

Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12161 Entry Year 2024 Acreage: 1,453 County Iron

Management Area: Panola Plains

Stand Examiner: Scott Sebero

Legal Description:

T42N, R32W, Sections: 21, 28, 29, 32, 33, 34.

Identified Planning Goals:

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

Soil and topography:

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

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

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

Unique Natural Features:

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

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Waterbodies include northern edge of Seven Springs Lake, Seven Springs Creek, unnamed tributaries, South Slough, and Stager Creek. All of the streams are designated Type 1 Trout Streams. 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. Any non-designated trout water body should have a 100 foot buffer.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state. No active sand/gravel pits are known to exist in the area. Bedrock is at or very near the surface in places across the compartment. Potential for sand & gravel is good on uplands where glacial deposits overlie bedrock. The surficial geology has not been mapped in detail here. No known ground-based mineral exploration has occurred within the compartment, but extensive testing for iron ore has occurred to the west. No known potential for iron ore exists beneath the compartment. Potential for other metallic and critical minerals beneath the compartment is unknown but is considered low at this time. No current state mineral leasing activity exists in the compartment. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

Vehicle Access:

Access for the compartment is from US-2, Stager Lake Road and associated trail roads.

Survey Needs:

Recreational Facilities and Opportunities:

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

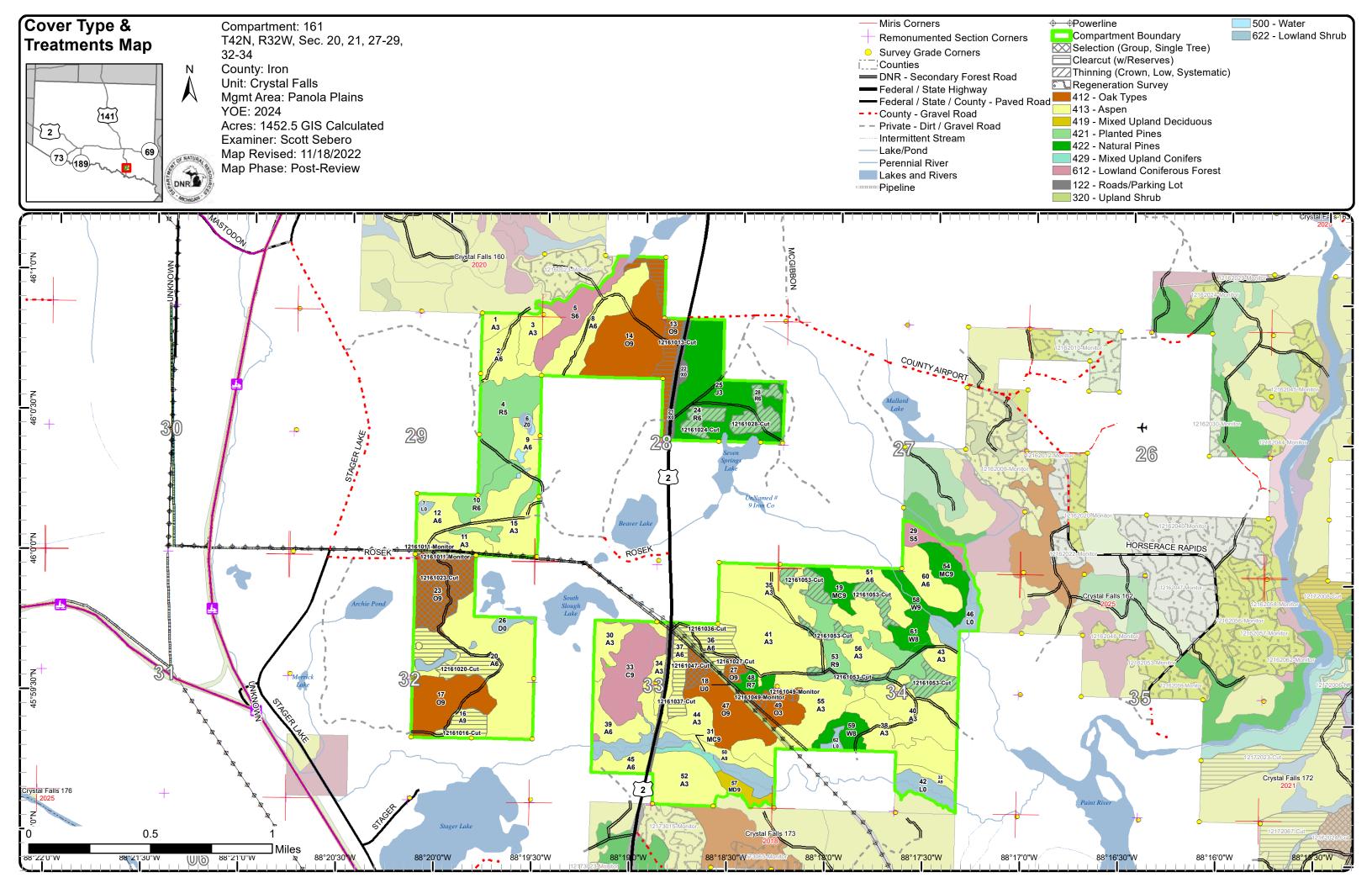
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

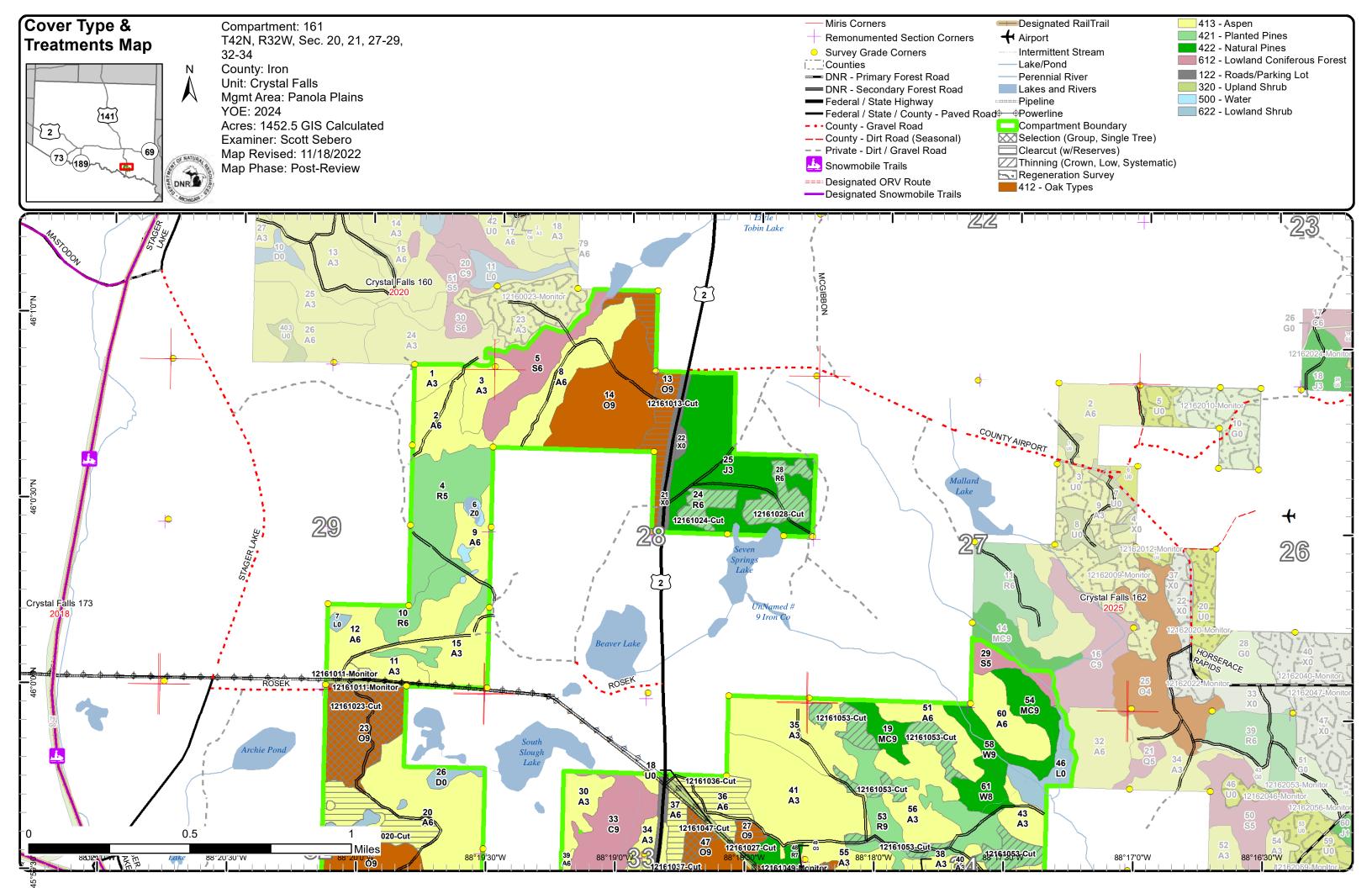
The following information is displayed, where pertinent, on the attached compartment maps:

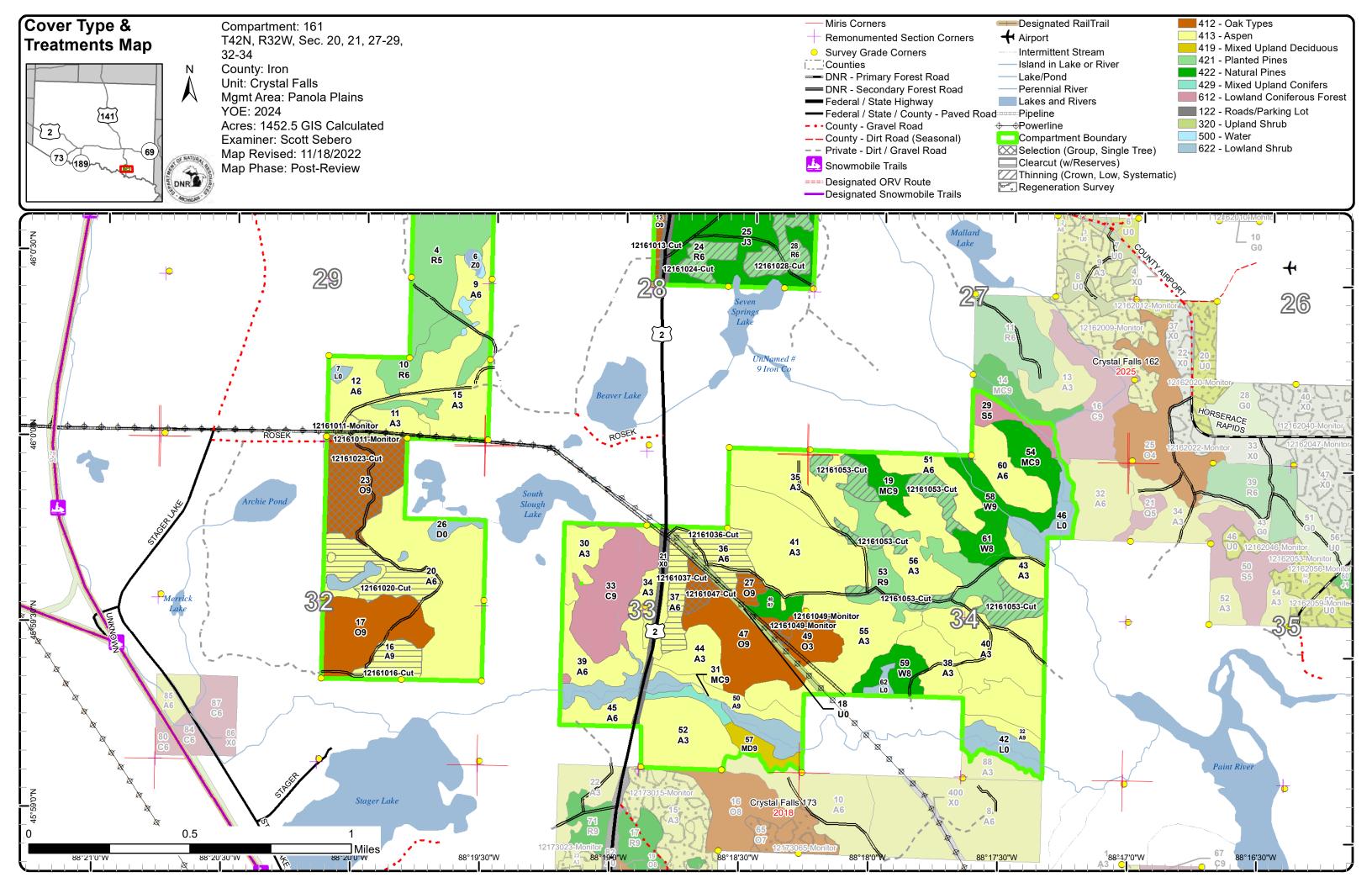
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

