

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72269 Entry Year 2025 Acreage: 1,775

County Crawford

Management Area: Camp Grayling

Stand Examiner: Joan Charlebois

Legal Description:

T 28N R 02W Sections 1, 2, & 3

Identified Planning Goals:

To provide an area that allows for National Guard training while maintaining forest health, productivity, sustainability, species diversification and structural diversity throughout the compartment.

Soil and topography:

The compartment's rolling to steep terrain is on Graycalm-Klacking and Graycalm-Grayling soil complexes. The outwash plains are on Grayling, Rubicon, and Croswell sands. The lowlands and river floodplain have Tawas-Lupton and Kinross-AuGres organic soils.

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

The compartment borders private property on the north edge of Section 1 and the SWSE. State of Michigan lands in Sections 1 and 2 are under long-term lease (L-1479) to the Michigan National Guard, Department of Military Affairs, with the exceptions of the SESE and the 2021-acquired SWNE of Section 1. The L-1479 agreement provides for use by the Military during their encampment, with no permanent buildings or improvements to be erected. Military needs take precedence over resource management needs on long-term lease lands. The DNR will coordinate all prescribed activities with the National Guard to ensure that they are compatible with Military training needs. The west edge of the compartment is within the fenced Range 40 Complex. Several Military Firing Point openings are located to the east within the compartment.

Unique Natural Features:

The North Branch of the AuSable is part of a designated Natural River system. There is the potential for rare wetland plants and reptiles to occur along the riparian corridor. There is also the potential for rare dry prairie plants, insects and birds to occur in upland grassy openings.

Archeological, Historical, and Cultural Features:

There are known features within the compartment.

Special Management Designations or Considerations:

The AuSable River system is a High Conservation Value Area (HCVA). The Military training lands are classified as a Special Conservation Area (SCA).

Watershed and Fisheries Considerations:

The North Branch of the AuSable River is a quality trout stream. Lonesome Lake occupies a steep ice-contact basin in the west side of the compartment.

Wildlife Habitat Considerations:

The compartment's aspen, oak and upland brush cover types provide good habitat for grouse, deer and turkey. The lowland aspen on the river floodplain has good potential for woodcock management. Some of the Firing Points within the compartment have been cultivated as dual-purpose wildlife openings. That opening maintenance has been done through a cooperative partnership between the DNR-Wildlife Division, Michigan Army National Guard (Camp Grayling), and the National Wild Turkey Federation.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. The nearest gravel pit is located in Section 24 and potential is thought to be good in the upland areas. Some of the compartment is leased for oil and gas. The Antrim Shale has been developed for gas production just to the east.

Vehicle Access:

County roads include Lonesome Lake Road, Lint Trail, Akron Club Trail, Ski Hill Road, and Twin Bridge Road. Several

forest roads spur off from that maintained network.

Survey Needs:

The SE corner of the SWSE of Section 1 was not located. It may have been disturbed during landscaping around a private driveway.

Recreational Facilities and Opportunities:

The North Branch of the AuSable River is used mainly for fly fishing, along with some canoe and kayak traffic. There are two informal fishing access points on the east side of the river, off Twin Bridge Road. Lonesome Lake has an informal boat launch. Hunting and ORV riding are the main forms of dispersed recreation in the upland interior.

Fire Protection:

The compartment has predominantly deciduous cover. Access is limited in areas with steep terrain. Lonesome Lake and the North Branch of the AuSable River are the nearest water access points.

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

Report 1 – Total Acres by Cover Type and Age Class

Grayling Mgt. Unit

Joan Charlebois : Examiner

Compartment 269 Year of Entry 2025



Age Class

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Aspen	0	164	132	29	146	0	186	0	0	0	0	0	0	0	0	0	0	0	656
Bog	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Herbaceous Openland	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Jack Pine	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Low-Density Trees	218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	218
Lowland Aspen/Balsam Poplar	0	82	0	66	0	0	0	0	66	0	0	0	0	0	0	0	0	0	214
Lowland Shrub	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Marsh	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Mixed Upland Deciduous	0	31	84	0	0	0	11	0	0	0	8	0	0	0	0	0	0	0	133
Northern Hardwood	0	0	82	0	0	0	0	0	0	0	76	0	0	0	0	0	0	0	158
Oak	0	0	0	0	56	0	40	0	0	151	0	0	0	0	0	0	0	0	246
Upland Shrub	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Urban	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Water	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Total	357	277	298	95	202	0	247	0	66	151	84	0	0	0	0	0	0	0	1773



Report 2 – Treatment Summary

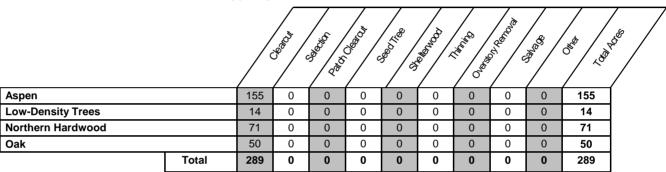
Grayling Mgt. Unit Year of Entry: 2025

Acres of Harvest

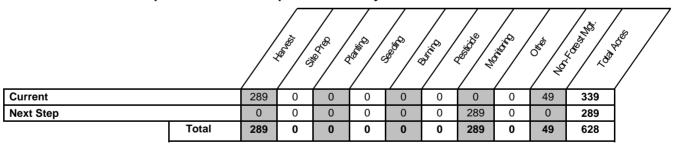
Compartment 269
Total Compartment Acres: 1,775

Commercial Harvest - 289 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Compartment: 269

Year of Entry: 2025

1 1 1	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut

Approved Treatments:

S

t а n d

72269006-ccr Poletimber 51-80 Harvest Clearcut with 4139 - Aspen, Even-Aged 13.5 4130 - Aspen Medium Retention Mixed Deciduous

Prescription Harvest 2"+ DBH except RP-WP, open-grown xlog oak that have good den tree potential. and retention excluding the RMZ on the west edge. Apply chipping spec with the option to request a waiver from the Military. Use tops to block access to eroding hillclimb trails and the Specs: closed shoreline road. The Draft Rx boundary has been edited to approximate the RMZ exclusion. Add other Military & drumming log

specs. Protect serviceberry.

Monitoring, Natural Regen (Re-Inventory) Next Step

Treatments:

Acceptable Moderate stocking in aspen with RM-O.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

16.8 Poletimber 55 81-110 72269008-cc 4130 - Aspen Harvest Clearcut 4139 - Aspen, Even-Aged Nο Well Mixed Deciduous

Prescription Harvest stems 2"+ DBH except RP-WP and open-grown xlog oak that have good den tree potential. No retention due to narrow stand shape and aspen objective. Add Military & drumming log specs. Apply chipping spec with the option to request a waiver from the Military. Protect Specs: serviceberry.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Moderate stocking in aspen with RM-O, and U inclusions where the stand was sparse pre-harvest.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

72269015-ccr 31.7 4123 - Red Oak Sawtimber 89 81-110 Clearcut with 4199 - Other Harvest Even-Aged No Mixed Upland Well Retention Deciduous

Prescription Harvest stems 2"+ DBH except RP-WP, open-grown xlog oak that have good den tree potential, and the steep hill above Lonesome Lake (west edge is RMZ, the rest is too steep). Chipping exemption was granted. Specs:

Use tops to stabilize and block access to the eroding hillclimb trails. Draft Rx boundary has been edited to approximate the intended

exclusion. Add other Military specs. Protect serviceberry. Protect survey corner witness trees.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Low to moderate stocking in RM-A-O.

Regen:

<u>Other</u> Comment:

Site Condition

S t		Grayling	Mgt. Unit		Repo	rt 3 ⁻	Treatments		Compartmen Year of Entr		OF NATURAL
	eatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
17 722	269017-Cut		301 - Low Density Deciduous Trees	Nonstock	ed 0		Harvest	Clearcut	330 - Low- Density Trees		No
Prescript Specs:	concur	rent with sta		d Military &				d den tree potentia pping spec with the			
Next Ste Treatment	_	ring, Natura	ll Regen (Re-Inve	ntory)							
Acceptate Regen:	ole The pu	rpose of cu	tting this LDT-type	e is to re-st	art its pa	atches of	declining aspen	while treating the a	adjacent stands.		
Other Commer	<u>nt:</u>										
Site Con	<u>dition</u>										
Proposed	d Start Date	10/1 /202	24								
18 722	269018-ccr	11.3	4130 - Aspen	Poletimbe Well	er 55	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Age	d No
Prescript Specs:	bounda	ry has bee		imate the i	ntended	l exclusior		en tree potential, ar & drumming log spe			
Next Ste Treatment	•	ring, Natura	ıl Regen (Re-Inve	ntory)							
Acceptate Regen:	ole Modera	ate stocking	in aspen with RM	I-O, and U	inclusio	ns where	the stand was s	parse pre-harvest.			
Other Commer	<u>nt:</u>										
Site Con	<u>dition</u>										
Propose	d Start Date	10/1 /202	24								
20 72	269020-сс	36.2 4	131 - Aspen, Oak	Poletimbe	er 57	51-80	Harvest	Clearcut	4139 - Aspen,	Even-Age	d No

Site Condition

Proposed Start Date: 10/1 /2024

20 72269020-cc 36.2 4131 - Aspen, Oak Poletimber 57 51-80 Harvest Clearcut 4139 - Aspen, Even-Aged No Well Mixed Deciduous

Prescription Specs: Harvest stems 2"+ DBH except RP-WP and open-grown xlog oak that have good den tree potential. No area-based retention due to aspen objective. Add Military & drumming log specs. Apply chipping spec with the option to request a waiver from the Military. Protect serviceberry.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Moderate stocking in aspen with O-RM and upland shrub inclusions.

