



Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32075

Entry Year 2018

Acreage: 1,912

County Marquette

Management Area: Dead Horse Moraines

Revision Date: 2016-08-08

Stand Examiner: Kevin LaBumbard

Legal Description:

T43N, R25W, Sections 10, 11, 12

Identified Planning Goals:

Improve the quality of the Northern Hardwoods stands through selective management while maintaining species diversity, (including the conifer content) and den trees for wildlife. Additional goals are to provide age-class distribution of Aspen by harvesting selected stands. Considerations for species diversity, coarse woody debris, and BMP's will be included with every harvest plan.

Soil and topography:

Terrain is relatively level to sloping with soils mostly well drained loams and associated organic soils, with a small amount of well drained loams and somewhat excessively drained sands. Major soil series include Onaway, Carbondale, Tacoosh, and Angelica with some Trenary, Kalkaska, Munising and Keweenaw.

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

This compartment lies within a large block of state land with only a couple of private ownerships along the northern border.

Unique Natural Features:

Archeological, Historical, and Cultural Features:

No concerns.

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

This compartment contains the Escanaba River and Sawmill Creek, which are both designated Type 1 trout streams greater than 50' width. Sawmill Creek serves as tributary to the Escanaba River. For all riparian areas, Best Management Practices should be followed to reduce erosion into waterbodies.

Wildlife Habitat Considerations:

Compartment 75 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); coarse 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

Sections 10 - 12, T43N-R25W, Marquette County. Surface sediments consist of an end moraine of medium-textured till and peat and muck. 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, but there should be potential on the upland areas.

Abandoned iron mines are located nine miles to the north. This area was not previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access:

Vehicle access to the compartment is very good via two Dept. maintained roads: the Escanaba River Road and Little West Road. There are also a few 2 tracks which branch off from these main roads.

Survey Needs:

None at this time.

Recreational Facilities and Opportunities:

Compartment 75 provides for several recreational activities. This area is heavily hunted for ruffed grouse, woodcock and whitetail deer. Canoeing and fishing along the Escanaba is a popular activity, with additional fishing in Sawmill Creek. Camping along the river is also common, especially at the confluence of the Sawmill and Escanaba River.

Fire Protection:

This compartment has a medium risk for wildfire.

Additional Compartment Information:

The following reports from the Inventory are attached:

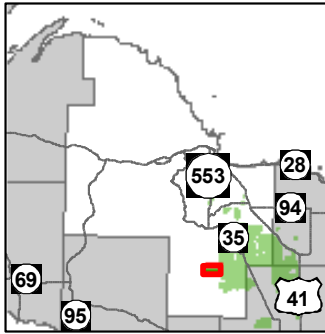
- Total Acres by Cover Type and Age Class
- Cover Type by Harvest Method
- Proposed Treatments – No Limiting Factors
- Proposed Treatments – With Limiting Factors
- Stand Details (Forested and Nonforested)
- Dedicated and Proposed Special Conservation Areas
- Site Condition Details