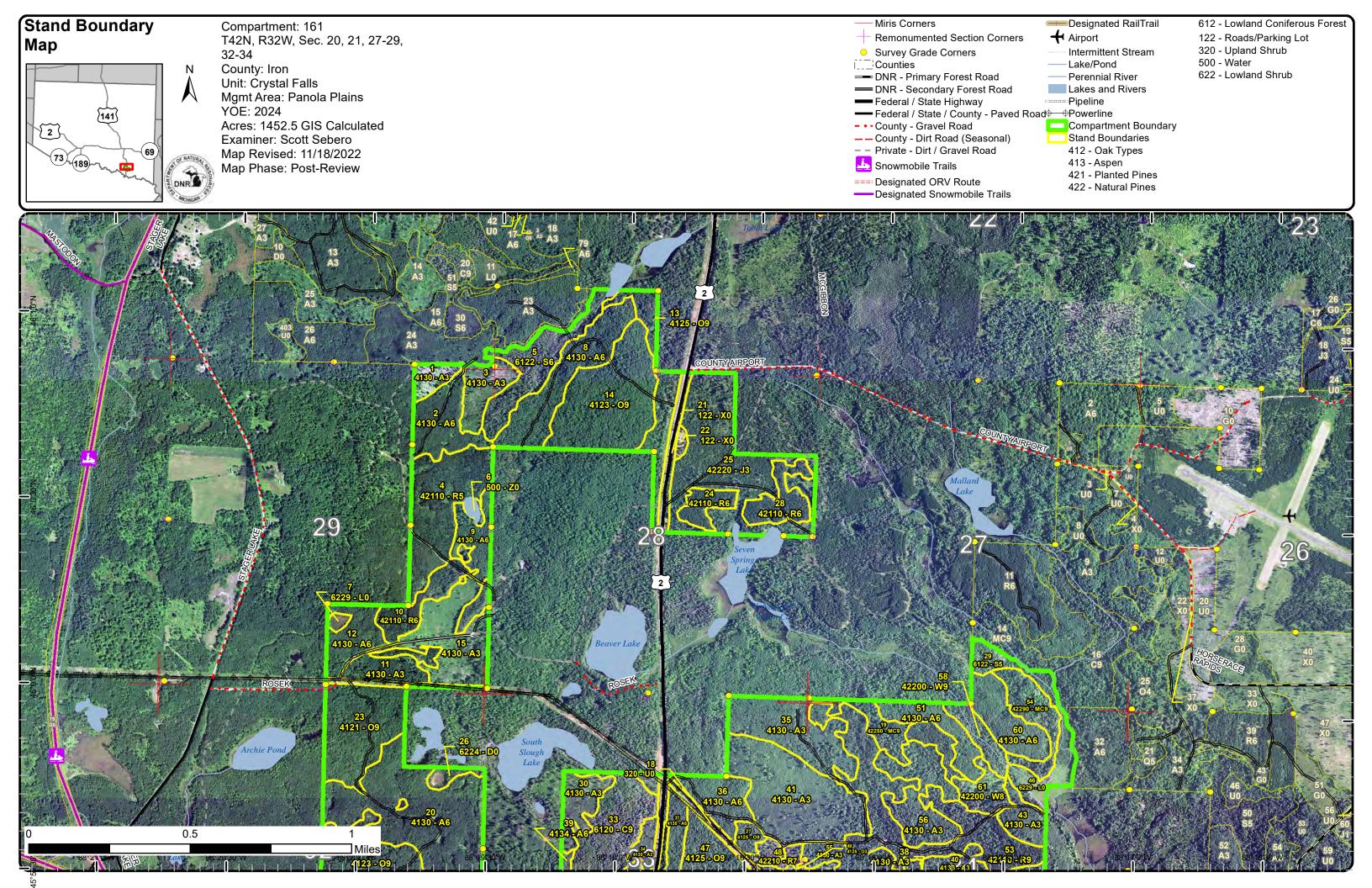
Site condition boundaries

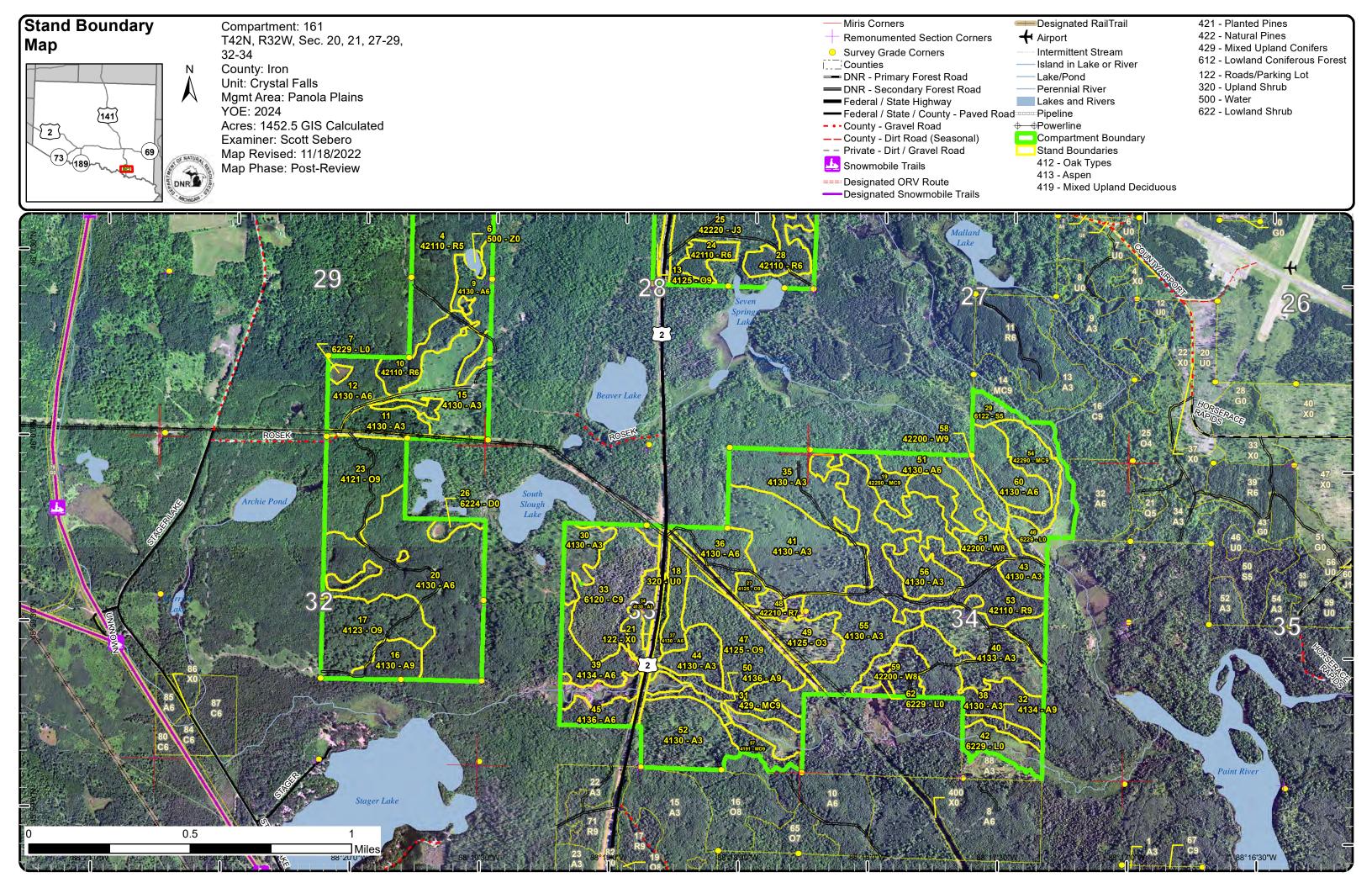
Details on the road access system

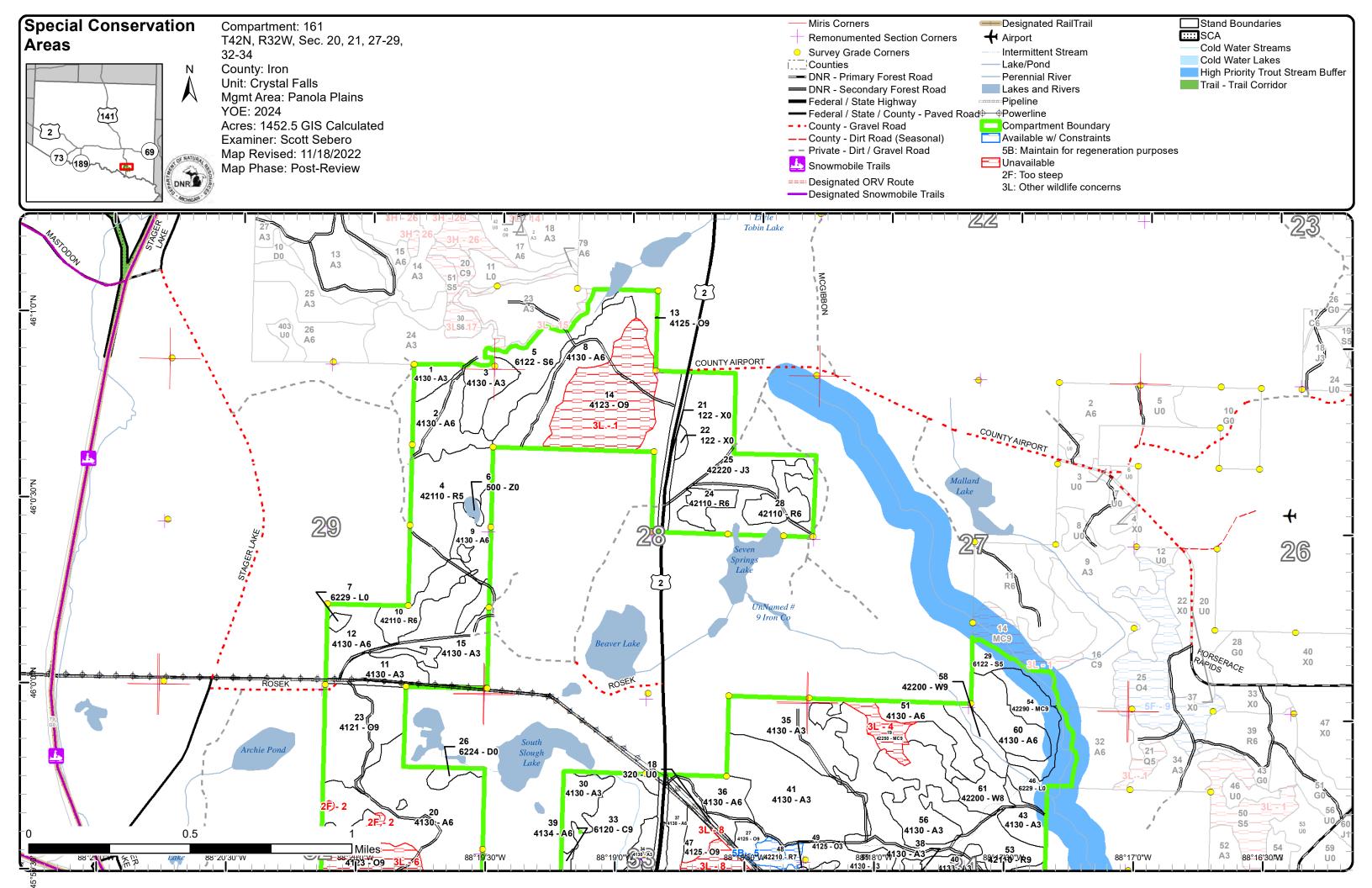


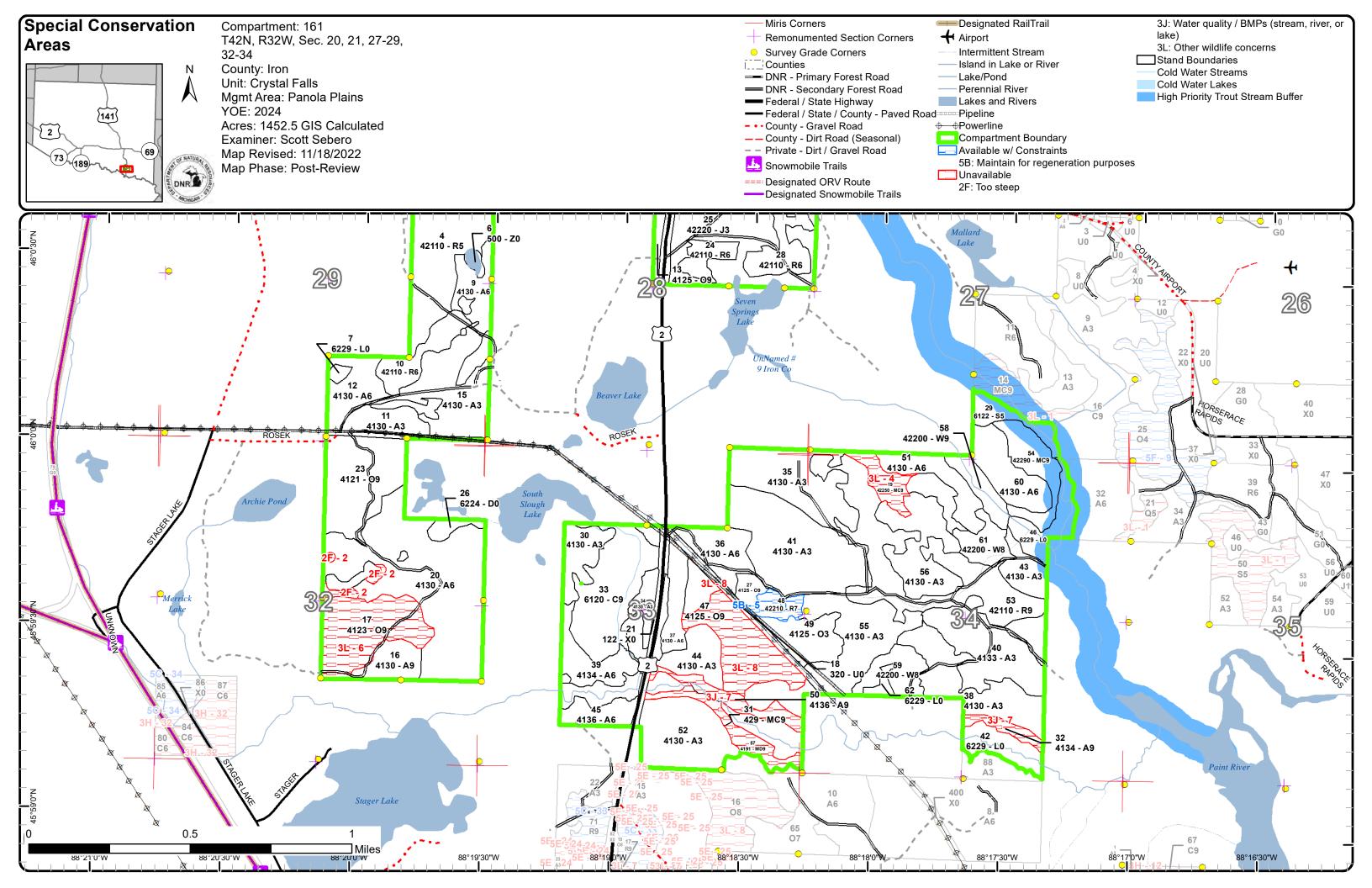












Compartment 161 Year of Entry 2024

Crystal Falls Mgt. Unit Scott Sebero: Examiner



Age Class

	Zor Zor	KO C	3/2					3/8	/ 8 / R				"" " " " " " " " " " " " " " " " " " "					,	No. No.
Aspen	0	121	208	106	102	165	13	0	0	17	0	0	0	0	0	0	0	0	731
Cedar	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0	43
Jack Pine	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
Lowland Shrub	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
Lowland Spruce/Fir	0	0	0	0	0	0	10	0	29	0	0	0	0	0	0	0	0	0	39
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	28
Oak	0	17	0	0	0	0	0	0	0	5	199	0	0	0	0	0	0	0	220
Red Pine	0	0	0	0	0	0	0	164	0	0	7	0	0	0	0	0	0	0	170
Treed Bog	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Upland Conifers	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	4
