



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32077

Entry Year 2021

Acreage: 1,573

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 2019-07-25

Stand Examiner: Eric Brolin

Legal Description:

T43N - R24W, Sections 4, 5, 6

Identified Planning Goals:

Strive to perpetuate the component of maple, aspen, and dry mesic conifers where they now occur.

Soil and topography:

Nearly level drainage ways, ground moraines, and till plains.

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

Surrounded by State land. Private holdings within the compartment, with several camps. Land use is production of commercial forest products, and low key recreation.

Unique Natural Features:

Big and Little Kiwi Lakes are in Sections 5 and 6.

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment contains two unnamed waterbodies (small lakes). 100' plus 5' per 1% increase in slope; buffers are recommended for these unnamed waterbodies to protect shoreline areas in accordance with Best Management Practices.

Wildlife Habitat Considerations:

Compartment 077 is found within the Dead Horse Moraines Management Area; on Ground Moraines in southeastern Marquette, southwestern Alger, and northwestern Delta Counties. The dominant Natural Communities are poor conifer swamps, mesic northern forests, and dry northern forests. Major forest cover types include Northern Hardwood, Aspen, and Mixed Lowland Conifer. This management area contains a large proportion of hardwood forest which regenerates well partly due to the heavier snow cover and lower deer numbers than the southern portion of this Management Area. The most significant wildlife management issues in the management area are: mast (hard and soft); mature forest (upland deciduous, especially aspen and mixed forest with little understory); course woody debris, early successional forest, and deer wintering complexes.

The following have been identified as featured species for the Dead Horse Moraines Management Area: black bear, pileated woodpecker, ruffed grouse, and white-tailed deer.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of peat & muck and minor medium-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Black River and Prairie du Chien Groups subcrop below the glacial drift. The Black River is quarried for stone in the UP and the PdC could be used for stone. There are no gravel pits located in this area and potential appears to be limited. Abandoned iron mines are located ten miles to the northwest. This area was not previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

County Road RM - Swamp Buck Road

Survey Needs:

Recreational Facilities and Opportunities:

General forest recreation.

Fire Protection:

Wet access in most areas will be difficult to access with fire equipment. Within the Gwinn Unit 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:

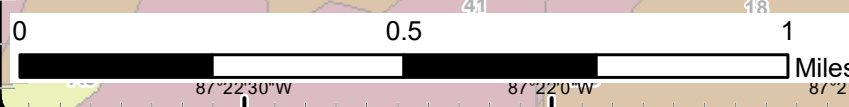
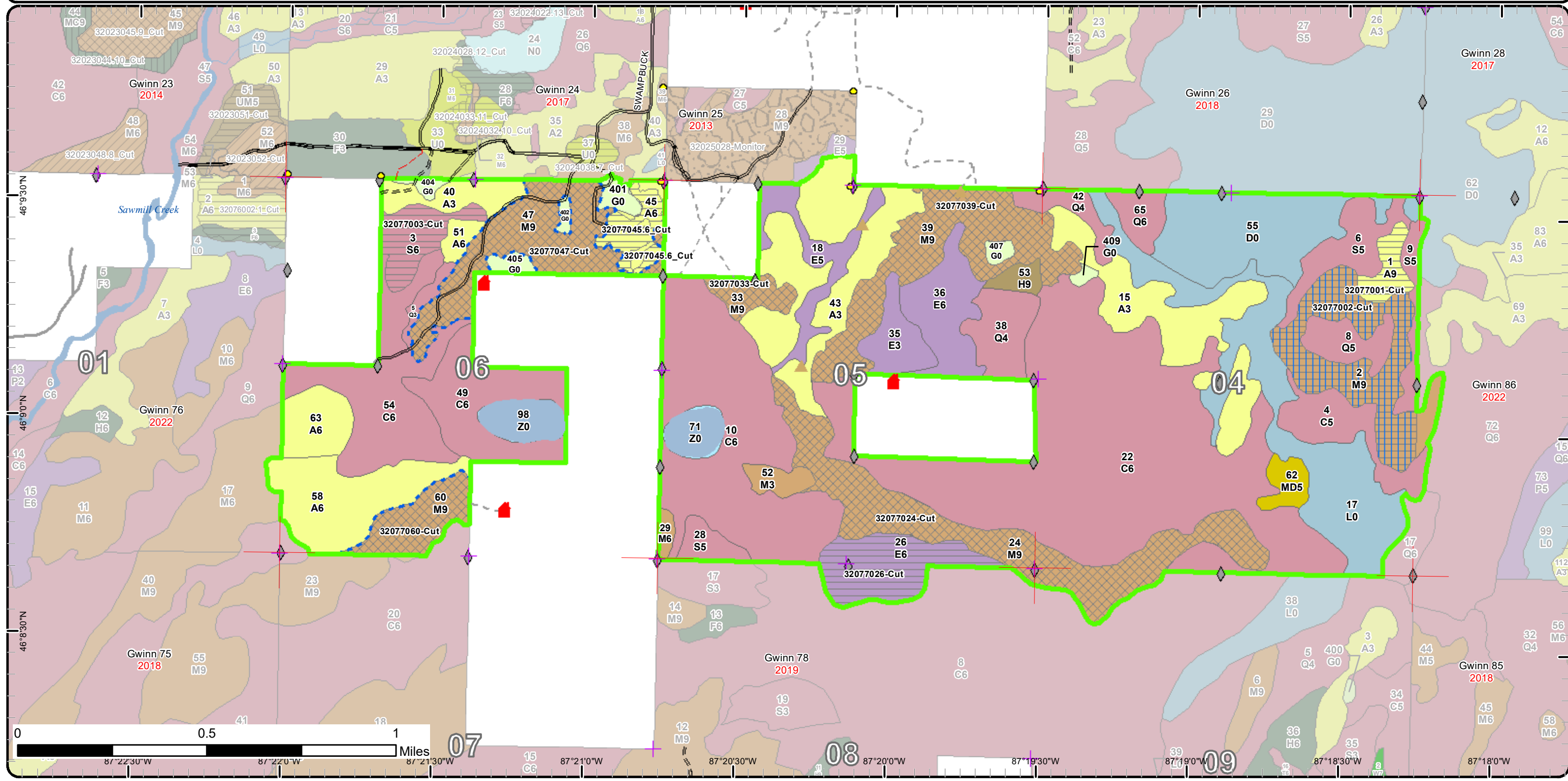
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map



