



# Compartment Review Presentation

## Grayling Forest Management Unit

Compartment 72268

Entry Year 2024

Acreage: 1,554

County Crawford

Management Area: Camp Grayling

---

**Stand Examiner:** Derek Nellis

### Legal Description:

T28N R2W Sections 10, 11, 12

### 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 complexes. The outwash plains are on Grayling sands. The river floodplain is comprised of Tawas-Leafriver mucks.

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

The entire area is under the 1935 long-term lease agreement L-1479 (Act 154 P.A. 1935) with the Michigan National Guard, Department of Military Affairs. The 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 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:

The compartment's east side is two miles north of Lovells and was within that community's early homesteading and farming influence zone.

### 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. There is a walk-in fishing access site on the east side of the river, with an informal parking spot off of Twin Bridge Road.

### 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.

### 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 that does not have a current economic use. The nearest gravel pit is located one and a half miles to the south, and potential is thought to be good in the upland areas. The compartment is State Military Leased land. None of the compartment is leased for mineral development. The Antrim Shale has been developed for gas production to the east.

### Vehicle Access:

County roads that provide access to the compartment include Twin Bridge, Ski Hill, Lint and Lonesome Lake Roads. A network of two-track roads provide access to the upland interior.

### Survey Needs:

The survey monument for the southwest corner of section twelve was destroyed, apparently during road work at the

intersection of Ski Hill Road and KP Truck Trail. One of four witness trees remains standing, and the monument itself is in a pile of dirt ~20 feet northwest of the original location.

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

The North Branch of the AuSable River is used mainly for fly fishing, but there is also some canoe and kayak traffic. Fisheries Division has an informal walk-in fishing access site along the river. Hunting is the main form of dispersed use in the upland interior. No designated recreational facilities or trails exist within the compartment, but there are recreational opportunities such as hunting, fishing, and wildlife viewing when military training is not occurring. ORV's are seasonally permitted some forest roads in this compartment starting in 2022.

### **Fire Protection:**

The compartment has mainly upland deciduous cover, with reasonable access. The AuSable River and nearby lakes are potential water points.

### **Additional Compartment Information:**

**The following reports from the Inventory are attached:**

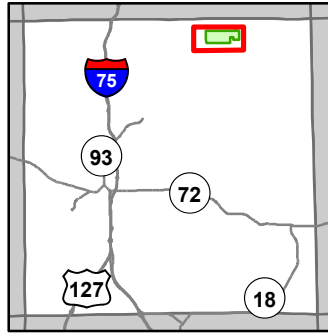
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

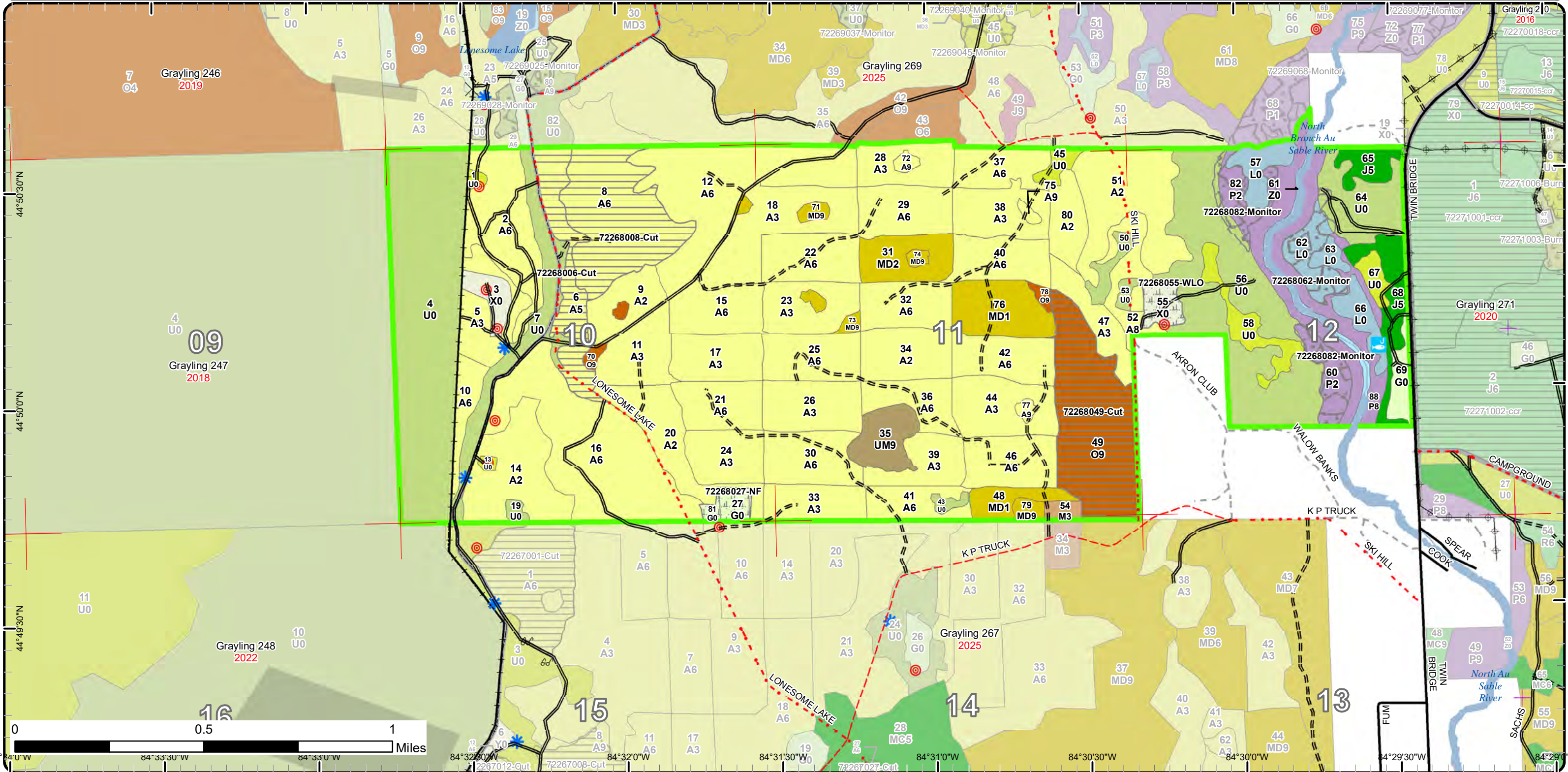
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 268  
 T28N, R02W, Sec. 10-12  
 County: Crawford  
 Unit: Grayling  
 Mgmt Area: Camp Grayling  
 YOE: 2024  
 Acres: 1554.1 GIS Calculated  
 Examiner: Derek Nellis  
 Map Revised: 12/27/2022  
 Map Phase: Post-Review

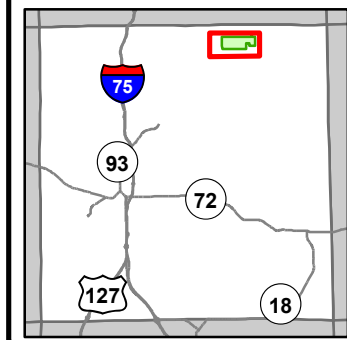


- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- 🏊 Fishing Access Site
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Fence
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- Regeneration Survey
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 790 - Other Bare/Sparsely Vegetated
- \* Camp Grayling Monitoring Wells
- ⊙ Camp Grayling Observation Point
- ⊗ Camp Grayling Firing Point
- ✕ Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail
- Camp Grayling Range Area

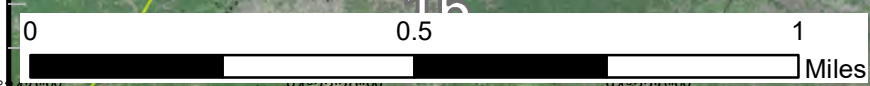
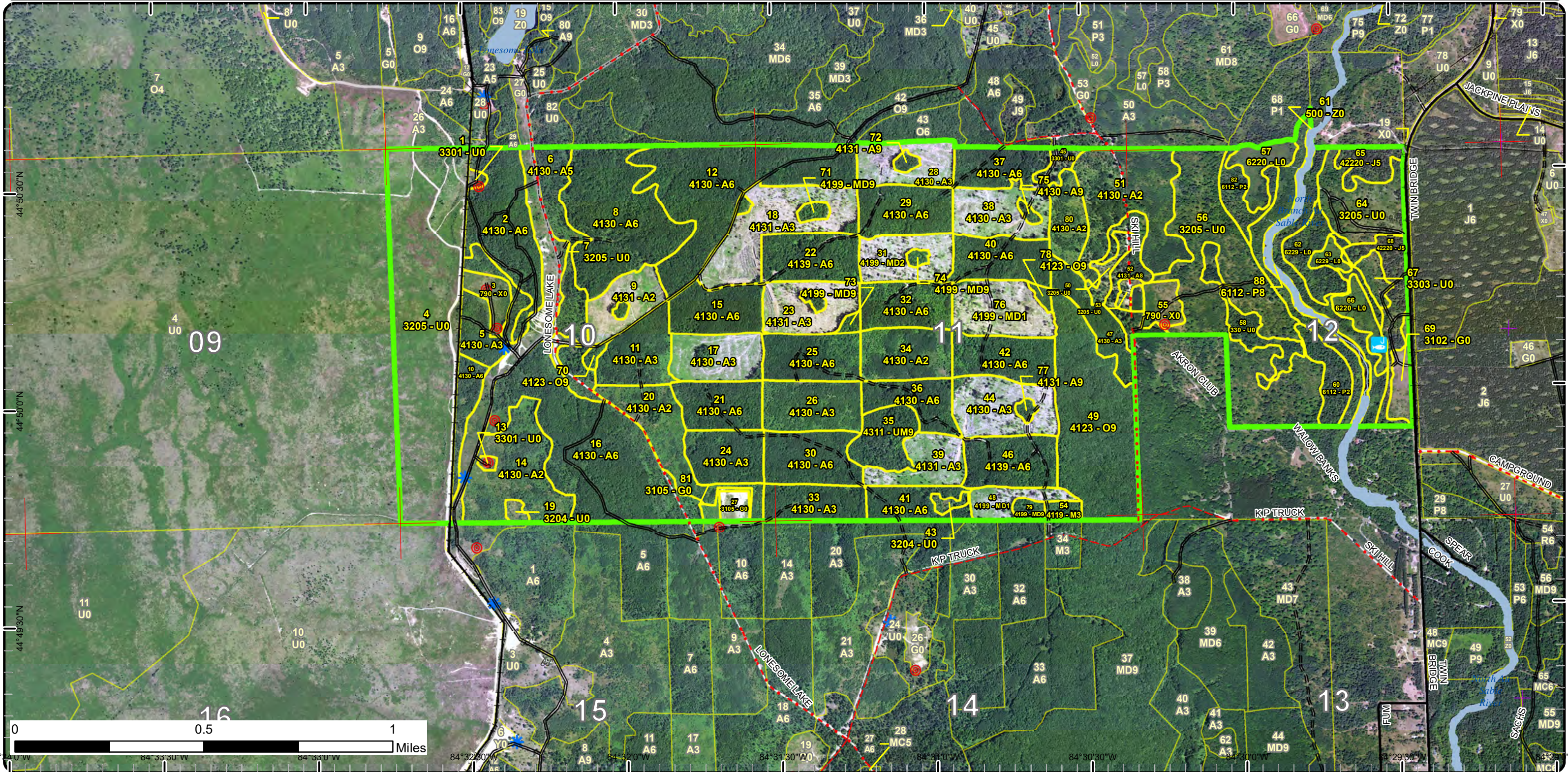


# Stand Boundary Map

Compartment: 268  
 T28N, R02W, Sec. 10-12  
 County: Crawford  
 Unit: Grayling  
 Mgmt Area: Camp Grayling  
 YO: 2024  
 Acres: 1554.1 GIS Calculated  
 Examiner: Derek Nellis  
 Map Revised: 12/27/2022  
 Map Phase: Post-Review



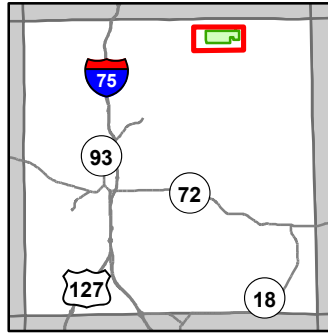
- Miris Corners
- Remonumented Section Corners
- Counties
- == DNR - Secondary Forest Road
- == DNR - Forest Access Route
- Federal / State / County - Paved Road
- - - County - Gravel Road
- - - County - Dirt Road (Seasonal)
- - - Private - Dirt / Gravel Road
- 🚶 Fishing Access Site
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- ⚡ Powerline
- Fence
- 🟩 Compartment Boundary
- 🟨 Stand Boundaries
- 500 - Water
- 622 - Lowland Shrub
- 790 - Other Bare/Sparsely Vegetated
- 🌸 Camp Grayling Monitoring Wells
- 👁️ Camp Grayling Observation Point
- 🔥 Camp Grayling Firing Point
- ⊗ Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail
- 🟩 Camp Grayling Range Area
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees



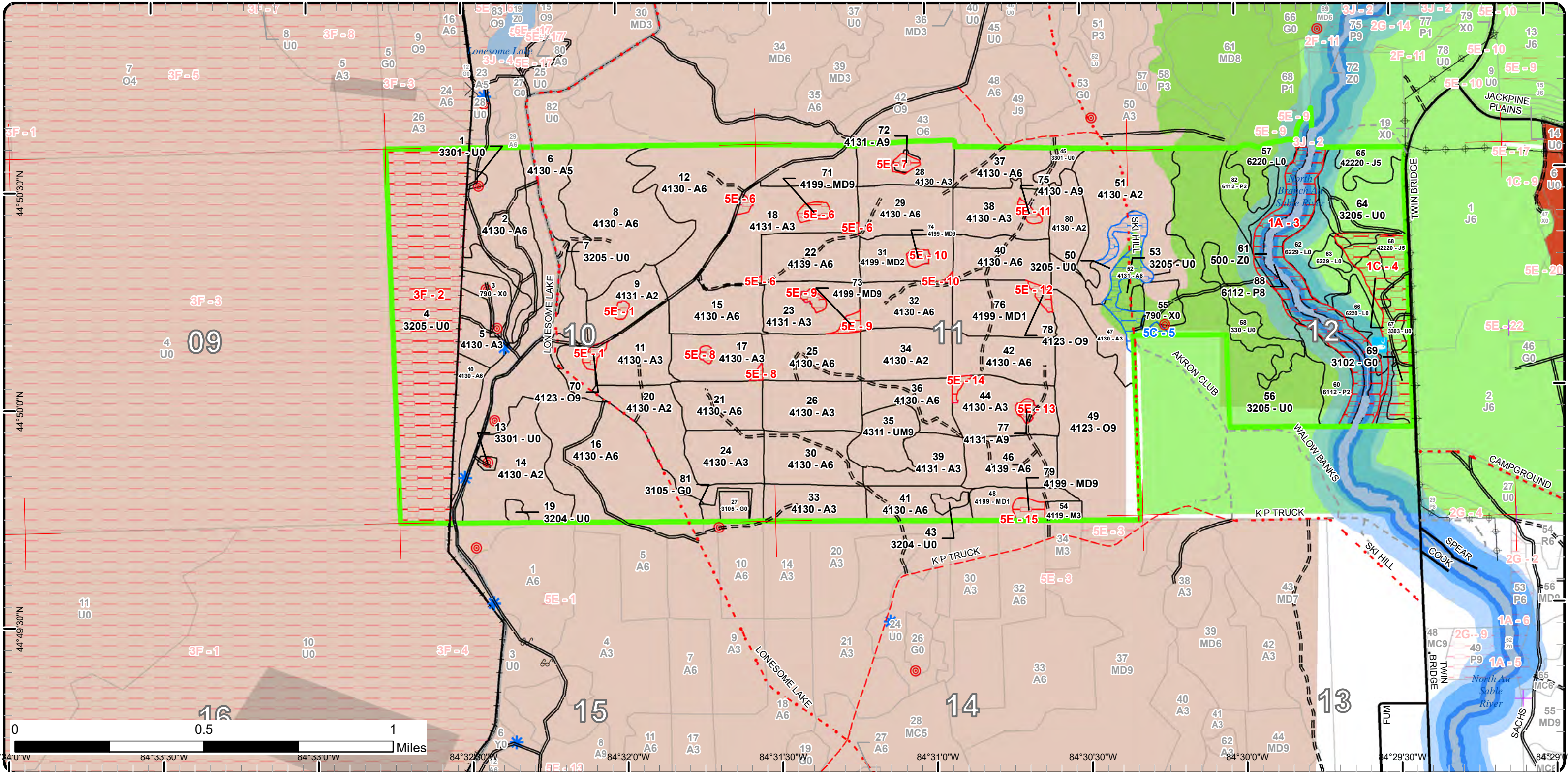
84° 32' 00" W 84° 33' 30" W 84° 32' 00" W 84° 31' 30" W 84° 30' 30" W 84° 29' 30" W

# Special Conservation Areas

Compartment: 268  
 T28N, R02W, Sec. 10-12  
 County: Crawford  
 Unit: Grayling  
 Mgmt Area: Camp Grayling  
 YOE: 2024  
 Acres: 1554.1 GIS Calculated  
 Examiner: Derek Nellis  
 Map Revised: 12/27/2022  
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Fishing Access Site
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Fence
- Compartment Boundary
- Available w/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable
- 1A: Federal/State/Local Law
- 1C: Other dept or div proc/practices
- 3F: Military easement / lease
- 5E: Long-Term Retention
- Stand Boundaries
- SCA
- Ecological Reference Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Kirtland Warbler Habitat
- Cold Water Streams
- High Priority Trout Stream Buffer
- Research, Development, and Military Lands
- Fishing Access Site
- \* Camp Grayling Monitoring Wells
- o Camp Grayling Observation Point
- o Camp Grayling Firing Point
- x Camp Grayling Gates
- Camp Grayling Fence
- Camp Grayling Tank Trail
- Camp Grayling Range Area



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	168	97	153	405	9	96	0	0	5	0	0	0	0	0	0	0	22	954
Bare/Sparsely Vegetated	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Herbaceous Openland	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Jack Pine	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	25
Low-Density Trees	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Lowland Aspen/Balsam Poplar	0	21	0	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	64
Lowland Shrub	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Mixed Upland Deciduous	0	51	0	0	0	0	0	3	8	0	0	0	0	0	0	0	0	0	62
Northern Hardwood	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Oak	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	0	0	0	67
Upland Mixed Forest	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	15
Upland Shrub	265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	265
Water	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
<b>Total</b>	<b>365</b>	<b>240</b>	<b>97</b>	<b>156</b>	<b>405</b>	<b>9</b>	<b>179</b>	<b>0</b>	<b>3</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>1555</b>



## Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2024

Acres of Harvest

Compartment 268

Total Compartment Acres: 1,554

Commercial Harvest - 145  
 Harvests with Site Condition - 0  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	82	0	0	0	0	0	0	0	0	82
Oak	63	0	0	0	0	0	0	0	0	63
<b>Total</b>	<b>145</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>145</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	145	0	0	0	0	38	0	14		196
Next Step	0	0	0	0	0	145	0	0		145
<b>Total</b>	<b>145</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>182</b>	<b>0</b>	<b>14</b>		<b>340</b>



S 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
-----------------------	----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

**Approved Treatments:**

6	72268006-Cut	27.1	4130 - Aspen	Poletimber Medium	53	1-50	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	No
<p><u>Prescription</u> Harvest all trees &gt;2"DBH. Standard retention. Include drumming tree spec, shrub protection for Hawthorne, and military specs. <u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u></p> <p><u>Acceptable</u> Moderately stocked aspen with other mixed deciduous. <u>Regen:</u></p> <p><u>Other</u> <u>Comment:</u></p> <p><u>Site Condition:</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											
8	72268008-Cut	54.5	4130 - Aspen	Poletimber Well	54	81-110	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Uneven- Aged	No
<p><u>Prescription</u> Harvest all trees &gt;2"DBH except do not harvest white oak and paper birch. Try to capture red oak pole component within area based retention. <u>Specs:</u> Drumming tree spec and military specs.</p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u></p> <p><u>Acceptable</u> Aspen with a mix of oak, maple, and birch for a moderately stocked stand. <u>Regen:</u></p> <p><u>Other</u> Steep and rolling terrain. use retention to help mitigate orv access. Look into including stand 32 to the north. <u>Comment:</u></p> <p><u>Site Condition:</u> <u>Proposed Start Date:</u> 10/1 /2023</p>											
27	72268027-NF	6.2	3105 - Mixed Upland Herbaceous	Nonstocked		Unspec ified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
<p><u>Prescription</u> Periodic opening maintenance as needed, that may include disking, chisel plowing, stump excavation, fertilizing, food plot seeding, no-till prairie <u>Specs:</u> grass seeding, mowing, and herbicide application. Also could include tree and shrub planting along the perimeter.</p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable</u> <u>Regen:</u></p> <p><u>Other</u> This opening is FP 221 and is part of the DNR/NWTF WHG project. <u>Comment:</u></p> <p><u>Site Condition:</u> <u>Proposed Start Date:</u> 8 /1 /2018</p>											





Standard

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

<b>49</b>	<b>72268049-Cut</b>	63.0	4123 - Red Oak	Sawtimber Well	85	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	No
-----------	---------------------	------	----------------	----------------	----	--------	---------	-------------------------	-------------------------------------	-----------	----

Prescription Specs: Harvest all trees >2"DBH. Steep ground on the north and east sides of the stand will be sold as a scaled sale. Inaccessible areas due to slope will be retention. Include military specs.

Next Step Treatments: Monitoring, Natural Regen (Re-Inventory)

Acceptable Regen: Mixed upland deciduous with a minimum of 20% oak.

Other Comment:

Site Condition:

Proposed Start Date: 10/1 /2023

<b>55</b>	<b>72268055-WLO</b>	7.3	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		No
-----------	---------------------	-----	-------------------------------------	------------	--	-------------	--------------	-----------------	---------------------------	--	----

Prescription Specs: 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.

Next Step Treatments:

Acceptable Regen:

Other Comment: This opening is FP 123 and is part of the DNR/NWTF WHG project.

Site Condition:

Proposed Start Date: 10/1 /2020

<b>62</b>	<b>72268062-Monitor</b>	13.7	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Monitoring	Natural Regen (Re-Inventory)	6112 - Lowland Aspen	Even-Aged	No
-----------	-------------------------	------	----------------------------	------------	---	-------------	------------	------------------------------	----------------------	-----------	----

Prescription Specs: check regen

Next Step Treatments:

Acceptable Regen: Lowland aspen and shrub cover on the floodplain, with mixed upland deciduous on the transition zone and upland edge.

Other Comment: Percent to Treat = 100%

Site Condition:

Proposed Start Date: 10/31/2022



S  
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
60 72268082-Monitor	24.0	6112 - Lowland Aspen	Sapling Medium	5	Immature	Monitoring	Natural Regen (Re-Inventory)	6112 - Lowland Aspen	Even-Aged	No
<p><u>Prescription</u> Additional regeneration within the proposed treatment boundary may be achieved through a Wildlife Division FTP; evaluate the need post-harvest. Natural regen survey. Natural regen goal is lowland aspen and shrub cover on the floodplain, with oak-aspen-mixed deciduous on the transition zone and upland edge.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> <u>Treatments:</u></p> <p><u>Acceptable Regen:</u> Lowland aspen and shrub cover on the floodplain, with mixed upland deciduous on the transition zone and upland edge.</p> <p><u>Other Comment:</u> Percent to Treat = 100%</p> <p><u>Site Condition:</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>										

Total Treatment Acreage Proposed: **195.8**

## Report 4 – Site Conditions

Grayling Mgt. Unit  
Derek Nellis : Examiner

Compartment: 268  
Year of Entry: 2024

### Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available
----------------	--------------------	-------------------------------	------------------------

### Dominant Site Conditions

5C	1A	1C	3F	3J	5E
----	----	----	----	----	----

955	933	14	8	Aspen	14			0			8
15	15	0	0	Bare/Sparsely Vegetated	0						
14	6	0	7	Herbaceous Openland			7				
25	9	0	16	Jack Pine			16				
24	19	0	5	Low-Density Trees			5	0			
64	29	0	35	Lowland Aspen/Balsam Poplar		32	1		2		
35	34	0	1	Lowland Shrub		1	0		0		
61	50	0	11	Mixed Upland Deciduous							11
3	3	0	0	Northern Hardwood							
67	63	0	4	Oak							4
15	15	0	0	Upland Mixed Forest							
265	152	0	113	Upland Shrub	0	1	1	111			
11	0	0	11	Water		11			0		
1,554	1,329	14	212	Total Forested Acres	14	45	31	111	2		23
	86%	1%	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	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention islands for stand 9's harvest (#605-14).</p>							
2	Unavailable	3F: Military easement / lease	111	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Part of Camp Grayling's fenced air-to-ground bombing Range 40 Complex.</p>							

## Report 4 – Site Conditions

Grayling Mgt. Unit  
Derek Nellis : Examiner

Compartment: 268  
Year of Entry: 2024

3	<b>Unavailable</b>	<b>1A: Federal/State/Local Law</b>	45	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Natural Rivers restricted cutting zone, 150 feet from the ordinary high water mark.							
4	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	33	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> see locked comments							
5	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	14	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Calculated covertime of aspen due to 40% benchmark in combined quaking and bigtooth coverage, but first age was on the red maple (35% cover and 66 years old) and second age was on the bigtooth aspen (20% cover and 47 years old). Generic silvicultural criteria flagged the stand based on the first age relative to the calculated aspen call. Keep this stand for next time. Adjacent aspen stands are 7 & 17 years old. See Stage 1 stand data & comments for the full picture.							
6	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Retention islands left for stand 18's harvest.							
7	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Retention island left for stand 28's harvest in 2016.							
8	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Retention islands left for stand 17's harvest in 2016.							

Report 4 – Site Conditions

Grayling Mgt. Unit  
Derek Nellis : Examiner

Compartment: 268  
Year of Entry: 2024

9	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention islands left for stand 23's harvest in 2016.</p>							
10	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention islands left for stand 31's harvest in 2016.</p>							
11	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention island left when for stand 38's harvest in 2016.</p>							
12	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention for the harvest of stand 49's NW peninsula in 2016 (now stand 76).</p>							
13	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention for stand 44's harvest in 2016.</p>							
14	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b></p>							
15	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p><b>Comments:</b> Retention left when stand 48 was harvested in 2016. Excluded an informal deer hunting campsite.</p>							