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

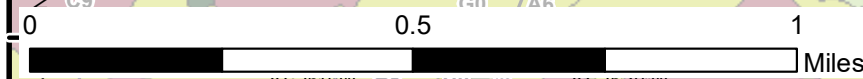
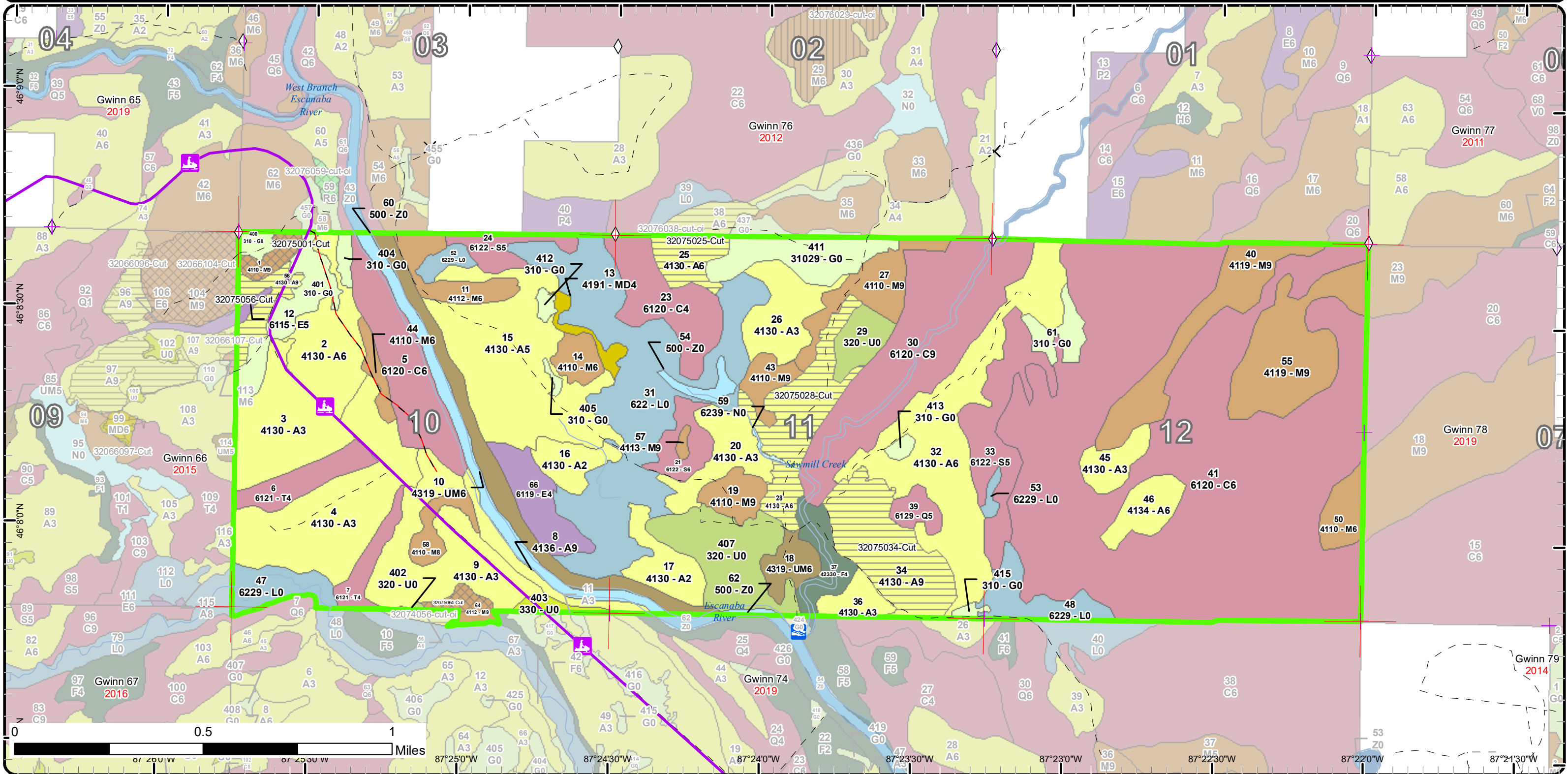
- Base feature information, stand boundaries, cover types, and numbers
- Proposed treatments
- Site condition boundaries
- Details on the road access system

Cover Type & Treatments Map

Compartment: 75
 T43N, R25W, Sec: 10, 11, 12
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1917 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
 Map Phase: Post-Review



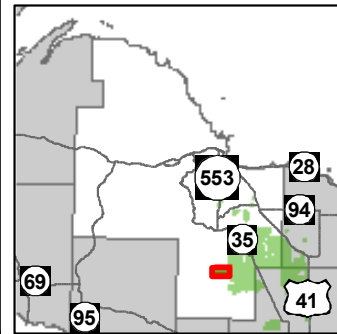
- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- X Gate
- Boating Access Site
- Snowmobile Trails
- Designated Snowmobile Trails
- County Poor Dirt Roads
- - Poor Dirt Roads
- Rivers
- ▭ Compartment Boundary
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- 411 - 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
- 320 - Upland Shrub
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



