



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12055

Entry Year: 2027

Acreage: 1,532

County: Dickinson

Management Area: Ralph Moraine

Stand Examiner: Deb Goupell

Legal Description:

T42N R29W Sec 2-5, 8-11

T43N R29W Sec 35

Identified Planning Goals:

Manage all forested cover types in a sustainable manner. Develop aspen age class distribution as the SFMP Management Plan directs. Encourage species diversity and conifers in hardwoods.

Soil and topography:

Fine sandy loams dominate the uplands, with a smattering of rock outcrops. Lowlands are dominated by Carbondale-Cathro mucks. Topography is quite varied from rolling hills to rock outcrops with a fair amount of seeps.

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

Entirely State owned and surrounded by State forest land.

Unique Natural Features:

Tributaries to form the South Branch of the East Branch of the Sturgeon River.

Archeological, Historical, and Cultural Features:

Archaeological hit was verified to be outside of this compartment.

Special Management Designations or Considerations:

Cold water fisheries require 300' buffer.

Watershed and Fisheries Considerations:

300 foot buffer to the trout waters of the E. Br. of the Sturgeon, upstream from the Gene's Pond bridge for areas susceptible to Aspen regeneration. For areas not susceptible to Aspen regeneration, a minimum 100 feet, plus 5 feet per 1% increase in slope, riparian management zone is recommended to protect riparian areas in accordance with Best Management Practices. There are also wetland areas within this compartment (<https://www.mcgi.state.mi.us/wetlands/mcgiMap.html#>) If any treatments are near a wetland area, best management practices should be incorporated which include a 100' buffer. This compartment also contains Warren Pond- Fisheries Division's walleye rearing pond. As such, as water flowing into or out of the pond should have appropriate buffer widths. Streams, regardless of their size or frequency of flow, are connected to downstream waters and strongly influence their function. Additionally, wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers via functions that improve downstream water quality. These systems act as effective buffers to protect downstream waters from pollution and are essential components of river food webs. BMP's should be implemented to control sediment sources from adjacent uplands. Fine sediments such as silt and sand negatively affect natural reproduction of fish, decrease the diversity of aquatic invertebrate and fish taxa, and result in lower overall fish populations.

Wildlife Habitat Considerations:

White-tailed deer was selected as a featured species in this compartment to manage for critical habitat conditions which include important conifers for winter cover, travel corridors and upland dispersal for forage. Forest openings will also be managed to provide important spring and summer forage. In addition, black bear was selected to manage for critically important lowland hardwoods, lowland conifers, vernal ponds and drainages, refuge trees, forest openings and mast producing trees and shrubs. Maximizing age class diversity, decreasing stand size and maintaining the conifer component in aspen stands will provide grouse, woodcock. Maintaining mature forest conditions will provide critical habitat for northern goshawk.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial oil & gas production in this part of the state. The closest known active sand/gravel pit is roughly three miles west. There is some potential for development of sand & gravel within the

compartment on the uplands, but bedrock is near the surface in places, and the relatively thin glacial sediments appear to be clay-rich. Furthermore, the compartment might be too far from populated areas (commercial markets) for any aggregate resources present to have much value beyond use by the county road commission or DNR for local road maintenance. Significant past metallic mineral exploration test drilling was completed in the immediate vicinity of the compartment. Although the setting is suitable for the occurrence of metallic minerals, there has been no identified prospect and no recent leasing activity in the area involving State-owned mineral rights. Potential for future production of metallic minerals from within the compartment is considered low at this time. The State does not own all the mineral rights within the compartment. Because the mineral estate is the dominant estate, the surface owner must provide the owner of the mineral rights reasonable access to the surface for mineral exploration and development.

Vehicle Access:

Wells Grade accesses the south and east boundary of this compartment. Two-track roads and trails also cross into the interior.

Survey Needs:

None.

Recreational Facilities and Opportunities:

There is a snowmobile trail in the far west portion of this stand. It is heavily used for hunting, ATV riding, trapping, and fishing. Gene's Pond campground and boat launch is located a few miles to the east.

Fire Protection:

Felch protection area.

Additional Compartment Information:

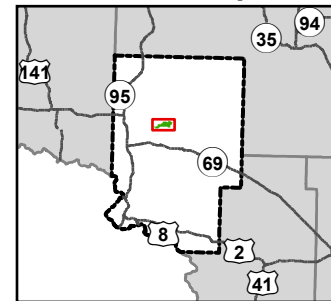
The following reports from the Inventory are attached:

- 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**

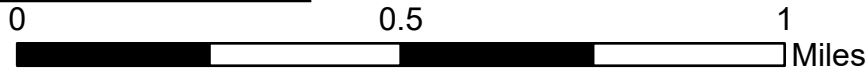
The following information is displayed, where pertinent, on the attached compartment maps:

- 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: 12055
T42N R29W Sec 2-5, 8-11
County: Dickinson
Unit: Crystal Falls
Mgmt. Area: Ralph Moraine
YOE: 2027
Acres: 1,532 GIS Calculated
Examiner: Deb Goupell
Date Exported: 08/22/2025
Map Phase: Web Post

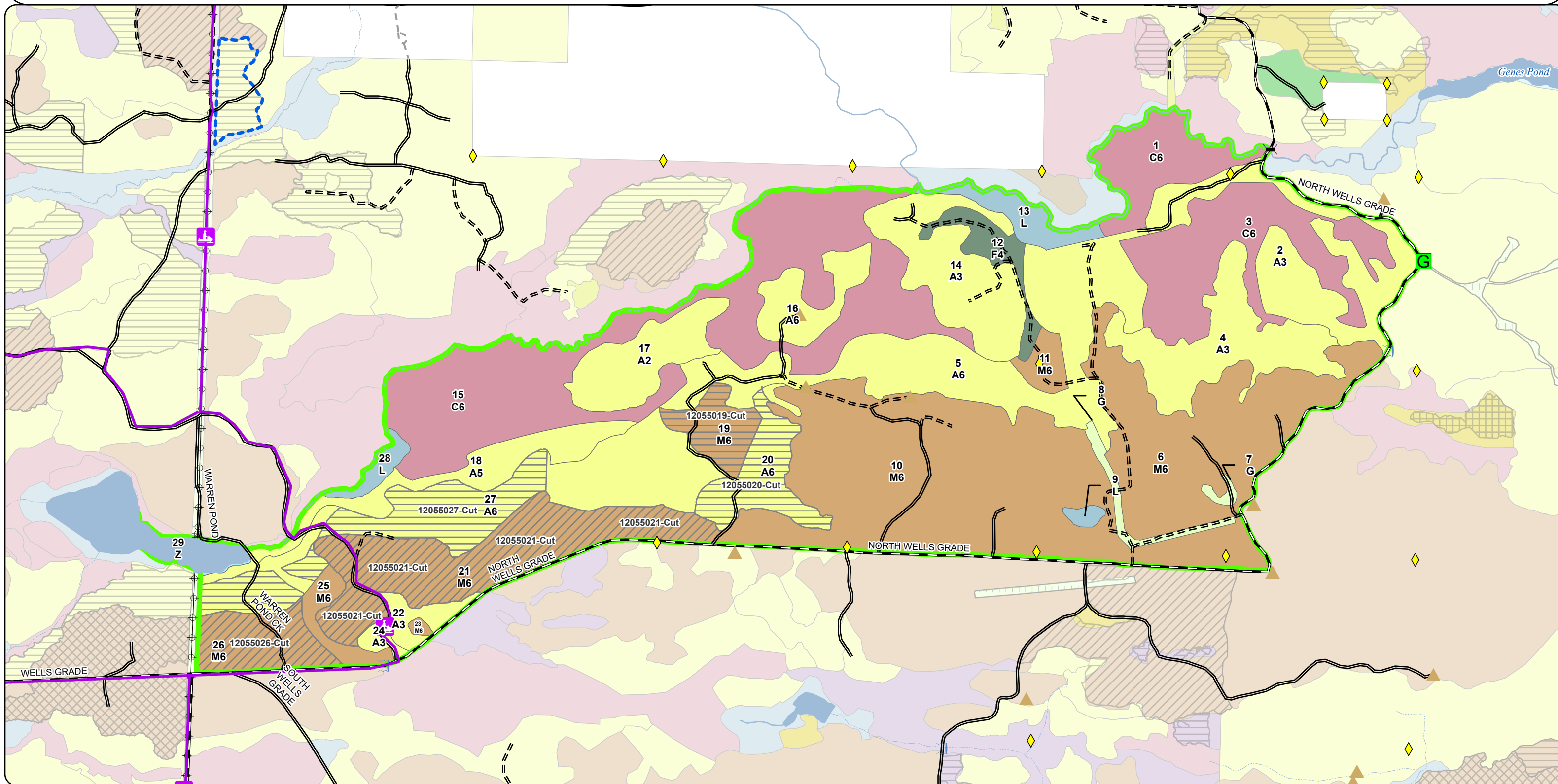


- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- Designated Snowmobile Trails
- DNR - Primary Forest Road

- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Intermittent Stream
- Perennial River

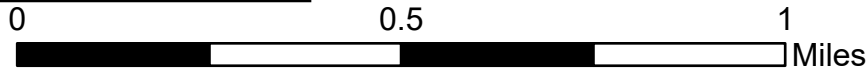
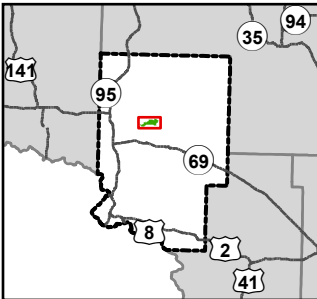
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- Clearcut
- Thinning
- Treatments with Site Conditions

