

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12048 Entry Year 2025 Acreage: 1,459

County Dickinson

Management Area: Ralph Moraine

Stand Examiner: Ed Rice

Legal Description:

T43N-R29W Sections 18, 19, 20, 29 and 30

Identified Planning Goals:

Optimize sustainable timber production while enhancing and protecting wildlife habitat. Continue to sustainably balance the aspen age class acres. Get the hardwood stands on a 20 year alternating cutting cycle towards regulation. Protect the riparian areas and transition zones during management activity. Promote recruitment of conifer.

Soil and topography:

Land is nearly level to hilly with a mix of Pemene and Emmet soils that are well drained loamy and sandy soils on ground moraines, end moraines and outwash plains. Some narrow depressions contain Cathro soils that are poorly drained black muck.

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

Ownership patterns in and around this compartment consist mostly of State lands with private parcels and camps.

Unique Natural Features:

No Unique Natural Features known.

Archeological, Historical, and Cultural Features:

Archeological potential exists.

Special Management Designations or Considerations:

This compartment should be included within a DWC. High populations of wintering deer were observed throughout the compartment

Watershed and Fisheries Considerations:

The northern region of this compartment borders the Main Branch Ford River. The Main Branch Ford River is designated a Type 1 trout stream less than 50-foot width and has a predicted mean July temperature of 65.3°F (cold stream). A 300-foot buffer is recommended for the Main Branch Ford River in riparian areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, a 100 foot plus 5 feet per 1% increase in slope; buffer is recommended to protect these areas in accordance with Best Management Practices.

The southern portion of the stand which includes the headwaters of the East Branch of the Sturgeon River, wetlands and springs. Best management practices should be implemented which include a 100' buffer.

Wildlife Habitat Considerations:

This compartment has had aspen age-class distribution for grouse and summer range for deer. The Ford River corridor provides valuable riparian habitat for wetland associated species and also is an important movement corridor for species such as deer and bear. Mesic and lowland conifers in this compartment provide critical winter habitat for deer, hare and bobcat. Transitions zones between uplands and lowlands are important for wintering deer to access upland food sources. Lowland conifers and lowland hardwoods types are important habitats for black bear. There are hunter walking trails that will be maintained in this compartment.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of medium-textured glacial till. The glacial drift thickness varies between 50 and 100 feet. The Cambrian Munising Formation and the Precambrian Michigamme Formation subcrop below the glacial drift. There is no current economic use for these rocks. The Groveland Iron mine is located approximately six miles to the south. A gravel pit is located in Section 20 and there should be potential. There is no economic oil and gas production in the UP.

Vehicle Access:

Good access.

Survey Needs:

one corner needed

Recreational Facilities and Opportunities:

Snowmobile trail

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

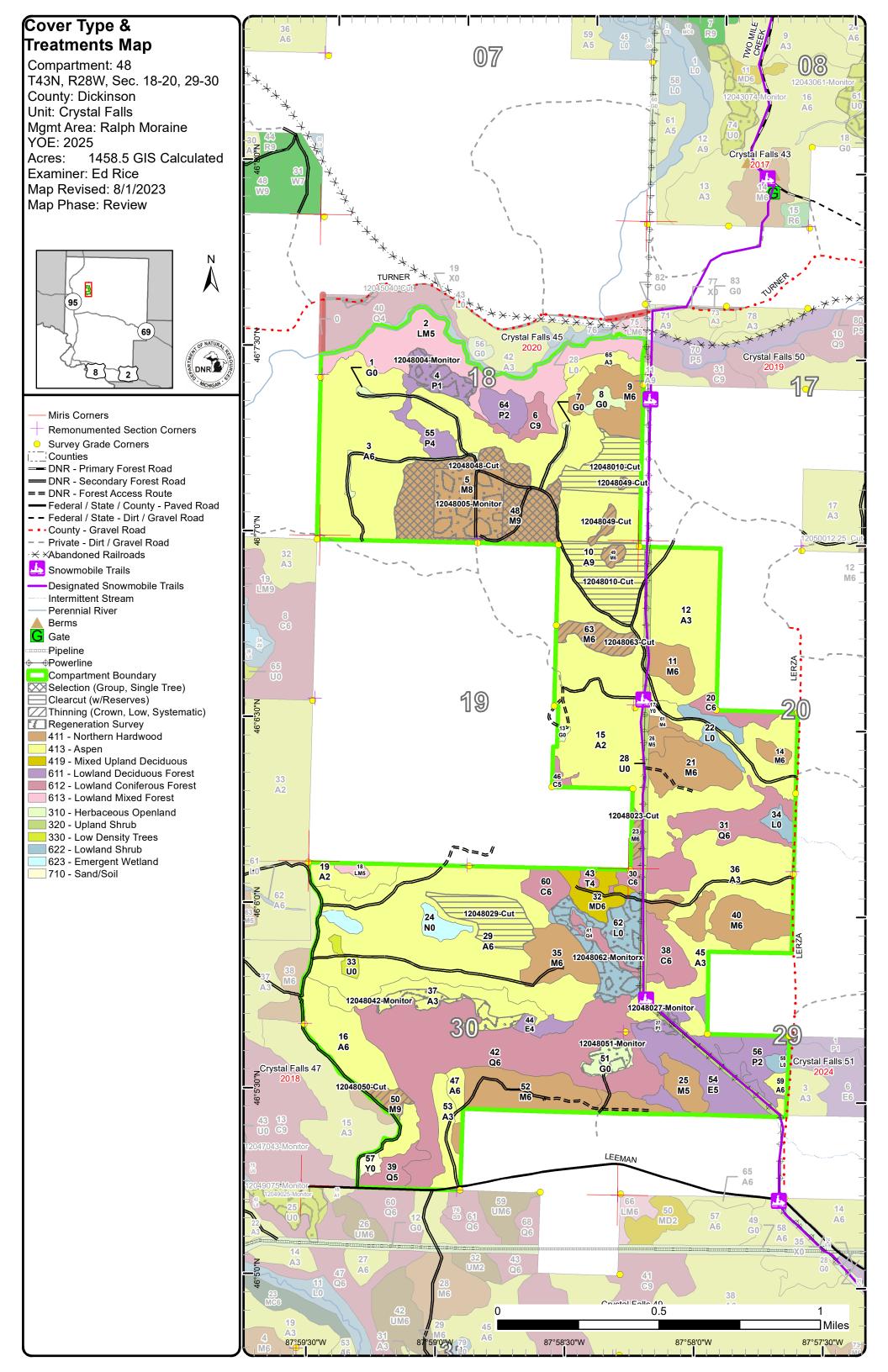
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