Upland Shrub	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Urban	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	35
Total	102	138	208	177	102	165	23	164	29	35	313	0	0	0	0	0	0	0	1451



Report 2 – Treatment Summary

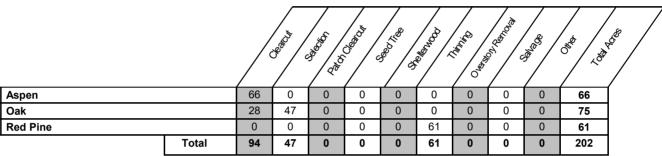
Crystal Falls Mgt. Unit Year of Entry: 2024

Acres of Harvest

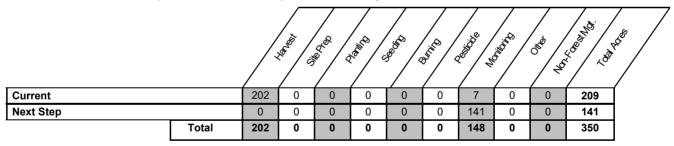
Compartment 161
Total Compartment Acres: 1,453

Commercial Harvest - 202 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: 161 Year of Entry: 2024 DNR DNCHIGAN

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Treatment Name Acres

Stand CoverType Size Density Stand Age F

BA Range

Treatment Type Treatment Method

Cover Type Objective Age Structure Habitat Cut

Approved Treatments:

11 12161011-2.8 4130 - Aspen Sapling 16 1-50 Monitoring Natural Regen 4319 - Mixed Even-Aged No Well Monitor (Re-Inventory) **Upland Forest**

Prescription Look for oak wilt.

Specs:

Next Step Treatments:

Acceptable Mix of maple, oak, aspen and pine.