Compartment: 77
 T43N, R24W, Sec: 04, 05, 06
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse
 Moraines
 YOE: 2021
 Acres: 1,573 GIS Calculated
 Examiner: Eric Brolin
 Map Revised: 10/16/2019
 Map Phase: Web-Post

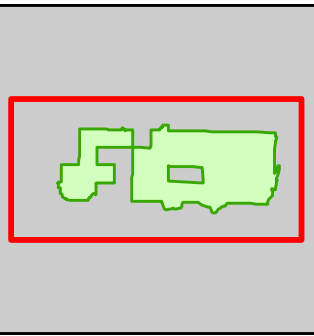
- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- County - Dirt Road (Seasonal)
- Private - Paved Road
- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub



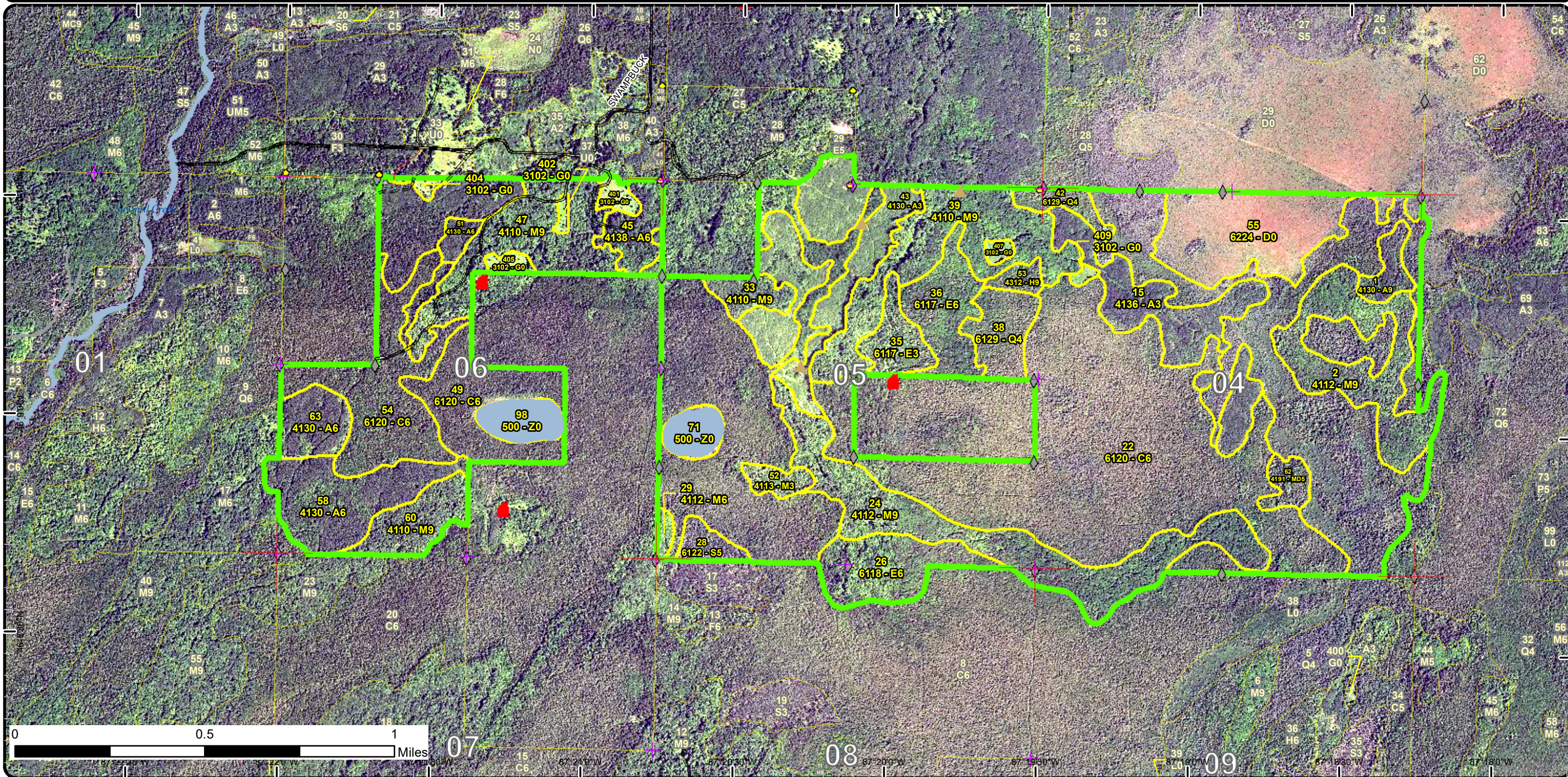
87°22'30"W 87°22'0"W 87°21'0"W 87°20'30"W 87°20'0"W 87°19'30"W 87°19'0"W 87°18'30"W 87°18'0"W

