



# Compartment Review Presentation

Gwinn Forest Management Unit

Compartment 32018

Entry Year 2020

Acreage: 1,704

County Marquette

Management Area: Dead Horse Moraines

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**Revision Date:** 2018-08-06

**Stand Examiner:** Robert Tylka

**Legal Description:**

T44N R24W Sec's. 10, 11, 12

**Identified Planning Goals:**

Manage for timber and wildlife habitat values on a sustainable basis when and where it is practical & economically viable to do so.

**Soil and topography:**

Terrain is flat to gently rolling; generally swampland to the east with scattered hardwood islands. Soils range from very poorly drained loam to sandy ridges. Major soil associations include: Carbondale, Lupton, Rifle, Rubicon, Croswell, and Tawas.

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

Parcels of private lands exist within the compartment boundaries, and these compound the access issues that exist due to the low, wet terrain found in much of the area. No developed recreational facilities exist within this compartment but it is undoubtedly used by locals for hunting and trapping.

**Unique Natural Features:**

The area is part of a large wetland complex, and some areas display evidence of minimal activity by man over an extended period of time.

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

None known or listed at this time.

**Special Management Designations or Considerations:**

**Watershed and Fisheries Considerations:**

No significant waterways are included in this compartment.

**Wildlife Habitat Considerations:**

Compartment 018 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 a medium-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien Group and Cambrian Trempealeau Formation subcrop below the glacial drift. These formations could be used for stone in the UP. There are not gravel pits in the area, but there maybe some potential on the uplands. Abandoned iron mines are located six miles to the northwest. This State land has not been previously leased for metallic exploration. There is no economic oil and gas production in the UP.

**Vehicle Access:**

Reasonably good for much of the area of the compartment west of Highway M-35. Fair but difficult (often winter only) for most of the compartment east of M-35, through compartment 17 to the north and comp. 5 to the east. The railroad tracks on the east side of M-35 and waterways/wetlands to the north and south of the compartment are the primary reasons for the difficulties.

**Survey Needs:**

None.

**Recreational Facilities and Opportunities:**

Recreation activity for this area is primarily for upland hunting of ruffed grouse, woodcock, and whitetail deer.

**Fire Protection:**

This compartment probably has a low risk for wildfire unless protracted drought conditions are in effect. Fire suppression would be extremely difficult due to the access issues.

**Additional Compartment Information:**

Despite the access issues, timber and wildlife habitat management in many areas of this compartment offer reasonably good opportunities. The wetlands are best managed through minimal disturbance.

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

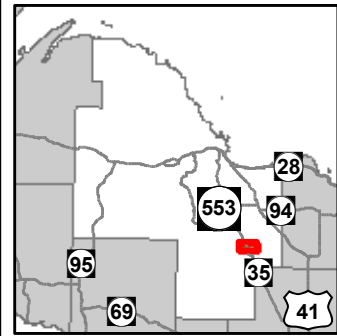
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

