



# Compartment Review Presentation

## Gwinn Forest Management Unit

Compartment 32071

Entry Year 2018

Acreage: 1,932

County Marquette

Management Area: Ralph Ground Moraine

---

**Revision Date:** 2016-08-08

**Stand Examiner:** Theresa Sysol

**Legal Description:**

T43N R25W Section(s) 34,35,36

**Identified Planning Goals:**

To maintain and enhance the health and sustainability of the forest cover types, while providing for recreational, wildlife and fisheries values.

**Soil and topography:**

Emmet fine sandy loam, Nadeau-Mancelona complex, Carbondale and Tawas soils, Mashek fine sandy loam, Northland fine sandy loam, Nadeau fine sandy loam, Nahma muck, Cathro-Ensley mucks, histosols and aquents. Level swamps with gently rolling uplands. Some eskers in the swamp with steep slopes. Steep slopes on a couple of the moraines. Generally rich soils on the uplands.

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

Developed farms directly to the south and east of the compartment. Large blocks of State land north and west.

**Unique Natural Features:**

None identified with Natural Features.

**Archeological, Historical, and Cultural Features:**

Old logging camps and rail grades in compartment as well as old homestead sites. Three archeological sites have been identified by the State Historic Preservation Office. Two sites are in stands with no treatments. The third site, 20MQ305, is in a stand that was prescribed to be cut. This site will be left out of treatments with a buffer, and will not be used as a workspace or staging area.

**Special Management Designations or Considerations:**

Large block of lowland swamp thermal cover for wildlife.

**Watershed and Fisheries Considerations:**

The headwaters of Leisner Creek and Hunters Brook are the conifer-lowland dominated areas in this compartment.

**Wildlife Habitat Considerations:**

Compartment 71 is found within the Ralph Ground Moraine Management Area; on Ground Moraines in northern Dickinson and southern Marquette Counties. The dominant Natural Communities are mesic northern forest, poor conifer swamps, and dry mesic northern forest. Major forest cover types include Aspen, Northern Hardwoods, and Mixed Lowland Conifers. Almost every cover type and associated species can be found within the management area including several deer wintering complexes. This management area provides some of the finest grouse and woodcock hunting in the Midwest and this is a wildlife management priority that will continue. Wildlife management issues in the management area are: early successional forest conditions (associated with alder, riparian zones, or forested wetlands); mast (hard and soft); habitat fragmentation; mature forest (upland deciduous, especially aspen and mixed forest with little understory); coarse woody debris; and deer wintering complexes.

The following have been identified as featured species for Ralph Ground Moraine Management Area: American woodcock, black bear, Northern goshawk, ruffed grouse, and whitetail deer.

**Mineral Resource and Development Concerns and/or Restrictions**

Surface sediments consist of medium-textured till and the compartment lies on the edge of a drumlin field. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Black River Formation, Prairie du Chien Group, and likely intervening units subcrop below the glacial drift. The Black River has been quarried for stone in the UP. There is evidence of a former sand/gravel pit located in Section 35 and there may be additional sand and gravel potential on the upland areas. There has been no mining within ten miles of the compartment (abandoned iron mines are located twelve miles to the north). State minerals just to the west and northwest of the compartment have been leased twice in the past 30 years

for metallic mineral exploration and development. The most recent leases were released in June 2016. There is no economic oil and gas production in the UP.

**Vehicle Access:**

Good throughout compartment in upland areas. The entire Watson Cut-Off road is in need of repairs/maintenance, though, including: grading, filling of holes and draining of holes.

**Survey Needs:**

None at this time.

**Recreational Facilities and Opportunities:**

General dispersed recreation, hunting.

**Fire Protection:**

Fire frequency and intensity is low within this compartment.

**Additional Compartment Information:**

Spruce budworm activity is just becoming detectable within and around the compartment, and treatments will target these areas. Wild parsnip has also been discovered and will be treated, if possible, through county grants.

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

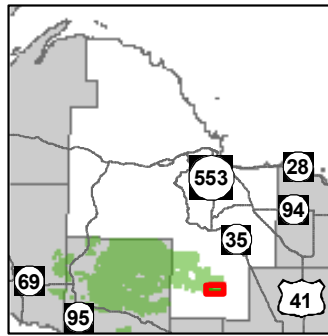
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

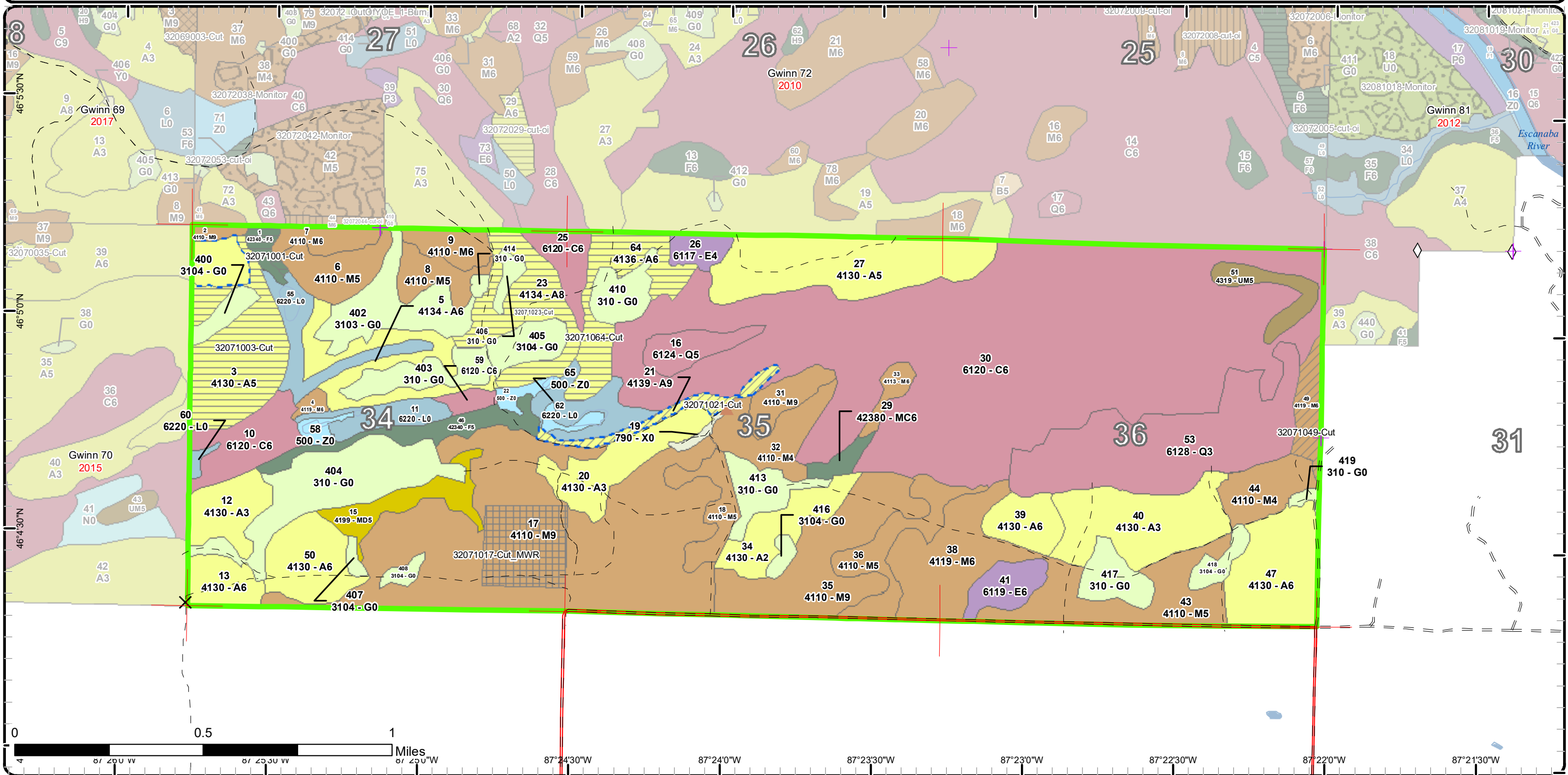
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 71  
 T43N, R25W, Sec: 34,35,36  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Ralph Ground  
 Moraine  
 YOE: 2018  
 Acres: 1932.3 GIS Calculated  
 Examiner: Theresa Sysol  
 Map Revised: 2/8/2017  
 Map Phase: Post-Review

