

# **Compartment Review Presentation**

**Crystal Falls Forest Management Unit** 

Compartment 12053 Entry Year 2023 Acreage: 2,641

Management Area: Ralph Ground Moraine

**County Dickinson** 

**Revision Date: 2021-08-16** 

Stand Examiner: Legal Description:

Sections 5-8 & 17-18, T42N-R29W and sections 31-32, T43N-R29W

#### **Identified Planning Goals:**

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

#### Soil and topography:

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

Compartment is solid state ownership, except one forty acre private parcel. Lands are used for forest products and hunting. Snowmobile trail passes through compartment. The west and south sides of the compartment are bordered with private parcels. These parcels contain camps and a few full time residents.

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

None.

Archeological, Historical, and Cultural Features:

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

None.

#### Watershed and Fisheries Considerations:

The northern boundary of the compartment runs along an unnamed stream that is technically a Type 1 trout stream. However, this stream is heavily impacted by beaver activity with impoundments at multiple locations creating unsuitable habitat for trout. Consequently, 100 foot buffer is recommended rather than the typical 300 foot buffer on designated trout streams. Warren Pond, Fisheries Division's walleye rearing pond, is also within this compartment and should also have a 100 foot buffer. A portion of the compartment borders the North Branch of the Sturgeon River, another Type 1 trout stream. This area is also heavily impacted by beaver and should get a 100 foot buffer as well.

#### Wildlife Habitat Considerations:

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. Riparian and transition zones were set aside in prior years of entry to provide some of these habitat requirements. Upland and lowland conifer components should be maintained and enhanced when possible. Opening maintenance will be completed as logistics allow.

## Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state. The closest active sand/gravel pit is approximately three miles to the southwest. There appears to be some good potential for sand & gravel within the compartment. Past iron ore exploration has occurred in the area of the compartment, but the closest historical mining is Groveland Mine, roughly three miles south. There may be some potential for iron ore beneath the compartment, but it does not appear to be anything economically significant. Potential for other metallic minerals beneath the compartment is unknown but is considered low at this time. State-owned mineral rights within the compartment have been leased in the past. Currently, active metallic mineral leases occur just over two miles to the southwest. 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:

Vehicle access is from Wells Grade and two tract roads off of Wells Grade.

## **Survey Needs:**

None.

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

Snowmobile trail. Hunting.

**Site Condition Details** 

**Fire Protection:** 

## **Additional Compartment Information:**

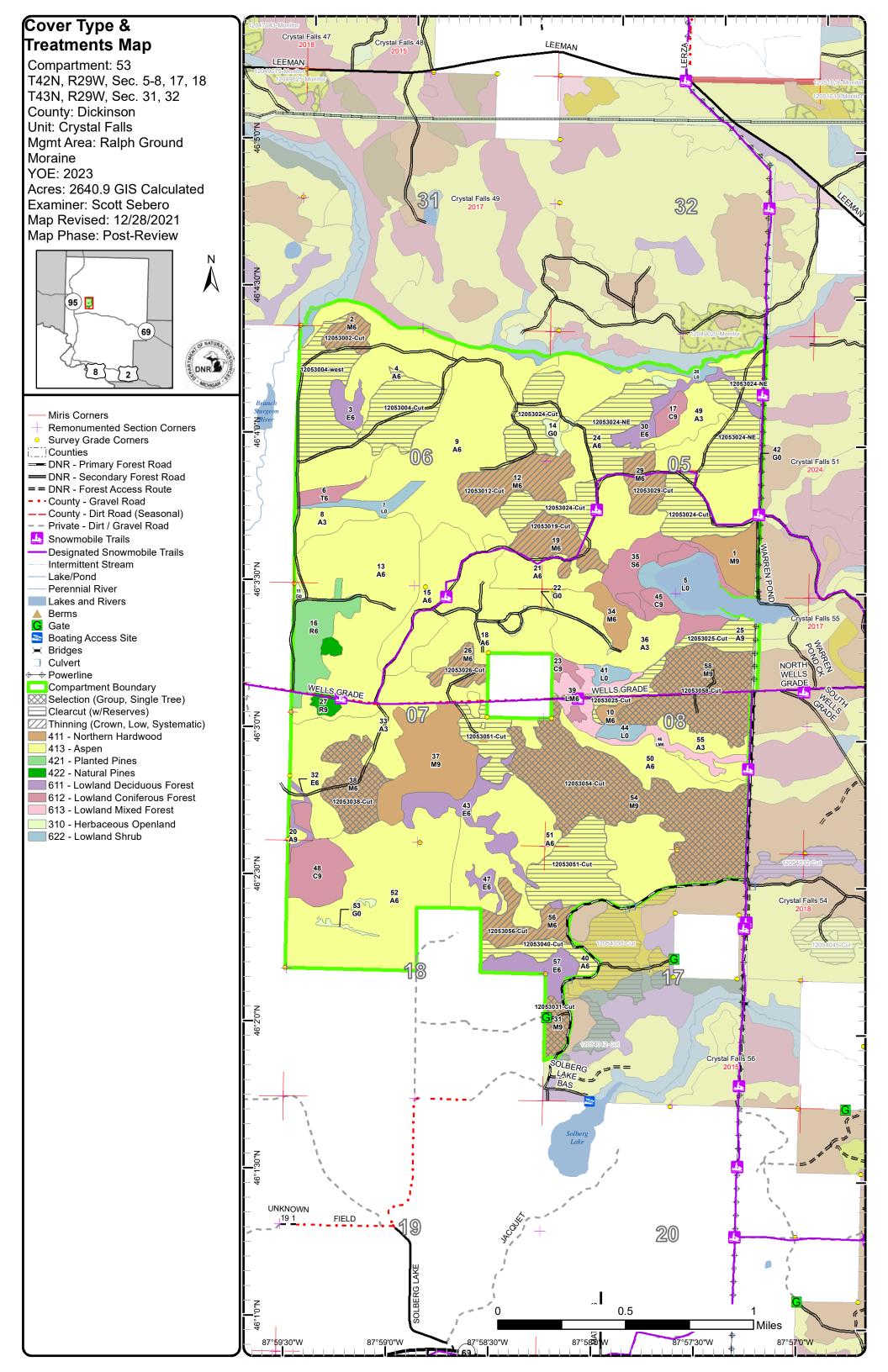
None.