Regen:

Other Comment:
Site Condition

S t		Grayling	Mgt. Unit		Repoi	rt 3 ⁻	Freatments		Compartmen 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
27	72269027- WLO	3.3 3	10 - Herbaceous Openland	Nonstocke	ed	Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
Pres Spe								ng, stump excavation and shrub plantin			, no-till
	tt Step_ atments:										
Acc Reg	eptable gen:										
Oth Con	er This La nment:	anding Zone	e opening mainten	ance is par	t of the	Military/D	NR/NWTF WHG	project.			
Site	<u>Condition</u>										
Pro	posed Start Date	<u>e:</u> 10/1 /202	24								
32	72269032-Cut	12.9 4	131 - Aspen, Oak	Poletimbe Well	er 54	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Aged	No
Pres			no retention due to DE. Add Military &					3 stand 8's cutting	specs and set up	concurrent in	that
	<u>kt Step</u> Monito atments:	ring, Natura	l Regen (Re-Inver	ntory)							
Acc Reg		ate stocking	in aspen with RM	I-O.							
Oth Con	<u>er</u> nment:										
Site	<u>Condition</u>										
Pro	posed Start Date	<u>s:</u> 10/1 /202	23								
34	72269034-ccr	64.1 4	131 - Aspen, Oak	Poletimbe Well	er 55	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	No
Pres Spe			DBH except RP-V		grown xl	og oak th	at have good der	n tree potential, an	d area-based rete	ention. Add M	lilitary &
	<u>kt Step</u> Monito atments:	ring, Natura	l Regen (Re-Inver	ntory)							
Acc Reg		ate stocking	in aspen with RM	I-O.							
Oth Con	<u>er</u> nment:										

Site Condition

s		Grayling	Mgt. Unit		Repor	rt 3 '	Treatments		Compartmer Year of Entr		OF NATURAL PROPERTY OF THE PRO
t 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
41	72269041- WLO	6.3 32	20 - Upland Shrub	Nonstock	ed		NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
Spec								g, stump excavation and shrub plantin			g, no-till
	tments:										
Rege	e <u>ptable</u> en:										
Othe Com	er This F ment:	iring Point o	pening maintenan	ce is part o	of the Mi	litary/DNF	R/NWTF WHG pr	oject.			
	<u>Condition</u>										
Prop	osed Start Date	<u>e:</u> 10/1 /202	24								
42	72269042-cc	18.4	4123 - Red Oak	Sawtimbe Well	er 87	81-110	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Even-Ageo	d No
Presi Spec	cs: shape to app	. Extend ha	rvest to include the intended inclusion	e flats on the	ne SE ed	dge of sta	and 39 where mo	den tree potential st of the aspen is. with the option to	The Draft Rx bo	undary has b	een edited
_	Step Monito tments:	oring, Natura	ıl Regen (Re-Inver	ntory)							
Acce Rege		moderate s	stocking in A-RM-C)							
Othe Com	<u>er</u> ment:										
Site	<u>Condition</u>										
Prop	osed Start Date	<u>e:</u> 10/1 /202	24								
45	72269045- WLO	8.3 32	20 - Upland Shrub	Nonstock	ed	Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
Prese Spec	•							g, stump excavati and shrub plantin			g, no-till
	Step tments:										
Acce Rege	eptable en:										
Othe Com	er This F ment:	iring Point o	pening maintenan	ce is part o	of the Mi	litary/DNI	R/NWTF WHG pr	oject.			
Site	Condition										

s		Grayling	Mgt. Unit		Repoi	rt 3 ⁻	Treatments		Compartmer Year of Entr		OF NATURAL DINK
t a n d	Treatmen Name	t Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
53	7226905 WLO	3- 8.2	4130 - Aspen	Sapling Medium	11	Immatu re	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
								ng, stump excavati e and shrub plantir			ng, no-till
	ext Step eatments:										
	ceptable gen:										
	<u>her</u> Th mment:	is Firing Point o	ppening maintenar	nce is part o	of the Mi	litary/DNF	R/NWTF WHG p	roject.			
Sit	e Condition										
Pro	oposed Start I	Date: 10/1 /202	24								
55	7226905 WLO	5- 8.5 3	310 - Herbaceous Openland	Nonstock	ed	Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
Pro								ng, stump excavati	on, fertilizing, foo		ng, no-till
<u>Sp</u>	ecs: pra	iirie grass seed	ing, mowing, and	herbicide a	pplicatio	n. Also d	could include tree	and shrub plantir	ng along the pering	neter.	
	ext Step eatments:										
	<u>ceptable</u> gen:										
	<u>her</u> Th mment:	is Firing Point o	pening maintenar	nce is part o	of the Mi	litary/DNF	R/NWTF WHG p	roject.			
Sit	e Condition										
Pro	oposed Start I	Date: 10/1 /202	24								
61	72269061-		4119 - Mixed orthern Hardwood	Sawtimbe	er 98	1-50	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Age	d No
	ecs: ret	ention focused		naintained o	pening.	The draf	t treatment boun	n tree potential, im dary has been edi			
	ext Step Mo eatments:	nitoring, Natura	al Regen (Re-Inve	ntory)							
	ceptable Lo	w stocking in R	M-A-O with U incl	usions throu	ıghout.						
	<u>her</u> mment:										

Site Condition

Grayling Mgt. Unit Report 3 -- Treatments Compartment: 269 S Year of Entry: 2025 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Name CoverType Density Age Range **Type** Method Objective Structure Cut Ч 65 72269065-ccr 22.5 4119 - Mixed Sawtimber 1-50 Harvest Clearcut with 4319 - Mixed Two-Aged No Northern Hardwoods Medium Retention **Upland Forest** Prescription Harvest stems 2"+ DBH except RP-WP, open-grown xlog oak that have good den tree potential, immature oak <8" DBH, and area-based Specs: retention to exclude the 150-ft Natural Rivers RMZ and the narrow west peninsula. Remove doglegs in the south line by picking up fingers of LDT stand 73. There is not a distinct type line between this stand and stand 73. The draft treatment boundary has been edited to approximate the intended exclusions & inclusions. Add Military specs. Apply chipping spec with the option to request a waiver from the Military. Protect serviceberry & hawthorn. Monitoring, Natural Regen (Re-Inventory) Next Step Treatments: Acceptable Low stocking in RM-O-A with U inclusions throughout. Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 66 72269066-14.5 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 310 -No Herbaceous ified WLO Openland Prescription Periodic opening maintenance as needed, that may include disking, chisel plowing, stump excavation, fertilizing, food plot seeding, no-till prairie grass seeding, mowing, and herbicide application. Also could include tree and shrub planting along the perimeter. Specs: Next Step Treatments: **Acceptable** Regen: This Firing Point opening maintenance is part of the Military/DNR/NWTF WHG project. Other Comment:

Total Treatment 338.5 Acreage Proposed:

Proposed Start Date: 10/1 /2024

Site Condition

Compartment: 269

Grayling Mgt. Unit

Joan Charlebois : Examiner Year of Entry: 2025

Availa	ability for	Managemer	nt								
Total	Acres	Acres Avail	Acres	De	omina	nt Site	e Cond	ditions	S		
Acres	Available	With Condition	Not Available		5C	1C	2F	2G	3F	3J	5E
657	607	0	49	Aspen			0		43	5	1
4	4	0	0	Bog							
28	28	0	0	Herbaceous Openland						0	0
10	10	0	0	Jack Pine							
218	214	0	4	Low-Density Trees		1	0	0		3	0
213	147	0	67	Lowland Aspen/Balsam Poplar		0	2	18		38	8
39	39	0	0	Lowland Shrub						0	
6	6	0	0	Marsh							
133	120	8	5	Mixed Upland Deciduous	8			0	0	1	4
158	150	0	8	Northern Hardwood						2	6
246	143	0	103	Oak			4		59	37	3
15	15	0	0	Upland Shrub							
19	9	0	9	Urban					9		0
29	18	0	11	Water						11	
1,775	1,510	8	257	Total Forested Acres	8	1	6	18	112	98	23
<u>-</u>	85%	0%	14%	Relative Percent		-	-			-	-

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
-	Comments: This portion of stand merged with the adj	d 70 was not set up for harves acent stand 67.	t due to i	noperable ground conditio	ons at time of 2016 YOE ha	arvest prep. The harvested	d operable portion was
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	55	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: N. Branch AuSable	natural river buffer 150 ft. fror	n river ed	ge.			

Report 4 – Site Conditions

Grayling Mgt. Unit

Joan Charlebois : Examiner

3	Unavailable	3F: Military easement / lease	125	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Within the 40 Com	plex fenced air-to-ground bomb	oing range	e.			
1	Unavailable	2F: Too steep	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	44	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments: Lonesome Lake ba	sin. The 100-foot RMZ was ex	rtended tr	o include the steep hillside	es above the lake and asso	ociated wetlands.	
3	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Boundary-excluded	I retention left when stand 11 w	as harve	sted (#625-15), in additio	n to the Lake RMZ retentio	n.	
3	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
9	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Retention islands le	eft for stand 68's 2016 YOE ha	vest. Ad	Iditional retention is along	the river, now merged with	adjacent comp 268's star	nd 88.

Report 4 - Site Conditions

Grayling Mgt. Unit

Joan Charlebois : Examiner

10	Unavailable	5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Retention left for st	and 67's 2016 YOE harvest.					
11	Unavailable	2F: Too steep	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This riser above the that occurs along it	e floodplain within #610-15 was s base.	avoided	during harvest operation	s due to issues of working	up its steep slope from the	particularly low ground
12	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Retention islands le	eft when stand 36 was harvested	d in 2008	3.			
13	Unavailable	1C: Other dept or div proc/practices	1	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments: This riser above the that occurs along it	e floodplain within #610-15 was s base.	avoided	during harvest operation	s due to issues of working	up its steep slope from the	particularly low groun
	This riser above the		avoided 10	during harvest operation Unspecified	s due to issues of working Unspecified	up its steep slope from the Unspecified	particularly low ground Unspecified
14	This riser above the that occurs along it Unavailable Comments: Excluded from star	2G: Too wet (sensitive soils, does not include	10 o inopera	Unspecified Unspecified	Unspecified The west part was excluded	Unspecified	Unspecified
14	This riser above the that occurs along it Unavailable Comments: Excluded from star	2G: Too wet (sensitive soils, does not include access issues)	10 o inopera	Unspecified Unspecified	Unspecified The west part was excluded	Unspecified	Unspecified

Report 4 – Site Conditions

Grayling Mgt. Unit

Compartment: 269 Year of Entry: 2025 Joan Charlebois : Examiner

16	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
S	Small portions of s	tand 75 that fall outside of the R	MZ.				
17	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
_	Comments: Retention in addition	on to the Lost Lake RMZ for star	ıd 25, ha	rvest #625-15			
18	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	8	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
S	Small stand with a	mix of immature to overmature	cover.				
19	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
_	Comments: Proposed retention	around the wildlife opening.					
20	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Proposed retention	for stand 65's draft harvest.					