- 411 - Northern Hardwood
- 413 - Aspen
- 423 - Other Upland Conifers
- 500 - Water
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub



Stand Boundary Map

Compartment: 12055
T42N R29W Sec 2-5, 8-11
County: Dickinson
Unit: Crystal Falls
Mgmt. Area: Ralph Moraine
YOE: 2027
Acres: 1,532 GIS Calculated
Examiner: Deb Goupell
Date Exported: 08/22/2025
Map Phase: Web Post

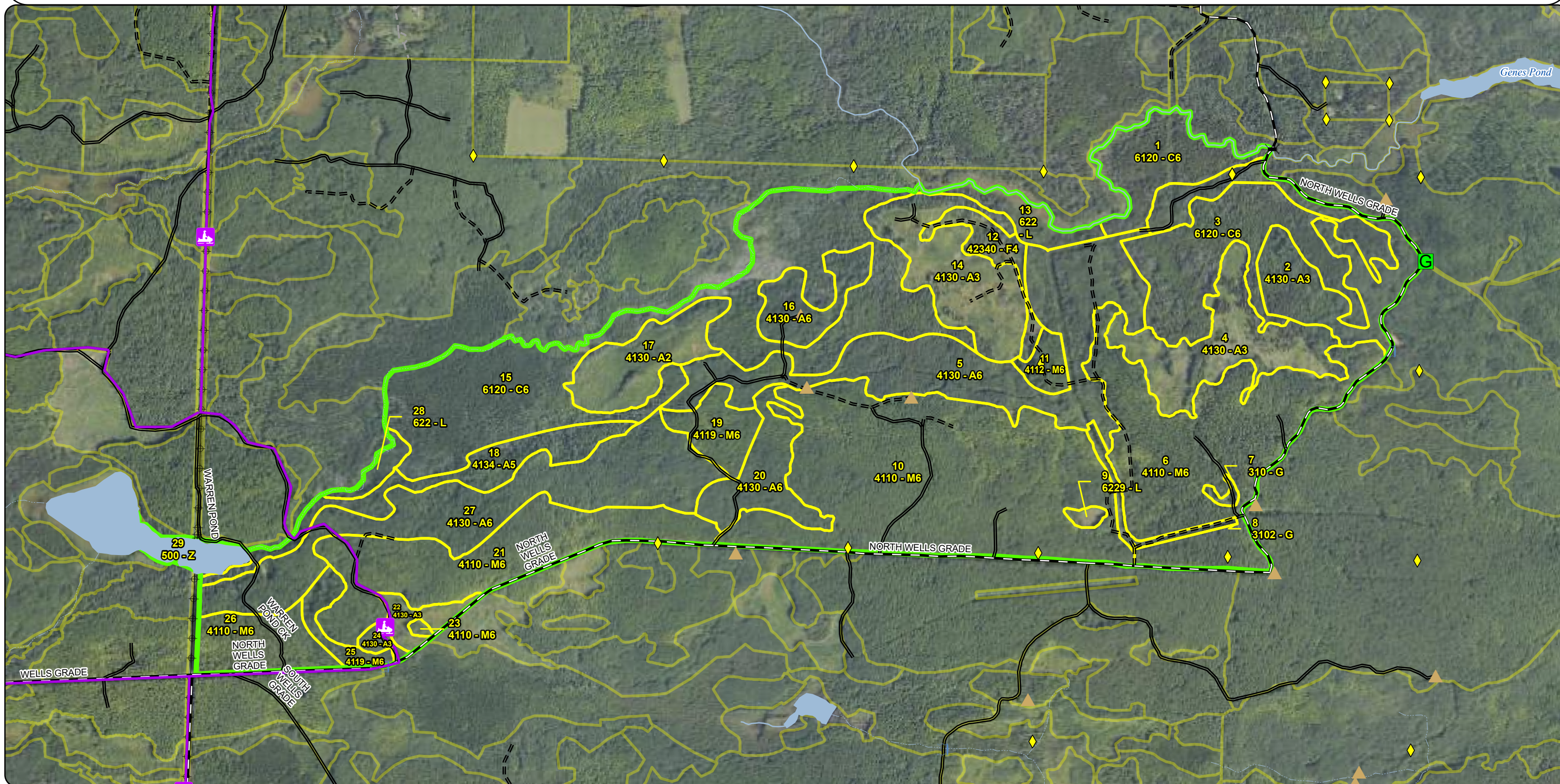


- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- Designated Snowmobile Trails

- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Intermittent Stream

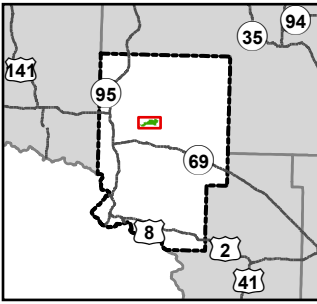
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- 411 - Northern Hardwood
- 413 - Aspen

