

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72178 Entry Year 2022 Acreage: 1,043

County Crawford

Management Area: Camp Grayling

Revision Date: 2020-04-07

Stand Examiner: Derek Nellis

Legal Description:

T27N, R04W Section 20, 21 and 22, Frederic Township

Identified Planning Goals:

To manage and maintain species and structural diversity, health, productivity, and sustainability throughout the compartment. To provide multiple uses of the land while incorporating any visual management.

Soil and topography:

Soil types, within this compartment consist of Grayling sands and Graycalm sands. Topography, within this compartment consists of many ridges and valleys throughout it.

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

Sections 21 and 22 is solid state ownership. Section 20 is mostly privately-owned with full time and seasonal residents, with the exception of an 80 acre parcel in the northeast quarter that is state-owned. Land use within the compartment is generally recreational.

Unique Natural Features:

None

Archeological, Historical, and Cultural Features:

None recorded at this time.

Special Management Designations or Considerations:

No special designations. Compartment is a major recreational corridor. The recreational trail system within the compartment is a major consideration to take into account when doing forest treatments.

Watershed and Fisheries Considerations:

None

Wildlife Habitat Considerations:

To manage and maintain existing cover types for deer, bear, squirrel, turkey and grouse.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial metallic mineral production in this part of the state. The closest active sand/gravel pit is more than six miles away. Sand & gravel potential appears to be good in the compartment. The compartment is south of the Antrim Shale gas play and north of the general region of central basin hydrocarbon potential. There is no known hydrocarbon potential beneath the compartment, no test wells have been drilled in the area, and there is no current mineral leasing activity in the vicinity. Oil & gas potential in the compartment is considered low at this time.

Vehicle Access:

The compartment is accessed from Howes Lake Road, a county road. Howes Lake Road traverses north/south through the west portion of the compartment. A designated nowmobile trail # 5 and several two tracks branch off this road and wind through the compartment. All newly created roads due to timber harvesting must be closed following the harvest.

Survey Needs:

None.

Recreational Facilities and Opportunities:

The compartment does provide many recreational opportunities such as hunting, snowmobiling, wildlife viewing and ORV riding. The Blue Bear Snowmobile Trail #5 / ORV Route traverses north/south through the compartment and the Frederic Loop ORV trail traverses through portions of this compartment.

Fire Protection:

Fire protection is the responsibility of the Michigan DNRE and the Frederic Volunteer Fire Department. Current access is adequate for fire suppression equipment. Nearby water sources include the Manistee River and the North Branch of the Au Sable River.

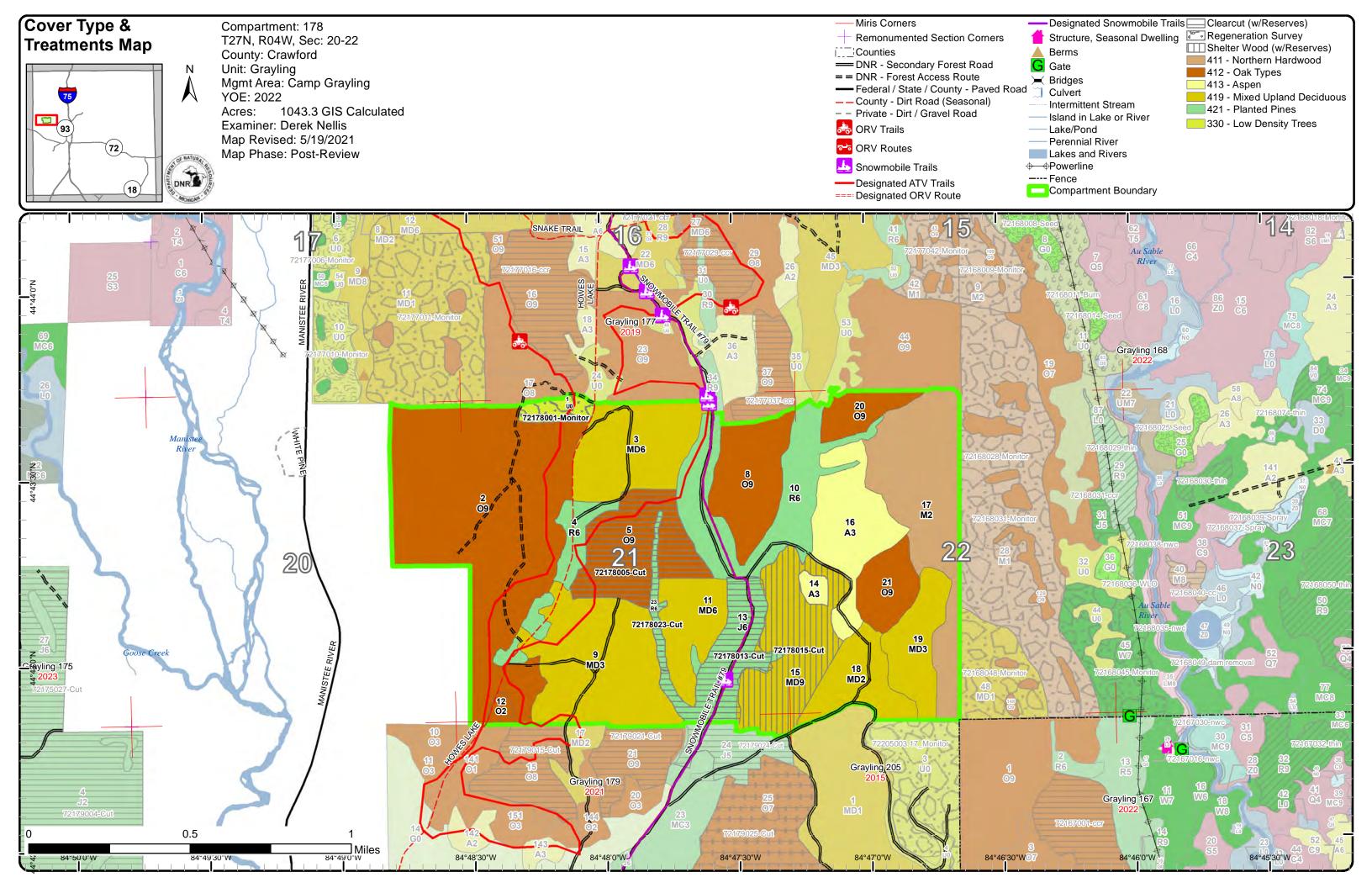
Additional Compartment Information:

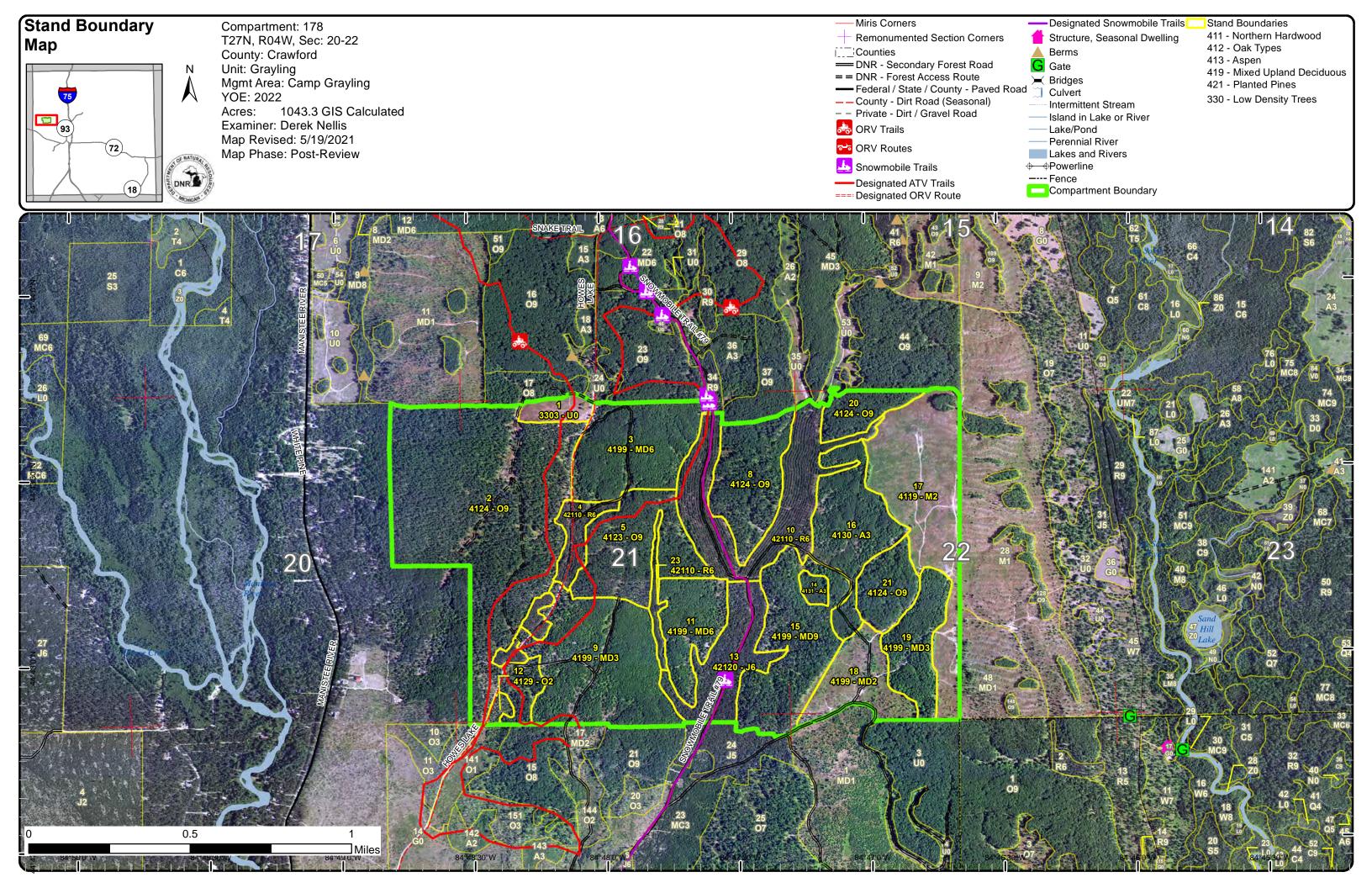
The following reports from the Inventory are attached:

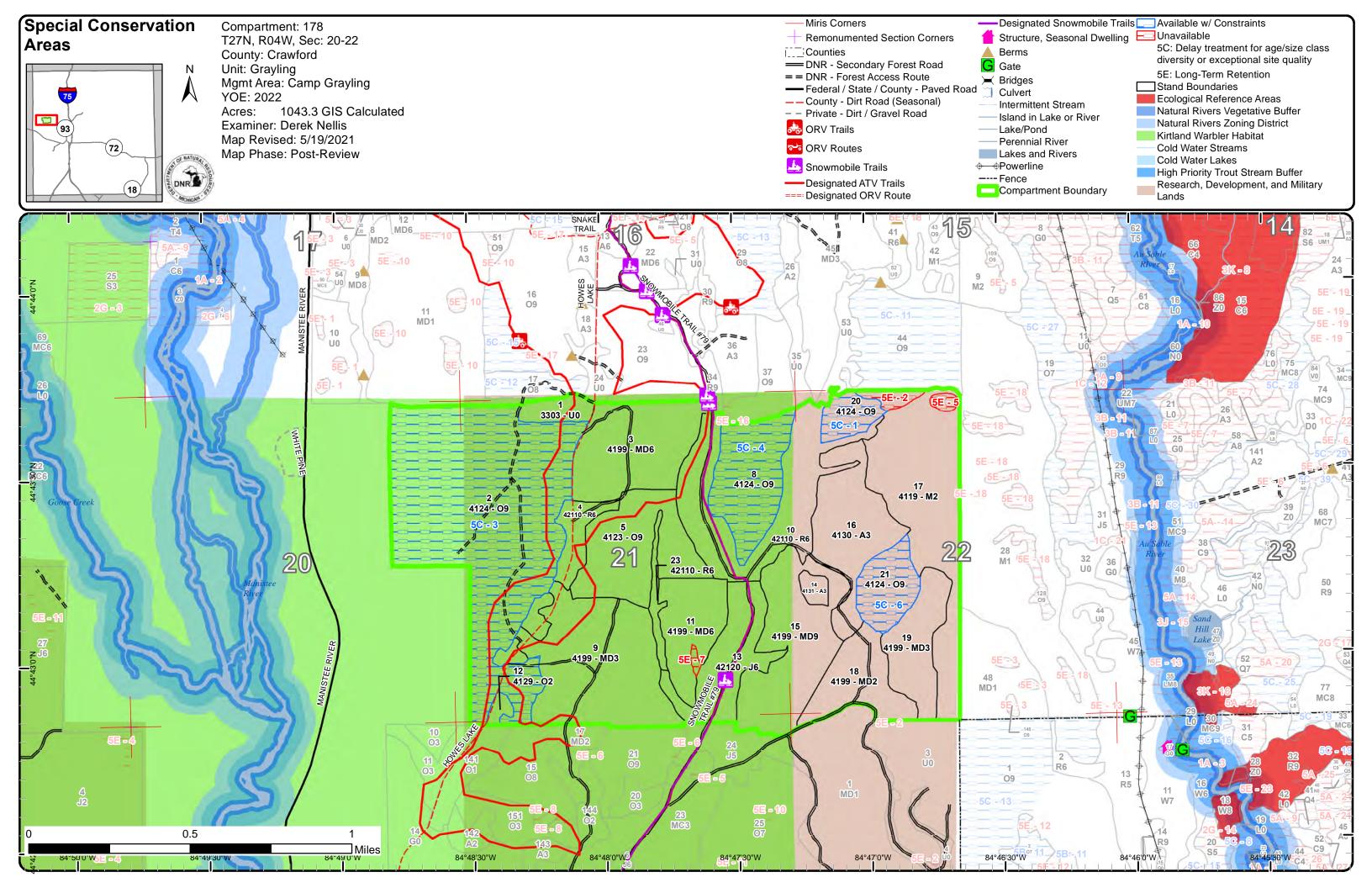
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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 178 Year of Entry 2022

Grayling Mgt. Unit

Derek Nellis: Examiner



Age Class

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	/		/ /	/ /	/ /		/ /	/	/ /	/ /	/ /	/	_ /	_ /	/ /	/	/ /	/ /		
	₹ oc		§ / ¿	\$ \ &	\$ / &			8 /s		\$ ² / \$	$^{\sharp}/_{s}$			\$ \{			No.			. /
																				/
Aspen	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	ı
Jack Pine	0	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	44	ı
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Mixed Upland Deciduous	0	36	0	161	71	0	0	0	0	0	73	0	0	0	0	0	0	0	341	
Northern Hardwood	0	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	
Oak	0	0	0	0	3	0	0	0	0	0	25	296	60	0	0	0	0	0	384	
Red Pine	0	0	0	0	0	7	0	100	0	0	0	0	0	0	0	0	0	0	107	
Total	10	133	0	220	74	7	0	144	0	0	98	296	60	0	0	0	0	0	1042	