11/20/2023 11:52:03 AM - Page 4 of 4 **DUERRG** Mgt. Unit

Compartment: #Type! Year of Entry:

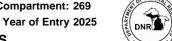


Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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: 269
Year of Entry 202



ERA = Ecological Reference Area

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.

Conservatio Area	on Type	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen constocked trout populations and those of other coldwater fish spayear to year. Coldwater streams in Michigan typically provides contributions of groundwater to their stream flows. Such streat designated as trout resources by Fisheries Order 210.	ecies (e.g., slimy sculpin) to persist from these conditions due to substantial
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated include the 5,847 acre Forest Fire Experiment Station, the 12, Area, the Beaver Islands Archipelago Wildlife Research Area High and Hog Islands, all state owned land on Beaver, South Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Nursery, and over 144,000 acres of Military Lands.	,000 acre Houghton Lake Wildlife Research (that includes most of Garden Island, all of Fox and North Fox Islands), the Cusino
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems influences the aquatic ecosystem and vice-versa. Because of streams and open water wetlands, riparian areas harbor a hig communities are ecologically and socially significant in their e as aesthetics, habitat, bank stability, timber production, and the	the unique conditions adjacent to lakes, th diversity of plants and wildlife. Riparian ffects on water quality and quantity, as well
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and continuous the U.S. Fish and Wildlife service for the recovery of threatened Part 365, Endangered Species Protection, of the Natural Resolution 1994 PA 451, and the Federal Endangered Species Act of 19 species plans in various stages of review. As of now only two Plover Habitat.	ed and endangered species, as governed by ources and Environmental Protection Act, 73. This is an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from approved distance from the river centerlines. The Natural Riv most Natural Rivers. The Vegetative Buffer ranges from 25 to	vers Zoning District is a 400 foot buffer for
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples identified as Element Occurrences (EOs) by the Michigan Nat context of their natural community classification system. Elem (Excellent) or B (Good) and a Global (G) or State (S) element threatened (2), or rare (3) serve as an initial base of ERAs. The State. The system is comprised of individual or association managed for restoration and maintenance of natural ecological submit recommendations for lands as ERAs using the DNR C	tural Features Inventory (MNFI) within the tent Occurrences with viability ranks of A (rarity) ranking of endangered (1), ney may be located upon any ownership in ns of natural community types that are all processes and values. The public may

Stand	d Level 4 C	over Type	Si	ize De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
3	6220 - /			Nonstocked		1.6		Unspecified	No		Lowland shrub cover (mostly salix) above the north pond of Lonesome Lake.
4	500	- Water	1	Nonsto	cked	2.9		Unspecified	No		North end of Lonesome Lake. Separated from the main basin by some marsh.
5	6220 - /	Alder/willow	1	Nonsto	cked	1.0	0	Unspecified	No		Salix with tag alder and some leatherleaf.
6	4130	- Aspen	Pole	timber	Mediu	um 17.1	56	51-80	N/A		Most of the stand resulted from a late-1960's regen event. That
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	disturbance left a minor, now very overmature, aspen component that is
	Quaking Aspen	20	Pole/Log	8	54		erry (Juneberr		Variable	Tall Shruk	log-xlog in size and breaking up. The majority aspen cover in its mid-50's is pole-log in size. There is also a minor immature aspen component that
	Paper Birch	1	Pole	6			oth Aspen	Low	Variable	Sapling	has been colonizing openings within the stand. The traces of RP & PB
	Red Pine	1	Pole/Log/XLog	8			hite Oak	Low	Variable	Sapling	are mainly on the west edge against the lowlands; the few WP are further east. The stand's south half has a lot of disturbed ground from past off-
	White Oak	3	Log/Pole	12		R	ed Oak	Low	Variable	Sapling	road maneuvers. Eight acres of contiguous covertype in comp 302 stand
	Red Maple	20	Pole/Sapling	6		Blac	ck Cherry	Low	Variable	Tall Shruk	
	Red Oak	5	Pole/Log/Sap	7			-		I		
	Bigtooth Aspen	50	Pole/Log	9	56						
8	4130	- Aspen	Ро	letimb	er We	ll 16.8	55	81-110	N/A		Narrow valley stand with some very steep terrain. BTA occurs mainly on the mid to upper slopes. Sparser QA occupies the valley bottom. The
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	mature oak increases on the steepest terrain.
	Quaking Aspen	25	Pole/Log	9		Blac	ck Cherry	Low	Variable	Tall Shrub	
	White Oak	5	Log/XLog/Pole			Servicebe	erry (Juneberr	y) Low	Variable	Tall Shrub	
	Red Oak	10	Log/Pole/XLog		85	Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	50	Pole/Log	8	55	W	hite Oak	Low	Variable	Sapling	
	Red Maple	10	Pole/Sap/Log	5							
9	4123 -	Red Oak	Sa	awtimb	er Wel	l 63.0	85	81-110	N/A		All but 3 acres of the stand fall within the Range 40 fence. The small
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	poly outside the fence is on a steep hilltop. Periodic fire influence within the range has likely started new age classes in the O-A-RM.
	Red Oak	60	Log/Pole/XLog	12	85	Re	d Maple	Low	Variable	Sapling	and range has many started new age stasses in the S // five.
	Red Maple	15	Sapling/Pole	4		W	hite Oak	Low	Variable	Sapling	
	Bigtooth Aspen	5	Pole/Log	8		Wit	ch Hazel	Low	5 - 10 feet	Tall Shruk	
	Quaking Aspen	3	Pole/Log/Sap	8				'		•	-
	Red Pine	1	XLog/Log	18							
	Paper Birch	1	Pole	6							
	White Oak	15	Log/XLog/Pole	12							



Stand	Level 4 C	over Type	\$	Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
11	4199 - Other Mixe	ed Upland D	Deciduous S	apling N	/ledium	n 30.5	5	Immature	N/A		O-A-RM stand was final harvested by early 2018 (#625-15), cutting stems
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	2"+ DBH except RP-WP (traces) and boundary-excluded retention (steep slopes and lake/wetland RMZ, split off as stand 14). Regenerated to RM
	Red Maple	45	Sapling	1	5	Wit	ch Hazel	Trace	< 5 feet	Tall Shrub	A with a minor but competitive stump-origin oak component. The single-
	White Oak	3	Sapling	1	5	Wh	nite Oak	Low	< 5 feet	Seeding	stem oak (mostly WO) is heavily browsed. On steeply rolling terrain.
	White Pine	1	Sapling/Pole	3		Servicebe	rry (Juneberi	ry) Low	< 5 feet	Tall Shrub	Aspen on the lower terrain occurs in dense patches The RM-O occurs more on the hilltops and forms sparser coverage.
	Quaking Aspen	6	Sapling	1	5						The control minopo and formed operation age.
	Black Cherry	5	Sapling	1	5						
	Bigtooth Aspen	30	Sapling	1	5						
	Red Oak	10	Sapling	1	5						
12	122 - Roa	d/Parking L	.ot	Nonsto	cked	9.3	0	Unspecified	No		Cleared road corridor within the R40 fence.
13	6239 - Mixed E	mergent W	/etland	Nonsto	ocked	5.7		Unspecified	No		Marsh that separates the north end of Lonesome Lake from the main basin.
14		Red Oak	S	awtimb	er Well	l 15.0	85	81-110	N/A		Was split off from stand 11 as retention for harvest #625-15. The stand also picks up inoperable redlined portions of that harvest. Most of the
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	stand occupies a steep slope down to Lonesome Lake. The xlog oak is
	White Oak	15	Log/Pole/XLog	11		Wh	ite Pine	Low	Variable	Sapling	mainly along the shoreline. There are traces of immature O-A.
	White Pine	8	Pole/Log/XLog	j 8		Wh	nite Oak	Low	5 - 10 feet	Sapling	
	Red Oak	50	Log/Pole/XLog	11	85	Servicebe	rry (Juneberr	ry) Low	Variable	Tall Shrub	
	Paper Birch	2	Pole	6		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	10	Pole/Log	8	55						
	Red Maple	15	Sapling/Pole	4							
15	4123 -	Red Oak	S	awtimb	er Well	l 57.5	89	81-110	N/A		O-A-RM stand occupies a N-S ridge. The west aspect above Lonesome
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	Lake is very steep; most of the canopy WP-RP-PB occurs along the lake in addition to locally full WP understory cover. Small pockets of BTA are
	Quaking Aspen	2	Log/Pole	10		Wh	ite Pine	Medium	Variable	Sapling	scattered throughout. The QA is on the east edge flats. The stand
	White Pine	7	Pole/Log/XLog	8		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	appears to have had a variable disturbance history. Most the RM and
	Bigtooth Aspen	13	Log/Pole	11		Servicebe	rry (Juneberr	ry) Trace	5 - 10 feet	Tall Shrub	some of the A-O were regenerated in the late 1960's. There is evidence of fire scarring on xlog oak in the NE. The north end has a half-dozen
	White Oak	10	Log/Pole/XLog	11		Blac	k Cherry	Trace	10 - 20 feet	Tall Shrub	deeply-eroded hillclimb trails. There is a road on the west edge
	Red Pine	2	XLog/Log/Pole	18		Maple Lea	aved Viburnu	m Trace	< 5 feet	Tall Shrub	immediately along the lakeshore that was closed due to erosion.
	Paper Birch	1	Pole/Sap/Log	6		Wł	nite Oak	Low	< 5 feet	Sapling	
	Red Maple	10	Sapling/Pole	3	52					1	•
	Red Oak	55	Log/Pole/XLog	11	89						
17	3301 - Low Dens	ity Deciduo	ous Trees	Nonsto	ocked	13.8	0		No		Valley stand. Upland shrub cover (serviceberry, BC, prairie willow) with patches of QA and scattered oak & pine.



