

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12091 Entry Year 2023 Acreage: 2,250

County Dickinson

Management Area: Cassidy Creek

Revision Date: 2021-08-16

Stand Examiner: Legal Description:

T40N R28W Sections 5, 7, 8, 9, 16, 17, 20, 21, 27, 28

Identified Planning Goals:

Optimize sustainable timber production while maintaining species diversity, recreational opportunities, and protecting wildlife habitat.

Soil and topography:

Soils range from wet Cathro muck to dry Emmet fine sandy loams. Topography also differs from flat lowlands to hardwood ridges and rock outcroppings.

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

Compartment 91 is located roughly 0.5 miles to 1.0 miles west of Foster City Road. Running parallel to Foster City Rd with private land boarding to the east and Blomgren's Marsh/South Branch of Breen Creek boarding the west. Deer hunting is evident in and around this compartment. The snowmobile trail #115 is operating in several sections of this compartment offering additional outdoor recreation activities.

Unique Natural Features:

Blomgren Marsh

Archeological, Historical, and Cultural Features:

None known

Special Management Designations or Considerations:

None known

Watershed and Fisheries Considerations:

Two unnamed streams run through the compartment that are designated Type 1 trout streams less than 50' in width. A 300' buffer is recommended in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, 100' plus 5' per 1% increase in slope. Blomgren March and South Branch Breen Creek are also within or border this compartment and should have a 100 ft. buffer.

Wildlife Habitat Considerations:

Upland conifer types, particularly white pine and hemlock have

declined substantially. Upland and lowland conifer components should be restored, and maintained where present and enhanced whenever possible. This area has the tendency to regenerate to red and white pine,

naturally. All species of wildlife need to be considered and a full range of habitat conditions should be provided. Conditions from early-successional to old growth must be provided to meet these needs. Lowland hardwood types and drainages are sensitive areas that provide excellent wildlife habitat in this intensively managed area. Riparian and transition zones were set aside in prior years of entry to provide some of these habitat requirements. This will be particularly important around the flooding so that species using this riparian area are provided appropriate habitat. Eagles, ospreys, herons, loons and various waterfowl use this impoundment and will be taken into consideration when management is proposed. Openings will be treated

as logistics allow.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of outwash sand and gravel and postglacial alluvium and thin to discontinuous glacial till over bedrock. There is insufficient data to determine the glacial drift thickness. The Cambrian

Munising Group and the Precambrian Michigamme Formation and Archean granite/gneiss outcrops beneath the glacial drift. There is not a current economic use for these rocks. The Hancock iron mine is located

approximately three miles to the northeast. State land in the area of this compartment was previously leased for metallic exploration and potential may still exist. A gravel pit is located one-half mile to the east and another one is located two

miles to the north. There appears to be some gravel potential in the compartment. There is no economic oil and gas production in the UP. No known potential exists for commercial oil & gas production in this part of the state. The State-owned Cassidy Creek Road Pit is less than one mile to the southwest. The pit has never been leased since the DNR switched from single-use permits to long-term leases around 2002. There appears to be some good potential for sand & gravel within the compartment on the uplands. There has been limited metallic mineral exploration in this area, and potential for metallic minerals beneath the compartment is considered low at this time. There is some history of leasing of State-owned mineral rights in the area, but there has been no metallic mineral lease activity in recent years. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

Vehicle Access:

Access is good with the Foster City Rd providing the main entry point into this compartment. Many state forest two tracks are constructed within the boundary of Compartment 91.

Survey Needs:

Survey may be needed.

Recreational Facilities and Opportunities:

Hunting, camping, fishing, trapping, hiking, canoeing, snowmobiling.

Fire Protection:

Crystal Falls FMU protection area. Access to most upland stands is fair. Access to swamp types would be difficult.

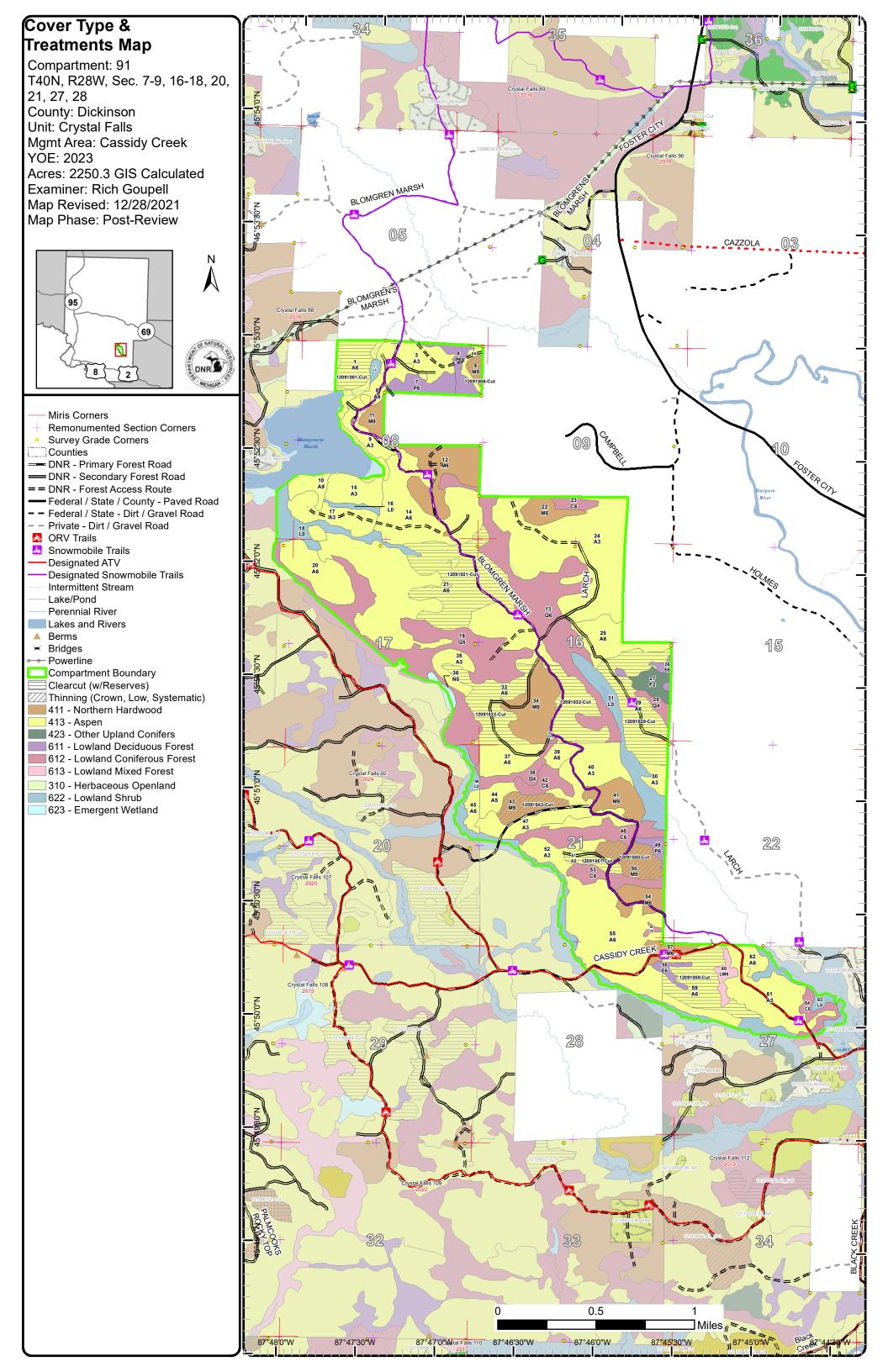
Additional Compartment Information:

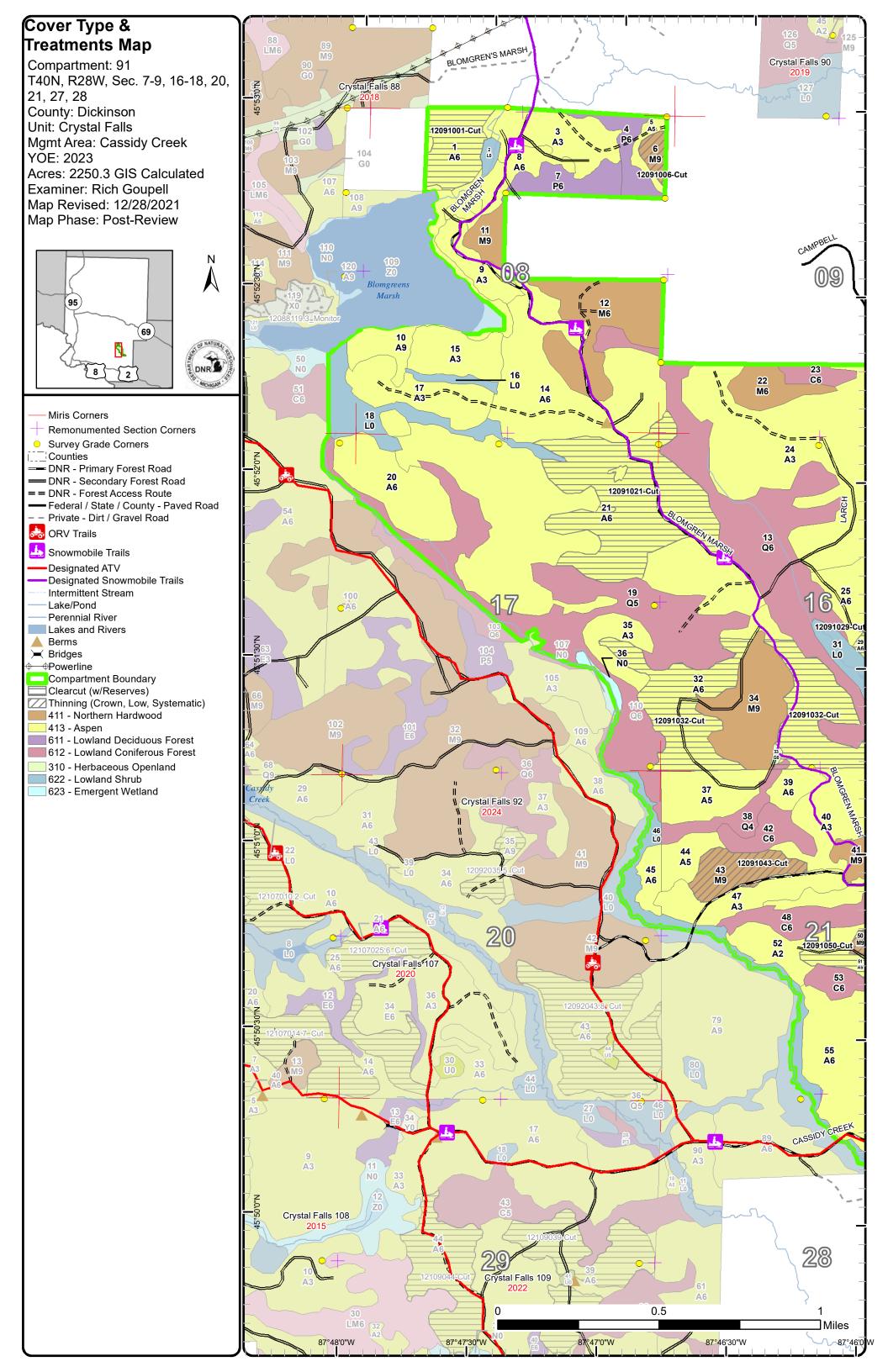
The following reports from the Inventory are attached:

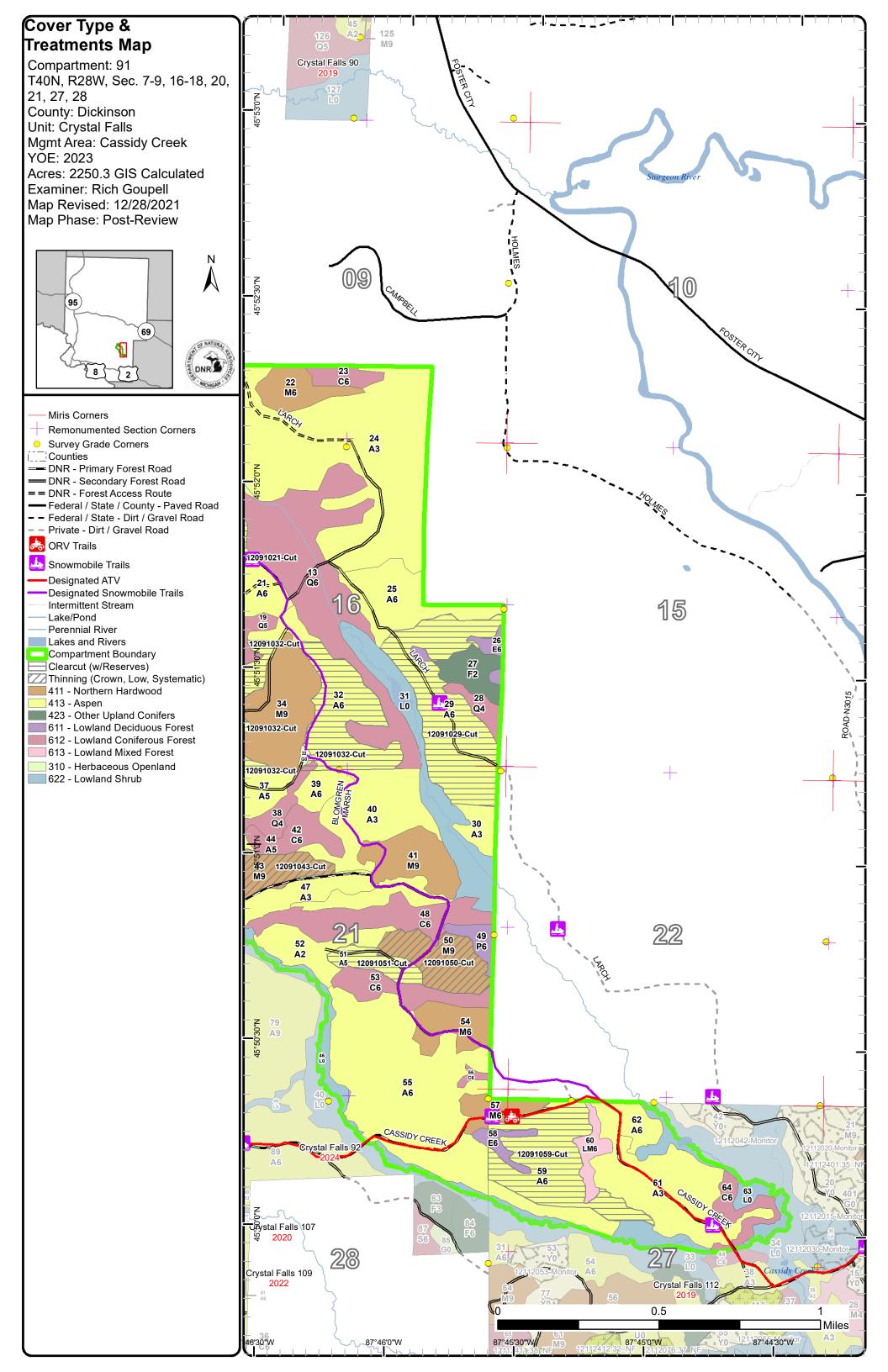
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

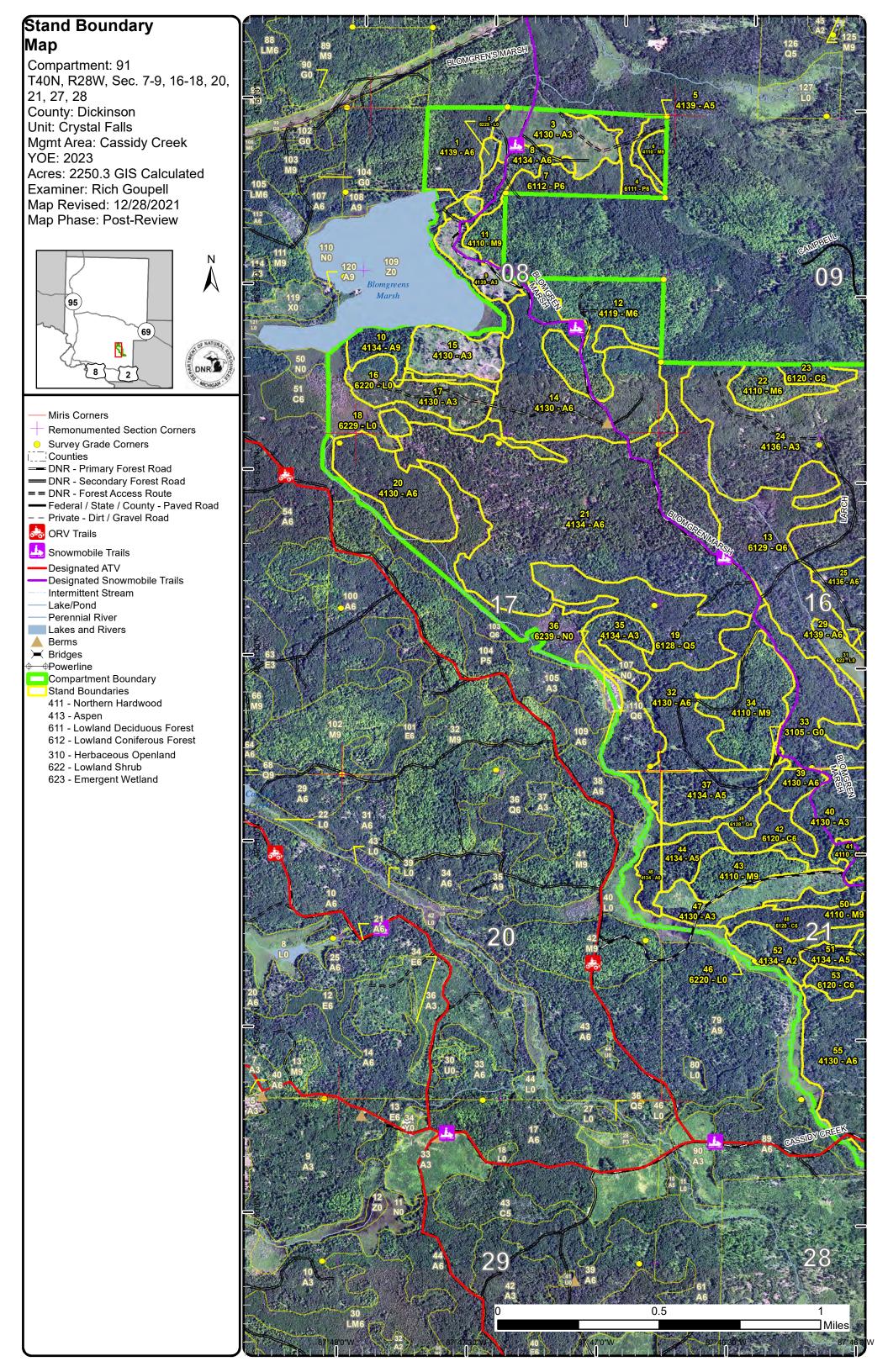
The following information is displayed, where pertinent, on the attached compartment maps:

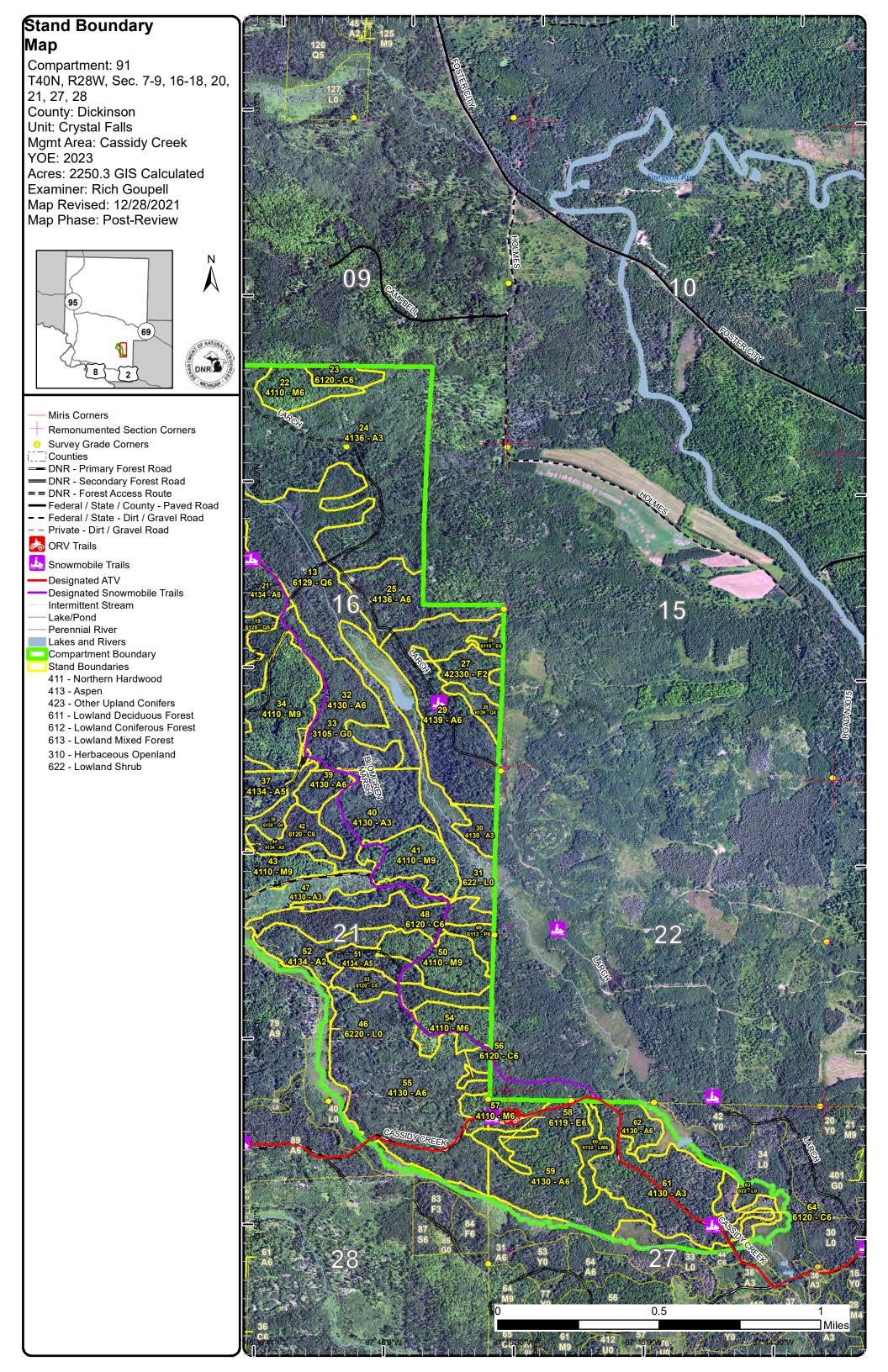
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