Report 2 – Treatment Summary

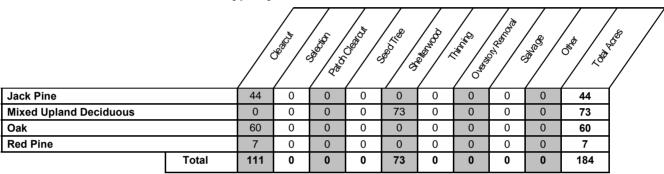
Grayling Mgt. Unit Year of Entry: 2022

Acres of Harvest

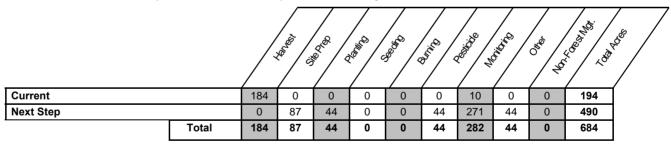
Compartment 178
Total Compartment Acres: 1,043

Commercial Harvest - 184
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



s t а n

d

Treatment Name

Acres

Stand CoverType

Density

Size

Stand Age

BA Range

Treatment Type

Treatment Method

Cover Type Objective

Age Structure Habitat Cut

Approved Treatments:

27 72175027-Cut 178.8 42120 - Planted Poletimber 34 1-50 Harvest Clearcut with 4212 - Planted Even-Aged No Jack Pine Well Retention Jack Pine

Prescription Harvest all stems greater than 2" DBH, Leave retention in vortex strips. Add low stump specs.

Specs:

SitePrep, Roller Chopping: SitePrep, Trenching: Pesticide, Aerial - Site Prep; Planting, KW Initial Plant; Monitoring, Artificial Next Step

<u>Treatments:</u> Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Jack pine at KW density.

Regen:

Harvesting stand outside of YOE is meant to create a larger and easier managed KW block. Merge stands into Comp 179 following harvest. <u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

42120 - Planted 4212 - Planted 72175028-Cut 93.3 Sapling 27 Harvest Clearcut with Even-Aged No Jack Pine

Jack Pine Well Retention

Prescription Harvest all stems greater than 2" DBH. Put retention in vortex strips. Add low stump specs.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, KW Initial Plant; Monitoring, Artificial Next Step

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Jack pine at KW density.

Regen:

Harvesting stand with mostly sub-merchantable stems outside of YOE is meant to create a larger and easier managed KW block. Merge Other

stands into Comp 179 following harvest. Comment:

Site Condition

Proposed Start Date: 10/1 /2020

42120 - Planted 4212 - Planted 72175029-Cut 9.8 Poletimber 27 1-50 Harvest Clearcut with Even-Aged Nο Jack Pine Well Retention Jack Pine

Prescription Clearcut with retention. Add low stump spec.

Specs:

SitePrep, Roller Chopping; SitePrep, Trenching; Pesticide, Aerial - Site Prep; Planting, KW Initial Plant; Monitoring, Artificial

Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Jack pine at KW density.

Regen:

Other Harvesting stand outside of YOE is meant to create a larger and easier managed KW block. Merge stands into Comp 179 following harvest.

Comment:

Site Condition

Proposed Start Date: 10/1 /2020

<u>Prescription</u> Harvest all trees greater than 2 inch DBH. Retain all pine and white oak.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mixed oak and pine at a level that meets forested objective

Regen:
Other
Comment:

Site Condition

Proposed Start Date: 10/1 /2021

S t		Grayling	g Mgt. Unit		Repo	rt 3 '	Treatments		Compartmen Year of Entr		DNR MICHIGAN
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
23	72178023-Cut	7.0	42110 - Planted Red Pine	Poletimbe Well	er 46	141- 170	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Even-Aged	No
Pres Spe		t all trees	greater than 2 inch	DBH.							
	<u>st Step</u> Monitor atments:	ring, Natur	ral Regen (Re-Inve	ntory)							
Acc Reg		aple, aspe	en, and pine at leve	els that mee	t minim	ium stock	ing.				
Oth		eration will	l be slow to fill in as	this narrov	v stand	will likely	be used for acc	ess into stand 5.			
Site	Condition										
Pro	posed Start Date	<u>:</u> 10/1 /20)21								

Total Treatment Acreage Proposed: 476.1

Grayling Mgt. Unit

Derek Nellis : Examiner

Compartment: 178
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Availa	ability for	Managemer	nt				
Total	Acres	Acres Avail	Acres		Domina	nt Site	Conditions
Acres	Available	With Condition	Not Available		5C	5E	
59	59	0	0	Aspen			
44	43	0	1	Jack Pine		1	
10	10	0	0	Low-Density Trees			
341	341	0	0	Mixed Upland Deciduous			
97	95	0	2	Northern Hardwood		2	
385	64	316	5	Oak	316	5	
107	107	0	0	Red Pine			
1,043	719	316	9	Total Forested Acres	316	9	
	69%	30%	1%	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	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	228	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Compartment: 178

Grayling Mgt. Unit

Derek Nellis : Examiner Year of Entry: 2022

4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	50	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	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				