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

---



**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.

ERA = Ecological Reference Area  
HCVA = High Conservation Value Area  
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
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.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																										
1	3301 - Low Density Deciduous Trees	Nonstocked	1.3		Unspecified	Managed Opening	Military Firing Point 505 opening. Not currently flagged for clearing. Has scattered aspen poles and patches of A3, along with upland brush (prairie willow, black cherry).																																																										
2	4130 - Aspen	Poletimber Well	37.1	37	1-50	N/A	Cut merch & up by early 1985 under 72-039-84-01, except for an uncut buffer left around Firing Point 505 in the stand's NW and a steep hillside at the stand's far south end. Aspen, RM & oak regen from the cut is transitioning into the pole class. Residual from the cut is already well into the pole class. The residual was heaviest along the stand's west side, which is dominated by small-pole QA and WP. The stand's east half had less residual. A majority of stems there are still saplings, but there is enough canopy representation in pole-sized stems that the stand is classified pole overall by IFMAP rules. Hilly terrain. BTA, RM & oak are concentrated on the ridgetop, switching to QA on the lower slopes. Less than recordable amounts of RP saw/poles & paper birch. At the stand's far S peninsula there is an acre inclusion of mature oak that was left uncut at the top of a steep hill. Several hill-climb 2-tracks cut through that area, recorded as an RDR.																																																										
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Black/Red (Hybrid) Oak</td> <td>2</td> <td>Log</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>45</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>Black/Red (Hybrid) Oak</td> <td>6</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Red Maple</td> <td>10</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>White Oak</td> <td>2</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Quaking Aspen</td> <td>30</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>White Oak</td> <td>2</td> <td>Log</td> <td>12</td> <td></td> </tr> <tr> <td>White Pine</td> <td>3</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Black/Red (Hybrid) Oak	2	Log	12		Bigtooth Aspen	45	Sapling/Pole	4	37	Black/Red (Hybrid) Oak	6	Pole/Sapling	5	37	Red Maple	10	Sapling/Pole	4	37	White Oak	2	Pole/Sapling	5	37	Quaking Aspen	30	Sapling/Pole	4	37	White Oak	2	Log	12		White Pine	3	Pole/Sapling	6		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																													
Black/Red (Hybrid) Oak	2	Log	12																																																														
Bigtooth Aspen	45	Sapling/Pole	4	37																																																													
Black/Red (Hybrid) Oak	6	Pole/Sapling	5	37																																																													
Red Maple	10	Sapling/Pole	4	37																																																													
White Oak	2	Pole/Sapling	5	37																																																													
Quaking Aspen	30	Sapling/Pole	4	37																																																													
White Oak	2	Log	12																																																														
White Pine	3	Pole/Sapling	6																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																														
Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub																																																														
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																														
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																														
3	790 - Other Bare/Sparsely Vegetated	Nonstocked	7.5		Unspecified	Managed Opening	Military Firing Points 503 & 504. Cleared and expanded into one larger opening in 2011. New stand boundary not visible on the available imagery.																																																										
4	3205 - Mixed Upland Shrub	Nonstocked	111.2		Unspecified	No	Within Military's fenced air-to-ground bombing Range 40 Complex. Burns regularly. Portion of stand visible along the fence has upland brush with repeatedly set-back aspen, oak and red maple sprout regen, as well as widely-scattered oak saw. The steep hillside in the stand's far NE corner has a sub-acre pocket of mature oak.																																																										
5	4130 - Aspen	Sapling Well	17.3	27	Immature	N/A	Cut 2" & up in late 1994 under 72-024-94-01. On rolling-steep terrain. BTA, RM & oak concentrated on hilltop, switching to mostly QA on the lower slopes. Hypoxylon present in the QA, mostly on the lower terrain. Occasional RP, WP & paper birch saplings. In addition to the listed subcanopy species, there were non-recordable amounts of witchhazel, beaked hazelnut & dogwood. Previous YOE aspen SI 57.																																																										
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Bigtooth Aspen</td> <td>15</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Northern Pin Oak</td> <td>3</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Black Cherry</td> <td>2</td> <td>Sapling</td> <td>2</td> <td></td> </tr> <tr> <td>White Oak</td> <td>2</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Red Maple</td> <td>13</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Quaking Aspen</td> <td>65</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	15	Sapling	3	27	Northern Pin Oak	3	Sapling	3	27	Black Cherry	2	Sapling	2		White Oak	2	Sapling	3	27	Red Maple	13	Sapling	3	27	Quaking Aspen	65	Sapling	2	27	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Prairie Willow</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub	Prairie Willow	Low	< 5 feet	Tall Shrub														
Canopy Species	% Cover	Size Class	DBH	Age																																																													
Bigtooth Aspen	15	Sapling	3	27																																																													
Northern Pin Oak	3	Sapling	3	27																																																													
Black Cherry	2	Sapling	2																																																														
White Oak	2	Sapling	3	27																																																													
Red Maple	13	Sapling	3	27																																																													
Quaking Aspen	65	Sapling	2	27																																																													
Sub-Canopy Species	Density	Avg. Height	Size																																																														
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																														
Prairie Willow	Low	< 5 feet	Tall Shrub																																																														
6	4130 - Aspen	Poletimber Medium	27.1	53	1-50	N/A	Patchy, variable QA pole stand with U/G inclusions. Mostly in a valley, with a couple deep frost pocket depressions. In-growth resulted in a another age/size class of large saplings intermediate in the canopy (second age), and there are also scattered older cull saw aspen stems. Hypoxylon & black canker present. BTA mixes in along this stand's east side where it transitions onto better ground. Hawthorn concentrated along the road edges.																																																										
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>10</td> <td>Sapling</td> <td>3</td> <td>30</td> </tr> <tr> <td>Quaking Aspen</td> <td>85</td> <td>Pole</td> <td>7</td> <td>53</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>3</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Black Cherry</td> <td>2</td> <td>Pole</td> <td>6</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	10	Sapling	3	30	Quaking Aspen	85	Pole	7	53	Bigtooth Aspen	3	Pole	7		Black Cherry	2	Pole	6		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Prairie Willow</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Hawthorn (spp.)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Northern Pin Oak</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Low	Variable	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub	Prairie Willow	Low	< 5 feet	Tall Shrub	Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub	Northern Pin Oak	Low	Variable	Sapling												
Canopy Species	% Cover	Size Class	DBH	Age																																																													
Quaking Aspen	10	Sapling	3	30																																																													
Quaking Aspen	85	Pole	7	53																																																													
Bigtooth Aspen	3	Pole	7																																																														
Black Cherry	2	Pole	6																																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																														
Black Cherry	Low	Variable	Tall Shrub																																																														
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																														
Prairie Willow	Low	< 5 feet	Tall Shrub																																																														
Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub																																																														
Northern Pin Oak	Low	Variable	Sapling																																																														





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
7	3205 - Mixed Upland Shrub	Nonstocked	31.0		Unspecified	No	Cleared corridor along Lonesome Lake Road. Heavy to sweetfern, with patches of blackberry, cherry brush, prairie willow, hawthorn and aspen. Several sandy two-tracks cross through the corridor, including hill-climb runs associated with a documented RDR. Spotted knapweed is common in the degraded areas.																																																							
8	4130 - Aspen	Poletimber Well	54.5	54	81-110	N/A	Previous OI indicated a 1972 year of origin. Rolling terrain dissected with shallow valleys. BTA, NRO, & RM on the higher ground, QA on the lower terrain. Vigorous stump-origin oak clumps are generally weeded down to 1-3 clean poles, some pushing the small saw class, with co-dominant to dominant crown position. Oak residual from the regen cut are 12-16" DBH, scattered across stand as individual stems and in small patches. The harvest was likely spec'd merch & up, making for a slightly older residual class in the aspen, too. Occasional WP saps from the trace supercanopy WP seed source.																																																							
		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Oak</td> <td>8</td> <td>Pole</td> <td>7</td> <td>53</td> </tr> <tr> <td>White Oak</td> <td>2</td> <td>Log</td> <td>14</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>2</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>15</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>60</td> <td>Pole</td> <td>7</td> <td>54</td> </tr> <tr> <td>Red Oak</td> <td>3</td> <td>Log</td> <td>12</td> <td></td> </tr> <tr> <td>Red Maple</td> <td>10</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> </tbody> </table>			Canopy Species	% Cover	Size Class	DBH	Age	Red Oak	8	Pole	7	53	White Oak	2	Log	14		Paper Birch	2	Pole/Sapling	6		Quaking Aspen	15	Pole	7		Bigtooth Aspen	60	Pole	7	54	Red Oak	3	Log	12		Red Maple	10	Pole/Sapling	5		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Witch Hazel	Low	5 - 10 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Oak	8	Pole	7	53																																																										
White Oak	2	Log	14																																																											
Paper Birch	2	Pole/Sapling	6																																																											
Quaking Aspen	15	Pole	7																																																											
Bigtooth Aspen	60	Pole	7	54																																																										
Red Oak	3	Log	12																																																											
Red Maple	10	Pole/Sapling	5																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub																																																											
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																											
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																											
9	4131 - Aspen, Oak	Sapling Medium	15.7	6	Immature	N/A	Mature O-A-RM stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except the few pine and retention islands (new stand 70). Regen passed to M.O. at time of sale closing in 2019.																																																							
		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Oak</td> <td>20</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>White Oak</td> <td>5</td> <td>Sapling</td> <td>1</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>10</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>45</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Red Maple</td> <td>20</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> </tbody> </table>			Canopy Species	% Cover	Size Class	DBH	Age	Red Oak	20	Sapling	1	6	White Oak	5	Sapling	1		Quaking Aspen	10	Sapling	1	6	Bigtooth Aspen	45	Sapling	1	6	Red Maple	20	Sapling	1	6																												
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Oak	20	Sapling	1	6																																																										
White Oak	5	Sapling	1																																																											
Quaking Aspen	10	Sapling	1	6																																																										
Bigtooth Aspen	45	Sapling	1	6																																																										
Red Maple	20	Sapling	1	6																																																										
10	4130 - Aspen	Poletimber Well	9.4	44	51-80	N/A	Q aspen stand bordering the Range 40 fence. Most of the aspen stems have transitioned into the pole class, but there is swath of younger sapling/pole aspen (roughly a chain wide) included along the range fence, and large cull aspen widely scattered across the stand. Oak regen filling in below. Small wetland inclusion at S end (OFS point); ground close to water table at that end of the stand.																																																							
		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>100</td> <td>Pole/Sapling</td> <td>6</td> <td>44</td> </tr> </tbody> </table>			Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	100	Pole/Sapling	6	44	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Oak</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Sapling</td> </tr> <tr> <td>Northern Pin Oak</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Prairie Willow</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Oak	Low	< 5 feet	Sapling	Northern Pin Oak	Low	5 - 10 feet	Sapling	Black Cherry	Low	Variable	Tall Shrub	Prairie Willow	Low	< 5 feet	Tall Shrub																										
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Quaking Aspen	100	Pole/Sapling	6	44																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																											
White Oak	Low	< 5 feet	Sapling																																																											
Northern Pin Oak	Low	5 - 10 feet	Sapling																																																											
Black Cherry	Low	Variable	Tall Shrub																																																											
Prairie Willow	Low	< 5 feet	Tall Shrub																																																											
11	4130 - Aspen	Sapling Well	20.3	27	Immature	N/A	Cut 2" & up in late 1994 under 72-023-94-01. Dense aspen, RM & oak sprout regen from the cut, interspersed with small U inclusions. Maple-leaf viburnum concentrated on the better ground with the BTA.																																																							
		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>10</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Quaking Aspen</td> <td>50</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>32</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Black Cherry</td> <td>3</td> <td>Sapling</td> <td>2</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>5</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> </tbody> </table>			Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	10	Sapling	2	27	Quaking Aspen	50	Sapling	2	27	Bigtooth Aspen	32	Sapling	3	27	Black Cherry	3	Sapling	2		Red Oak	5	Sapling	2	27	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub						
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Maple	10	Sapling	2	27																																																										
Quaking Aspen	50	Sapling	2	27																																																										
Bigtooth Aspen	32	Sapling	3	27																																																										
Black Cherry	3	Sapling	2																																																											
Red Oak	5	Sapling	2	27																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub																																																											
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																											
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																											
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																											