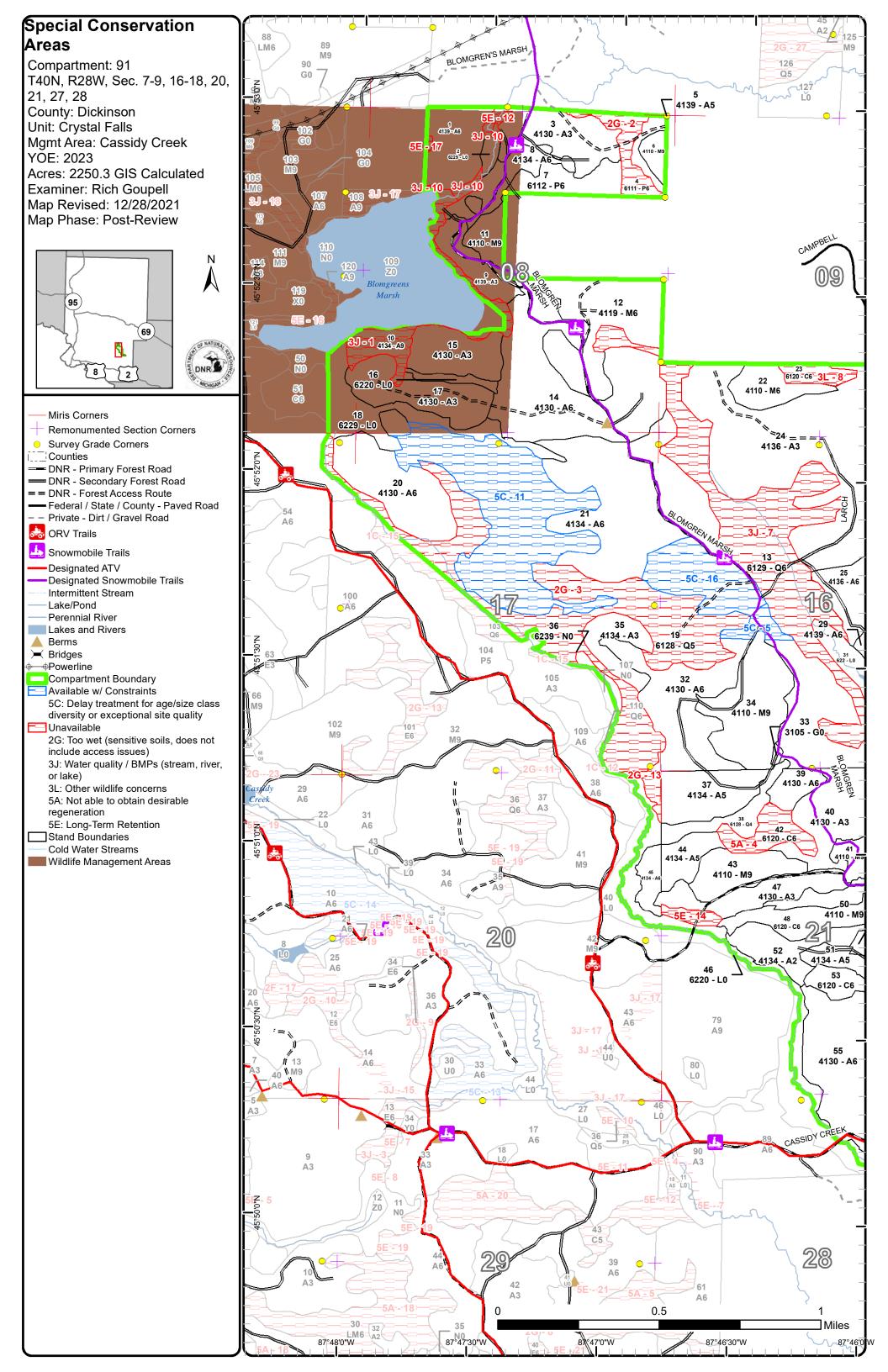


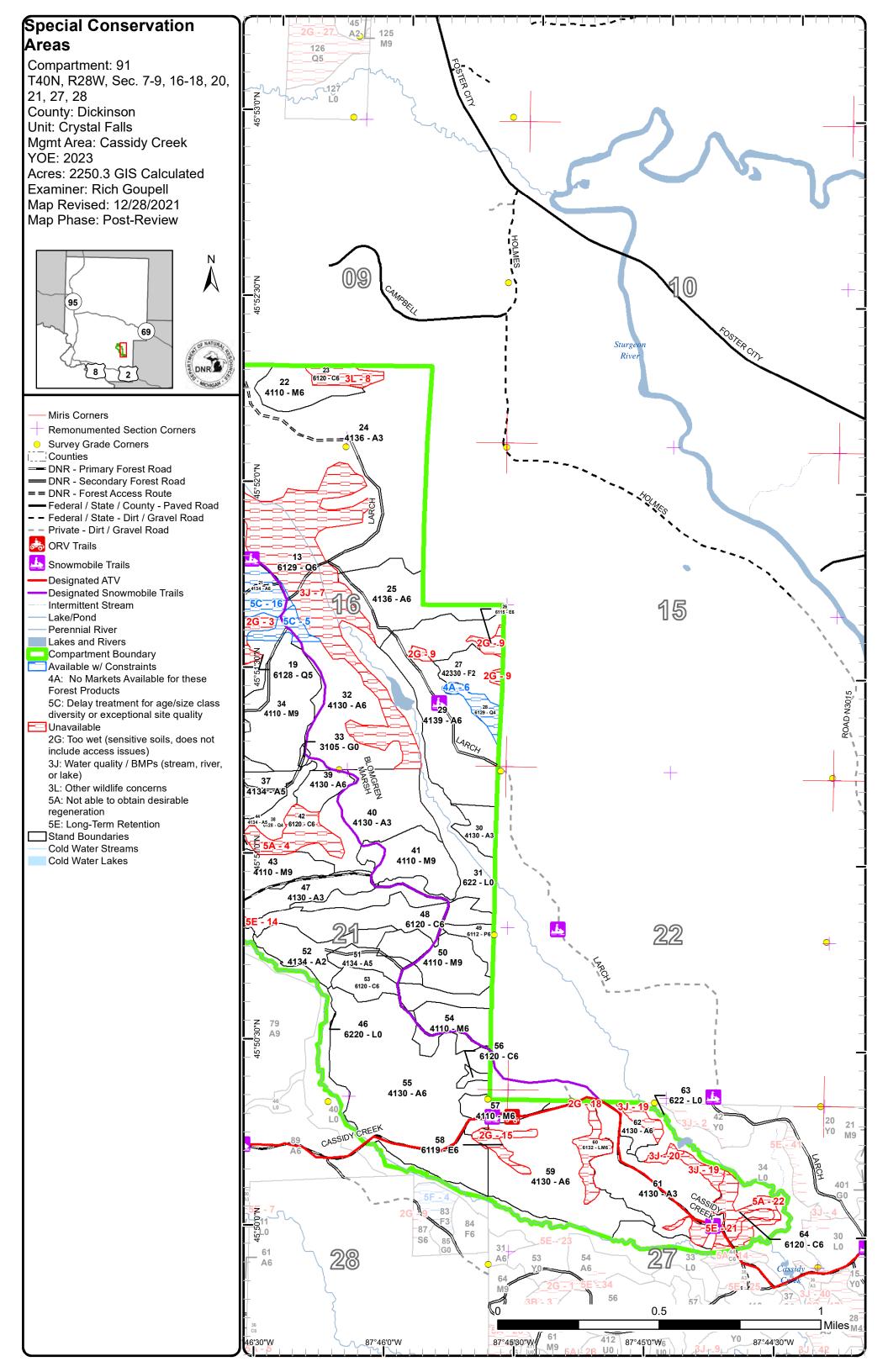












Compartment 91 Year of Entry 2023

Crystal Falls Mgt. Unit Rich Goupell : Examiner

Age Class

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	¥or d		s' / «	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	a a	3 / 15) / &	\$ \	8	\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		72, Z	`/&	N. S.		N. S.	R. July	Ext. 780
Aspen	0	167	37	230	343	361	251	0	26	0	0	0	0	0	0	0	0	13	1427
Cedar	0	0	0	0	0	0	0	0	0	12	8	71	0	0	0	0	0	2	93
Herbaceous Openland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lowland Aspen/Balsam Poplar	0	0	0	18	7	0	0	0	0	0	0	0	0	0	0	0	0	14	39
Lowland Conifers	0	0	0	0	0	0	0	0	14	0	126	0	0	0	0	0	0	132	272
Lowland Deciduous	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
Lowland Shrub	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	0	0	0	0	0	0	0	0	11	122	95	0	0	0	0	0	12	239
Upland Spruce/Fir	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Total	146	167	37	262	350	361	251	0	40	29	256	175	6	0	0	0	0	173	2251



Report 2 – Treatment Summary

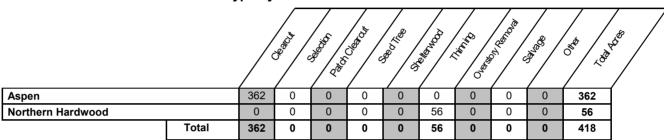
Crystal Falls Mgt. Unit Year of Entry: 2023

Acres of Harvest

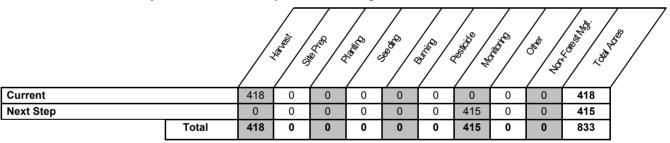
Compartment 91
Total Compartment Acres: 2,250

Commercial Harvest - 418 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

ВА

Compartment: 91 Year of Entry: 2023

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Treatment Acres Name

Stand CoverType

Size Density

Stand Age Range

Treatment Type

Treatment Method

Cover Type Objective

Age Structure Habitat Cut

Approved Treatments:

12091001-Cut 26.7 4139 - Aspen, Poletimber 49 51-80 Harvest Clearcut with 413 - Aspen Even-Aged No Mixed Deciduous Well Retention

Prescription Cut all trees 2 inches and greater. Leave sub-merch spruce and fir. Buffer creek and marsh 100 feet. Red line out small hardwood patch on

west line. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, spruce, mixed deciduous

Regen:

Recommend winter harvest or mandate winter harvest; Will be choice of sale prep forester. Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

6.0 4110 - Sugar Maple Sawtimber 12091006-Cut 411 - Northern 111-Harvest Crown Thinning Even-Aged Nο Association Well 140 Hardwood

Prescription Thin to 80 BA. Do not cut cedar and hemlock.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

12091021-Cut 103.4 4134 - Aspen, Poletimber 48 51-80 Harvest Clearcut with 4139 - Aspen, Even-Aged No Spruce/Fir Well Retention Mixed Deciduous

Prescription Cut all trees 2 inches and greater. Do not cut cedar, hemlock, beech, red and white pine. Red line out black ash pockets. Winter cut.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, bam, northern hardwood associates, spruce, fir and pine

Regen:

Other Exclusions/ long-term retention will likely push treatment below 100 acres.

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Cry S t	stal Falls	Mgt. Unit		Repo	rt 3 '	Treatments		Compartmen Year of Entry	/-	DNR
a n Treatment d Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
29 12091029-Cut	70.6	4139 - Aspen, Mixed Deciduous	Poletimbe Well	r 59	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
Prescription Harvest Specs:	to a 2" sp	ec leaving Cedar, l	Hemlock, P	ine, Wł	hite Birch	and Oak if pres	ent. Exclude creek ı	running through c	enter of stand.	
	ng, Natura	al Regen (Re-Inven	ntory)							
Acceptable Aspen, Regen:	Hardwood	ls, Spruce/Balsam,	Pine							
Comment:										
Site Condition Proposed Start Date:	10/1 /20:	22								
32 12091032-Cut	97.2	4130 - Aspen	Poletimbe Well	r 56	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<u>Prescription</u> Harvest <u>Specs:</u>	to a 2" sp	ec leaving Cedar, l		ine and	d Oak if pr	resent.	recention			
Next Step Monitori Treatments:	ng, Natura	al Regen (Re-Inven	ntory)							
Acceptable Aspen, Regen:	Hardwood	ls, Spruce/Balsam,	Pine.							
Other Comment:										
Site Condition										
Proposed Start Date:	10/1 /20:	22								
43 12091043-Cut	22.1 4	110 - Sugar Maple Association	Sawtimbe Well	r 101	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<u>Prescription</u> Mark to <u>Specs:</u>	70 top 90	BA. Leave Conifer	rs							
Next Step Treatments:										
Acceptable Northern Regen:	n Hardwoo	ods, Softwoods								
Other Comment:										
Site Condition										
Proposed Start Date:	10/1 /20:	22								
50 12091050-Cut	27.6 4	110 - Sugar Maple Association	Sawtimbe Well	r 104	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<u>Prescription</u> Mark to <u>Specs:</u>	70 to 90 E	BA. leave conifers.								
Next Step										

Next Step
Treatments:

Acceptable Northern Hardwoods, Spruce/Fir
Regen:

Other Comment:
Site Condition

Proposed Start Date: 10/1 /2022

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 91 S Year of Entry: 2023 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment** Cover Type Age Habitat n Method Objective Name CoverType Density Age Range Type Structure Cut d 51 12091051-Cut 11.7 4134 - Aspen. Poletimber Unspec Harvest Clearcut 413 - Aspen Even-Aged No Spruce/Fir Medium ified Prescription Clearcut 2" spec leaving Pine, Cedar, Oak, and Hemlock if present. No retention due to small acreage. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Aspen, Northern Hardwoods, Spruce/Fir, Pine Regen: **Other** Comment: Site Condition Proposed Start Date: 10/1 /2022 52 12091059-Cut 52.8 4130 - Aspen Poletimber 111-Harvest Clearcut with 413 - Aspen Even-Aged No Well 140 Retention Prescription Clearcut to a 2"spec. Leaving Pine, Cedar, Hemlock and Oak if present. Also Leave cherry. Mark out Cedar drainage. Specs: Next Step Monitoring, Natural Regen (Re-Inventory); Monitoring, Natural Regen (Re-Inventory) **Treatments:**

Acceptable Aspen, Hardwoods, Spruce/Fir, Pine

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2022

Total Treatment 418.1 Acreage Proposed:

Crystal Falls Mgt. Unit

Compartment: 91 Year of Entry: 2023 Rich Goupell : Examiner

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres	Do	omina	nt Site	Cond	ditions	3		
Acres	Available	With Condition	Not Available		4A	5C	2G	3J	3L	5A	5E
1426	1223	152	51	Aspen	0	152	0	37	0	0	14
93	57	0	36	Cedar				0	8	28	
1	1	0	0	Herbaceous Openland							
39	25	0	14	Lowland Aspen/Balsam Poplar			14				
272	14	7	251	Lowland Conifers	7	0	132	119			
12	0	0	12	Lowland Deciduous			12				
9	0	0	9	Lowland Mixed Forest			9				
142	142	0	0	Lowland Shrub				0			
3	3	0	0	Marsh							
239	239	0	0	Northern Hardwood			0	0	0		
14	14	0	0	Upland Spruce/Fir	0		0				
2,250	1,719	159	373	Total Forested Acres	7	152	167	156	8	28	14
-	76%	7%	17%	Relative Percent				-			

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	26	3B: Threatened, endangered, and special concern species	5E: Long-Term Retention	Unspecified	Unspecified
(Comments:						
E	Buffer to Marsh, OF	S point buffered, Retention					
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 - Site Conditions

Crystal Falls Mgt. Unit Rich Goupell: Examiner

Compartment: 91
Year of Entry: 2023

3 Unavailable Unspecified Unspecified Unspecified Unspecified 2G: Too wet (sensitive 128 soils, does not include access issues) Comments: Unspecified Unspecified Unspecified Unspecified 4 Unavailable 5A: Not able to obtain 16 desirable regeneration Comments: Unspecified Unspecified Unspecified 5 **Available** 5C: Delay treatment for 7 Unspecified age/size class diversity or exceptional site quality Comments: 6 **Available** 4A: No Markets Available 7 Unspecified Unspecified Unspecified Unspecified for these Forest Products **Comments:** Unspecified Unspecified Unspecified Unspecified Unavailable 3J: Water quality / BMPs 119 (stream, river, or lake) **Comments:** 8 Unavailable 3L: Other wildlife 8 Unspecified Unspecified Unspecified Unspecified concerns **Comments:**

Report 4 - Site Conditions

Compartment: 91
Year of Entry: 2023

9 Unavailable Unspecified Unspecified Unspecified Unspecified 2G: Too wet (sensitive 6 soils, does not include access issues) Comments: 3J: Water quality / BMPs 5E: Long-Term Unspecified Unspecified Unspecified 10 Unavailable 5 (stream, river, or lake) Retention Comments: 11 **Available** 5C: Delay treatment for 110 Unspecified Unspecified Unspecified Unspecified age/size class diversity or exceptional site quality Comments: 12 Unavailable 5E: Long-Term Retention 2 3J: Water quality / Unspecified Unspecified Unspecified BMPs (stream, river, or lake) Comments: Unspecified 2G: Too wet (sensitive Unspecified Unspecified Unspecified 13 Unavailable 4 soils, does not include access issues) Comments: Unspecified Unspecified Unspecified Unspecified 14 Unavailable 5E: Long-Term Retention 5 Comments: Buffer along creek for retention

Crystal Falls Mgt. Unit

Rich Goupell: Examiner

Report 4 – Site Conditions

Crystal Falls Mgt. Unit Rich Goupell: Examiner

15	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	35	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: When the time cor	nes, this area should be treated	with the	north section of Stand 32	that was retained. This wil	l help to break up stand 2°	1 and stand 32.
17	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
19	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	8	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments: 300' buffer						
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
C	Comments:						

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Compartment: 91 Year of Entry: 2023 Rich Goupell : Examiner

21	Unavailable	5E: Long-Term Retention	7	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
_	comments: 00' buffer						
22	Unavailable	5A: Not able to obtain desirable regeneration	12	3J: Water quality / BMPs (stream, river, or lake)	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
C	Comments:						

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: 91
Year of Entry 2023



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	on 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 oxyger stocked trout populations and those of other coldwater f conditions for coldwater fishes may occur in Michigan la groundwater inflows, or are located in colder (northern) Director's action and designated as trout resources by F	ish species to persist from year to year. Suitable ikes if they are relatively deep, have substantial areas of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxyg stocked trout populations and those of other coldwater f year to year. Coldwater streams in Michigan typically pro- contributions of groundwater to their stream flows. Such designated as trout resources by Fisheries Order 210.	rish species (e.g., slimy sculpin) to persist from ovide these conditions due to substantial



Stan	d Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
1	4139 - Aspen, I	Mixed Deci	duous f	Poletimb	er Well	31.8	49	51-80	N/A		South end wetter than north.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	
	Paper Birch	5	Pole	8		Bals	am Poplar	Low	5 - 10 feet	Sapling	
	Quaking Aspen	45	Pole	7	49	Ва	lsam Fir	Low	< 5 feet	Sapling	
	Balsam Poplar	25	Pole	8		Whi	te Spruce	Low	5 - 10 feet	Sapling	
	Balsam Fir	5	Pole	6		BI	ack Ash	High	< 5 feet	Sapling	
	White Spruce	10	Log/Pole	10		Blackbe	rry/Raspberry	Low	< 5 feet	Tall Shrub	
	Black Ash	5	Pole	6							
	Sugar Maple	5	Log/Pole	11							
2	6229 - Mixed	lowland sh	nrub	Nonsto	cked	3.3	ı	Unspecified	No		
3		- Aspen		Sapling		32.8	5	Immature	N/A		Harvested 2016. Trace amounts of balsam poplar, ironwood and white pine in canopy. Trace amount of super canopy white pine.
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	
	Quaking Aspen	75	Sapling	1	5	Та	ag Alder	Trace	5 - 10 feet	Tall Shrub	
	White Spruce	5	Sapling	1							
	Balsam Fir	5	Sapling	1							
	Red Maple	5	Sapling	1							
	Black Cherry	5	Sapling	1							
	Paper Birch	5	Sapling	1							
4	6111 - Lowland	d Balsam F	Poplar I	Poletimb	er Well	14.3	67	51-80	N/A		Stream runs through stand. Spruce falling out. Variable ages of ash and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Bam filling in. Very wet. Trace elm.
	Paper Birch	5	Pole	6		Ва	lsam Fir	Medium	5 - 10 feet	Sapling	
	Black Spruce	10	Pole	6	98	Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
	Tamarack	5	Pole	6				'			•
	Balsam Poplar	45	Pole/Log	9	67						
	Black Ash	25	Log/Pole	10							
N	orthern White Cedar	10	Log/Pole	10							
5	4139 - Aspen, f			oletimbei			27	Immature	N/A		Some super canopy spruce scattered throughout. Large Spruce falling out. Mostly an upland site with lowland areas. Trace amounts of hemlock
	Canopy Species		Size Class		Age		nopy Species		Avg. Height	Size	and sugar maple and spruce.
	Quaking Aspen	50	Pole/Sapling		27		Isam Fir	Medium	Variable	Sapling	
	Balsam Poplar	40	Pole/Sapling		27		erry (spp.)	Low	5 - 10 feet	Sapling	
	Balsam Fir	10	Pole	6	27		te Spruce	Low	Variable	Sapling	
						Iro	onwood	Low	Variable	Sapling	



and	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age I	BA Range	Managed 9	Site	General Comments
6	4110 - Sugar M	laple Asso	ciation S	Sawtimb	er Well	6.0	97	111-140	N/A		Trace hemlock
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	75	Log/Pole	10	97	Whi	te Spruce	Low	Variable	Sapling	
	Yellow Birch	5	Pole	8		Lea	therwood	Low	< 5 feet	Tall Shrub	
	Basswood	5	Log	14							
	Paper Birch	10	Log	12							
No	orthern White Cedar	5	Pole	8							
7	6112 - Lov	wland Aspe	en F	Poletimb	er Well	18.2	27	Immature	N/A		Wet
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	48	Pole/Sapling	5	27	Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
	Balsam Poplar	25	Pole/Sapling	5				'	1		
	Balsam Fir	5	Pole/Sapling	9 6							
	White Spruce	5	Pole/Sapling	g 5							
	Black Ash	15	Pole/Sapling	g 5							
No	orthern White Cedar	2	Log	12							
8	4134 - Aspe		Size Class	Poletimb DBI	H Age	18.1 Sub-Ca	27 nopy Species	Immature Density	N/A Avg. Height	Size	Good amount of mixed conifer coming back with the aspen. Trace amount of maple, oak, black spruce and pine
	Quaking Aspen	65	Pole/Sapling		27	Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Balsam Poplar	5	Pole/Sapling	5		Hazelr	ut (Beaked)	Low	< 5 feet	Tall Shrub	
	Balsam Fir	20	Pole/Sapling	g 5		Che	erry (spp.)	Low	Variable	Sapling	
	White Spruce	10	Pole/Sapling	5		Ba	lsam Fir	High	Variable	Sapling	
				'	· · · · · · · · · · · · · · · · · · ·	Bals	am Poplar	Medium	Variable	Sapling	
						Qual	king Aspen	Medium	Variable	Sapling	
9	4139 - Aspen,			Saplin		18.1		Immature	N/A		Harvested 2016. Trace amount of super canopy cedar. Some low pockets throughout stand.
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	
	Quaking Aspen	55	Sapling	1	5	Ta	ng Alder	Trace	5 - 10 feet	Tall Shrub	
	White Pine	5	Sapling	4							
	Balsam Poplar	10	Sapling	1							
	White Spruce	1	Sapling	1							
	Balsam Fir	2	Sapling	1							
	Paper Birch	5	Sapling	1							
	Black Cherry	5	Sapling	1							
	Red Maple	2	Sapling	1							
		15	Sapling								

