



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:

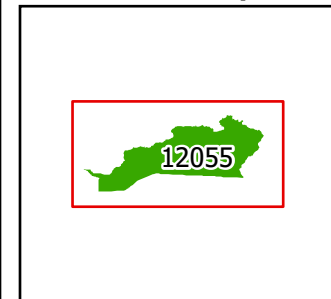
The following reports from the Inventory are attached:

- 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: 11/14/2025
Map Phase: Post Review

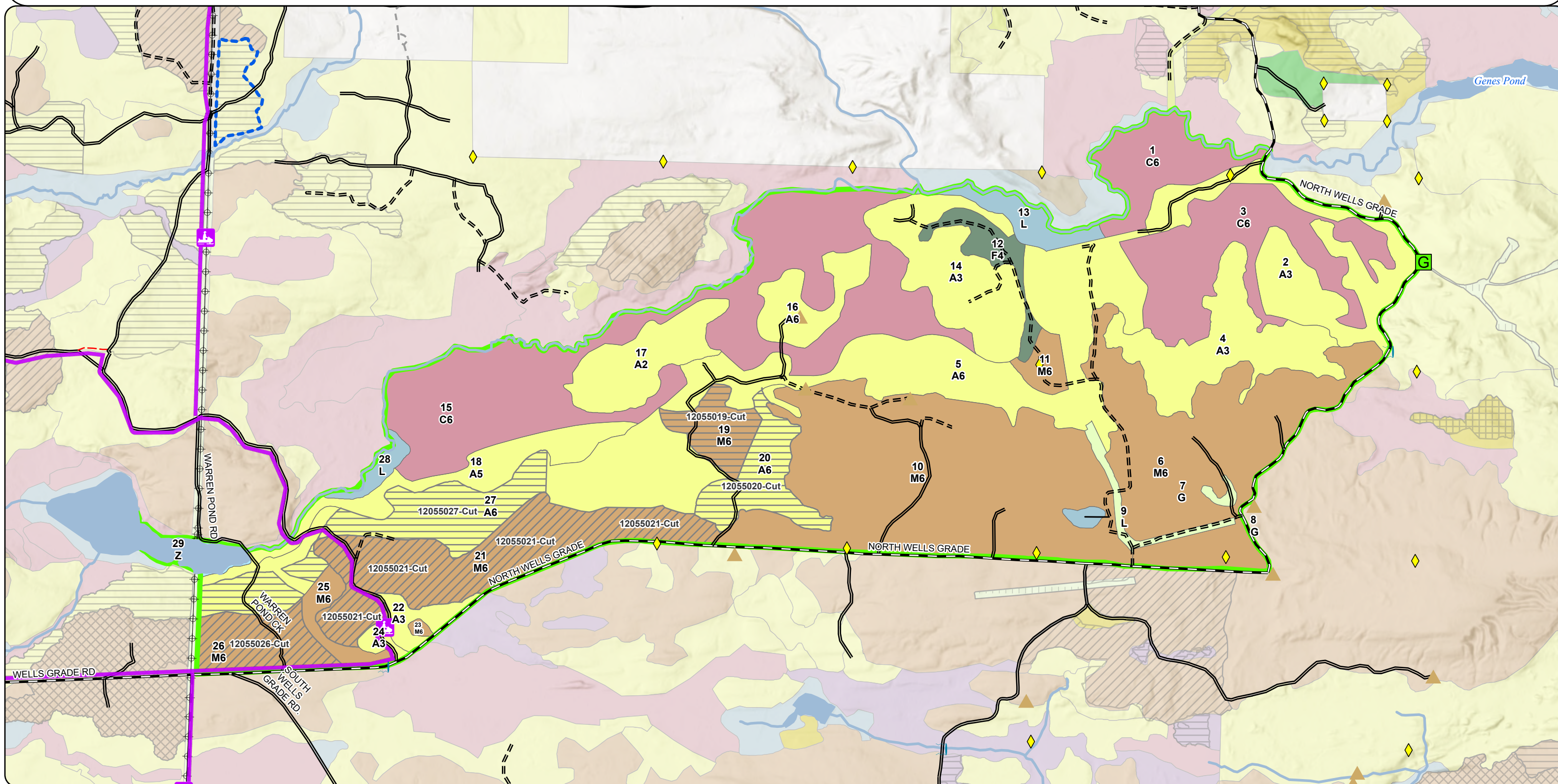
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- Survey Grade Corners
- Berm
- Gate
- Culvert
- Designated Snowmobile
- DNR - Primary Forest Road

- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Electric
- Streams

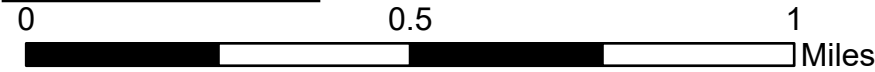
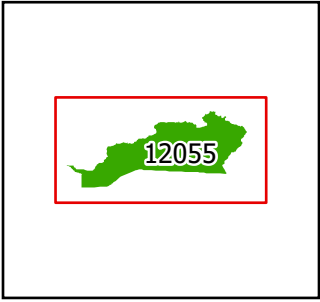
- Lakes and Rivers
- Compartment Boundary
- Clearcut
- Thinning
- Treatments with Site Conditions
- 411 - Northern Hardwood
- 413 - Aspen

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

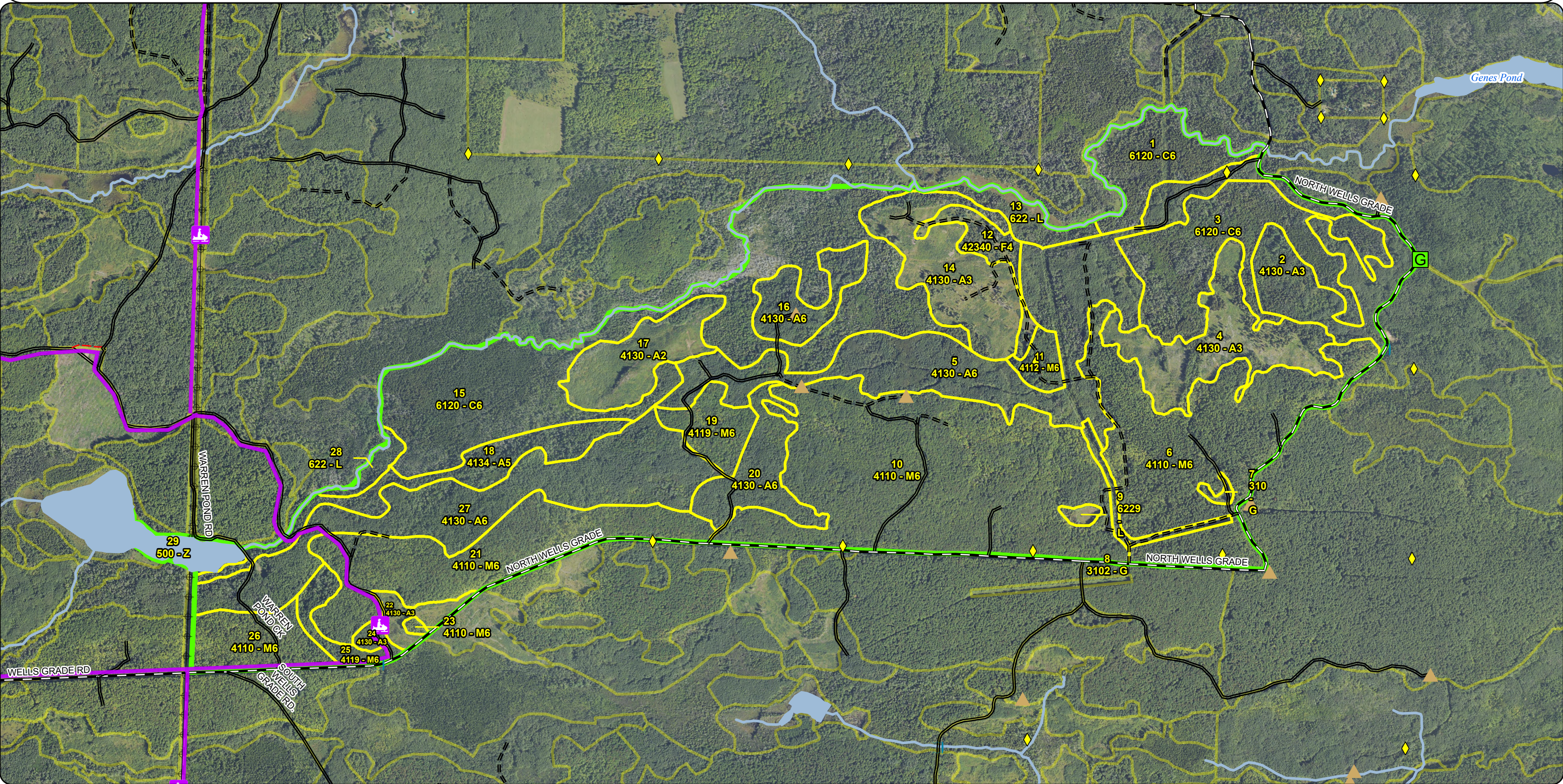


Stand Boundary Map

Compartment: 12055
T42N R29W Sec 2-5, 8-11
County: Dickinson
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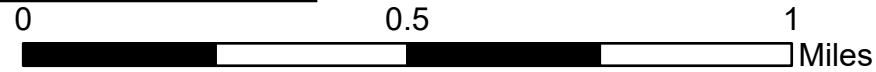
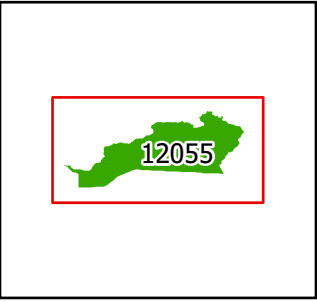


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|-----------------------------|---------------------------------------|---------------------------------|
| Survey Grade Corners | DNR - Forest Access Route | 411 - Northern Hardwood |
| Berm | Federal / State / County - Paved Road | 413 - Aspen |
| Gate | County - Dirt Road (Seasonal) | 423 - Other Upland Conifers |
| Culvert | Private - Dirt / Gravel Road | 500 - Water |
| Designated Snowmobile | Electric | 612 - Lowland Coniferous Forest |
| DNR - Primary Forest Road | Streams | 310 - Herbaceous Openland |
| DNR - Secondary Forest Road | Lakes and Rivers | 622 - Lowland Shrub |
| | Compartment Boundary | |