Grayling Mgt. Unit Compartment: 178
Year of Entry 2022



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Type Area		Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area					
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.						
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources and 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two explover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed					

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Stand	Level 4 Co	over Type		Size De	nsity	Acres Stand Age B	1 Range	Managed Site		General Comments						
1	3303 - Mixed Lo	ow Density	Trees	Nonsto	cked	10.4 Ir	mmature	No		Moderately stocked red maple, mixed oak, and aspen stand with trace						
						Sub-Canopy Species	Density	Avg. Height	Size	amounts of red and white pine. heavy deer browse on all deciduous species.						
						Red Maple	Medium	< 5 feet	Sapling							
						Red Oak	Low	< 5 feet	Sapling	Stand cut under backscratcher oak, 72-033-13-01						
						White Oak	Low	< 5 feet	Sapling	Mature Oak stand with a Red maple understory. ORV trail traverses						
						Quaking Aspen	Low	5 - 10 feet	Sapling	through a portion of the stand. Stand was part of stand 1 last entry.						
						Red Pine	Low	10 - 20 feet	Sapling							
						White Pine	Low	10 - 20 feet	Sapling							
2	4124 - Red with White Oak Sawtii		4124 - Red with White Oak Sawtimber				24 - Red with White Oak Sawtimber		4124 - Red with White Oak Sawtimber		er Well	227.9 100	1-50	N/A		Stump sprout red maple and aspen regeneration are approximately 15-
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	25' tall. Some mixed oak regeneration is beginning to get above deer browse height. A trace amount of overstory mortality throughout. Pockets						
	Red Oak	50	Log/Pole	12		Red Maple	Medium	< 5 feet	Seeding	of white and red pine in the openings and valleys. Rolling terrain with						
	White Oak	40	Log/Pole	12		Red Maple	Medium	Variable	Sapling	steep valleys in the northwest. High ground in the west overlooks the						
No	orthern Pin Oak	10	Log/Pole	12		Bigtooth Aspen	Medium	Variable	Sapling	Manistee river valley.Large stand off matuure Oak. Stand was treated last entry year with a 40% crown closure (shelterwood seed cut). Reger is a mix of Aspen, Red maple and Oak. Oak is being competted by the other spieces. Several small openings exists within the stand in the						
						Cherry (spp.)	Low	< 5 feet	Seeding							
						Cherry (spp.)	Low	Variable	Sapling							
						Oak (spp.)	Low	Variable	Sapling	valleys. Several two tracks exist with in the stand that were blocked but since than have been breeched. ORV trail traveres through a portion of						
						Oak (spp.)	Medium	< 5 feet	Seeding	= Since than have been breeched. On vitall traveres through a portion t						
						Hazelnut (American)	Medium	Variable	Tall Shrub							
						White Pine	Low	10 - 20 feet	Sapling							
						Red Pine	Low	10 - 20 feet	Sapling							
3	4199 - Other Mixe	d Upland D	eciduous F	Poletimb	er Well	63.6 28	51-80	N/A		Sub-merchantable red maple and aspen stand mixed with Oak pole.						
	4199 - Other Mixe	d Upland D % Cover			er Well	63.6 28 Sub-Canopy Species	51-80 Density	N/A Avg. Height	Size	White oak is single stem while red oak and red maple are stump sprout						
				DBH					Size Sapling							
	Canopy Species	% Cover	Size Class	DBH 4	I Age	Sub-Canopy Species	Density	Avg. Height		White oak is single stem while red oak and red maple are stump sprout						
	Canopy Species Red Maple	% Cover	Size Class Sapling/Pole	DBH 4 5	I Age	Sub-Canopy Species Red Maple	Density Medium	Avg. Height Variable	Sapling	White oak is single stem while red oak and red maple are stump sprout						
(Canopy Species Red Maple Red Oak	% Cover 40 20	Size Class Sapling/Pole Pole/Sapling	DBH 4 5 5	I Age	Sub-Canopy Species Red Maple Aspen (spp.)	Density Medium Medium	Avg. Height Variable Variable	Sapling Sapling	White oak is single stem while red oak and red maple are stump sprout						
(Red Maple Red Oak White Oak	% Cover 40 20 20	Size Class Sapling/Pole Pole/Sapling Pole/Sapling	DBH 4 5 5	28	Sub-Canopy Species Red Maple Aspen (spp.) Cherry (spp.)	Density Medium Medium Low	Avg. Height Variable Variable Variable	Sapling Sapling Sapling	White oak is single stem while red oak and red maple are stump sprout origin.						
(Red Maple Red Oak White Oak	% Cover 40 20 20 20 20	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	DBH 4 5 5	28 28 28	Red Maple Aspen (spp.) Cherry (spp.) Oak (spp.) Hazelnut (American)	Medium Medium Low Low	Avg. Height Variable Variable Variable Variable	Sapling Sapling Sapling Sapling	White oak is single stem while red oak and red maple are stump sprout origin. Row thinning canopy openings have closed approximately 50%.						
B 4	Red Maple Red Oak White Oak Bigtooth Aspen	% Cover 40 20 20 20 20 10 10 10 10 10 10 10 10 10 10 10 10 10	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	DBH 4 5 5 4 Poletimb	28 28 28	Red Maple Aspen (spp.) Cherry (spp.) Oak (spp.) Hazelnut (American)	Density Medium Medium Low Low Low	Avg. Height Variable Variable Variable Variable Variable Variable	Sapling Sapling Sapling Sapling	White oak is single stem while red oak and red maple are stump sprout origin. Row thinning canopy openings have closed approximately 50%. Diameters of red pine are highly variable for a plantation (4-12"). This						
4	Canopy Species Red Maple Red Oak White Oak Bigtooth Aspen 42110 - Plan	% Cover 40 20 20 20 20 10 10 10 10 10 10 10 10 10 10 10 10 10	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole	DBH 4 5 5 4 Poletimb	28 28 er Well	Red Maple Aspen (spp.) Cherry (spp.) Oak (spp.) Hazelnut (American)	Density Medium Medium Low Low Low New Low Medium	Avg. Height Variable Variable Variable Variable Variable Variable	Sapling Sapling Sapling Sapling Tall Shrub	White oak is single stem while red oak and red maple are stump sprout origin. Row thinning canopy openings have closed approximately 50%. Diameters of red pine are highly variable for a plantation (4-12"). This stand contains two patches of mixed oak pine. The pine in these patches is, on average, larger diameter. Stand cut under contract 72-023-12-						
4	Canopy Species Red Maple Red Oak White Oak Bigtooth Aspen 42110 - Plat Canopy Species	% Cover 40 20 20 20 20 mted Red P	Size Class Sapling/Pole Pole/Sapling Pole/Sapling Sapling/Pole Pine Pine Pine Pine Pine Pine Pine Pin	DBH 4 5 5 4 Poletimb	28 28 28 Per Well	Red Maple Aspen (spp.) Cherry (spp.) Oak (spp.) Hazelnut (American) 23.1 62 Sub-Canopy Species	Density Medium Medium Low Low Low Density	Avg. Height Variable Variable Variable Variable Variable Variable Avg. Height	Sapling Sapling Sapling Sapling Tall Shrub	White oak is single stem while red oak and red maple are stump sprout origin. Row thinning canopy openings have closed approximately 50%. Diameters of red pine are highly variable for a plantation (4-12"). This stand contains two patches of mixed oak pine. The pine in these patches						