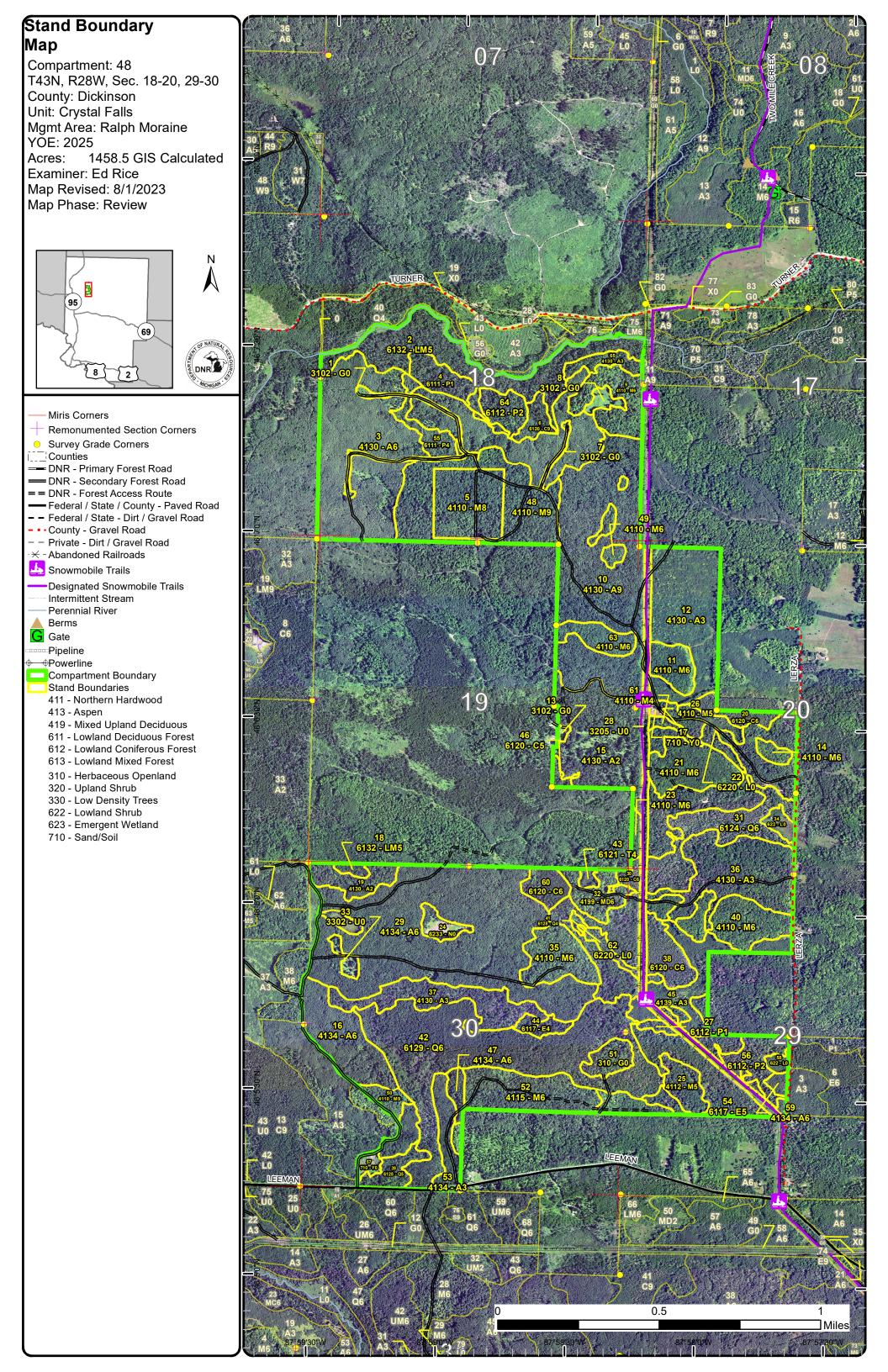
The following information is displayed, where pertinent, on the attached compartment maps:

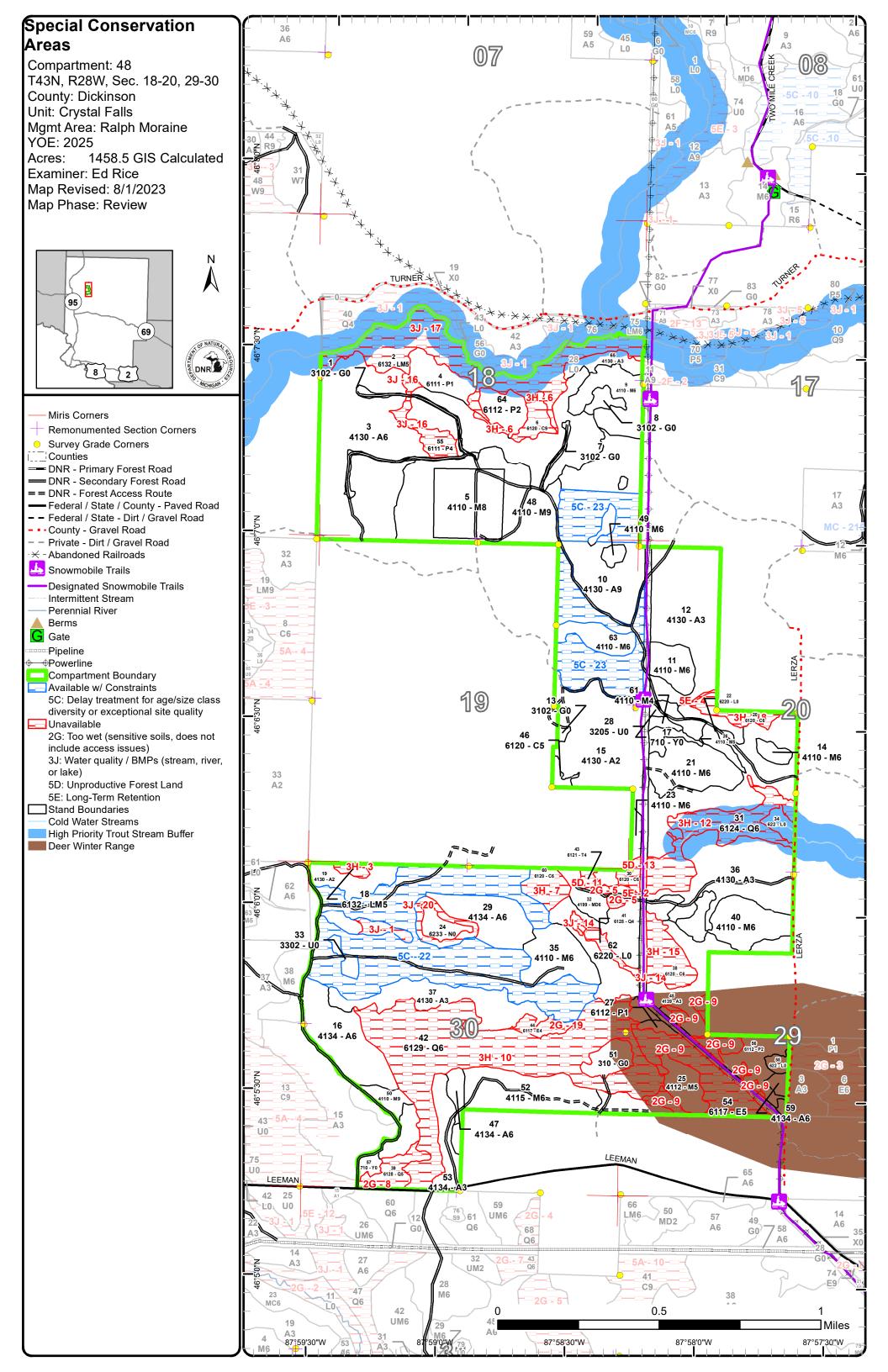
Base feature information, stand boundaries, cover types, and numbers

Proposed treatments
Site condition boundaries

Details on the road access system







Crystal Falls Mgt. Unit

Ed Rice: Examiner

Compartment 48 Year of Entry 2025



Age Class

	Į gr		3/4	2 / A	P &	3 / 6	S R	3/8	8/8	\$ \ \$	S &	8 /8	S Z Z		N S		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	St Store	,
Aspen	0	193	79	13	136	42	264	0	0	0	0	0	0	0	0	0	0	0	727
Cedar	0	0	0	0	0	0	0	14	3	7	18	0	0	0	0	0	0	0	42
Herbaceous Openland	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Aspen/Balsam Poplar	0	37	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Lowland Conifers	0	0	0	0	0	32	0	0	0	0	130	0	0	0	0	0	0	0	162
Lowland Deciduous	0	0	0	0	0	0	5	37	0	0	0	0	0	0	0	0	0	0	42
Lowland Mixed Forest	0	0	0	0	0	0	2	0	0	0	55	0	0	0	0	0	0	0	57
Lowland Shrub	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Marsh	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Mixed Upland Deciduous	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13
Northern Hardwood	0	0	0	0	0	0	44	8	30	0	0	0	0	0	0	0	0	182	264
Sand, Soil	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Tamarack	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Upland Shrub	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Total	105	230	79	13	145	74	330	59	33	7	203	0	0	0	0	0	0	182	1460