Stand	Level 4 Co	over Type	s	ize De	nsity	Acres	Stand Age E	A Range	Managed \$	Site	General Comments
18	4130	- Aspen	Po	letimb	er Wel	l 13.3	55	81-110	N/A		A-O-RM stand with immature to overmature components. The S1/2 has
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	QA 40-50 yrs old with FTF, the N1/2 BTA 50-55 yrs old. There is mature oak scattered and in pockets. WP occurs mainly with the QA, including
	Red Oak	5	Log/XLog	16	85	Wh	ite Oak	Low	Variable	Sapling	locally full understory cover.
Е	Bigtooth Aspen	40	Pole/Log	8	55	Wh	ite Pine	Low	Variable	Sapling	
(Quaking Aspen	35	Pole/Sap/Log	7	44	Blac	k Cherry	Low	Variable	Tall Shrub	
	White Pine	4	Pole/Sap/Log	7		Maple Lea	ved Viburnum	Trace	< 5 feet	Tall Shrub	
	Red Pine	1	Pole/Log/XLog	8		Wito	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Red Maple	9	Pole/Sap/Log	5		Re	ed Oak	Low	Variable	Sapling	
	Paper Birch	1	Pole/Log/Sap	6						,	•
	White Oak	5	Log/XLog/Pole	15							
19	500 -	Water	1	Vonsto	cked	14.7			No		Lonesome Lake
20	4131 - A	spen, Oak	Po	letimb	er Well	36.2	57	51-80	N/A		A-O-RM stand occupying a valley and west side of a ridge. The flats have patchier cover in aspen (mainly QA) with xxlog oak and regen of
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	both species colonizing openings. Canopy cover increases to full moving
	Red Maple	14	Sapling/Pole	4		Bigto	oth Aspen	Trace	10 - 20 feet	Sapling	upslope to the east, transitions from QA to BTA, and ends up with more
	White Oak	5	Log/Pole/XLog	12		Blac	k Cherry	Low	Variable	Tall Shrub	oak at the top. The mid-1960s regen event that re-started most of the stand, including a component of the oak, left scattered residual oak and
Black	k/Red (Hybrid) Oak	10	Pole/Sapling	6		Wh	ite Oak	Low	Variable	Sapling	aspen. QA on the flats is starting to break up.
	Red Oak	5	Log/XLog	13	85	Wito	ch Hazel	Low	5 - 10 feet	Tall Shrub	
(Quaking Aspen	15	Pole/Log	9	55	Servicebe	rry (Juneberry)	Trace	Variable	Tall Shrub	
	White Pine	1	Pole/Log/Sap	7		Quak	ing Aspen	Trace	10 - 20 feet	Sapling	
E	Bigtooth Aspen	50	Pole/Log	8	57	Maple Lea	ved Viburnum	Trace	< 5 feet	Tall Shrub	
21		- Aspen		Sapling		22.1	27	1-50	N/A		Aspen stand was final harvested in 1996 (#008-95), spec'd to cut stems 2"+ DBH. The harvest left residual xlog oak scattered across the stand.
	Canopy Species	% Cover		_	Age		nopy Species	Density	Avg. Height	Size	Regenerated well to aspen with RM and competitive oak stump sprouts.
	White Pine	1	Sapling/Pole	4			rry (Juneberry)		10 - 20 feet	Tall Shrub	
(Quaking Aspen	10	Sapling/Pole	4	27	Wito	ch Hazel	Medium	10 - 20 feet	Tall Shrub	
	White Oak	2	XLog	22							
	Bigtooth Aspen	60	Sapling/Pole	4	27						
Black	k/Red (Hybrid) Oak	4	Log/XLog	16	0=						
	Red Maple	10	Sapling	2	27						
	Red Oak	10	Sapling/Pole	4	27						
	White Oak	3	Sapling	2							



Stand	I Level 4 Co	ver Type	Si	ze De	ensity	Acres	Stand Age B	A Range	Managed \$	Site	General Comments
22	4125 - Blacl	k, N. Pin C			er Wel		57	81-110	N/A		Stand was partially re-started in the mid-1960's. There is a significant stump-origin oak component from that regen event that occupies
	Canopy Species	% Cover		DBH	l Age		nopy Species	Density	Avg. Height	Size	dominant to codominant crown positions. Most of the aspen is from that
	Red Maple	10	Sapling/Pole	4		Servicebe	erry (Juneberry)	Trace	Variable	Tall Shrub	disturbance also. Oak residual increases on the ridgetop. The BTA
Blac	ck/Red (Hybrid) Oak	30	Log	11	87	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	increases on the lower slopes to the east. The mature RO was coded as "BRO" in order to overcome a MiFI error and list it as a separate canopy
	White Oak	10	Pole/Log	8		WI	nite Oak	Trace	Variable	Sapling	record from the immature RO. Had to call the stand's overall size "log"
	Red Oak	30	Pole	7	57	Wh	nite Pine	Trace	Variable	Sapling	due to at least 30% of the canopy being in log-sized stems, but a majority
	Bigtooth Aspen	19	Pole/Log	8	57						of the stand is in poles.
	Red Pine	1	Pole/Log/XLog	9							
24	4131 - As	spen, Oak	Ро	letimb	er Wel	l 26.1	55	81-110	N/A		Within Range 40 fence. Periodic disturbance is greater toward the south
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	end. QA is mostly in the valley through the south end; cover is sparser there with more recent regen. Oak increases on the hilltops. BTA
	Quaking Aspen	25	Pole/Sap/Log	7	45	R	ed Oak	Low	10 - 20 feet	Sapling	occupies the middle ground.
	Red Oak	20	Log/Pole/XLog	12	85	WI	nite Oak	Low	5 - 10 feet	Sapling	,
	White Oak	5	Log/Pole/XLog	12		Re	d Maple	Medium	10 - 20 feet	Sapling	
	Bigtooth Aspen	40	Pole/Log	8	55				ı		
	Red Maple	10	Pole/Sapling	6							
25	4130 -	Aspen	S	Sapling	g Well	17.1	5 I	mmature	N/A		A-O stand on rolling terrain was final harvested by early 2018 (#625-15),
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	cutting stems 2"+ DBH except retention (Lonesome Lake RMZ & steep slopes, merged with stand 15). Regenerated back to aspen with a minor
	Red Oak	3	Sapling	1	5		horn (spp.)	Trace	5 - 10 feet	Tall Shrub	
	White Pine	2	Sapling/Pole	2			erry (Juneberry)	Low	5 - 10 feet	Tall Shrub	to full stocking interspersed with with small NF openings.
	Bigtooth Aspen	10	Sapling	1	5	Hazeln	nut (Beaked)	Trace	< 5 feet	Tall Shrub	
	Red Maple	10	Sapling	1	5	Wit	ch Hazel	Trace	< 5 feet	Tall Shrub	
	Quaking Aspen	70	Sapling	1	5	Prai	rie Willow	Trace	< 5 feet	Tall Shrub	
	Black Cherry	5	Sapling	1	5						
26	4131 - As	spen, Oak	S	Saplin	g Well	17.0	19 I	mmature	N/A		Previous inventory noted that the stand was harvested in 2004 (72-016-02-02) "Range 40 Oak Salvage". The harvest extended further to the west, but that area appears to have been set back by fire more recently.
27	310 - Herbace	eous Oper	nland N	Nonst	ocked	5.0	U	nspecified	No		LZ X-ray maintained opening.
28	4130 -	Aspen	Sa	pling	Medium	n 8.0	5 I	mmature	N/A		A-O stand on two ridges was final harvested by early 2018 (#625-15), cutting stems 2"+ DBH; no retention due to small acreage. The steepest
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	part of the west ridge couldn't be completely cut or chipped. FP 506 is a
	Quaking Aspen	25	Sapling	1	5	Hazeln	nut (Beaked)	Low	< 5 feet	Tall Shrub	sub-acre NF inclusion in the valley. Regenerated to A-RM with a minor
	Black Cherry	5	Sapling	1	5	Servicebe	erry (Juneberry)	Low	5 - 10 feet	Tall Shrub	but competitive stump-origin oak component. The east aspects have 75-
	Bigtooth Aspen	35	Sapling	1	5	Wit	ch Hazel	Trace	< 5 feet	Tall Shrub	100% cover. The valley and west aspect fall into the 25-50% category.
	Red Oak	10	Sapling	1	5						
	White Pine	1	Sapling/Pole	3							
	White Oak	4	Sapling	1							
	Red Maple	20	Sapling	1	5						