Regen:

Other Percent to Treat = 100%

Comment:

Site Condition

Proposed Start Date: 4 /19/2022

13 12161013-Cut 23.3 4125 - Black, N. Pin Sawtimber 96 81-110 Harvest Clearcut with 4122 - Oak, Pine Even-Aged No Oak Well Retention

<u>Prescription</u> Cut all trees with one or more pulpwood stick, except red and white pine and red oak. Leave all red and white pine and northern red oak. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of oak and pine.

Regen:

<u>Other</u>

Comment:
Site Condition

Proposed Start Date: 10/1 /2023

16 12161016-Cut 12.5 4130 - Aspen Sawtimber 51 81-110 Harvest Clearcut with 4131 - Aspen, Even-Aged No Well Retention Oak

<u>Prescription</u> Cut all aspen and maple 2" DBH or greater. Cut all paper birch and cherry with one or more pulpwood sticks. Leave all oak and conifers. <u>Specs:</u>

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of aspen, oak and pine.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2023

Compartment: 161

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Year of Entry: 2024 а **Treatment** Size Stand BA **Treatment Treatment Cover Type** Acres Stand Age Habitat n Method Objective Structure Name CoverType Density Age Range Type Cut d 20 12161020-Cut 23.5 4130 - Aspen Poletimber 81-110 Harvest Clearcut with 4131 - Aspen, Even-Aged Nο Well Retention Oak Prescription Cut all aspen and maple 2" DBH or greater. Cut all cherry and paper birch with one or more pulpwood sticks. Leave all oak and conifers. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Mix of aspen, oak and pine. Regen: **Other** Comment: Site Condition Proposed Start Date: 10/1 /2023 12161023-Cut 40.4 4121 - Oak, Aspen Sawtimber 111-Harvest Group Selection 4122 - Oak, Pine Even-Aged No 140 Prescription Cut all aspen and mixed hardwood, except oak, with one or more pulpwood sticks. Leave all oak and conifers. Cut and remove any pockets Specs: of oak wilt. Work with WLD on any oak wilt pockets found prior to harvest. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable Mix of oak and pine. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2023 24 12161024-Cut 42110 - Planted 8.8 Poletimber 63 141-Harvest Crown Thinning 42110 - Planted Even-Aged No Red Pine Red Pine Well 170 Prescription Thin red pine to 120 BA. Specs: Next Step Treatments: Acceptable Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2023 12161027-Cut 4.5 4125 - Black, N. Pin Sawtimber 81 81-110 Harvest Clearcut with 4122 - Oak, Pine Even-Aged No Oak Well Retention Prescription Cut all trees with one or more pulpwood stick, except red and white pine and red oak. Leave all red and white pine and northern red oak. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> Acceptable Mix of oak and pine. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2023

Compartment: 161

s t	,		s Mgt. Offit	·	керо	11.5 1	realments		Compartmen Year of Entry		DNR
a n Treati d Nar		Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
28 121610 Prescription Specs:	728-Cut Thin red	15.2 pine to 1	42110 - Planted Red Pine 20 BA.	Poletimbe Well	r 63	111- 140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
Next Step Treatments: Acceptable Regen: Other											
Comment:											
Site Condition Proposed St		10/1 /20	23								
36 12161	036-Cut	17.7	4130 - Aspen	Poletimbe Well	r 44	81-110	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	No
Prescription Specs:			l maple 2" DBH or will be cut.	greater. Cu	t all spi	ruce, balsa	m, jack pine a	nd paper birch with	one or more pulp	wood sticks.	No red or
Next Step Treatments:		ng, Natur	al Regen (Re-Inver	ntory)							
Acceptable Regen: Other	Mix of as	pen and	oak.								
Comment:											
Site Condition Proposed St		10/1 /20	23								
37 12161	037-Cut	12.4	4130 - Aspen	Poletimbe Well	r 44	51-80	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	No
Prescription Specs:			I maple 2" DBH or will be cut.		t all spi	ruce, balsa	m, jack pine a	nd paper birch with		wood sticks.	No red or
Next Step Treatments:		ng, Natur	al Regen (Re-Inver	ntory)							
Acceptable Regen:	Mix of as	pen and	oak.								
Other Comment:											
Site Condition	<u>on</u>										
Proposed St	art Date:	10/1 /20	23								
47 12161	047-Cut	6.6 4	125 - Black, N. Pin Oak	Sawtimbe Well	r 90	81-110	Harvest	Group Selection	4122 - Oak, Pine	e Even-Aged	No
Prescription Specs:		sticks.						k. Cut all spruce, b ockets of oak wilt.			
Next Step Treatments:		ng, Natur	al Regen (Re-Inver	ntory)							
Acceptable Regen:	Mix of oa	ık and pi	ne.								
Other Comment:											
Site Condition		4044 17	00								
Proposed St	art Date:	10/1 /20	23								

s t	Cı	rystal Fall	s Mgt. Unit		Repoi	rt3 1	reatments		Compartment Year of Entry		DNR DNR
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
49	12161049- Monitor	4.5 4	l125 - Black, N. Pin Oak	Sapling Well	7	Immatu re	Monitoring	Natural Regen (Re-Inventory)	4123 - Red Oak	Two-Aged	No
Preso Spec	cription s:										
Next Treat	<u>Step</u> ments:										
Acce Rege		pine and o	oak.								
Other Comr	-	nt to Treat	= 100%								
Site 0	Condition										
Propo	osed Start Date	<u>e:</u> 4 /19/20)22								
53	12161053-Cut	37.0	42110 - Planted Red Pine	Sawtimbe Well	er 61	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	No
Preso Spec	<u>cription</u> Thin re s:	ed pine to	120 BA.								
Next Treat	<u>Step</u> ments:										
Acce Rege	<u>ptable</u> n:										
Other Comr	-										

Total Treatment Acreage Proposed: 209.2

Proposed Start Date: 10/1 /2023

Site Condition

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment: 161
Year of Entry: 2024

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Sit	e Con	ditions
Acres	Available	With Condition	Not Available		5B	2F	3J	3L
730	710	0	20	Aspen		3	17	
43	43	0	0	Cedar				
71	71	0	0	Jack Pine				
57	57	0	0	Lowland Shrub				
39	39	0	0	Lowland Spruce/Fir				
8	0	0	8	Mixed Upland Deciduous			8	
28	18	0	10	Natural Mixed Pines				10
220	92	0	128	Oak				128
170	163	7	0	Red Pine	7			
8	8	0	0	Treed Bog				
5	0	0	5	Upland Conifers			5	
13	13	0	0	Upland Shrub				
20	20	0	0	Urban				
4	4	0	0	Water				
35	35	0	0	White Pine				
1,453	1,275	7	171	Total Forested Acres	7	3	30	138
	88%	0%	12%	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.

1 Unavailable 3L: Other wildlife concerns 57 Unspecified Comments: Deer, bear, squirrel, grouse, turkey. 2 Unavailable 2F: Too steep 3 Unspecified	Unspecified Unspecified Unspecified
Deer, bear, squirrel, grouse, turkey.	
Unavailable 2F: Too steep 3 Unspecified	
	Unspecified Unspecified Unspecified
Comments:	

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

4	Unavailable	3L: Other wildlife concerns	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Deer.						
5	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	3L: Other wildlife concerns	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Deer, bear, squirrel	, grouse, turkey.					
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	30	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Unavailable	3L: Other wildlife concerns	33	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Deer, bear, squirrel	l, grouse, turkey.					