Pole/Log

Report 7 - Stands

Compartment: 91 Year of Entry: 2023



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
10	4134 - Asp	en, Spruce	/Fir	Sawtimb	er Well	25.9	76	51-80	N/A		Aspen falling apart. Some Aspen over 20 inches. Low BAs due to dying
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Aspen. Trace amounts of Ironwood and Beech in understory. Terrain is rocky with a mix of highland with lowland tag alder pockets and drainage:
	Sugar Maple	2	Pole	8		Ва	alsam Fir	Medium	Variable	Sapling	throughout. OFS found on SW side of stand. Retention for adjacent
	Red Maple	5	Pole	8		Whi	ite Spruce	Low	Variable	Sapling	harvest.
	Paper Birch	5	Pole	6		Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	45	Log	16	76	Wit	tch Hazel	Low	< 5 feet	Tall Shrub	
	Balsam Poplar	3	Log/Pole	12							_
	Balsam Fir	20	Pole	6							
	White Spruce	10	Pole/Sapling	g 6							
	White Pine	5	Log/Pole	10							
	Black Ash	5	Pole	6							
11	4110 - Sugar I	Maple Asso	ciation	Sawtimb		10.5	81	81-110	N/A		mostly even-aged. Some small wet pockets. BA around 110.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	77	Pole	9	81	Ва	alsam Fir	Medium	Variable	Sapling	
	Yellow Birch	2	Log/Pole	13		W	hite Ash	Medium	Variable	Sapling	
	Basswood	5	Log	13		Lea	atherwood	Low	< 5 feet	Tall Shruk	
	Paper Birch	5	Log/Pole	11		Iro	onwood	Low	Variable	Sapling	
	Red Oak	1	Log	12		Whi	ite Spruce	Medium	Variable	Sapling	
	White Ash	10	Log/Pole	10		Whi	ite Spruce	Low	Variable	Pole	
						WI	hite Pine	Trace	Variable	Sapling	
						Quak	king Aspen	Low	10 - 20 feet	Sapling	
						Sug	gar Maple	Medium	Variable	Pole	
12	4119 - Mixed N	orthern Har	dwoods	Poletimb	er Well	53.8	96	81-110	N/A		North half thinned in 2005. Some drainages present. BA around 90-100. This stand could be held and thinned next entry.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	This stand could be field and tillined flext entry.
	Sugar Maple	58	Pole	9	96	Ва	alsam Fir	Low	< 5 feet	Sapling	
	Yellow Birch	3	Pole	8		Iro	onwood	Low	Variable	Pole	
	Basswood	10	Log	12		Iro	onwood	High	5 - 10 feet	Sapling	
	Paper Birch	5	Log/Pole	10		BI	ack Ash	Medium	Variable	Sapling	
	Hemlock	3	Log	14		W	hite Ash	Low	Variable	Sapling	
	White Ash	1	Log/Pole	12		Sug	gar Maple	Low	Variable	Sapling	
	Black Ash	15	Pole/Log	8							-
	Quaking Aspen	2	Log	14							
	Balsam Poplar	1	Log/Pole	12							
	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·								

Red Maple



Stand	Level 4 Cover Type Size Density		Density Acres Stand Age BA Range Managed Site						General Comments			
13	6129 - Mixed Conif	erous Lowla	and Forest	Poletim	ber Well	119.1	90	81-110	N/A		Most of this stand is under water due to beaver activity.	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Pole	8		Bal	sam Fir	Medium	10 - 20 feet	Sapling		
	Black Spruce	25	Pole	8		Tai	marack	Medium	10 - 20 feet	Sapling		
No	orthern White Cedar	45	Pole	8	90	Ta	g Alder	Low	5 - 10 feet	Tall Shrub		
	Tamarack	25	Pole	8								
14	4130	- Aspen		Poletim	ber Well	96.5	37 L	Inspecified	N/A		Trace amount of sugar maple, elm, basswood and red maple in canon	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Super canopy white pine present.	
	Quaking Aspen	51	Pole	6	37	Bal	sam Fir	Medium	Variable	Sapling		
	Balsam Fir	2	Pole	5		Wh	ite Ash	Medium	Variable	Sapling		
	White Spruce	2	Pole	5		Suga	ar Maple	Low	Variable	Sapling		
	Balsam Poplar	15	Pole	7		Red	d Maple	Low	Variable	Sapling		
	White Pine	5	Log	14		Wh	ite Pine	Trace	Variable	Sapling		
	Bigtooth Aspen	25	Pole	7		Chei	rry (spp.)	Trace	Variable	Sapling		
				'		Ta	g Alder	Low	5 - 10 feet	Tall Shrub		
						White	e Spruce	Low	Variable	Sapling		
						Wh	ite Pine	Low	Variable	Pole		
15	4130	- Aspen		Saplir	g Well	25.3	5	Immature	N/A		Harvested 2016. Super canopy white pine present.	
	Canopy Species	% Cover	Size Class	DB	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	60	Sapling	1	5	Ta	g Alder	Medium	5 - 10 feet	Tall Shrub		
	White Pine	3	Log	14		Bal	sam Fir	Low	Variable	Sapling		
	Balsam Poplar	10	Sapling	1		White	e Spruce	Low	Variable	Sapling		
	White Spruce	1	Sapling	1				'				
	Paper Birch	5	Sapling	1								
	Black Cherry	5	Sapling	1								
	D. I.M	9	Sapling	1								
	Red Maple											
	White Ash	5	Sapling	2								



Stand Level 4	Cover Type	•	Size Der	nsity	Acres Stand Age	BA Range	Managed S	Site	General Comments
17 413	30 - Aspen		Sapling	Well	36.5 16	Unspecified	N/A		
Canopy Species	% Cove	Size Class	DBH	Age	Sub-Canopy Specie	s Density	Avg. Height	Size	
Quaking Aspen	58	Sapling	3	16	White Pine	Low	5 - 10 feet	Sapling	
Bigtooth Aspen	15	Sapling	3		Tag Alder	Low	5 - 10 feet	Tall Shrub	
Paper Birch	2	Sapling	2		Balsam Fir	Low	5 - 10 feet	Sapling	
White Ash	3	Sapling	3		White Spruce	Low	5 - 10 feet	Sapling	
Black Cherry	2	Sapling	3						
Balsam Poplar	15	Sapling	3						
White Spruce	5	Pole/Sapling	6						
19 6128 - Lowlan	d Coniferous	s, Mixed Pol	letimber	Mediur	n 131.9 93	81-110	N/A		Collection of drainages. Several beaver dams. Variety of ages present.
	eciduous	s, Mixed Pol			n 131.9 93 Sub-Canopy Specie		N/A Avg. Height	Size	Collection of drainages. Several beaver dams. Variety of ages present.
D	eciduous		DBH 8					Size Sapling	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species	eciduous % Cove	Size Class	DBH		Sub-Canopy Specie	s Density	Avg. Height		Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch	% Cove	r Size Class Pole	DBH		Sub-Canopy Specie	s Density Low	Avg. Height Variable	Sapling	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir	**Cover 3 10 10	Pole Pole	DBH 8 8		Sub-Canopy Specie Balsam Fir Black Ash	s Density Low Medium	Avg. Height Variable Variable	Sapling Sapling	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir Black Spruce	**Cover 3 10 10	r Size Class Pole Pole Pole	DBH 8 8 8	Age	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder	S Density Low Medium High	Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda	**Cover 3 10 10 r 30	r Size Class Pole Pole Pole Log/Pole	DBH 8 8 8 11	Age	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder	S Density Low Medium High	Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda	**Cover 3 10 10 10 r 30 20	Pole Pole Pole Log/Pole Pole	DBH 8 8 8 11 8	Age	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder	S Density Low Medium High	Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash	**Cover 3 10 10 10 r 30 20 20	Pole Pole Log/Pole Pole Pole Pole	DBH 8 8 8 11 8 7	Age	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder	S Density Low Medium High	Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Collection of drainages. Several beaver dams. Variety of ages present.
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen	**Cover 3 10 10 10 r 30 20 20 5	Pole Pole Pole Log/Pole Pole Pole Pole Log/Pole Pole Pole Pole Pole/Log Log/Pole	DBH 8 8 8 8 111 8 7 8 10 Poletimbe	93 70 er Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder	S Density Low Medium High	Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Collection of drainages. Several beaver dams. Variety of ages present. Aspen stand with some fir in understory.
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen	% Cover 3 10 10 10 r 30 20 20 5 2 20 60 - Aspen	Pole Pole Pole Log/Pole Pole Pole Pole Pole Pole Pole Pole/Log Log/Pole	DBH 8 8 8 8 11 8 7 8 10	93 70 er Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder Black Spruce	S Density Low Medium High Low	Avg. Height Variable Variable 5 - 10 feet Variable	Sapling Sapling Tall Shrub	
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen	% Cover 3 10 10 10 r 30 20 20 5 2 20 60 - Aspen	Pole Pole Pole Log/Pole Pole Pole Pole Pole Pole Pole Pole/Log Log/Pole	DBH 8 8 8 8 111 8 7 8 10 Poletimbe	93 70 er Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder Black Spruce	S Density Low Medium High Low	Avg. Height Variable Variable 5 - 10 feet Variable	Sapling Sapling Tall Shrub Sapling	
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen Canopy Species	**Cover 3	Pole Pole Pole Pole Pole Pole Pole Pole	BH 8 8 8 8 11 8 7 8 10 Poletimber	93 70 er Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder Black Spruce 43.2 46 Sub-Canopy Specie	S Density Low Medium High Low 51-80 S Density	Avg. Height Variable Variable 5 - 10 feet Variable N/A Avg. Height	Sapling Sapling Tall Shrub Sapling	
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen Canopy Species Sugar Maple	**Cover 3	Pole Pole Pole Pole Pole Pole Pole Pole	DBH	93 70 er Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder Black Spruce 43.2 46 Sub-Canopy Specie Balsam Fir	S Density Low Medium High Low 51-80 S Density Low	Avg. Height Variable Variable 5 - 10 feet Variable N/A Avg. Height Variable	Sapling Sapling Tall Shrub Sapling Size Sapling	
Canopy Species Paper Birch Balsam Fir Black Spruce Northern White Ceda Tamarack Black Ash Balsam Poplar Quaking Aspen Canopy Species Sugar Maple Paper Birch	**Cover 3 10 10 10 10 10 20 20 5 2 20 60 - Aspen **Cover 3 2	Pole Pole Pole Pole Pole Pole Pole Pole	DBH 8 8 8 8 111 8 7 8 10 Poletimber DBH 6 6 6	93 70 Per Well	Sub-Canopy Specie Balsam Fir Black Ash Tag Alder Black Spruce 43.2 46 Sub-Canopy Specie Balsam Fir White Spruce	S Density Low Medium High Low 51-80 S Density Low Low	Avg. Height Variable Variable 5 - 10 feet Variable N/A Avg. Height Variable Variable	Sapling Sapling Tall Shrub Sapling Size Sapling Sapling	

Crystal Falls Mgt. Unit



Stand	Level 4 Co	ver Type		Size Density	Acres	Stand Age B	A Range	Managed S	Site	General Comments
21	4134 - Aspe	n, Spruce	/Fir I	Poletimber Well	249.9	48	51-80	N/A		OJ: Highly variable stand. Rock and water. Looks like 2 aged aspen
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	about 35 and 70 years old. Fir mortality high. AC: Rocky mostly Aspen stand with drainages, swamp hardwoods, and
	Sugar Maple	5	Pole	6	Ва	lsam Fir	Medium	Variable	Sapling	fir pockets mixed throughout. Wait to harvest.
	Red Maple	10	Pole	7	Whit	e Spruce	Low	Variable	Sapling	JS: Trace beech, cedar, red oak and red pine. Variable in BA and size;
	Quaking Aspen	32	Pole	7 48	Bla	ack Ash	Low	Variable	Sapling	due to variability in soil and old aspen falling out. Canopy closure varies with an average of about 75% for the entire stand. West side of stand
	Balsam Fir	15	Pole	6	Iro	nwood	Low	Variable	Sapling	has less canopy closure. Marbled with multiple ages with 48 years being
	White Spruce	10	Pole	6	Та	g Alder	Low	5 - 10 feet	Tall Shrub	
	White Pine	3	Log	10	Е	Beech	Trace	Variable	Sapling	patches of younger aspen. Other ages present range from saplings, to 40, and 70 years old. Spruce budworm damage also present. No bed and
	Black Ash	5	Pole	6	Wh	ite Pine	Low	Variable	Sapling	banks observed.
	Black Spruce	2	Pole	5	Balsa	am Poplar	Low	Variable	Sapling	
	Bigtooth Aspen	10	Pole/Log	9	Re	d Maple	Low	Variable	Sapling	
	Basswood	2	Log/Pole	12						•
	Hemlock	1	Log	14						
	Yellow Birch	2	Pole	7						
	Balsam Poplar	3	Pole/Log	8						
22	4110 - Sugar M Canopy Species		ciation F	Poletimber Well DBH Age	16.6	98	81-110 Density	N/A Avg. Height	Size	1
	Sugar Maple	90	Pole/Log	8 98		e Spruce	Low	5 - 10 feet	Sapling	
	Basswood	5	Log	12	******	.о оргасо	2011	0 101001	capinig	
	Paper Birch	5	Pole/Log	9						
		-								
23	6120 - Low	land Ceda	ar I	Poletimber Well	8.1	97	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	5	Pole	6		lsam Fir	Low	Variable	Sapling	
	Balsam Fir	15	Pole/Sapling	9 6	Та	g Alder	Medium	5 - 10 feet	Tall Shrub	
	White Spruce	5	Log/Pole	10						
No	orthern White Cedar	50	Log/Pole	12 97						
	Black Ash	25	Pole	6						
24	4136 - Aspen,	Mixed Co	onifer	Sapling Well	168.0	27 l	mmature	N/A		AC: Swamp Hardwood pockets mixed throughout. Especially in SE part
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	of stand Cut in 1994 part of Karnaval Aspen.
	Quaking Aspen	65	Sapling	3 27	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Balsam Fir	10	Sapling	2	Whit	te Spruce	Low	5 - 10 feet	Sapling	
	White Spruce	5	Sapling	2	Ta	marack	Low	5 - 10 feet	Sapling	
	White Pine	5	Log	14	Wh	ite Pine	Medium	5 - 10 feet	Sapling	
	White Pine	10		2						1
	VVIIILO I IIIO	10	Sapling	3						