- 423 - Other Upland Conifers
- 500 - Water
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub



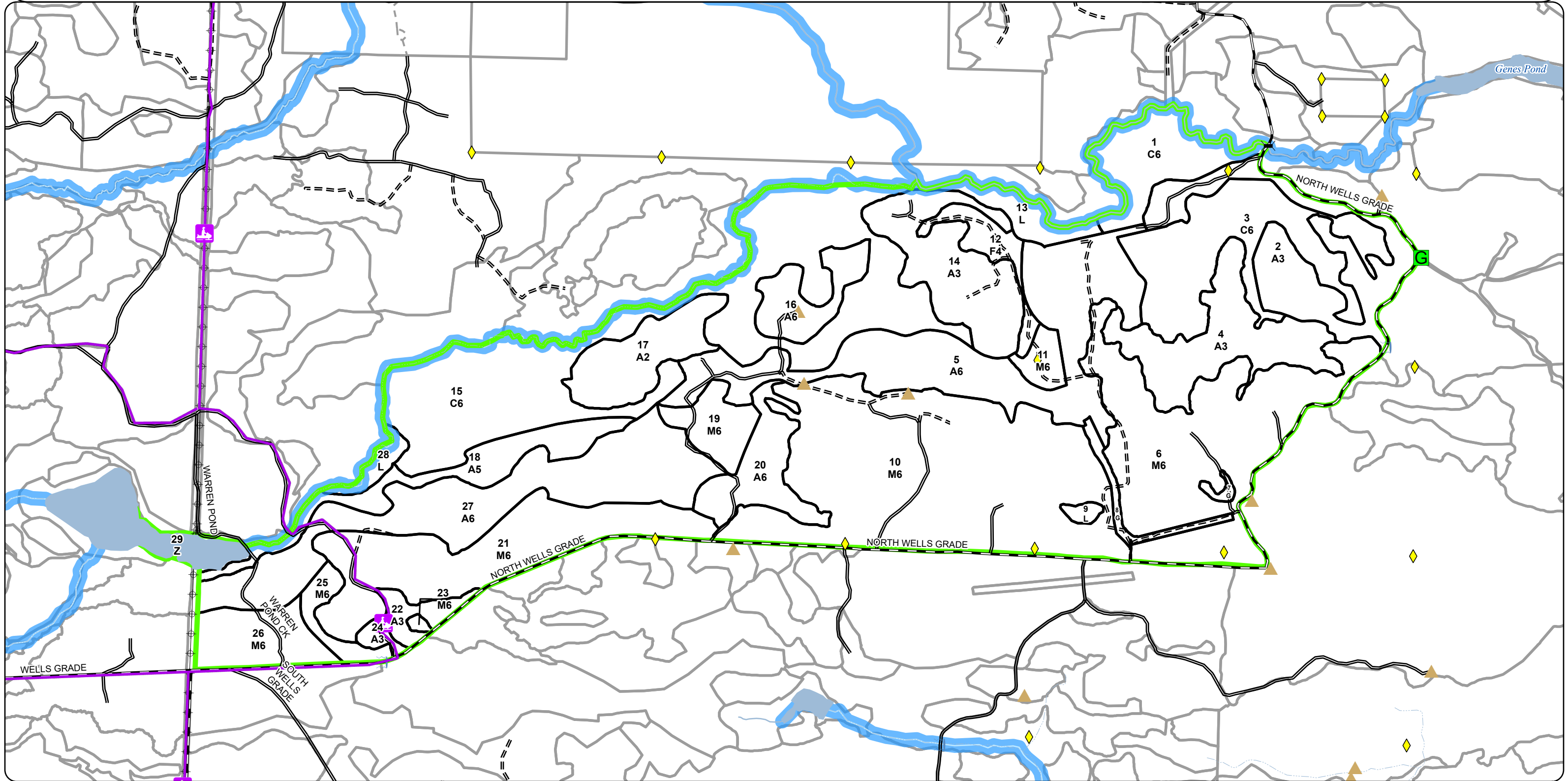
Special Conservation Areas & Site Conditions Map

Compartment: 12055
T42N R29W Sec 2-5, 8-11
County: Dickinson
Unit: Crystal Falls
Mgmt. Area: Ralph Moraine
YOE: 2027
Acres: 1,532 GIS Calculated
Examiner: Deb Goupell
Date Exported: 08/22/2025
Map Phase: Web Post



0 0.5 1 Miles

- Survey Grade Corners
- Berms
- Gate
- Bridges
- Culvert
- Designated Snowmobile Trails
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Intermittent Stream
- Perennial River
- Powerline
- Lakes and Rivers
- Counties
- Compartment Boundary
- Stand Boundaries
- Cold Water Streams
- High Priority Trout Stream Buffer