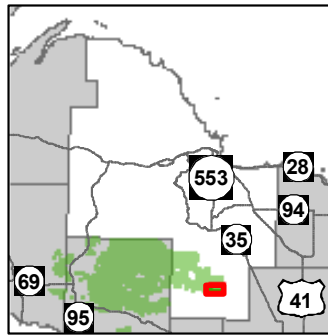


- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Seed Tree (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 790 - Other Bare/Sparsely Vegetated
- Lakes

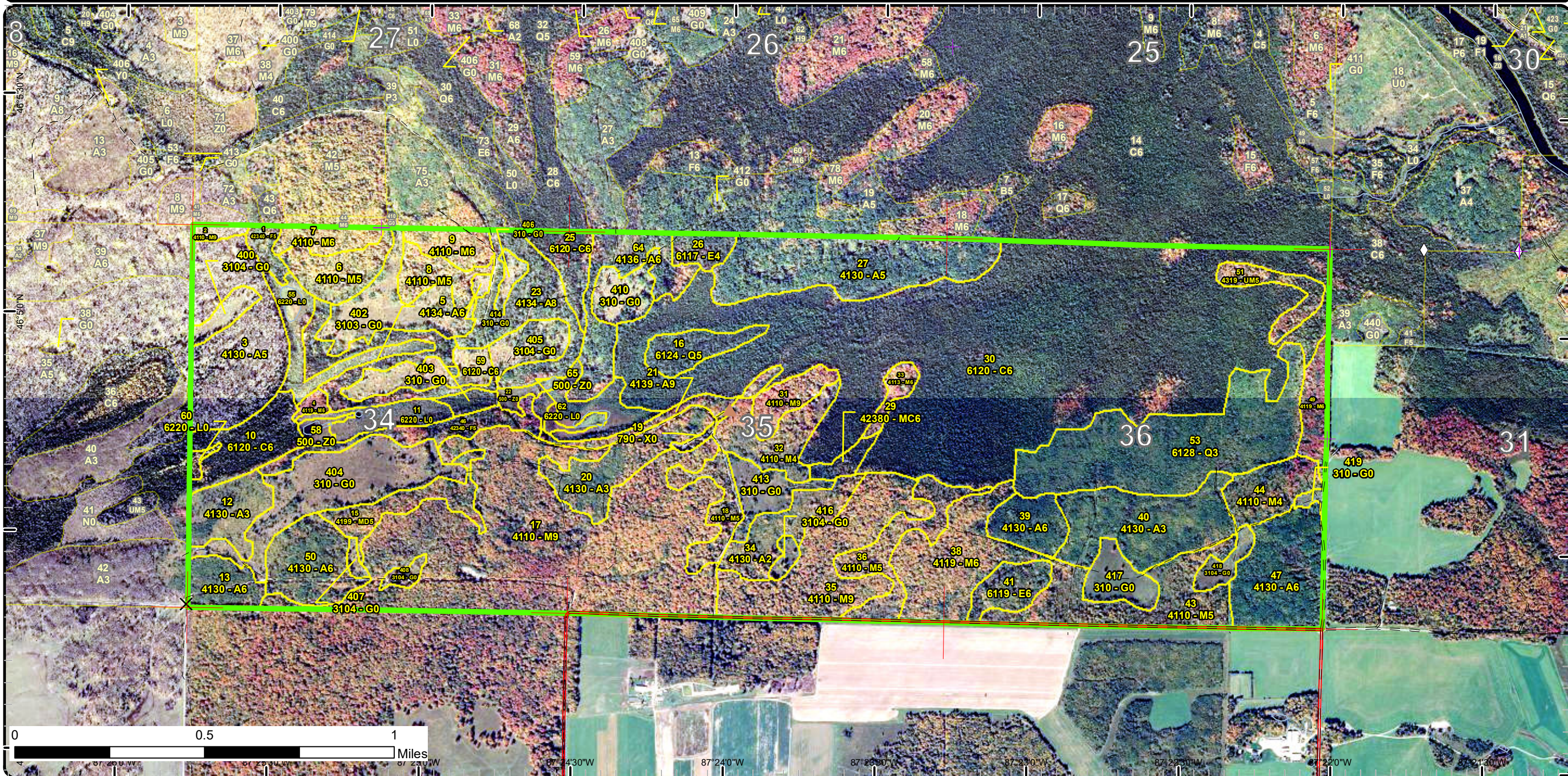


# Stand Boundary Map

Compartment: 71  
 T43N, R25W, Sec: 34,35,36  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Ralph Ground  
 Moraine  
 YOE: 2018  
 Acres: 1932.3 GIS Calculated  
 Examiner: Theresa Sysol  
 Map Revised: 2/8/2017  
 Map Phase: Post-Review

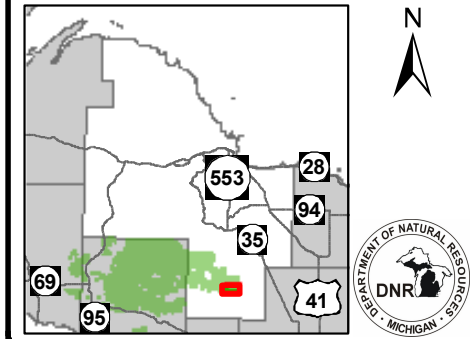


- Miris Corners
  - + Remonumented Section Corners
  - ◇ Field Grade GPS Corners
  - X Gate
  - ▲ Berms
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - Rivers
  - ▭ Compartment Boundary
  - ▭ Stand Boundaries
- 423 - Other Upland Conifers
  - 430 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
  - 310 - Herbaceous Openland
  - 500 - Water
  - 622 - Lowland Shrub
  - 790 - Other Bare/Sparsely Vegetated
- 411 - Northern Hardwood
  - 413 - Aspen
  - 419 - Mixed Upland Deciduous