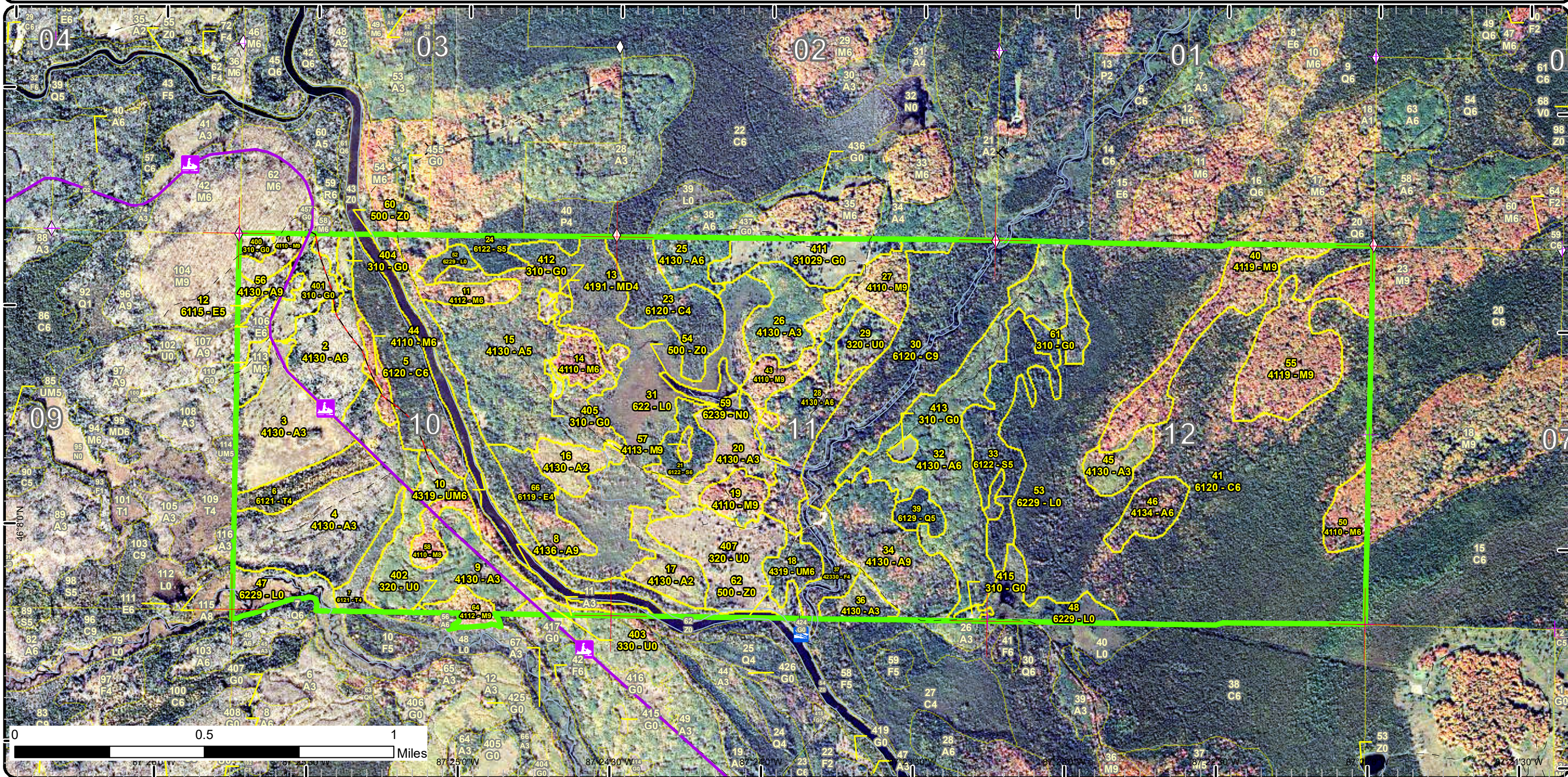
87°25'0"W 87°24'30"W 87°24'0"W 87°23'30"W 87°23'0"W 87°22'30"W 87°22'0"W 87°21'30"W

Stand Boundary Map

Compartment: 75
 T43N, R25W, Sec: 10, 11, 12
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1917 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
 Map Phase: Post-Review