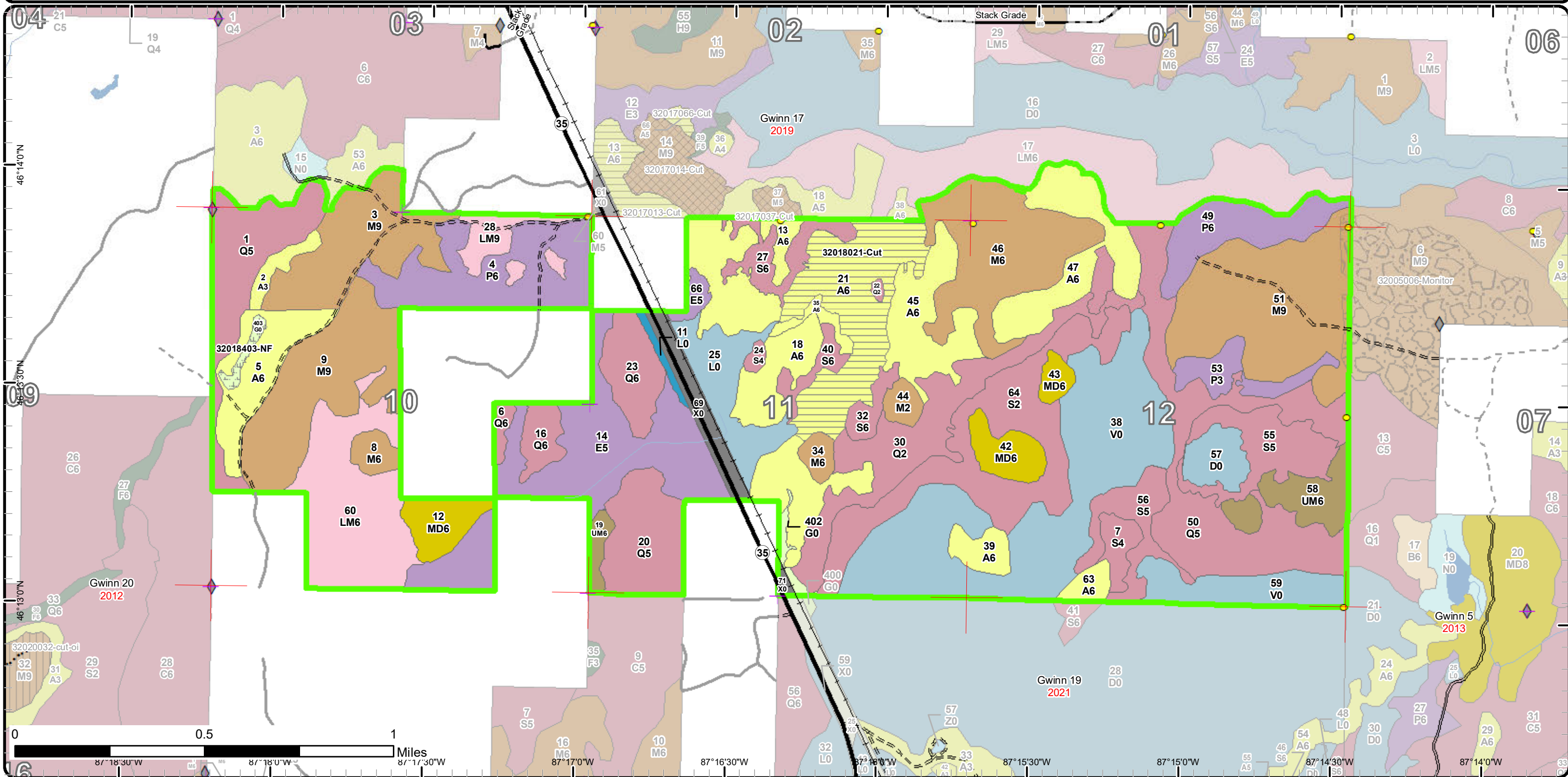
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 18  
 T44N, R24W, Sec: 10, 11, 12  
 County: Marquette  
 Unit: Gwinn  
 Mgmt Area: Dead Horse Moraines  
 YOE: 2020  
 Acres: 1,704 GIS Calculated  
 Examiner: Robert Tylka  
 Map Revised: 8/24/2018  
 Map Phase: Web-Post

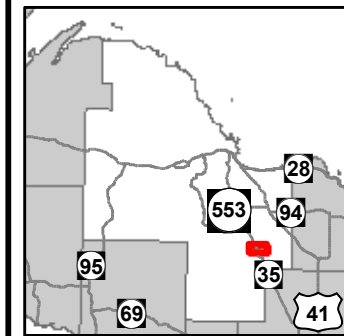


- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- == DNR - Secondary Forest Road
- == DNR - Forest Access Route
- == Federal / State Highway
- == Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- Private - Paved Road
- Private - Dirt / Gravel Road
- Active Railroads
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Other Treatment - See Comments
- Clearcut (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland
- Lakes