Stand	l Level 4 C	over Type		Size Density		Acres	Stand Age B	A Range	Managed 9	Site	General Comments	
25	4136 - Asper	n, Mixed Co	nifer	Poletimber Well		34.4	37	81-110	N/A		Several drainages throughout. Just starting to become merchantable.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	About one acre of Red Pine along road.	
	Red Maple	5	Pole	5		Ва	ılsam Fir	Low	Variable	Sapling		
	Quaking Aspen	65	Pole	5	37	Whi	te Spruce	Low	Variable	Sapling		
	Balsam Fir	10	Pole	5		Ta	ag Alder	Low	5 - 10 feet	Tall Shrub		
	White Spruce	5	Pole	5		Hazelr	nut (Beaked)	Low	< 5 feet	Tall Shrub		
	Red Pine	5	Log	12								
	Black Ash	5	Pole	6								
	Paper Birch	5	Pole	6								
26	6115 - Lo	owland Ash		Poletimbe	er Well	5.7	83	51-80	N/A		Wet Black Ash stand	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Poplar	3	Pole	8		Ta	ag Alder	High	5 - 10 feet	Tall Shrub		
	Balsam Fir	2	Pole	6							•	
No	rthern White Cedar	5	Pole	8								
	Black Ash	90	Pole	6	83							
27	42330 -	Upland Fir		Sapling M	ledium	13.9	27	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	8	Sapling	2		Hazelr	nut (Beaked)	Medium	< 5 feet	Tall Shrub		
	Balsam Fir	80	Sapling	2	27							
	White Spruce	5	Sapling	2								
	White Pine	5	Sapling	2								
	Ironwood	2	Sapling	2								
28	6129 - Mixed Conif	erous Lowl	and Forest	Poletimbe	r Poor	7.0	99	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Balsam Fir	2	Pole/Sapling	g 6		Ва	ılsam Fir	Low	5 - 10 feet	Sapling		
	Black Spruce	40	Pole/Sap/Lo	g 9	99	Ta	amarack	Medium	5 - 10 feet	Sapling		
No	rthern White Cedar	18	Pole	8		Ta	ag Alder	High	5 - 10 feet	Tall Shrub		
	Tamarack	35	Pole/Log	9							-	
	Black Ash	5	Pole/Sapling	g 6								



tand	d Level 4 Co	Size Den	sity	Acres Stan	d Age BA	A Range	Managed S	Site	General Comments		
29	4139 - Aspen, I	Mixed Dec	iduous P	Poletimber Well		70.6 5	9	81-110	N/A		Terrain is rock and swails. Scattered supercanopy White Pines.
	Canopy Species	% Cover	Size Class	DBH .	Age	Sub-Canopy	Species	Density	Avg. Height	Size	
	Red Maple	5	Pole/Log	11		Balsam F	-ir	Medium	Variable	Sapling	
	Quaking Aspen	50	Log/Pole	11	59	Ironwoo	d	Low	Variable	Sapling	
	Bigtooth Aspen	5	Pole	7		Tag Alde	er	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	5	Pole	8		Hazelnut (Be	aked)	Medium	< 5 feet	Tall Shrub	
	Balsam Fir	10	Pole	5							
	White Spruce	3	Pole	8							
	White Pine	2	XLog	20							
	Black Ash	10	Pole	8							
	Black Cherry	3	Pole	6							
	Ironwood	2	Sapling/Pole	5							
	Paper Birch	5	Log/Pole	11							
30	4130	- Aspen		Sapling \	Vell	9.3 3	0 In	nmature	N/A		
	Canopy Species	% Cover	Size Class	DBH .	Age	Sub-Canopy	Species	Density	Avg. Height	Size	
	Sugar Maple	5	Pole/Sapling	6		Balsam F	=ir	Low	Variable	Sapling	
	Red Maple	5	Pole/Sapling	6		White Spr	uce	Low	Variable	Sapling	
	Quaking Aspen	80	Sapling	4	30	Hazelnut (Be	aked)	Low	< 5 feet	Tall Shrub	
	Balsam Fir	5	Sapling	4							
	Balsam Fir White Spruce	5 5	Sapling Sapling	4							
31	White Spruce		Sapling		ked	42.3	Un	nspecified	No		
31	White Spruce	5	Sapling	4				nspecified 81-110	No N/A		Aspen ages vary greatly. 20-50 years old. Density and quality is pa
	White Spruce 622 - Low 4130	5 vland Shrul - Aspen	Sapling	Nonstoc	r Well		6	· 		Size	Scattered rocks mixed throughout. White Birch is declining. Many of
	White Spruce 622 - Low 4130	- Aspen Cover	Sapling	Nonstoc	r Well	103.2 5	6 Species	81-110	N/A	Sapling	
	White Spruce 622 - Low 4130	- Aspen Cover 2 5	Sapling P Size Class	Nonstoc	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo	6 Species Fir	81-110 Density	N/A Avg. Height		Scattered rocks mixed throughout. White Birch is declining. Many of
	White Spruce 622 - Low 4130 Canopy Species Sugar Maple	- Aspen Cover	Sapling P Size Class Pole	Nonstoc Poletimber BH A 8 10 20	r Well	103.2 5 Sub-Canopy 9 Balsam F	6 Species Fir	81-110 Density Low	N/A Avg. Height Variable	Sapling	Scattered rocks mixed throughout. White Birch is declining. Many of on Aspen. A few scattered supercanopy White Pines.
	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple	- Aspen Cover 2 5	Sapling P Size Class Pole Log/Pole	Nonstoc Poletimber BH A 8 10 20	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo	6 Species Fir d	81-110 Density Low Low	N/A Avg. Height Variable Variable	Sapling Sapling	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.
	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple Paper Birch	- Aspen Cover 2 5 5	Sapling P Size Class Pole Log/Pole XLog	Nonstoc Poletimber BH A 8 10 20	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo Tag Alde	6 Species Fir d	81-110 Density Low Low Low	N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.
	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple Paper Birch Quaking Aspen	5 vland Shrul - Aspen % Cover 2 5 5 35	Sapling P Size Class Pole Log/Pole XLog Log/Pole	Nonstoc Poletimber B	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo Tag Alde	6 Species Fir d	81-110 Density Low Low Low	N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.
	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple Paper Birch Quaking Aspen Bigtooth Aspen	5 vland Shrul - Aspen % Cover 2 5 5 35 29	Sapling P Size Class Pole Log/Pole XLog Log/Pole Pole	Nonstoc Poletimber BBH A 8 10 20 10 9	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo Tag Alde	6 Species Fir d	81-110 Density Low Low Low	N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.
	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple Paper Birch Quaking Aspen Bigtooth Aspen Balsam Poplar	5 vland Shrul - Aspen % Cover 2 5 5 35 29 5	Sapling P Size Class Pole Log/Pole XLog Log/Pole Pole Log/Pole	8 10 20 10 9 11	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo Tag Alde	6 Species Fir d	81-110 Density Low Low Low	N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.
32	White Spruce 622 - Low 4130 - Canopy Species Sugar Maple Red Maple Paper Birch Quaking Aspen Bigtooth Aspen Balsam Poplar Balsam Fir	- Aspen - Cover 2 5 5 5 29 5 10	Sapling P Size Class Pole Log/Pole XLog Log/Pole Pole Log/Pole Pole	4	r Well	103.2 5 Sub-Canopy S Balsam F Ironwoo Tag Alde	6 Species Fir d	81-110 Density Low Low Low	N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Tall Shrub	Scattered rocks mixed throughout. White Birch is declining. Many on Aspen. A few scattered supercanopy White Pines.



Stand	d Level 4 Co	over Type		Size De	nsity	Acres Stand	d Age B	A Range	Managed Site		General Comments
34	4110 - Sugar M	gar Maple Association Sawtimber Well 45.4 95 81-110 N/A			Few scattered conifers mixed throughout.						
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy S	Species	Density	Avg. Height	Size	
	Sugar Maple	55	Log/Pole	10	95	Quaking As	pen	Low	5 - 10 feet	Sapling	
	Basswood	20	Log/Pole	10		Balsam F	ir	Low	5 - 10 feet	Sapling	
	White Ash	15	Log/Pole	10		Ironwood	b	Low	Variable	Sapling	
	Paper Birch	5	Pole	8							
	Quaking Aspen	5	Log/Pole	10							
35	4134 - Aspe	en, Spruce/	Fir	Sapling	ı Well	16.6 2	7 Ir	mmature	N/A		Some older super canopy trees present. Beaver damage. Trace maple.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy S	Species	Density	Avg. Height	Size	Rocky.
	Quaking Aspen	55	Sapling/Pole	e 4	27	Balsam F	ir	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	5	Sapling/Pole	9 4		White Spru	ıce	Low	5 - 10 feet	Sapling	
	Balsam Fir	35	Sapling/Pole	9 4							
	White Spruce	5	Sapling/Pole	9 4							
36	6239 - Mixed Er	mergent W	etland	Nonsto	cked	3.4	Ur	nspecified	No		
37	4134 - Aspe	en, Spruce/	Fir Po	oletimbe	Mediur	n 28.1 4	1 Ur	nspecified	N/A		Past cut in aspen regenerating poorly. Looks like a poor site. Scattered
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy S	Species	Density	Avg. Height	Size	low vigor stand. Most of the bigger balsam has been hit by spruce bud worm. Pocket of tag alder in NE part of stand.
	Quaking Aspen	70	Pole	8	41	Quaking As	pen	Low	10 - 20 feet	Sapling	worm. I boket of tag ander in the part of stand.
	Balsam Fir	5	Pole	6		Balsam F	ir	Low	10 - 20 feet	Sapling	
	White Spruce	25	Pole	6		White Spru	ıce	Low	10 - 20 feet	Sapling	
						Tamarac	k	Medium	10 - 20 feet	Sapling	
						Black Che	rry	Low	5 - 10 feet	Sapling	
						Tag Alde	er	Low	5 - 10 feet	Tall Shrub	
						Red Map	le	Low	10 - 20 feet	Sapling	
38		duous		Poletimb				1-50	N/A		
	Canopy Species		Size Class		Age	Sub-Canopy S		Density	Avg. Height	Size	
	Black Ash	40	Pole/Sapling		75	Tag Alde		Full	5 - 10 feet	Tall Shrub	
	Tamarack	40	Pole	7		Red Map	le	Low	5 - 10 feet	Sapling	
No	orthern White Cedar	10	Pole	8							
	Black Spruce	10	Pole	5							
39	4130 -	- Aspen		Poletimb		9.6 3	0 Ir	mmature	N/A		north part h 8 inch black ash break out
	Canopy Species		Size Class		Age	Sub-Canopy S	-	Density	Avg. Height	Size	
	Paper Birch	3	Sapling	4		Balsam F		Medium	Variable	Sapling	
	Quaking Aspen	80	Pole/Sapling		30	White Spru		Medium	Variable	Sapling	
	Balsam Fir	12	Sapling	3		White Pir	ne	Low	< 5 feet	Sapling	
	White Spruce	5	Sapling	3							