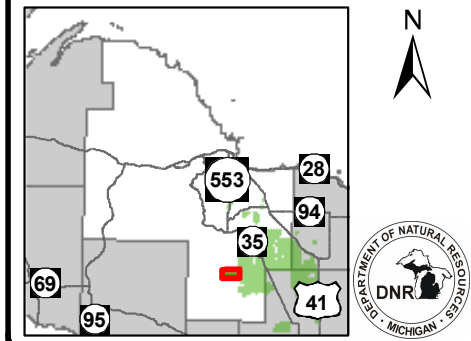


- Miris Corners
 - + Remonumented Section Corners
 - ◇ Field Grade GPS Corners
 - X Gate
 - Boating Access Site
 - Snowmobile Trails
 - Designated Snowmobile Trails
 - County Poor Dirt Roads
 - Poor Dirt Roads
 - Rivers
 - Compartment Boundary
 - Stand Boundaries
- 413 - Aspen
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 - 423 - Other Upland Conifers
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 - 623 - Emergent Wetland
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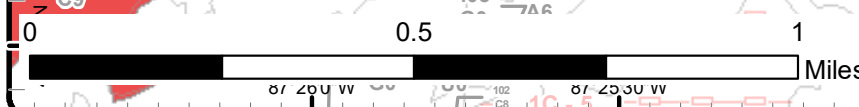
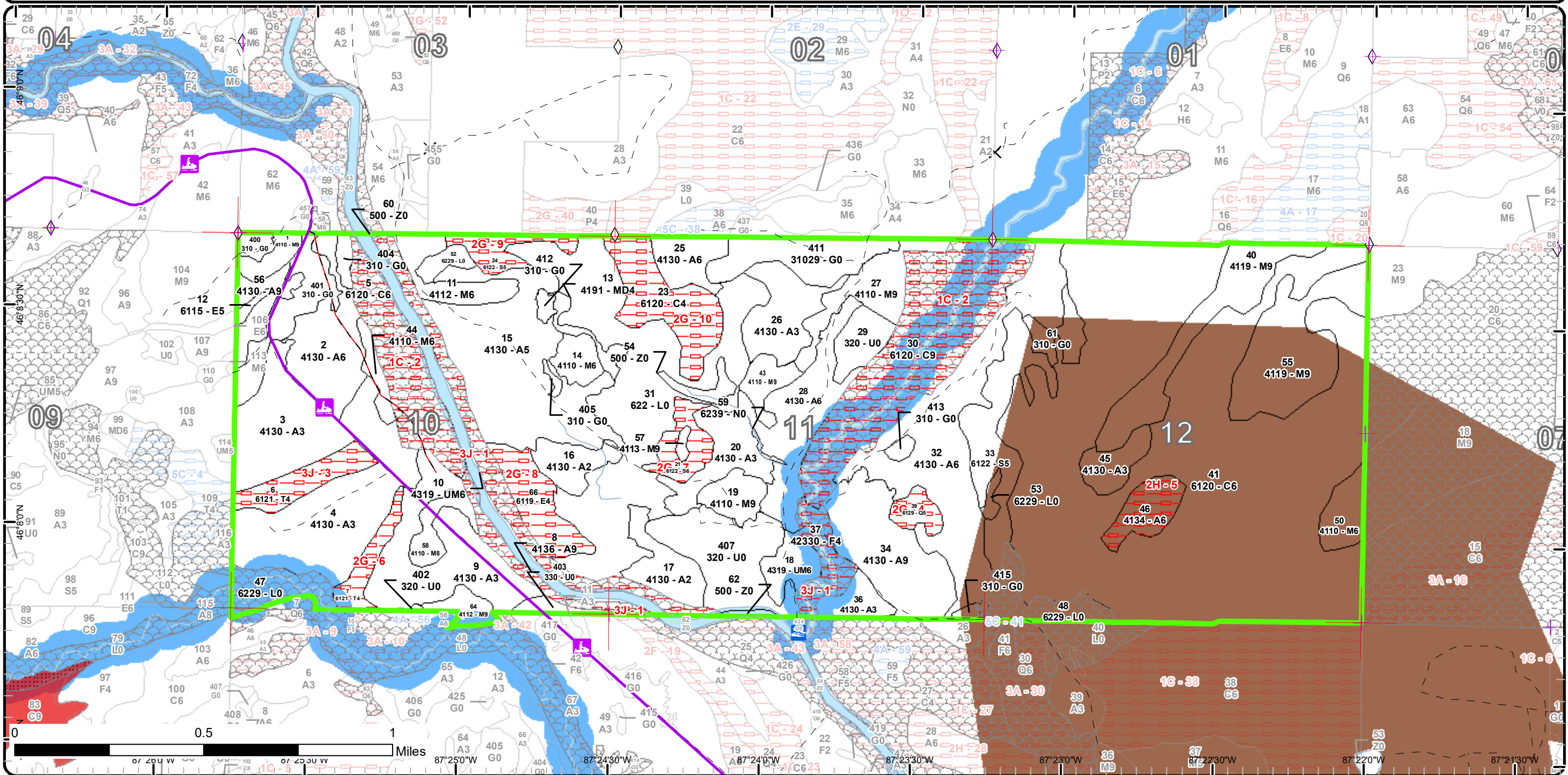


Special Conservation Areas & Site Conditions Map

Compartment: 75
 T43N, R25W, Sec. 10, 11, 12
 County: Marquette
 Unit: Gwinn
 Mgmt Area: Dead Horse Moraines
 YOE: 2018
 Acres: 1917 GIS Calculated
 Examiner: Kevin LaBumbard
 Map Revised: 2/8/2017
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- X Gate
- Boating Access Site
- Snowmobile Trails
- Designated Snowmobile Trails
- County Poor Dirt Roads
- - Poor Dirt Roads
- Rivers
- Compartment Boundary
- Unavailable
- 1C: Other dept or div proc/practices
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Deer Winter Range



Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit

Compartment 75

Year of Entry 2018

Kevin LaBumbard : Examiner



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	94	99	158	0	118	112	0	15	12	0	0	0	0	0	0	0	0	607
Cedar	0	0	0	0	0	0	0	0	0	0	34	94	469	0	0	0	0	0	597
Herbaceous Openland	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
Lowland Conifers	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7
Lowland Deciduous	0	0	0	0	0	0	0	2	0	21	0	0	0	0	0	0	0	0	23
Lowland Shrub	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
Lowland Spruce/Fir	0	0	0	0	0	0	0	11	38	13	0	0	0	0	0	0	0	0	62
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Northern Hardwood	0	0	0	0	0	0	0	0	2	0	0	11	0	0	0	0	9	178	200
Tamarack	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	27
Upland Mixed Forest	0	0	0	0	0	0	0	11	0	34	0	0	0	0	0	0	0	0	45
Upland Shrub	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Upland Spruce/Fir	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16
Water	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Total	324	94	99	158	0	118	128	30	82	87	34	105	469	0	0	0	9	178	1914