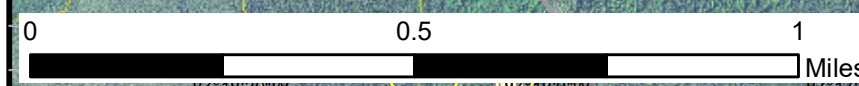
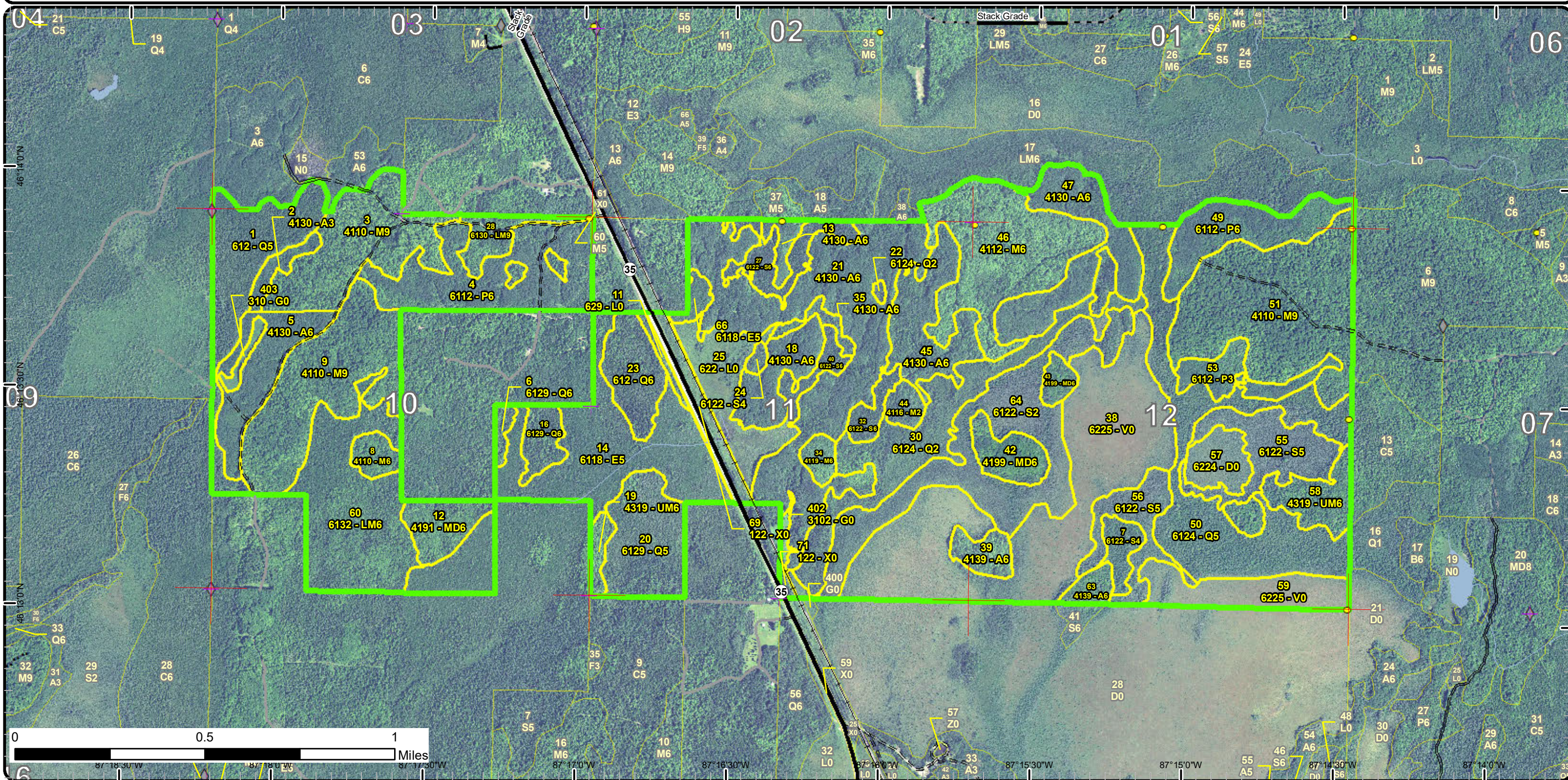


# Stand Boundary Map

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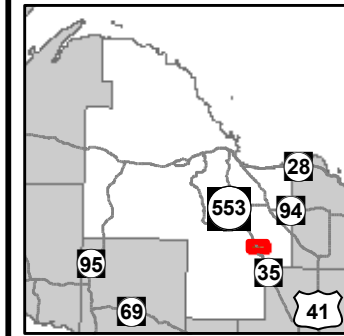
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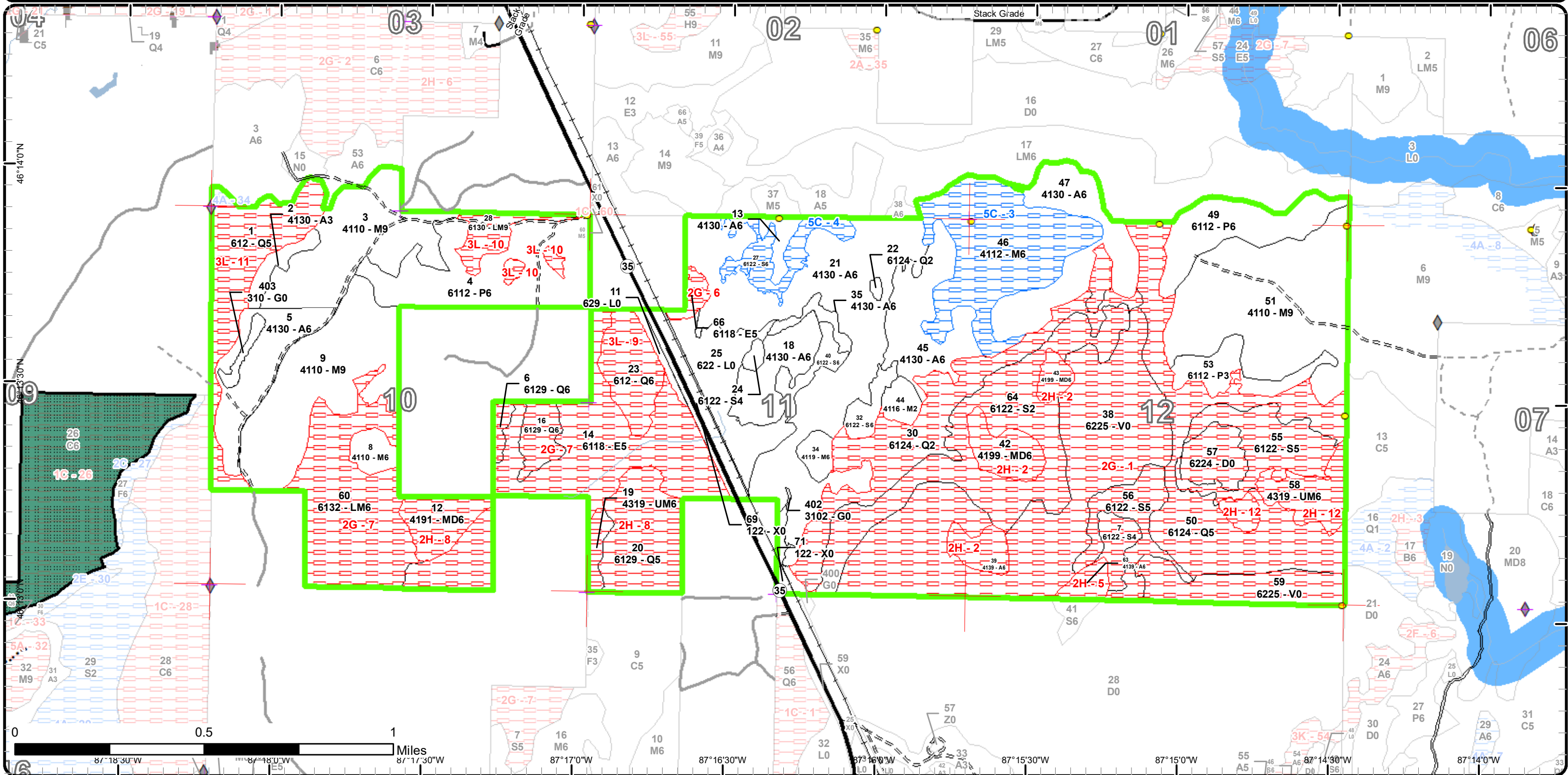
0 0.5 1 Miles