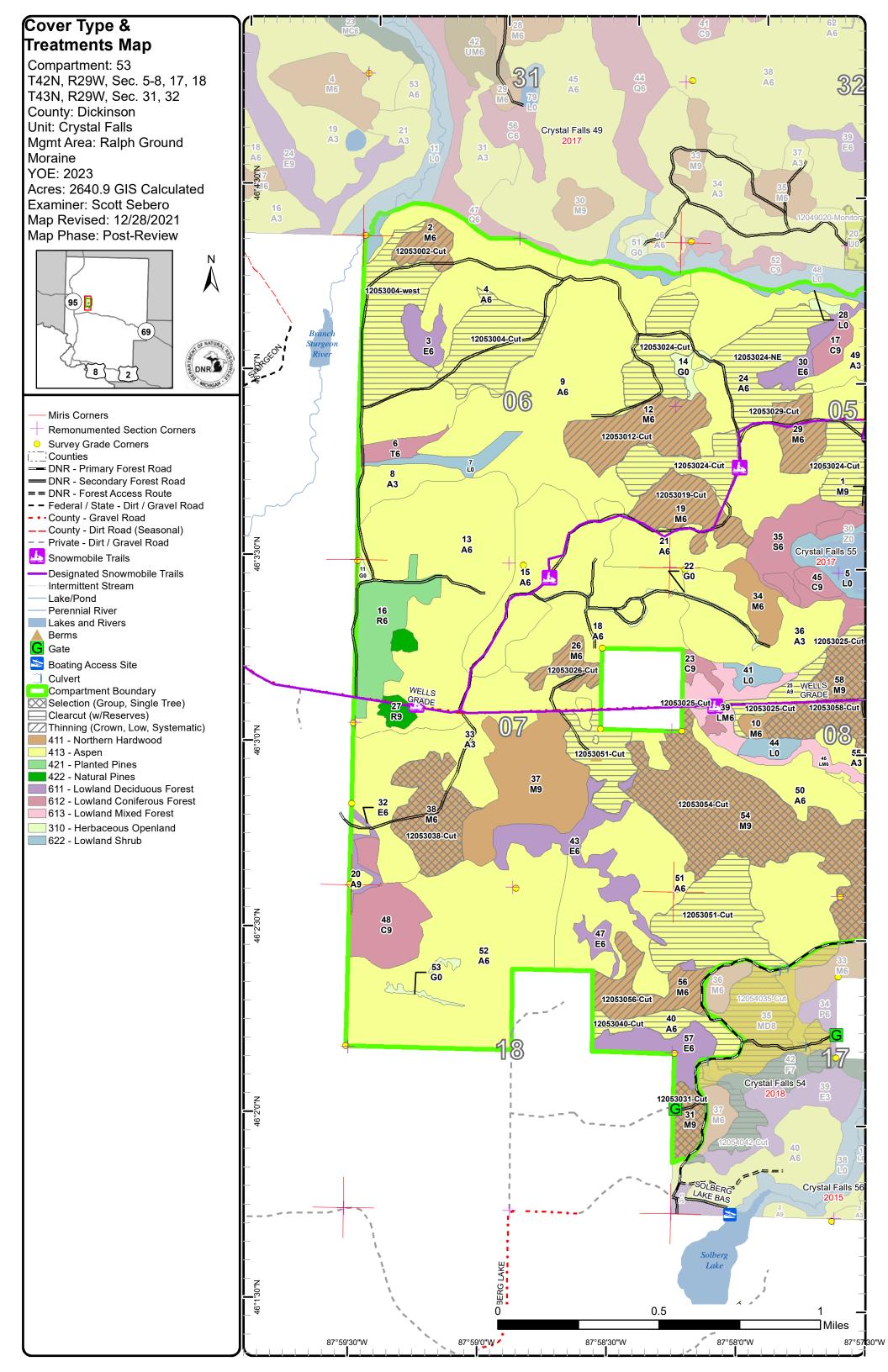
The following reports from the Inventory are attached:

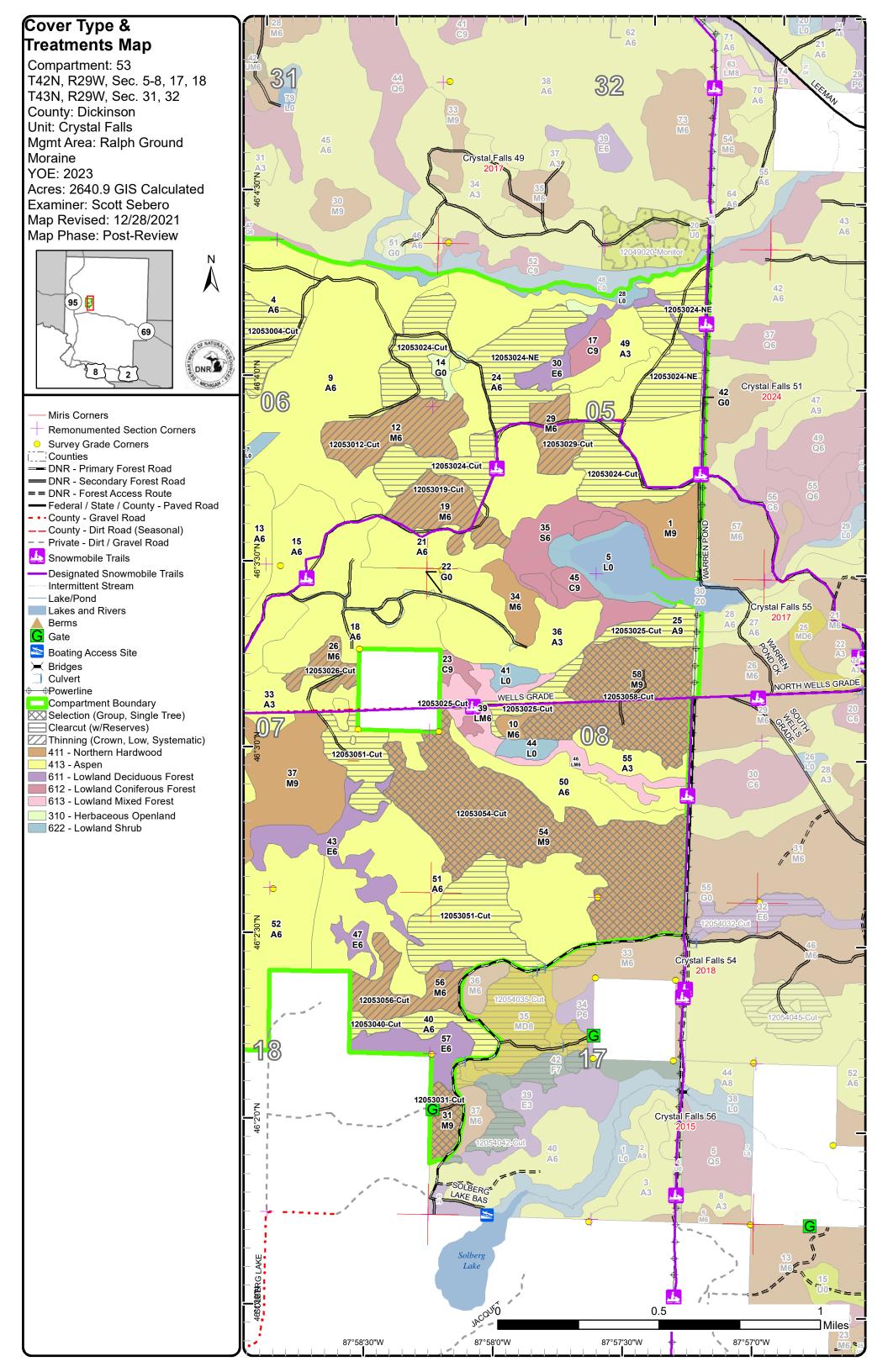
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas

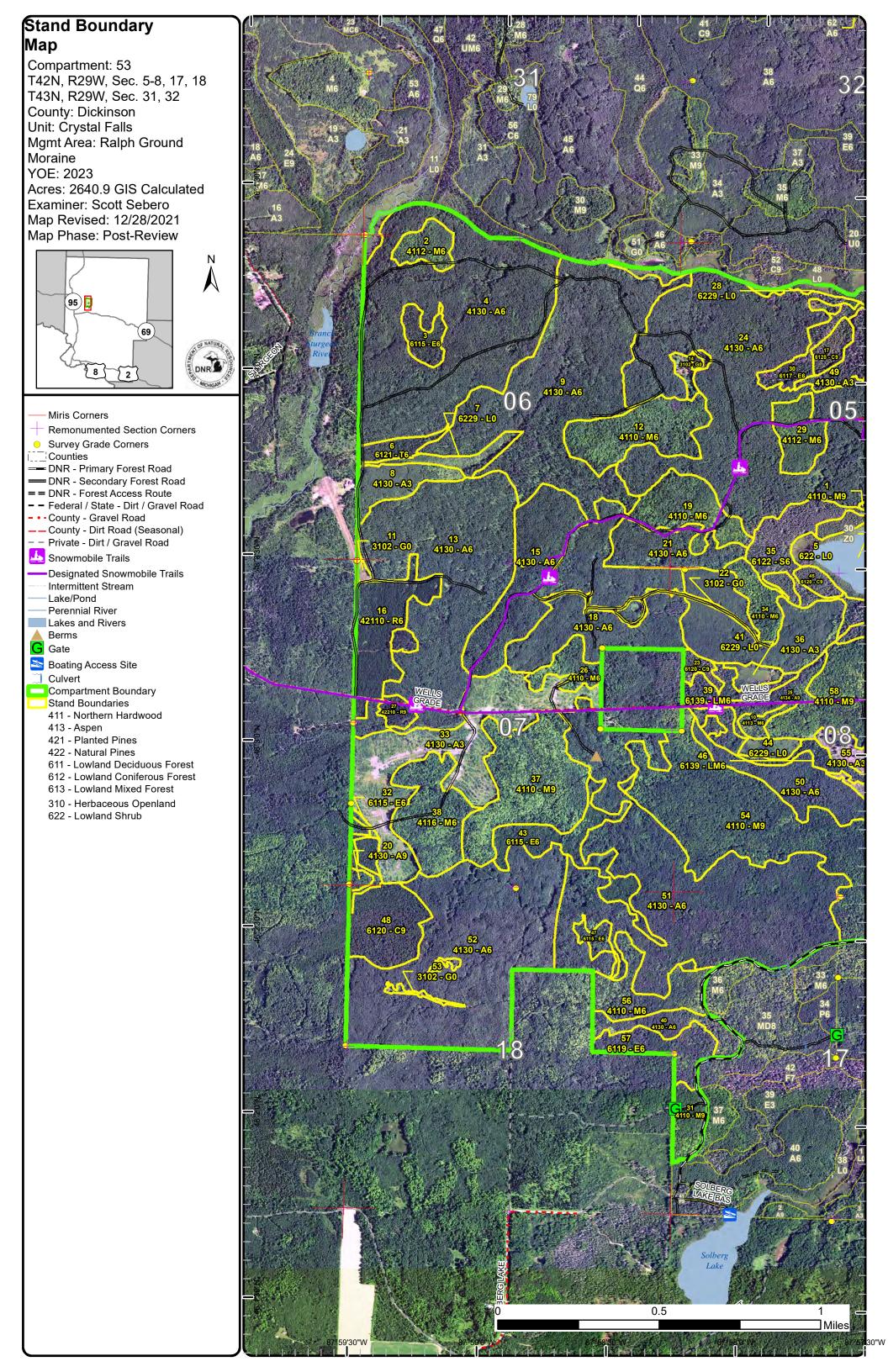
The following information is displayed, where pertinent, on the attached compartment maps:

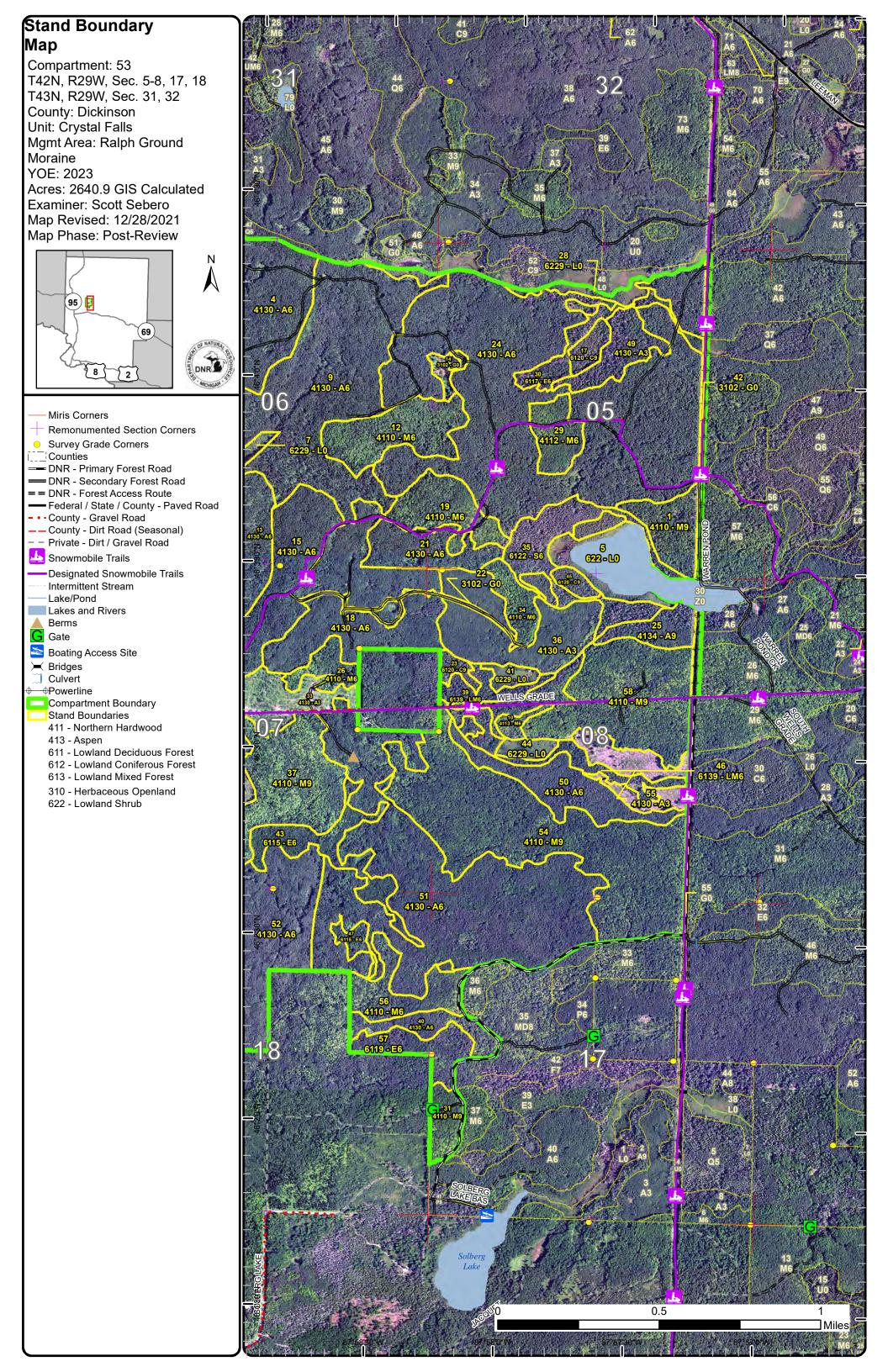
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