Stand Boundary Map

Compartment: 77
 T43N, R24W, Sec: 04, 05, 06
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 Unit: Gwinn
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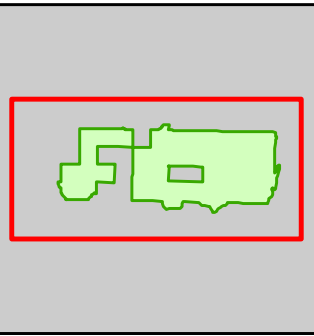


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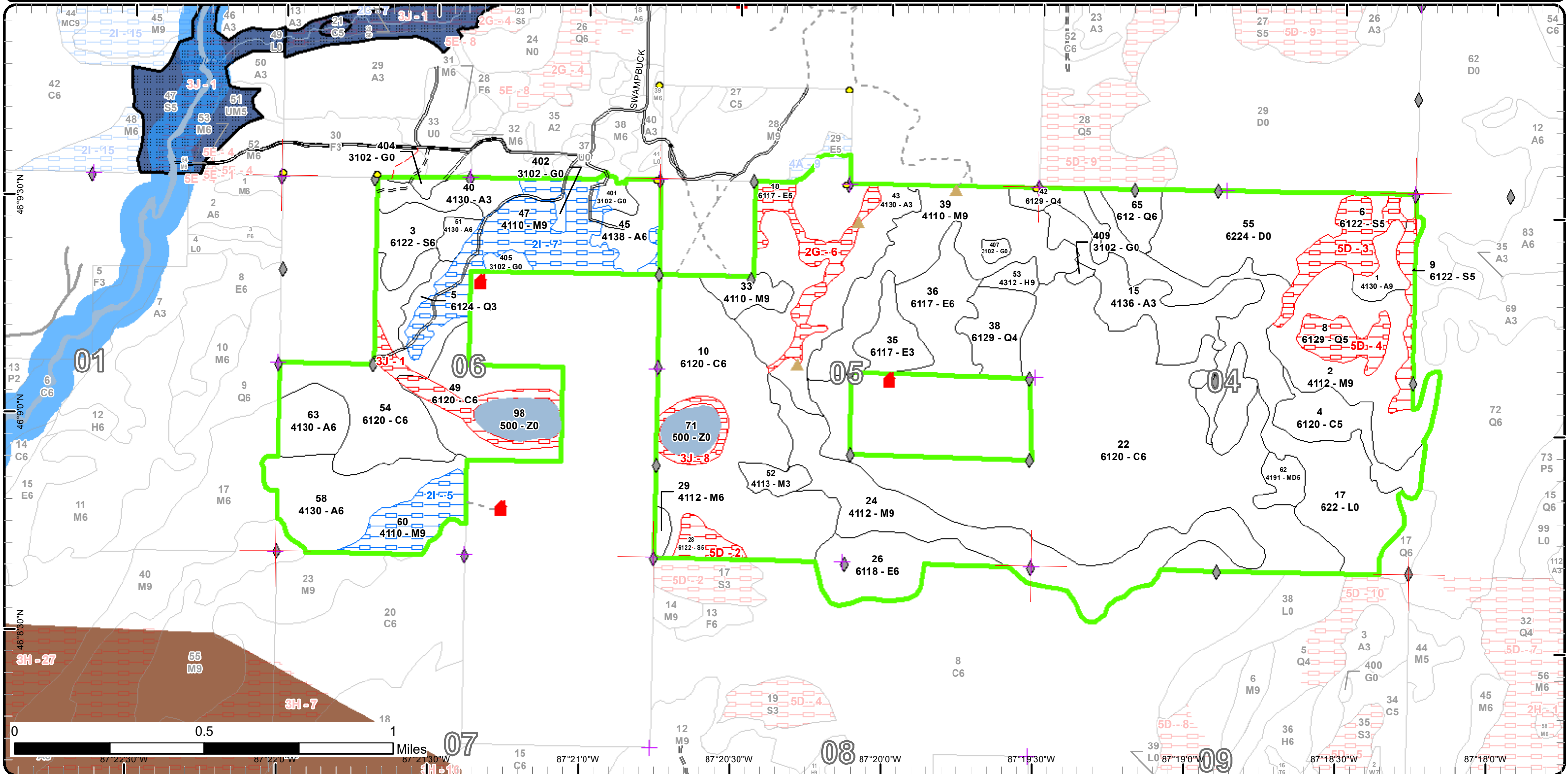