Stand	d Level 4 C	Cover Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
40	4130	- Aspen		Saplin	g Well	60.1	30	Immature	N/A		Scattered larger aspen throught out stand.
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Red Maple	10	Pole	6		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Quaking Aspen	80	Sapling/Pole	e 4	30	Ва	alsam Fir	Low	< 5 feet	Sapling	
	Balsam Fir	5	Sapling	3		Wh	ite Spruce	Low	< 5 feet	Sapling	
No	orthern White Cedar	3	Pole	6		Ir	onwood	Low	5 - 10 feet	Sapling	
	White Pine	2	Log/XLog	13		Hazelı	nut (Beaked)	Low	5 - 10 feet	Tall Shrub	
41	4110 - Sugar M	laple Assoc	ciation s	Sawtimb	oer Wel	l 26.2	104	81-110	N/A		Stand Thinned 2015
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Sugar Maple	60	Log/Pole	10	104	Ir	onwood	Low	Variable	Sapling	
	Basswood	40	Log	12		Lea	atherwood	Medium	< 5 feet	Tall Shrub	
				'		Ва	alsam Fir	Low	Variable	Sapling	
42	6120 - Lo	wland Ceda	ır f	Poletimb	oer Wel	l 15.7	101	Unspecified	N/A		
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Balsam Fir	10	Pole	9		Qual	king Aspen	Low	10 - 20 feet	Sapling	
	White Spruce	10	Log/Pole	11		Norther	n White Ceda	ar Low	5 - 10 feet	Sapling	
No	orthern White Cedar	50	Log/Pole	10	101	Ta	amarack	Low	Variable	Sapling	
	Tamarack	25	Pole/Log	9		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	White Pine	5	Log	14							
43	4110 - Sugar N	laple Assoc	ciation	Sawtimb	oer Wel	l 22.1	101	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Sugar Maple	75	Log/Pole	10	101	Ва	alsam Fir	Low	5 - 10 feet	Sapling	
	Basswood	15	Log	12		Ir	onwood	Low	10 - 20 feet	Sapling	
	Paper Birch	3	Pole	8							
	White Ash	7	Log/Pole	12							
44	4134 - Aspe	en, Spruce/	Fir Po	oletimbe	r Mediu	ım 12.9	30	Immature	N/A		Spotty spruce fir with some aspen. Poor stocking, poor site.
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	
	Balsam Fir	10	Pole/Log	8		Ва	alsam Fir	Medium	Variable	Tall Shrub	
	Quaking Aspen	60	Pole/Sapling	g 5	30	Wh	ite Spruce	Medium	Variable	Tall Shrub	
	White Spruce	30	Pole/Sapling	g 5		Ta	ag Alder	Low	5 - 10 feet	Tall Shrub	
45	4134 - Aspe	en, Spruce/	Fir F	Poletimb	oer Wel	l 8.4	43	81-110	N/A		OPIC - FMD: OI Stand Year Origin was 1978
	Canopy Species	% Cover	Size Class	DBI	H Age						
	Quaking Aspen	80	Pole	6	43						
	Balsam Fir	20	Pole/Sapling	g 5							



Stand		Level 4 Cover Type	Level 4 Cover Type	Level 4 Cover Type		Level 4 Cover Type		Size Density		Acres	Stand Age I	and Age BA Range		ite	General Comments
46	6220 - A	lder/willow		Nonsto	cked	44.3	0 (Jnspecified	No		Lowland alder drainage.				
47	4130	- Aspen		Sapling	Well	29.5	6	Immature	N/A		Harvested 2015				
	Canopy Species	% Cover	Size Class	DBH	Age										
(Quaking Aspen	100	Sapling	1	6										
48	6120 - Lov	vland Ceda	ır P	oletimb	er Well	36.2	104 l	Jnspecified	N/A		Stand is very dense on West side and sparse on the East side.				
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size					
	Balsam Fir	5	Pole	8			lsam Fir	Low	5 - 10 feet	Sapling					
	White Spruce	5	Pole/Log	9		Та	ıg Alder	Low	5 - 10 feet	Tall Shrub					
	Black Spruce	5	Pole	7											
Nor	rthern White Cedar	80	Pole/Log	9	104										
	Black Ash	5	Pole	6											
49	6112 - Lov	vland Aspe	n P	oletimb	er Well	6.8	30	Immature	N/A		Pockets of larger aspen in stand				
	Canopy Species	% Cover	Size Class	DBH	Age										
(Quaking Aspen	70	Pole/Sapling	5	30										
	Balsam Fir	10	Pole/Sapling	5											
	14/1 11 0														
	White Spruce	5	Sapling/Pole	4											
	White Spruce Quaking Aspen	5 15	Sapling/Pole Log/Pole												
	·	15	Log/Pole	4	er Well	27.6	104	111-140	N/A						
50	Quaking Aspen	15 laple Assoc	Log/Pole	4 10 awtimb	er Well		104		N/A Avg. Height	Size					
50	Quaking Aspen 4110 - Sugar M	15 laple Assoc	Log/Pole ciation S.	4 10 awtimb	Age	Sub-Car				Size Sapling					
50	Quaking Aspen 4110 - Sugar M Canopy Species	15 laple Assoc	Log/Pole ciation S	4 10 awtimbe	Age	Sub-Car Bal	nopy Species	Density	Avg. Height						
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple	15 laple Associate **Cover** 75	Log/Pole Ciation S. Size Class Log/Pole	4 10 awtimbe DBH	Age	Sub-Car Bal	nopy Species Isam Fir	Density Low	Avg. Height 5 - 10 feet	Sapling					
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple Yellow Birch	15 laple Assoc **Cover** 75 3	Log/Pole ciation S Size Class Log/Pole Pole	4 10 awtimbe DBH	Age	Sub-Car Bal	nopy Species Isam Fir	Density Low	Avg. Height 5 - 10 feet	Sapling					
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple Yellow Birch Basswood	15 laple Associated 75 3 15 7	Log/Pole ciation S. Size Class Log/Pole Pole Log Log/Pole	4 10 awtimbe DBH 10 8 12 10	Age	Sub-Car Bal Iro	nopy Species Isam Fir onwood	Density Low	Avg. Height 5 - 10 feet	Sapling	Fair to poorly stocked aspen.				
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple Yellow Birch Basswood Paper Birch	15 laple Assoc % Cover	Log/Pole ciation S. Size Class Log/Pole Pole Log Log/Pole	4 10 awtimber DBH 10 8 12 10 etimber	Age 104	Sub-Car Bal Iro	nopy Species Isam Fir onwood	Low Low Unspecified	Avg. Height 5 - 10 feet 10 - 20 feet	Sapling	Fair to poorly stocked aspen.				
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple Yellow Birch Basswood Paper Birch 4134 - Aspe	15 laple Assoc % Cover	Log/Pole ciation S. Size Class Log/Pole Pole Log Log/Pole Fir Pole	4 10 awtimber DBH 10 8 12 10 etimber	Age 104 Medium	Sub-Car Bal Iro 1 11.7 Sub-Car	nopy Species Isam Fir pnwood	Low Low Unspecified	Avg. Height 5 - 10 feet 10 - 20 feet N/A	Sapling Sapling	Fair to poorly stocked aspen.				
50	Quaking Aspen 4110 - Sugar M Canopy Species Sugar Maple Yellow Birch Basswood Paper Birch 4134 - Aspe Canopy Species	15 laple Assoc % Cover	Log/Pole ciation S Size Class Log/Pole Pole Log Log/Pole Fir Pole Size Class	4 10 awtimber 10 8 12 10 etimber DBH	Age 104 Medium	Sub-Car Bal Iro 11.7 Sub-Car	nopy Species Isam Fir ponwood 58 U	Low Low Jnspecified Density	Avg. Height 5 - 10 feet 10 - 20 feet N/A Avg. Height	Sapling Sapling	Fair to poorly stocked aspen.				



Stan	d Level 4 Co	over Type	\$	Size Density	Acres	Stand Age I	BA Range	Managed S	ite	General Comments
52	4134 - Aspe			apling Mediun	n 21.1	29	Immature	N/A		Poor open grown regeneration.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	3	Pole/Sapling	5	Bal	sam Fir	Low	5 - 10 feet	Sapling	
	Quaking Aspen	72	Sapling	3 29	Hazeln	ut (Beaked)	Low	< 5 feet	Tall Shrub	
	Balsam Fir	10	Sapling	3						
	White Spruce	10	Sapling	3						
	Black Cherry	5	Sapling	3						
53	6120 - Lov	vland Ceda	r P	oletimber We	I 18.8	104 l	Jnspecified	N/A		patches of Tag alder within the stand.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
N	orthern White Cedar	70	Log/Pole	11 104	Bal	sam Fir	Medium	10 - 20 feet	Sapling	
	Black Ash	5	Pole/Log	8	Whit	e Spruce	Low	10 - 20 feet	Sapling	
	Yellow Birch	5	Pole	7	Та	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	10	Pole	8						
	Balsam Fir	10	Pole/Sapling	7						
54	4110 - Sugar M	laple Assoc	ciation P	oletimber We	l 18.9	104	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	83	Pole/Log	8 104	Bal	sam Fir	Low	5 - 10 feet	Sapling	
	White Ash	2	Log/Pole	10	Whit	e Spruce	Low	5 - 10 feet	Sapling	
	Basswood	15	Log	12	Irc	nwood	Medium	Variable	Sapling	
55	4130	- Aspen	P	oletimber We	123.2	30	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Canopy Species Quaking Aspen	% Cover	Size Class Pole/Sapling	DBH Age 5 30		nopy Species ite Pine	Density Low	Avg. Height >20 feet	Size Sapling	
					Wh					
	Quaking Aspen	85	Pole/Sapling	5 30	Whit	ite Pine	Low	>20 feet	Sapling	
56	Quaking Aspen Balsam Fir Red Maple	85 10	Pole/Sapling Sapling Sapling	5 30	Whit Che	ite Pine e Spruce rry (spp.)	Low	>20 feet >20 feet	Sapling Sapling	
56	Quaking Aspen Balsam Fir Red Maple	85 10 5 wland Ceda	Pole/Sapling Sapling Sapling	5 30 3 3	Whit Che	ite Pine e Spruce rry (spp.)	Low Low Low Low	>20 feet >20 feet >20 feet	Sapling Sapling	
56	Quaking Aspen Balsam Fir Red Maple 6120 - Lov	85 10 5 wland Ceda	Pole/Sapling Sapling Sapling	5 30 3 3	Whit Whit Che I 1.9 Sub-Car	ite Pine e Spruce rry (spp.)	Low Low Low Low	>20 feet >20 feet >20 feet >20 feet	Sapling Sapling Sapling	
56	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species	85 10 5 wland Ceda	Pole/Sapling Sapling Sapling r P	5 30 3 3 oletimber We	Whit Whit Che I 1.9 Sub-Car	ite Pine e Spruce rry (spp.) 104 U	Low Low Low Dnspecified Density	>20 feet >20 feet >20 feet N/A Avg. Height	Sapling Sapling Sapling	
	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species Balsam Fir	85 10 5 wland Ceda % Cover 25	Pole/Sapling Sapling Sapling r Pole Size Class Pole	5 30 3 3 oletimber We DBH Age 8	Whit Whit Che I 1.9 Sub-Cai Bal Whit	ite Pine e Spruce rry (spp.) 104 Loopy Species sam Fir	Low Low Low Unspecified Density Medium	>20 feet >20 feet >20 feet N/A Avg. Height Variable	Sapling Sapling Sapling Size Sapling	
	Quaking Aspen Balsam Fir Red Maple 6120 - Low Canopy Species Balsam Fir White Spruce orthern White Cedar	85 10 5 wland Ceda % Cover 25 15 60	Pole/Sapling Sapling Sapling r P Size Class Pole Log/Pole Pole	5 30 3 3 0letimber We DBH Age 8 11	Whit Whit Che I 1.9 Sub-Cai Bal Whit	ite Pine e Spruce rry (spp.) 104 thoopy Species sam Fir e Spruce	Low Low Low Unspecified Density Medium Low	>20 feet >20 feet >20 feet N/A Avg. Height Variable Variable	Sapling Sapling Sapling Size Sapling Sapling	Hardwood pole stand with few poorer quality logs. BA averaged 100
N	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species Balsam Fir White Spruce orthern White Cedar	85 10 5 wland Ceda Cover 25 15 60 laple Association Cover Cover	Pole/Sapling Sapling Sapling r P Size Class Pole Log/Pole Pole	5 30 3 3 3 soletimber We DBH Age 8 11 8 104	Whit Whit Che I 1.9 Sub-Car Bal Whit Ta	ite Pine e Spruce rry (spp.) 104 topy Species sam Fir e Spruce g Alder	Low Low Low Dnspecified Density Medium Low Low 81-110	>20 feet >20 feet >20 feet N/A Avg. Height Variable Variable 5 - 10 feet	Sapling Sapling Sapling Size Sapling Sapling	Hardwood pole stand with few poorer quality logs. BA averaged 100
Ne	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species Balsam Fir White Spruce orthern White Cedar	85 10 5 wland Ceda Cover 25 15 60 laple Association Cover Cover	Pole/Sapling Sapling Sapling r P Size Class Pole Log/Pole Pole	5 30 3 3 oletimber We DBH Age 8 11 8 104 oletimber We	Whit Whit Che I 1.9 Sub-Car Bal Whit Ta I 12.2 Sub-Car	ite Pine e Spruce rry (spp.) 104 Unopy Species sam Fir e Spruce g Alder 86	Low Low Low Dnspecified Density Medium Low Low 81-110	>20 feet >20 feet >20 feet N/A Avg. Height Variable Variable 5 - 10 feet N/A	Sapling Sapling Sapling Size Sapling Sapling Sapling Tall Shrub	Hardwood pole stand with few poorer quality logs. BA averaged 100
Ne	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species Balsam Fir White Spruce orthern White Cedar 4110 - Sugar M Canopy Species	85 10 5 wland Ceda % Cover 25 15 60 laple Assoc % Cover % Cover	Pole/Sapling Sapling Sapling r P Size Class Pole Log/Pole Pole Size Class	5 30 3 3 oletimber We DBH Age	Whit Whit Che I 1.9 Sub-Car Bal Whit Ta I 12.2 Sub-Car	ite Pine e Spruce rry (spp.) 104 Unopy Species sam Fir e Spruce g Alder 86 nopy Species	Low Low Low Jnspecified Density Medium Low Low 81-110 Density	>20 feet >20 feet >20 feet N/A Avg. Height Variable Variable 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Size Sapling Sapling Tall Shrub	Hardwood pole stand with few poorer quality logs. BA averaged 100 crowns still have room to grow. Survey corner present. Scattered aspe
Ne	Quaking Aspen Balsam Fir Red Maple 6120 - Lov Canopy Species Balsam Fir White Spruce orthern White Cedar 4110 - Sugar M Canopy Species Red Maple	85 10 5	Pole/Sapling Sapling Sapling r P Size Class Pole Log/Pole Pole Size Class Pole Pole	5 30 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Whit Whit Che I 1.9 Sub-Cai Bal Whit Ta I 12.2 Sub-Cai Irc Leaf	ite Pine e Spruce rry (spp.) 104 nopy Species sam Fir e Spruce g Alder 86 nopy Species inwood	Low Low Low Unspecified Density Medium Low Low 81-110 Density Medium Medium	>20 feet >20 feet >20 feet N/A Avg. Height Variable Variable 5 - 10 feet N/A Avg. Height Variable	Sapling Sapling Sapling Size Sapling Sapling Tall Shrub Size Sapling	Hardwood pole stand with few poorer quality logs. BA averaged 100 crowns still have room to grow. Survey corner present. Scattered aspe