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
12	4130 - Aspen	Poletimber Well	64.2	37	51-80	N/A	Cut merch & up by early 1985 under 72-039-84-01, and the east 20 acres under 72-255-84-01. Diffuse boundary between this stand and the adjacent to the west; the '84 harvest fingers into that stand and there was more residual left there. Aspen stand (mostly bigtooth) with red maple and oak components. There are traces of beech, hard maple & ironwood (concentrated in the east) and red pine (concentrated in the south). The residual from the cut is now large pole to small saw in size, while the majority regen from the cut is transitioning into the pole class. The red oak is generally vigorous, clean-boled and ahead of the aspen in diameter growth.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	13	Sapling/Pole	4	37	Beech	Low		Variable	Sapling
Red Oak	5	Pole/Sapling	6	37	Hazelnut (Beaked)	Low		5 - 10 feet	Tall Shrub
Paper Birch	2	Sapling/Pole	4	37	Witch Hazel	Medium		10 - 20 feet	Tall Shrub
Bigtooth Aspen	70	Pole/Sapling	5	37	Serviceberry (Juneberry)	Low		10 - 20 feet	Tall Shrub
Quaking Aspen	10	Pole/Sapling	5	37	Maple Leaved Viburnum	Low		< 5 feet	Tall Shrub
					Red Maple	Low	5 - 10 feet	Sapling	
13	3301 - Low Density Deciduous Trees	Nonstocked	1.1		Unspecified	Managed Opening	Military Firing Point 501 opening. Scattered aspen poles & regen, with cherry brush & serviceberry. Part of the Military's firing point clearing project; planned expansion boundary flagged but not yet cleared. Likely to happen this summer.		
14	4130 - Aspen	Sapling Medium	36.2	27	Immature	N/A	Cut 2" & up in late 1994 under 72-024-94-01, except for an uncut buffer left around Firing Point 501. Q aspen sapling clones separated by U/G inclusions, on rolling terrain with small frost pocket depressions. QA clones have varying vigor; both hypoxylon & black canker present, particularly along clone margins and on lower terrain position. Black cherry mixed in throughout, along with a trace of NP oak & RM regen from the cut. The FP 501 opening is flagged for clearing that will expand it into this stand, likely to be done this year.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Quaking Aspen	90	Sapling	2	27	Prairie Willow	Low		< 5 feet	Tall Shrub
Black Cherry	10	Sapling	1		Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
15	4130 - Aspen	Poletimber Well	19.9	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen stand transitioning into the pole class. Mostly BTA, with QA, RM & NRO components and some paper birch. While not a large component, the oak is vigorous, with stump clumps continuing to weed down to fewer stems.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	13	Sapling/Pole	3	37	Witch Hazel	Medium		10 - 20 feet	Tall Shrub
Red Oak	5	Pole/Sapling	6	37	Serviceberry (Juneberry)	Low		10 - 20 feet	Tall Shrub
Paper Birch	2	Sapling/Pole	4	37	Black Cherry	Low		Variable	Tall Shrub
Bigtooth Aspen	70	Pole/Sapling	5	37	Hazelnut (Beaked)	Low		5 - 10 feet	Tall Shrub
Quaking Aspen	10	Pole/Sapling	5	37	Maple Leaved Viburnum	Low		< 5 feet	Tall Shrub
16	4130 - Aspen	Poletimber Well	76.0	37	1-50	N/A	Cut merch & up in late 1984 under 72-040-84-01, except for an uncut buffer left around FP 502 in the stand's far SW peninsula. FP 502 is flagged for clearing & expansion that will create an acre-plus opening, taking most of the mature aspen from the old uncut buffer. Aspen transitioning into the pole class; enough there to make pole overall. Oak farther ahead; clumps weeding down nicely.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	10	Sapling/Pole	3	37	Witch Hazel	Medium		5 - 10 feet	Tall Shrub
Quaking Aspen	35	Sapling/Pole	4	37	Serviceberry (Juneberry)	Low		10 - 20 feet	Tall Shrub
Bigtooth Aspen	48	Pole/Sapling	5	37	Black Cherry	Low		Variable	Tall Shrub
Red Oak	7	Pole/Sapling	5	37	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	
17	4130 - Aspen	Sapling Well	19.5	6	Immature	N/A	Regen looks good, meets MO.		
Canopy Species	% Cover	Size Class	DBH	Age				Overmature aspen with mixed hdwds was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except two sub-acre retention islands that are inclusions within this stand. Did not visit this stand during sale closing, so monitoring treatment will be kept in place.	
Red Maple	15	Sapling	1	6					
Quaking Aspen	30	Sapling	1	6					
Bigtooth Aspen	50	Sapling	1	6					
Red Oak	5	Sapling	1	6					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																															
<b>18</b>	4131 - Aspen, Oak	Sapling Well	34.9	6	Immature	N/A	Mature O-A-RM stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, and retention islands (new stand 71 and two sub-acre inclusions in SE corners). The beech were left for future snags. Regen passed to M.O. at time of sale closing in 2019.																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Beech</td> <td>2</td> <td>Pole/Sap/Log</td> <td>6</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>1</td> <td>Log</td> <td>14</td> <td>85</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>50</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>1</td> <td>Log</td> <td>11</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>20</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Red Maple</td> <td>25</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>XLog/Log</td> <td>20</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Beech	2	Pole/Sap/Log	6		Red Oak	1	Log	14	85	Bigtooth Aspen	50	Sapling	1	6	Bigtooth Aspen	1	Log	11		Red Oak	20	Sapling	1	6	Red Maple	25	Sapling	1	6	Red Pine	1	XLog/Log	20																														
Canopy Species	% Cover	Size Class	DBH	Age																																																																		
Beech	2	Pole/Sap/Log	6																																																																			
Red Oak	1	Log	14	85																																																																		
Bigtooth Aspen	50	Sapling	1	6																																																																		
Bigtooth Aspen	1	Log	11																																																																			
Red Oak	20	Sapling	1	6																																																																		
Red Maple	25	Sapling	1	6																																																																		
Red Pine	1	XLog/Log	20																																																																			
<b>19</b>	3204 - Mast Producing Shrub	Nonstocked	1.9		Unspecified	No	Dry upland opening; prominently cherry brush, along with serviceberry & encroaching aspen.																																																															
<b>20</b>	4130 - Aspen	Sapling Medium	25.3	16	Immature	N/A	Cut merch & up in late 2005 under 72-062-04-01, except for a sub-acre retention pocket that has mostly mixed oak saw. Areas of the stand that were sparse to start with along the road saw some in-growth but are still largely U/G. Small pockets where the mature aspen had succumbed to fungal disease and broke up before harvest have sparse to no aspen suckering. Overall though, the stand does meet minimum acceptable regen standards. The merch & up cutting spec left a scattering of large sap/small pole aspen & oak. Heavy preferential deer browse on the RM & oak stump sprouts in the stand's NW, but not in the SE.																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Bigtooth Aspen</td> <td>25</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Black Cherry</td> <td>5</td> <td>Sapling</td> <td>1</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>5</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Quaking Aspen</td> <td>55</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Red Maple</td> <td>10</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Bigtooth Aspen	25	Sapling	1	16	Black Cherry	5	Sapling	1		Red Oak	5	Sapling	1	16	Quaking Aspen	55	Sapling	1	16	Red Maple	10	Sapling	1	16	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Prairie Willow</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Hawthorn (spp.)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Prairie Willow	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub	Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub	Witch Hazel	Low	< 5 feet	Tall Shrub																	
Canopy Species	% Cover	Size Class	DBH	Age																																																																		
Bigtooth Aspen	25	Sapling	1	16																																																																		
Black Cherry	5	Sapling	1																																																																			
Red Oak	5	Sapling	1	16																																																																		
Quaking Aspen	55	Sapling	1	16																																																																		
Red Maple	10	Sapling	1	16																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																			
Prairie Willow	Low	< 5 feet	Tall Shrub																																																																			
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																																			
Hawthorn (spp.)	Low	5 - 10 feet	Tall Shrub																																																																			
Witch Hazel	Low	< 5 feet	Tall Shrub																																																																			
<b>21</b>	4130 - Aspen	Poletimber Well	18.3	37	51-80	N/A	Cut merch & up in 1985 under 72-255-84-01. Still transitioning into the pole class. Stand has dense aspen clones with minor RM & RO components, separated by RM, RO & paper birch dominated areas with only minor aspen representation. Oak stems vigorous; some approaching small saw size. Start to see small amount of HM, beech & ironwood in the stand's east end.																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>20</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>Red Oak</td> <td>10</td> <td>Pole/Sapling</td> <td>6</td> <td>37</td> </tr> <tr> <td>Quaking Aspen</td> <td>30</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>37</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Paper Birch</td> <td>3</td> <td>Sapling/Pole</td> <td>3</td> <td>37</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	20	Sapling/Pole	4	37	Red Oak	10	Pole/Sapling	6	37	Quaking Aspen	30	Pole/Sapling	5	37	Bigtooth Aspen	37	Pole/Sapling	5	37	Paper Birch	3	Sapling/Pole	3	37	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Witch Hazel</td> <td>Medium</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Medium</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Witch Hazel	Medium	10 - 20 feet	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub	Black Cherry	Low	Variable	Tall Shrub	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Medium	< 5 feet	Tall Shrub													
Canopy Species	% Cover	Size Class	DBH	Age																																																																		
Red Maple	20	Sapling/Pole	4	37																																																																		
Red Oak	10	Pole/Sapling	6	37																																																																		
Quaking Aspen	30	Pole/Sapling	5	37																																																																		
Bigtooth Aspen	37	Pole/Sapling	5	37																																																																		
Paper Birch	3	Sapling/Pole	3	37																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																			
Witch Hazel	Medium	10 - 20 feet	Tall Shrub																																																																			
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																																			
Black Cherry	Low	Variable	Tall Shrub																																																																			
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																																																			
Maple Leaved Viburnum	Medium	< 5 feet	Tall Shrub																																																																			
<b>22</b>	4139 - Aspen, Mixed Deciduous	Poletimber Well	21.3	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen, red maple and oak with a mixed hardwood component. The stand is transitioning into the pole class, with much of the hardwood cover still sapling-sized. The aspen (mostly quaking) and oak are farthest into the pole category, with the red oak being the real stand-out in terms of growth & vigor. The hard maple & beech occur mostly in high stem density, stagnating stump clumps. There are small openings within the stand and scattered RP & WP.																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Sugar Maple</td> <td>10</td> <td>Sapling</td> <td>3</td> <td>37</td> </tr> <tr> <td>Red Maple</td> <td>15</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>Beech</td> <td>2</td> <td>Sapling</td> <td>2</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>15</td> <td>Pole/Sapling</td> <td>6</td> <td>37</td> </tr> <tr> <td>Paper Birch</td> <td>3</td> <td>Sapling/Pole</td> <td>3</td> <td>37</td> </tr> <tr> <td>Quaking Aspen</td> <td>50</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Ironwood</td> <td>2</td> <td>Sapling</td> <td>2</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>3</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Sugar Maple	10	Sapling	3	37	Red Maple	15	Sapling/Pole	4	37	Beech	2	Sapling	2		Red Oak	15	Pole/Sapling	6	37	Paper Birch	3	Sapling/Pole	3	37	Quaking Aspen	50	Pole/Sapling	5	37	Ironwood	2	Sapling	2		Bigtooth Aspen	3	Pole/Sapling	5	37	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub		
Canopy Species	% Cover	Size Class	DBH	Age																																																																		
Sugar Maple	10	Sapling	3	37																																																																		
Red Maple	15	Sapling/Pole	4	37																																																																		
Beech	2	Sapling	2																																																																			
Red Oak	15	Pole/Sapling	6	37																																																																		
Paper Birch	3	Sapling/Pole	3	37																																																																		
Quaking Aspen	50	Pole/Sapling	5	37																																																																		
Ironwood	2	Sapling	2																																																																			
Bigtooth Aspen	3	Pole/Sapling	5	37																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																			
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																																			
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																																																			
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																																			
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																																			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																															
23	4131 - Aspen, Oak	Sapling Well	19.3	6	Immature	N/A	Mature O-A-M stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, ash and retention islands. Beech and ash were left for future snags. Regen passed to M.O. at time of sale closing in 2019.																																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Beech</td> <td>3</td> <td>Pole/Sap/Log</td> <td>8</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>25</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>47</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> <tr> <td>Red Maple</td> <td>25</td> <td>Sapling</td> <td>1</td> <td>6</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Beech	3	Pole/Sap/Log	8		Red Oak	25	Sapling	1	6	Bigtooth Aspen	47	Sapling	1	6	Red Maple	25	Sapling	1	6																																																												
Canopy Species	% Cover	Size Class	DBH	Age																																																																																		
Beech	3	Pole/Sap/Log	8																																																																																			
Red Oak	25	Sapling	1	6																																																																																		
Bigtooth Aspen	47	Sapling	1	6																																																																																		
Red Maple	25	Sapling	1	6																																																																																		
24	4130 - Aspen	Sapling Well	18.2	27	Immature	N/A	Cut 2" & up in late 1994 under 72-029-94-01. West aspect, shallow slope leveling out. BTA & QA with RM & vigorous oak stump sprouts. A couple of U/G inclusions within the stand.																																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>35</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>50</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Red Maple</td> <td>10</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Red Oak</td> <td>5</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	35	Sapling	2	27	Bigtooth Aspen	50	Sapling	2	27	Red Maple	10	Sapling	2	27	Red Oak	5	Sapling	3	27	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																						
Canopy Species	% Cover	Size Class	DBH	Age																																																																																		
Quaking Aspen	35	Sapling	2	27																																																																																		
Bigtooth Aspen	50	Sapling	2	27																																																																																		
Red Maple	10	Sapling	2	27																																																																																		
Red Oak	5	Sapling	3	27																																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																																			
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																																																			
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																																																			
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																																																			
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																																																																			
25	4130 - Aspen	Poletimber Well	20.8	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Sprout/root-sucker origin stems transitioning into the pole class. BTA & QA with RM, HM, PB & clean-boled NRO. The oak is vigorous, & stump clumps are weeding down nicely. Stand's east third transitions into less aspen & more low-end hardwoods. HM & beech not growing as vigorous as the rest. Basswood & white ash primarily on the east half.																																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Sugar Maple</td> <td>13</td> <td>Sapling</td> <td>3</td> <td>37</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>35</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> <tr> <td>Red Maple</td> <td>6</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>Ironwood</td> <td>2</td> <td>Sapling</td> <td>3</td> <td></td> </tr> <tr> <td>White Ash</td> <td>2</td> <td>Sapling</td> <td>4</td> <td>37</td> </tr> <tr> <td>Beech</td> <td>3</td> <td>Sapling</td> <td>3</td> <td>37</td> </tr> <tr> <td>Red Oak</td> <td>10</td> <td>Pole/Sapling</td> <td>6</td> <td>37</td> </tr> <tr> <td>Paper Birch</td> <td>2</td> <td>Sapling/Pole</td> <td>4</td> <td>37</td> </tr> <tr> <td>Basswood</td> <td>2</td> <td>Sapling</td> <td>4</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>25</td> <td>Pole/Sapling</td> <td>5</td> <td>37</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Sugar Maple	13	Sapling	3	37	Bigtooth Aspen	35	Pole/Sapling	5	37	Red Maple	6	Sapling/Pole	4	37	Ironwood	2	Sapling	3		White Ash	2	Sapling	4	37	Beech	3	Sapling	3	37	Red Oak	10	Pole/Sapling	6	37	Paper Birch	2	Sapling/Pole	4	37	Basswood	2	Sapling	4		Quaking Aspen	25	Pole/Sapling	5	37	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Beech</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Beech	Low	Variable	Sapling				
Canopy Species	% Cover	Size Class	DBH	Age																																																																																		
Sugar Maple	13	Sapling	3	37																																																																																		
Bigtooth Aspen	35	Pole/Sapling	5	37																																																																																		
Red Maple	6	Sapling/Pole	4	37																																																																																		
Ironwood	2	Sapling	3																																																																																			
White Ash	2	Sapling	4	37																																																																																		
Beech	3	Sapling	3	37																																																																																		
Red Oak	10	Pole/Sapling	6	37																																																																																		
Paper Birch	2	Sapling/Pole	4	37																																																																																		
Basswood	2	Sapling	4																																																																																			
Quaking Aspen	25	Pole/Sapling	5	37																																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																																			
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																																																																			
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																																																			
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																																																			
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																																																			
Beech	Low	Variable	Sapling																																																																																			
26	4130 - Aspen	Sapling Well	22.3	16	Immature	N/A	Cut merch & up in early 2006 under 72-062-04-01. High-end aspen site; predominantly BTA with RM, QA, oak, and a northern hardwood component. Light browse, majority of stems punched past the browse line. Oak growth impressive; dominant stems in clumps are over 8 feet tall; above the aspen in places.																																																																															
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>10</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Black/Red (Hybrid) Oak</td> <td>8</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>51</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Black Cherry</td> <td>3</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Sugar Maple</td> <td>5</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Ironwood</td> <td>3</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Red Maple</td> <td>15</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>White Ash</td> <td>2</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> <tr> <td>Beech</td> <td>3</td> <td>Sapling</td> <td>1</td> <td>16</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	10	Sapling	1	16	Black/Red (Hybrid) Oak	8	Sapling	1	16	Bigtooth Aspen	51	Sapling	1	16	Black Cherry	3	Sapling	1	16	Sugar Maple	5	Sapling	1	16	Ironwood	3	Sapling	1	16	Red Maple	15	Sapling	1	16	White Ash	2	Sapling	1	16	Beech	3	Sapling	1	16	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Hazelnut (Beaked)</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Witch Hazel</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Medium</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub	Witch Hazel	Low	< 5 feet	Tall Shrub	Maple Leaved Viburnum	Medium	< 5 feet	Tall Shrub																	
Canopy Species	% Cover	Size Class	DBH	Age																																																																																		
Quaking Aspen	10	Sapling	1	16																																																																																		
Black/Red (Hybrid) Oak	8	Sapling	1	16																																																																																		
Bigtooth Aspen	51	Sapling	1	16																																																																																		
Black Cherry	3	Sapling	1	16																																																																																		
Sugar Maple	5	Sapling	1	16																																																																																		
Ironwood	3	Sapling	1	16																																																																																		
Red Maple	15	Sapling	1	16																																																																																		
White Ash	2	Sapling	1	16																																																																																		
Beech	3	Sapling	1	16																																																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																																																			
Hazelnut (Beaked)	Low	< 5 feet	Tall Shrub																																																																																			
Witch Hazel	Low	< 5 feet	Tall Shrub																																																																																			
Maple Leaved Viburnum	Medium	< 5 feet	Tall Shrub																																																																																			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
27	3105 - Mixed Upland Herbaceous	Nonstocked	4.0		Unspecified	Managed Opening	Barren area of firing point.  Military Firing Point 221 opening. East side cleared & expanded in 2011. Uncleared west side has cherry & willow brush. New stand boundary not visible on the available imagery.
28	4130 - Aspen	Sapling Well	17.4	6	Immature	N/A	Overmature BTA with RO & mixed hdwds was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech and a retention island (new stand 72). The beech were left for future snags. Regen passed to M.O. at time of sale closing in 2019.
		<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	
		Beech	5	Pole/Sap/Log	8		
		Red Maple	10	Sapling	1	6	
		Red Oak	10	Sapling	1	6	
		Bigtooth Aspen	70	Sapling	1	6	
		White Oak	5	Sapling	1	6	
29	4130 - Aspen	Poletimber Well	21.1	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen (mostly bigtooth), with vigorous oak, the usual RM, and poor-quality northern hardwoods. The hard maple and small amounts of paper birch, basswood, white ash and beech tend toward high stem densities and small diameters. On rolling terrain. Staghorn sumac concentrated along the two-track.
		<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	
		Sugar Maple	5	Sapling/Pole	3	37	
		Red Maple	10	Sapling/Pole	3	37	
		Red Oak	15	Pole/Sapling	6	37	
		Bigtooth Aspen	66	Sapling/Pole	4	37	
		Ironwood	2	Sapling/Pole	3		
		Paper Birch	2	Sapling/Pole	3	37	
		<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		Witch Hazel	Low	5 - 10 feet	Tall Shrub		
		Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub		
30	4130 - Aspen	Poletimber Well	22.0	36	1-50	N/A	Cut merch & up in 1986 under 72-255-84-01. Rolling terrain. Better ground, start seeing beech, sugar maple, ironwood. Aspen, RM & oak transitioning into the pole class. Oak stump sprouts vigorous, co-dominant to dominant in the canopy.
		<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	
		Sugar Maple	2	Sapling	3	36	
		Red Maple	7	Sapling/Pole	3	36	
		Beech	2	Sapling	3	36	
		Red Oak	7	Pole/Sapling	5	36	
		Paper Birch	2	Sapling/Pole	4	36	
		Quaking Aspen	30	Pole/Sapling	5	36	
		Bigtooth Aspen	50	Pole/Sapling	5	36	
		<b>Sub-Canopy Species</b>	<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>		
		Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub		
		Witch Hazel	Medium	5 - 10 feet	Tall Shrub		
		Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub		
31	4199 - Other Mixed Upland Deciduous	Sapling Medium	17.7	6	Immature	N/A	Mature O-M stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, ash, white oak, green-marked trees and retention islands (largest captured as new stand 74). The beech & ash were left for future snags. Regen passed to M.O. at time of sale closing in 2019.
		<b>Canopy Species</b>	<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	
		Sugar Maple	10	Sapling	1	6	
		Red Maple	20	Sapling	1	6	
		Basswood	10	Sapling	1	6	
		Red Oak	39	Sapling	1	6	
		Red Oak	1	XLog/Log	20		
		Bigtooth Aspen	10	Sapling	1	6	
		Beech	10	Pole/Sap/Log	8		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments		
<b>32</b>	4130 - Aspen	Poletimber Well	19.2	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Still transitioning into the pole class, with the aspen and oak farther along than the northern hardwoods component. The hardwoods (sugar maple with small amounts of white ash, paper birch, ironwood, basswood & beech) tend toward high stem densities and small diameters. The real stand-out in terms of growth and vigor is the red oak. Within the stand, the oak form is the best where it is growing in association with the aspen (vs. the northern hardwoods); the aspen trains it to grow straighter, taller and cleaner-boled.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Bigtooth Aspen	25	Pole/Sapling	5	37	Serviceberry (Juneberry)	Low		Variable	Tall Shrub
Sugar Maple	18	Sapling/Pole	2	37					
Red Maple	2	Sapling/Pole	3	37					
Red Oak	10	Pole/Sapling	6	37					
White Ash	5	Sapling/Pole	3	37					
Paper Birch	2	Sapling/Pole	3	37					
Quaking Aspen	35	Pole/Sapling	5	37					
Ironwood	3	Sapling	2	37					
<b>33</b>	4130 - Aspen	Sapling Well	16.6	27	Immature	N/A	Cut 2" & up in late 1994 under 72-029-94-01. Rolling terrain. Aspen (mostly BTA) with RM, oak & a trace of PB. Oak stump sprouts are vigorous and co-dominant to dominant in the canopy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Maple	5	Sapling	2	27	Hazelnut (Beaked)	Low		5 - 10 feet	Tall Shrub
Quaking Aspen	20	Sapling	2	27	Maple Leaved Viburnum	Low		< 5 feet	Tall Shrub
Bigtooth Aspen	70	Sapling	2	27	Witch Hazel	Low		5 - 10 feet	Tall Shrub
Red Oak	5	Sapling/Pole	3	27	Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
<b>34</b>	4130 - Aspen	Sapling Medium	21.2	16	Immature	N/A	Cut merch & up in early 2006 under 72-062-04-01. Aspen (mostly quaking) with red maple and a northern hardwoods component. The stand's NW is heavy to low-end hardwoods & blackberry, with vigorous oak stump sprouts well above the browse line. There is light browse overall, with the exception of the low hill in the stand's SE, where the sparse oak stump clumps have been heavily browsed. Regen in the stand's SE is not as dense or tall as the rest, but continues to fill in. The QA clones are expanding into the lower-coverage hardwood areas of the stand.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Oak	5	Sapling	1	16	Hazelnut (Beaked)	Low		< 5 feet	Tall Shrub
Black Cherry	5	Sapling	1	16	Blackberry/Raspberry	Medium		< 5 feet	Tall Shrub
Bigtooth Aspen	5	Sapling	1	16	Serviceberry (Juneberry)	Low		5 - 10 feet	Tall Shrub
Red Maple	8	Sapling	1	16	Beech	Low		< 5 feet	Seeding
Beech	8	Sapling	1	16					
Quaking Aspen	55	Sapling	1	16					
Ironwood	4	Sapling	1	16					
Sugar Maple	10	Sapling	1	16					
<b>35</b>	4311 - Pine, Aspen Mix	Sawtimber Well	15.3	57	51-80	N/A	White Pine with significant deciduous component (aspen, RM, PB & oak, with off-site HM, beech & ironwood). Seven acres that landed in the adjacent 20-acre grouse blocks were cut merch & up in 1985 under 72-255-84-01 and are pole/sapling in size and intermediate in the canopy (second age). A lot of cull in the mature-overmature aspen & PB. Saw oak wolfy.		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density		Avg. Height	Size
Red Oak	2	Pole/Sapling	6	37	Maple Leaved Viburnum	Low		< 5 feet	Tall Shrub
Red Oak	3	Log	16		Serviceberry (Juneberry)	Medium		Variable	Tall Shrub
Paper Birch	3	Log	12		Red Maple	Low		>20 feet	Sapling
Quaking Aspen	25	Pole/Sap/Log	8		Beech	Low		10 - 20 feet	Sapling
Sugar Maple	2	Log/Pole	12		Ironwood	Low		10 - 20 feet	Sapling
Bigtooth Aspen	7	Log/Pole	10		Witch Hazel	Low		5 - 10 feet	Tall Shrub
Red Maple	3	Log	12		Hazelnut (Beaked)	Medium		5 - 10 feet	Tall Shrub
Beech	2	Pole	6		White Pine	Medium		Variable	Sapling
Sugar Maple	3	Pole/Sapling	5	37					
White Pine	50	Log/Pole	12	57					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments	
36	4130 - Aspen	Poletimber Well	15.9	37	51-80	N/A	Cut merch & up in 1985 under 72-255-84-01. Still transitioning into the pole class. Aspen with good quality oak and low-end hardwoods, including a trace of basswood & white ash. The oak is clean-boled & vigorous. A few white pine present. See Management Considerations.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Beech		3	Pole/Sapling	5		Beech		
Red Oak		6	Pole/Sapling	6	37	Low		
Quaking Aspen		55	Pole/Sapling	5	37	Variable		
White Pine		2	Log/Pole	12		Tall Shrub		
Ironwood		2	Sapling	3		5 - 10 feet		
Sugar Maple		10	Sapling/Pole	4	37	Tall Shrub		
Red Maple		7	Pole/Sapling	5	37			
Bigtooth Aspen		15	Pole/Sapling	5	37			
37	4130 - Aspen	Poletimber Well	16.6	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen stand still transitioning into the pole class. BTA with vigorous NRO, and the usual red maple. Stand is on shallow ridge/valley terrain sloping down to the east. The quaking aspen is mostly in the stand's east on the flats where the cover is patchier. Some WP also occurs in the stand's NE. The better ground is in the west, with traces of hard maple, paper birch, and beech.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Sugar Maple		2	Sapling	2	37	Serviceberry (Juneberry)		
Red Maple		8	Sapling/Pole	4	37	Low		
Red Oak		5	Pole/Sapling	5	37	Medium		
Bigtooth Aspen		80	Pole/Sapling	5	37	5 - 10 feet		
Quaking Aspen		5	Pole/Sapling	5	37	Tall Shrub		
38	4130 - Aspen	Sapling Well	20.3	6	Immature	N/A	Overmature aspen with O-RM was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, white oak, green-marked trees and retention islands (new stand 75). Regen passed to M.O. at time of sale closing in 2019.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Red Maple		20	Sapling	1	6	White Pine		
Red Oak		1	XLog/Log	20		Low		
Red Oak		14	Sapling	1	6	Variable		
Bigtooth Aspen		65	Sapling	1	6	Sapling		
39	4131 - Aspen, Oak	Sapling Well	16.4	6	Immature	N/A	Overmature A-M stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, and white oak. The beech were left for future snags. Regen passed to M.O. at time of sale closing in 2019.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Red Maple		10	Sapling	1	6			
Beech		1	Pole/Sap/Log	8				
Red Oak		20	Sapling	1	6			
White Pine		4	Pole/Sap/Log	8				
Bigtooth Aspen		65	Sapling	1	6			
40	4130 - Aspen	Poletimber Well	19.4	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen stand still transitioning into the pole class, with some clones farther along than others. The maple, beech and paper birch tend toward high stem densities and low diameters. The RO is vigorous and weeding down to fewer stems per clump. See Management Considerations.	
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>		
Red Maple		8	Sapling/Pole	4	37	Hazelnut (Beaked)		
Red Oak		7	Pole/Sapling	5	37	Low		
Quaking Aspen		3	Sapling/Pole	4	37	5 - 10 feet		
Bigtooth Aspen		80	Pole/Sapling	5	37	Tall Shrub		
Sugar Maple		2	Sapling	2	37	Witch Hazel		
						Serviceberry (Juneberry)		
						Low		
						5 - 10 feet		
						Tall Shrub		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																									
41	4130 - Aspen	Poletimber Well	14.0	36	51-80	N/A	Cut merch & up in 1986 under 72-255-84-01. Rolling terrain. Aspen transitioning into the pole class. Highest ground with predominantly BTA, switching to QA on lower slopes. RM & oak stump-origin associates. Oak vigorous & weeding down to fewer stems. A trace of beech, sugar maple & ironwood on the higher ground.																																																									
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Sugar Maple</td><td>2</td><td>Sapling</td><td>3</td><td>36</td></tr> <tr><td>Red Maple</td><td>8</td><td>Sapling/Pole</td><td>4</td><td>36</td></tr> <tr><td>Beech</td><td>2</td><td>Sapling</td><td>3</td><td>36</td></tr> <tr><td>Bigtooth Aspen</td><td>55</td><td>Pole/Sapling</td><td>5</td><td>36</td></tr> <tr><td>Pin Cherry</td><td>2</td><td>Sapling/Pole</td><td>3</td><td></td></tr> <tr><td>Black/Red (Hybrid) Oak</td><td>6</td><td>Pole/Sapling</td><td>6</td><td>36</td></tr> <tr><td>Quaking Aspen</td><td>25</td><td>Sapling/Pole</td><td>4</td><td>36</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Sugar Maple	2	Sapling	3	36	Red Maple	8	Sapling/Pole	4	36	Beech	2	Sapling	3	36	Bigtooth Aspen	55	Pole/Sapling	5	36	Pin Cherry	2	Sapling/Pole	3		Black/Red (Hybrid) Oak	6	Pole/Sapling	6	36	Quaking Aspen	25	Sapling/Pole	4	36	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Hazelnut (Beaked)</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Maple Leaved Viburnum</td><td>Low</td><td>&lt; 5 feet</td><td>Tall Shrub</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>10 - 20 feet</td><td>Tall Shrub</td></tr> <tr><td>Witch Hazel</td><td>Medium</td><td>10 - 20 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub	Witch Hazel	Medium	10 - 20 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Sugar Maple	2	Sapling	3	36																																																												
Red Maple	8	Sapling/Pole	4	36																																																												
Beech	2	Sapling	3	36																																																												
Bigtooth Aspen	55	Pole/Sapling	5	36																																																												
Pin Cherry	2	Sapling/Pole	3																																																													
Black/Red (Hybrid) Oak	6	Pole/Sapling	6	36																																																												
Quaking Aspen	25	Sapling/Pole	4	36																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub																																																													
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																													
Serviceberry (Juneberry)	Low	10 - 20 feet	Tall Shrub																																																													
Witch Hazel	Medium	10 - 20 feet	Tall Shrub																																																													
42	4130 - Aspen	Poletimber Well	20.2	37	1-50	N/A	Cut merch & up in 1985 under 72-255-84-01. Aspen-maple-oak stand still transitioning into the pole class, with the BTA and RO farthest along. The mixed hardwoods (red and sugar maple, with small amounts of beech, ironwood, paper birch, white ash & basswood) are still solidly in the sapling class. The RO is vigorous and is weeding down the # stems/stump clump faster than the maple.																																																									
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Bigtooth Aspen</td><td>65</td><td>Sapling/Pole</td><td>4</td><td>37</td></tr> <tr><td>Quaking Aspen</td><td>2</td><td>Sapling/Pole</td><td>4</td><td>37</td></tr> <tr><td>Sugar Maple</td><td>4</td><td>Sapling</td><td>2</td><td>37</td></tr> <tr><td>Beech</td><td>2</td><td>Sapling</td><td>3</td><td>37</td></tr> <tr><td>Red Oak</td><td>10</td><td>Pole/Sapling</td><td>5</td><td>37</td></tr> <tr><td>Ironwood</td><td>2</td><td>Sapling</td><td>2</td><td></td></tr> <tr><td>Red Maple</td><td>15</td><td>Sapling</td><td>3</td><td>37</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	65	Sapling/Pole	4	37	Quaking Aspen	2	Sapling/Pole	4	37	Sugar Maple	4	Sapling	2	37	Beech	2	Sapling	3	37	Red Oak	10	Pole/Sapling	5	37	Ironwood	2	Sapling	2		Red Maple	15	Sapling	3	37	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Witch Hazel</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub								
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Bigtooth Aspen	65	Sapling/Pole	4	37																																																												
Quaking Aspen	2	Sapling/Pole	4	37																																																												
Sugar Maple	4	Sapling	2	37																																																												
Beech	2	Sapling	3	37																																																												
Red Oak	10	Pole/Sapling	5	37																																																												
Ironwood	2	Sapling	2																																																													
Red Maple	15	Sapling	3	37																																																												
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																													
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																													
43	3204 - Mast Producing Shrub	Nonstocked	2.1		Unspecified	No	Valley opening. Serviceberry, hawthorn, cherry & staghorn sumac with encroaching maple & aspen.																																																									
44	4130 - Aspen	Sapling Well	24.3	6	Immature	N/A	Mature A-O stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, ash, white oak, green-marked trees and retention islands (largest captured as new stand 77). The beech & ash were left for future snags. Regen passed to M.O. at time of sale closing in 2019.																																																									
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>10</td><td>Sapling</td><td>1</td><td>6</td></tr> <tr><td>Beech</td><td>2</td><td>Pole/Sap/Log</td><td>8</td><td></td></tr> <tr><td>Red Oak</td><td>2</td><td>Log/XLog</td><td>16</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>1</td><td>Log</td><td>11</td><td>81</td></tr> <tr><td>Bigtooth Aspen</td><td>75</td><td>Sapling</td><td>1</td><td>6</td></tr> <tr><td>Red Oak</td><td>10</td><td>Sapling</td><td>1</td><td>6</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	10	Sapling	1	6	Beech	2	Pole/Sap/Log	8		Red Oak	2	Log/XLog	16		Bigtooth Aspen	1	Log	11	81	Bigtooth Aspen	75	Sapling	1	6	Red Oak	10	Sapling	1	6																											
Canopy Species	% Cover	Size Class	DBH	Age																																																												
Red Maple	10	Sapling	1	6																																																												
Beech	2	Pole/Sap/Log	8																																																													
Red Oak	2	Log/XLog	16																																																													
Bigtooth Aspen	1	Log	11	81																																																												
Bigtooth Aspen	75	Sapling	1	6																																																												
Red Oak	10	Sapling	1	6																																																												
45	3301 - Low Density Deciduous Trees	Nonstocked	4.2		Unspecified	No	Heavy military use along forest access route.  On the flats; low density trees with mast producing shrubs. Mostly hybridized black/red oak with open-grown form (large-diameter, heavy limbs, low forks). Similar stature oak cut in the adjacent stand to the south were 120+ years old with interior cavities, and they did not stump sprout. Occasional red maple, white oak and aspen. Sweet fern and bracken fern visible above the snow.																																																									
		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Black Cherry</td><td>Low</td><td></td><td>Tall Shrub</td></tr> <tr><td>Red Maple</td><td>Trace</td><td></td><td>Pole</td></tr> <tr><td>White Oak</td><td>Trace</td><td></td><td>Pole</td></tr> <tr><td>Prairie Willow</td><td>Low</td><td></td><td>Tall Shrub</td></tr> <tr><td>Black/Red (Hybrid) Oak</td><td>Low</td><td></td><td>Log</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Medium</td><td></td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height		Size	Black Cherry	Low		Tall Shrub	Red Maple	Trace		Pole	White Oak	Trace		Pole	Prairie Willow	Low		Tall Shrub	Black/Red (Hybrid) Oak	Low		Log	Serviceberry (Juneberry)	Medium		Tall Shrub																																
Sub-Canopy Species	Density	Avg. Height	Size																																																													
Black Cherry	Low		Tall Shrub																																																													
Red Maple	Trace		Pole																																																													
White Oak	Trace		Pole																																																													
Prairie Willow	Low		Tall Shrub																																																													
Black/Red (Hybrid) Oak	Low		Log																																																													
Serviceberry (Juneberry)	Medium		Tall Shrub																																																													