Report 2 – Treatment Summary

Gwinn Mgt. Unit

Compartment 75

Year of Entry: 2018

Acres of Harvest

Total Compartment Acres: 1,912

Commercial Harvest - 135
 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	112	0	0	0	0	0	0	0	0	112
Northern Hardwood	0	12	0	0	0	0	0	0	0	12
Upland Mixed Forest	11	0	0	0	0	0	0	0	0	11
Total	123	12	0	0	0	0	0	0	0	135

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	135	0	0	0	0	0	0	0	0	135
Next Step	0	0	0	0	0	0	135	0	0	135
Total	135	0	0	0	0	0	135	0	0	270



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	32075001-Cut	7.0	4110 - Sugar Maple Association	Sawtimber Well	100	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Individual tree selection to target BA of 80. Favor best tree in place, retain minor species component.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any hardwoods other than ironwood.

Regen:

Other 2016- Leeks, occasional white spruce and upland cedar. Good quality hardwoods. Very little regeneration. Dry summer harvest preferred to

Comment: avoid snowmobile conflicts.

Proposed Start Date: 10/01/2017

18	32075018-Cut	11.1	4319 - Mixed Upland Forest	Poletimber Well	63	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Proposal
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Habitat Cut: No**Site Condition:**

Prescription Harvest aspen, fir, spruce retaining cherry, white pine, red pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, fir, spruce, cherry, white or red pine.

Regen:

Other SBW-Chp 7 TJS

Comment:

Proposed Start Date: 10/01/2017

25	32075025-Cut	13.7	4130 - Aspen	Poletimber Well	52	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Ready for harvest. Leave cherry and retention island. Stand 38 across compartment line is the same, will be ready for harvest too.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen

Regen:

Other Retain should include large aspen – pileated woodpecker/Grouse (State Game Fund)

Comment:

Proposed Start Date: 10/01/2017

28	32075028-Cut	39.6	4130 - Aspen	Poletimber Well	52	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Final harvest retaining the cherry, cedar, wp, hemlock. A good summer sale

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen

Regen:

Other Retain should include large aspen – pileated woodpecker/Grouse (State Game Fund)

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
34	32075034-Cut	46.8	4130 - Aspen	Sawtimber Well	54	111- 140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Final harvest retaining the cherry, cedar, wp, hemlock. A good summer sale

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable aspen

Regen:

Other Retain should include large aspen – pileated woodpecker/Grouse (State Game Fund)

Comment:

Proposed Start Date: 10/01/2017

56	32075056-Cut	11.9	4130 - Aspen	Sawtimber Well	58	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Final harvest with reserves. 100' buffer along swale.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen

Regen:

Other OPIC - FMD: 3-4 stick aspen with mixed hardwoods over beaked hazel. The hardwoods are sugar maple, soft maple, cherry. Stand contains a small black ash swale running northeast. More fir on the south end. Summer harvest preferred to avoid snowmobile conflicts.

Comment:

Retain should include large aspen – pileated woodpecker/Grouse (State Game Fund)

Proposed Start Date: 10/01/2017

64	32075064-Cut	5.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	100	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription -Fair quality hardwoods with excellent regeneration. Schedule treatment with stand 11 of compartment 76. Mark to 80 residual BA favoring

Specs: cherry, basswood.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable any hardwoods other than ironwood

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 135.2**

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 75

Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions			
		With Condition	Not Available		1C	2G	2H	3J
607	581	0	26	Aspen			15	11
596	426	0	170	Cedar	137	34		
72	72	0	0	Herbaceous Openland				
7	0	0	7	Lowland Conifers		7		
23	2	0	21	Lowland Deciduous		21		
165	165	0	0	Lowland Shrub				
61	37	0	24	Lowland Spruce/Fir		24		
1	1	0	0	Marsh				
6	6	0	0	Mixed Upland Deciduous				
199	199	0	0	Northern Hardwood				
27	0	0	27	Tamarack		11		16
45	11	0	34	Upland Mixed Forest				34
53	53	0	0	Upland Shrub				
16	0	0	16	Upland Spruce/Fir				16
33	33	0	0	Water				0
1,912	1,586		326	Total Forested Acres	137	97	15	78
	83%		17%	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)	62	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Escanaba River and Sawmill Creek riparian protection.							
2	Unavailable	1C: Other dept or div proc/practices	137	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Wildlife cutting guidelines and riparian protection.							