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	174	0	73	0	152	151	0	0	0	39	0	0	0	0	0	0	0	589
Cedar	0	0	0	0	0	0	0	0	0	0	0	330	0	0	0	0	0	0	330
Herbaceous Openland	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Shrub	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Northern Hardwood	0	0	0	0	0	0	0	0	0	21	23	500	0	0	0	0	0	0	544
Upland Spruce/Fir	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Total	53	174	0	73	16	152	151	0	0	21	62	830	0	0	0	0	0	0	1532



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2027

Acres of Harvest

Compartment 55
Total Compartment Acres: 1,532

Commercial Harvest - 357
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		93	0	0	0	0	0	0	0	0	93
Northern Hardwood		21	0	0	0	129	0	0	0	0	151
Total		114	0	0	0	129	0	0	0	0	244

Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		244	0	0	0	0	0	0	0	0	244
Next Step		0	0	0	0	0	114	0	0	0	114
Total		244	0	0	0	0	114	0	0	0	358



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
-----------------------	-------------------	-------	--------------------	-----------------	--------------	-------------	-------------------	---------------------	-------------------------	------------------	----------------

Proposed Treatments:

19	12055019-Cut	21.2	4119 - Mixed Northern Hardwoods	6	87	81-110	Harvest	Clearcut	4319 - Mixed Upland Forest	Cutting Record	No
<u>Prescription</u> Final harvest all trees 3" and up on east side of woods road; thin to BA 80-90 on west side of road, which will serve as retention for stand. Leave <u>Specs:</u> some variety of species scattered across stand. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> aspen, mixed softwood, mixed hardwood <u>Regen:</u> <u>Other</u> west of road is primarily a pole stand on a rock knob <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											
20	12055020-Cut	32.0	4130 - Aspen	6	57		Harvest	Clearcut	413 - Aspen	Planting Record	No
<u>Prescription</u> Final harvest all stems 3" and greater. Retention is in far north = 5%, reflected by treatment also add 2 conifer pockets for retention per WLD <u>Specs:</u> request. <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> aspen, mixed softwood, mixed hardwood <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											
21	12055021-Cut	97.3	4110 - Sugar Maple Association	6	103	81-110	Harvest	Thinning	411 - Northern Hardwood	Planting Record	No
<u>Prescription</u> Thin to BA 80 following Compleat Marker: leave all present species represented, focus on releasing crowns on crop trees. Open around <u>Specs:</u> basswood clumps to encourage more stump sprouting. Favor minor species especially yellow birch. Use snowmobile specs <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											
26	12055026-Cut	32.0	4110 - Sugar Maple Association	6	104	81-110	Harvest	Thinning	411 - Northern Hardwood	Planting Record	No
<u>Prescription</u> Thin to BA 80 following Compleat Marker: leave all present species represented, especially yellow birch, focus on releasing crowns on crop trees <u>Specs:</u> Open around basswood clumps to encourage more stump sprouting. <u>Next Step</u> <u>Treatments:</u> <u>Acceptable</u> <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											



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
27	12055027-Cut	61.0	4130 - Aspen	6	51		Harvest	Clearcut	413 - Aspen	Planting Record	No
<u>Prescription</u> final harvest cutting all stems 3" and greater. Retention is reflected in treatment boundary (6% of stand): 300 ft buffer to N.Br. Sturgeon river + <u>Specs:</u> drainage that eventually disappears underground. Use snowmobile specs <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> aspen, mixed hardwood, mixed softwood <u>Regen:</u> <u>Other</u> <u>Comment:</u> <u>Site Condition:</u> <u>Proposed Start Date:</u> 10/01/2026											

Total Treatment 243.5
 Acreage Proposed:



Availability for Management

Total Acres	Acres Available	Acres With Condition	Acres Not Available		Dominant Site Conditions			
Acres	Available	With Condition	Not Available		2F	3H	3J	5E
435	376	0	60	Aspen	25		26	9
330	204	0	126	Cedar		126		
10	10	0	0	Herbaceous Openland				
27	27	0	0	Lowland Shrub				
544	532	0	12	Northern Hardwood			12	
16	16	0	0	Upland Spruce/Fir				
16	16	0	0	Water				
1,378	1,181		197	Total Forested Acres	25	126	38	9
	86%		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	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable		2F: Too steep	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								
2	Unavailable		3J: Water quality/BMPs (stream, river, or lake)	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								
3	Unavailable		3J: Water quality/BMPs (stream, river, or lake)	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:								
Fisheries has requested 300 feet								



6	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	8	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	8	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5E: Long-Term Retention	8	3J: Water quality/BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	3J: Water quality/BMPs (stream, river, or lake)	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	3B: Threatened, endangered, and special concern species	8	3J: Water quality/BMPs (stream, river, or lake)	5E: Long-Term Retention	Unspecified	Unspecified
Comments:							