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																					
<b>46</b>	4139 - Aspen, Mixed Deciduous	Poletimber Well	21.3	36	1-50	N/A	Cut merch & up in 1986 under 72-255-84-01. Still transitioning into the pole class, east half of the stand not as far along as the west half. Cover varies from dense aspen clones with maple & oak mixed in, to maple & oak dominated areas with aspen mixed in. The hard maple & beech tend to be small-diameter with high stem densities. The oak stems are the real stand-out: vigorous & clean-boled, jumping ahead of the maple. Occasional PB, WP & white ash saplings. See Management Considerations.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Bigtooth Aspen</td><td>25</td><td>Pole/Sapling</td><td>5</td><td>36</td></tr> <tr><td>Ironwood</td><td>2</td><td>Sapling</td><td>2</td><td></td></tr> <tr><td>Sugar Maple</td><td>15</td><td>Sapling</td><td>3</td><td>36</td></tr> <tr><td>Red Oak</td><td>15</td><td>Pole/Sapling</td><td>6</td><td>36</td></tr> <tr><td>Red Maple</td><td>15</td><td>Sapling</td><td>3</td><td>36</td></tr> <tr><td>Quaking Aspen</td><td>25</td><td>Pole/Sapling</td><td>5</td><td>36</td></tr> <tr><td>Beech</td><td>3</td><td>Sapling</td><td>2</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	25	Pole/Sapling	5	36	Ironwood	2	Sapling	2		Sugar Maple	15	Sapling	3	36	Red Oak	15	Pole/Sapling	6	36	Red Maple	15	Sapling	3	36	Quaking Aspen	25	Pole/Sapling	5	36	Beech	3	Sapling	2		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Witch Hazel</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Black Cherry	Low	Variable	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Bigtooth Aspen	25	Pole/Sapling	5	36																																																								
Ironwood	2	Sapling	2																																																									
Sugar Maple	15	Sapling	3	36																																																								
Red Oak	15	Pole/Sapling	6	36																																																								
Red Maple	15	Sapling	3	36																																																								
Quaking Aspen	25	Pole/Sapling	5	36																																																								
Beech	3	Sapling	2																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																									
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																									
Black Cherry	Low	Variable	Tall Shrub																																																									
<b>47</b>	4130 - Aspen	Sapling Well	14.6	17	Immature	N/A	Split from stand 80. Higher density aspen regen.  Cut merch & up in 2005 under 72-062-04-01. Mostly BTA, along with RM, oak, quaking aspen and cherry. The stand's south half has dense aspen cover but the north half is patchier, bringing the overall canopy closure down to 50-75%. The aspen in the north half is not a well-developed, with sub-acre pockets that had sparse sprouting and heavy browse. The oak that has recruited is 8' tall and vigorous.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Quaking Aspen</td><td>5</td><td>Sapling</td><td>1</td><td>17</td></tr> <tr><td>Bigtooth Aspen</td><td>85</td><td>Sapling</td><td>1</td><td>17</td></tr> <tr><td>Red Maple</td><td>5</td><td>Sapling</td><td>1</td><td>17</td></tr> <tr><td>Red Oak</td><td>5</td><td>Sapling</td><td>1</td><td>17</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	5	Sapling	1	17	Bigtooth Aspen	85	Sapling	1	17	Red Maple	5	Sapling	1	17	Red Oak	5	Sapling	1	17	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Black Cherry</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Low	5 - 10 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																			
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Quaking Aspen	5	Sapling	1	17																																																								
Bigtooth Aspen	85	Sapling	1	17																																																								
Red Maple	5	Sapling	1	17																																																								
Red Oak	5	Sapling	1	17																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Black Cherry	Low	5 - 10 feet	Tall Shrub																																																									
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																									
<b>48</b>	4199 - Other Mixed Upland Deciduous	Sapling Poor	9.7	6	Immature	N/A	Regen looks good.  Mature O-A-M stand was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, green-marked trees and a retention island (new stand 79). The beech was left for future snags.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>25</td><td>Sapling</td><td>1</td><td>6</td></tr> <tr><td>Beech</td><td>15</td><td>Pole/Sap/Log</td><td>8</td><td></td></tr> <tr><td>Red Oak</td><td>5</td><td>Log/XLog</td><td>16</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>35</td><td>Sapling</td><td>1</td><td>6</td></tr> <tr><td>Red Oak</td><td>20</td><td>Sapling</td><td>1</td><td>6</td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	25	Sapling	1	6	Beech	15	Pole/Sap/Log	8		Red Oak	5	Log/XLog	16		Bigtooth Aspen	35	Sapling	1	6	Red Oak	20	Sapling	1	6																												
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Red Maple	25	Sapling	1	6																																																								
Beech	15	Pole/Sap/Log	8																																																									
Red Oak	5	Log/XLog	16																																																									
Bigtooth Aspen	35	Sapling	1	6																																																								
Red Oak	20	Sapling	1	6																																																								
<b>49</b>	4123 - Red Oak	Sawtimber Well	63.0	85	81-110	N/A	NW peninsula harvested in 2016, split off as stand 76. Original stand 49 comments from 2012: On rolling to steep terrain. Most of the stand occupies the east aspect of a 100-foot tall ridge, with that sideslope dissected by numerous valleys. The cover is predominantly NRO, with suppressed-intermediate RM, poor quality mixed hardwoods, and pockets of BTA. There are widely-scattered RP & white oak across the stand, and small amounts of white ash, basswood & beech (mostly in the stand's NW on slightly better ground). The oak is heavy to large-pole/small-saw stems, most of them 9-11" DBH with shallow, compact crowns (8-10' diam). NRO SI 55.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Sugar Maple</td><td>2</td><td>Pole</td><td>8</td><td></td></tr> <tr><td>Red Oak</td><td>75</td><td>Log/Pole</td><td>10</td><td>85</td></tr> <tr><td>Paper Birch</td><td>1</td><td>Pole</td><td>7</td><td></td></tr> <tr><td>Red Maple</td><td>8</td><td>Pole/Sapling</td><td>6</td><td></td></tr> <tr><td>Red Pine</td><td>1</td><td>XLog/Log</td><td>22</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>13</td><td>Log/Pole</td><td>10</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Sugar Maple	2	Pole	8		Red Oak	75	Log/Pole	10	85	Paper Birch	1	Pole	7		Red Maple	8	Pole/Sapling	6		Red Pine	1	XLog/Log	22		Bigtooth Aspen	13	Log/Pole	10		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Ironwood</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Witch Hazel</td><td>Low</td><td>5 - 10 feet</td><td>Tall Shrub</td></tr> <tr><td>Serviceberry (Juneberry)</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	Low	Variable	Sapling	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Serviceberry (Juneberry)	Low	Variable	Tall Shrub					
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Sugar Maple	2	Pole	8																																																									
Red Oak	75	Log/Pole	10	85																																																								
Paper Birch	1	Pole	7																																																									
Red Maple	8	Pole/Sapling	6																																																									
Red Pine	1	XLog/Log	22																																																									
Bigtooth Aspen	13	Log/Pole	10																																																									
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Ironwood	Low	Variable	Sapling																																																									
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																									
Serviceberry (Juneberry)	Low	Variable	Tall Shrub																																																									