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed \$	Site	General Comments
29	3301 - Low Dens	ity Deciduo	us Trees	Nonst	ocked	5.3	0		No		Serviceberry, BC & prairie willow with scattered NPO, RM, aspen, RP, WP & JP in a wide range of sizes.
30	4116 - Mixed N.	Hardwood	- Aspen	Sapling	g Well	81.5	16 I	mmature	N/A		O-A-RM stand was cut 2"+ DBH in 2007 (#674-05). Regenerated heavy
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	to RM, with aspen and minor but vigorous oak components. The stump- origin oak occupies dominant/codominant canopy positions. The single-
	Red Maple	60	Sapling	2	16	Wite	ch Hazel	Medium	5 - 10 feet	Tall Shrub	stem oak is more intermediate. Traces of WP & beech. On rolling
	Bigtooth Aspen	20	Sapling	2	16	Servicebe	rry (Juneberry)	Low	5 - 10 feet	Tall Shrub	terrain.
	Red Oak	10	Sapling	3	16	Maple Lea	aved Viburnum	Trace	< 5 feet	Tall Shrub	
	White Oak	10	Sapling	1	16						•
31	4130	- Aspen	5	Sapling	Medium	25.0	5 I	mmature	N/A		Sparse A-RM stand with a minor oak component was final harvested by
	Canopy Species	% Cover	Size Class	DBH	l Age						early 2018 (#625-15), cutting stems 2"+ DBH except green-marked (traces of log-xlog oak); no additional retention due to narrow stand
	Quaking Aspen	50	Sapling	1	5						shape. The aspen was noted to have had heart rot and black canker,
	Red Maple	10	Sapling	1	5						and cruised out to ~8 cd/ac. The aspen regen is patchy. Areas that were
	Black Cherry	23	Sapling	1	5						non-stocked pre-harvest have mainly BC regen, with aspen in-growth along the edges.
	Bigtooth Aspen	15	Sapling	1	5						along the ougoe.
	White Oak	2	Sapling	1							
32	4131 - <i>A</i>	Aspen, Oak	F	Poletimb	er Well	12.9	54	81-110	N/A		A-O stand on rolling terrain. Did not have a uniform regen event. Was
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	partially cut-over in the late 1960's, resulting in variable distribution in regen and residual. Most of the aspen is regen from that event, with
	White Oak	1	Log/Pole	12		Wite	ch Hazel	Low	10 - 20 feet	Tall Shrub	
	Bigtooth Aspen	38	Pole/Log	8	54	Servicebe	rry (Juneberry)	Trace	Variable	Tall Shrub	there is an immature oak pole cohort. The oak cover increases moving
	White Pine	1	Pole/Log/Sap	7		Maple Lea	aved Viburnum	Low	< 5 feet	Tall Shrub	uphill to the east.
	Red Maple	10	Pole/Sapling	6		Re	d Maple	Low	Variable	Sapling	
	Red Oak	30	Log/Pole	12	84	Wh	ite Oak	Trace	Variable	Sapling	
	Quaking Aspen	20	Pole/Log	9	54						
33	4123 -	Red Oak	F	Poletimb	er Well	43.5	35	51-80	N/A		O-A stand on the west aspect of a ridge was cut merch in 1988 (#026-
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	86). Regenerated well to oak with aspen. The stump-origin oak is vigorous, clean-boled and dominant-codominant in the canopy. The
	Bigtooth Aspen	25	Pole/Sapling		35	Wite	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
			Dala/Canlina		0.5	\//b	ite Oak	Trace	5 - 10 feet	Sapling	·
	White Oak	5	Pole/Sapling	5	35	1 V V	ille Oak	Trace	3 - 10 1661	Sapility	
	White Oak Red Maple	15	Sapling/Pole		35	100	iile Oak	Hace	3 - 10 1661	Sapiling	



Stand	Level 4 C	over Type	Si	ze De	nsity	Acres	Stand Age B	A Range	Managed \$	Site	General Comments
34	4131 - <i>A</i>	Aspen, Oak	Po	letimb	er Well	64.1	55	81-110	N/A		A-O-RM stand on rolling terrain. Did not have a uniform regen event. Was partially cut-over in the late 1960's, resulting in variable distribution
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	was partially cut-over in the late 1960's, resulting in variable distribution in regen and residual. Most of the aspen is regen from that event, with
	Red Pine	1	XLog/Log/Pole	20		Maple Lea	aved Viburnum	Low	< 5 feet	Tall Shrub	scattered overmature stems. The oak is heavier to residual although
	Sugar Maple	1	Pole/Sap/Log	5		Iro	nwood	Trace	Variable	Sapling	there is an immature oak pole cohort. Because of a MiFI limitation, only
	Quaking Aspen	5	Pole/Log	8		Е	Beech	Trace	Variable	Sapling	one age could be assigned to each species, so the residual age was applied to the oak, and the regen age to the aspen. The traces of RP ar
	Red Maple	15	Pole/Sap/Log	6		Wito	ch Hazel	Low	10 - 20 feet	Tall Shrub	almost all legacy trees.
	Red Oak	30	Log/Pole/XLog	11	85	Wh	ite Pine	Trace	Variable	Sapling	
	White Oak	1	Log/Pole	12						,	•
	Paper Birch	1	Pole	6							
	Bigtooth Aspen	45	Pole/Log	8	55						
	Beech	1	Sapling/Pole	3							
35		Aspen, Oak			er Well	113.8	36	81-110	N/A		A-O-RM stand was cut merch in 1987 (#032-86). Regenerated back to aspen with significant O-RM components. The stump-origin oak
	Canopy Species	% Cover	Size Class	_	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	occupies dominant to co-dominant crown positions.
	Red Maple	15	Sapling/Pole	3	36	Wito	ch Hazel	Medium	Variable	Tall Shrub	
	Red Oak	32	Pole/Sapling	7	36	Maple Lea	aved Viburnum	Trace	< 5 feet	Tall Shrub	residual oak saw and WP.
	Beech	1	Pole/Sapling	5							
	Paper Birch	1	Pole/Sapling	5	36						
	Quaking Aspen	5	Pole/Sapling	5	36						
	White Oak	1	Sapling/Pole	4							
	Bigtooth Aspen	45	Pole/Sapling	6	36						
36	4199 - Other Mixe	ed Upland D	Deciduous S	Sapling		84.2	15 I	mmature	N/A		O-A-RM stand on a ridge was cut 2"+ DBH in 2008 (#674-05) except for retention islands (totaling 4 acres) on the east edge. Small additional
	Canopy Species		Size Class	DBH	Age		nopy Species	Density	Avg. Height	Size	patches were left uncut on the steepest ground above the retention
	Red Maple	45	Sapling	1	15	Blac	k Cherry	Trace	< 5 feet	Tall Shrub	islands. The stand regenerated to RM with BTA and minor but
	Red Oak	10	Sapling	3	15	Maple Lea	aved Viburnum	Trace	< 5 feet	Tall Shrub	lower clance PO increases on the steen cost concet
	White Oak	10	Sapling	2		Wito	ch Hazel	Medium	5 - 10 feet	Tall Shrub	lower slopes. RO increases on the sleep east aspect.
	Red Oak	3	Log	14							
	Bigtooth Aspen	30	Sapling	2	15						
	Bigtooth Aspen	2	Log	10							
37	4130	- Aspen	S	Sapling		23.6	5 I	mmature	N/A		Aspen stand with minor RM-O components was final harvested by early 2018 (#625-15), cutting stems 2"+ DBH except for the scattered RP and
	Canopy Species	% Cover	Size Class	DBH	Age						two sub-acre retention islands. Regenerated well to aspen. Carried
	Bigtooth Aspen	5	Sapling	1	5						forward the previous inventory age for the residual aspen in the ret
	Black Cherry	5	Sapling	1	5						islands.
	Quaking Aspen	4	Log	10	65						
	Red Pine	1	Log/Pole/XLog	12							
	Quaking Aspen	80	Sapling	1	5						
	Red Maple	5	Sapling	1	5						



Stand	Level 4 Co	over Type	s	ize De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
38	4131 - A	spen, Oak	5	Sapling	Poor	68.6	7	1-50	N/A		Seed tree harvested in 2016 (#607-15). Cutting specs differed between
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	the three pre-harvest stands but all left seed-tree levels of either green- marked trees, oak, or pine. The harvest removed predominantly BTA,
	Red Maple	10	Sapling/Pole	1		Serviceber	ry (Juneberry)	Medium	10 - 20 feet	Tall Shrub	followed by RM and a minor amount of oak. The designated species
	Black Cherry	10	Pole/Sap/Log	6		Prairi	e Willow	Low	5 - 10 feet	Tall Shrub	were cut >/< merch, leaving scattered large sap-small pole residual. Xlog
	Jack Pine	1	Pole/Log	8							open-grown NPO were the primary green-marked leave trees; that canopy record was coded as "BRO" in order to overcome a MiFI error
	White Pine	1	Pole/Sap/Log	7							and list it separately from the immature NPO. Carried forward the
(Quaking Aspen	5	Sapling	1	7						previous inventory NPO age although it probably underestimates the xlog
	Bigtooth Aspen	50	Sapling/Pole	1	7						component's age. Cover is a mosaic of U-LDT and A3 patches, with residual scattered above. The aspen clones are continuing to expand
Blac	k/Red (Hybrid) Oak	13	XLog/Log	22	94						into the NF areas.
N	lorthern Pin Oak	5	Sapling/Pole	3							
	White Oak	5	Pole/Sap/Log	3							
39	4199 - Other Mixed	d Upland E	eciduous Po	oletimb	er Well	10.8	57	81-110	N/A		Stand occupies a steep east aspect. Could not find a harvest record, but
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	the majority O-A pole cover dated to a mid-1960's regen event. The stump-origin oak poles occupy dominant to co-dominant crown
Blac	k/Red (Hybrid) Oak	10	Log	12	88	Maple Lea	ved Viburnum	Low	< 5 feet	Tall Shrub	positions. There is a minor mature residual oak component that occurs
	Bigtooth Aspen	30	Pole/Log	8	58	Witc	h Hazel	Low	5 - 10 feet	Tall Shrub	mainly on the stand's perimeter. The BTA increases moving downslope.
	Paper Birch	2	Pole	7					1		The mature RO canopy record had to be called BRO in order to overcome a MiFI limitation.
	Red Maple	10	Sapling/Pole	3							oversome a viii i iiiiilaadii.
	Red Oak	45	Pole	7	57						
	White Oak	3	Pole/Sapling	7							
40	6229 - Mixed	lowland s	hrub	Nonsto	ocked	1.0	0		No		Small wetland with salix, leatherleaf, and marsh cover.
41	320 - Upl	and Shrub		Nonsto	ocked	6.3			No		Military Firing Point (FP 115). Was last brush-hogged around 2012. Upland shrub cover has re-sprouted across the opening (mostly BC, with prairie willow and serviceberry).
42	4123 -	Red Oak	Sa	awtimb	er Well	14.9	87	81-110	N/A		Narrow valley stand. Oak cover on the flats is more open-grown; form
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	improves moving upslope. The minor aspen component is mostly overmature. There are traces of immature pole oak and aspen but not
	Red Maple	15	Pole/Sap/Log	7		Serviceber	ry (Juneberry)	Low	Variable	Tall Shrub	enough to call the stand 2-aged.
	Bigtooth Aspen	10	Log/Pole	12		Whi	ite Pine	Trace	Variable	Sapling	
	Paper Birch	1	Log/Pole	10		Suga	ar Maple	Low	5 - 10 feet	Sapling	
	White Pine	1	Pole	6		Re	d Oak	Low	Variable	Sapling	
	White Oak	10	Log/Pole/XLog	11		Wh	ite Oak	Low	Variable	Sapling	
	Red Oak	62	Log/XLog/Pole	14	87	Witc	h Hazel	Low	5 - 10 feet	Tall Shrub	
	Red Pine	1	XLog	20							1