Report 4 – Site Conditions

Gwinn Mgt. Unit

Kevin LaBumbard : Examiner

Compartment: 75

Year of Entry: 2018

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Gwinn Mgt. Unit

Compartment: 75

Kevin LaBumbard : Examiner

Year of Entry: 2018

9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	34	2D: Portable Bridge Needed (Dept. bridge will be adequate)	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
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	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	4110 - Sugar Maple Association	Sawtimber Well	7.0	100	111-140	OPIC - FMD: Widely spaced large trees. Has just transitioned to M9. Maple regeneration is virtually non-existent. 2016- Leeks, occasional white spruce and upland cedar. Good quality hardwoods. Very little regeneration.
2	4130 - Aspen	Poletimber Well	33.7	47	81-110	OPIC - FMD: Mostly well-stocked, 3-4 stick aspen over occasional fir and raspberry. A few sparse areas due to hypoxylon canker. 2016-Aspen is large, ready to harvest.
3	4130 - Aspen	Sapling Well	42.3	7	Immature	OPIC - FMD: This is almost a pure aspen stand with maybe 10 BA of fir, white spruce, red maple and cherry. ***Stand harvested as "West Is Best" # 011-08-01 (Unit 1,2) August - October, 2009. This was a chipped sale and large landing was created along Little West Road. Stand also contains a 1 acre exclusion/retention patch. 2016-Chip pile still hasn't regenerated.
4	4130 - Aspen	Sapling Well	70.0	28	Immature	OPIC - FMD: A3 2-4" dbh, 20-25' tall. 2016-Almost pure aspen, starting to transition to poles.
5	6120 - Lowland Cedar	Poletimber Well	42.6	119	141-170	OPIC - FMD: SCA-Nicer than average cedar along the Escanaba River. Retain as biodiversity maintenance area to protect valuable riparian corridor as well as provide thermal cover for winter wildlife.
6	6121 - Tamarack	Poletimber Poor	16.5	79	1-50	OPIC - FMD: Lowland conifers over willow and alder.
7	6121 - Tamarack	Poletimber Poor	10.8	79	1-50	OPIC - FMD: Lowland conifers over willow and alder.
8	4136 - Aspen, Mixed Conifer	Sawtimber Well	11.5	82	51-80	OPIC - FMD: SCA-Retain as biodiversity maintenance zone to provide riparian buffer along the Escanaba River.
9	4130 - Aspen	Sapling Well	52.3	17	Immature	OPIC - FMD: Good regeneration, 8-12' tall. Cut in 2000 under permit #19-98-01. 2016-Aspen 15-25' tall.
10	4319 - Mixed Upland Forest	Poletimber Well	34.3	87	51-80	OPIC - FMD: SCA-Mixed aspen, spruce/fir and red maple along the Escanaba River. Retain as biodiversity maintenance area to protect riparian zone. This stand also receives regular recreational use from canoe campers. 2016-old aspen, snapped off bf, low quality M.
11	4112 - Maple, Beech, Cherry Association	Poletimber Well	15.3	180	81-110	OPIC - FMD: Very poor site. Stand consist of low quality even-aged soft maple with a large percentage of twins and clumps. Cut with stand 12 when stand 12 is ready. 2016-see above. Not worth cutting at this time. Most of m is smaller. Contains small opening, north end.
12	6115 - Lowland Ash	Poletimber Medium	1.6	61	81-110	Black ash swale, standing water. A few large aspen on the edge.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	4191 - Mixed Upland Deciduous with Conifer	Poletimber Poor	5.7	69	1-50	OPIC - FMD: Blowdown area. Most of the aspen is down, but a few remain standing with scattered sugar maple poles. Regeneration is a mix of 4-8' sugar maple, soft maple, and aspen over hazel. 2016-Extremely low quality hardwoods, low stocking, very wet. Blends into an L type.
14	4110 - Sugar Maple Association	Poletimber Well	8.7	180	81-110	OPIC - FMD: Fairly decent hardwoods growing on a small knob. This stand was scheduled, marked, and sold to Bruce Brown for cutting 10 years ago as part of a bigger sale. It was never cut and most of the marked trees still retain visible orange paint. The stand will have to be remarked in yellow. Two illegal blinds overlooking a bear baiting site are located on the north slope of the stand. 2010-Cut by K&K winter of 2010 under contract # 010-08-01.
15	4130 - Aspen	Poletimber Medium	84.1	45	51-80	OPIC - FMD: Stand has just transitioned into a pole stand. Aspen dbh is running 4-7", 1-2 sticks tall. Abundant hazel in the understory. A few alder swales are located within the stand. 2016-stand contains old grass openings, some blowdown in areas. Spruce budworm present. Retain some smaller white birch, rp, and larger crowned hardwoods.
16	4130 - Aspen	Sapling Medium	12.8	6	Immature	2016-trace residual cherry. Cut February of 2010 under contract #010-08-01. Aspen 10-15' tall.
17	4130 - Aspen	Sapling Medium	17.2	6	Immature	OPIC - FMD: U is a mix of willow, dogwood, and hazel. Occasional fir and spruce scattered throughout the stand. 99 is a mix of cherry and soft maple. Stand will hold 10 years easily if needed. 2010-Cut by K&K winter of 2010 under contract # 010-08-01.
18	4319 - Mixed Upland Forest	Poletimber Well	11.1	63	51-80	OPIC - FMD: A6 2-3 stick aspen surrounded by a large grass opening. Stand is located near a popular fishing/camping site. 2016-Spruce budworm present in the stand. Harvest aspen, fir, spruce retaining cherry, white pine, red pine.
19	4110 - Sugar Maple Association	Sawtimber Well	11.1	100	81-110	OPIC - FMD: Thinned in 2000 by Bruce Brown under permit #20-98-01. 2016-little regeneration noted.
20	4130 - Aspen	Sapling Well	21.6	6	Immature	OPIC - FMD: Stand has areas of blowdown and heavy beaver activity. The west portion is transitioning to low quality hardwoods. 2010-Cut by K&K winter of 2010 under contract # 010-08-01.
21	6122 - Black Spruce	Poletimber Well	12.9	83	51-80	OPIC - FMD: Black spruce poles 5-7" dbh over smaller medium stocked spruce. Quite wet.
23	6120 - Lowland Cedar	Poletimber Poor	33.7	97	1-50	OPIC - FMD: CUT 1989, #28-88-1
24	6122 - Black Spruce	Poletimber Medium	10.9	67	1-50	OPIC - FMD: 1-2 stick black spruce with black spruce understory..