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments					
50	3205 - Mixed Upland Shrub	Nonstocked	5.2		Unspecified	No	Upland brush with scattered trees. Stand contains a former landing west of the road.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Black/Red (Hybrid) Oak	Low		Log	
								Prairie Willow	Low		Tall Shrub	
								Quaking Aspen	Trace		Pole	
								Bigtooth Aspen	Trace		Pole	
								Black Cherry	Low		Tall Shrub	
								Serviceberry (Juneberry)	Low		Tall Shrub	
Red Maple	Low		Pole									
51	4130 - Aspen	Sapling Medium	45.1	27	Immature	N/A	Cut 2" & up in late 1994 under 72-025-94-01, except for widely scattered wolfy xlog oak. Multipoly: 1-acre patch cut ~300' south of the main sale polygon. Aspen stand on the flats, with clones separated by upland brush. Health and vigor varies between clones. The BTA (mostly west of the road) is better developed. The QA has a higher incidence of hypoxylon and black canker. OFS point is an alder-willow wetland inclusion.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Bigtooth Aspen	15	Sapling	3	27
								Red Maple	2	Sapling	1	27
								Quaking Aspen	80	Sapling	2	27
								Black/Red (Hybrid) Oak	3	Sapling	2	27
Sub-Canopy Species	Density	Avg. Height	Size									
Black Cherry	Low	Variable	Tall Shrub									
Serviceberry (Juneberry)	Medium	10 - 20 feet	Tall Shrub									
52	4131 - Aspen, Oak	Sawtimber Medium	13.8	57	1-50	N/A	Marginal, catch-all stand that incorporates patches of red maple, aspen and oak that were left when the adjacent harvests were set up and when FP123 was expanded. The RM is generally in oversized pulp stump clumps, the oak tends to be open-grown (especially the xlog stems), and the aspen clones vary from immature to overmature. There isn't a lot separating this stand from the upland shrub/low density tree stands that it encompasses. The stand saw heavy impact in the past from tracked vehicle traffic.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Bigtooth Aspen	20	Pole/Log	7	57
								Quaking Aspen	20	Pole/Log	8	
								Black/Red (Hybrid) Oak	25	Log/XLog	16	
Red Maple	35	Pole/Log	9	76								
Sub-Canopy Species	Density	Avg. Height	Size									
Red Maple	Low	Variable	Sapling									
Quaking Aspen	Low	10 - 20 feet	Sapling									
Serviceberry (Juneberry)	Medium	10 - 20 feet	Tall Shrub									
53	3205 - Mixed Upland Shrub	Nonstocked	2.2		Unspecified	No	Upland brush with scattered trees. Includes two former landings on either side of the road, and healed-over ruts from past tracked vehicle traffic.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Bigtooth Aspen	Trace		Pole	
								Red Maple	Low		Pole	
								Black/Red (Hybrid) Oak	Low		Log	
								Black Cherry	Low		Tall Shrub	
								Red Pine	Trace		Pole	
								Serviceberry (Juneberry)	Medium		Tall Shrub	
								Prairie Willow	Low		Tall Shrub	
								Black/Red (Hybrid) Oak	Low		Pole	
Quaking Aspen	Trace		Pole									