Stand	Level 4 C	over Type	S	ize De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
43	4123 -	Red Oak	Po	oletimb	er Wel	l 12.2	36	81-110	N/A		O-A stand on a hill was cut merch in 1987 (#027-86). The stump-origin
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	oak is clean-boled and occupies dominant-codominant crown positions. The RM is also stump-origin but further behind in development. Traces
	Red Maple	25	Sapling/Pole	3	36	Servicebe	erry (Juneberry	y) Low	5 - 10 feet	Tall Shrub	of PB.
	Red Oak	65	Pole	6	36	Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	10	Pole/Sapling	5	36			<u> </u>			
44	3301 - Low Densi	ty Deciduo	us Trees	Nonsto	cked	98.0	0		No		Large outwash plain opening. Upland shrub cover (serviceberry, BC, hawthorn, prairie willow) with scattered NPO-WO, stump-origin RM clumps, small aspen clones, & traces of RP-WP-JP.
45	320 - Up	land Shrub	I	Nonsto	cked	8.3	ļ	Unspecified	No		Military Firing point (FP 110). Last brush-hogged around 2012. BC, serviceberry, & prairie willow re-sprouted across the opening, along with a couple patches of A3 on the perimeter.
46	6220 - A	lder/willow	ı	Nonsto	cked	1.3	0		No		Pair of small tag alder wetlands connected by a narrow swale. Aspen on margins.
47	6220 - A	lder/willow	ı	Nonsto	cked	1.1	0		No		Salix & tag alder with cattail.
48	4130	- Aspen	Po	oletimb		31.7	37	81-110	N/A		A-O stand was cut merch in 1986 (#027-86). Regenerated well to aspen, with the WP and traces of RP mainly around stands 40 & 49
	Canopy Species	% Cover	Size Class		Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	with the VVI and traces of VVI mainly around stands to a 10
	White Pine	5	Log/Pole/XLog			Servicebe	erry (Juneberry	y) Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	15	Pole/Sapling	6	37	Wh	nite Pine	Trace	Variable	Sapling	
Bla	ck/Red (Hybrid) Oak	3	Pole	7	37		ed Maple	Low	Variable	Sapling	
	Bigtooth Aspen	67	Pole/Sapling	6	37	Blac	ck Cherry	Low	5 - 10 feet	Tall Shrub	
	Red Maple	10	Sapling/Pole	4	37						
49	6225	5 - Bog		Nonsto	cked	4.3	0 (Unspecified	No		Leatherleaf bog with patches of salix and scattered pine saplings. Snags throughout. Was within stand 48's harvest but this low ground appears to have been largely avoided. It met the forested benchmark during 2015 YOE inventory but extensive mortality since took out most of the mature JP-WP-RP cover
50	4130	- Aspen	\$	Sapling	Well	83.3	17	Immature	N/A		Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Pre-harvest cover was patchy A5. Post-harvest
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	cover is dense aspen regen with U-inclusions and scattered residual oak-
	Red Pine	2	XLog/Log/Pole			Servicebe	erry (Juneberry	y) Low	Variable	Tall Shrub	pine of varying sizes. Most of the low ground inclusions are south of the
	Northern Pin Oak	2	Pole/Sap/Log	7		Ta	ag Alder	Low	10 - 20 feet	Tall Shrub	E-W road.
	White Pine	1	Pole/Log/Sap	8		Prai	rie Willow	Trace	5 - 10 feet	Tall Shrub	
	Bigtooth Aspen	5	Sapling	2	17	Blac	ck Cherry	Low	5 - 10 feet	Tall Shrub	
	Quaking Aspen	80	Sapling	2	17	Wi	llow spp.	Low	Variable	Tall Shrub	
	Quality / topon			-							
	Black Cherry	5	Sapling	2							



Stan	d Level 4 C	over Type	Si	ize De	nsity	Acres S	Stand Age BA	A Range	Managed S	Site	General Comments
51	6112 - Lov			letimb	er Well			51-80	N/A		Lowland aspen stand was final harvested in 1996 (#008-95), spec'd to cut 2"+ DBH. The lowest ground that could not be harvested was merged
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size	with lowland shrub stand 52. The south part was cut off by stand 53's
	Red Pine	1	XLog/Log/Pole	18		Black	Cherry Low		5 - 10 feet	Tall Shrub	firing point expansion. The QA is still transitioning into the pole class but
	Balsam Poplar	14	Pole/Sap/Log	8		Serviceberr	y (Juneberry)	Medium	5 - 10 feet	Tall Shrub	enough is there to call it pole overall. The balsam poplar is concentrated along the L3 edge and has a residual component
	Quaking Aspen	85	Sapling/Pole	4	27	Tag	Alder	Low	10 - 20 feet	Tall Shrub	along the L3 edge and has a residual component
						Willo	w spp.	Trace	10 - 20 feet	Tall Shrub	
52	6220 - A	lder/willow	, 1	Nonst	cked	6.0			No		Salix with tag alder and patches of cattail. Uncut portions of stand 51
						Sub-Cand	opy Species	Density	Avg. Height	Size	were merged with this stand and have scattered QA & balsam poplar saw above L3.
						Α	lder	Full		Tall Shrub	430.0 20.
53	4130	- Aspen	Sa	pling	Лedium	8.2	11 In	nmature	N/A		Military Firing Point (FP 124). Aspen has been filling in since it was last cleared around 2012. Part of the regen that was brush-hogged was from
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size	1996 & 2006 harvests.
	Quaking Aspen	65	Sapling	1	11	Prairie	e Willow	Low	5 - 10 feet	Tall Shrub	
	Northern Pin Oak	5	Sapling	1	11						
	Black Cherry	20	Sapling	1	11						
	Bigtooth Aspen	10	Sapling	1	11						
54	4130	- Aspen	S	Saplino	Poor	21.6	7 In	nmature	N/A		Patchy declining aspen stand was final harvested in 2016 (#607-15), spec'd to cut stems 2"+ DBH except oak. Cruised harvest volume was 4
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size	cds/acre. The stand was cut >/< merch, leaving large sapling-small pole
	Red Maple	1	Sapling/Pole/Log	3	7	Hawtho	orn (spp.)	Low	Variable	Tall Shrub	aspen scattered across the stand, in addition to the designated-leave
	Quaking Aspen	84	Sapling/Pole	1	7		e Willow	Trace	< 5 feet	Tall Shrub	NPO. Aspen regen from the harvest occurs in small clones that are slowly spreading into the upland shrub cover. Because a MiFI limitation
	Northern Pin Oak	5	Pole/Sap/Log	6			y (Juneberry)	Low	10 - 20 feet	Tall Shrub	prevents listing the residual aspen separately from the regen canopy
	Black Cherry	10	Pole/Sap/Log	7	58	Black	Cherry	Medium	5 - 10 feet	Tall Shrub	record, the BC canopy record was used as a surrogate to represent that
											second age class. The previous inventory aspen age was applied to the BC.
55	310 - Herbac	oous Oper					•				
	310 TIGIDAC	eous Opei	nland f	Nonst	ocked	8.5	Un	specified	Managed O	pening	Military Firing Point (FP 127), part of the NWTF-DNR-DMVA cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry.
56		- Aspen			well	23.5	Un 17	specified	Managed O	pening	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+
56			S	Saplin		23.5		·		pening	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted
56	4130	- Aspen	S	Saplin	j Well	23.5 Sub-Cand	17	1-50	N/A		wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+
56	4130 Canopy Species	- Aspen	Size Class	Sapling DB	j Well	23.5 Sub-Cano	17 opy Species	1-50 Density	N/A Avg. Height	Size	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling
56	4130 Canopy Species White Pine	- Aspen **Cover** 2	Size Class Log/Pole/Sap	Sapling DBH	j Well	23.5 Sub-Cano Northeri Serviceberr	17 ppy Species n Pin Oak	1-50 Density Low	N/A Avg. Height Variable	Size Sapling	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling
	4130 Canopy Species White Pine Red Maple	- Aspen **Cover** 2 5	Size Class Log/Pole/Sap Sapling/Pole	Sapline DBH 11	y Well	23.5 Sub-Cano Northern Serviceberr Prairie	17 ppy Species n Pin Oak y (Juneberry)	1-50 Density Low Low	N/A Avg. Height Variable 10 - 20 feet	Size Sapling Tall Shrub	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling
	4130 Canopy Species White Pine Red Maple Quaking Aspen	- Aspen **Cover* 2 5 60	Size Class Log/Pole/Sap Sapling/Pole Sapling	DBH 11 1 2	y Well Age	23.5 Sub-Cand Northern Serviceberr Prairie Red	17 ppy Species n Pin Oak y (Juneberry) e Willow	1-50 Density Low Low Trace	N/A Avg. Height Variable 10 - 20 feet < 5 feet	Size Sapling Tall Shrub Tall Shrub	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling
	4130 Canopy Species White Pine Red Maple Quaking Aspen Northern Pin Oak	- Aspen % Cover 2 5 60 15	Size Class Log/Pole/Sap Sapling/Pole Sapling Log/Pole/XLog	DBH 11 1 2 12	1 Age 17 93	23.5 Sub-Cand Northern Serviceberr Prairie Red	17 oppy Species In Pin Oak In (Juneberry) In Willow Maple	1-50 Density Low Low Trace Low	N/A Avg. Height Variable 10 - 20 feet < 5 feet 5 - 10 feet	Size Sapling Tall Shrub Tall Shrub Sapling	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling
	4130 Canopy Species White Pine Red Maple Quaking Aspen Northern Pin Oak Black Cherry	- Aspen **Cover 2 5 60 15 5	Size Class Log/Pole/Sap Sapling/Pole Sapling Log/Pole/XLog Sapling	DBH 11 1 2 12 3	17 93 17	23.5 Sub-Cand Northern Serviceberr Prairie Red	17 oppy Species In Pin Oak In (Juneberry) In Willow Maple	1-50 Density Low Low Trace Low	N/A Avg. Height Variable 10 - 20 feet < 5 feet 5 - 10 feet	Size Sapling Tall Shrub Tall Shrub Sapling	wildlife opening maintenance project. The cleared but uncultivated perimeter (2.5 acres) has re-sprouting aspen, BC & serviceberry. Aspen stand was final harvested in 2006 (#049-05), cutting stems 2"+ DBH except O-RP-WP. Dense aspen regen from the harvest is dotted with U/LDT inclusions, variable distribution in residual oak (large sapling