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: 161
Year of Entry 2024



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	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 oxygen conditions stocked trout populations and those of other coldwater fish spectonditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	cies to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish spective 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.	cies (e.g., slimy sculpin) to persist from ese conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems i influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effects as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian ects on water quality and quantity, as well



Stan	d Level 4 Co	over Type	5	Size De	ensity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments	MICHIGAN .
1	4130	- Aspen		Saplin	g Well	7.0	7	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Red Oak	10	Log/Pole/Sap	12		Hazelnı	ut (American) Medium	5 - 10 feet	Tall Shrub		
	Bigtooth Aspen	10	Sapling	1	7	Re	ed Maple	Medium	10 - 20 feet	Sapling		
	Quaking Aspen	70	Sapling	1	7						-	
	Red Maple	10	Sapling	1	7							
2	4130	- Aspen	P	oletimb	er Well	23.0	26	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Quaking Aspen	100	Pole/Sapling	5	26	Hazelnı	ut (American) Medium	5 - 10 feet	Tall Shrub		
		1		1		Che	erry (spp.)	Low	5 - 10 feet	Sapling		
3	4130	- Aspen		Saplin	g Well	14.9	7	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Balsam Fir	5	Sapling	1	7	Hazelnı	ut (American) Medium	5 - 10 feet	Tall Shrub		
	Quaking Aspen	65	Sapling	1	7							
	White Pine	5	Log/Pole	12	95							
	White Spruce	5	Sapling	1	7							
	Red Maple	20	Sapling	1	7							
4	42110 - Plar	nted Red P	rine Pol	etimbe	r Mediur	m 44.5	64	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Red Pine	100	Pole	8	64	Quak	king Aspen	High	10 - 20 feet	Sapling		
5	6122 - Bl	ack Spruce	e P	oletimb	er Well	28.7	76	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Tamarack	15	Pole/Log/Sap	8			ag Alder	Medium	5 - 10 feet	Tall Shrub		
N	orthern White Cedar	20	Log/Pole	10				l .				
	White Pine	5	Log/Pole/Sap	16								
	Black Spruce	60	Pole/Log/Sap		76							
6	500 -	Water		Nonst	ocked	3.6		Unspecified	No		Vernal ponds.	
7	6229 - Mixed	lowland sh	nrub	Nonst	ocked	1.9		Unspecified	No			



Stand	d Level 4 C	over Type	s	ize De	ensity	Acres	Stand Age B	A Range	Managed \$	Site	General Comments	MICHIGAN .
8	4130	- Aspen	Po	oletim	er Well	36.0	47	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	30	Pole/Sapling	6	47	Re	d Maple	Medium	10 - 20 feet	Sapling		
	Red Oak	10	Log/Pole/Sap	10		Hazelnu	it (American)	Low	5 - 10 feet	Tall Shrub		
	Red Maple	10	Pole/Sap/Log	6								
	Bigtooth Aspen	40	Pole/Sap/Log	8	47							
	Balsam Fir	10	Pole/Sapling	6								
9	4130	- Aspen	Po	oletimb	er Well	13.8	37	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	90	Pole/Sapling	6	37	Hazelnu	t (American)	Medium	5 - 10 feet	Tall Shrub		
	Red Pine	10	Pole/Sap/Log	8								
10	42110 - Pla	nted Red P	Pine Po	oletimb	er Well	23.5	64	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Pine	100	Pole	8	64	Hazelnu	it (American)	Low	5 - 10 feet	Tall Shrub		
						Quak	ing Aspen	Medium	10 - 20 feet	Sapling		
11	4130	- Aspen	;	Saplin	g Well	11.9	16	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Oak	10	Pole/Log/Sap	8		Hazelnu	it (American)	Medium	5 - 10 feet	Tall Shrub		
	Red Maple	5	Sapling	3								
	Red Pine	10	Log/Pole/Sap	10								
	Quaking Aspen	75	Sapling/Pole	3	16							
12	4130	- Aspen	Po	oletim	er Well	17.3	37	51-80	N/A		Oak wilt along powerline.	
	Canopy Species	% Cover		DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Northern Pin Oak	10	Pole/Log/Sap	6		Hazelnu	it (American)	Medium	5 - 10 feet	Tall Shrub		
	Red Pine	5	Log/Pole/Sap	12		Che	rry (spp.)	Low	5 - 10 feet	Sapling		
	Bigtooth Aspen	30	Pole/Sapling	6	37							
	Red Maple	5	Pole/Sapling	6								
	Quaking Aspen	50	Pole/Sapling	6	37							
13	4125 - Blac	k, N. Pin C	oak Sa	awtimb	er Well	23.3	96	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Pine	20	Log/Pole/Sap	12		Ja	ck Pine	Low	5 - 10 feet	Sapling		
	Northern Pin Oak	60	Log/Pole/Sap	12	96	Re	d Maple	Medium	5 - 10 feet	Sapling		
	Red Maple	5	Pole/Log/Sap	8		Hazelnu	it (American)	Medium	5 - 10 feet	Tall Shrub		
	Jack Pine	5	Log/Pole/Sap	10								
	Red Oak	10	Log/Pole/Sap	14	96							



Stand	Level 4 C	over Type	;	Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
14	4123 -	Red Oak	S	awtimb	er Well	56.5	96	111-140	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	15	Pole/Sap/Log	6		Red	l Maple	Medium	>20 feet	Sapling	
	Red Pine	5	Log/Pole/Sap	14							
	Red Maple	5	Pole/Sapling	6							
	Red Oak	75	Log/Pole/Sap	12	96						
15	4130	- Aspen		Sapling	j Well	36.1	7	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Jack Pine	5	Sapling	1		Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
1	Northern Pin Oak	5	Pole/Log/Sap	8				,		,	•
	Quaking Aspen	80	Sapling	1	7						
	Red Pine	10	Pole/Sap/Log	8							
16	4130	- Aspen	S	awtimb	er Well	12.5	51	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Log/Sap	8		Red	l Maple	Medium	10 - 20 feet	Sapling	
	Quaking Aspen	30	Pole/Log/Sap	8	51	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Balsam Fir	5	Pole/Sapling	6							
	Red Oak	5	Log/Pole/Sap	12							
	White Pine	10	Log/Pole/Sap	14							
	Bigtooth Aspen	40	Log/Pole/Sap	10	51						
17	4123 -	Red Oak	S	awtimb	er Well	38.8	96	81-110	N/A		Pocket of dead oak on NE side of stand.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Oak	90	Log/Pole/Sap	14	96	Quakir	ng Aspen	High	10 - 20 feet	Sapling	
	Red Pine	5	Log/Pole/Sap	16	96	Red	l Maple	High	5 - 10 feet	Sapling	
	White Pine	5	Log/Pole	16	96	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
18	320 - Up	land Shrub	1	Nonsto	cked	12.8	U	Inspecified	No		powerline
19		Pine, Oak		awtimb		10.0	91	81-110	N/A		.Most of the oak in the south portion of stand. Rock outcrops in oak
	Canopy Species	% Cover			Age		opy Species		Avg. Height	Size	
	Red Oak	10	Log/Pole/Sap				ng Aspen	Medium	>20 feet	Sapling	
	Red Pine	55	Log/Pole/Sap		91	Red	l Maple	Medium	>20 feet	Sapling	
1	Northern Pin Oak	30	Log/Pole/Sap		91						
	White Pine	5	Log/Pole/Sap	16							