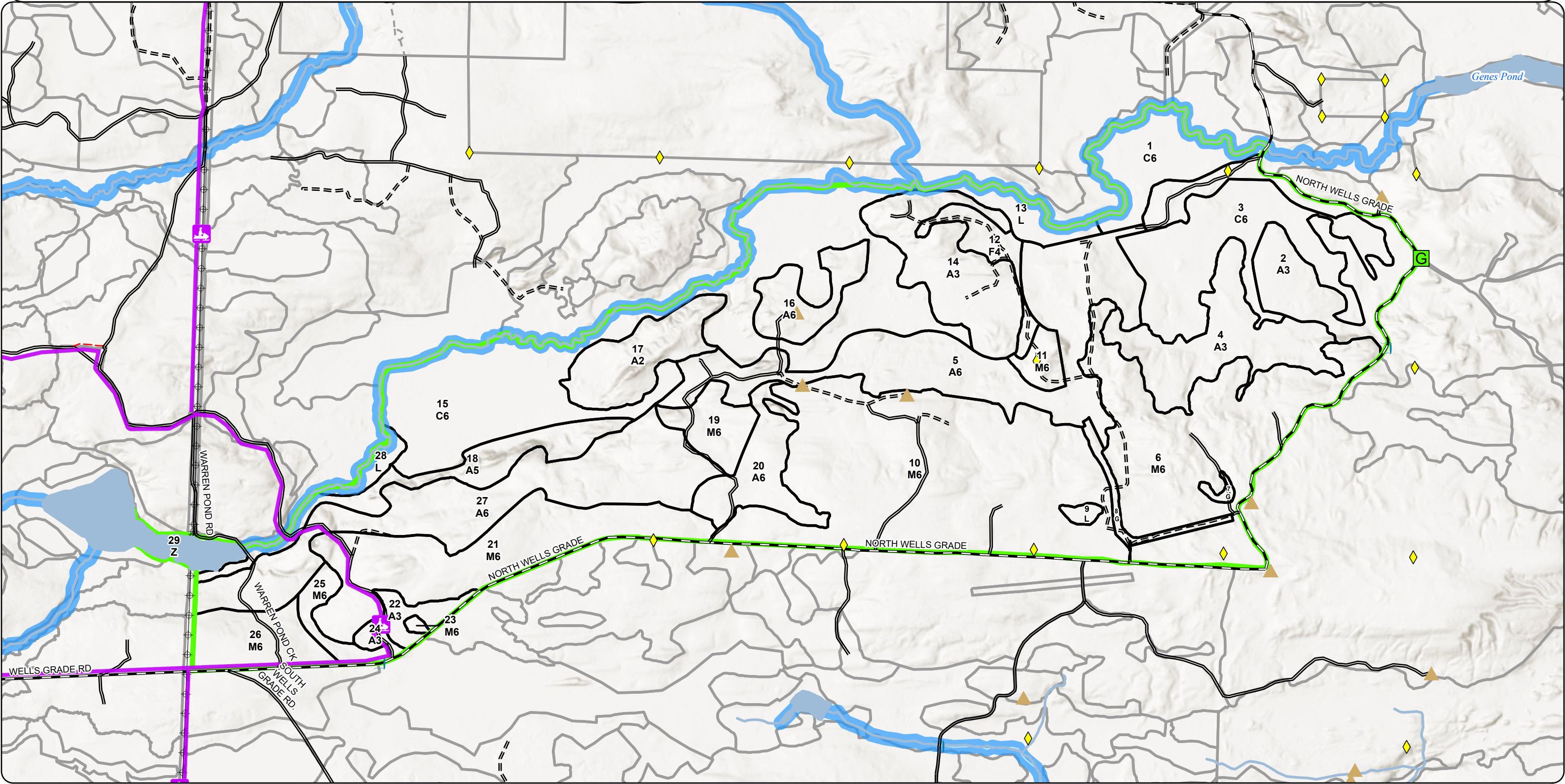


**Special Conservation Areas
& Site Conditions Map**

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: 11/14/2025
Map Phase: Post Review



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|---------------------------|---------------------------------------|-----------------------------------|
| Survey Grade Corners | DNR - Secondary Forest Road | Streams |
| Berm | DNR - Forest Access Route | Lakes and Rivers |
| Gate | Federal / State / County - Paved Road | Compartment Boundary |
| Culvert | County - Dirt Road (Seasonal) | Stand Boundaries |
| Designated Snowmobile | Private - Dirt / Gravel Road | Cold Water Streams |
| DNR - Primary Forest Road | Electric | 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	0	129	0	0	0	151
Total	114	0	0	0	0	129	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	0	114	0	0	114
Total	244	0	0	0	0	0	114	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
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Approved 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. <u>Specs:</u> Leave 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											



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
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. Open around basswood clumps to encourage more stump sprouting. <u>Specs:</u> <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											
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	2F	3H	3J	5E
Acres	Available	With Condition	Not Available					
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								