# Special Conservation Areas & Site Conditions Map

Compartment: 18  
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- Private - Paved Road
- Private - Dirt / Gravel Road
- Active Railroads
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3L: Other wildlife concerns
- Stand Boundaries
- SCA
- Cold Water Streams
- High Priority Trout Stream Buffer
- Habitat Corridor



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	0	7	0	226	43	0	0	0	17	0	0	0	0	0	0	0	0	293
Bog	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
Herbaceous Openland	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Aspen/Balsam Poplar	0	0	0	51	62	0	0	0	0	0	0	0	0	0	0	0	0	0	113
Lowland Conifers	0	0	0	0	0	0	0	0	16	48	39	95	84	0	0	0	0	0	282
Lowland Deciduous	0	0	0	0	0	0	0	0	0	94	0	0	5	0	0	0	0	0	99
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	89
Lowland Shrub	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	18	18	0	9	87	0	55	0	0	0	187
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	6	17	0	0	0	0	0	0	15	38
Northern Hardwood	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	318	324
Treed Bog	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	6	30
Urban	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
<b>Total</b>	<b>251</b>	<b>0</b>	<b>7</b>	<b>51</b>	<b>294</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>183</b>	<b>56</b>	<b>104</b>	<b>176</b>	<b>24</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>428</b>	<b>1706</b>



## Report 2 – Treatment Summary

Gwinn Mgt. Unit

Year of Entry: 2020

Acres of Harvest

Compartment 18

Total Compartment Acres: 1,704

Commercial Harvest - 70  
 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	70	0	0	0	0	0	0	0	0	70
<b>Total</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	70	0	0	0	0	98	0	4		171
Next Step	0	0	0	0	0	70	0	0		70
<b>Total</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>167</b>	<b>0</b>	<b>4</b>		<b>241</b>

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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
21 32018021-Cut	69.7	4130 - Aspen	Poletimber Well	38	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Proposal

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

Prescription Clearcut with reserves - Listed as age 38 from previous inventory but there appears to be more of an age spread present. Identify several 1-3 acre blocks where age-class or species diversity, or site conditions, indicate that retention is appropriate. The final number of retention acres is not critical but should be approximately 3-10% of the stand's total.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, red maple, conifers

Regen:

Other Due to the extremely difficult access, a relatively large amount of aspen will be harvested in this part of the compartment during this entry. Winter harvest only.

Comment:

Wildlife: We are harvesting approximately half of a large aspen stand which will provide a better age class distribution. - ruffed grouse, white-tailed deer.

Proposed Start Date: 10/01/2018

403 32018403-NF	3.6	310 - Herbaceous Openland	Nonstocked	Unspec ified	NonForestMgt	Other - Specify	3102 - Grass			Draft Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Plant scattered native/non-GMO mast producing trees/shrubs as appropriate and cover crops in herbaceous openings according to local site conditions to promote forage for specified wildlife species. Hand/mechanical removal of brush/vegetation from the opening will be used to maintain the openings and hunter walking trails--current and future; disking, mowing, cultipacking, pesticide application may be used as necessary to accomplish wildlife goals. Partial completion reports will be completed annually for the duration this FTP is valid, describing completed work.

Next Step

Treatments:

Acceptable Site to be maintained as opening.