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																					
54	4119 - Mixed Northern Hardwoods	Sapling Well	3.1	27	Immature	N/A	Cut 2" & up in late 1994 under 72-003-95-02, noted for a future gravel pit. Most of the harvest was in comp 267. Heavy to red maple, with sugar maple and red oak, and small amounts of aspen, ironwood, beech and paperbirch. The dense sprout-origin regen tend to be small diameter, except for the oak which has the best height & diameter growth and is weeding down to fewer stems.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>6</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> <tr> <td>Ironwood</td> <td>5</td> <td>Sapling</td> <td>1</td> <td></td> </tr> <tr> <td>Sugar Maple</td> <td>15</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Beech</td> <td>2</td> <td>Sapling</td> <td>1</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>2</td> <td>Sapling</td> <td>2</td> <td>27</td> </tr> <tr> <td>Red Oak</td> <td>15</td> <td>Sapling/Pole</td> <td>4</td> <td>27</td> </tr> <tr> <td>Red Maple</td> <td>55</td> <td>Sapling</td> <td>3</td> <td>27</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Quaking Aspen	6	Sapling	3	27	Ironwood	5	Sapling	1		Sugar Maple	15	Sapling	2	27	Beech	2	Sapling	1		Paper Birch	2	Sapling	2	27	Red Oak	15	Sapling/Pole	4	27	Red Maple	55	Sapling	3	27	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Witch Hazel</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Maple Leaved Viburnum</td> <td>Low</td> <td>&lt; 5 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Witch Hazel	Low	5 - 10 feet	Tall Shrub	Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Quaking Aspen	6	Sapling	3	27																																																								
Ironwood	5	Sapling	1																																																									
Sugar Maple	15	Sapling	2	27																																																								
Beech	2	Sapling	1																																																									
Paper Birch	2	Sapling	2	27																																																								
Red Oak	15	Sapling/Pole	4	27																																																								
Red Maple	55	Sapling	3	27																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Witch Hazel	Low	5 - 10 feet	Tall Shrub																																																									
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub																																																									
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																																									
55	790 - Other Bare/Sparsely Vegetated	Nonstocked	7.3		Unspecified	Managed Opening	Military Firing Point 123. Firing point clearing project done in 2011. Stumped & brush-hogged. Visible where the snow had melted: grass & a lot of bare ground. A few stump piles and tree-length aspen bundles.																																																					
56	3205 - Mixed Upland Shrub	Nonstocked	87.1		Unspecified	No	Large upland brush/low-density tree type on an old pine stumpfield. Predominantly serviceberry, black cherry and prairie willow with scattered poor-quality red maple, open-grown oak and sub-acre aspen clones. The tree cover is more concentrated along the perimeter and is very widely scattered in the interior. Roughly 10 acres in the stand's SW burned in a Nov 2000 wildfire (Crawford #20) that started on private. Some aspen sprouted in the fire area. OFS points are small wetland inclusions. See Management Considerations.																																																					
<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Serviceberry (Juneberry)</td> <td>Medium</td> <td></td> <td>Tall Shrub</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td></td> <td>Tall Shrub</td> </tr> <tr> <td>Quaking Aspen</td> <td>Low</td> <td></td> <td>Pole</td> </tr> <tr> <td>Black/Red (Hybrid) Oak</td> <td>Low</td> <td></td> <td>Log</td> </tr> <tr> <td>Prairie Willow</td> <td>Low</td> <td></td> <td>Tall Shrub</td> </tr> <tr> <td>Red Maple</td> <td>Low</td> <td></td> <td>Pole</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>Low</td> <td></td> <td>Pole</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)		Medium		Tall Shrub	Black Cherry	Low		Tall Shrub	Quaking Aspen	Low		Pole	Black/Red (Hybrid) Oak	Low		Log	Prairie Willow	Low		Tall Shrub	Red Maple	Low		Pole	Bigtooth Aspen	Low		Pole																										
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Serviceberry (Juneberry)	Medium		Tall Shrub																																																									
Black Cherry	Low		Tall Shrub																																																									
Quaking Aspen	Low		Pole																																																									
Black/Red (Hybrid) Oak	Low		Log																																																									
Prairie Willow	Low		Tall Shrub																																																									
Red Maple	Low		Pole																																																									
Bigtooth Aspen	Low		Pole																																																									
57	6220 - Alder/willow	Nonstocked	10.4		Unspecified	No	Salix with spiraea & dogwood. Widely scattered quaking aspen. Slough drain starts in it and flows out to the river.																																																					
58	330 - Low-Density Trees	Nonstocked	12.3	0	Unspecified	413 - Aspen	Harvested in December 2017.  Stand boundary picks up several small aspen clones that are separated by upland brush. Mostly quaking aspen, with small amounts of big tooth aspen, red maple, and hybridized oak. Some break-up occurring within the clones. The west edge of the stand has aspen regen from a Nov 2000 wildfire (Crawford #20) that started on private. The stand just barely makes the threshold for overall size log. QA SI 59																																																					
<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Cherry (spp.)</td> <td>Medium</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Quaking Aspen</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Cherry (spp.)		Medium	10 - 20 feet	Tall Shrub	Quaking Aspen	Low	5 - 10 feet	Sapling																																														
Sub-Canopy Species	Density	Avg. Height	Size																																																									
Cherry (spp.)	Medium	10 - 20 feet	Tall Shrub																																																									
Quaking Aspen	Low	5 - 10 feet	Sapling																																																									
60	6112 - Lowland Aspen	Sapling Medium	11.5	5	Immature	N/A	Floodplain aspen stand was final harvested with retention in Feb 2018 (#606-14), cutting stems 2"+ except conifers, elm, and green-marked trees. The Natural Rivers restricted cutting zone was excluded as retention. The upland west edge that was intentionally included in the harvest was merged back into the adjacent upland shrub stand 56.																																																					
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>12</td> <td>Sapling</td> <td>1</td> <td>5</td> </tr> <tr> <td>Quaking Aspen</td> <td>80</td> <td>Sapling</td> <td>1</td> <td>5</td> </tr> <tr> <td>Balsam Poplar</td> <td>8</td> <td>Sapling</td> <td>1</td> <td>5</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	12	Sapling	1	5	Quaking Aspen	80	Sapling	1	5	Balsam Poplar	8	Sapling	1	5	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>American Highbush Cranberry</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Willow spp.</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Tag Alder</td> <td>Low</td> <td>10 - 20 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	American Highbush Cranberry	Low	5 - 10 feet	Tall Shrub	Willow spp.	Low	5 - 10 feet	Tall Shrub	Black Cherry	Low	5 - 10 feet	Tall Shrub	Tag Alder	Low	10 - 20 feet	Tall Shrub																
Canopy Species	% Cover	Size Class	DBH	Age																																																								
Red Maple	12	Sapling	1	5																																																								
Quaking Aspen	80	Sapling	1	5																																																								
Balsam Poplar	8	Sapling	1	5																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																									
American Highbush Cranberry	Low	5 - 10 feet	Tall Shrub																																																									
Willow spp.	Low	5 - 10 feet	Tall Shrub																																																									
Black Cherry	Low	5 - 10 feet	Tall Shrub																																																									
Tag Alder	Low	10 - 20 feet	Tall Shrub																																																									



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																			
61	500 - Water	Nonstocked	11.1		Unspecified	No	North Branch of the AuSable, a designated Natural River system.																																			
62	6229 - Mixed lowland shrub	Nonstocked	12.9	0	Unspecified	No	Floodplain aspen stand was final harvested with retention in Feb 2021 (#606-14), cutting stems 2"+ except conifers. The Natural Rivers restricted cutting zone was excluded as retention. The upland NE edge that was intentionally included in the harvest was merged back into the adjacent upland shrub stand 64.																																			
63	6229 - Mixed lowland shrub	Nonstocked	3.4		Unspecified	No	Lowland brush: spiraea with a perimeter of salix.																																			
64	3205 - Mixed Upland Shrub	Nonstocked	24.6		Unspecified	No	Dry upland opening with open-grown JP scattered & in sub-acre patches like a pine barrens. The shrub cover includes serviceberry, prairie willow, cherry, hawthorn, and sweetfern. There are traces of RP, oak, WP, red maple and aspen, generally concentrated along the west edge near the floodplain. Three acres of JP in the stand's NW & NE peninsulas were cut merch & up in 1994 under 72-020-94-02.																																			
65	42220 - Natural Jack Pine	Poletimber Medium	8.7	53	51-80	N/A	Patchy JP stand, generally poles in their mid-40's with scattered overmature JP that were the seed source. There are small patches of aspen, and small amounts of RP and mixed oak. The canopy is sparser along the west edge. Private land to the north.																																			
		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Quaking Aspen</td> <td>7</td> <td>Pole/Sapling</td> <td>7</td> <td></td> </tr> <tr> <td>Northern Pin Oak</td> <td>2</td> <td>Pole/Log/Sap</td> <td>7</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>88</td> <td>Pole</td> <td>7</td> <td>53</td> </tr> <tr> <td>Red Pine</td> <td>3</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	7	Pole/Sapling	7		Northern Pin Oak	2	Pole/Log/Sap	7		Jack Pine	88	Pole	7	53	Red Pine	3	Log/Pole	12		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Serviceberry (Juneberry)</td> <td>Low</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Black Cherry	Medium	5 - 10 feet	Tall Shrub
Canopy Species	% Cover	Size Class	DBH	Age																																						
Quaking Aspen	7	Pole/Sapling	7																																							
Northern Pin Oak	2	Pole/Log/Sap	7																																							
Jack Pine	88	Pole	7	53																																						
Red Pine	3	Log/Pole	12																																							
Sub-Canopy Species	Density	Avg. Height	Size																																							
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub																																							
Black Cherry	Medium	5 - 10 feet	Tall Shrub																																							
66	6220 - Alder/willow	Nonstocked	8.8		Unspecified	No	Alder-willow on the floodplain with widely-scattered aspen and black willow. A footpath crosses through it to the fishing access site on the																																			
67	3303 - Mixed Low Density Trees	Nonstocked	4.8		Unspecified	4319 - Mixed Upland Forest	Roughly three acres were cut merch & up in 1994 under 72-020-94-02. Widely scattered overstory RP, paper birch and JP were left. Regen includes WP (seeded in from the supercanopy WP just north of the stand), JP, RP, oak and black cherry. Discounting the cherry brush, the stand doesn't meet the forested benchmark, but continued in-growth of WP & JP is likely.																																			
		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Cherry</td> <td>Medium</td> <td></td> <td>Tall Shrub</td> </tr> <tr> <td>Red Pine</td> <td>Trace</td> <td></td> <td>Log</td> </tr> <tr> <td>Red Pine</td> <td>Low</td> <td></td> <td>Sapling</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td></td> <td>Sapling</td> </tr> <tr> <td>Paper Birch</td> <td>Trace</td> <td></td> <td>Log</td> </tr> <tr> <td>Black/Red (Hybrid) Oak</td> <td>Low</td> <td></td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td></td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Cherry	Medium		Tall Shrub	Red Pine	Trace		Log	Red Pine	Low		Sapling	Jack Pine	Low		Sapling	Paper Birch	Trace		Log	Black/Red (Hybrid) Oak	Low		Sapling	White Pine	Low		Sapling							
Sub-Canopy Species	Density	Avg. Height	Size																																							
Black Cherry	Medium		Tall Shrub																																							
Red Pine	Trace		Log																																							
Red Pine	Low		Sapling																																							
Jack Pine	Low		Sapling																																							
Paper Birch	Trace		Log																																							
Black/Red (Hybrid) Oak	Low		Sapling																																							
White Pine	Low		Sapling																																							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>68</b>	42220 - Natural Jack Pine	Poletimber Medium	16.4	55	51-80	N/A	Patchy JP stand with small upland openings, including the loop parking area for a walk-in fishing access site. Cover includes naturally-established and planted JP & RP, a handful of super-canopy WP in the NW, and small amounts of xlog oak and struggling quaking aspen. The naturally-established JP is in the mid-40's, seeded in from scattered overmature JP "orchard" trees. The planted JP is near the center of the stand, and was established at a very wide spacing. Open-grown form is common in the JP. The planted RP is mixed in with the planted JP and also occurs in a patch at the north end and in a single sketchy row down on the floodplain. Second age is on the planted JP & RP. See OFS point and red compt folder.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Jack Pine		90	Pole	7	55	Black Cherry		Medium	Variable	Tall Shrub	
Red Pine		10	Log	13	67	Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
<b>69</b>	3102 - Grass	Nonstocked	7.5		Unspecified	No	Grassy opening with widely scattered cherry brush, hawthorn, serviceberry and pine saplings. See OFS points.				
<b>70</b>	4123 - Red Oak	Sawtimber Well	2.6	87	81-110	N/A	Retention islands left when stand 9 was harvested in 2016. Original stand 9 comments: small-med NRO saw with WO, RM, QA & overmature BTA. Stand's east end picks up a 5-chain wide swath of predominantly QA. There's a strip of younger aspen along the stand's S edge bordering the 2-track. Oak is wolfier S of the 2-track.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		8	Log/Pole	10		Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Bigtooth Aspen		10	Log/Pole	12		Hazelnut (Beaked)		Low	5 - 10 feet	Tall Shrub	
White Oak		5	Log/Pole	12		Witch Hazel		Low	10 - 20 feet	Tall Shrub	
Red Maple		12	Pole/Log	8		Red Maple		Low	Variable	Sapling	
Red Oak		65	Log	13	87						
<b>71</b>	4199 - Other Mixed Upland Deciduous	Sawtimber Well	3.3	85	111-140	N/A	Two of 4 retention islands left when stand 18 was harvested in 2016. Original stand 18 comments: Oak and aspen, with red maple and paper birch components and minor representation in northern hardwoods. The NRO and BTA dominate the canopy to a varying extent across the stand. The RM & PB are suppressed to intermediate in the canopy, with the PB progressively dropping out. The northern hardwoods are heaviest to the NE, the BTA to the SW. The NRO is a mix of good quality small saw and suppressed poles.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		8	Pole/Log	7		Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
Red Oak		50	Log/Pole	12	85	Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Paper Birch		8	Pole	8		Beech		Low	Variable	Sapling	
Beech		2	Pole/Sap/Log	6		Ironwood		Low	Variable	Sapling	
Bigtooth Aspen		26	Log/Pole	11							
Red Pine		2	XLog/Log	20							
Sugar Maple		4	Pole	7							
<b>72</b>	4131 - Aspen, Oak	Sawtimber Well	1.8	84	111-140	N/A	Retention island left when stand 28 was cut in 2016. Original stand 28 comments: Overmature BTA (conks, burls, cavities forming) with quality RO, suppressed-intermediate RM, and small amounts of hard maple, paper birch, beech & white ash. Terrain is a series of shallow ridges and valleys. BTA SI 75.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Bigtooth Aspen		70	Log/Pole	10	84	Serviceberry (Juneberry)		Low	5 - 10 feet	Tall Shrub	
Red Maple		5	Pole/Sap/Log	7		Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Red Oak		25	Log/Pole	12		Witch Hazel		Medium	5 - 10 feet	Tall Shrub	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments				
<b>73</b>	4199 - Other Mixed Upland Deciduous	Sawtimber Well	3.1	86	81-110	N/A	Retention islands left when stand 23 was cut in 2016. Original stand 23 comments: Oak, aspen, RM & paper birch with a northern hardwoods component (hard maple and small amounts of beech, white ash, basswood & ironwood). The site is high-end for oak and aspen, but is growing low-end northern hardwoods. The NRO is good quality, the BTA overmature, and the paper birch dying out. The canopy coverage in each species varies across the stand.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Oak		40	Log/Pole	12	86	Maple Leaved Viburnum		Low	< 5 feet	Tall Shrub	
Beech		3	Pole/Sapling	6		Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
Bigtooth Aspen		30	Log/Pole	10		Hazelnut (Beaked)		Low	5 - 10 feet	Tall Shrub	
White Ash		2	Log/Pole	10		Ironwood		Low	5 - 10 feet	Sapling	
Sugar Maple		7	Pole/Log	7							
Red Maple		10	Pole/Log	8							
Paper Birch		8	Pole/Log	7							
<b>74</b>	4199 - Other Mixed Upland Deciduous	Sawtimber Well	1.4	89	81-110	N/A	Part of the retention left when stand 31 was harvested in 2016. Original stand 31 comments: Large diameter, wide-crowned red oak with relatively small diameter northern hardwoods filled in between. Occasional larger basswood saw clumps, but generally most of the hardwood component is 10" DBH and under. First age: 14" DBH oak, 79 years (SI 68). Second age: 7" DBH hard maple, 66 years (SI 50). Third age: 8" DBH white ash, 56 years. The stand's NE has less of the northern hardwoods, and more oak (log-pole sized) and aspen. The understory has little in the way of shrubs.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Red Maple		2	Pole/Sap/Log	7		Sugar Maple		Low	10 - 20 feet	Sapling	
Basswood		18	Log/Pole	10		Beech		Low	< 5 feet	Sapling	
White Ash		7	Pole/Log	8	66	Ironwood		Medium	5 - 10 feet	Sapling	
Beech		3	Pole/Sap/Log	6							
Red Oak		35	Log/XLog	14	89						
Paper Birch		3	Pole/Log	8							
Bigtooth Aspen		2	Log/Pole	10							
Sugar Maple		28	Pole/Sapling	7	76						
Ironwood		2	Pole/Sapling	5							
<b>75</b>	4130 - Aspen	Sawtimber Well	1.3	85	81-110	N/A	Retention island left when stand 38 was harvested in 2016. Original stand 38 comments: Overmature BTA with quality NRO mixed in. RM is suppressed-intermediate in the canopy. There is an older xlog oak component, very open-grown, many with basal cavities from old fire scarring. The stand's NE is sparser, with cull RM stump clumps, more quaking aspen, and U/G inclusions. There are a few WP, RP & white oak saw, and WP saplings/poles localized around the seed source. BTA SI 72				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Quaking Aspen		2	Pole/Log	8		White Pine		Low	Variable	Sapling	
Red Maple		8	Pole/Log	7		Hazelnut (Beaked)		Low	< 5 feet	Tall Shrub	
Red Oak		2	XLog	24		Witch Hazel		Low	5 - 10 feet	Tall Shrub	
Red Oak		10	Log/Pole	11		Serviceberry (Juneberry)		Low	Variable	Tall Shrub	
Bigtooth Aspen		78	Log/Pole	10	85						
<b>76</b>	4199 - Other Mixed Upland Deciduous	Sapling Poor	23.0	6	Immature	N/A	Forest access route runs down the valley with steep to rolling terrain on either side.  Part of mature O-RM stand 49 was final harvested with reserves in 2016 (#605-14), cutting stems 2"+ DBH except pine, beech, ash, white oak, green-marked trees and island retention.. The beech & ash were left for future snags. Regen passed to M.O. at time of sale closing in 2019.				
Canopy Species		% Cover	Size Class	DBH	Age						
Red Oak		4	Log/XLog	16	86						
Bigtooth Aspen		10	Sapling	1	6						
Red Pine		1	XLog/Log	22							
Red Oak		40	Sapling	1	6						
Beech		5	Pole/Sap/Log	8							
Red Maple		40	Sapling	1	6						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
-------	--------------------	--------------	-------	-----------	----------	--------------	------------------