Report 4 – Site Conditions



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				





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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
15	6120 - Lowland Cedar	Poletimber Well	204.2	104		N/A	This is a very variable stand. Shallow soils, seeps and drainages throughout.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Balsam Poplar		3	Log	14		Hazelnut (Spp.)		Low	5 - 10 feet	5 - 10 feet
Balsam Fir		8	Pole	8		Tag Alder		Low	5 - 10 feet	5 - 10 feet
White Spruce		10	Log/Pole	11						
Black Spruce		5	Pole	7						
Northern White Cedar		65	Pole/Log	9	104					
Tamarack		3	Pole	9						
White Pine		1	Log	16						
Black Ash		5	Pole	7						
16	4130 - Aspen	Poletimber Well	25.4	40	Unspecified	N/A	Cut in 1985; few larger white spruce were left originally. Stand is on a rock ledge; east end is much heavier to conifer but has been heavily impacted by SBW in the past 10 years			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Quaking Aspen		85	Pole	8	40	Balsam Fir		Medium	Variable	Variable
White Spruce		15	Pole	8		Hazelnut (Spp.)		High	5 - 10 feet	5 - 10 feet
						White Spruce		Medium	Variable	Variable
17	4130 - Aspen	Sapling Medium	38.9	6	Immature	N/A	Very steep rock in center. Rocky with terrain. Buffer stream on north. Humpback Ridge TS cut 2019. Southeast corner where hardwoods was heavier is not regenerating well yet.			
Canopy Species		% Cover	Size Class	DBH	Age					
Red Maple		20	Sapling	1						
Quaking Aspen		80	Sapling	1	6					
18	4134 - Aspen, Spruce/Fir	Poletimber Medium	39.0	90		N/A	At least 3 seeps and 2 different bed/banks. Very steep ridge. Black ash swale. With hydrology and terrain, and buffer to Sturgeon River, stand is factor limited.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		5	Log/Pole	10		Balsam Fir		High	Variable	Variable
Paper Birch		5	Log/Pole	10		Hazelnut (Spp.)		Medium	5 - 10 feet	5 - 10 feet
Quaking Aspen		63	Log	14	90					
Balsam Fir		10	Pole/Log	8						
White Spruce		15	Log/Pole	10						
Black Ash		2	Pole	7						
19	4119 - Mixed Northern Hardwoods	Poletimber Well	21.2	87	81-110	N/A	Seepy, shallow soils. Very few quality stems except on west side of road (much defect, broken tops or limbs). Ash is dying. Trace amount of cedar. Thick with princess pine and lycopodium. Final harvest east of road and thin west side(many pole sized trees) as retention.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		40	Pole	8	87	Balsam Fir		Medium	5 - 10 feet	5 - 10 feet
Red Maple		30	Pole	8		Hazelnut (Spp.)		Medium	5 - 10 feet	5 - 10 feet
Yellow Birch		3	Pole	8		White Spruce		Medium	5 - 10 feet	5 - 10 feet
Basswood		10	Log/Pole	10						
Quaking Aspen		10	Log/Pole	12						
Balsam Poplar		5	Pole	8						
Black Ash		2	Pole	6						



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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
Sugar Maple		50	Log/Pole	10	104	Ironwood		High	10 - 20 feet	10 - 20 feet
Yellow Birch		8	Log/Pole	11		White Ash		Medium	10 - 20 feet	10 - 20 feet
Basswood		40	Log/Pole	11		Leatherwood		Low	5 - 10 feet	5 - 10 feet
Quaking Aspen		2	Log	12		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
Sugar Maple		2	Pole/Sapling	6		Balsam Fir		Medium	Variable	Variable
Quaking Aspen		80	Pole	9	51	Sugar Maple		Low	10 - 20 feet	10 - 20 feet
Balsam Poplar		10	Pole	9		White Spruce		Medium	Variable	Variable
Balsam Fir		5	Pole/Sapling	7						
White Spruce		3	Pole/Sapling	7						
28	622 - Lowland Shrub	None	7.4			No				
29	500 - Water	None	16.4			No	Warren Pond			