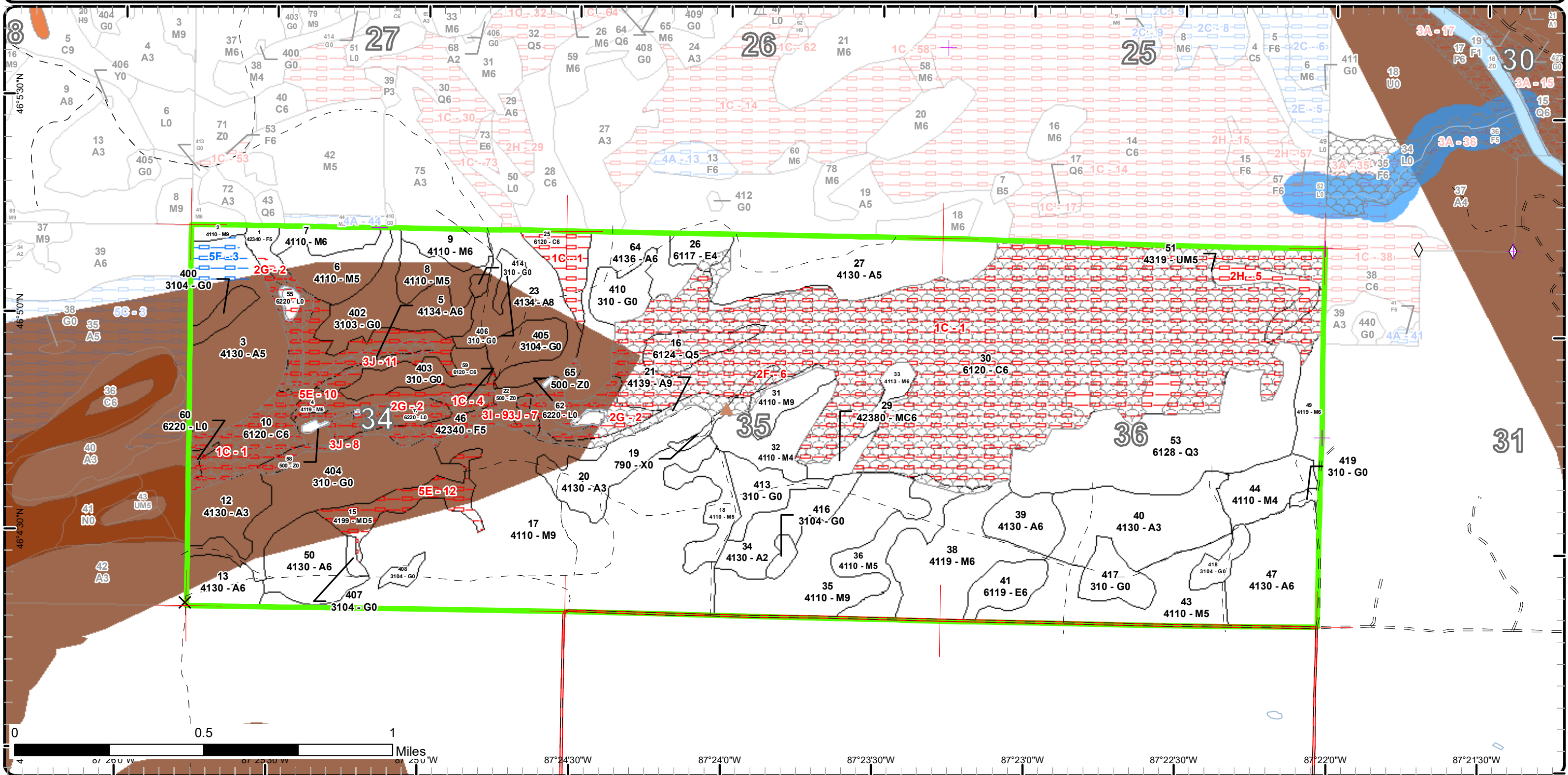


# Special Conservation Areas & Site Conditions Map

Compartment: 71  
 T43N, R25W, Sec: 34,35,36  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Ralph Ground  
 Moraine  
 YOE: 2018  
 Acres: 1932.3 GIS Calculated  
 Examiner: Theresa Sysol  
 Map Revised: 2/8/2017  
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- X Gate
- ▲ Berms
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Rivers
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 1C: Other dept or div proc/practices
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3I: Historical / archeological (add locked comments)
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range
- Other Habitat Area



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	44	79	104	0	64	128	40	0	0	0	0	0	0	0	0	0	0	459
Bare/Sparsely Vegetated	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	44	0	0	440	0	0	484
Herbaceous Openland	189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
Lowland Conifers	0	0	0	95	0	0	0	0	14	0	0	0	0	0	0	0	0	0	109
Lowland Deciduous	0	0	0	0	0	0	0	8	14	0	0	0	0	0	0	0	0	0	22
Lowland Shrub	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	19
Northern Hardwood	0	0	0	0	0	0	0	0	25	47	223	0	0	0	0	0	0	244	539
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Upland Mixed Forest	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	12
Upland Spruce/Fir	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	25
Water	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
<b>Total</b>	<b>257</b>	<b>44</b>	<b>79</b>	<b>199</b>	<b>0</b>	<b>77</b>	<b>128</b>	<b>73</b>	<b>53</b>	<b>66</b>	<b>223</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>440</b>	<b>0</b>	<b>250</b>	<b>1932</b>



## Report 2 – Treatment Summary

Gwinn Mgt. Unit

Compartment 71

Year of Entry: 2018

Acres of Harvest

Total Compartment Acres: 1,932

Commercial Harvest - 165  
 Harvests with Site Condition - 22  
 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	128	0	0	0	0	11	0	0	0	139
Northern Hardwood	0	0	0	30	0	13	0	0	0	44
Upland Spruce/Fir	5	0	0	0	0	0	0	0	0	5
<b>Total</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>187</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	187	0	0	0	0	0	0	0	0	187
Next Step	0	0	0	0	0	0	174	0	0	174
<b>Total</b>	<b>187</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>174</b>	<b>0</b>	<b>0</b>	<b>361</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	32071001-Cut	4.7	42340 - Upland Spruce/Fir	Poletimber Medium	62	51-80	Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Harvest all aspen, balsam poplar, ironwood, balsam fir and white spruce. Avoid wetland area with ash, cedar. Retain sugar maple, basswood,  
Specs: all white cedar and black cherry.

Deer-wintering complex, add winter harvest specification.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, spruce, fir

Regen:

Other Retain all white cedar and black cherry (3% of stand) – Deer and Bear. (Treatment will promote Deer and Bear (State Game Fund) Part of this is  
Comment: deer wintering complex a winter cutting spec should be added.

Proposed Start Date: 10/01/2017

3	32071003-Cut	49.8	4130 - Aspen	Poletimber Medium	57	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
---	--------------	------	--------------	----------------------	----	-------	---------	----------------------------	-------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Harvest all aspen, balsam poplar, fir, spruce. Leave paper birch, elm, cherry, sugar maple and basswood; also retain hardwood patches,  
Specs: including any retention aspen, S/F within.

Add winter harvesting spec; deer wintering complex.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen and a component of mixed conifers and hardwoods.

Regen:

Other No sign of SBW yet, but has been detected in the vicinity.

Comment: Agree with Treatment (State Game Fund) this is deer wintering complex a winter cutting spec should be added.

Proposed Start Date: 10/01/2017

3	32071003- Cutx	11.2	4130 - Aspen	Poletimber Medium	57	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Proposal
---	-------------------	------	--------------	----------------------	----	-------	---------	----------------------------	-------------	-----------	----------------

**Habitat Cut: No****Site Condition: Evaluated for Forest Health**

Prescription Harvest all aspen, balsam poplar, fir, spruce. Leave paper birch, elm, cherry, sugar maple and basswood; also retain hardwood patches,  
Specs: including any retention aspen, S/F within.