Regen:

Other Prescribe wildlife habitat maintenance activities, including: plant

Comment: scattered native/non-GMO mast producing trees/shrubs as appropriate and cover crops in herbaceous openings according to local site conditions to promote forage for specified wildlife species. Hand/mechanical removal of brush/vegetation from the opening will be used to maintain the openings and hunter walking trails--current and future; disking, mowing, cultipacking, pesticide application may be used as necessary to accomplish wildlife goals. Partial completion reports will be completed annually for the duration this FTP is valid, describing completed work.

Proposed Start Date: 10/01/2019

**Total Treatment  
Acreage Proposed: 73.3**



## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Robert Tylka : Examiner

Compartment: 18  
Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions					
		With Condition	Not Available		4A	5C	2G	2H	3L
293	276	0	17	Aspen				17	
174	0	0	174	Bog			174		
7	7	0	0	Herbaceous Openland					
112	112	0	0	Lowland Aspen/Balsam Poplar					
282	1	2	279	Lowland Conifers	2		170	39	70
99	0	0	99	Lowland Deciduous			99		
89	0	0	89	Lowland Mixed Forest			74		15
36	36	0	0	Lowland Shrub					
188	18	18	152	Lowland Spruce/Fir		18	152		
38	0	0	38	Mixed Upland Deciduous				38	
324	251	73	0	Northern Hardwood		73			
15	0	0	15	Treed Bog			15		
29	0	0	29	Upland Mixed Forest				29	
19	19	0	0	Urban					
1,704	720	92	892	Total Forested Acres	2	91	684	122	85
	42%	5%	52%	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	2G: Too wet (sensitive soils, does not include access issues)	496	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	31	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Opportunity to reserve these as undisturbed upland deciduous wildlife habitat.							

## Report 4 – Site Conditions

Gwinn Mgt. Unit  
Robert Tylka : Examiner

Compartment: 18  
Year of Entry: 2020

3	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	73	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Due to difficult access, recommend holding until next entry when adjacent aspen stands are harvested.							
4	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	18	Unspecified	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>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	183	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Gwinn Mgt. Unit  
Robert Tylka : Examiner

Compartment: 18  
Year of Entry: 2020

8	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	61	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
9	Unavailable	3L: Other wildlife concerns	24	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	Unavailable	3L: Other wildlife concerns	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	Unavailable	3L: Other wildlife concerns	47	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	24	Unspecified	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
<b>Comments</b>				