Report 2 – Treatment Summary

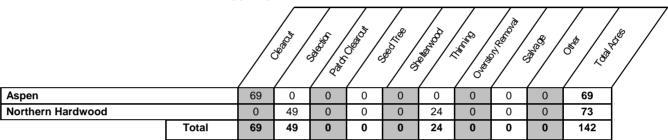
Crystal Falls Mgt. Unit Year of Entry: 2025

Acres of Harvest

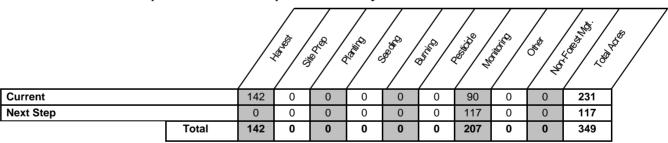
Compartment 48
Total Compartment Acres: 1,459

Commercial Harvest - 142 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



DNR DNR MICHIGAN

t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habit Cut

Proposed Treatments:

S

10 12048010-Cut 47.7 4130 - Aspen Sawtimber 55 Unspec Harvest Clearcut with 4319 - Mixed Even-Aged No Well ified Retention Upland Forest

<u>Prescription</u> cut merchantable aspen. cut spruce, fir 12" stump diameter and larger do not cut tree species except listed above. maple may only be cut for <u>Specs:</u> equipment access where necessary but should be kept to a minimum.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable aspen, hardwoods

Regen:

Other as transitions to stand 63, hardwood component increases. component of larger aspen 14-16"dbh. very little conifer in stand. h maple 4-6" dbh throughout with associated basswood and cherry. scattered hills/knobs where higher stocking of N hdwd is present. highly stocked h

maple in N 1/4 of the stand 2-5" dbh. small inclusion of lower quality h maple and w birch in NW. aspen concentrations mainly follow the

understory hazel

Site Condition

Proposed Start Date: 10/1 /2024

23 12048023-Cut 2.9 4110 - Sugar Maple Poletimber 55 81-110 Harvest Crown Thinning 411 - Northern Uneven-No Association Well Hardwood Aged

Prescription Thin to 70 BA. keep all tree species and sizes represented. do not remove all aspen, w birch, or conifer if present. avoid creating a flush of aspen in understory if aspen is found in concentrations. Do not cut oak, hemlock, pine, y birch, b ash, or elm if present. capture value of high grade basswood logs where available without removing all basswood. keep at least one large crowned h maple per acre as seed sources.

Next Step Treatments:

Acceptable N hardwoods

Regen:

Other good basswood logs 11-16" dbh. stand 110 BA

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

29 12048029-Cut 21.1 4134 - Aspen, Poletimber 51 Unspec Harvest Clearcut with 429 - Mixed Even-Aged No Spruce/Fir Well ified Retention Upland Conifers

<u>Prescription</u> cut merchantable aspen. cut spruce/fir 12" stump and larger. do not cut any other species. if smaller conifer are needed to be cut for <u>Specs:</u> equipment access, keep to absolute minimum. buffer any vernal/low area minimum 100 feet

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable conifer, aspen

Regen:

Other W end has higher stocking of ironwood/hazel. multiple small vernal ponds near to edge of stand 60. fir 4-7" dbh. small inclusions of h

<u>Comment:</u> maple/cherry component throughoutvery heavy winter deer use - cover and food

Site Condition

Proposed Start Date: 10/1 /2024

Compartment: 48

Hardwood

Year of Entry: 2025

Aged

S

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
48	12048048-Cut	48.5	4110 - Sugar Maple	Sawtimbe	r 73	81-110	Harvest	Single Tree	411 - Northern	Uneven-	No

Specs:

Prescription Thin to 70 BA. keep all tree species and sizes represented. do not remove all aspen, w birch, or conifer if present. avoid creating a flush of aspen in understory if aspen is found in concentrations. Do not cut oak, hemlock, pine, y birch, b ash, or elm if present. capture value of high grade basswood logs where available without removing all basswood, keep at least one large crowned h maple per acre as seed sources, if vernal or low areas are found, buffer a minimum of 100 feet.

Selection

Next Step

Monitoring, Natural Regen (Intermediate)

Association

Well

Treatments:

Acceptable N hardwoods

Regen:

center of stand heavier to ironwood. stand 110 BA Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

12048049-Cut 5.6 4110 - Sugar Maple Poletimber 55 81-110 Harvest Crown Thinning 411 - Northern Uneven-Nο Association Well Hardwood Aged

Specs:

Prescription Thin to 70 BA. keep all tree species and sizes represented. do not remove all aspen, w birch, or conifer if present. avoid creating a flush of aspen in understory if aspen is found in concentrations. Do not cut oak, hemlock, pine, y birch, b ash, or elm if present, capture value of high grade basswood logs where available without removing all basswood, keep at least one large crowned h maple per acre as seed sources, if vernal or low areas are found, buffer a minimum of 100 feet.

Next Step Treatments:

Acceptable N hardwoods

Regen:

Other small n hdwd island among a larger mixed aspen stand. good basswood logs. stand 110 BA

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

12048050-Cut 5.5 4110 - Sugar Maple Sawtimber 81-110 Harvest Crown Thinning 411 - Northern Uneven-No Association Well Hardwood Aged

Specs:

Prescription Thin to 70 BA. keep all tree species and sizes represented. do not remove all aspen, w birch, or conifer if present. avoid creating a flush of aspen in understory if aspen is found in concentrations. Do not cut oak, hemlock, pine, y birch, b ash, or elm if present. capture value of high grade basswood logs where available without removing all basswood, keep at least one large crowned h maple per acre as seed sources, if vernal or low areas are found, buffer a minimum of 100 feet.

Next Step Treatments:

Acceptable N hardwoods

Regen:

Other very scattered y birch 12-16" dbh. average stand 110 BA

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Acres

BA

Cover Type

Age

Habitat

d	Name	CoverType	Density	Age	Range	туре	Method	Objective	Structure	Cut
63	12048063-Cut	10.3 4110 - Sugar Maple	Poletimber	56	111-	Harvest	Crown Thinning	411 - Northern	Uneven-	No
		Association	Well		140			Hardwood	Aged	

Treatment

Treatment

Prescription Specs:

Thin to 70 BA. keep all tree species and sizes represented. do not remove all aspen, w birch, or conifer if present. avoid creating a flush of aspen in understory if aspen is found in concentrations. Do not cut oak, hemlock, pine, y birch, b ash, or elm if present. capture value of high grade basswood logs where available without removing all basswood. keep at least one large crowned h maple per acre as seed sources. if

vernal or low areas are found, buffer a minimum of 100 feet.