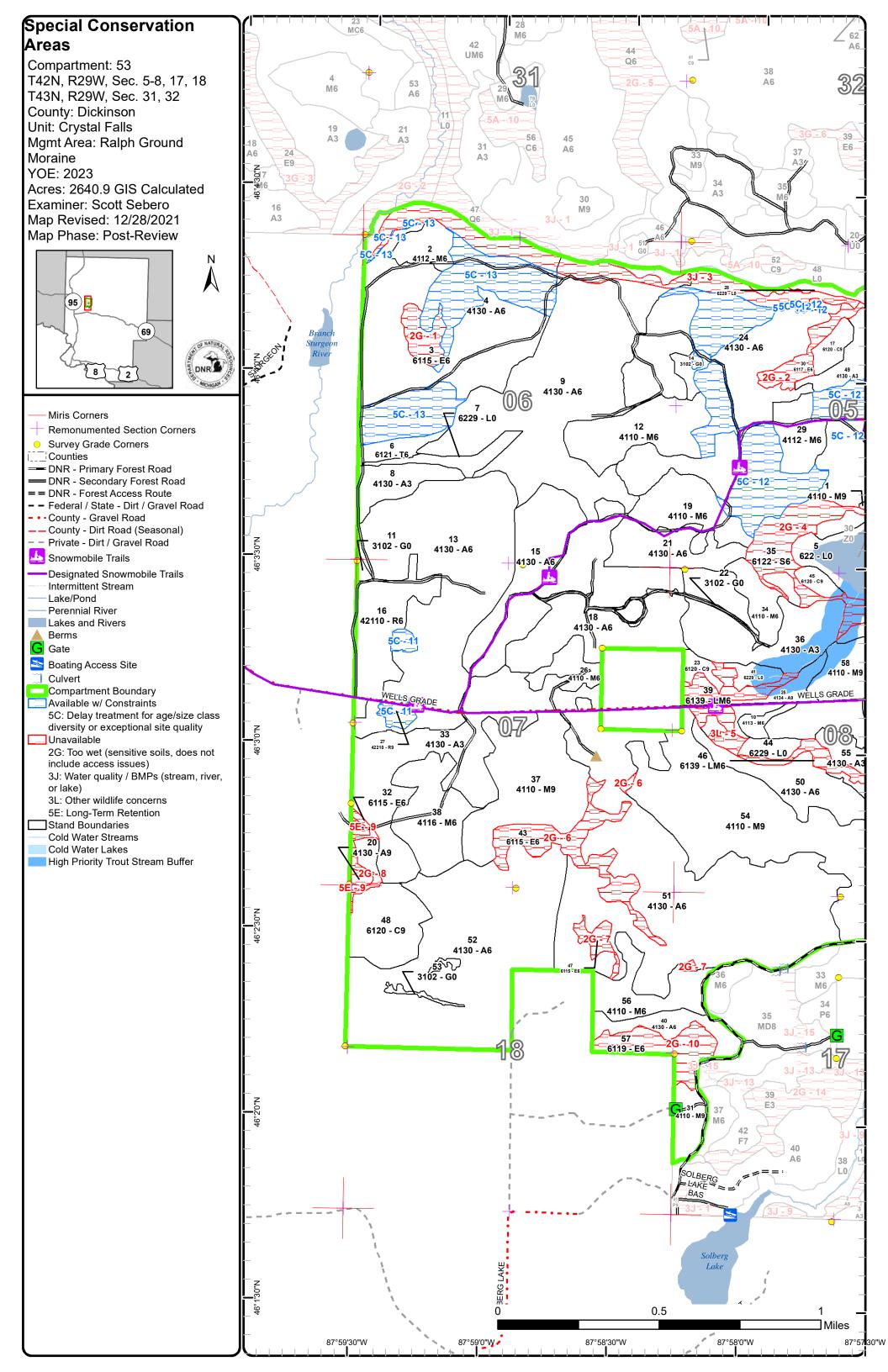


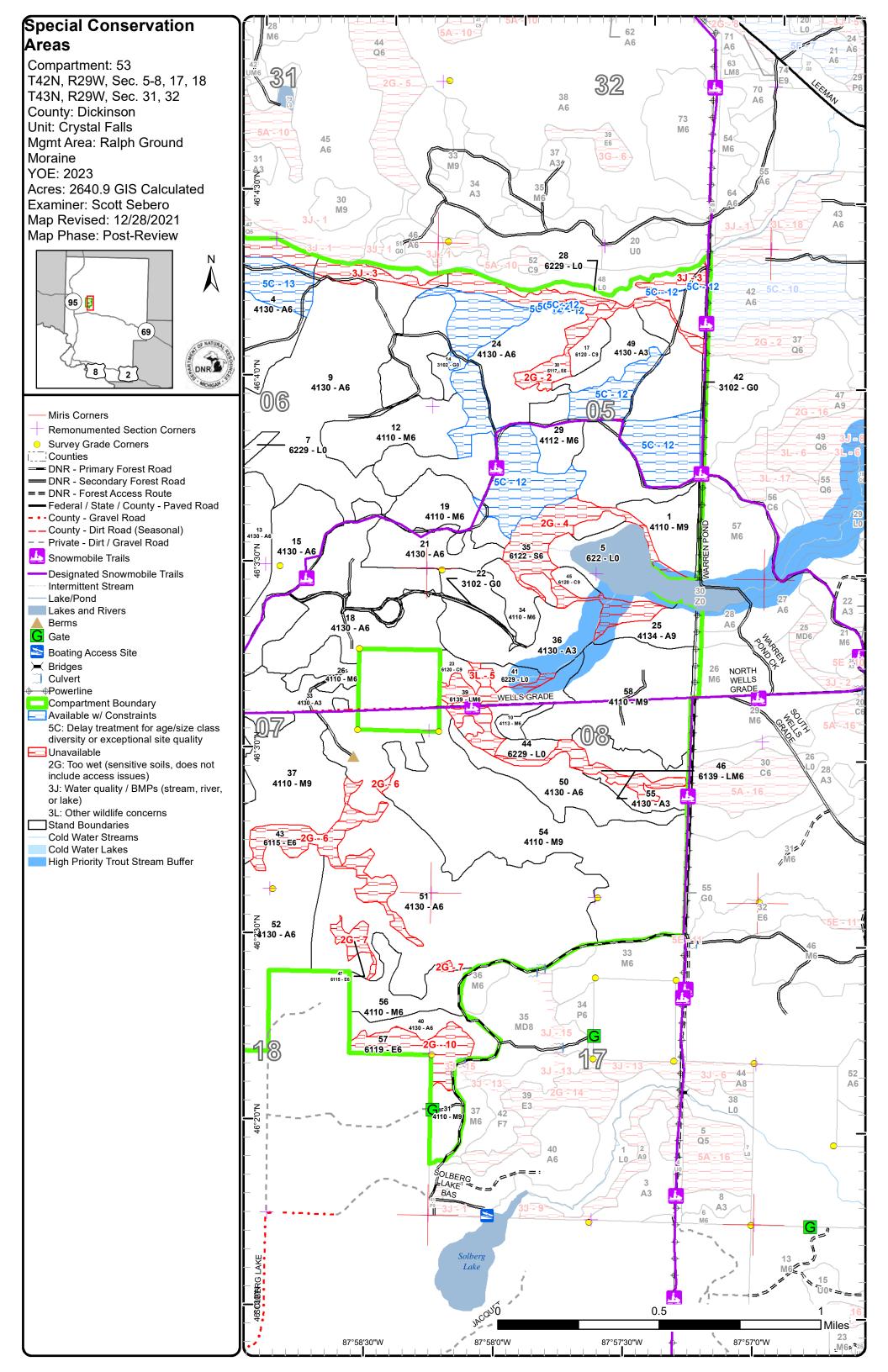












Compartment 53 Year of Entry 2023

Crystal Falls Mgt. Unit Scott Sebero : Examiner



## Age Class

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Aspen	0	144	77	92	325	1027	4	0	0	30	0	0	0	0	0	0	0	0	1699
Cedar	0	0	0	0	0	0	0	0	0	0	28	0	37	0	0	0	0	0	65
Herbaceous Openland	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Lowland Deciduous	0	0	0	0	0	0	92	0	0	0	0	0	0	0	0	0	0	0	92
Lowland Mixed Forest	0	0	0	0	0	0	20	0	13	0	0	0	0	0	0	0	0	0	33
Lowland Shrub	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	40
Northern Hardwood	0	0	0	0	0	5	0	0	0	0	168	384	0	0	0	0	0	0	557
Red Pine	0	0	0	38	0	0	0	0	0	9	0	0	0	0	0	0	0	0	47
Tamarack	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Total	99	144	77	130	325	1032	124	0	53	39	196	384	37	0	0	0	0	0	2640



## **Report 2 – Treatment Summary**

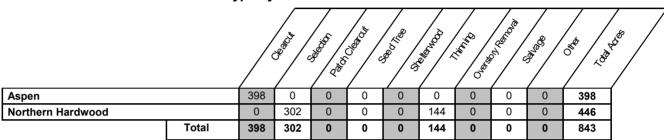
# Crystal Falls Mgt. Unit Year of Entry: 2023

#### **Acres of Harvest**

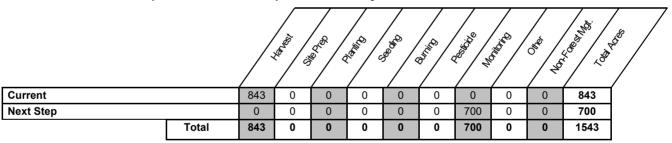
Compartment 53
Total Compartment Acres: 2,641

Commercial Harvest - 843 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



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



Crystal Falls Mgt. Unit

Report 3 -- Treatments Compartment: 53 Year of Entry: 2023



**Treatment** Acres Stand Size Stand BA **Treatment Treatment** Cover Type Age Method Objective Name CoverType Density Age Range Type Structure Cut

**Approved Treatments:** 

12053002-Cut 12.6 4112 - Maple, Poletimber 90 111-Harvest Crown Thinning 411 - Northern Even-Aged No Beech, Cherry Well 140 Hardwood

Association

Prescription Mark to 80 BA.