Crystal Falls Mgt. Unit
Deb Goupell: Examiner

Report 4 – Site Conditions

Compartment: 55
Year of Entry: 2027



13	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	126	5A: Not able to obtain desirable regeneration	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!
Year of Entry:

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

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																						
7	310 - Herbaceous Openland	None	2.1			No	trees closing in this opening																																																						
8	3102 - Grass	None	8.0			No	Old ELF line																																																						
9	6229 - Mixed Lowland Shrub	None	2.9			No																																																							
10	4110 - Sugar Maple Association	Poletimber Well	223.7	104	81-110	N/A	There are drainages to watch out for. Wells Drains TS Thinned 2023.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Paper Birch</td><td>3</td><td></td><td>12</td><td></td><td>Sugar Maple</td><td>Trace</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Basswood</td><td>30</td><td></td><td>12</td><td></td><td>Ironwood</td><td>Medium</td><td>Variable</td><td>Variable</td></tr><tr><td>Red Maple</td><td>10</td><td></td><td>10</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Quaking Aspen</td><td>7</td><td></td><td>12</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Sugar Maple</td><td>50</td><td></td><td>12</td><td>104</td><td></td><td></td><td></td><td></td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Paper Birch	3		12		Sugar Maple	Trace	10 - 20 feet	10 - 20 feet	Basswood	30		12		Ironwood	Medium	Variable	Variable	Red Maple	10		10						Quaking Aspen	7		12						Sugar Maple	50		12	104				
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size																																																					
Paper Birch	3		12		Sugar Maple	Trace	10 - 20 feet	10 - 20 feet																																																					
Basswood	30		12		Ironwood	Medium	Variable	Variable																																																					
Red Maple	10		10																																																										
Quaking Aspen	7		12																																																										
Sugar Maple	50		12	104																																																									
11	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.7	95	111-140	N/A	ParV-Wisco habitat type on Rubicon sand 18-35% slope. Based on this, I suggest managing even aged hardwood and wait at least another 10 years to final harvest. There are many multi-stemmed trees and epicormic boles. Few quality trees. A second alternative would be to try a heavy shelterwood by marking as much quality crop trees to a BA of 40-50 -- this would be more experimental. Well covered with princess pine and lycopodium club mosses, making maple regeneration questionable.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Basswood</td><td>10</td><td></td><td>12</td><td></td><td>Hazelnut (Spp.)</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Sugar Maple</td><td>40</td><td></td><td>10</td><td>95</td><td>White Spruce</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>Red Maple</td><td>50</td><td>Seedling</td><td>9</td><td>95</td><td>Balsam Fir</td><td>Low</td><td>Variable</td><td>Variable</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	Basswood	10		12		Hazelnut (Spp.)	Medium	5 - 10 feet	5 - 10 feet	Sugar Maple	40		10	95	White Spruce	Low	Variable	Variable	Red Maple	50	Seedling	9	95	Balsam Fir	Low	Variable	Variable																		
Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size																																																					
Basswood	10		12		Hazelnut (Spp.)	Medium	5 - 10 feet	5 - 10 feet																																																					
Sugar Maple	40		10	95	White Spruce	Low	Variable	Variable																																																					
Red Maple	50	Seedling	9	95	Balsam Fir	Low	Variable	Variable																																																					
12	42340 - Upland Spruce/Fir	Poletimber Poor	16.1	38	1-50	N/A	Old opening filling in with various species																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Balsam Fir</td><td>20</td><td>Sapling</td><td>6</td><td></td></tr><tr><td>Black Cherry</td><td>20</td><td>Sapling</td><td>5</td><td></td></tr><tr><td>Quaking Aspen</td><td>20</td><td></td><td>10</td><td></td></tr><tr><td>White Spruce</td><td>40</td><td>Sapling</td><td>7</td><td>38</td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Balsam Fir	20	Sapling	6		Black Cherry	20	Sapling	5		Quaking Aspen	20		10		White Spruce	40	Sapling	7	38																													
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Balsam Fir	20	Sapling	6																																																										
Black Cherry	20	Sapling	5																																																										
Quaking Aspen	20		10																																																										
White Spruce	40	Sapling	7	38																																																									
13	622 - Lowland Shrub	None	16.3			No	OPIC - FMD: OI Stand Year Origin was 555																																																						
14	4130 - Aspen	Sapling Well	61.1	6	Immature	N/A	Humpback Ridge TS cut 2019. Retention is 100' buffer from stream includes red maple, cedar, white pine.																																																						
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Quaking Aspen</td><td>75</td><td>Log</td><td>1</td><td>6</td></tr><tr><td>Red Maple</td><td>15</td><td>Log</td><td>1</td><td></td></tr><tr><td>Balsam Poplar</td><td>5</td><td>Log</td><td>1</td><td></td></tr><tr><td>Northern White Cedar</td><td>5</td><td>Seedling</td><td>9</td><td></td></tr></table>								Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	75	Log	1	6	Red Maple	15	Log	1		Balsam Poplar	5	Log	1		Northern White Cedar	5	Seedling	9																														
Canopy Species	% Cover	Size Class	DBH	Age																																																									
Quaking Aspen	75	Log	1	6																																																									
Red Maple	15	Log	1																																																										
Balsam Poplar	5	Log	1																																																										
Northern White Cedar	5	Seedling	9																																																										