Stand Level 4	d Level 4 Cover Type Size Density					Stand Age B	A Range	Managed Site		General Comments
57 6220 -	Alder/willow	Nonstocked			11.6			No		Tag alder with salix and scattered aspen. Was partially within stand 58's harvest but could not be cut due to ground conditions at the time. Snags and blowdowns common.
58 6112 - L	owland Aspe	en Po	oletimb	er Wel	l 54.1	27	51-80	N/A		Lowland aspen stand was final harvested in 1996 (#008-95), spec'd to cut 2"+ DBH. The lower ground was only partially cut and the most saturated
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
Red Maple	1	Sapling/Pole/Lo				d Maple	Low	Variable	Sapling	ground was excluded altogether. Unharvested portions were either merged with adjacent stands or left as mature inclusions within this
Northern Pin Oak	2	Pole/Sapling	5		Red Os	ier Dogwood	Trace	< 5 feet	Tall Shrub	stand. Aspen filled in well except on the very lowest ground (with L3) and
Quaking Aspen	80	Pole/Sapling	5	27	Servicebe	rry (Juneberry)	Low	Variable	Tall Shrub	on the upland edges (more NPO-U there).
Balsam Poplar	15	Pole/Sap/Log	6		Та	ıg Alder	Low	10 - 20 feet	Tall Shrub	
Black Cherry	2	Sapling/Pole	3	27	Blac	ck Cherry	Low	5 - 10 feet	Tall Shrub	
					Wil	low spp.	Trace	10 - 20 feet	Tall Shrub	
59 3301 - Low Den	sity Deciduo	ous Trees	Nonst	ocked	5.1	0		No		BC & serviceberry with scattered O-A-RP-WP-JP of varying sizes.
60 6220 -	Alder/willow	1	Nonsto	ocked	13.1	0		No		Tag alder, salix, red osier dogwood and bog birch with three sub-acre forested patches: aspen, black spruce-NWC, and RM. Was partially within stand 58's harvest but could not be cut due to ground conditions at the time. Handful of xlog WP at the north end.
61 4119 - Mixed N	Northern Har	rdwoods Sa	awtimb	er Poo	r 52.4	98	1-50	N/A		Cover on this old pine stumpfield is not much above LDT. Primarily
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	oversize RM pulp in stump-origin clumps, with small aspen clones, BC, xxlog NPO, scattered RP, and a patch of WP on the SW edge. The
Black Cherry	10	Pole/Log	7		Re	d Maple	Trace	Variable	Sapling	stand had to be called log overall due to its ave diam but it is not log
Red Pine	1	XLog/Log	22		Wh	nite Pine	Trace	Variable	Sapling	quality.
Bigtooth Aspen	5	Log/Pole/Sap	10		Servicebe	rry (Juneberry)	Low	10 - 20 feet	Tall Shrub	
Red Maple	65	Log/Pole	11	98	Hawth	norn (spp.)	Trace	Variable	Tall Shrub	
White Oak	1	XLog/Log	22		Northe	ern Pin Oak	Trace	10 - 20 feet	Sapling	
Quaking Aspen	10	Log/Pole	10	44	Blac	ck Cherry	Medium	Variable	Tall Shrub	
Northern Pin Oak	5	XLog	30							
Balsam Poplar	1	Pole/Sapling	7							
White Pine	2	Log/Pole	10							
62 413	0 - Aspen	;	Saplin	g Well	6.4	27	1-50	N/A		Aspen stand was final harvested in 1996 (#008-95), cutting stems 2"+
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size	DBH. The BTA clones filled in densely. The QA is sparser, particularly in the NE where there is more upland shrub cover. The stand on average
Black Cherry	5	Sapling	3		Re	d Maple	Low	5 - 10 feet	Sapling	hasn't crossed the 30% pole cover benchmark for calling the stand pole
Northern Pin Oak	1	Sapling/Pole	3		Prair	rie Willow	Trace	< 5 feet	Tall Shrub	overall.
White Oak	1	Sapling	2		Blac	ck Cherry	Medium	5 - 10 feet	Tall Shrub	
Quaking Aspen	33	Sapling/Pole	3	27	Servicebe	rry (Juneberry)	Low	10 - 20 feet	Tall Shrub	
Bigtooth Aspen	60	Sapling/Pole	3	27	Hawth	norn (spp.)	Trace	< 5 feet	Tall Shrub	
63 6220 -	Alder/willow		Nonst	ocked	2.4	0	_	No	_	Salix, tag alder & red-osier dogwood, with low-density aspen cover that was left uncut due to inoperable ground. The W1/2 was within stand 58's harvest boundary and the E1/2 was within stand 68's harvest boundary.

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Stand	and Level 4 Cover Type			Size Density		Acres Sta	and Age BA	A Range	Managed Site		General Comments	
64	42220 - Natu	tural Jack Pine		Poletimber I		or 10.0	51	51-80	N/A		A handful of scattered JP "orchard" trees seeded in this stand over time.	
	Canopy Species	Canopy Species % Cover Size Clas		s DBH Age							The resulting cover is 2+ aged but a MiFI limitation prevents accurately listing it as such. Majority cover is pole-log and around 50 years old.	
	Jack Pine	99	Pole/Log	8	51						There is younger pole-sapling JP cover colonizing the adjacent openings,	
(Quaking Aspen		Pole/Log	9							and traces of the surviving pioneer JP. The JP cover is patchy, with	
											dense pockets separated by U/LDT openings, driveway, and powerline corridors.	
65	4119 - Mixed No	rthern Hard	dwoods Sav	Sawtimber Medium		um 24.3	m 24.3 94		N/A		Marginal 2-aged cover averages in the low end of 50-75%, with U	
	Canopy Species	% Cover Size Class		s DBH Ag		Sub-Canop	nopy Species	Density	Avg. Height	Size	inclusions common. Primarily oversize RM pulp in stump-origin clumps and open-grown NPO, with a few small aspen clones. There is a second	
Blac	k/Red (Hybrid) Oak	10	Pole/Sapling	6	40	Prairie Willow	Trace	< 5 feet	Tall Shrub	age class in small pole-large sapling NPO, but that canopy record had to		
	Bigtooth Aspen	1 L	Log/Pole	12 10 9 18		Serviceberry (Juneberry)		Low	10 - 20 feet	Tall Shrub	be called BRO in order to overcome a MiFI limitation. The stand also	
	Red Maple	65	Log/Pole		94	Black C	herry	Low	Variable	Tall Shrub	had to be called log overall due to its ave diam but it is not log quality.	
Ν	Northern Pin Oak	20	XLog/Log			Northern F	Pin Oak		Variable	Sapling		
(Quaking Aspen	4	Log/Pole/Sap	10								
66 3102 - Grass Nonstocked						14.5 Unspecified Managed Opening						
66				Nonsto	ocked	14.5	Un	specified	Managed O	pening	Military Firing Points (FP 125 and 126), part of the NWTF-DNR-DMVA cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen.	
66	3102 · 6112 - Low			Saplinç	g Well	41.0		specified	N/A	pening	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018	
67		vland Aspe	n size Class	Saplinç	y Well	41.0 Sub-Canop	5 In	· 		pening	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen.	
67	6112 - Low	vland Aspe	n Size Class Sapling	Sapling DBH	g Well	41.0	5 In	nmature	N/A Avg. Height 5 - 10 feet		cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention	
67	6112 - Low Canopy Species Balsam Poplar rthern White Cedar	vland Aspe **Cover** 15 1	Size Class Sapling Log/Pole	Sapling DBI 1	y Well	41.0 Sub-Canopy Serviceberry (Tag Al	5 In y Species (Juneberry)	nmature Density Trace Low	N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-	
67	6112 - Low Canopy Species Balsam Poplar	vland Aspe % Cover 15	Size Class Sapling Log/Pole Pole/Sapling	Sapling DBH	y Well I Age	41.0 Sub-Canopy Serviceberry (Tag Al Willow	5 In y Species (Juneberry) Ider spp.	Density Trace Low Trace	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common preharvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out	
67	6112 - Low Canopy Species Balsam Poplar rthern White Cedar	vland Aspe **Cover** 15 1	Size Class Sapling Log/Pole	Sapling DBI 1	y Well Age 5	41.0 Sub-Canopy Serviceberry (Tag Al	5 In y Species (Juneberry) Ider spp.	nmature Density Trace Low	N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large	
67	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen	vland Aspe % Cover 15 1 1	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling	DBH	y Well I Age	41.0 Sub-Canopy Serviceberry (Tag Al Willow	5 In y Species (Juneberry) Ider spp. Dogwood	Density Trace Low Trace	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP	
67	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry	wland Aspe % Cover 15 1 1 2	Size Class Sapling Log/Pole Pole/Sapling Sapling	Sapling DBH	y Well Age 5	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E	5 In y Species (Juneberry) Ider spp. Dogwood	Density Trace Low Trace Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large	
67	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen	vland Aspe **Cover 15 1 1 2 75	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling	DBH	y Well Age 5	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E	5 In y Species (Juneberry) Ider spp. Dogwood	Density Trace Low Trace Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP	
67	6112 - Low Canopy Species Balsam Poplar thern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir	vland Aspe **Cover 15 1 1 2 75 5 1	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling Sapling/Pole Sapling/Pole	Sapling DBH	y Well Age 5	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.)	Density Trace Low Trace Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC.	
67 Nor	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir	vland Aspe **Cover* 15	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling Sapling/Pole Sapling/Pole	DBH	y Well Age 5 5 5	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.)	Density Trace Low Trace Medium Trace	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC. Overmature lowland aspen stand was final harvested with retention by Feb 2018 (#610-15), excluding two sub-acre interior retention islands and	
67 Nor	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir Northern Pin Oak	vland Aspe **Cover** 15	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling/Pole Sapling/Pole	DBH	y Well Age 5 5 Medium	41.0 Sub-Canopy Serviceberry (5 In y Species (Juneberry) Ider spp. Dogwood n (spp.) 5 In	Density Trace Low Trace Medium Trace	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC.	
67 Nor	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir Jorthern Pin Oak 6112 - Low Canopy Species	vland Aspe **Cover* 15	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling/Pole Sapling/Pole	DBH	y Well Age 5 5 Medium	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn 19.3 Sub-Canopy	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.) 5 In y Species spp.	Density Trace Low Trace Medium Trace	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet < 5 feet N/A Avg. Height	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC. Overmature lowland aspen stand was final harvested with retention by Feb 2018 (#610-15), excluding two sub-acre interior retention islands and the Natural Rivers RMZ. The harvest left scattered large sapling-small pole aspen, elm & birch. The 5% mature QA canopy record is actually pole-log in size but had to be called log in order to overcome a MiFI	
67 Nor	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir Northern Pin Oak 6112 - Low Canopy Species American Elm	vland Aspe **Cover 15 1 1 2 75 5 1	size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole	DBH	y Well Age 5 5 Medium	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn 19.3 Sub-Canopy Willow	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.) 5 In y Species spp. Dogwood	nmature Density Trace Low Trace Medium Trace Trace Density Low	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet Variable	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC. Overmature lowland aspen stand was final harvested with retention by Feb 2018 (#610-15), excluding two sub-acre interior retention islands and the Natural Rivers RMZ. The harvest left scattered large sapling-small pole aspen, elm & birch. The 5% mature QA canopy record is actually pole-log in size but had to be called log in order to overcome a MiFI error. Regen from the harvest varies from A3 to L3, and averages in the	
67 Nor	6112 - Low Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir Northern Pin Oak 6112 - Low Canopy Species American Elm Paper Birch	vland Aspe **Cover 15 1 1 2 75 5 1 vland Aspe **Cover 1 1 1 1 1 1 1 1 1	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole	Sapling	y Well Age 5 5 Medium	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn 19.3 Sub-Canopy Willow Red Osier E	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.) 5 In y Species spp. Dogwood	nmature Density Trace Low Trace Medium Trace Density Low Low Low	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet Variable < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Size Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC. Overmature lowland aspen stand was final harvested with retention by Feb 2018 (#610-15), excluding two sub-acre interior retention islands and the Natural Rivers RMZ. The harvest left scattered large sapling-small pole aspen, elm & birch. The 5% mature QA canopy record is actually pole-log in size but had to be called log in order to overcome a MiFI error. Regen from the harvest varies from A3 to L3 and averages in the	
67 Nor	Canopy Species Balsam Poplar rthern White Cedar Paper Birch Black Cherry Quaking Aspen Balsam Fir Northern Pin Oak Canopy Species American Elm Paper Birch Balsam Poplar	vland Aspe **Cover 15 1 1 2 75 5 1 vland Aspe **Cover 1 1 5 5 1 1 1 5	Size Class Sapling Log/Pole Pole/Sapling Sapling Sapling Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Sapling/Pole Size Class Pole/Sapling Sapling Sapling	Sapling	y Well Age 5 5 Medium	41.0 Sub-Canopy Serviceberry (Tag Al Willow Red Osier E Hawthorn 19.3 Sub-Canopy Willow Red Osier E	5 In y Species (Juneberry) Ider spp. Dogwood n (spp.) 5 In y Species spp. Dogwood	nmature Density Trace Low Trace Medium Trace Density Low Low Low	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet < 5 feet 5 - 10 feet Variable < 5 feet	Size Tall Shrub Tall Shrub Tall Shrub Tall Shrub Size Tall Shrub	cooperative wildlife opening maintenance project. The cleared but uncultivated perimeter (7 acres) has re-sprouting BC & aspen. Overmature lowland aspen stand was final harvested by early 2018 (#610-15) cutting merch stems except for RP-WP saw, NWC, boundary-excluding retention islands and the Natural Rivers RMZ. Uncut areas of the harvest on inoperable ground were merged along with the retention into stand 75 (see Site Condition layer). Blowdowns were common pre-harvest. Aspen regen is continuing to fill in across the W1/2 of the stand. The E1/2 is already well-stocked. The aspen regen averages out toward the low end of 75-100% cover, along with scattered residual large sap-small pole aspen, fir, NPO & birch stems, and traces of saw RP, WP & NWC. Overmature lowland aspen stand was final harvested with retention by Feb 2018 (#610-15), excluding two sub-acre interior retention islands and the Natural Rivers RMZ. The harvest left scattered large sapling-small pole aspen, elm & birch. The 5% mature QA canopy record is actually pole-log in size but had to be called log in order to overcome a MiFI error. Regen from the harvest varies from A3 to L3, and averages in the low end of 50-75%. This stand had been set up in the 1995 YOE (#008-	