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4130 - Aspen	Poletimber Well	13.7	52	81-110	OPIC - FMD: This stand is almost pure aspen, with poles 4-5 sticks tall, and 8-10" dbh. Fairly heavy hazel brush in the understory and an occasional black cherry pole can be found scattered about.
26	4130 - Aspen	Sapling Well	25.3	18	Immature	OPIC - FMD: Cut under permit 021-98-01 in 1999. Aspen is doing very well, 1-2" dbh and 10-15' tall.
27	4110 - Sugar Maple Association	Sawtimber Well	22.4	100	81-110	OPIC - FMD: Cut under permit 21-98-01 in 1999. Hardwood appears to be growing well.
28	4130 - Aspen	Poletimber Well	39.6	52	81-110	OPIC - FMD: 3-5 stick aspen with spruce and fir. Scattered cherry poles. Understory is comprised of fir and hazel.
30	6120 - Lowland Cedar	Sawtimber Well	94.0	102	81-110	OPIC - FMD: SCA-Swamp conifers along Sawmill Creek. Retain as biodiversity maintenance area to protect the riparian values along the Sawmill, and provide for deer yard.
32	4130 - Aspen	Poletimber Well	88.2	28	Immature	OPIC - FMD: Mostly well-stocked 2-4" aspen 15-25' tall. Fir understory along stand edge. 2016-Stand is just transitioning to a pole stand with a 3-6" dbh range.
33	6122 - Black Spruce	Poletimber Medium	37.5	78	51-80	OPIC - FMD: Most black spruce with cedar. Very wet.
34	4130 - Aspen	Sawtimber Well	46.8	54	111-140	OPIC - FMD: 3-4 stick healthy aspen with spruce and fir. 2016-6-7 stick aspen over 3 stick fir. Fir has budworm. Larger spruce north. A few upland cedar southeast. Stand contains a small "rise" east side within 3 chains of the Esc. River Road, with red maple, cherry, and aspen sawtimber sized trees. Perfect retention patch.
36	4130 - Aspen	Sapling Well	9.7	17	Immature	OPIC - FMD: Cut by Deshambo under midway logging permit #20-98-01 in 2000. Mostly well stocked.
37	42330 - Upland Fir	Poletimber Poor	15.6	53	1-50	OPIC - FMD: SCA-A mixed stand of mostly fir, aspen, and soft maple along sawmill creek. Retain as biodiversity maintenance area to protect the riparian zone.
39	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	7.3	80	1-50	OPIC - FMD: Fairly small stand of small diameter cedar and black spruce. Wet.
40	4119 - Mixed Northern Hardwoods	Sawtimber Well	37.6	100	81-110	OPIC - FMD: Cut in 2003-4 under permit # 026-01-01 2016- Stand is a mix of sugar, red maples, basswood, y. birch.
41	6120 - Lowland Cedar	Poletimber Well	426.1	110	81-110	OPIC - FMD: C6C7Q4, nice cedar swamp. Regeneration is a mix of fir, cedar, and alder.
43	4110 - Sugar Maple Association	Sawtimber Well	9.4	100	81-110	OPIC - FMD: Cut under permit 21-98-01 in 1999. Hardwood appears to be growing well. Multiple vernal ponds and drainages in this stand make it inoperable under our current guidelines.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4110 - Sugar Maple Association	Poletimber Well	6.2	100	81-110	OPIC - FMD: Narrow hardwood finger with A6 to the west with a steep drop to a cedar stand east. Occasional yellow birch and scattered large den trees. The further north in the stand, the poorer the quality. Retain all yellow birch. ***Stand harvested as "West Is Best" #011-08-01 (Unit 3) - cut October, 2009. 2016-no regen from previous harvest.
45	4130 - Aspen	Sapling Well	11.6	13	Immature	OPIC - FMD: Cut in 2004 under permit # 026-01-01
46	4134 - Aspen, Spruce/Fir	Poletimber Well	14.5	76	51-80	OPIC - FMD: A6A5 DEAD FIR AREAS. Data from 1996. High water prevented stand examiner from reaching the stand.
50	4110 - Sugar Maple Association	Poletimber Well	12.6	100	51-80	OPIC - FMD: M6, 3-6"DBH, SUN SCALD 10%, CUT W/STD IN COMPT. 78. 2006-Poor access prevented stand examiner from reaching the stand. 2016-Same.
55	4119 - Mixed Northern Hardwoods	Sawtimber Well	50.9	100	51-80	OPIC - FMD: Cut under permit # 026-01-01 in 2004. 2016-stand is a mix of sugar and red maple, basswood, yellow birch.
56	4130 - Aspen	Sawtimber Well	11.9	58	81-110	OPIC - FMD: 3-4 stick aspen with mixed hardwoods over beaked hazel. The hardwoods are sugar maple, soft maple, cherry. Stand contains a small black ash swale running northeast. More fir on the south end.
57	4113 - R.Maple, Conifer	Sawtimber Well	1.5	71	51-80	OPIC - FMD: Narrow sandy ridge surrounded by low black spruce. Formerly an aspen stand, most of the aspen is dead and down and it is now a poor quality even aged soft maple stand. North end has a Ford Model A body.
58	4110 - Sugar Maple Association	Sawtimber Medium	9.3	100	51-80	OPIC - FMD: Thinned in 2001 under permit #19-98-01. 2016-Poor quality sugar maple and cherry. Maple regen in the larger gaps browsed but above the deer now.
64	4112 - Maple, Beech, Cherry Association	Sawtimber Well	7.4	100	111-140	OPIC - FMD: Good regeneration, 8-12' tall. Cut in 2000 under permit #19-98-01. 2016-Fair quality hardwoods with excellent regeneration. Schedule treatment with stand 11 of compartment 76.
66	6119 - Mixed Lowland Deciduous Forest	Poletimber Poor	21.3	82	1-50	OPIC - FMD: White birch poles and a few aspen with scattered black spruce over tag alder. Very wet site. 2016-LF too wet.