Stand	d Level 4 C	over Type	5	Size Density	Acres	Stand Age I	BA Range	Managed 9	Site	General Comments	MICHIGAN
20	4130	- Aspen	P	oletimber Well	99.0	42	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Oak	10	Log/Pole/Sap	14	Hazelni	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	30	Pole/Log/Sap	8 42	Ва	ılsam Fir	Low	Variable	Sapling		
	Red Maple	10	Pole/Sapling	6							
	White Pine	5	Log/Pole/Sap								
	Bigtooth Aspen	45	Pole/Log/Sap	8 42							
21	122 - Road	d/Parking L	ot	Nonstocked	18.5	ι	Jnspecified	No		US-2	
22	122 - Road	d/Parking L	ot	Nonstocked	1.8	l	Jnspecified	No		Way side park.	
23	4121 - 0	Dak, Aspen	S	awtimber Well	40.6	94	111-140	N/A		A couple pockets of oak wilt along powerline.	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Bigtooth Aspen	25	Pole/Log/Sap	8 42	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Red Maple	10	Pole/Sapling	5	Re	ed Maple	Medium	>20 feet	Sapling		
	Quaking Aspen	5	Pole/Sapling	6 42							
	Red Oak	60	Log/Pole/Sap	14 94							
24	42110 - Pla	inted Red P	Pine P	oletimber Well	8.8	63	141-170	N/A			
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Pine	100	Pole/Log/Sap	8 63	Qual	king Aspen	Low	10 - 20 feet	Sapling		
					North	ern Pin Oak	Low	5 - 10 feet	Sapling		
25	42220 - Nat			Sapling Well	71.2	23	Immature	N/A			
	Canopy Species		Size Class	DBH Age		nopy Species		Avg. Height	Size		
	Red Pine	10	Sapling/Pole	4 23	Hazelni	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Jack Pine	85	Sapling/Pole	4 23							
	Northern Pin Oak	5	Sapling/Pole	4							
26	6224 -	Treed Bog		Nonstocked	8.3	0 ι	Jnspecified	No			
					Sub-Ca	nopy Species	Density	Avg. Height	Size		
					Ta	amarack	Low	>20 feet	Pole		
					Blac	ck Spruce	Low	10 - 20 feet	Pole		



Stand	Level 4 C	over Type	S	Size De	nsity	Acres	Stand Age I	BA Range	Managed 9	Site		General Comments	MCHIGAN .
27	4125 - Blac	k, N. Pin O	ak S	awtimb	er Well	4.5	81	81-110	N/A		Pockets of dead oak.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Pine	5	Log/Pole/Sap	14		Re	d Maple	Low	5 - 10 feet	Sapling			
	White Pine	5	Log/Pole/Sap	14		Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub			
	Bigtooth Aspen	5	Log/Pole/Sap	10									
	Northern Pin Oak	75	Log/Pole/Sap	10	81								
	Red Maple	5	Pole/Sap/Log	6									
	Red Oak	5	Log/Pole/Sap	12									
28	42110 - Pla	nted Red P	ine Po	oletimb	er Well	15.2	63	111-140	N/A				
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Red Pine	100	Pole	8	63	Quak	ing Aspen	Low	5 - 10 feet	Sapling			
29	6122 - BI	ack Spruce	e Pole	etimber	Mediun	n 9.9	51	51-80	N/A				
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Black Spruce	100	Pole/Sap/Log	8	51	Ta	ng Alder	Low	5 - 10 feet	Tall Shrub			
30	4130	- Aspen		Sapling	Well	16.2	7	Immature	N/A		Dirt Pile Aspen.		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Quaking Aspen	90	Sapling	1	7	Hazelnı	ut (American)	Medium	5 - 10 feet	Tall Shrub			
	Red Maple	5	Sapling	1									
	Balsam Fir	5	Sapling	1									
31	429 - Mixed l	Jpland Con	ifers S	awtimb	er Well	4.5	80	81-110	N/A		Buffer for stager creek		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	Balsam Fir	20	Pole/Sap/Log	8		Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub			
	White Spruce	20	Log/Pole/Sap	10						1			
	White Pine	50	Log/Pole/Sap	14	80								
	Red Maple	5	Log/Pole/Sap	10									
		5	Log/Pole/Sap	10									
32	4134 - Aspe	en, Spruce/	Fir S	awtimb	er Well	5.5	80	81-110	N/A		Buffer for stager creek		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size			
	White Pine	5	Log/Pole/Sap	14		Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub			
	White Spruce	15	Log/Pole/Sap	10									
	Balsam Fir	5	Pole/Sap/Log	8									
	Quaking Aspen	75	Log/Pole/Sap	10	80								



Stand	d Level 4 C	over Type	5	Size De	nsity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments	CHIGAN .
33	6120 - Lo	wland Ceda		awtimb		43.4	95	111-140	N/A			
	Canopy Species	% Cover	Size Class		Age		nopy Species		Avg. Height	Size		
	Black Spruce	30	Pole/Log/Sap			Та	g Alder	Medium	5 - 10 feet	Tall Shrub		
	Balsam Fir	10	Pole/Sap/Log	8								
No	orthern White Cedar	50	Pole/Log	10	95							
	Balsam Poplar	10	Log/Pole/Sap	10								
34	4130	- Aspen		Sapling	Well	9.9	8	Immature	N/A		Harvested 2014- Retained red and white pine, cedar, hemlock and o	oak.
	Canopy Species	% Cover	Size Class	DBH	Age							
	Balsam Fir	10	Sapling/Pole	2	_							
	Quaking Aspen	90	Sapling	1	8							
35	4130	- Aspen		Sapling	Well	38.1	18	Immature	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Oak	10	Log/Pole/Sap				it (American)	Medium	5 - 10 feet	Tall Shrub		
	Quaking Aspen	85	Sapling/Pole	3	18		,					
	Red Pine	5	Log/Pole/Sap									
36	4130	- Aspen	P	oletimb	er Well	17.7	44	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Red Maple	5	Pole/Sap/Log	6		Hazelnu	t (American)	Low	5 - 10 feet	Tall Shrub		
	Red Oak	5	Log/Pole/Sap	12							•	
	Quaking Aspen	30	Pole/Log/Sap	8	44							
	Red Pine	5	Log/Pole/Sap	14								
	Bigtooth Aspen	40	Pole/Log/Sap		44							
	Northern Pin Oak	10	Log/Pole/Sap	10								
	White Pine	5	Log/Pole/Sap	14								
37	4130	- Aspen	Р	oletimb	er Well	12.4	44	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Northern Pin Oak	15	Pole/Log/Sap	8		Hazelnu	t (American)	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	60	Pole/Log/Sap	8	44		<u> </u>			1		
	Balsam Fir	5	Pole/Sap/Log	6								
	Red Maple	10	Pole/Sap/Log	6								
	Red Pine	10	Log/Pole/Sap	10								
38	4130	- Aspen		Sapling	Well	34.6	26	Immature	N/A		Tall Pine t-sale. 12-94	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	90	Sapling/Pole	4	26		it (American)	Low	5 - 10 feet	Tall Shrub		
	White Pine	10	Log/Pole/Sap	12	90	Bal	sam Fir	Low	Variable	Sapling		
											1	



Stand	Level 4 Co	over Type	S	ize De	ensity	Acres S	Stand Age	BA Range	Managed \$	Site	General Comments
39	4134 - Aspe	en, Spruce	/Fir Po	oletim	er Well	21.3	37	81-110	N/A		Sale # 12-030-84
	Canopy Species	% Cover	Size Class	DBI	H Age		opy Species	s Density	Avg. Height	Size	
	Balsam Fir	20	Pole/Sapling	6	37	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	80	Pole/Sapling	6	37	Black	Spruce	Full	10 - 20 feet	Sapling	
40	4133 - Aspe	en, Mixed P	ine	Saplin	g Well	36.7	7	Immature	N/A		Stager Mix 2015.
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Can	py Species	Density	Avg. Height	Size	
	Red Oak	5	Log/Pole/Sap	12		Red	Maple	Medium	5 - 10 feet	Sapling	
	White Pine	15	Log/Pole/Sap	12		Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Red Pine	5	Log/Pole/Sap	12							
	Quaking Aspen	45	Sapling	1	7						
	Bigtooth Aspen	30	Sapling	1	7						
41	4130	- Aspen		Saplin	g Well	60.0	15	Immature	N/A		Compartment 161 t-sale. 66-04
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Can	opy Species	s Density	Avg. Height	Size	
		5	Log/Pole/Sap	10	90	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	95	Sapling	2	15						
42	6229 - Mixed	l lowland sl	hrub	Nonst	ocked	37.9	l	Unspecified	No		Stand contains Stager Creek.
43	4130	- Aspen		Saplin	g Well	18.0	23	Immature	N/A		Black Powder Aspen t-sale. 001-98
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Can	py Species	s Density	Avg. Height	Size	
	Red Oak	10	Log/Pole/Sap	12	90	Quakir	ig Aspen	High	10 - 20 feet	Sapling	
	Quaking Aspen	85	Sapling/Pole	4	23						-
	Red Pine	5	Log/Pole/Sap	10	61						
44	4130	- Aspen		Saplin	g Well	14.9	16	Immature	N/A		Acorn Aspen t-sale. 55-04
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Can	py Species	s Density	Avg. Height	Size	
	Red Oak	5	Log/Pole/Sap	12	95	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	95	Sapling/Pole	3	16						-
45	4136 - Aspen	ı, Mixed Co	onifer Po	oletim	er Well	10.7	36	51-80	N/A		Stager Creek Sale. 11-84
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Can	opy Species	s Density	Avg. Height	Size	
	Quaking Aspen	80	Pole/Sapling	5	36	Hazelnut	(American)	Low	5 - 10 feet	Tall Shrub	
	Balsam Fir	10	Pole/Sapling	5				,			-
	White Pine	10	Log/Pole/Sap	12							
46	6229 - Mixed	l lowland sl	hrub	Nonst	ocked	14.7	l	Unspecified	No		beaver pond on seven springs creek and lowlands next to it.