Stand

Next Step Treatments:

Acceptable N hardwoods

Treatment

Regen:

S

t a

n

Other stand composition is very similar to nearby n hdwd stands, much higher BA in this area. stand 130 BA

Size

Stand

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Approved Treatments:

4 12048004- 11.5 6111 - Lowland Sapling 5 Immatu Monitoring Natural Regen 4130 - Aspen Even-Aged No Monitor Balsam Poplar Poor re (Re-Inventory)

Prescription monitor for regen*2023 regen was not successful in many areas of the stand to date - tag alder/cattail

Specs:

Next Step Treatments:

Acceptable Mix of aspen, fir and hardwood.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 12/7 /2017

5 12048005- 29.4 4110 - Sugar Maple Sawtimber 73 51-80 Monitoring Natural Regen 411 - Northern Uneven-No Monitor Association Medium (Intermediate) Hardwood Aged

Prescription monitor for maple regen

Specs:

Next Step Treatments:

Acceptable maple

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 10/1 /2019

Crystal Falls Mgt. Unit Report 3 -- Treatments Compartment: 48 S Year of Entry: 2025 t а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat n Name CoverType Density Age Range Type Method Objective Structure Cut Ч 27 12048027-0.7 6112 - Lowland Sapling 5 Immatu Monitoring Natural Regen 6124 - Lowland Even-Aged No Monitor Aspen Poor (Re-Inventory) Spruce-Fir Prescription monitor. 3/1/23: much of stand has very poorly regenerated to this point - tag alder/cattail Specs: Next Step Treatments: Acceptable Mix of softwood, hardwood and aspen. Regen: Other Percent to Treat = 100% Comment: Site Condition Proposed Start Date: 10/1 /2019 37 12048042-11.3 4130 - Aspen Sapling 5 Immatu Monitoring Natural Regen 6129 - Mixed Even-Aged No Well (Re-Inventory) Coniferous Monitor re Lowland Forest Prescription monitor - regeneration has failed up to now 2/6/23 - tag alder and cattail Specs: Next Step Treatments: Acceptable Mix of mixed softwood and aspen. Regen: Percent to Treat = 100% Other Comment: Site Condition Proposed Start Date: 10/1 /2019 12048049-27 2.0 6112 - Lowland Sapling 5 Immatu Monitoring Natural Regen 6130 - Fir, Even-Aged No (Re-Inventory) Poor Aspen, Maple Monitor Aspen re Prescription monitor - as of 2023 inventory, stand has regenerated poorly, most of the harvest area is new growth tag alder Specs: Next Step Treatments: Acceptable Mix of aspen, hardwood and softwood. Regen: Other Percent to Treat = 100% Comment: Site Condition Proposed Start Date: 10/1 /2019 12048051-4113 - R.Maple, Even-Aged 51 7.0 310 - Herbaceous Nonstocked Natural Regen Unspec Monitoring Nο Openland ified (Re-Inventory) Conifer Monitor Prescription monitor. stand is failed regen at this point, 2/6/23. very scattered r maple stump sprouts, most of the area is raspberry Specs: Next Step Treatments: Acceptable Mix of hardwood, aspen and softwood. Regen:

Proposed Start Date: 10/1 /2019

Percent to Treat = 100%

Other

Comment:
Site Condition

S t	Crystal Falls Mgt. Unit							Compartmen Year of Entr		DNR MATURAL RESOURCES	
a n d	Treatment Name	Acres	Stand CoverType	Size Density		BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
62	12048062- Monitorx	27.7	6220 - Alder/willow	Nonstocke	ed 0	Unspec ified	Monitoring	Natural Regen (Re-Inventory)	4134 - Aspen, Spruce/Fir	Even-Aged	No
Next Treat Acce Rege	s: Step ments: ptable Mix on:	f softwood,	has not regenerated	Š) 2023 ii	nventory.					
Other Comr	-	ent to Treat	= 100%								
	Condition osed Start Dat	te: 10/1 /20	019								

Total Treatment Acreage Proposed: 231.2

Crystal Falls Mgt. Unit

Ed Rice : Examiner

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres	Do	minai	nt Site	e Cond	ditions	S	
Acres	Available	With Condition	Not Available		5C	2G	3Н	3J	5D	5E
727	534	182	11	Aspen	182			10		0
42	2	0	40	Cedar			37		3	
21	21	0	0	Herbaceous Openland						
3	3	0	0	Low-Density Trees						
46	37	0	9	Lowland Aspen/Balsam Poplar				9		
161	0	0	161	Lowland Conifers		9	147	6		
42	0	0	42	Lowland Deciduous		42				
57	0	0	57	Lowland Mixed Forest			2	55		
43	43	0	0	Lowland Shrub						0
9	9	0	0	Marsh						
13	11	0	1	Mixed Upland Deciduous		1				
263	263	0	0	Northern Hardwood						
4	4	0	0	Sand, Soil						
2	0	0	2	Tamarack					2	
25	25	0	0	Upland Shrub						0
1,459	953	182	324	Total Forested Acres	182	52	186	80	5	1
	65%	12%	22%	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)	4	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: drainage towards op	pen marsh					
2	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Ed Rice : Examiner

3	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
4	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: vernal area						
6	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 - Site Conditions

Compartment: 48

Year of Entry: 2025

Unspecified Unspecified Unspecified 9 Unavailable 37 Unspecified 2G: Too wet (sensitive soils, does not include access issues) Comments: Unspecified Unspecified Unspecified Unspecified 10 Unavailable 3H: Deer Wintering Area -115 habitat is incompatible with harvest at this time Comments: Unspecified Unspecified Unspecified Unspecified 11 Unavailable **5D: Unproductive Forest** 2 Land Comments: 3J: Water quality / BMPs Unspecified Unspecified Unspecified 3H: Deer Wintering Area -12 Unavailable 32 (stream, river, or lake) habitat is incompatible with harvest at this time Comments: heavy winter deer use. creek/drainage and multiple open springs 13 Unavailable **5D: Unproductive Forest** 3 2G: Too wet (sensitive Unspecified Unspecified Unspecified soils, does not include Land access issues) Comments: low SI - high water table 3J: Water quality / BMPs Unspecified 5D: Unproductive Forest 5E: Long-Term Retention Unspecified 14 Unavailable 6 (stream, river, or lake) Land Comments:

Crystal Falls Mgt. Unit

Ed Rice: Examiner

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Ed Rice: Examiner

15	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	14	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
16	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: creek originates an	nd flows through stand					
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	55	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
C	Comments:						
18	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	7	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
19	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments: ouffer to low groun	d area					

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Ed Rice: Examiner

22	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	120	Unspecified	Unspecified	Unspecified	Unspecified
	omments: nly remaining old	ler aged aspen stand in this area	of the co	mpartment. extremely h	eavy winter deer use as co	over and food	
23	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	62	Unspecified	Unspecified	Unspecified	Unspecified
_	omments: etain for age clas	s distribution. only older aged sta	and in area	а			

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: 48
Year of Entry 2025



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	Туре	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 cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildle and Waterfowl Production Areas, deer wintering complexes in loopenings and savannas. Habitat areas are distinct from critical hendangered or threatened species (such as Kirtland's warbler or general in nature, are not primarily associated with threatened or covered by species recovery plans that are developed in cooperation.	wland conifer communities, grassland abitat designated for recovery of piping plover areas) in that they are more endangered species, and are not
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high documentities are ecologically and socially significant in their effect as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well