Specs:

S

t а

n

d

Next Step Treatments:

Acceptable

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2022

12053004-Cut 42.2 4130 - Aspen Poletimber 48 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Retention

Prescription Final Harvest using 4" spec. Leave Cedar, Hemlock, Oak, Pine if found

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Aspen, Mixed Conifers, Mixed Deciduous

Regen: **Other** 

Comment:

Site Condition

Proposed Start Date: 6 /14/2018

12053004-53.0 4130 - Aspen Poletimber 48 81-110 Harvest Clearcut with 4134 - Aspen, Even-Aged No Well Retention Spruce/Fir

Prescription Cut all aspen and mixed hardwood with one or more pulpwood sticks. Cut all spruce and balsam with two or more pulpwood sticks. No red

Specs: or white pine or cedar will be cut.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of aspen, fir and hardwood.

Regen:

**Other** Red line out any ash drains.

Comment:

Site Condition

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Mix of aspen, fir and hardwood.

Regen: Other Comment: Site Condition

S t		Crystal Falls	Mgt. Unit		Repo	rt 3	Treatments		Compartmen Year of Entry	L.	OF NATURAL AND DESCRIPTION OF NATURAL AND DESCRI
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
25	12053025-C	ut 30.0	4134 - Aspen, Spruce/Fir	Sawtimbe Well	r 80	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	No
Pres Spe			mixed hardwood wedar will be cut.	vith one or I	more pu	ılpwood s	sticks. Cut all sp	ruce and balsam w	ith two or more p	ulpwood sticks	. No red
	<u>t Step</u> Moni atments:	itoring, Natura	al Regen (Re-Inven	ntory)							
Acce Reg	eptable Mix o en:	of aspen, fir a	nd hardwood.								
Othe Com	<u>er</u> nment:										
	Condition										
	oosed Start Da			Dalatinala	- 00	444	Haminat	Consum This sin s	444 Northon		N-
26	12053026-C	ut 12.5 4	110 - Sugar Maple Association	Poletimbe	er 90	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
Pres Spe	<u>scription</u> Mark <u>cs:</u>	to 80 BA.									
	t Step utments:										
Acce Reg	eptable en:										
Othe Com	<u>er</u> nment:										
Site	Condition										
Prop	osed Start Da	ate: 10/1 /202	22								
29	12053029-C	ut 18.8	4112 - Maple, Beech, Cherry Association	Poletimbe Well	r 100	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
Pres Spe	scription Mark	to 80 BA.	Association								
	t Step atments:										
Acce Reg	eptable en:										
Othe Com	<u>er</u> nment:										
	Condition										
Prop	osed Start Da	ate: 10/1 /202	22								
31	12053031-C	ut 13.3 4	110 - Sugar Maple Association	Sawtimbe Well	r 90	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	No
Pres Spe	<u>scription</u> Mark <u>cs:</u>	to 80 BA.									
	t Step Moni utments:	itoring, Natura	al Regen (Re-Inven	ntory)							
Acce Reg	eptable Mix o en:	of hardwood a	and fir.								
Othe Com	e <u>r</u> nment:										
Site	Condition										

Prescription Mark to 80 BA. Cut all aspen with one or more pulpwood stick. Leave all conifer.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Mix of maple, aspen and fir.

Regen: Other

Comment:

Site Condition

•		Cı	rystal Falls	Mgt. Unit		Repoi	rt 3	Treatments		Compartmen		TOF NATURAL PR
S t										Year of Entr	y: 2023	DNR
a n d	T	reatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
50	6 12	053056-Cut	27.9 4	110 - Sugar Maple Association	Poletimbe Well	r 100	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	No
<u>Sr</u> <u>Ne</u>	escrip oecs: ext Ste		o 80 BA.									
Ac	ccepta											
	<u>ther</u> omme	nt:										
Si	te Cor	ndition										
<u>Pr</u>	opose	ed Start Date	<u>:</u> 10/1 /202	22								
58	3 12	053058-Cut	83.5 4	110 - Sugar Maple Association	Sawtimbe Well	r 95	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	No
	escrip oecs:	otion Mark to	o 80 BA. C	ut all aspen with or	e or more	pulpwo	od stick.	Leave all conifer	<del>.</del>			
	ext Ste	<del></del>	ring, Natura	al Regen (Re-Inven	tory)							
	ccepta	ble Mix of	maple, asp	en and fir.								
	<u>ther</u> omme	nt:										
Si	te Cor	ndition										

Total Treatment 843.4 Acreage Proposed:

Proposed Start Date: 10/1 /2022

Crystal Falls Mgt. Unit

Compartment: 53 Year of Entry: 2023 **Scott Sebero: Examiner** 

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	dition	s
Acres	Available	With Condition	Not Available		5C	2G	3J	3L	5E
1562	1362	143	58	Aspen	143		54		4
66	66	0	0	Cedar					
30	30	0	0	Herbaceous Openland					
92	0	0	92	Lowland Deciduous		92			
33	0	0	33	Lowland Mixed Forest				33	
69	69	0	0	Lowland Shrub					
40	0	0	40	Lowland Spruce/Fir		40			
557	557	0	0	Northern Hardwood					
47	38	9	0	Red Pine	9				
8	8	0	0	Tamarack					
2,504	2,130	152	223	Total Forested Acres	152	132	54	33	4
	85%	6%	9%	Relative Percent					

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

ι		<b>Dominant Site Condition</b>	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Com	nments:						
l	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	16	Unspecified	Unspecified	Unspecified	Unspecified
Com	nments:						

# Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	54	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: 300 foot buffer for I	Fish Division.					
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	40	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3L: Other wildlife concerns	33	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	32	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

9	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
С	Comments:						
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	22	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	120	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	69	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:

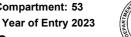


## Report 5 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* 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: 53





# **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.

Conservati 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 oxyg stocked trout populations and those of other coldwate conditions for coldwater fishes may occur in Michigan groundwater inflows, or are located in colder (northern Director's action and designated as trout resources by	er fish species to persist from year to year. Suitable lakes if they are relatively deep, have substantial n) areas of the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved or stocked trout populations and those of other coldwate year to year. Coldwater streams in Michigan typically contributions of groundwater to their stream flows. Su designated as trout resources by Fisheries Order 210	er fish species (e.g., slimy sculpin) to persist from provide these conditions due to substantial ich streams are established by Director's action and
SCA	Riparian Area	A transitional area between aquatic and terrestrial eco influences the aquatic ecosystem and vice-versa. Bec streams and open water wetlands, riparian areas hark communities are ecologically and socially significant i as aesthetics, habitat, bank stability, timber production	cause of the unique conditions adjacent to lakes, oor a high diversity of plants and wildlife. Riparian in their effects on water quality and quantity, as well