Stand	d Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments	MICHIGAN
47	4125 - Blac	k, N. Pin C	Dak S	awtimb	er Well	39.4	90	81-110	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Red Maple	5	Pole/Sapling	5	44	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Red Oak	20	Log/Pole/Sap	12	90						-	
ا	Northern Pin Oak	60	Log/Pole/Sap	10	90							
	Quaking Aspen	15	Pole/Sapling	5	44							
48	42210 - Nat	ural Red P	Pine S		er Poor	6.6	90	1-50	N/A		Stager Mix 2015.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Pine	90	Log/Pole/Sap	16	90	R	ed Pine	Medium	Variable	Sapling		
		10	Log/Pole/Sap	10		Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
49	4125 - Blac	k, N. Pin C	Dak	Saplin	g Well	17.1	7	Immature	N/A		Stager Mix 2015.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
1	Northern Pin Oak	80	Sapling	1	7	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Red Oak	20	Log/Pole/Sap	12	90							
50	4136 - Aspen	, Mixed Co	onifer S	awtimb	er Well	11.4	80	81-110	N/A		Buffer for stager creek.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Red Pine	5	Log/Pole/Sap	14		Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	70	Log/Pole/Sap	10	80			'			-	
	White Spruce	10	Log/Pole/Sap	10								
	White Pine	10	Log/XLog	16								
	Red Oak	5	Log/Pole/Sap	10								
51	4130	- Aspen	P	oletimb	er Well	16.7	34	51-80	N/A		Seven Springs Creek Sale. 7-84	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Red Oak	10	Log/Pole/Sap	12	90	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	Quaking Aspen	85	Pole/Sapling	5	34			'			-	
	Red Pine	5	Log/Pole/Sap	12	90							
52	4130	- Aspen		Saplin	g Well	36.0	10	Immature	N/A		Declination Aspen t-sale. 59-11	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
		10	Log/Pole/Sap	12	90	Hazelnı	ut (American)	Low	5 - 10 feet	Tall Shrub		
	White Pine	10	Pole/Log/Sap	10	95							
	Quaking Aspen	80	Sapling	1	10							
53	42110 - Plai	nted Red F	Pine S	awtimb	er Well	71.1	61	141-170	N/A		Stager Mix 2015.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size		
	Red Pine	100	Log/Pole/Sap	12	61	Re	ed Maple	High	>20 feet	Sapling		
		- '				Oual	king Aspen	Low	>20 feet	Sapling		



Stand	d Level 4 Co	ver Type	S	ize De	nsity	Acres	Stand Age I	BA Range	Managed S	Site	General Comments
54	42290 - Natu	ral Mixed F	Pine Sa		er Well	18.5	90	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	White Spruce	10	Log/Pole/Sap	10		Ва	lsam Fir	Low	Variable	Sapling	
	White Pine	55	Log/Pole/Sap	14	90	Wh	ite Pine	Low	Variable	Sapling	
	Red Pine	30	Log/Pole/Sap	14	90						
	Red Maple	5	Log/Pole/Sap	10							
55	4130 -	Aspen	:	Sapling	Well	46.6	15	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
1	Northern Pin Oak	15	Pole/Sap/Log	8		Hazelnu	ıt (American)	Low	5 - 10 feet	Tall Shrub	
	White Pine	5	Sapling/Pole	3							
	Quaking Aspen	80	Sapling	1	15						
56	4130 -	Aspen	;	Sapling		30.2	25	Immature	N/A		T.L.C. Aspen t-sale. 13-94
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	90	Sapling/Pole	4	25	Ва	lsam Fir	Low	Variable	Sapling	
	Red Pine	10	Log/Pole/Sap	10	61						
57	4191 - Mixed Upla Coi	nd Decidu nifer	ous with Sa	awtimb	er Well	8.3	80	81-110	N/A		Buffer for stager creek.
	Canopy Species	% Cover		DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Balsam Fir	5	Pole/Sap/Log	8		Hazelnı	ıt (American)	Low	5 - 10 feet	Tall Shrub	
	White Spruce	5	Log/Pole/Sap	10							
	White Pine	25	Log/Pole/Sap	12	80						
	Red Maple	20	Log/Pole/Sap	10	80						
		20	Log/Pole/Sap	12	80						
	Black Cherry	20	Pole/Log/Sap	8							
	Quaking Aspen	5	Log/Pole/Sap	10							
58	42200 - Natu	ral White F	Pine Sa	awtimb	er Well	10.4	90	141-170	N/A		Steep banks down to seven springs creek.
	Canopy Species	% Cover		DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Pine	10	Log/Pole/Sap	14		Re	d Maple	Medium	5 - 10 feet	Sapling	
	Red Maple	10	Log/Pole/Sap	12		Wh	ite Pine	Low	Variable	Sapling	
					[
	White Pine	70	Log/Pole/Sap	14	90						
	White Pine White Spruce	70 10	Log/Pole/Sap Log/Pole/Sap	14	90						
59		10	Log/Pole/Sap	10	90 Mediun	n 13.7	90	51-80	N/A		Stager Mix 2015.
59	White Spruce	10	Log/Pole/Sap Pine Saw	10 /timber			90 nopy Species		N/A Avg. Height	Size	Stager Mix 2015.
59	White Spruce 42200 - Natur	10	Log/Pole/Sap Pine Saw	10 /timber	Mediun	Sub-Ca				Size Sapling	Stager Mix 2015.

Crystal Falls Mgt. Unit

Report 7 - Stands



	4400					21-		= 1 00			- 0. 10.1 0.01	
	4130	- Aspen	Ро	letimb	er Well	21.7	37	51-80	N/A		Tree Stand Sale. 8-84	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canor	py Species	Density	Avg. Height	Size		
	Balsam Fir	10	Pole/Sapling	5	37	Hazelnut (A	American)	Low	10 - 20 feet	Tall Shrub		
	0 11 1	00	D - I - /O : !!	6	37							
	Quaking Aspen 42200 - Natu	90 ural White F	Pole/Sapling Pine Saw		Mediu	n 11.4	95	51-80	N/A		Stager Mix 2015.	
61	42200 - Natu	ıral White F	Pine Saw	timber	Mediu						Stager Mix 2015.	
61	42200 - Natu	ıral White F	Pine Saw Size Class	timber	Mediur Age	Sub-Canop	py Species	Density	Avg. Height	Size	Stager Mix 2015.	
61	42200 - Natu	ural White F % Cover 65	Pine Saw	timber	Mediu		py Species			Size Sapling	Stager Mix 2015.	
61	42200 - Natu	ıral White F	Pine Saw Size Class	timber	Mediur Age	Sub-Canop	py Species Pine	Density	Avg. Height		Stager Mix 2015.	