Add winter harvesting spec; deer wintering complex.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, spruce, fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017





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	Approval Status
17	32071017- Cut_MWR	30.2	4110 - Sugar Maple Association	Sawtimber Well	97	81-110	Harvest	Seed Tree	411 - Northern Hardwood	Even-Aged	Field Boundary - Ready for VMS

**Habitat Cut: No****Site Condition:**

Prescription Seed tree. A residual density of 6-8 trees per acre (~5-7% overstory cover) will be prescribed by same criteria as shelterwood trees.

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable A diverse mix of northern hardwood species.

Regen:

Other Leave Tops: Tree tops will need to be reduced in size, removed, or piled beneath residual trees to promote accessibility of scarification/herbicide equipment.

Comment:

Proposed Start Date: 10/01/2016

21	32071021-Cut	10.5	4139 - Aspen, Mixed Deciduous	Sawtimber Well	69	51-80	Harvest	Low Thinning	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
----	--------------	------	----------------------------------	-------------------	----	-------	---------	--------------	----------------------------	-----------------	-------------------------

**Habitat Cut: No****Site Condition: Too Steep**

Prescription Remove merchantable aspen, spruce and fir. Leave lowland buffer. Protect residual hardwood stems. Promote black cherry. Harvest during the winter (deer wintering complex).

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Northern hardwoods, aspen and mixed conifer component.

Regen:

Other Do not include steep finger of birch on east end of stand.

Comment:

Favor/promote black cherry – Bear, (State Game Fund) Part of this is deer wintering complex a winter cutting spec should be added.

Proposed Start Date: 10/01/2017

23	32071023-Cut	36.4	4134 - Aspen, Spruce/Fir	Sawtimber Medium	57	51-80	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Draft Field Boundary
----	--------------	------	-----------------------------	---------------------	----	-------	---------	----------------------------	-------------------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Harvest all merchantable aspen, balsam poplar, spruce, fir, jack pine and tamarack. Harvest ironwood. Leave residual maple, basswood, cherry and white pine.

Specs:

Harvest during the winter (deer wintering complex).

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, BP, and a component of mixed conifers and northern hardwood.

Regen:

Other Include some of the adjacent G types in cut, due to SBW and other merchantable timber. Remove cherry with black knot.

Comment:

Agree with Treatment (State Game Fund) Part of this is deer wintering complex a winter cutting spec should be added.

Proposed Start Date: 10/01/2017



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	Approval Status
49	32071049-Cut	13.4	4119 - Mixed Northern Hardwoods	Poletimber Well	97	81-110	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**

Prescription Thin northern hardwoods. Leave all hemlock, cedar - nice patch within and some scattered. Remove all aspen, balsam poplar. Leave obvious large wildlife trees. Fair amount of yellow birch stems within; retain good wildlife crop trees (large crowns) and those that have future potential - OK to mark others for harvest. Due to size of stand and location (against open cropland), would not recommend retaining mature A, S/F due to wind throw potential - re-evaluate at time of sale prep, though.

Next Step  
Treatments:

Acceptable Northern hardwoods, some aspen, mixed conifers.  
Regen:

Other Add winter harvest spec; deer-wintering complex.  
Comment:

Proposed Start Date: 10/01/2017

64	32071064-Cut	30.9	4136 - Aspen, Mixed Conifer	Poletimber Well	57	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Draft Field Boundary
----	--------------	------	--------------------------------	--------------------	----	--------	---------	----------------------------	-------------------------------------	-----------	-------------------------

**Habitat Cut: No****Site Condition:**

Prescription Harvest all merchantable aspen, balsam poplar, spruce, fir, tamarack. Leave cherry, elm, paper birch, yellow birch, maple(s).  
Specs:

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

Acceptable Aspen, balsam poplar and a component of mixed conifers, northern hardwoods.  
Regen:

Other Within hardwood patch area mark hardwood to cut - mainly maple, but some paper birch, fir, and spruce could be harvested as well.  
Comment:

Agree with Treatment (State Game Fund) Part of this is deer wintering complex a winter cutting spec should be added.

Proposed Start Date: 10/01/2017

**Total Treatment  
Acreage Proposed: 187.1**

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Theresa Sysol : Examiner

Compartment: 71  
Year of Entry: 2018

### Availability for Management

Total Acres	Acres Available	Acres Available With Condition	Acres Not Available
459	416	11	32

### Dominant Site Conditions

	Total Acres	Acres Available	Acres Available With Condition	Acres Not Available	Dominant Site Conditions								
					5F	1C	2F	2G	2H	3I	3J	5E	
459	416	11	32	Aspen	11		2					29	
2	2	0	0	Bare/Sparsely Vegetated									
484	0	0	484	Cedar		484							
189	189	0	0	Herbaceous Openland									
109	95	0	14	Lowland Conifers		14							
22	22	0	0	Lowland Deciduous									
54	0	0	54	Lowland Shrub		2		52					
19	0	0	19	Mixed Upland Deciduous									19
539	536	0	3	Northern Hardwood									3
6	6	0	0	Upland Conifers									
13	0	0	13	Upland Mixed Forest					13				
25	5	0	20	Upland Spruce/Fir				1		9	10		
12	12	0	0	Water									
1,932	1,283	11	639	Total Forested Acres	11	500	2	53	13	9	39	22	
	66%	1%	33%	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	1C: Other dept or div proc/practices	495	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife - deer habitat areas.							
2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	53	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Stand is put in biodiversity maintenance to protect riparian values of creek and associated wetlands.							

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Theresa Sysol : Examiner

Compartment: 71  
Year of Entry: 2018

3	<b>Available</b>	<b>5F: Evaluated for Forest Health Considerations</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This portion of stand was harvested in 1986 under permit #001-85 - can delay treatment for now unless harvest is desired. 2017-Treatment added. Will move forward with Chapter 7 request.							
4	<b>Unavailable</b>	<b>1C: Other dept or div proc/practices</b>	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	13	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Some narrow corridors could possibly provide winter access, but overall difficult access.							
6	<b>Unavailable</b>	<b>2F: Too steep</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Esker in cedar swamp. Very steep knife edge sides and top.							
7	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Small upland buffer area. Hardwood knob about 1 acre included in stand has steep sides down to wetland. Put in biodiversity maintenance to protect riparian values of the creek.							

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Theresa Sysol : Examiner

Compartment: 71  
Year of Entry: 2018

9	<b>Unavailable</b>	<b>3I: Historical / archeological (add locked comments)</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	29	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	19	3H: Deer Wintering Areas	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

Mgt. Unit

Compartment: #Type!