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																															
20	4130 - Aspen	Poletimber Well	33.7	57		N/A	Far north piece is poor quality maple on a rock outcrop.																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Red Maple</td><td>5</td><td></td><td>10</td><td></td></tr><tr><td>Sugar Maple</td><td>5</td><td></td><td>10</td><td></td></tr><tr><td>Quaking Aspen</td><td>90</td><td></td><td>10</td><td>57</td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	5		10		Sugar Maple	5		10		Quaking Aspen	90		10	57	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Hazelnut (Spp.)</td><td>Medium</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>Balsam Fir</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr><tr><td>White Spruce</td><td>Low</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Sugar Maple</td><td>Medium</td><td>10 - 20 feet</td><td>10 - 20 feet</td></tr><tr><td>Ironwood</td><td>Low</td><td>Variable</td><td>Variable</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Hazelnut (Spp.)	Medium	5 - 10 feet	5 - 10 feet	Balsam Fir	Low	5 - 10 feet	5 - 10 feet	White Spruce	Low	10 - 20 feet	10 - 20 feet	Sugar Maple	Medium	10 - 20 feet	10 - 20 feet	Ironwood	Low	Variable	Variable				
Canopy Species	% Cover	Size Class	DBH	Age																																																		
Red Maple	5		10																																																			
Sugar Maple	5		10																																																			
Quaking Aspen	90		10	57																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																			
Hazelnut (Spp.)	Medium	5 - 10 feet	5 - 10 feet																																																			
Balsam Fir	Low	5 - 10 feet	5 - 10 feet																																																			
White Spruce	Low	10 - 20 feet	10 - 20 feet																																																			
Sugar Maple	Medium	10 - 20 feet	10 - 20 feet																																																			
Ironwood	Low	Variable	Variable																																																			
21	4110 - Sugar Maple Association	Poletimber Well	97.3	103	81-110	N/A	Thinned in 2001 Wells West TS. Steep hills in northwest. Ironwood very heavy in east 1/3 of stand. More conifer along north edge/rock knob																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Basswood</td><td>30</td><td></td><td>14</td><td></td></tr><tr><td>Yellow Birch</td><td>5</td><td></td><td>10</td><td></td></tr><tr><td>Sugar Maple</td><td>55</td><td></td><td>12</td><td>103</td></tr><tr><td>Quaking Aspen</td><td>10</td><td></td><td>12</td><td></td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Basswood	30		14		Yellow Birch	5		10		Sugar Maple	55		12	103	Quaking Aspen	10		12		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>Ironwood</td><td>Low</td><td>Variable</td><td>Variable</td></tr><tr><td>White Spruce</td><td>Low</td><td>5 - 10 feet</td><td>5 - 10 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	Ironwood	Low	Variable	Variable	White Spruce	Low	5 - 10 feet	5 - 10 feet											
Canopy Species	% Cover	Size Class	DBH	Age																																																		
Basswood	30		14																																																			
Yellow Birch	5		10																																																			
Sugar Maple	55		12	103																																																		
Quaking Aspen	10		12																																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																			
Ironwood	Low	Variable	Variable																																																			
White Spruce	Low	5 - 10 feet	5 - 10 feet																																																			
22	4130 - Aspen	Sapling Well	11.3	6	Immature	N/A	Humpback Ridge TS cut 2019																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Quaking Aspen</td><td>75</td><td>Log</td><td>1</td><td>6</td></tr><tr><td>Black Ash</td><td>5</td><td>Pole</td><td>1</td><td></td></tr><tr><td>Balsam Poplar</td><td>20</td><td>Log</td><td>1</td><td></td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Quaking Aspen	75	Log	1	6	Black Ash	5	Pole	1		Balsam Poplar	20	Log	1																																	
Canopy Species	% Cover	Size Class	DBH	Age																																																		
Quaking Aspen	75	Log	1	6																																																		
Black Ash	5	Pole	1																																																			
Balsam Poplar	20	Log	1																																																			
23	4110 - Sugar Maple Association	Poletimber Well	1.3	94	81-110	N/A	Humpback Ridge TS thinned 2019																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Basswood</td><td>40</td><td></td><td>12</td><td>94</td></tr><tr><td>Quaking Aspen</td><td>15</td><td></td><td>12</td><td></td></tr><tr><td>Red Maple</td><td>5</td><td></td><td>10</td><td></td></tr><tr><td>Sugar Maple</td><td>40</td><td></td><td>12</td><td>94</td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Basswood	40		12	94	Quaking Aspen	15		12		Red Maple	5		10		Sugar Maple	40		12	94																											