Stand	d Level 4 C	over Type	(	Size De	ensity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments	MICHIGAN .
1	4110 - Sugar M	laple Asso	ciation S	awtimb	er Well	24.1	105	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	70	Log/Pole/Sap		105	Ва	lsam Fir	Low	< 5 feet	Sapling		
	Red Maple	10	Log/Pole/Sap	10		Iro	onwood	Medium	5 - 10 feet	Sapling		
	Basswood	15	Log/Pole	10								
	Paper Birch	5	Log/Pole	10								
2	4112 - Maple, Beec	h, Cherry A	Association P	oletimb	er Well	12.6	90	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Log/Pole/Sap	10	90	Lea	therwood	Low	5 - 10 feet	Tall Shrub		
	Red Maple	20	Pole/Log/Sap	8		Ва	lsam Fir	Low	5 - 10 feet	Sapling		
	Quaking Aspen	15	Pole	8								
	Paper Birch	5	Pole/Log	8								
3	6115 - Lo	owland Ash	Р	oletimb	er Well	10.8	50	51-80	N/A		Cedar and tamarack at south end of stand.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Ash	65	Pole/Sap/Log	6	50	Ta	ag Alder	High	5 - 10 feet	Tall Shrub		
	Paper Birch	15	Pole/Log	8								
No	orthern White Cedar	10	Log/Pole	10								
	Tamarack	10	Log/Pole/Sap	10								
4	4130	- Aspen	Р	oletimb	er Well	186.5	48	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	5	Pole	6		Ва	Isam Fir	Low	10 - 20 feet	Pole		
	Quaking Aspen	90	Pole	8	48	Whi	te Spruce	Low	10 - 20 feet	Pole		
	Balsam Fir	5	Pole/Sap/Log	8			ut (American)	Medium	5 - 10 feet	Tall Shrub		
5	622 - Lov	vland Shrub	)	Nonst	ocked	31.9	0 (	Jnspecified	No			
6	6121	Tamarack	Р	oletimb	er Well	8.4	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Ash	10	Pole	6		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub		
	Tamarack	90	Pole/Sapling	6	50						1	
7	6229 - Mixed	l lowland sh	nrub	Nonst	ocked	10.3	l	Jnspecified	No			
8	4130	- Aspen		Saplin	g Well	18.3	17	Immature	N/A		sale 69-03	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	95	Sapling/Pole		17	Hazelnı	ut (American)	Medium	5 - 10 feet	Tall Shrub		
	White Spruce	5	Pole/Sapling	6							•	



Stand	d Level 4 C	over Type	S	ize De	ensity	Acres	Stand Age E	BA Range	Managed 9	Site	General Comments
9	4130	- Aspen	Po	oletimb	er Well	165.5	40 L	Jnspecified	N/A		
	Canopy Species	% Cover			I Age		nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Sapling	6			Isam Fir	Low	10 - 20 feet	Pole	
	Quaking Aspen	80	Pole	6	40		te Spruce	Low	10 - 20 feet	Pole	
	Black Ash	5	Pole/Sapling	6		Hazelnı	ut (American)	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	5	Pole/Sapling	6							
10	4113 - R.M	laple, Conit	fer Po	oletimb	er Well	4.8	40	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	60	Pole/Log/Sap	8	40	Ва	lsam Fir	High	10 - 20 feet	Sapling	
	Balsam Fir	25	Pole/Sapling	6							
	Quaking Aspen	15	Pole	8							
11	3102	- Grass		Nonst	ocked	1.7	L	Jnspecified	No		South end of an air landing strip that begins on privately owned land.
12	4110 - Sugar N	/laple Asso	ciation Po	oletimb	er Well	41.0	100	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Sugar Maple	50	Pole	8	100	Iro	onwood	Low	5 - 10 feet	Sapling	
	Red Maple	10	Log/Pole/Sap	10		Lea	therwood	Low	5 - 10 feet	Tall Shrub	
	Basswood	30	Log/Pole	10							
	Quaking Aspen	5	Log/Pole	10							
	Paper Birch	5	Pole/Log	8							
13	4130	- Aspen	Po	oletimb	er Well	152.0	38	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	95	Pole/Sapling	6	38	Ва	lsam Fir	Low	10 - 20 feet	Pole	
	Balsam Fir	5	Pole/Sapling	6		Whi	te Spruce	Low	10 - 20 feet	Pole	
						Hazelnı	ut (American)	Medium	5 - 10 feet	Tall Shrub	
14	3102	- Grass		Nonst	ocked	6.8	l	Jnspecified	No		
15	4130	- Aspen	Po		er Well	55.7	43	81-110	N/A		
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	95	Pole/Log	8	43	Ва	lsam Fir	Low	5 - 10 feet	Sapling	
	Balsam Fir	5	Pole	6		Hazelnı	ut (American)	Medium	5 - 10 feet	Tall Shrub	
16	42110 - Pla	nted Red P	Pine Po	oletimb	er Well	38.3	26	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Pine	100	Pole/Sapling	6	26	Whi	te Spruce	Low	< 5 feet	Sapling	
						R	ed Pine	Low	< 5 feet	Sapling	



Stand	d Level 4 C	over Type	;	Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments	MICHIGAN
17	6120 - Lo	wland Ceda	ır S	Sawtimb	er Well	7.9	91	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size		
No	orthern White Cedar	100	Log/Pole	10	91	Тад	g Alder	Medium	5 - 10 feet	Tall Shrub		
18	4130	- Aspen	Р	oletimb	er Well	91.5	27	81-110	N/A		Hunter walking trail in stand. sale 007-93.	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	95	Pole/Sapling	6	27	Hazelnut	(American)	Medium	5 - 10 feet	Tall Shrub		
	White Spruce	5	Pole/Sapling	6								
19	4110 - Sugar N	laple Assoc	ciation P	oletimb	er Well	31.2	90	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Pole	8	90	Iron	nwood	Low	5 - 10 feet	Sapling		
	Basswood	20	Pole	8		Leath	nerwood	Low	5 - 10 feet	Tall Shrub		
	Paper Birch	5	Pole/Log	8							•	
	Quaking Aspen	5	Log/Pole	10								
	Red Maple	10	Log/Pole/Sap	10								
20	4130	- Aspen	S	Sawtimb	er Well	3.7	57	81-110	N/A			
	Canopy Species	% Cover	Size Class		Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	90	Log/Pole	10	57	Bals	sam Fir	Low	5 - 10 feet	Sapling		
	Red Maple	5	Pole/Log/Sap									
	Balsam Fir	5	Pole/Log/Sap	8								
21	4130	- Aspen	Р	oletimb	er Well	28.7	40	81-110	N/A			
	Canopy Species	% Cover	Size Class		Age		opy Species	Density	Avg. Height	Size		
	Red Maple	10	Pole/Sapling	6			sam Fir	Low	10 - 20 feet	Pole		
	Quaking Aspen	85	Pole	8	40	White	Spruce	Low	10 - 20 feet	Pole		
	Sugar Maple	5	Pole/Sapling	6		Hazelnut	(American)	Medium	5 - 10 feet	Tall Shrub		
22	3102	- Grass		Nonsto	cked	5.7	ι	Jnspecified	Managed O	pening	Hunter walking trail.	
23	6120 - Lo	wland Ceda		Sawtimb	er Well	7.0	96	141-170	N/A		A few large white pine in southern block of stand.	
	Canopy Species		Size Class		Age		opy Species	Density	Avg. Height	Size		
No	orthern White Cedar	100	Log/Pole	10	96	Bals	sam Fir	Low	5 - 10 feet	Pole		
						Tan	narack	Low	10 - 20 feet	Pole		
						Too	Alder	Medium	5 - 10 feet	Tall Shrub	l .	