Year of Entry:



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

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

---

SCA Name	SCA Category	Detail Type	Recommendation	Acres
----------	--------------	-------------	----------------	-------

---

**Comments**

---



**Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42340 - Upland Spruce/Fir	Poletimber Medium	6.0	62	51-80	Old open area/G type with natural encroachment. Contains valley between upland M and A stands, which drops into more lowland ash saplings with spruce and cedar. Some upland aspen included. Bracken fern, grasses ground cover.
2	4110 - Sugar Maple Association	Sawtimber Well	3.2	97	51-80	Small knob of hardwood which adjoins 3 other compartments - treated as one sale. Larger sugar maple with heavier defects - some nice poles, though. Older maple regeneration within - no ground cover maple. Ground cover noted: leatherwood, maidenhair fern.
3	4130 - Aspen	Poletimber Medium	60.9	57	51-80	OPIC - FMD 2006: 3-5 stick aspen just starting to come into maturity. Heavy beaver activity southeast. Stand is converting to fir there. Patches of A2 and A3 2" and up throughout stand. Also poorly stocked areas. Aspen overall scattered and poorly stocked with pole sized trees. Trees are healthy and vigorous though. Thick hazel in areas. Sparse along beaver flooding east. 2015: North end of stand was cut in 1986 - permit #001-85 (With C. 70 to the west?). Aspen ~ 6-8" dbh here. Hypoxylon in BTA. Along G type and south, aspen is larger and is as described in previous inventory - ready for treatment. Adjoins C. 70 stand 35. Black knot on cherry.
4	4119 - Mixed Northern Hardwoods	Poletimber Well	2.9	87	51-80	OPIC - FMD 2006: SCA. Small hardwood patch at confluence of creeks. Poor timber quality but good den trees and other wildlife trees here. BA low due to beaver activity and dead fir. Some upland cedar and hazel areas. Put in biodiversity maintenance to protect riparian values of creek area. 2015: Lots of dead/blowdown balsam fir; very open stand, in places. Extremely low quality maple - lots of defects. Would need to be treated with adjacent stand, due to access and merchantability.
5	4134 - Aspen, Spruce/Fir	Poletimber Well	29.3	62	51-80	OPIC - FMD 2006: Small trees have seeded in over the years and continue to seed in. Clones of aspen 2-3 stick as well as mature in spots. Thick fir in areas and in the understory of most of the stand. Most of stand about 30 years old with some older and younger. 2015: Heavy fir blowdown noted. Small amount of SBW noted. Tamarack mainly along lowland edges. Trace cedar, basswood. Ground cover of club moss, bracken fern.
6	4110 - Sugar Maple Association	Poletimber Medium	19.6	87	1-50	OPIC - FMD 2006: Beaver active along pond F1A4 there. Rest of stand sparse A4 or A5 over M4M3 . 2" dbh hardwood. Recommend cut aspen out, protect regeneration and convert to northern hardwood. Blowdown areas. 2015: Stand harvested as "Hunters Brook Aspen" #017-08-01 - completed Oct, 2009 - old red paint still visible. Ground cover: maidenhair fern.
7	4110 - Sugar Maple Association	Poletimber Well	10.1	87	81-110	OPIC - FMD 2006: Small trees, good potential. Not quite ready for thinning. Some sparse areas. Some aspen mixed in as well as 2" dbh M3 areas. Areas of good 2-stick sugar maple. 2015: Nice stand of hardwood poles. Aspen is overmature and could be removed. Stand BA overall not quite ready for thinning, though. A few "legacy" sugar maple present. Dead white spruce within.
8	4110 - Sugar Maple Association	Poletimber Medium	13.4	87	51-80	OPIC - FMD 2006: Stand sparse A4 or A5 over M4M3 . 2" dbh hardwood. Recommend cut aspen out, protect regeneration and convert to northern hardwood. Blowdown in spots. 2015: Stand harvested as "Hunters Brook Aspen" #017-08-01 - completed Oct, 2009. Pockets of primarily aspen regeneration.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
9	4110 - Sugar Maple Association	Poletimber Well	11.5	87	81-110	Nice stand of mainly poles; sawlogs have heavier defects - wildlife trees. Small patch of bigtooth aspen within - tall! Rolling terrain. Maple regeneration within is older; no established ground cover. Ground cover of leatherwood, maidenhair fern, trillium noted.
10	6120 - Lowland Cedar	Poletimber Well	25.9	112	111-140	OPIC - FMD 2006: SCA. Nice cedar on edge and point of hardwood. Some gaps due to beaver and wind. South is small cedar and twisted but well-stocked.
12	4130 - Aspen	Sapling Well	20.9	8	Immature	OPIC - FMD 2006: Some aspen 10" dbh Smaller 4-stick throughout stand. Some F6 areas along ecotone especially north. Some aspen lost due to blowdown and past beaver activity..We will leave some upland areas of young fir along ecotone in this cut. 2015: Stand harvested as "Pig Ranch Aspen" #018-08 - cut August-Sept., 2009. Trace amount of tamarack, white pine. Includes small wet area - beaver flooded in past. Seeding in with tamarack, b.spruce, fir. Wet non-merchantable areas Q1, L or N but seems to be growing.
13	4130 - Aspen	Poletimber Well	15.3	27	Immature	OPIC - FMD 2006: A3 2" dbh average. Some sparse areas but overall looks mostly adequately stocked, however up to 1/2 the stand is stocked less than most young aspen stands. Some cherry, mixed with spruce/fir too in spots. Some trees up to 4". 2015: Cut under permit #024-88 "Watson 34 Sale" (unit 2) - Spring, 1990. Aspen not all that healthy; hypoxylon, breakage noted. Residual hardwood and a few large bigtooth aspen within stand. Trace amount of elm.
15	4199 - Other Mixed Upland Deciduous	Poletimber Medium	19.0	87	1-50	OPIC - FMD 2006: Most of this stand scattered aspen over M3 1-3" dbh. Very good productive soil. Recommend hold until the adjacent hardwoods are thinned next entry period. Probably convert stand to hardwood at that time. Also some scattered large maple and some hardwood 1-2 stick. Good potential on hardwood. 2015: Stand is transitioning over to mainly upland northern hardwoods; aspen is old and in decline; should harvest now. Areas heavier to smaller maple with trace aspen - especially along slope transition to higher upland grounds. Some lower grounds within - seasonal drainages - mainly southeast finger.
16	6124 - Lowland Spruce- Fir	Poletimber Medium	14.2	77	1-50	OPIC - FMD 2006: SCA. S5 bog type ground cover. S2S1 under sparse 2-4 stick black spruce and tamarack. Some areas thicker regeneration 2' and up. Patches of S6 ad S3 so overall S5. Added to sca to protect larger contiguous landscape.
17	4110 - Sugar Maple Association	Sawtimber Well	211.4	97	81-110	OPIC - FMD 2006: Good quality stand and productive rich soil. Straight smooth bark vigorous sugar maple M8 or M7 overall in most areas. Cut in the 1970's (#3/74A). Cut permit 32-03-02 Sanville in 2003, cleanup of unfinished sale of Vetort 2001. Some older regeneration in gaps 2-4". No new regeneration yet. Some areas combined into stand are A4M4 with thick sugar maple regeneration 2-4" dbh west central and east central, probably 15 -25 acres overall should be ready to thin when the main part of the stand is ready. Old G type (stand 409) within: Level site with rough surface. Poor grass forage. Scattered cherry, aspen, sugar maple, and white spruce poles. Aspen and cherry brush encroaching. 2015: Little to no new regeneration since cuts. Some areas ready to thin, but not uniform throughout (S. of E/W road section 34 harvested in 2003). Pockets of aspen with maple, cherry understory. Heavier conifer pockets around old openings and gravel pit.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
18	4110 - Sugar Maple Association	Poletimber Medium	15.5	97	51-80	OPIC - FMD 2006: Thick 1-2" DBH Maple under sparse mature aspen 4-6 stick. Large old maple should be preserved in cut. Protect regeneration during cut to convert to hardwood. Not much volume/acre. Some mortality and dead tops in aspen. 2015: Stand harvested as "Watson Intersection" #019-08-1 - cut summer, 2010. Approximately 30 - 60 BA hardwood, balsam poplar residual. Some older aspen saplings also. Old stand 415 (G) within: Site level with rough surface. Mainly bracken fern and milkweed. Raspberry clumps. Few cherry poles.
20	4130 - Aspen	Sapling Well	29.1	17	Immature	OPIC - FMD 2006: was cut 2000 by Vetort permit #16-98-01. Well stocked 1-2" average dbh. Residual hardwood in spots 2-8" average. Some large sugar maple left along road for visual management. 2015: Also residual basswood, cherry.
21	4139 - Aspen, Mixed Deciduous	Sawtimber Well	10.5	69	51-80	OPIC - FMD 2006: SCA. narrow stream buffer stand along Leisner Creek and north of Watson cutoff road. Some past beaver activity. Large aspen converting to hardwood. Recommend not cutting due to narrowness of stand and proximity to creek. Stand recommended to put in biodiversity maintenance to protect riparian and visual values. Also, SCA (old stand 37): Esker in cedar swamp. Very steep knife edge sides and top. Birch toward northeast, some aspen southwest. Some birch dieback but most look ok and young, small yet. Upland cedar and a few hemlock. Small red maple and 2-4' fir under. No mature sp/fir. Big cedar on upland point NE. Recommend biodiversity maintenance due to unique land form and difficulty logging plus large amount of scattered cedar/hemlock. Surrounded by deer yard. 2015: Roadside aspen/hardwood stand, with aspen dying out. Could let stand naturally convert to hardwood, or, harvest accessible aspen, fir and spruce. Old stand 37 combined into this stand and should be left as is, due to steepness as described. ~ 50 % paper birch, which is dead/dying, and scattered aspen, red maple, cedar, hemlock, S/F, and trace tamarack, cherry. Cut under permit #3/74A - Dec 1974 - Feb, 1975 - no aspen taken.
23	4134 - Aspen, Spruce/Fir	Sawtimber Medium	36.4	57	51-80	OPIC - FMD 2006: A6A5 4-5 stick mostly well stocked but some sparse areas. Some bigger aspen. Some mortality and dead tops. Most areas trees still young and not a lot of volume per acre. 2015: Trace white pine. Very open-grown, variable stand - already in decline with regeneration patches started. Low quality aspen - off-site. Wet lowland brush area within. SBW noted feeding in mainly larger white spruce.
25	6120 - Lowland Cedar	Poletimber Well	13.6	112	81-110	OPIC - FMD 2006: Patch of C6 along creek which may be seasonal. Vernal ponds in stand. Q sparse on west side of creek, cedar thick on east side. Stand fades to lowland brush south to road area. 2015: same comments as above.
26	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Poor	8.3	69	1-50	OPIC - FMD 2006: E3 with scattered aspen, fir and black ash poles. Larger trees on higher hummocks. Most of stand low with small 2-3" dbh black ash. 2015: Some overstory aspen, red maple but mostly smaller ash.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4130 - Aspen	Poletimber Medium	64.2	45	51-80	OPIC - FMD 2006: Sparse areas in center of stand. Bigger trees on edge. Some mortality occurring. Mostly a 4-stick average for height. M3 under in most areas. Fir mixed in but mostly along low and edge. 2015: SBW defoliation noted within adjacent stand 19 (compartment 72). Fairly mixed aspen/balsam poplar sizes; smaller A regeneration, in places. F/S in clumps/patches. Patch of hardwood within (~3 acres - old stand 28) which was managed with compartment to the north (cut within the last few years) to leave - little new regeneration started. Also two old G types (stand 412,420), which are overgrown. Ground cover of bracken fern, bunchberry.