<b>77</b>	4131 - Aspen, Oak	Sawtimber Well	1.6	81	81-110	N/A	Part of the retention left when stand 44 was harvested in 2016. Original stand 44 comments: Comparable coverage in aspen and oak, swapping dominance across the stand, with an intermediate-suppressed mixed hardwoods component. The hardwoods are mostly red and sugar maple, with small amounts of paper birch, beech, white ash & basswood. There is a sub-acre pocket of RP saw along the two-track. The birch is dying out. The oak is mostly log-pole in size, but there are also scattered xlog specimens. BTA SI 57
-----------	-------------------	----------------	-----	----	--------	-----	---

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	6	Pole	6	
Paper Birch	2	Pole	6	
Red Oak	40	Log/Pole	12	
Bigtooth Aspen	45	Log/Pole	10	81
Sugar Maple	3	Pole	7	
Beech	2	Pole/Sapling	6	
Red Pine	2	Log	16	

Sub-Canopy Species	Density	Avg. Height	Size
Serviceberry (Juneberry)	Low	Variable	Tall Shrub
Ironwood	Medium	Variable	Sapling

<b>78</b>	4123 - Red Oak	Sawtimber Well	1.6	85	81-110	N/A	NW peninsula harvested in 2016, split off as stand 76. Original stand 49 comments from 2012: On rolling to steep terrain. Most of the stand occupies the east aspect of a 100-foot tall ridge, with that sideslope dissected by numerous valleys. The cover is predominantly NRO, with suppressed-intermediate RM, poor quality mixed hardwoods, and pockets of BTA. There are widely-scattered RP & white oak across the stand, and small amounts of white ash, basswood & beech (mostly in the stand's NW on slightly better ground). The oak is heavy to large-pole/small-saw stems, most of them 9-11" DBH with shallow, compact crowns (8-10' diam). NRO SI 55.
-----------	----------------	----------------	-----	----	--------	-----	--

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	13	Log/Pole	10	
Paper Birch	1	Pole	7	
Red Pine	1	XLog/Log	22	
Red Maple	8	Pole/Sapling	6	
Sugar Maple	2	Pole	8	
Red Oak	75	Log/Pole	10	85

Sub-Canopy Species	Density	Avg. Height	Size
Ironwood	Low	Variable	Sapling
Serviceberry (Juneberry)	Low	Variable	Tall Shrub
Witch Hazel	Low	5 - 10 feet	Tall Shrub

<b>79</b>	4199 - Other Mixed Upland Deciduous	Sawtimber Well	2.8	79	111-140	N/A	Retention island left when stand 48 was harvested in 2016. Original stand 48 comments: Variable stand with roughly equal parts oak, aspen, and northern hardwoods. Only species of quality is the NRO. Very good form in the small saw class. Xlog oak wolfy. The oak is densest to the east, aspen dominant to the west. Significant but poor-quality hardwood component (RM, HM, paper birch, beech, ironwood). Paper birch dropping out of the stand. BTA & QA very overmature, with increasing rot & breakage. A few basswood, RP & white ash.
-----------	-------------------------------------	----------------	-----	----	---------	-----	---

Canopy Species	% Cover	Size Class	DBH	Age
Bigtooth Aspen	30	Log	12	78
Sugar Maple	8	Pole/Log/Sap	7	
Ironwood	2	Sapling/Pole	3	
Beech	4	Pole/Sap/Log	5	
Quaking Aspen	3	Log	12	
Red Oak	2	XLog	20	
Paper Birch	6	Pole/Log	8	
Red Oak	33	Log/Pole	13	79
Red Maple	12	Pole/Log/Sap	7	

Sub-Canopy Species	Density	Avg. Height	Size
Ironwood	Low	Variable	Sapling
Hazelnut (Beaked)	Low	5 - 10 feet	Tall Shrub
Witch Hazel	Low	Variable	Tall Shrub
Maple Leaved Viburnum	Low	< 5 feet	Tall Shrub
Beech	Low	Variable	Sapling

<b>80</b>	4130 - Aspen	Sapling Medium	13.2	17	Immature	N/A	Split from stand 47. Loser density aspen in patches. Cut merch & up in 2005 under 72-062-04-01. Mostly BTA, along with RM, oak, quaking aspen and cherry. The stand's south half has dense aspen cover but the north half is patchier, bringing the overall canopy closure down to 50-75%. The aspen in the north half is not a well-developed, with sub-acre pockets that had sparse sprouting and heavy browse. The oak that has recruited is 8' tall and vigorous.
-----------	--------------	----------------	------	----	----------	-----	--

Canopy Species	% Cover	Size Class	DBH	Age
Red Oak	5	Sapling	1	17
Quaking Aspen	5	Sapling	1	17
Bigtooth Aspen	85	Sapling	1	17
Red Maple	5	Sapling	1	17

Sub-Canopy Species	Density	Avg. Height	Size
Black Cherry	Low	5 - 10 feet	Tall Shrub
Serviceberry (Juneberry)	Low	5 - 10 feet	Tall Shrub



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
81	3105 - Mixed Upland Herbaceous	Nonstocked	2.3		Unspecified	Managed Opening	Old firing point perimeter.

Military Firing Point 221 opening. East side cleared & expanded in 2011. Uncleared west side has cherry & willow brush. New stand boundary not visible on the available imagery.

82	6112 - Lowland Aspen	Sapling Medium	9.9	5	Immature	N/A	Floodplain aspen stand was final harvested with retention in Feb 2018 (#606-14), cutting stems 2"+ except conifers, elm, and green-marked trees. The Natural Rivers restricted cutting zone was excluded as retention. The upland west edge that was intentionally included in the harvest was merged back into the adjacent upland shrub stand 56.
----	----------------------	----------------	-----	---	----------	-----	---

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Quaking Aspen	80	Sapling	1	5	Willow spp.	Low	5 - 10 feet	Tall Shrub
Balsam Poplar	8	Sapling	1	5	Tag Alder	Low	10 - 20 feet	Tall Shrub
Red Maple	12	Sapling	1	5	American Highbush Cranberry	Low	5 - 10 feet	Tall Shrub
					Black Cherry	Low	5 - 10 feet	Tall Shrub

88	6112 - Lowland Aspen	Sawtimber Medium	42.6	55	1-50	N/A	2022 inventory notes species composition of 2014? have: overstory understorey super canopy trc cedar trc white pine ground cover low willow trc nannyberry high quaking medium bam trace cherry trace hybrid oak trace paper birch trace serviceberry trace rubus trace hawhorn trace red osier dogwood trace salix spp. Portion of stand that was not harvested has consistent ground cover with the above list with the canopy consisting primarily of quaking Aspen with medium balsam poplar and trace white pine white paper Birch. Portions of stand closer to river or lower have more tag alder. general comments when was stand harvested 2014? Follow up treatments not present during inventory 12/28/21 Stand should recruit well quaking Aspen various rosacea and stump sprouting in Birch and oak are heavily browsed. Recruitment of preferred dearborough species less likely. Stand drops off of high ground pri groaned primarily flattens out to wet wet soil Due to adjacency to ausable river river flood plain. Floodplain aspen stand, including riser up to the first terrace. Mostly quaking aspen with balsam poplar and scattered paper birch. On the transition ground to the uplands, there are small amounts of pine, oak and red maple, including a sketchy row of planted red pine. Along the river's edge there are small patches of willow and northern white cedar, The aspen is generally mature to overmature. As the older component continues to break up, this stand is close to dropping to 25-50% canopy closure, There is a minor immature aspen component trying to fill in the stand's opener areas. The understory has large patches of dense highbush cranberry cover, particularly in the N1/2. A walk-in fishing access site is located along the river.
----	----------------------	------------------	------	----	------	-----	--

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	2	Pole	7		Willow spp.	Low	Variable	Tall Shrub
Quaking Aspen	80	Log/Pole	11	54	Tag Alder	Low	10 - 20 feet	Tall Shrub
Northern White Cedar	2	Log	12		Black Cherry	Low	Variable	Tall Shrub
Black Willow	2	Log	12		Spiraea spp.	Low	< 5 feet	Tall Shrub
Balsam Poplar	14	Pole/Sap/Log	7		American Highbush Cranberry	Medium	5 - 10 feet	Tall Shrub
					Blackberry/Raspberry	Low	< 5 feet	Tall Shrub
					Quaking Aspen	Low	Variable	Sapling

2022 inventory notes species composition of 2014? have: overstory understorey super canopy trc cedar trc white pine ground cover low willow trc nannyberry high quaking medium bam trace cherry trace hybrid oak trace paper birch trace serviceberry trace rubus trace hawhorn trace red osier dogwood trace salix spp. Portion of stand that was not harvested has consistent ground cover with the above list with the canopy consisting primarily of quaking Aspen with medium balsam poplar and trace white pine white paper Birch. Portions of stand closer to river or lower have more tag alder. general comments when was stand harvested 2014? Follow up treatments not present during inventory 12/28/21 Stand should recruit well quaking Aspen various rosacea and stump sprouting in Birch and oak are heavily browsed. Recruitment of preferred dearborough species less likely. Stand drops off of high ground pri groaned primarily flattens out to wet wet soil Due to adjacency to ausable river river flood plain. Floodplain aspen stand, including riser up to the first terrace. Mostly quaking aspen with balsam poplar and scattered paper birch. On the transition ground to the uplands, there are small amounts of pine, oak and red maple, including a sketchy row of planted red pine. Along the river's edge there are small patches of willow and northern white cedar, The aspen is generally mature to overmature. As the older component continues to break up, this stand is close to dropping to 25-50% canopy closure, There is a minor immature aspen component trying to fill in the stand's opener areas. The understory has large patches of dense highbush cranberry cover, particularly in the N1/2. A walk-in fishing access site is located along the river.