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Stan	d Level 4 Co	over Type	S	Size De	ensity	Acres Stand Age B	A Range	Managed S	Site	General Comments
5	4123 -	Red Oak	Sa	awtimb	er Well	60.3 113	51-80	N/A		Some pockets of overstory mortality and crown die back. Stand appears less vigorous than surrounding oak with a more prominent presence of
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	red maple. A few scattered pine throughout the stand.
	Red Oak	84	Log	13	113	Red Maple	Medium	Variable	Sapling	,
	White Oak	10	Log	11		White Pine	Low	Variable	Sapling	Mature Oak stand that was thinned in 2006. All Aspen and Red maple was removed also. Red maple stump sprouting. Oak too, but is being
Bla	ack/Red (Hybrid) Oak	4	Log	12		Red Pine	Low	Variable	Sapling	heavily browsed. ORV trail runs through a portion of the stand.
	Red Pine	2	Pole/Log/Sap	6		Aspen (spp.)	Low	Variable	Sapling	,
						Cherry (spp.)	Low	Variable	Sapling	
						Oak (spp.)	Low	< 5 feet	Sapling	
						Hazelnut (American)	Low	Variable	Tall Shrub	
8	4124 - Red v	vith White	Oak Sa	awtimb	er Well	49.5 101	81-110	N/A		Overstory appears healthy and vigorous. The red maple and aspen is
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	approximately 15 - 20' tall. Some oak regeneration was observed but is highly variable in height and density.
	Red Maple	3	Log	11		Red Maple	High	< 5 feet	Seeding	flightly variable in neight and density.
	Red Oak	60	Log/Pole	13	101	Red Maple	High	Variable	Sapling	Mature Oak stand that was thinned to 70 ba or had a species removal 15
	White Oak	34	Log/Pole	11		Cherry (spp.)	Low	Variable	Sapling	to 20 years ago. Heavy Red maple understory.
	Quaking Aspen	3	Pole/Sapling	5		Cherry (spp.)	Medium	< 5 feet	Seeding	
	0 1		1 0			Hazelnut (American)	Low	Variable	Tall Shrub	
9	4199 - Other Mixed	d Upland D	eciduous	Saplin	g Well	97.3 27 li	mmature	N/A		Immature Oak/Aspen/Red maple stand. Stand is starting to reach into
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	pole size. West side of stand more dominantly Oak and east side Aspen (dencer too as seen in photo). Two track traverses through south portion
	Red Maple	45	Sapling/Pole	3	27	Red Maple	Low	Variable	Sapling	of the stand and one up through the middle of stand to then north and
	White Oak	10	Sapling/Pole	3	27	Aspen (spp.)	Low	Variable	Sapling	dead ending.
	Bigtooth Aspen	25	Sapling/Pole	3		Cherry (spp.)	Low	Variable	Sapling	
	Red Pine	10	Sapling	3		Oak (spp.)	Low	< 5 feet	Seeding	
	Black Cherry	10	Sapling	3						
10	42110 - Plar	nted Red P	ine Po	oletimb	er Well	76.4 62	111-140	N/A		Row thinning canopy gaps are nearly closed. BA avg. from 11 plots is
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	130.Stand cut under contract 72-023-12-01, in 2014/15.Red Pine plantation. A few scattereed hardwood spieces within the stand
	Red Pine	100	Pole/Log	8	62	Red Maple	Low	Variable	Sapling	(cherry/oak). Blue Bear snowmobile/ORV route traverses through a
1						Red Pine	Low	Variable	Sapling	portion of the stand. A blocked trail road traverses through a portion of
						Cherry (spp.)	Low	Variable	Sapling	the stand.
	4400 Other Misse	d Upland D	eciduous Po	oletimb	er Well	35.9 37	1-50	N/A		Mixed stand of primarily stump sprout origin. Increased pine component
11	4199 - Other Mixed							Avg. Height	Size	on the east side. Some valleys and old landings are still fairly open.
11	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Holgin	SIZE	
11		% Cover	Size Class Pole/Sapling	DBH 4	I Age	Sub-Canopy Species Red Maple	Medium	Variable	Sapling	Stand swapped from Non-Forested to Forested.
11	Canopy Species				I Age				1	Stand swapped from Non-Forested to Forested.
11	Canopy Species Red Maple	30	Pole/Sapling	4	Age 37	Red Maple	Medium	Variable	Sapling	Stand swapped from Non-Forested to Forested.
11	Canopy Species Red Maple Red Oak	30 30	Pole/Sapling Pole/Sapling	4		Red Maple Aspen (spp.)	Medium Low	Variable Variable	Sapling Sapling	Stand swapped from Non-Forested to Forested.
11	Canopy Species Red Maple Red Oak Bigtooth Aspen	30 30 30	Pole/Sapling Pole/Sapling Pole/Sapling	4 4 4		Red Maple Aspen (spp.)	Medium Low	Variable Variable	Sapling Sapling	Stand swapped from Non-Forested to Forested.