29	42380 - Non Pine Upland Conifer, Mixed Deciduous	Poletimber Well	5.6	67	81-110	OPIC - FMD 2006: Sale taken back from Vetort in 1999. Not cut. Most of the fir is gone except a small patch south. Not enough remaining aspen to convert to aspen stand. Poor timber quality maple mixed with upland cedar although some of the stand is lowland. Low ground south separates most of the stand from upland stand north. Fir in gaps 3-6' tall. Stand would have to be cut in winter and is not feasible to cut alone. 2015: Tamarack/spruce types along G included - some porcupine girdling occurring. Blowdown S/F with low quality red maple; wet area (predominately cedar) to cross (~200 ft.) to reach higher ground.
30	6120 - Lowland Cedar	Poletimber Well	439.7	140	111-140	OPIC - FMD: SCA. North is sparse cedar with alder under 2-stick cedar. South is better stocked but still small and crooked interior. Some areas slightly elevated and have nicer timber quality. Bigger trees southeast along high ground. Big cedar east, wolf sign, dead deer spring 2006. Headwaters of Leisner creek and Hunters brook in this stand. North of stand 21 contains some high ground eskers or moraines with steep banks but still mostly cedar. Other high islands in stand mostly small acreage. Important deer yard and riparian areas so recommend put this stand in biodiversity maintenance. 2015: Same as previous. Ground cover of sphagnum, lichen, moss. Exposed root systems.
31	4110 - Sugar Maple Association	Sawtimber Well	12.8	92	81-110	OPIC - FMD 2006: Good timber quality and soil here. Cut 1998 by Vetort permit #16-98-01 (unit 5). No new regeneration yet but some elderberry in gaps. Some areas have older regeneration 2-4" dbh in gaps. Trees larger in most areas but smaller trees east. Overall M9 vigorous trees on productive site. 2015: Previous cut #2/74A in 1974. Trace elm, white spruce. Very little new regeneration. Ground cover noted : maidenhair fern.
32	4110 - Sugar Maple Association	Poletimber Poor	23.7	92	1-50	OPIC - FMD: Scattered large aspen with hardwood 3" under thick. North has areas of smaller hardwood regeneration. Some mortality and dead tops in the aspen. Looks like aspen will not add volume or improve. Recommend cut to remove aspen and protect hardwood regen as much as possible and convert stand to northern hardwood. Some nice scenic larger hardwood will be excluded from sale and kept to provide size diversity in the remaining stand. 2015: Stand harvested as "Watson Intersection" #019-08-1 (unit 2)- cut summer, 2010. Also select cut in 1974 under permit #2/74A.
33	4113 - R.Maple, Conifer	Poletimber Well	6.4	92	81-110	OPIC - FMD 2006: Fair quality red maple marked and sold last entry. Sale taken back from Vetort and not cut. Permit #17-98-01. Stand was included with a larger sale and now will probably not be feasible by itself. Marking is still visible. 2015: Aspen is dying, larger BF is mostly dead. Some of the cut areas have good paper birch regeneration started. Ground cover of club moss, princess pine.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	4130 - Aspen	Sapling Medium	23.3	7	Immature	OPIC - FMD 2006: Sparse areas but some areas well-stocked. A6A5A2. Scattered large old maple sawlogs will be left in next stand for visual management and size diversity. 2015: Stand harvested as "Watson Intersection" #019-08-1 - cut summer, 2010. Residual hardwood and some older aspen saplings (~15 yrs of age) within. Aspen mainly in patches.
35	4110 - Sugar Maple Association	Sawtimber Well	58.8	97	81-110	OPIC - FMD 2006: South half of stand cut in 1999 - 2000 by Vetort permit #17-98-01. Sale taken from Vetort and not finished. North half cut by Sanville 2002. Good quality trees, productive soil. Some areas M9. Good older regeneration in gaps 2". Some ironwood. No new regeneration and some sedges invading gaps. Otherwise nice stand overall. 2015: Still little new regeneration; no ground cover seedlings noted; maidenhair fern. Trace yellow birch along stand edge.
36	4110 - Sugar Maple Association	Poletimber Medium	25.2	77	51-80	OPIC - FMD 2006: Thick M4M3 under A6A5. Recommend cut aspen out and protect small hardwood and convert stand to hardwood. Most of stand has good maple regeneration 8' up to 6" dbh. Some larger hardwood scattered. Very good soil and site, highest Kotar productivity rating. No need for marking hardwood at this time. 2015: Stand harvested as "Watson Intersection" #019-08-1 - cut summer, 2010. Good aspen regeneration started and release of maple regeneration.
38	4119 - Mixed Northern Hardwoods	Poletimber Well	46.0	97	81-110	OPIC - FMD 2006: This stand was cut in 1999 by Vetort permit #17-98-01 (unit 2). Highly productive soil and site. Nice quality trees. Old regeneration 2-6" dbh, no new regeneration. Good size diversity, including large crowned maples. 2015: Also cut under permit #2/74A in 1974. BTA mainly in roadside clones/isolated clumps; one large 24" tree at N. end. Basal area not all that high (average = 100), but could remove overmature aspen and very lightly thin hardwoods.
39	4130 - Aspen	Poletimber Well	16.4	29	Immature	OPIC - FMD 2006: A6A3 well-stocked small 2-stick trees with some 4" dbh areas. Hardwood mixed in. Good soil and site. 2015: Permit #004-88-2 (23 acs) - cut Feb-May, 1988. Trace conifers in understory.
40	4130 - Aspen	Sapling Well	49.7	19	Immature	OPIC - FMD 2006: Aspen clearcut under permit #018-98-01 "Farm Aspen Sale" in 1998. Some residual hardwood. A few sparse areas especially near large opening. Lower areas 1" but on good soil 2"-4" dbh. 2015: Small pockets of hardwood logs/poles within aspen cut. Scattered large white spruce. Ground cover noted: maidenhair fern.
41	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	14.0	77	81-110	OPIC - FMD 2006: Lower and wetter but not swamp. Vernal ponds non-stocked except big maple on hummocks Maple 30" dbh. Typed white ash but is Green ash. Open understory. 2015: Musclewood (hornbeam) along stand edges. No understory vegetation.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4110 - Sugar Maple Association	Poletimber Medium	45.2	97	51-80	OPIC - FMD: Sparse areas. Some areas will probably convert to hardwood. Good soil and site for hardwood. Some areas 2-4" dbh maple understory especially near road. Leave large scattered maple along road for visual management. 2015: Stand harvested as "High Fence Aspen" #020-08-1 - BF and A only removed. W 1/2 of stand (unit 1) cut August, 2009 and E 1/2 (unit 2) cut Jan, Feb, 2010. Some aspen retained along Co Rd. Good protection of residual M stems. Good site and quality hardwood. Heavy to basswood clumps. Scattered aspen left. Muscledwood (Carpinus) in stand, noted along stand 41edge.
44	4110 - Sugar Maple Association	Poletimber Poor	19.8	97	1-50	OPIC - FMD 2006: Mix of mature and overmature aspen. Well-stocked mostly with some mortality. Small ridge of hardwood 2-3 acres NW can leave for visual management or diversity. Good soil and site. 2015: Stand harvested as "High Fence Aspen" #020-08-1 - aspen and BF only removed Summer, 2010. Good protection of residual M. Aspen regeneration with large spruce heavier, in places, but good release of sugar maple saplings also. Black cherry with black knot. Numerous wildlife snag trees.
46	42340 - Upland Spruce/Fir	Poletimber Medium	19.0	67	51-80	OPIC - FMD 2006: SCA. No aspen here in most of stand due to beaver activity. Stand is F4F6F2F1. A few aspen in spots. Fir stand narrow and sparse. A few F2 areas. Average is about 2-stick 30 BA although some spots heavier and lighter stocked. Hardwood knob about 1 acre included in stand has steep sides down to wetland. Put in biodiversity maintenance to protect riparian values of the creek. 2015: Some blowdown BF; dead/dying spruce/fir. Transition upland A/F to S/F. Small island portion on E. side of road is primarily red maple/fir - leave (swale of B. ash to cross ~ 100'). Treat roadside area with stand 21 treatment for marketability; Do not include hardwood patch and wetland buffer at the west end of stand. Try to retain pockets of smaller S/F (4-6" dbh) if not impacted by SBW. Ground cover of club moss, grasses; some maple (1-2' ht seedlings).
47	4130 - Aspen	Poletimber Well	43.3	25	Immature	OPIC - FMD: A3 cut 1992. 4" dbh average well-stocked. Some hardwood including some residual. Some almost 2 stick aspen. 2015: Small wet inclusion within. Fair amount of hardwood regeneration present, in places. Aspen size ranges from 3 - 8" dbh. Ground cover noted includes: bracken, grass, raspberry and burdock.
49	4119 - Mixed Northern Hardwoods	Poletimber Well	13.4	97	81-110	OPIC - FMD 2006: CUT 70'S, Old habitat cutting. Some patches of hemlock and upland cedar. Big log-size trees about 20 BA and 20 BA of 3-4 stick. Rest of the BA small trees just becoming pole sized. Good timber potential. Not much volume if thinned now and most areas BA too low. Recommend wait 10 years for thinning. 2015: Good potential. Some wind throw occurring. Still a lot of small diameter poles, but aspen should be removed and lightly thin other hardwoods for access and release. North end contains more red maple and yellow birch saplings. Trace ironwood and balsam poplar poles. Would make nice firewood sale.
50	4130 - Aspen	Poletimber Well	28.7	28	Immature	OPIC - FMD 2006: 4" average dbh, some sparse areas but overall well-stocked. Some cherry and fir seeding in. Some trees up to two-stick A4A3A2. Some M4 areas south of road, about 1/4 of stand understocked but seems to be seeding in. 2015: A few bigtooth aspen clones within. Along G type, fringed with larger spruce/fir. Hypoxylon appears heavy in quaking aspen - off-site.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	4319 - Mixed Upland Forest	Poletimber Medium	12.5	44	51-80	OPIC - FMD 2006: F6 mostly but a mix. Stand cut in 1973, old residual hardwood, cedar, hemlock. Most sp/fir is 2 stick coming up in gaps. Some gaps have hazel, dogwood, raspberry. Most of the hardwood is poor quality red maple. 2015: Slightly higher ground than surrounding lowland cedar. Mixed stand.
53	6128 - Lowland Coniferous, Mixed Deciduous	Sapling Well	94.8	22	Immature	OPIC - FMD 2006: cut in 1995 and part of area Rx burned soon after. The large cutting and followup burn were made in attempt to regenerate cedar. Mostly alder and willow now on edge but interior of stand is well-stocked tamarack with some spruce, fir, balsam poplar and aspen. Some very small cedar only 2-3" tall but other species are 1" dbh and 15' tall. Some wetter areas east poorly stocked but stand overall looks to be adequately stocked with trees. Cedar regeneration disappointing so far. 2015: No cedar regeneration noted within far east portion; mainly ash, birch, balsam poplar, and tagalder. Numerous small patch cuts (for deer feeding) done from ~1987 - 1995. Predominately tamarack regeneration.
59	6120 - Lowland Cedar	Poletimber Well	4.9	112	81-110	OPIC - FMD 2006: SCA. Cedar small and sparse interior of stand. Good stocking upland edge. Alder and fir understory. C6C5C2F3 overall C6 stocked with trees. Gets more sparse and flooded west. 2015: Intermittent drainage crossing; wetland. Fringed with spruce/fir.
64	4136 - Aspen, Mixed Conifer	Poletimber Well	30.9	57	81-110	OPIC - FMD 2006: Somewhat larger aspen than stand east. West side along creek is big but elsewhere is 3-4 stick. Scattered trees along opening. 2015: Aspen is in decline; some dead already - treat now. Also includes small stand of maple (~3 acres). Some large wildlife den trees here but poor timber quality. Good gaps with regeneration 2-3" dbh. Stand should be managed for combination of large wildlife trees and timber. Thinning possible when aspen is harvested, but not much overall to remove.