Compartment: 53 Year of Entry: 2023



Stand	d Level 4 C	over Type	S	ize De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comment	ts
24	4130	- Aspen	Po	oletimb	er Well	314.6	48	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	85	Pole	8	48	Ва	lsam Fir	Low	10 - 20 feet	Pole		
	Red Maple	5	Pole/Log/Sap	8		Whi	te Spruce	Low	5 - 10 feet	Pole		
	Balsam Fir	5	Pole/Sap/Log	8		Iro	nwood	Low	5 - 10 feet	Sapling		
	White Spruce	5	Pole/Log/Sap	8		Hazelnı	ıt (American)	Medium	5 - 10 feet	Tall Shrub		
25	4134 - Asp	en, Spruce	Fir S	awtimb	er Well	30.0	80	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Log/Pole	10	80	Ва	lsam Fir	Low	5 - 10 feet	Sapling		
	Paper Birch	10	Log/Pole	10		Hazelnı	ıt (American)	Medium	5 - 10 feet	Tall Shrub		
	Balsam Fir	15	Log/Pole/Sap	10								
	White Spruce	5	Log/Pole/Sap	10								
26	4110 - Sugar N	Maple Asso	ciation Po	oletimb	er Well	12.5	90	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Pole	8	90	Lea	therwood	Low	5 - 10 feet	Tall Shrub		
	Red Maple	10	Log/Pole/Sap	10		Iro	onwood	Medium	5 - 10 feet	Sapling		
	Basswood	25	Log/Pole	10								
	Quaking Aspen	5	Log/Pole	10								
27	42210 - Na	tural Red P	ine Sa	awtimb	er Well	8.6	85	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Pine	100	Log	12	85		lsam Fir	Medium	10 - 20 feet	Pole		
						Quak	ing Aspen	Low	10 - 20 feet	Sapling		
28	6229 - Mixed	d lowland sl	nrub	Nonst	ocked	14.8	L	Inspecified	No			
29	4112 - Maple, Beed	ch, Cherry A	Association Po	oletimb	er Well	18.8	100	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Pole	8	100	Iro	nwood	Low	10 - 20 feet	Sapling		
	Basswood	10	Log/Pole	10								
	Red Maple	20	Log/Pole	10								
	Quaking Aspen	10	Log/Pole	10								

SWARTZN3



Stand	Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments	M/CHIGAN .
30	6117 - Lowland I Coni	Deciduous ferous	, Mixed P	oletimb	er Well	16.4	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	10	Log/Pole	10		Ta	ag Alder	High	5 - 10 feet	Tall Shrub		
	Balsam Fir	10	Pole/Sap/Log	8	,						•	
	Black Spruce	10	Pole/Sap/Log	8								
No	orthern White Cedar	5	Log/Pole	10								
	Tamarack	10	Log/Pole/Sap	10								
	Balsam Poplar	20	Pole/Log/Sap	8	50							
	Black Ash	35	Pole/Sap/Log	8	50							
31	4110 - Sugar M	laple Asso	ciation S	Sawtimb	er Well	13.3	90	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Log/Pole/Sap	10	90	Lea	therwood	Low	5 - 10 feet	Tall Shrub		
	Red Maple	5	Log/Pole/Sap	12		Iro	onwood	Low	5 - 10 feet	Sapling		
	Basswood	35	Log/Pole	12							-	
32	6115 - Lo	wland Ash	n P	oletimb	er Well	5.0	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Log/Sap	8		Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub		
	Quaking Aspen	10	Pole/Log	8								
No	orthern White Cedar	5	Log/Pole	10								
	Black Ash	75	Pole/Sap/Log		50							
	Black Spruce	5	Pole/Sap/Log	8								
33	4130 -	- Aspen		Sapling	y Well	96.6	6	Immature	N/A		sale 67-13	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	95	Sapling	1	6	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	White Spruce	5	Sapling	1							-	
34	4110 - Sugar M	laple Asso	ciation P	oletimb	er Well	14.5	96	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Pole	8	96	Iro	onwood	High	10 - 20 feet	Sapling		
	Red Maple	10	Pole	8							-	
	Basswood	30	Pole/Log	10								
35	6122 - Bla	ack Spruce	e P	oletimb	er Well	39.6	70	51-80	N/A		Wet. Many small streams in stand.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	85	Pole/Sap/Log	8	70	Ta	ng Alder	Medium	5 - 10 feet	Tall Shrub		
	Tamarack	10	Pole/Sap/Log	8				,		,	•	
	Quaking Aspen	5	Log/Pole	12								



Stand	d Level 4 Co	over Type	\$	Size De	ensity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments	MICHIGAN .
36	4130	- Aspen		Saplino	g Well	58.9	15	Immature	N/A		sale # 75-03	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size		
	Quaking Aspen	100	Sapling/Pole	4	15	Hazelnı	ıt (American)	Low	5 - 10 feet	Tall Shrub		
37	4110 - Sugar M	laple Assoc	ciation S	awtimb	er Well	66.9	105	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size		
	Sugar Maple	65	Log/Pole	10	105	Iro	nwood	Medium	5 - 10 feet	Sapling		
	Red Maple	10	Pole/Log	8		Ва	lsam Fir	Medium	5 - 10 feet	Sapling		
	Basswood	20	Log/Pole	10						•	•	
	Quaking Aspen	5	Log/Pole	10								
38	4116 - Mixed N.	Hardwood	- Aspen P	oletimb	er Well	39.7	105	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size		
	Sugar Maple	45	Pole/Log	8	105	Ва	lsam Fir	Medium	5 - 10 feet	Sapling		
	Red Maple	20	Pole/Log/Sap	8		Iro	nwood	Medium	5 - 10 feet	Sapling		
	Basswood	15	Log/Pole	10				1		1		
	Quaking Aspen	20	Pole/Log	8								
39	6139 - Mixed	Lowland Fo	orest P	oletimb	er Well	19.9	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size		
	Balsam Fir	5	Pole/Sap/Log	8		Ва	lsam Fir	Low	5 - 10 feet	Pole		
	Black Spruce	30	Pole	8		Та	marack	Low	10 - 20 feet	Pole		
	Tamarack	5	Log/Pole/Sap	10		Ta	g Alder	Medium	5 - 10 feet	Tall Shrub		
	Balsam Poplar	30	Pole/Log	8	50						•	
	Black Ash	25	Pole/Sap/Log	8	50							
No	orthern White Cedar	5	Log/Pole	10								
40	4130	- Aspen	Р	oletimb	er Well	17.6	47	Unspecified	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age		nopy Specie	s Density	Avg. Height	Size		
	Sugar Maple	10	Pole	8		Ва	lsam Fir	Low	10 - 20 feet	Pole		
	Quaking Aspen	80	Pole	8	47	Whi	te Spruce	Low	10 - 20 feet	Pole		
	Balsam Poplar	5	Pole/Log/Sap	8								
	Red Maple	5	Pole/Log/Sap	8								
41	6229 - Mixed	lowland sh	nrub	Nonsto	ocked	6.0		Unspecified	No			
42	3102			Nonsto		12.4		Unspecified	No			