Special Conservation Areas & Site Conditions Map

Compartment: 77
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 County: Marquette
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 Mgmt Area: Dead Horse
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- Private - Dirt / Gravel Road
- Cabin
- ▲ Berms
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 2G: Too wet (sensitive soils, does not include access issues)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5D: Unproductive Forest Land
- Stand Boundaries
- SCA
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range
- Spring or Seep



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	76	16	76	56	0	17	10	0	0	0	0	0	0	0	0	0	0	251
Cedar	0	0	0	0	0	0	0	0	0	0	101	406	0	0	47	0	0	0	554
Hemlock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Herbaceous Openland	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Conifers	0	0	0	0	5	0	44	0	0	0	0	15	0	0	0	0	0	0	64
Lowland Deciduous	0	0	0	17	0	0	0	36	0	0	23	0	0	0	0	0	0	33	108
Lowland Shrub	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	9	0	33	0	0	0	0	0	20	62
Mixed Upland Deciduous	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
Northern Hardwood	0	0	7	0	0	0	0	58	0	36	220	0	0	0	0	0	0	0	321
Treed Bog	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Water	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Total	194	76	23	93	61	9	61	104	0	45	344	454	0	0	47	0	20	39	1569



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2021

Acres of Harvest

Compartment 77

Total Compartment Acres: 1,573

Commercial Harvest - 390
 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	23	0	0	0	0	0	0	0	0	23
Lowland Deciduous	36	0	0	0	0	0	0	0	0	36
Lowland Spruce/Fir	20	0	0	0	0	0	0	0	0	20
Northern Hardwood	0	256	0	55	0	0	0	0	0	311
Total	79	256	0	55	0	0	0	0	0	390

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	390	0	0	0	0	0	0	0	0	390
Next Step	0	0	0	20	0	0	390	0	0	410
Total	390	0	0	20	0	0	390	0	0	800



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	32077001-Cut	10.3	4130 - Aspen	Sawtimber Well	69	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec to promote aspen regeneration. Retention should include forked crown aspen and paper birch. Leave cedar, hemlock, and
Specs: white pine.

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

Acceptable aspen, spruce, fir
Regen:

Other Access may require frozen conditions to harvest.
Comment:

Proposed Start Date: 10/1 /2020

2	32077002-Cut	55.0	4112 - Maple, Beech, Cherry Association	Sawtimber Well	62	81-110	Harvest	Seed Tree with Retention	4116 - Mixed N. Hardwood - Aspen	Two-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec to promote red maple and aspen regeneration. Green mark to leave 10-20 BA of better quality red maple poles. These leave
Specs: trees will be left indefinitely for seed and diversity. Leave cedar, hemlock, white pine, and yellow birch in combination with green marked trees. Most surrounding lowland conifer is sparse and unproductive, but include any areas that may be merchantable with this treatment.

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

Acceptable red maple, aspen, spruce/fir
Regen:

Other Very limited access and poor potential for any quality sawlogs. This should be managed as an even-aged stand. Access may require frozen
Comment: conditions to harvest.

Proposed Start Date: 10/1 /2020

3	32077003-Cut	19.6	6122 - Black Spruce	Poletimber Well	150	111-140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec. to promote black spruce regeneration. Leave cedar, white pine, and hemlock if present.
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); Seeding, Machine Seed
Treatments:

Acceptable black spruce, tamarack, cedar
Regen:

Other Stand lines are clear on the ground where cedar becomes too dense along the south border. Access from G0 to the north for harvest and
Comment: decking. Retain northeast bubble where cedar becomes too dense. Harvest during dry or frozen conditions.

Proposed Start Date: 10/1 /2020

24	32077024-Cut	91.5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Leave some
Specs: large future snag trees for wildlife including trees over a 24" diameter at the stump. Leave cedar, hemlock, and white spruce. Favor diversity while marking especially yellow birch.

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

Acceptable northern hardwood
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2020

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
26 32077026-Cut	36.2	6118 - Lowland Deciduous with Cedar	Poletimber Well	60	111-140	Harvest	Clearcut with Retention	611 - Lowland Deciduous Forest	Two-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Harvest to a 2" spec. to promote lowland hardwood and conifer regeneration. Leave cedar, hemlock, white pine, and yellow birch. Green tree to
Specs: leave some healthy paper birch.

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

Acceptable lowland hardwoods, conifers
Regen:

Other Harvest during dry or frozen conditions.
Comment:

Proposed Start Date: 10/1 /2020

33 32077033-Cut	11.7	4110 - Sugar Maple Association	Sawtimber Well	85	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all
Specs: merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar and hemlock if present. Favor diversity while marking especially basswood.