Report 7 - Stands

Stand	Level 4 Co	4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments								
69	4199 - Other Mixed	Deciduous Saw	timber	Mediun	n 7.9	98	51-80	N/A		Variable density mixed deciduous canopy above a moderate to full			
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	understory. The NW 2 acres have a sparse canopy above full subcano cover. WP seeded in from two legacy trees in the west end of the standard Aspen increases north of the road, RM increases to the south. The standard response in the standard respo		
	Red Maple	45	Pole/Log/Sap	9	98	Red	Maple	Low	Variable	Sapling			
Е	Bigtooth Aspen	15	Pole/Log/Sap	8	50	Serviceber	ry (Juneberry	/) Low	10 - 20 feet	Tall Shrub	didn't have a uniform regen event and is broadly 2-aged across most		
	Red Pine	1	XLog/Log	18		Norther	n Pin Oak	Low	10 - 20 feet	Sapling	species. The canopy's log-sized component reaches the 30% threshold where the stand has to be called log overall. The RM "log" stems,		
	White Pine	10	Pole	6		Whi	te Pine	Medium	Variable	Sapling	however, are just oversized pulp in stump-origin clumps with heartrot		
C	Quaking Aspen	15	Pole/Log/Sap	8		Whi	te Oak	Low	10 - 20 feet	Sapling	common.		
No	orthern Pin Oak	10	Pole/Log/Sap	9				1			_		
	White Oak	1	Log/XLog	13									
Black	k/Red (Hybrid) Oak	3	Log/XLog	15									
72	500 -	Water	١	Nonsto	cked	11.3			No		North Branch of the AuSable River.		
73	3301 - Low Densi	ty Deciduo	ous Trees N	Nonsto	cked	65.7	0 (Unspecified	No		Large outwash plain opening. Upland shrub cover (serviceberry, BC, hawthorn, prairie willow) with scattered NPO, stump-origin RM clumps, small clumps of aspen, & traces of RP-WP.		
75	6112 - Lov	6112 - Lowland Aspen Sa			nber Well 66.0 71		71	51-80	N/A		Overmature aspen stand on the river floodplain and riser. Pockets of		
(Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	NWC up to 2 acres in size are scattered across the stand. Understory varies from high coverage in balsam fir to diverse L3. The tag alder is		
	Balsam Fir	10	Pole	6		Red Osie	er Dogwood	Low	< 5 feet	Tall Shrub	mostly along the river. Aspen blowdowns & snags are common. The		
	White Pine	1	Pole/Log/XLog	8		Quakir	ng Aspen	Low	5 - 10 feet	Sapling	steep riser transitions onto dry ground; NPO, pine & BTA mix in there.		
	Black Willow	1	Log/XLog/Pole	12		Bals	am Fir	Low	Variable	Sapling	The stand picks up retention left for stands 67 & 77 (see Site Condition layer).		
Nort	hern White Cedar	10	Log/Pole	12	114	Tag	Alder	Medium	10 - 20 feet	Tall Shrub	idyor).		
	Red Pine	1	XLog/Log/Pole	20		Balsar	m Poplar	Low	5 - 10 feet	Sapling			
C	Quaking Aspen	55	Log/Pole	12	71			-			-		
	Tamarack	1	Log	14									
	Paper Birch	5	Log/Pole	10									
Е	Bigtooth Aspen	1	Log/Pole	12									
	Black Spruce	2	Pole/Log	9									
Е	Balsam Poplar	10	Log/Pole	11									
No	orthern Pin Oak	3	XLog/Log/Pole	20									
76	3301 - Low Densi	ty Deciduc	ous Trees 1	Nonsto	cked	18.3	l	Jnspecified	No		Upland shrub cover (BC, serviceberry, prairie willow, hawthorn) with LDT (open-grown xlog NPO, scattered WP-RP, small aspen clones, and dense patches of NPO regen). The tree cover reaches forested levels of the stand's SW edge above the river. 2004 LWD FTP C72-497 was approved to helicopter-lift whole trees for in-stream placement in the river. Informal river access point on the SW edge had stairs constructed to address erosion concerns.		



Stand	nd Level 4 Cover Type			Size Density		Acres Stand Age		BA Range	Managed Site		General Comments
77	7 6112 - Lowland Aspen			Sapling Medium		21.3	2	Immature	N/A		Overmature lowland aspen stand was final harvested by March 2021
	Canopy Species	opy Species % Cover Size C		s DBH Age		Sub-Canopy Species Gray Dogwood		s Density	Avg. Height	Tall Shrub	(#610-15) except for the handful of RP-WP-NWC, two sub-acre interior retention islands, and the Natural Rivers RMZ. Widely-scattered
	Quaking Aspen80SaplingBalsam Poplar20Sapling			1	2			Low	< 5 feet		tamarack and elm were also left. Uncut portions were split off as stand
				1	2	Red Os	ier Dogwood	Trace	< 5 feet	Tall Shrub	75. The regen ranges from A3 in the north to A0 on the lowest ground in
							Tag Alder		Variable	Tall Shrub	the south-center, averaging toward the low end of 50-75% across the stand.
					Wil	low spp.	Trace	5 - 10 feet	Tall Shrub		
78	3302 - Low Density Conifer Trees Nonstoc					11.6		Unspecified	No		Upland shrub cover (BC, serviceberry, hawthorn, prairie willow) with LDT (JP, RP, NPO, QA).
79	122 - Roa	Nonst	ocked	9.3			No		Twin Bridge Road		