Stand	Cover Type	Acres	Managed Site	General Comments:
11	6220 - Alder/willow	13.9	No	OPIC - FMD 2006: SCA. Drained beaver flooding with dead cedar. Some small trees on higher ground but most of the area is wetland grasses etc. Some fir starting to seed it. Ponds still here but drained down.
19	790 - Other Bare/Sparsely Vegetate	2.2	No	OPIC - FMD: Gravel pit used occasionally for local use. 2015: Not used in awhile. E. side of road is lower, wetter (some cattails).
22	500 - Water	4.4	No	OPIC - FMD: Beaver pond along road. Leisner creek. No recent activity spring 2006. No activity 2015.
55	6220 - Alder/willow	19.8	No	OPIC - FMD 2006: SCA. Lowland brush, mostly willow and alder, around spring pond and outlet. Scattered cedar on edge.
58	500 - Water	4.0	No	OPIC - FMD 2006: Beaver pond flooded spring 2006, origin several years previous.
60	6220 - Alder/willow	1.9	No	OPIC - FMD 2006: SCA. Small area drained beaver pond, mostly small shrubs such as alder, willow and grass. This stand put in biodiversity maintenance to protect riparian values of stream.
62	6220 - Alder/willow	18.2	No	OPIC - FMD 206: SCA. Mostly alder, flooded and partially flooded creek. Some scattered small cedar. Small patch of C6 and E3 Northeast included in stand. Some recent and past beaver activity. Stand is put in biodiversity maintenance to protect riparian values of creek and associated wetlands.
65	500 - Water	3.4	No	OPIC - FMD 2006: Beaver pond flooded spring 2006, origin several years previous.
400	3104 - Degraded	7.0	Yes	Ground cover of grasses, sedge, strawberry. Knapweed present along old trail road edges. Appears to be some SBW defoliation in open-grown white spruce (trace).
402	3103 - Rubus-Fern	31.9	Yes	Aspen encroachment on edges; also interior clones. Some SBW feeding noted on larger white spruce. Extremely pitted ground (within NW "finger"). Old pulp pile within. FTP W32-354: seeded May, 1978. Could be treated with surrounding harvest, if desired.
403	310 - Herbaceous Openland	17.4	Yes	Grasses, some bracken fern; raspberry. FTP W32-354: seeded May, 1978. FTP W32-546: Disk/seed/plant (seed corn for turkey). Treat merchantable timber with surrounding harvest, if desired.
404	310 - Herbaceous Openland	52.6	Yes	OPIC - FMD/WLD 2006: Level to gently rolling site but rough surface. Poor forage - forbs and sparse grass. Limestone rocks being flipped by bears for invertebrates. Core area of opening still about 95% open. Pockets of willow, white spruce, bam, and cherry saplings intruding. Southwest arm of opening about 70% open. 2015: Open interior with scattered spruce, cherry, aspen clones, tamarack. Knapweed found in old trail/skid road. FTP W32-40: seeded 9/1979 with rye, Birdsfoot trefoil, timothy. FTP W32-271: to plant Siberian crab (1983?) and FTP W32-452: opening maintenance July, 1991 w/Tordon; spike.