Stand	Cover Type	Acres	Managed Site	General Comments:
29	320 - Upland Shrub	12.1	No	OPIC - FMD: This stand consists of cherry, raspberry, fir, grass and scattered 8' - 15' tall aspen clones.
31	622 - Lowland Shrub	121.9	No	OPIC - FMD: Tag alder with small black spruce.
47	6229 - Mixed lowland shrub	16.1	No	OPIC - FMD: SCA-Tag alder with stream. Retain as biodiversity maintenance area to protect riparian corridor.
48	6229 - Mixed lowland shrub	19.1	No	OPIC - FMD: SCA- Old Beaver flooding. Include as biodiversity maintenance area to protect riparian zone.
52	6229 - Mixed lowland shrub	5.2	No	Multiple cedar clumps within lowland type
53	6229 - Mixed lowland shrub	2.3	No	
54	500 - Water	5.0	No	OPIC - FMD: Beaver flooding.
59	6239 - Mixed Emergent Wetland	0.8	No	
60	500 - Water	25.7	No	OPIC - FMD: Escanaba River
61	310 - Herbaceous Openland	9.7	No	OPIC - FMD: Cherry brush and small aspen over fir and white spruce. Occasional tamarack. All of this among old burned pine stumps.
62	500 - Water	2.3	No	OPIC - FMD: Escanaba River
400	310 - Herbaceous Openland	3.6	No	OPIC - FMD: Grass opening.
401	310 - Herbaceous Openland	21.9	No	OPIC - FMD: Grass opening.
402	320 - Upland Shrub	0.6	No	OPIC - FMD: Grass opening.
404	310 - Herbaceous Openland	3.3	No	OPIC - FMD: Grass opening.
405	310 - Herbaceous Openland	1.2	No	OPIC - FMD: Grass opening.
407	320 - Upland Shrub	40.3	No	OPIC - FMD: Grass opening. 2016-upland shrub with scattered trees.



Stand	Cover Type	Acres	Managed Site	General Comments:
411	31029 - Grass (OI)	26.2	No	OPIC - FMD: Grass opening.
412	310 - Herbaceous Openland	2.2	No	OPIC - FMD: Grass opening.
413	310 - Herbaceous Openland	2.2	No	OPIC - FMD: Grass opening.
415	310 - Herbaceous Openland	1.7	No	OPIC - FMD: Grass opening.