Stand	Level 4 Co	over Type	S	ize De	nsity	Acres	Stand Age B	A Range	Managed 9	Site	General Comments	MICHIGAN .
43	6115 - Lo	wland Ash	n Po	oletimb	er Well	31.9	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Log/Sap	8		Та	ig Alder	Medium	5 - 10 feet	Tall Shrub		
	Quaking Aspen	10	Pole/Log	8								
No	rthern White Cedar	5	Log/Pole	10								
	Black Ash	75	Pole/Sap/Log	8	50							
	Black Spruce	5	Pole/Sap/Log	8								
44	6229 - Mixed	lowland sh	hrub	Nonsto	ocked	6.4	U	nspecified	No			
45	6120 - Lov	vland Ceda	ar S	awtimb	er Well	13.5	96	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Black Spruce	5	Pole/Sap/Log	8		Та	ıg Alder	Low	5 - 10 feet	Tall Shrub		
No	rthern White Cedar	90	Log/Pole	10	96							
	Tamarack	5	Log/Pole/Sap	10								
46	6139 - Mixed	Lowland F	orest Po	oletimb	er Well	13.4	70	51-80	N/A			
	Canopy Species		Size Class	DBH	l Age		nopy Species	Density	Avg. Height	Size		
	Balsam Poplar	25	Pole/Log/Sap	8		Та	ıg Alder	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	5	Pole/Log	8								
	Black Ash	20	Pole/Sap/Log	6								
	Tamarack	5	Pole/Log/Sap	8								
No	rthern White Cedar	10	Log/Pole	10								
	Black Spruce	30	Pole/Log/Sap	8	70							
	Paper Birch	5	Pole/Log	8								
47	6115 - Lo	wland Ash	n Po	oletimb	er Well	6.6	50	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Log/Sap	8		Та	ig Alder	Medium	5 - 10 feet	Tall Shrub		
	Quaking Aspen	10	Pole/Log	8								
No	rthern White Cedar	5	Log/Pole	10								
	Black Ash	75	Pole/Sap/Log	8	50							
	Black Spruce	5	Pole/Sap/Log	8								
48	6120 - Lov	vland Ceda	ar Sa	awtimb	er Well	37.3	110	141-170	N/A			
	Canopy Species	% Cover	Size Class		Age		nopy Species	Density	Avg. Height	Size		
	Balsam Poplar	5	Log/Pole/Sap	10			lsam Fir	Low	10 - 20 feet	Pole		
No	rthern White Cedar	85	Log/Pole	10	110	Та	ıg Alder	Medium	5 - 10 feet	Tall Shrub		
	Black Ash	5	Pole/Sap/Log	8				·		<u>-</u>		
	Black Spruce											



2-002-17.
sale 54-03
eale 54-03
ale 54-03
ale 54-03

Log/Pole/Sap

10

10

## Report 7 - Stands

Compartment: 53 Year of Entry: 2023



Stand	d Level 4 Co	over Type	S	ize De	nsity	Acres S	Stand Age E	SA Range	Managed S	ite	General Comments	Місні
55	4130	- Aspen	Ş	Sapling	ı Well	26.0	4	Immature	N/A		sale 67-13	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size		
	Balsam Fir	5	Sapling	2		Tag	Alder	Low	5 - 10 feet	Tall Shrub		
	Red Maple	5	Sapling	1								
	Balsam Poplar	10	Sapling	1	4							
	Quaking Aspen	80	Sapling	1	4							
56	4110 - Sugar M	/laple Asso	ciation Po	oletimb	er Well	28.0	100	111-140	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size		
	Sugar Maple	60	Pole	8	100	Bals	am Fir	Low	5 - 10 feet	Sapling		
	Basswood	25	Log/Pole	10		Leath	nerwood	Low	5 - 10 feet	Tall Shrub		
	Bacomoda		0									
	Red Maple	10	Pole/Log/Sap	8								
		10		8								
57	Red Maple	5 and Decidue	Pole/Log/Sap Pole/Log	8 oletimb	er Well	21.6	50	81-110 <b>Density</b>	N/A Avg. Height	Size		
57	Red Maple Quaking Aspen 6119 - Mixed Lowla	5 and Decidue	Pole/Log/Sap Pole/Log  pus Forest Po	8 oletimb		21.6 Sub-Cand	50 opy Species eam Fir			<b>Size</b> Pole		
57	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species	5 and Decidue % Cover	Pole/Log/Sap Pole/Log  Dus Forest Po	8 oletimb		21.6 Sub-Cano	opy Species	Density	Avg. Height			
	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen	5 and Decidue  Cover  20	Pole/Log/Sap Pole/Log  Dus Forest Po  Size Class Pole	8 DBH 8		21.6  Sub-Cano  Balsa  White	opy Species am Fir	<b>Density</b> Low	Avg. Height 10 - 20 feet	Pole		
	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar	5 and Decidue % Cover 20 10	Pole/Log/Sap Pole/Log  Dus Forest Po Size Class Pole Pole/Sap/Log	DBH 8		21.6  Sub-Cano  Balsa  White	opy Species sam Fir Spruce	Density Low Low	<b>Avg. Height</b> 10 - 20 feet 10 - 20 feet	Pole Pole		
	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar	5	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole	DBH 8 8 8		21.6  Sub-Cano  Balsa  White	opy Species sam Fir Spruce	Density Low Low	<b>Avg. Height</b> 10 - 20 feet 10 - 20 feet	Pole Pole		
	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar Black Spruce	5 and Decidue % Cover 20 10 5 10	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole Pole/Log/Sap	8  DBH  8  8  10  8		21.6  Sub-Cano  Balsa  White	opy Species sam Fir Spruce	Density Low Low	<b>Avg. Height</b> 10 - 20 feet 10 - 20 feet	Pole Pole		
	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar Black Spruce Red Maple	5 and Decidue % Cover 20 10 5 10 5 5 50	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole Pole/Log/Sap Log/Pole/Sap Pole/Log/Sap Pole/Log/Sap	8  DBH  8  8  10  8  10  8  awtimb	Age 50	21.6  Sub-Cano  Balsa  White	opy Species eam Fir Spruce	Density Low Low	<b>Avg. Height</b> 10 - 20 feet 10 - 20 feet	Pole Pole		
No	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar Black Spruce Red Maple Black Ash	5 and Decidue  Cover 20 10 5 10 5 5 50  Maple Associated	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole Pole/Log/Sap Log/Pole/Sap Pole/Log/Sap Pole/Log/Sap	8  DBH  8  8  10  8  10  8  awtimb	Age 50	21.6  Sub-Cano  Balsa  White  Tag	opy Species eam Fir Spruce	Low Low Medium	Avg. Height 10 - 20 feet 10 - 20 feet 5 - 10 feet	Pole Pole		
No	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar Black Spruce Red Maple Black Ash 4110 - Sugar M	5 and Decidue  Cover 20 10 5 10 5 5 50  Maple Associated	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole Pole/Log/Sap Log/Pole/Sap Pole/Log/Sap Pole/Log/Sap Pole/Log/Sap	8  DBH  8  8  10  8  10  8  awtimb	Age 50	21.6  Sub-Cano  Balsa  White  Tag  83.5  Sub-Cano	opy Species cam Fir Spruce Alder	Low Low Medium	Avg. Height  10 - 20 feet  10 - 20 feet  5 - 10 feet	Pole Pole Tall Shrub		
No	Red Maple Quaking Aspen 6119 - Mixed Lowla Canopy Species Quaking Aspen Balsam Poplar orthern White Cedar Black Spruce Red Maple Black Ash 4110 - Sugar M	5 and Decidue Cover 20 10 5 10 5 50 Maple Assoc	Pole/Log/Sap Pole/Log  Dus Forest Pole  Size Class Pole Pole/Sap/Log Log/Pole Pole/Log/Sap Log/Pole/Sap Pole/Log/Sap Pole/Log/Sap Pole/Log/Sap Size Class	8 Dletimb 8 8 8 10 8 10 8 10 8 DBH	50 er Well	21.6  Sub-Cano Bals: White Tag  83.5  Sub-Cano	opy Species eam Fir Spruce Alder  95 opy Species	Low Low Medium  111-140  Density	Avg. Height  10 - 20 feet  10 - 20 feet  5 - 10 feet  N/A  Avg. Height	Pole Pole Tall Shrub		

SWARTZN3

Red Maple