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

Acceptable northern hardwood
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2020

39 32077039-Cut	69.6	4110 - Sugar Maple Association	Sawtimber Well	90	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all
Specs: merchantable spruce/fir. Leave some large future snag trees for wildlife including trees over a 24" diameter at the stump. Leave cedar and hemlock if present. Favor diversity while marking especially basswood and yellow birch.

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

Acceptable northern hardwood
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2020

45 32077045.6_C ut	13.1	4138 - Aspen (OI)	Poletimber Well	57	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut stand, cut all hardwood using a 2 inch spec leave all sub merchantable conifer. Leave all hemlock, cedar, and white pine
Specs:

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

Acceptable Aspen, mixed hardwood, mixed conifer.
Regen:

Other
Comment:

Proposed Start Date: 11/8 /2017

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
47 32077047-Cut	59.3	4110 - Sugar Maple Association	Sawtimber Well	90	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar, hemlock, black cherry, and yellow birch. Favor diversity while marking especially basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable northern hardwood

Regen:

Other Do not mark below target in areas with lighter BA.

Comment:

Proposed Start Date: 10/1 /2020

60 32077060-Cut	23.9	4110 - Sugar Maple Association	Sawtimber Well	80	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Mark stand to 70-90 BA. Maintain older canopy gaps that are growing in while creating new ones to establish/release regeneration. Remove all merchantable spruce/fir. Leave some large future snag trees for wildlife. Leave cedar, hemlock, and yellow birch. Favor diversity while marking especially basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable northern hardwood

Regen:

Other Capture any merchantable upland spruce/fir along stand edges. Start date of 10/01/2027 to harvest with hardwoods from Compartments

Comment: 75/76/77/78.

Proposed Start Date: 10/1 /2027

**Total Treatment
Acreage Proposed: 390.2**

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 77
Year of Entry: 2021

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions			
		With Condition	Not Available		4A	2G	3J	5D
252	251	1	0	Aspen	1			
555	529	0	26	Cedar			26	
6	6	0	0	Hemlock				
17	17	0	0	Herbaceous Openland				
64	49	0	15	Lowland Conifers				15
109	86	0	23	Lowland Deciduous	0	23		
87	87	0	0	Lowland Shrub				
62	20	0	42	Lowland Spruce/Fir				42
9	9	0	0	Mixed Upland Deciduous				
322	322	0	0	Northern Hardwood				
66	66	0	0	Treed Bog				
25	25	0	0	Water				
1,573	1,466	1	107	Total Forested Acres	1	23	26	57
	93%	0%	7%	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	3J: Water quality / BMPs (stream, river, or lake)	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	5D: Unproductive Forest Land	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gwinn Mgt. Unit
Eric Brolin : Examiner