**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	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	612 - Lowland Coniferous Forest	Poletimber Medium	48.1	87	81-110	Mixed lowland conifers. Spruce, fir and cedar appear to be the most common species but the stand's composition, density and age-class structure all appear to vary significantly. Some deciduous species (poplars, red maple and black ash) are also present. Overall much of the ground is probably operable under frozen winter conditions, but at this point the wildlife habitat values are probably more significant than the timber values.
2	4130 - Aspen	Sapling Well	6.8	16	Immature	Cut under permit #009-00-01 - well-stocked aspen regen.
3	4110 - Sugar Maple Association	Sawtimber Well	56.6	111	81-110	Hardwoods cut in 2002 under permit #09-00-01. Some maple seedlings with raspberry. Includes a pocket of aspen regen (just over an acre) resulting from the cut under the same permit. 12-12-17: Field exam confirms that this statement is correct. Medium-to-good quality site and the trees reflect this, but there is evidence of logging damage to residuals. The stand will hold until BA is high enough for the next cut. Overall more logs than poles so next entry (YOE 2030) should allow emphasis on improving the stand by retaining trees with the best form.
4	6112 - Lowland Aspen	Poletimber Well	61.5	38	81-110	Areas low and wet with willow in places. Well-stocked stand overall. Mainly 3-4 stick aspen. The basal area is highly variable, with the norm being anywhere from 60 to 140. Diverse mix of understory species, including a few hemlock & cedar.. Also includes several pockets of lowland conifers that are older than the aspen (all under 3 acres and year of origin approx. 1939.) Last entry this was described as upland but more of it appears to be leaning towards a transitional lowland type, based on the ground flora observed (wet sedge, etc.) Note that the age was previously listed as reflecting a year of origin of 1990 - based on similarities to other aspen stands nearby, this is estimated to be about the same age as those other aspen stands.
5	4130 - Aspen	Poletimber Well	32.1	38	51-80	7-9-18: Good but variable aspen stocking - 2-4 stick aspen, generally 7-8" DBH with some stems still submerchantable. Site appears to be capable of producing fairly high quality timber. BA runs about 50-80 sq.ft./acre at this time. White birch is uncommon overstory associate. Occasional paper birch & black cherry in the overstory, and a lot of sugar maple saplings present. A few balsam fir observed in the understory as well. May be ready for harvest next entry.
6	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	3.8	79	51-80	Old OI notes: Cedar and hemlock "island" within a black ash swamp. 2018: Access across pvt lands appears to be possible, but there is little economic incentive to pursue commercial harvest in this stand.
7	6122 - Black Spruce	Poletimber Poor	9.1	101	51-80	Semi-open stand of slow-growing timber on wet ground - inoperable for timber management as it's generally too wet and the site indices appear to be rather low. However, species composition, crown closure/stand density, site indices and even age classes all vary significantly from one spot to the next, and evidence of old winter roads can still be seen. Overall, it seems that commercial timber management would be uneconomical.
8	4110 - Sugar Maple Association	Poletimber Well	7.8	181	81-110	Hardwood poles/small logs - access is difficult.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
9	4110 - Sugar Maple Association	Sawtimber Well	72.5	101	81-110	Hardwoods select cut under permit #009-00-01. Many canopy gaps. Hemlock and black cherry are uncommon overstory associates. 7-9-18: Field exam confirms that this data is correct. Medium-to-good quality site and the trees reflect this, but there is evidence of logging damage to residuals. The stand will hold until BA is high enough for the next cut. Overall more logs than poles so next entry (YOE 2030) should allow emphasis on improving the stand by retaining trees with the best form.
12	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	16.8	98	81-110	Old OI notes: Wet red maple and fir stand with occasional hemlock. Poor access. 2018: Appears to be a fully-stocked stand of mixed timber but no practical access exists without crossing private lands.
13	4130 - Aspen	Poletimber Well	5.9	38	111-140	Dense mixed aspen with red maple, balsam fir, and white spruce. Also scattered paper birch and white pine.
14	6118 - Lowland Deciduous with Cedar	Poletimber Medium	94.3	80	1-50	Old OI notes: E4C4Q4 VERY WET 2018: LM 4-5, semi open, very wet and inoperable. Small pockets of better timber 6-8" DBH (especially spruce/fir/red maple) are scattered throughout the stand on areas of slightly elevated terrain but access for harvest not economically feasible.
16	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	11.0	79	51-80	Old OI Notes: Cedar and hemlock "island" within a black ash swamp. 2018 - Access across inoperable wetlands seems questionable. Best value is to leave this as undisturbed wildlife habitat.
18	4130 - Aspen	Poletimber Well	22.2	38	111-140	Aspen pole stand, fully stocked 6-9" DBH. Scattered fir and red maple.
19	4319 - Mixed Upland Forest	Poletimber Well	5.8	103	81-110	Old OI notes: Poor quality red maple pole stand on an inaccessible ridge within the swamp. Regeneration on the north side is M3, on the south end F3. 2018 - Stand appears to be fully stocked with hardwoods in several size classes and scattered conifers. No viable access identified.
20	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	38.8	98	51-80	Old OI notes: Stand varies from a swamp conifer stand to a mixed lowland hardwoods black ash type. 2018 - Old notes appear to be accurate. Photos suggest a mix of slow-growing spruce, cedar and ash with highly variable stand density. Lowland brush also appears to be dominant in places, and several pockets of upland deciduous timber are present on elevated sites. Evidence of seasonal access across the private lands to the east (winter roads) appear on the photos but no viable access for timber management was confirmed.
21	4130 - Aspen	Poletimber Well	124.5	38	111-140	Dense mixed aspen with red maple, balsam fir, and white spruce. Also scattered paper birch and white pine.
22	6124 - Lowland Spruce-Fir	Sapling Medium	0.9	77	Unspecified	.Small inclusion of lowland conifers - retain when cutting the aspen.
23	612 - Lowland Coniferous Forest	Poletimber Well	23.6	115	111-140	Old OI notes.: Cedar stand with a few fir. 2018 - Stand appears to be a mix of lowland conifers heavy to cedar but also containing spruce, fir and lowland hardwoods.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
24	6122 - Black Spruce	Poletimber Poor	2.2	77	1-50	Semi-open spruce-fir on wet ground - site indices appear to be too low for commercial management. Age carried forward from previous inventory records; probably more age-class diversity present. Scattered aspen along the fringe of the stand.
27	6122 - Black Spruce	Poletimber Well	17.7	85	Unspecified	Relatively slow-growing black spruce with scattered cedar, fir and deciduous trees on a wet site. a few larger white pine and red maple are also present. The site itself may have some inoperable areas, but overall it is probably harvestable under hard frozen conditions.
28	6130 - Fir, Aspen, Maple	Sawtimber Well	15.1	130	81-110	Mixed lowland timber - large but rough-looking red maple with hemlock, cedar, and aspen/balsam poplar on the wetter spots. Larger aspen is in rough shape in some places. Scattered white pine, paper birch & yellow birches and a few spruce also present. The balsam fir and some of the aspen appear to be a second cohort where the first died out. Age is a rough guess, as unevenaged characteristics are definitely present. some lowland brush and ash regen mixed into the understory. Everything here is rather variable - composition, density, stand structure and site indices.  The two small pockets (separate stands too small to map separately) shown appear to be similar to the main stand but were not field-checked.
30	6124 - Lowland Spruce- Fir	Sapling Medium	60.2	116	Unspecified	This stand consists primarily of stunted black spruce, fir and tamarack but also has a small area of black spruce poles. Stocking varies from S1 to S5. In many areas lowland brush is dominant. Not quite as wet as the black spruce bog to the east but operability is still questionable at best. Site indices are too low for commercial timber management.