Report 7 - Stands



Stand	Level 4 Co	over Type	ver Type		Size Density			BA Range	Managed \$	Site	General Comments
1	3102	- Grass		Nonsto	cked	6.6	ι	Jnspecified	No		hunter walking trail
2	6132 - Mixed Lowla	and Forest v	with Cedar Po	oletimber	Mediun	n 54.9	95 l	Jnspecified	N/A		areas with open canopy having heavy tag alder. river buffer mix of low
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	py Species	Density	Avg. Height	Size	ground with small high ground knobs.
	Black Ash	10	Pole	6		Ash	(spp.)	Low	Variable	Sapling	
	Quaking Aspen	10	Log	12		Balsa	am Fir	Medium	10 - 20 feet	Sapling	
	Balsam Poplar	20	Log/Pole	12		Tag	Alder	High	5 - 10 feet	Tall Shrub	
	White Spruce	10	Log	12							
Nor	rthern White Cedar	30	Log/Pole	10	95						
	Balsam Fir	15	Pole/Sapling	6							
	Paper Birch	5	Pole	7							
3	4130	- Aspen	F	Poletimb	er Well	135.9	35 l	Jnspecified	N/A		Ironwood throughout stand, with higher stocking in E half. E half also ha
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	py Species	Density	Avg. Height	Size	higher component of h maple saplings and small poletimber. areas in W central with denser spruce/fir. small, scattered tag alder inclusions in W
	Balsam Fir	5	Sapling/Pole			Leath	erwood	Low	< 5 feet	Tall Shrub	
	Sugar Maple	5	Sapling/Pole	4		Iron	wood	Low	5 - 10 feet	Sapling	
	White Spruce	10	Sapling/Pole	3		Hazelnut	(American)	Medium	< 5 feet	Tall Shrub	
	Black Cherry	5	Sapling	2						1	1
	Quaking Aspen	70	Pole/Sapling	6	35						
	Ironwood	5	Sapling	1							
4	6111 - Lowlan		-	Sapling		11.4	5	Immature	N/A		multiple small drainages throughout the stand,- no buffers were applied in previous cut. many areas non stocked growing into heavy tag alder
	Canopy Species		Size Class	DBH			py Species		Avg. Height	Size	and/or cattail
	Balsam Poplar	65	Sapling	1	5		Alder	High	5 - 10 feet	Tall Shrub	
	Quaking Aspen	30	Sapling	1		Catta	il spp.	High	Unspecified	Non-Wood	
	White Pine	5	Log	16							
5	4110 - Sugar M	Maple Assoc	ciation Sa	awtimber	Mediun	29.5	73	51-80	N/A		ironwood, aspen saplings regenerating from previous cut.
	Canopy Species		Size Class		Age	Sub-Cano	py Species	Density	Avg. Height	Size	
	Basswood	15	Log	12			wood	High	5 - 10 feet	Sapling	
	Sugar Maple	85	Log/Pole	14	73		/Raspberry	High	< 5 feet	Tall Shrub	
						Quakin	g Aspen	Medium	5 - 10 feet	Sapling	
6	6120 - Lov	wland Ceda	ar S	Sawtimb	er Well	7.2	95 l	Jnspecified	N/A		dense cedar 3-17"dbhheavy winter deer use
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	py Species	Density	Avg. Height	Size	
	Balsam Poplar	15	Log	12		White	Spruce	Low	5 - 10 feet	Sapling	
	Paper Birch	5	Pole/Log	9				1			•
Nor	rthern White Cedar	80	Log/Pole	10	95						
7	3102	- Grass		Nonsto	cked	1.5	ι	Jnspecified	No		hunter walking trail

Report 7 - Stands



Stand	d Level 4 C	over Type		Size Density	Acres S	cres Stand Age BA Range		Managed S	Site	General Comments
8	3102	- Grass		Nonstocked	3.6	ι	Inspecified	No		grass/shrub opening with scattered spruce/fir
9	4110 - Sugar N	Maple Assoc	ciation	Poletimber Well	20.3	60	81-110	N/A		scattered eutypella throughout. heavy ironwood saplings in much of
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Cand	py Species	s Density	Avg. Height	Size	stand. scattered spruce saplings. stand 90 BA
	Yellow Birch	10	Pole	8	Leath	erwood	Low	< 5 feet	Tall Shrub	
	Basswood	5	Log	11	Iron	wood	High	10 - 20 feet	Sapling	
	Quaking Aspen	5	Log	14	Suga	r Maple	Medium	>20 feet	Sapling	
	Sugar Maple	80	Pole/Log	9 60						
10	4130	- Aspen		Sawtimber Well	109.5	55 L	Inspecified	N/A		as transitions to stand 63, hardwood component increases, component of
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Cand	py Species	Density	Avg. Height	Size	larger aspen 14-16"dbh. very little conifer in stand. h maple 4-6" dbh throughout with associated basswood and cherry. scattered hills/knobs
	Black Cherry	5	Pole	8	Suga	r Maple	Medium	10 - 20 feet	Sapling	where higher stocking of N hdwd is present. highly stocked h maple in N
	Sugar Maple	25	Pole/Log	9	Hazelnut	(American)	High	< 5 feet	Tall Shrub	1/4 of the stand 2-5" dbh. small inclusion of lower quality h maple and w
	Basswood	5	Pole	7	Iron	wood	High	10 - 20 feet	Sapling	birch in NW.
	Quaking Aspen	60	Log/Pole	10 55						-
	Balsam Fir	5	Pole	7						
11	4110 - Sugar N			Poletimber Well	10.9	56	81-110	N/A		stand 90 BA
	Canopy Species		Size Class			ppy Species		Avg. Height	Size	
	Sugar Maple	50	Pole/Log	8 56		erwood	Medium	< 5 feet	Tall Shrub	
	Basswood	30	Log/Pole	11		wood	Low	10 - 20 feet	Sapling	
	Quaking Aspen	20	Log	12 93	Suga	r Maple	Low	10 - 20 feet	Sapling	
12	4130	- Aspen		Sapling Well	53.1	11 L	Inspecified	N/A		young aspen stand with associated, residual hardwoods scattered
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Cand	py Species	Density	Avg. Height	Size	
	Black Cherry	5	Pole	7	Iron	wood	Medium	10 - 20 feet	Sapling	
	Sugar Maple	10	Pole/Saplin	g 5						
	Quaking Aspen	80	Sapling	2 11						
	Basswood	5	Pole	7						
13	3102	- Grass		Nonstocked	1.0	L	Inspecified	No		small field
14	4110 - Sugar N	Maple Assoc	ciation	Poletimber Well	3.5	60	51-80	N/A		edges of stand hold heavier component of ironwood, spruce, fir in understory. stand BA 70
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Cand	py Species	Density	Avg. Height	Size	understory. Stanta DA 10
	Red Maple	5	Pole	7		am Fir	Medium	< 5 feet	Sapling	
	Sugar Maple	80	Pole	7 60		Spruce	Medium	5 - 10 feet	Sapling	
	Basswood	15	Log/Pole	10		wood	Medium	5 - 10 feet	Sapling	
						r Maple	Low	10 - 20 feet	Sapling	
						erwood	Medium	< 5 feet	Tall Shrub	

Crystal Falls Mgt. Unit Report 7 – Stands



Stand	Level 4 Cover Type			Size Density			Stand Age	BA Range	Managed 9	Site	General Comments
15	4130	- Aspen	Sa		Medium	99.3	8	Immature	N/A		areas non stocked throughout after previous cut growing back to tag
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	aluei aliu caltalis
	Quaking Aspen	70	Sapling	1	8	Tag	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	30	Sapling	1		Cat	tail spp.	Medium	Unspecified	Non-Wood	
16	4134 - Aspe	en, Spruce/	Fir Po	oletimb	er Well	37.7	43 l	Unspecified	N/A		aspen 4-9" dbh. heavy fir understory. center of the stand is heavier to
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	well stocked fir small poletimber.
	Black Cherry	5	Pole/Sapling	6		Hazelnu	t (American)	Low	< 5 feet	Tall Shrub	very heavy winter deer use - cover
	Sugar Maple	5	Pole	8		Bal	sam Fir	High	>20 feet	Sapling	
	Balsam Fir	35	Pole/Sapling	6							
	Quaking Aspen	55	Pole	7	43						
17	710 - S	and, Soil		Nonsto	ocked	1.1	l	Unspecified	No		old gravel pit
18	6132 - Mixed Lowla	and Forest v	with Cedar Pole	etimbe	· Mediur	n 2.3	51 l	Unspecified	N/A		heavy winter deer use
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	
	White Spruce	5	Pole	8		Bal	sam Fir	Medium	10 - 20 feet	Sapling	
No	orthern White Cedar	40	Log	12	101	Tag	g Alder	High	5 - 10 feet	Tall Shrub	
	Black Ash	50	Pole/Sapling	6	51	Bla	ick Ash	Medium	10 - 20 feet	Sapling	
	Paper Birch	5	Pole	6							
19	4130	- Aspen	Sa	apling I	Medium	11.8	5	Immature	N/A		tag alder along N edge nearer to low ground.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	
	Quaking Aspen	85	Sapling	1	5	Tag	g Alder	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	10	Sapling	1		Blackber	ry/Raspberry	Medium	< 5 feet	Tall Shrub	
	Sugar Maple	5	Sapling	1				•			
20	6120 - Lov	wland Ceda	ır Po	oletimb	er Well	7.2	84	141-170	N/A		heavy winter deer use
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	
	Black Spruce	5	Pole	6		Tag	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	5	Pole/Sapling	5							
No	orthern White Cedar	90	Pole/Log	9	84						
21	4110 - Sugar M	laple Assoc	ciation Po	oletimb	er Well	23.0	55	81-110	N/A		good basswood logs. very scattered h maple logs 14-16" dbh. stand 1
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	s Density	Avg. Height	Size	BA
	Sugar Maple	75	Pole	7	55	Iro	nwood	Low	5 - 10 feet	Sapling	
	Basswood	25	Log	12		Blackber	ry/Raspberry	Low	< 5 feet	Tall Shrub	
							herwood	Low	< 5 feet	Tall Shrub	
22	6220 - A	lder/willow		Nonsto	ocked	8.5	0 (Unspecified	No		tag alder with dead snags. small Q6 inclusion S of woods road