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											DNR DNR	
Stand	l Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments	
12	4129 - N	Mixed Oak		Sapling I	Medium	3.4	30	1-50	N/A		Immature Oak/pine stand of variable sizes. 1 to 6 ft tall to 1 to 4 inches in	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	dia Stand is part of large stand in compartment 179 to the south. West side of stand borders Howes Lake Road.	
	Red Oak	33	Sapling	3	30	Ja	ick Pine	Low	< 5 feet	Seeding	olds of stand bolds from be balls from a	
	White Oak	33	Sapling	3		Oa	ak (spp.)	Low	< 5 feet	Seeding		
	White Pine	3	Sapling	3							-	
	Red Pine	3	Sapling	3								
	Jack Pine	20	Sapling	3								
	Black Cherry	8	Sapling	3								
13	42120 - Plar	nted Jack P	ine	Poletimb	er Well	44.0	62		N/A		New stand added. Jack pine plantation with mixed deciduous spieces.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Blue Bear snowmobile/ORV route traverses through the stand north/south. Stand continues south into compartment 179.	
	Northern Pin Oak	5	Pole/Log	8		Re	d Maple	Low	Variable	Sapling	Tiora vocati. Ciaria continuos social into comparament 170.	
	Jack Pine	90	Pole	8	62	R	ed Pine	Low	Variable	Sapling		
	Black Cherry	5	Pole	7		Che	erry (spp.)	Low	Variable	Sapling		
14	4131 - A	spen, Oak		Sapling	y Well	4.8	21	mmature	N/A		5 acre aspen clone surrounded by stand 15.	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size		
	Red Maple	20	Sapling	3		Re	ed Maple	Low	< 5 feet	Seeding		
	Red Oak	20	Sapling	3		Asp	en (spp.)	Low	< 5 feet	Seeding		
	Bigtooth Aspen	50	Sapling	3	21	Oa	ak (spp.)	Low	< 5 feet	Seeding		
	Black Cherry	10	Sapling	2				,	+	1	-	
15	4199 - Other Mixe	d Upland D	eciduous	Sawtimb	er Well	72.8	98	81-110	N/A		White oak regeneration patches are beginning to get above deer browse	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Red oak overstory mortality is estimated at 70%. Mature Oak stand mixed with Red maple and Red pine. Other hardwood and pine species	
	Red Maple	26	Pole/Log	9		Re	ed Maple	Medium	Variable	Sapling	mixed within the stand. Heavy deer browsing on white Oak regen that	
	Red Oak	40	Log/Pole	13	98	Asp	en (spp.)	Low	Variable	Sapling	exists. Also heavy fuelwood cutting within stand including standing dead	
	White Oak	10	Log/Pole	10		Che	erry (spp.)	Low	Variable	Sapling	Also oak mortality throughout the stand. Two track trails run through portions of the stand.	
	Bigtooth Aspen	3	Log/Pole	10		Oa	ak (spp.)	Low	< 5 feet	Sapling	portions of the stand.	
	Northern Pin Oak	5	Log/Pole	10	_				,	-		
	White Pine	4	Pole/Log	8								
	Red Pine	12	Pole/Log	8								
16	4130	- Aspen		Saplin	g Well	54.6	29	mmature	N/A		The majority of quaking aspen is heavily centered. Big tooth aspen is	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	healthy and vigorous. Stand is heavier to mixed deciduous in the south.Large immature Aspen stand mixed with deciduious spieces.	
	Red Maple	5	Sapling	2		Re	ed Maple	Low	Variable	Seeding	(Cherry, Oak, Red maple). Blocked two track traverses through middle of	
	Bigtooth Aspen	37	Sapling	2	29	Che	erry (spp.)	Low	Variable	Seeding	eding stand north/south and along the south east corner. Two track runs	
	Northern Pin Oak	10	Sapling	2				,			the south west corner of the stand.	
	Black Cherry	10	Sapling	2								
	O 1	00	0 1'	_	00							