Stand	Cover Type	Acres	Managed Site	General Comments:
405	3104 - Degraded	12.9	Yes	OPIC - WLD 2006: Level site but rough surface. About 70% openland. Herbaceous forage low quality. Will be M4 soon - cherry saplings and poles. Widely scattered white spruce poles. Sporadic aspen poles. 2015: Treat opening with adjacent harvest planned. Remove merchantable timber. Knapweed present along roadsides.
406	310 - Herbaceous Openland	4.2	Yes	OPIC - WLD 2006: Level/rough. 70%-75% openland. Poor herbaceous forage. Scattered cherry poles. Cherry and aspen brush invading. Very little conifer component. 2015: Treat opening with adjacent harvest planned, if desired.
407	3104 - Degraded	2.2	Yes	OPIC - WLD 2006: Level site with rough surface. Approximately 80% open. Lot of bracken fern. Large-crowned cherry poles. Scattered white spruce poles. Aspen and cherry brush developing. 2015: Light SBW feeding evidence at north end. Treat stand with adjacent harvest, if desired.
408	3104 - Degraded	3.4	Yes	OPIC - WLD 2006: Level site with rough surface. About 70% openland. Moderate quality grass forage. North side filling in with white spruce, bam, and cherry saplings. Some small hardwood groves - ironwood and sugar maple poles/sawtimber. Nice aspen poles around perimeter. 2015: Treat stand with adjacent harvest planned, if desired.
410	310 - Herbaceous Openland	13.7	Yes	OPIC - WLD 2006: Level site with rough surface. Poor herbaceous forage. Approximately 75% open. Scattered cherry and aspen poles. Fair amount of white spruce poles. Tamarack, cherry, aspen and black spruce saplings in patches. 2015: Scattered aspen clones; tamarack on perimeter. Trace red pine noted. Treat with adjacent harvest planned, if desired, removing merchantable timber.
413	310 - Herbaceous Openland	15.2	Yes	OPIC - FMD/WLD 2006: Level site with rough surface. Approximately 80% open. Widely scattered sugar maple and cherry poles. Many raspberry clumps. Areas of nice grass forage. Small clones of aspen and bam. Some cherry brush. Apple tree. 2015: Lots of encroachment. Harvest aspen/b. poplar clones along roadside; treat interior clones, if desired by WLD. Wild parsnip within.
414	310 - Herbaceous Openland	1.6	Yes	Slight depression.
416	3104 - Degraded	3.4	No	OPIC - WLD 2006: Level site with rough surface. Approximately 50% open. Raspberry. Aspen saplings invading. Scattered live and standing dead aspen poles.
417	310 - Herbaceous Openland	14.2	Yes	OPIC - WLD 2006: One of best openings we have. Site level with smooth surface. Little aspen and cherry brush. Widely spaced sawlog-size sugar maples. Approximately 60% birdsfoot trefoil, 40% grasses - very lush forage. 2015: Several FTP's listed - W32-372: Disk/seed/mow 1987, W32-530: Disk/seed (grass/legume mix) 1995 and W32-547: Opening maintenance/fertilize (for turkey) 1996.
418	3104 - Degraded	7.1	No	OPIC - WLD: Site is level with rough surface. Approximately 98% openland. About 1/2 of field is good forage of clover/birdsfoot trefoil/grass while other 1/2 is bracken. Some cherry and willow shrubs. 2015: raspberry also present
419	310 - Herbaceous Openland	2.2	No	Wild parsnip found within.