Compartment: 77
Year of Entry: 2021

3	Unavailable	5D: Unproductive Forest Land	33	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Very sparse, slow growing ground.							
4	Unavailable	5D: Unproductive Forest Land	15	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments: Very sparse, slow growing ground.							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	23	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Black ash drainage between lowland areas.							
8	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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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
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																									
1	4130 - Aspen	Sawtimber Well	10.3	69	111-140	N/A	Shallow rolling knobs dense to large, nice quality bigtooth aspen. Fir understory can get dense in areas. South border has softer ground and transitions into more red maple. OPIC - FMD: A6F4, One of seven hard to access stands with volume, that are coded 7 for merchantability because they are surrounded by very wet area, plus it would be a very long snow plow , because of winter cutting. I did not check the stand this time because of time constraints.																																									
<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>78</td> <td>Log</td> <td>12</td> <td>69</td> </tr> <tr> <td>Balsam Fir</td> <td>7</td> <td>Pole/Sapling</td> <td>6</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>7</td> <td>Pole</td> <td>7</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Bigtooth Aspen	78	Log	12	69	Balsam Fir	7	Pole/Sapling	6		Paper Birch	7	Pole	7		<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Balsam Fir</td> <td>High</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>				Canopy Species	Density	Avg. Height	Size	Balsam Fir	High	Variable	Sapling														
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2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	55.0	62	81-110	N/A	Wetter ground solid to red maple with poor potential for better quality sawlogs. Long circular ridge connected by lower conifer drainages. Slight elevation change from the surrounding lowlands turns into dense flats of red maple which range from small sawlog sized trees to dense poles. Cedar and birch found mixed in around the edges. Some patches of this stand have a very dense understory of balsam fir. Small, dense patches of hemlock were observed and should be excluded from future harvests. Large remnant minor species exist such as aspen, white spruce, and yellow birch within. 170 100 210 150 Average of 130 BA. OPIC - FMD: M6A4, one of seven hard to access stands with volume, that are coded 7 for merchantability, because they are surrounded by very wet area, plus it would be a very long snow plow, because of winter cutting. I did not check the stand this time because of time constraints.																																									
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3	6122 - Black Spruce	Poletimber Well	19.6	150	111-140	N/A	Lowland conifer stand heavy to black spruce. Stand is showing very little decline for its very old age. More fir mixed in the transitions, especially along the north edge. OPIC - FMD: FAIRLY GOOD CEDAR, SMALLER SPRUCE & CEDAR IN NW CORNER, SAVE FOR THE DEER. DID NOT TAKE ANY POINTS IN STAND BECAUSE OF TIME CONSTRAINTS.																																									
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4	6120 - Lowland Cedar	Poletimber Medium	35.2	92	81-110	N/A	Lowland mix dense to cedar along the upland transitions. Areas of black spruce/tamarack within. Any areas with merchantable species is very sparse and unproductive lowland. OPIC - FMD: M4Q4, one of seven hard to access stands with volume, that are coded 7 for merchantability, because they are surrounded by very wet area, plus it would be a very long snow plow, because it would be a winter cut. I did not check the stand this time because of time constraints.																																									
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5	6124 - Lowland Spruce-Fir	Sapling Well	4.7	36		N/A	Sapling strip along cedar heavy to conifer. Stand was cut with adjoining aspen to the north but regenerated different.																																									
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																														
6	6122 - Black Spruce	Poletimber Medium	33.3	100	81-110	N/A	Lowland stand transitioning from open bog to lower ground hardwoods. Stunted black spruce along the bog side with more cedar mixed in along the hardwood stands. Very wet ground.																														
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8	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	15.2	100	1-50	N/A	Low ground pothole bog surrounded by slightly higher lowland hardwoods / red maple. This is a very sparse and wet stand with slow growing trees.																														
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10	6120 - Lowland Cedar	Poletimber Well	125.9	104	111-140	N/A	Very large lowland stand dense to cedar. Scattered minor species and pockets across the entire stand. Patches of open canopy alder found within. Transition into higher elevation stands contains more diversity. Smaller diameter cedar south and around the lake. OPIC - FMD: FAIR CEDAR-B FIR 1-3" DBH-																														
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15	4136 - Aspen, Mixed Conifer	Sapling Well	56.8	25	Immature	N/A	Dense aspen saplings. Tamarack saplings can become abundant in patches of lower ground or around the edges transitioning into lowland. OPIC - FMD: A3 is 1-4 " dbh, 15-25 ft tall, some bam, fir ,tamarac, and lowland brush mixed in. Cut in 1994'-1995', Permit #38-91-01, wet access, long snow plow.																														
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17	622 - Lowland Shrub	Nonstocked	87.3			No	Lowland drainage. Alder dense in areas and patches of scattered, stunted black spruce.																														
18	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	23.3	98	51-80	N/A	Web of lowland drainage areas. Seasonally flooded/moving water.																														
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22	6120 - Lowland Cedar	Poletimber Well	280.5	104	111-140	N/A	Very large lowland stand dense to cedar. Scattered minor species and pockets across the entire stand. Patches of open canopy alder found within. Transition into higher elevation stands contains more diversity.OPIC - FMD: FAIR CEDAR-B FIR 1-3" DBH-																														
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24	4112 - Maple, Beech, Cherry Association	Sawtimber Well	91.5	90	111-140	N/A	Thinned in 2005. Ranges from poorer quality to areas of good quality hardwood across the stand. Majority is smaller sawlog to pole sized trees. Some areas are dense to maple saplings, especially where openings occur. Strips of paper birch along edges. A couple of lower spots and/or drainages cut across this strand that may need culvert installation. 140 130 80 120 150 160 130 80 90 Average of 120 BA. OPIC - FMD: M6M7, cut prmt# 27-01-01, fair stand of hardwood consisting of hard and soft maple, birch, ironwood, and some spruce. Some raspberry coming in.																																	