- Stands

Stand	nd Level 4 Co	over Type		Size Density		Acres	Acres Stand Age BA		Managed S	Site	General Comments
23	4110 - Sugar N	/laple Assoc	ciation	Poletimb	er Well	2.9	55	81-110	N/A		good basswood logs 11-16" dbh. stand 110 BA
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	5	Log	14		Sug	ar Maple	Low	>20 feet	Sapling	
	Basswood	35	Log	12							•
	Paper Birch	5	Pole	9							
	Sugar Maple	55	Pole	8	55						
24	6233 - W	et Meadow	,	Nonsto	ocked	9.0	L	Inspecified	No		small marsh opening - wet. edged with spruce/fir
25	4112 - Maple, Beed						56	1-50	N/A		thinned heavily last entry. all aspen was removed and regenerated in small edge areas, many areas are nonstocked with raspberry, average
	Canopy Species		Size Class		Age	Sub-Car	nopy Species	Density	Avg. Height	Size	50 BA
	Red Maple	70	Pole/Log	8	56	Blackber	rry/Raspberry	Medium	< 5 feet	Tall Shrub	
	Sugar Maple	30	Pole	7		Quak	ing Aspen	Low	< 5 feet	Sapling	
26	4110 - Sugar N	•		oletimber Mediun			55	51-80	N/A		aspen removed last entry - has highly stocked aspen understory
	Canopy Species						nopy Species		Avg. Height	Size	
	Basswood	25	Log	12			nwood	Low	5 - 10 feet	Sapling	
	Sugar Maple	75	Pole	7	55		rry/Raspberry	Low	< 5 feet	Tall Shrub	
							therwood	Low	< 5 feet	Tall Shrub	
						Quak	ing Aspen	High	10 - 20 feet	Sapling	
27	6112 - Lo	wland Aspe	n	Sapling	Poor	2.8	5	Immature	N/A		stand to this point has regenerated poorly - most area is new tag alder.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	65	Sapling	1	5	Cat	tail spp.	Medium	Unspecified	Non-Wood	
	Tamarack	5	Sapling	1		Ta	g Alder	High	5 - 10 feet	Tall Shrub	
	Balsam Poplar	30	Sapling	1							
28	3205 - Mixed	d Upland Sh	nrub	Nonsto	ocked	25.2	L	Inspecified	No		Transmission line ROW
29	4134 - Asp	en, Spruce/	Fir	Poletimb	er Well	151.4	51 L	Inspecified	N/A		W end has higher stocking of ironwood/hazel. multiple small vernal ponds near to edge of stand 60. fir 4-7" dbh. small inclusions of h
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	maple/cherry component throughoutvery heavy winter deer use -
	Black Cherry	5	Pole/Saplin	g 5		Iro	nwood	Low	10 - 20 feet	Sapling	cover and food
	Sugar Maple	5	Pole/Saplin	g 5		Hazelnu	ıt (American)	Low	< 5 feet	Tall Shrub	
	Paper Birch	5	Pole/Saplin	g 5		Bal	Isam Fir	High	>20 feet	Sapling	
	Quaking Aspen	65	Pole/Log	9	51						
	Balsam Fir	20	Pole/Saplin	g 7							

Report 7 - Stands



Stand	nd Level 4 Cov	over Type	ver Type		Size Density		Acres Stand Age BA Range		Managed S	Site	General Comments
30	6120 - Lov	wland Ceda	ar I	Poletimb	er Well	3.4	70	Unspecified	N/A		N end of stand is transition area with small b ash sapling/small
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	poletimber component. low SI - cedar is of low quality, high water table
	Tamarack	10	Pole/Sapling	5		Ва	lsam Fir	Medium	5 - 10 feet	Sapling	
	Black Spruce	20	Pole	6		Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
No	orthern White Cedar	70	Pole	7	70					1	•
31	6124 - Lowla	and Spruce	-Fir I	Poletimb	er Well	32.0	49	Unspecified	N/A		areas of open canopy with tag alder. open springs
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	winter deer use
	Balsam Fir	5	Pole/Sapling	7		Ва	alsam Fir	Low	5 - 10 feet	Sapling	William door doo
	Black Spruce	45	Pole	6	49	Blad	ck Spruce	Low	5 - 10 feet	Sapling	
	Tamarack	10	Pole	6		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
No	orthern White Cedar	40	Pole	9							1
32	4199 - Other Mixed	d Upland D	eciduous I	Poletimb	er Well	12.8	56	51-80	N/A		much of the fir in the understory has died out. overall lower quality
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	hardwoods, mixed stand. very scattered small diameter h maple. stand averages 80 BA
	Sugar Maple	5	Pole/Sapling	5		Sug	gar Maple	Low	10 - 20 feet	Sapling	averages ou bA
	Paper Birch	20	Log/Pole	10		Ba	alsam Fir	High	>20 feet	Sapling	
	Balsam Fir	10	Pole/Sapling	1 6						1 0	
	Quaking Aspen	15	Log/Pole	10							
	Red Maple	30	Pole/Log	9	56						
	Yellow Birch	20	Pole	8							
33	3302 - Low Den	sity Conife	r Trees	Nonst	ocked	3.3		Unspecified	No		small opening growing into spruce/fir. scattered cherry saplings
34	622 - Low	vland Shrub)	Nonst	ocked	4.2		Unspecified	No		marsh, alder with multiple creek channels
35	4110 - Sugar M	laple Asso	ciation I	Poletimb	er Well	20.1	61	81-110	N/A		average stand 100 BA
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Sugar Maple	60	Pole/Log	9	61	Lea	therwood	Medium	< 5 feet	Tall Shrub	
	Yellow Birch	5	Log	11		Sug	gar Maple	Low	>20 feet	Sapling	
	Basswood	30	Log/Pole	11		Ire	onwood	Low	Variable	Sapling	
	White Ash	5	Log	12							_
36	4130	- Aspen		Saplin	g Well	45.7	5	Immature	N/A		areas adjacent to lowland conifer edges did not regenerate well - grew ir
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	heavier to tag alder
	Quaking Aspen	95	Sapling	1	5	Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	5	Sapling	2				1			<u>-</u>