Canopy Species	% Cover	Size Class	DBH	Age																																																		
Basswood	40		12	94																																																		
Quaking Aspen	15		12																																																			
Red Maple	5		10																																																			
Sugar Maple	40		12	94																																																		
24	4130 - Aspen	Sapling Well	4.4	27	Immature	N/A	Baby Wells TS cut 2001. Black ash is mostly dead (EAB)																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>Balsam Poplar</td><td>10</td><td>Log</td><td>1</td><td></td></tr><tr><td>Quaking Aspen</td><td>90</td><td>Log</td><td>1</td><td>27</td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	Balsam Poplar	10	Log	1		Quaking Aspen	90	Log	1	27	<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>White Spruce</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr><tr><td>Balsam Fir</td><td>Low</td><td>< 5 feet</td><td>< 5 feet</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	White Spruce	Low	< 5 feet	< 5 feet	Balsam Fir	Low	< 5 feet	< 5 feet																					
Canopy Species	% Cover	Size Class	DBH	Age																																																		
Balsam Poplar	10	Log	1																																																			
Quaking Aspen	90	Log	1	27																																																		
Sub-Canopy Species	Density	Avg. Height	Size																																																			
White Spruce	Low	< 5 feet	< 5 feet																																																			
Balsam Fir	Low	< 5 feet	< 5 feet																																																			
25	4119 - Mixed Northern Hardwoods	Poletimber Well	12.3	94	81-110	N/A	There is a bed and bank from the Grade going north and eventually disappears underground for a bit and reappears in bits in stand to the northwest. Most of the conifer in the north lobe has fallen out and there is some windfall aspen there as well.																																															
<table><tr><th>Canopy Species</th><th>% Cover</th><th>Size Class</th><th>DBH</th><th>Age</th></tr><tr><td>White Spruce</td><td>5</td><td></td><td>12</td><td></td></tr><tr><td>Sugar Maple</td><td>30</td><td></td><td>11</td><td>94</td></tr><tr><td>Basswood</td><td>20</td><td></td><td>14</td><td></td></tr><tr><td>Quaking Aspen</td><td>15</td><td></td><td>13</td><td></td></tr><tr><td>Red Maple</td><td>15</td><td></td><td>10</td><td></td></tr><tr><td>Balsam Poplar</td><td>10</td><td></td><td>14</td><td></td></tr><tr><td>Balsam Fir</td><td>5</td><td>Seedling</td><td>8</td><td></td></tr></table>			Canopy Species	% Cover	Size Class	DBH	Age	White Spruce	5		12		Sugar Maple	30		11	94	Basswood	20		14		Quaking Aspen	15		13		Red Maple	15		10		Balsam Poplar	10		14		Balsam Fir	5	Seedling	8		<table><tr><th>Sub-Canopy Species</th><th>Density</th><th>Avg. Height</th><th>Size</th></tr><tr><td>White Spruce</td><td>Low</td><td>Variable</td><td>Variable</td></tr></table>				Sub-Canopy Species	Density	Avg. Height	Size	White Spruce	Low	Variable	Variable
Canopy Species	% Cover	Size Class	DBH	Age																																																		
White Spruce	5		12																																																			
Sugar Maple	30		11	94																																																		
Basswood	20		14																																																			
Quaking Aspen	15		13																																																			
Red Maple	15		10																																																			
Balsam Poplar	10		14																																																			
Balsam Fir	5	Seedling	8																																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																			
White Spruce	Low	Variable	Variable																																																			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
26	4110 - Sugar Maple Association	Poletimber Well	32.0	104	81-110	N/A	Wells West TS thinned 2001. White ash regen is heavy on far east third of this stand. Basswood tops showing dieback. Terrain slopes down to north			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Basswood		40		11		Leatherwood		Low	5 - 10 feet	5 - 10 feet
Sugar Maple		50		10	104	White Ash		Medium	10 - 20 feet	10 - 20 feet
Quaking Aspen		2		12		Ironwood		High	10 - 20 feet	10 - 20 feet
Yellow Birch		8		11		Balsam Fir		Low	< 5 feet	< 5 feet
27	4130 - Aspen	Poletimber Well	117.2	51		N/A	There are some older and larger trees on the north edge and far west (south of Warren Pond)			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
White Spruce		3	Sapling	7		Sugar Maple		Low	10 - 20 feet	10 - 20 feet
Balsam Poplar		10	Seedling	9		White Spruce		Medium	Variable	Variable
Sugar Maple		2	Sapling	6		Balsam Fir		Medium	Variable	Variable
Quaking Aspen		80	Seedling	9	51					
Balsam Fir		5	Sapling	7						
28	622 - Lowland Shrub	None	7.4			No				
29	500 - Water	None	16.4			No	Warren Pond			