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26	6118 - Lowland Deciduous with Cedar	Poletimber Well	36.2	60	111-140	N/A	Lower ground transitional stand, some higher and drier patches but overall lowland. Denser to poorer quality red maple and paper birch with scattered larger, mature species. OPIC - FMD: F5M4, Leave until next treatment period, when the maple stands to the north will be cut. After subtracting the volume needed for retention, it would not pay to cut this small stand by itself.																																	
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28	6122 - Black Spruce	Poletimber Medium	8.8	86	51-80	N/A	Very sparse, unproductive black spruce stand. 5" - 1 stick trees with scattered saplings and some tamarack poles. OPIC - FMD: SMALL, SPARSE, FAIR GROWTH, NO BRUSH, DID NOT VISIT STAND BECAUSE OF TIME CONSTRAINTS.																																	
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29	4112 - Maple, Beech, Cherry Association	Poletimber Well	3.1	65	111-140	N/A	Small hardwood stand. Access is through cedar and road is grown in with alder. Stand is very dense with poor quality red maple poles. OPIC - FMD: Poor stand, did not visit stand this time because of time constraints.																																	
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33	4110 - Sugar Maple Association	Sawtimber Well	11.7	85	141-170	N/A	Maple log strand with little diversity. No regen in the understory. Corners are in place and blue line is still visible. 160 150 140 180 100 Average of 145 BA. OPIC - FMD: M6M7, Basal area only 100, leave until next time. A mix of hard and soft maple, with a lot of basswood, some spruce and aspen mixed in.																																	
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Sugar Maple	85	Log	14	85																																				
35	6117 - Lowland Deciduous, Mixed Coniferous	Sapling Well	17.2	25	Immature	N/A	Low poorly drained ground. Dense red maple and fir saplings. OPIC - FMD: Cut in 1993-94, #38-91-01, it is now F2U2, 2-4" dbh, 10-30 ft tall, with a few pole sized cedar, and hemlock.																																	
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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																	
36	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	32.5	64	81-110	N/A	Lowland mix of hardwood and conifer. Age ranges considerably from pole sized red maple to 120+ year old black spruce. Cedar is more dense in the west tip. Slightly higher elevation in the south with more red maple and some paper birch. Allow one more inventory cycle to add red maple diameter and even age harvest.																																	
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38	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	22.0	50	Unspecified	N/A	Lowland mix with denser cedar in areas.																																	
<p>OPIC - FMD: Q4L OVERALL, POOR QUALITY, DID NOT CHECK STAND THIS TIME BECAUSE OF TIME CONSTRAINTS.</p>																																								
39	4110 - Sugar Maple Association	Sawtimber Well	69.6	90	111-140	N/A	Maple stand quite variable in size and species from one end to the other. Areas of lower red Maple ground along transitions. Patches of maple regeneration otherwise fairly open understory across most of the stand. Some patches along the lowland stand are heavy to sapling/small poles and may be excluded from next harvest. A couple of vernal pools are present within. 110 90 180 140 120 130 130 150 150 130 Average of 135 BA.																																	
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40	4130 - Aspen	Sapling Well	16.4	16	Immature	N/A	Softer ground with some lowland aspen mixed in. Transitions into lowlands along the south border. Road in the west half is used as a private camp access road. Some dense fir patches on borders. OPIC - FMD: A2U1F1 now. Cut in 2003 by LaFleur under permit # 025-01-01, A2 is 1/2 to 2" dbh, 10-20 ft. tall.																																	
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42	6129 - Mixed Coniferous Lowland Forest	Poletimber Poor	11.0	50	Unspecified	N/A	Lowland conifer mix.																																	
<p>OPIC - FMD: LEAVE FOR WILDLIFE AND DIVERSITY.</p>																																								
43	4130 - Aspen	Sapling Well	75.5	8	Immature	N/A	Aspen sapling stand with drainages webbed within. Some scattered maple and ash poles. OPIC - FMD: A6F4, SMALL, POOR QUALITY ASPEN-LOTS OF BALSAM REPRO.-CLEARCUT NOW. ***Stand harvested as "Ironclad Swamp Buck" #002-11-01 - cut December, 2011.																																	
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45	4138 - Aspen (OI)	Poletimber Well	17.0	57	111-140	N/A	OPIC - FMD: A6F4M4, not quite old enough, cut next treatment period.																																	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																		
47	4110 - Sugar Maple Association	Sawtimber Well	59.3	90	111-140	N/A	<p>Good quality hardwood logs, dense to sugar maple. Southeast corner has some large aspen and a sliver of lowland conifer. No maple regeneration and not much in the understory across most of the stand. The south tip has a young fir understory with more pole sized trees. Small patches of ironwood regeneration are found within. Past marking left a very wide range of BA across the stand. 110 120 150 100 80 100 70 160 120 130 140 140 90 90 Average of 115 BA across the entire stand. Very dense patches with some lighter BA areas around the edges and the south tip.</p> <p>OPIC - FMD: M6M7, Cut in 2003 by LaFleur under permit #25-01-01, a mix of hard and soft maple, birch, basswood, blackchery , aspen and fir. Lots of raspberry also.</p>																																		
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49	6120 - Lowland Cedar	Poletimber Well	47.4	130	111-140	N/A	<p>Dense stand of cedar.</p> <p>OPIC - FMD: FAIRLY GOOD CEDAR, SMALLER SPRUCE & CEDAR IN NW CORNER, SAVE FOR THE DEER. DID NOT TAKE ANY POINTS IN STAND BECAUSE OF TIME CONSTRAINTS.</p>																																		
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51	4130 - Aspen	Poletimber Well	5.3	36	1-50	N/A	<p>Solid to aspen sapling - small sized poles. Very few fir saplings in understory. OPIC - FMD: Cut - Permit # 5-83-1. A5A1 now with some black cherry mixed in.</p>																																		
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52	4113 - R.Maple, Conifer	Sapling Well	7.4	14	Immature	N/A	<p>Young sapling stand. Dense with fir and red maple stump sprouts.</p> <p>OPIC - FMD: Cut prmt.#27-01-01, finished in 2005, it is now U1F1 (cut all merch, leave pine, cedar, hem)</p>																																		
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53	4312 - Hemlock, Mixed Deciduous	Sawtimber Well	5.7	182	111-140	N/A	<p>Did not look at this stand YOE 2021. Note of nice hemlock stand from past inventory.</p> <p>OPIC - FMD: H9H6, nice stand to leave for wildlife and diversity, it is like a park.</p>																																		
54	6120 - Lowland Cedar	Poletimber Well	66.1	93	111-140	N/A	<p>Larger diameter cedar with patches of canopy lowland hardwoods and black spruce speckled in. Very dense understory of small diameter cedar around 5" average but 90+ years old. More solid to cedar in the north portion. Would not be able to operate without damaging oodles of cedar.</p> <p>OPIC - FMD: NW PART OF STAND HA0 LESS HDWD & SMALLER CEDAR & BALSAM. LEAVE FOR WILDLIFE AND DIVERSTIY</p>																																		
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55	6224 - Treed Bog	Nonstocked	66.1			No	Open bog with scattered, unproductive black spruce 10'-20' tall.																																		