Quaking Aspen

38

Sapling

Compartment: 178 Year of Entry: 2022



Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments	
17	4119 - Mixed No	rthern Har	dwoods	Sapling l	Medium	97.2	8	Immature	N/A		Red maple is the most prominent regeneration with some Aspen	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	patches. Oak stump sprouts have been suppressed from severe deer browse and are just beginning to reach a 5' average height. Stand cut	
	Red Maple	70	Sapling	1	8	Comm	on Blackberry	Medium	5 - 10 feet	Tall Shruk	under backscratcher oak, 72-033-13-01Mature Oak stand mixed with	
	Bigtooth Aspen	15	Sapling	1	8						Red maple in over story and under story. White pine understory more dense in strip to south. All roads through the stand have been blocked.	
	Red Oak	15	Sapling	1	8						dense in strip to south. All roads through the stand have been blocked.	
18	4199 - Other Mixed	d Upland D	Deciduous S	Sapling I	Medium	36.0	8	1-50	N/A		Sapling stand of red maple and oak with a trace amount of Jack pine. Scattered log size white pine retained during last harvest.	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Scattered by size write pine retained during last harvest.	
	Red Maple	50	Sapling	1	8	Re	ed Maple	Medium	Variable	Sapling	Stand cut under backscratcher oak, 72-033-13-01	
Blac	ck/Red (Hybrid) Oak	40	Sapling	1	8	Che	erry (spp.)	Low	Variable	Sapling		
	White Pine	10	Log	12		0	ak (spp.)	High	Variable	Sapling		
19	4199 - Other Mixed	d Upland D	Deciduous	Sapling	g Well	35.3	31	1-50	N/A		Red maple, aspen, and oak sapling stand transitioning to pole size. The	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	majority of stems are stump sprout origin. Some scattered log size bigtooth aspen on the perimeter. A trace amount of white pine saplings	
	Red Maple	39	Sapling/Pole	9 4	31	Re	ed Maple	Medium	Variable	Sapling	were observed.Immature Oak, Aspen and Red Maple stand. Depends	
	Red Oak	25	Sapling/Pole	9 4		Ası	pen (spp.)	Medium	Variable	Sapling	on where you our in the stand. Its in pockets as well as scattered	
	White Oak	10	Sapling/Pole	9 4		Che	erry (spp.)	Low	Variable	Sapling	throughout the stand. Two tracks around a portion of the stand as well as two the old landings in the stand have been blocked. Looks as though	
	Bigtooth Aspen	25	Sapling/Pole	9 4		0:	ak (spp.)	Medium	Variable	Sapling	one to south has been breeched.	
	White Pine	1	Sapling	3		Hazeln	ut (American)	Low	Variable	Tall Shrub		
20	4124 - Red v	vith White	Oak :	Sawtimb	er Well	18.7	102	81-110	N/A		This stand was split from stand 17 post harvest. This portion of stand 17	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	was not included in the harvest area. Stand consists of white and red oak with a minor component of red maple. There are some areas of the stand	
	Red Maple	5	Pole/Log	8		Wi	tch Hazel	Low	5 - 10 feet	Tall Shruk		
	Red Oak	75	Log	14	102						the oak looks healthy.	
	White Oak	20	Log/Pole	10								
21	4124 - Red v	vith White	Oak :	Sawtimb	er Well	25.0	92	81-110	N/A		This stand was split from stand 17 post harvest. This portion of stand 17	
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	was not included in the harvest area. Stand consists of white and red oak	
	Red Maple	5	Pole/Log	8	8	W	hite Oak	Medium	5 - 10 feet	Sapling	with a minor component of red maple. There are some areas of the stand	
	Red Oak	40	Log	12	92						with dense white oak regeneration. Some of the maple is dying back but	
	White Oak	55	Log	12	92						the oak looks healthy.	
23	42110 - Plar	nted Red F	Pine I	Poletimb	er Well	7.0	46	141-170	N/A		Red pine pole approximately 45 y/o. highly variable diameters. No signs	
	Canopy Species	% Cover	Size Class	DBH	I Age						of ever being thinned. This is a long finger that extends into an oak stand.	
	Red Pine	100	Pole	6	46							