Crystal Falls Mgt. Unit



Canopy Species Source Canopy Species Source Size Class DBH Age	Stand	Level 4 Co	over Type	:	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
Balsam Fir Maclium 5 + 1.0g 14 Adder Low 5 + 10 feet Sapling	58	6119 - Mixed Lowla	and Decidud	ous Forest P	oletimb	er Well	6.3	110	81-110	N/A		Lowland fingers. Cedar in the west transitions to black ash.
Red Maple		Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
Red Maple		White Spruce	5	Log			Ba	alsam Fir	Medium	5 - 10 feet	Sapling	
Black Ash Ash Aspen Polestinder Willie Polestinder Polestinder Willie Polestinder Po		Paper Birch	15	Pole	8			Alder	Low	5 - 10 feet	Tall Shrub	
Southern White Cedar 10 Pole/Log 8		Red Maple	25	Pole/Log	8							
Signature Sig		Black Ash	45	Pole/Log	9	110						
Canopy Species % Cover Size Class DBH Age	No	rthern White Cedar	10	Pole/Log	8							
Canopy Species % Cover Size Class DBH Age Sub-Canopy Species Balsam Fir High Sub-Canopy Species High S	59	4130 - Aspen Poletimber V			er Well	65.1	52 111-140		N/A			
Paper Birch 5 Pole 8 8 Cuaking Aspen 65 Pole 8 8 Cuaking Aspen 85 Pole 8 52		Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	,
Red Maple Quaking Aspen 85 Pole 8 52 Go 6132 - Mixed Lowland Forest with Cedar Poletimber Well Ganopy Species 5 Log/Pole 10 Black Ash 40 Pole 7 108 Ganopy Species 5 Cogres 5 Raping 1 2 Black Cherry 5 Pole 8 8 1 Black Spruce 20 Pole		Paper Birch	5	Pole	8		Ba	alsam Fir	High	>20 feet	Pole	
Quaking Aspen		Red Maple	10	Pole	8						-	dense in south. Cedar and black ash found within stand. Exclude dense
Canopy Species % Cover Size Class DBH Age Balsam Poplar 5 Log/Pole 10 Northern White Cedar 35 Log/Pole 10 Black Spruce 20 Pole 7 108 61 4130 - Aspen Species % Cover Size Class DBH Age Quaking Aspen 95 Sapling 1 2 Black Cherry 5 Pole 8 Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Gashage Pole 100 Sapling/Pole 4 30 Reference Poletimber Well Alder High 5-10 feet Tall Shrub 64 6120 - Lowland Cedar Polet 10 Log/Pole 10 Pole 1			85	Pole		52						cedar and black ash pockets.
Balsam Poplar 5 Log/Pole 10 Northern White Cedar 35 Log/Pole 10 Black Spruce 20 Pole 7 108 61 4130 - Aspen Sapling Well Sapli	60	6132 - Mixed Lowla	ınd Forest v	with Cedar P	oletimb	er Well	9.0	108	81-110	N/A		
Balsam Poplar 5		Canopy Species	% Cover	Size Class	DBH	Age						
Northern White Cedar 35						- 3-						may be older than dominant age of stand.
Black Spruce 20	No	<u>'</u>										
Sapling Well Sapling Sapl												
Canopy Species % Cover Size Class DBH Age Quaking Aspen 95 Sapling 1 2 Black Cherry 5 Pole 8 Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Balsam Fir Medium >20 feet Tall Shrub Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Canopy Species Density Avg. Height Size Alder High 5 - 10 feet Tall Shrub Canopy Species % Cover Size Class DBH Age Sub-Canopy Species Density Avg. Height Size Alder Tall Shrub Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Balsam Fir High 10 - 20 feet Sapling Tamarack 20 Pole 8		·				108						
Canopy Species % Cover Size Class DBH Age Quaking Aspen 95 Sapling 1 2 Black Cherry 5 Pole 8 Sapling 1 2 Black Cherry 5 Pole 8 Sapling 1 2 Sub-Canopy Species Pole Sub-Canopy Species Pole Sub-Canopy Species Pole Sub-Canopy Species Pole Sub-Canopy Species Sub-Canopy	61	4130	- Aspen		Sapling	Well	61 1	2	Immature	N/A		Stand cut in Fall 2019 part of Redo Timber Sale
Quaking Aspen 95 Sapling 1 2	01			Siza Class			•	_		,, .		Canada Ca
Black Cherry 5 Pole 8 Pole 8 Poletimber Well 9.5 30 Immature N/A Aspen sapling stand. West half of stand is low density balsam/spruce 20 tall) with some cherry. this part of stand is within 300 ft buffer of L Cassidy Ck. Canopy Species W Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Balsam Fir Medium >20 feet Sapling		• • • •										
Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Balsam Fir Medium >20 feet Sapling 63 622 - Lowland Shrub Nonstocked Sub-Canopy Species Density Alder High 5-10 feet Tall Shrub 64 6120 - Lowland Cedar Poletimber Well 12.1 86 81-110 N/A Canopy Species New York Height Size Alder High 5-10 feet Tall Shrub 65 Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Pole 7 Alder Medium 5-10 feet Sapling Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Pole 7 Poletimber Well Black Spruce 10 Pole 8 Poletimber Well Balsam Fir High 10 - 20 feet Sapling												
Canopy Species % Cover Size Class DBH Age Quaking Aspen 100 Sapling/Pole 4 30 Sub-Canopy Species Balsam Fir Medium >20 feet Sapling Nonstocked 16.4 Unspecified No Sub-Canopy Species Density Avg. Height Size Alder High 5-10 feet Tall Shrub Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Sub-Canopy Species Density Alder Medium 5-10 feet Tall Shrub Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Balsam Fir High 10-20 feet Sapling Tamarack 20 Pole 8	62	4130	- Aspen	P	oletimb	er Well	9.5	30	Immature	N/A		Aspen sapling stand. West half of stand is low density balsam/spruce (10-
Quaking Aspen 100 Sapling/Pole 4 30 Balsam Fir Medium >20 feet Sapling Comparison Compariso		Canony Species	% Cover	Size Class	DBH	Δαρ	Sub-Ca	nony Species	s Density	Ava Height	Size	20' tall) with some cherry. this part of stand is within 300 ft buffer of Little
Sub-Canopy Species Density Avg. Height Size Alder High 5 - 10 feet Tall Shrub 64 6120 - Lowland Cedar Poletimber Well 12.1 86 81-110 N/A Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Alder Medium 5 - 10 feet Tall Shrub Black Spruce 10 Pole 7 Balsam Fir High 10 - 20 feet Sapling Tamarack 20 Pole 8												Cassidy Ck.
Sub-Canopy Species Density Avg. Height Size Alder High 5 - 10 feet Tall Shrub 64 6120 - Lowland Cedar Poletimber Well 12.1 86 81-110 N/A Canopy Species 6 Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Pole 7 Balsam Fir High 10 - 20 feet Sapling Tamarack 20 Pole 8	63	622 - Low	/land Shrub)	Nonsto	cked	16.4		Unspecified	No		Alder drainage along stream.
Alder High 5 - 10 feet Tall Shrub 64 6120 - Lowland Cedar Poletimber Well 12.1 86 81-110 N/A Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Black Spruce 10 Pole 7 Tamarack 20 Pole 8							Sub-Ca	nony Species	. Density	Ava Height	Size	
Canopy Species % Cover Size Class DBH Age Quaking Aspen 10 Log/Pole 10 Alder Medium 5 - 10 feet Tall Shrub Black Spruce 10 Pole 7 Tamarack 20 Pole 8							Oub Ou					
Canopy Species% Cover Size ClassDBH AgeSub-Canopy SpeciesDensityAvg. HeightSizeQuaking Aspen10Log/Pole10AlderMedium5 - 10 feetTall ShrubBlack Spruce10Pole7Balsam FirHigh10 - 20 feetSapling Tamarack	64	6120 - Lov	wland Ceda	ar P	oletimb	er Well	12.1	86	81-110	N/A		
Quaking Aspen10Log/Pole10AlderMedium5 - 10 feetTall ShrubBlack Spruce10Pole7Balsam FirHigh10 - 20 feetSaplingTamarack20Pole8		Canopy Species	% Cover	Size Class	рвн	Age	Sub-Ca	nopy Species	s Density	Ava. Heiaht	Size	under story of fir and alder. Inoperable due to saturated soil and stream
Black Spruce 10 Pole 7 Balsam Fir High 10 - 20 feet Sapling Tamarack 20 Pole 8						7.90	232 90					
Tamarack 20 Pole 8		0 1					Ra					
									. "9"	.0 20 1001		
NOTIFIED WHITE GEORGE TO USE TOO/POLE TO AN	No	rthern White Cedar	60	Log/Pole	10	86						