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments			
58	4130 - Aspen	Poletimber Well	50.8	36	81-110	N/A	Great quality aspen poles with mixed maple ranging from saplings to scattered log sized trees. Some fir and areas with sugar maple saplings in the understory but fairly open across much of the stand. A small lowland patch with mixed conifer is in the southwest corner of this stand. OPIC - FMD: Cut prmt.# 5-83-1, nice aspen coming in, with a mix of maple, fir, hemlock, birch, and spruce.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Quaking Aspen		55	Pole	7	36	Balsam Fir		Medium	>20 feet	Sapling
Sugar Maple		8	Log/Pole/Sap	10		Sugar Maple		Medium	Variable	Sapling
Red Maple		10	Pole/Log	9						
Bigtooth Aspen		19	Pole	8						
60	4110 - Sugar Maple Association	Sawtimber Well	23.9	80	111-140	N/A	Good quality sugar maple. Ranges from poles to small saw logs. Very little regen except scattered ironwood and stunted, stubby maple saplings. Canopies have very little room to grow across parts of the stand. A few interior gaps show little/no regen. Some larger diameters and a little more diversity as you head southwest across compartments 78 and 75. 140 100 110 100 100 130 140 120 100 100 Average of 115 BA (from C77, S60). 120 90 150 130 Average of 125 BA (C75, S55). Hold and prescribe all hardwood stands in this area in YOE 2028 with compartment 75 inventory cycle. This will allow stand 60 BA to become more uniform across the stand. OPIC - FMD: M6M7, Area cut in 1983 , # 5-83-1. Cut again in 2003-4 under permit 026-01-01, it is now a mix of hard and soft maple , basswood, birch, aspen, spruce, and even some cedar			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Sugar Maple		89	Log/Pole	12	80	Sugar Maple		Low	10 - 20 feet	Sapling
						Ironwood		Low	10 - 20 feet	Sapling
						Leatherwood		Low	< 5 feet	Tall Shrub
62	4191 - Mixed Upland Deciduous with Conifer	Poletimber Medium	8.8	40	51-80	N/A	Secluded stand with small elevation humps mixed with softer lowland areas. Very light BA consists of pole sized small paper birch and scattered larger hemlock and white pine. Very dense understory of fir saplings. Very wet limited access. Possible paper birch/white pine seed tree in the future once birch and fir matures. OPIC - FMD: Stand that is surrounded by wet area, hard to get to. Will not be cut. Leave for wildlife and diversity, Did not check stand this time because of time constraints.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
White Pine		15	XLog	24	126	Balsam Fir		High	Variable	Sapling
Hemlock		15	XLog/Log	20						
Red Maple		25	Pole	5						
Paper Birch		45	Pole/Sapling	6	40					
63	4130 - Aspen	Poletimber Well	19.6	27	Immature	N/A	Young aspen poles. On the verge of large saplings to 5"-6" average poles in 2019. OPIC - FMD: A5F4, Cut prmt# 36-91-01, nice aspen with some maple, birch, fir, and spruce mixed in.			
Canopy Species		% Cover	Size Class	DBH	Age	Canopy Species		Density	Avg. Height	Size
Quaking Aspen		50	Pole/Sapling	5	27	Balsam Fir		Medium	Variable	Sapling
Bigtooth Aspen		40	Pole/Sapling	5	27					
65	612 - Lowland Coniferous Forest	Poletimber Well	11.4	50	Unspecified	N/A	Did not access this stand in 2019. Bog area very difficult to access.			
71	500 - Water	Nonstocked	11.2		Unspecified	No	OPIC - FMD: Little Kiwi Lake			
98	500 - Water	Nonstocked	13.4			No	OPIC - FMD: Big Kiwi Lake			



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
401	3102 - Grass	Nonstocked	4.9			No	Scattered conifer. OPIC - FMD: TORDONED 6-88
402	3102 - Grass	Nonstocked	1.8			No	Growing in with conifer. OPIC - FMD: TORDONED 1982
404	3102 - Grass	Nonstocked	2.6			No	Growing in with conifer. OPIC - FMD: TORDONED 1982
405	3102 - Grass	Nonstocked	3.8			No	Scattered conifer. OPIC - FMD: TORDONED 1982
407	3102 - Grass	Nonstocked	2.5		Unspecified	No	Grass opening
409	3102 - Grass	Nonstocked	1.6		Unspecified	No	Grass opening growing in with conifer saplings/poles along the edges.