Report 7 – Stands



											Source Control of the
Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age I	BA Range	Managed :	Site	General Comments
37	4130	- Aspen		Sapling	Well	29.1	5	Immature	N/A		areas adjacent to swamp to the S where lowland spruce was removed
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	did not regenerate - tag alder and cattail
	Quaking Aspen	90	Sapling	1	5	Та	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	10	Sapling	1		Cat	tail spp.	Medium	Unspecified	Non-Wood	
38	6120 - Lo	wland Ceda	ar F	oletimbe	er Wel	l 13.6	67 l	Jnspecified	N/A		very scattered balm
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	heavy winter deer use
	Paper Birch	10	Pole	8		Bal	sam Fir	Medium	10 - 20 feet	Sapling	Theavy winter deer dee
No	rthern White Cedar	80	Pole/Log	9	67						
	Black Spruce	10	Pole	7							
39	6128 - Lowland (Coniferous iduous	, Mixed Po	letimber	Mediu	ım 8.8	95 l	Jnspecified	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	White Spruce	25	Log/Pole	10		Та	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	5	Log/Pole	10		As	h (spp.)	Low	Variable	Sapling	
	Tamarack	10	Pole	7		Bal	sam Fir	High	10 - 20 feet	Sapling	
	Paper Birch	5	Pole	7							•
	Red Maple	20	Pole/Sapling	6							
No	rthern White Cedar	35	Pole/Log	9	95						
40	4110 - Sugar M	laple Asso	ciation F	Poletimbe	er Wel	l 27.9	55	81-110	N/A		very scattered hemlock. N and E edges of the stand have a heavy fir
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	component - saplings to 7-8" poletimber. basswood has good log quality 11-16"dbh. scattered h maple log trees- fair to low quality. very scattered
	Balsam Fir	5	Pole	7		Sug	ar Maple	Low	>20 feet	Sapling	w birch. stand 90 BA
	Red Maple	5	Pole	7		Bal	sam Fir	High	10 - 20 feet	Sapling	
	Sugar Maple	65	Pole/Log	8	55	Irc	nwood	Medium	>20 feet	Sapling	low winter deer use - mainly along edges adjacent to conifer
	Basswood	25	Log/Pole	13		Leat	herwood	Medium	< 5 feet	Tall Shrub	
41	6128 - Lowland Dec	Coniferous iduous	, Mixed P	oletimbe		r 5.5	90 l	Jnspecified	N/A		areas denser to cedar. overall the stand is low quality balm with associated fir and cedar. drainage
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species		Avg. Height	Size	
	Red Maple	15	Pole/Sapling			Та	g Alder	High	5 - 10 feet	Tall Shrub	
	Paper Birch	10	Pole	6		Bal	sam Fir	High	10 - 20 feet	Sapling	
No	rthern White Cedar	40	Pole/Log	9	90						
	Black Spruce	5	Pole	6							
	Balsam Fir	25	Pole/Sapling	6							
	Black Ash	5	Pole/Sapling	5							

Report 7 - Stands



Stand	d Level 4 Co	Cover Type S			ensity	Acres Stand Age BA Range				Managed :	Site	General Comments
42	6129 - Mixed Conife	erous Lowla	and Forest Po	letimb	er Well	114.9	95	Unspe	cified	N/A		areas higher stocked to tamarack scattered throughout, generally
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Spec	ies De	ensity	Avg. Height	Size	associated with pockets of small diameter cedar 4-6" dbh. W side of the stand has inclusion/higher stocking to b ash and w birch. S edge has a
	Black Spruce	15	Pole	7		Ta	ag Alder		High	5 - 10 feet	Tall Shrub	lowland transitional area of w birch, spruce, fir, and cedar.
	Paper Birch	5	Pole/Sapling	6		Ва	lsam Fir	N	ledium	10 - 20 feet	Sapling	h a san a san da an a san a
	Black Ash	5	Pole	8							•	heavy winter deer use
	Tamarack	5	Log/Pole	10								
No	orthern White Cedar	70	Pole/Log	9	95							
43	6121 - ⁻			letimb	er Poor	1.9	55	55 Unspe				stunted bog tamarack, small diameter. non productive forestland.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Spec	ies De	ensity	Avg. Height	Size	adjacent vernal areas
	Black Spruce	10	Sapling	4		5	Sedges	IV	ledium	Unspecified	Non-Wood	
	Tamarack	90	Pole/Sapling	5	55							
44	6117 - Lowland Con	Deciduous, iferous	Mixed Po	letimb	er Poor	4.9	51	Unspe	cified	N/A		semi open - heavy tag alder with scattered b ash, w birch, and fir. E end has a small inclusion of balm. lowland w birch with cedar in E side
	Canopy Species	% Cover	Size Class	DBH Age		Sub-Canopy Spec		cies Density		Avg. Height Size		
	Balsam Fir	15	Pole/Sapling	5		Ва	lsam Fir	N	ledium	10 - 20 feet	Sapling	
No	rthern White Cedar	5	Pole/Log	8		Ta	ag Alder		High	5 - 10 feet	Tall Shrub	
	Balsam Poplar	20	Log/Pole	10								
	Paper Birch	40	Pole	6	51							
	Black Ash	20	Pole/Sapling	7								
45	4139 - Aspen,	Mixed Deci	duous S	Saplin	g Well	25.7	18	Unspe	cified	N/A		inclusions of b ash saplings in lower ground areas. interior of the stand
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Spec	ies De	ensity	Avg. Height	Size	has fairly dense fir saplings. small drainage/creek running between stands 38 - 54
	Black Ash	5	Sapling	1		Hazelnı	ut (America	n) N	ledium	< 5 feet	Tall Shrub	
	Red Maple	5	Sapling	1		Ва	lsam Fir		High	5 - 10 feet	Sapling	
	Balsam Poplar	25	Sapling	1		Bl	ack Ash	N	ledium	5 - 10 feet	Sapling	
	White Spruce	5	Pole/Sapling	5								
	Balsam Fir	10	Pole/Sapling	5								
	Quaking Aspen	50	Sapling	2	18							
46	6120 - Lov	wland Ceda	ar Pole	timbe	r Medium	n 2.3	95	Unspe	cified	N/A		SE end is open tag alder
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Spec	ies De	ensity	Avg. Height	Size	
	Black Ash	20	Pole	6		Ва	lsam Fir	N	ledium	10 - 20 feet	Sapling	
	Balsam Fir	5	Pole/Sapling	6		Ta	ag Alder		High	5 - 10 feet	Tall Shrub	