32	6122 - Black Spruce	Poletimber Well	7.7	77	51-80	Age estimated to be the same as stand 40 (spruce stand to the west.)  This stand is somewhat slower-growing than the spruce poles in the stand to the west, and definitely more open. Site becomes progressively wetter as you proceed to the southeast, with a visible drop in the site indices as you go. Cedar is present.
34	4119 - Mixed Northern Hardwoods	Poletimber Well	5.9	181	81-110	Old OI notes: Fair quality hardwood stand showing the effects of past excessive logging damage. Lots of scars, and cankers. The stand also contains cherry and large red maple. Heavy maple seedling stocking about 12" high. Poor access over a very long winter road. 2018 - old description is valid. Many trees display injury, poor form etc.
35	4130 - Aspen	Poletimber Well	5.1	38	1-50	Semi-open aspen with red maple, balsam fir, and white spruce. Also scattered paper birch and white pine. Growing slower than the adjacent stands. Retain for some wildlife cover/habitat values while the denser aspen stands surrounding it are harvested.
39	4139 - Aspen, Mixed Deciduous	Poletimber Well	10.1	85	81-110	Previously classified as aspen - From a distance it looks like some of the aspen is starting to fall out of this stand. A mix of birch, red maple and other hardwoods is likely to take over, with a component of spruce & fir. The access issues across the wetlands make harvesting the timber uneconomical; therefore reserving this stand for undisturbed wildlife habitat is a desirable management objective.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	6122 - Black Spruce	Poletimber Well	8.2	77	51-80	Small stand of black spruce and swamp conifer poles. Relatively slow-growing, but not as slow as the non-merchantable conifer stands to the east. Merchantable but recommend retaining them for wildlife cover while the aspen is harvested nearby. No evidence of spruce budworm damage in spite of the balsam fir component. A few other lowland spp also present - scattered tamarack and ash.
42	4199 - Other Mixed Upland Deciduous	Poletimber Well	15.0	87	111-140	Island of inaccessible upland deciduous timber. It appears to feature a mix of aspen, birches and maples, with a fair number of large trees present. A few spruce and fir also present but primarily in the understory. Given the access issues, this stand should be reserved for undisturbed wildlife habitat.
43	4199 - Other Mixed Upland Deciduous	Poletimber Well	5.8	87	81-110	Viewed from a distance, this appears to be an island of mixed upland deciduous timber featuring aspen, birches and red maple with a few scattered balsam fir & spruce near the edges. There appears to be log-sized trees, and some age-class diversity is probably developing. Access across the wetlands appears to be fairly difficult so this stand should be left alone as undisturbed wildlife habitat.
44	4116 - Mixed N. Hardwood - Aspen	Sapling Medium	6.3	38	51-80	OPIC - FMD: Soft maple and aspen regeneration from the 1980 harvest. 2-4" dbh.M2A1 Wet soils. 2018: Not field checked but evidence in recent photos suggests that stand is maturing to the poletimber stage. Check next entry, as the adjacent aspen stand to the north may be ready to cut at that time.
45	4130 - Aspen	Poletimber Well	36.6	38	81-110	Aspen poles - cut next entry to create some aspen age-class diversity in the area. Winter cut only due to access difficulties. Small inclusions of lowland conifers also present on the wetter areas.
46	4112 - Maple, Beech, Cherry Association	Poletimber Well	73.2	181	111-140	Last harvested in 1986. This is a poletimber stand with a few sawtimber sized trees. Occasional cherry, large white pine, and yellow birch.
47	4130 - Aspen	Poletimber Well	43.2	40	81-110	Cut next entry to create some aspen age class diversity in this area. Winter cut only due to difficult access.
49	6112 - Lowland Aspen	Poletimber Well	33.8	25	51-80	.Young aspen stand reaching merchantable size class. Many stems in the 4-6" DBH range so BA is highly variable, but the majority of the area is fully-stocked. Wetter areas tend to have less and somewhat smaller DBH aspen stems, submerchantable ash, and proportionately more lowland brush spp. such as willows; in small pockets the lowland brush is the dominant cover but mapping these separately would be impossible. The site itself is probably best classified as lowland, though in reality it is somewhat of a transitional site between the northern hardwoods to the south and the true wetland cover to the north & west.
50	6124 - Lowland Spruce- Fir	Poletimber Medium	95.3	101	51-80	Semi-open stand of slow-growing timber on wet ground - inoperable for timber management as it's generally too wet and the site indices appear to be rather low. However, species composition, crown closure/stand density, site indices and even age classes all vary significantly from one spot to the next, and evidence of old winter roads can still be seen. Overall, it seems that commercial timber management would be uneconomical.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
51	4110 - Sugar Maple Association	Sawtimber Well	101.5	101	81-110	Area treated under timber sale # 013-90-01 with cutting completed in 1996. Excellent well developed hard maple regeneration 1" in diameter and 8'-12' tall. Site quality is very high, AoCA. The stand is dominated by sawtimber sized sugar maple, with occasional cherry, basswood, and the rare red oak sawtimber. There are very few 6"-8" poles, and only a few 10" dbh poles. Forest floor is carpeted with dutchman's-breeches. 2015: Stand was harvested as "Whitey's Hill" #004-10 - one unit thinned in Jan, Feb, 2013 by Graves with the remainder thinned Dec-Feb, 2014-15 by Kretz Lumber (Premier Logging sub-crew). 2018 - data from last update in 2014 appears to be accurate. A few hemlock (generally in pockets of several trees) also present, and these were protected during the last harvest. Scattered red maple present especially along the edges of the stand. There is also a pocket of mixed timber (primarily hardwood poles & regen but somewhat lower quality) at the southeast corner of the stand (not cut last entry) that gradually drops into the wetlands to the south. It appears to be operable but needs to be evaluated the next time this stand is prescribed for treatment.
53	6112 - Lowland Aspen	Sapling Well	16.9	25	Immature	Cut in 1993 under permit #13-90-01, the aspen is heavily stocked where it regenerated, but many areas of the stand are wet, with only willow and tag alder present. 2018 - stand includes a pocket of lowland hardwoods/mixed timber too small to meet mapping standards where a semi-open mix of hardwoods, aspen and conifers occupies the site. Too wet and considerably slower growing than the high-quality northern hardwoods to the north, and probably best managed with this aspen in the future.
55	6122 - Black Spruce	Poletimber Medium	32.2	131	1-50	Very slow-growing spruce on boggy ground - site index too low for commercial timber management and the ground appears to be inoperable for modern logging methods. Many trees do have a merchantable stick or two of wood but this would not justify cutting, as reforestation would likely fail to meet certification standards.
56	6122 - Black Spruce	Poletimber Medium	23.1	131	51-80	Very slow-growing black spruce on boggy ground - too wet for operability, and the site index is too low to consider for commercial forest management. Scattered trees do have a stick of merchantable wood but reforestation would most likely fail forest certification standards.
58	4319 - Mixed Upland Forest	Poletimber Well	23.6	122	81-110	Slightly rolling, elevated terrain with a mix of timber on it. Natural succession appears to be well underway as much of the paper birch is in bad shape. The hemlock are old but hanging on, and some hemlock regen is appearing. Operable but access is difficult. Basal area is somewhat variable but fully-stocked.
60	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	74.0	86	81-110	Old OI notes: Stand varies from a swamp conifer stand to a mixed lowland hardwoods E type. Mixed hardwoods consist of black ash and red maple. East edge of stand contains a small black spruce bog. 2018: A little of everything in this stand. Ground varies from gently rolling to slightly wet to inoperable, with corresponding changes to site indices for various tree species. Stand density and composition also vary.
63	4139 - Aspen, Mixed Deciduous	Poletimber Well	6.5	82	81-110	Old OI notes; Small island of aspen, birch, and fir surrounded by black spruce bog. 2018 - No access.