Report 7 – Stands



Stand	d Level 4 C	Level 4 Cover Type		Size Density		Acres Sta	nd Age B	A Range	Managed S	Site	General Comments
47	4134 - Aspe	en, Spruce/	Fir F	Poletimb	er Well	4.4	45 Ur	nspecified	N/A		very scattered r maple saplings 3-4" dbh
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Quaking Aspen	70	Pole	8	45	Red Ma	aple	Low	Variable	Sapling	
	Balsam Fir	30	Pole/Sapling	7		Balsam	Fir	Medium	>20 feet	Sapling	
						Ironwo	ood	Low	Variable	Sapling	
48	4110 - Sugar N	laple Asso	ciation §	Sawtimb	er Well	48.6	73	81-110	N/A		center of stand heavier to ironwood. stand 110 BA
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Paper Birch	5	Log	12		Sugar M	laple	Medium	>20 feet	Sapling	
	Basswood	15	Log	12		Ironwo	od	Medium	10 - 20 feet	Sapling	
	Sugar Maple	70	Log/Pole	10	73	Leather	vood	Low	< 5 feet	Tall Shrub	
	Yellow Birch	5	Pole/Log	9							
	Quaking Aspen	5	Log	14							
49	4110 - Sugar N	laple Asso	ciation F	Poletimb	er Well	5.6	55	81-110	N/A		small n hdwd island among a larger mixed aspen stand. good basswood
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	logs. stand 110 BA
	Sugar Maple	60	Pole/Log	8	55	Sugar M	laple	Medium	>20 feet	Sapling	
	Basswood	35	Log	12							
	Quaking Aspen	5	Log	12							
50	4110 - Sugar N	laple Asso	ciation S	Sawtimb	er Well	5.5	64	81-110	N/A		very scattered y birch 12-16" dbh. average stand 110 BA
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Basswood	10	Log	12		Ironwo	od	Medium	>20 feet	Sapling	
	Sugar Maple	90	Log/Pole	10	64	Leather	vood	Low	< 5 feet	Tall Shrub	
		1		'		Sugar M	laple	Low	>20 feet	Sapling	
51	310 - Herbac	eous Open	land	Nonsto	ocked	8.2	0 Ur	nspecified	4116 - Mixe Hardwood -		small clumps of cedar residual after last entry's cut. very scattered r maple stump sprouts. stand overall has failed regeneration, mainly a raspberry opening
52	4115 - Y.Birc	h, Hemlock	NH F	Poletimb	er Well	31.9	65	81-110	N/A		average stand 100BA
		% Cover	Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Canopy Species							Low	< 5 feet	T-11 Ob	
	Canopy Species Sugar Maple	40	Log/Pole	10	65	Leatherv	vood	LOW	< 3 leet	Tall Shrub	
		40 35	Log/Pole Log	10	65	Leather Sugar M		Low	>20 feet	Sapling	
	Sugar Maple				65		laple				
53	Sugar Maple Basswood Yellow Birch	35 25	Log Log	12		Sugar M Ironwo	laple	Low	>20 feet	Sapling	scattered aspen just moving into small poletimber size class 4-5" dbh
53	Sugar Maple Basswood Yellow Birch	35 25	Log Log	12 12 Sapling		Sugar M Ironwo	laple ood 26 Ur	Low Medium	>20 feet 10 - 20 feet	Sapling	
53	Sugar Maple Basswood Yellow Birch 4134 - Aspe	35 25 en, Spruce/	Log Log	12 12 Sapling	g Well	Sugar M Ironwo	laple ood 26 Ur / Species	Low Medium	>20 feet 10 - 20 feet N/A	Sapling Sapling	scattered aspen just moving into small poletimber size class 4-5" dbh
53	Sugar Maple Basswood Yellow Birch 4134 - Aspe	35 25 en, Spruce/ % Cover	Log Log /Fir Size Class	12 12 Sapling DBH	g Well	Sugar M Ironwo 12.7 Sub-Canopy	26 Ur / Species merican)	Low Medium nspecified Density	>20 feet 10 - 20 feet N/A Avg. Height	Sapling Sapling	scattered aspen just moving into small poletimber size class 4-5" dbh

Crystal Falls Mgt. Unit Report 7 - Stands



Stand	Level 4 C	over Type		Size Density		Acres	Stand Age B	A Range	ange Managed Site		General Comments
54	6117 - Lowland Con	Deciduous, iferous	Mixed Po	oletimbe	r Medium	37.1	62	51-80	N/A		widely scattered large w pine. areas in stand that are open with heavy tag alder. areas in S of stand have a higher cedar component. wet ground
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Paper Birch	20	Pole	7		Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
No	rthern White Cedar	10	Log/Pole	10		BI	ack Ash	High	>20 feet	Sapling	
	Tamarack	5	Log	11		Ва	lsam Fir	Medium	10 - 20 feet	Sapling	
	Black Ash	35	Pole/Sapling	6	62						•
	Quaking Aspen	15	Log	12							
	Balsam Poplar	5	Log	12							
	Black Spruce	10	Log	11							
55	6111 - Lowlan	d Balsam F	oplar F	Poletimb	er Poor	9.1	35 U	nspecified	N/A		very scattered tamarack small poletimber. N end has component of
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	higher stocked spruce/fir. S end is heavier to balm/aspen. creek originates in stand, flowing N
	Paper Birch	5	Sapling	4		Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
	Balsam Poplar	45	Pole	6	35						
	Balsam Fir	10	Sapling/Pole	3							
	White Spruce	20	Sapling/Pole	3							
	Quaking Aspen	20	Pole/Sapling	6	35						
56	6112 - Lov	wland Aspe	n S	Sapling I	Medium	13.2	5 1	Immature	N/A		low ground cut from last cycle. many areas growing into new growth tag
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	alder
	Balsam Fir	10	Sapling	2		Ta	ag Alder	High	5 - 10 feet	Tall Shrub	
	Quaking Aspen	60	Sapling	1	5						
	Balsam Poplar	30	Sapling	1							
57	710 - S	Sand, Soil		Nonsto	ocked	2.9	U	Inspecified	No		old gravel pit. growing into spruce/fir at the edges. scattered r pine and tamarack. small clumps of aspen
58	622 - Lov	vland Shrub)	Nonsto	ocked	2.4	U	nspecified	No		tag alder with small diameter, 2-4" dbh b ash along the E side
59	4134 - Aspe			Poletimb		3.3	51 U	Inspecified	N/A		very scattered w birch. aspen 6-10" dbh
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	
	Red Maple	15	Pole	6		Ва	llsam Fir	High	10 - 20 feet	Sapling	
	Balsam Fir	20	Sapling/Pole								
	Quaking Aspen	65	Pole	7	51						
60	6120 - Lov	wland Ceda	ır F	Poletimb	er Well	8.5	95 U	nspecified	N/A		cedar 9-12" dbh
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	heavy winter deer use
	Balsam Poplar	15	Log	12		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
N.L.	rthern White Cedar	75	Log/Pole	10	95	BI	ack Ash	Low	10 - 20 feet	Sapling	
INO			U	1.0			401171011	_0		- upg	

Report 7 - Stands



Stand	I Level 4 C	Level 4 Cover Type			Size Density		Stand Age	BA Range	Managed :	Site	General Comments
61	4110 - Sugar N	/laple Assoc	ciation	Poletimb	er Poor	1.8	60	1-50	N/A		N end of stand has lower overstory stocking - M4A3 with dense aspen
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	sapling understory. S end hdwd stocking increases - M5A3 - as stand transitions to adjacent N hdwd stand. small lowland pockets that were
	Basswood	20	Pole/Log	9		Iro	onwood	Medium	< 5 feet	Sapling	included in previous cut
	Sugar Maple	80	Pole	8	60	Quak	ing Aspen	High	5 - 10 feet	Sapling	
						Whit	te Spruce	Low	5 - 10 feet	Sapling	
62	2 6220 - Alder/willow			Nonstocked ion Poletimber We	onstocked 28.2		8.2 0 Unspe		6128 - Lov Coniferous, Decidud	Mixed	most of the stand has not regenerated well - new growth tag alder, cattails, and swamp grass. isolated areas of r maple stump sprouts. small areas in the SE, NW, and NE in the slightly higher areas have regenerated to aspen less than 1" dbh
63	4110 - Sugar N	Maple Assoc	ciation	Poletimb	er Well	10.3	56	111-140	N/A		stand composition is very similar to nearby n hdwd stands, much higher BA in this area, stand 130 BA
	Canopy Species	% Cover Size Clas		DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	BA III triis area. stand 130 BA
	Quaking Aspen	5	Log	12		Sug	ar Maple	Low	10 - 20 feet	Sapling	
	Basswood	20	Log/Pole	11		Lea	therwood	Medium	< 5 feet	Tall Shrub	
	Sugar Maple	75	Pole/Log	8	56	Iro	onwood	Low	10 - 20 feet	Sapling	
64	6112 - Lo	wland Aspe	n	Sapling N	/ledium	9.7	5	Immature	N/A		areas poorly regenerated from previous cut, notably in W end.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	80	Sapling	1	5	Ta	g Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Poplar	15	Sapling	1		Car	ttail spp.	Medium	Unspecified	Non-Wood	
	Balsam Fir	5	Sapling	2							
65	4130	- Aspen		Sapling		6.9	5	Immature	N/A		areas with tag alder and cattail. small drainages flowing N to river
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	90	Sapling	1	5	Haze	Inut (Spp.)	Medium	< 5 feet	Tall Shrub	
	White Pine	5	Log	16		Та	ig Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	5	Sapling	2							