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Gwinn Mgt. Unit

Report 7 – Forested Stands

Compartment: 18  
Year of Entry: 2020



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	6122 - Black Spruce	Sapling Medium	87.3	116	1-50	Very slow-growing spruce and other lowland spp. on boggy, inoperable ground that is too wet for logging ops.. Stand density and composition vary, and a few trees have merchantable wood; but overall the site index is too low to consider this stand for commercial timber management.
66	6118 - Lowland Deciduous with Cedar	Poletimber Medium	4.8	115	51-80	Previously identified as cedar. This stand is fairly wet and slow-growing, featuring a mix of species. Appears to be inoperable ground.



Stand	Cover Type	Acres	Managed Site	General Comments:
11	629 - Mixed non-forested wetland	3.2	No	Mix of lowland brush and scattered lowland deciduous spp adjacent to Highway M-35. A few conifers are also present.
25	622 - Lowland Shrub	32.4	No	Lowland brush on wet inoperable site.
38	6225 - Bog	144.4	No	Bog - inoperable ground - too wet.
57	6224 - Treed Bog	14.9	No	Treed bog featuring primarily stunted black spruce, balsam fir and scattered ash. with a few willows etc. as well. Inoperable - too wet.
59	6225 - Bog	29.8	No	Very wet boggy area with only low shrubs and scattered taller lowland shrubs such as willow etc. A few stunted trees and semi-open islands of primarily submerchantable timber are also present. Inoperable - too wet.
69	122 - Road/Parking Lot	17.0	No	Highway M-35 and Canadian-Soo Railroad R-O-W's.
71	122 - Road/Parking Lot	1.6	No	Highway M-35 and Canadian-Soo Railroad R-O-W's.
402	3102 - Grass	3.7	No	Site tordoned in 1980 and 1982. Old RR grade passes through stand. Patches of aspen regen, scattered willow, cherry, etc.. mostly open. North end of stand is a wet swale with more scattered trees.
403	310 - Herbaceous Openland	3.6	Yes	Opening cleared in August of 1995 and seeded in August of 1996. Gently rolling terrain with smooth surface. Maintain as needed in future per WLD.