



# Compartment Review Presentation

Atlanta Forest Management Unit

Compartment 54081

Entry Year 2020

Acreage: 495

County Alpena

Management Area: Alpena Lake Plain

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**Revision Date:** 2018-05-04

**Stand Examiner:** Dale Parris

**Legal Description:**

T29N R06E Sections 20 & 21

**Identified Planning Goals:**

All harvests have been prescribed following the direction indicated in the Alpena Lake Plains Management Area (ALPMA) Plan and Timber Analysis. In all cases the unique characteristics of the individual stand was taken into consideration when writing the prescription. The timber analysis completed on the ALPMA, specific to Compartment 81, indicated that the lowland aspen covertime be of focus for harvest for the purpose of balancing the age classes of this covertime across the Management Area (MA). Wildlife, recreation, aesthetics, adjacent stands, and the larger landscape were considered in all management decisions.

**Soil and topography:**

The western most 80 acres of Compartment 81 is upland forest. The soil in these 80 acres is mostly McGinn loamy sand (well drained) and Hoist sandy loam (moderately well drained). This upland area is composed of mildly rolling hills.

The rest of Compartment 81 is dominated by flat lowland ground. The soil in the central region of Compartment 81 is mainly Lupton muck (very poorly drained). This lowland forest area is dominated by northern white cedar and black spruce.

The soil surrounding Wolf Creek to the east is Rollaway muck, a very poorly drained soil that is frequently flooded. The rest of the soil in Compartment 81 further to the east is a mix of Tawas Muck (very poorly drained), Ausable muck (very poorly drained), and the Tacoda-Wakeley complex (poorly drained).

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

The northern boundary of Compartment 88 is adjacent to more State of Michigan owned land. The remainder of the land adjacent to Compartment 88 is recreational, larger acreage, hunting type properties.

**Unique Natural Features:**

The western most region of Compartment 81 is characterized by upland hardwood forest and upland aspen. The central region of Compartment 81 is lowland forest dominated by northern white cedar and black spruce with tamarack commonly mixed in. Further to the east Wolf Creek flows from south to north through the compartment. The flood plain forest surrounding the river is mainly red and silver maple. The rest of the acreage furthest to the east is dominated by lowland shrub/mixed swamp conifer with the occasional small pocket of higher ground growing mixed upland deciduous, and mixed conifer forests.

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

As part of the NHD, the Michigan Natural Features Inventory (MNFI) at the Michigan State University Extension website did not list any rare species or species of concern in Compartment 81.

**Special Management Designations or Considerations:**

The Fisheries Division of the Michigan DNR needs to be consulted regarding all forest management that takes place near Wolf Creek. Wolf Creek and all its tributaries upstream from T30N R07E Section 32 are designated trout stream. The "Sustainable Soil and Water Quality Practices on Forest Land" publication put forth by the MI DNR and MI DEQ details best management practices for managing forests near streams and rivers.

Rutting and the disturbance of underground water flow needs to be considered when managing forests in and around sensitive lowland soils.

Oak wilt needs to be taken into consideration in harvests that take place in and adjacent to stands that contain oak.

**Watershed and Fisheries Considerations:**

### **Wildlife Habitat Considerations:**

This compartment is an excellent opportunity to manage for wildlife. It is part of a multiple compartment, large scale block of public land providing contiguous wildlife pathways that are necessary for many of our large game animals such as black bear. There is also a large river corridor following Wolf Creek which is an excellent pathway for wildlife travel. Habitat components of cedar and wetland complexes as well as aspen provide food and cover for multiple species at a variety of age classes. We are working to maintain winter cover areas as well as keep a good age rotation of aspen in this compartment as well as adjacent compartments. Species which benefit from our management include white-tailed deer, black bear, ruffed grouse, woodcock, and many other game and non-game species.

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

Sections 20 & 21, T29N-R6E, Alpena County

Active sand/gravel pits are not located in the area, but there may be some sand & gravel potential within the compartment on the uplands in Section 20. Glacial drift is too thick in this area for bedrock non-metallic mineral potential. All state-owned mineral rights in the compartment are currently leased, and the area has been heavily developed for Antrim Shale gas. There is some potential for additional future Antrim wells, but most of the state land in the compartment is classified as non-development. There is no known oil and gas potential from other formations in this area. There is no known metallic mineral potential in this part of the state.

### **Vehicle Access:**

Vehicle access to Compartment 81 is limited to the forest road off the end of Andor Road to the west. Due to surrounding private land, surrounding lowlands, and the absence of legal forest access roads, there is no vehicle access to the central and eastern portions of Compartment 81.

### **Survey Needs:**

There are stands prescribed for harvest in Compartment 81 that require a survey to find survey corners necessary for constructing timber sale boundaries adjacent to private land. These stands are located in T29N R06E Section 20.

### **Recreational Facilities and Opportunities:**

Compartment 81 does not contain any DNR designated recreation trails. Compartment 81 has opportunities for hunting whitetail deer, ruff grouse, bear, squirrel, coyote, and turkey within season with the proper license(s).

### **Fire Protection:**

In the case of a wildland fire, response to Compartment 81 will be from the Alpena DNR office as well as the Ossineke Township Fire Department.

### **Additional Compartment Information:**

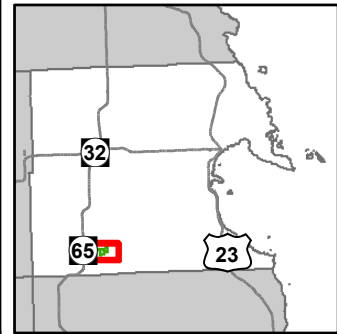
#### **The following reports from the Inventory are attached:**

- 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:**

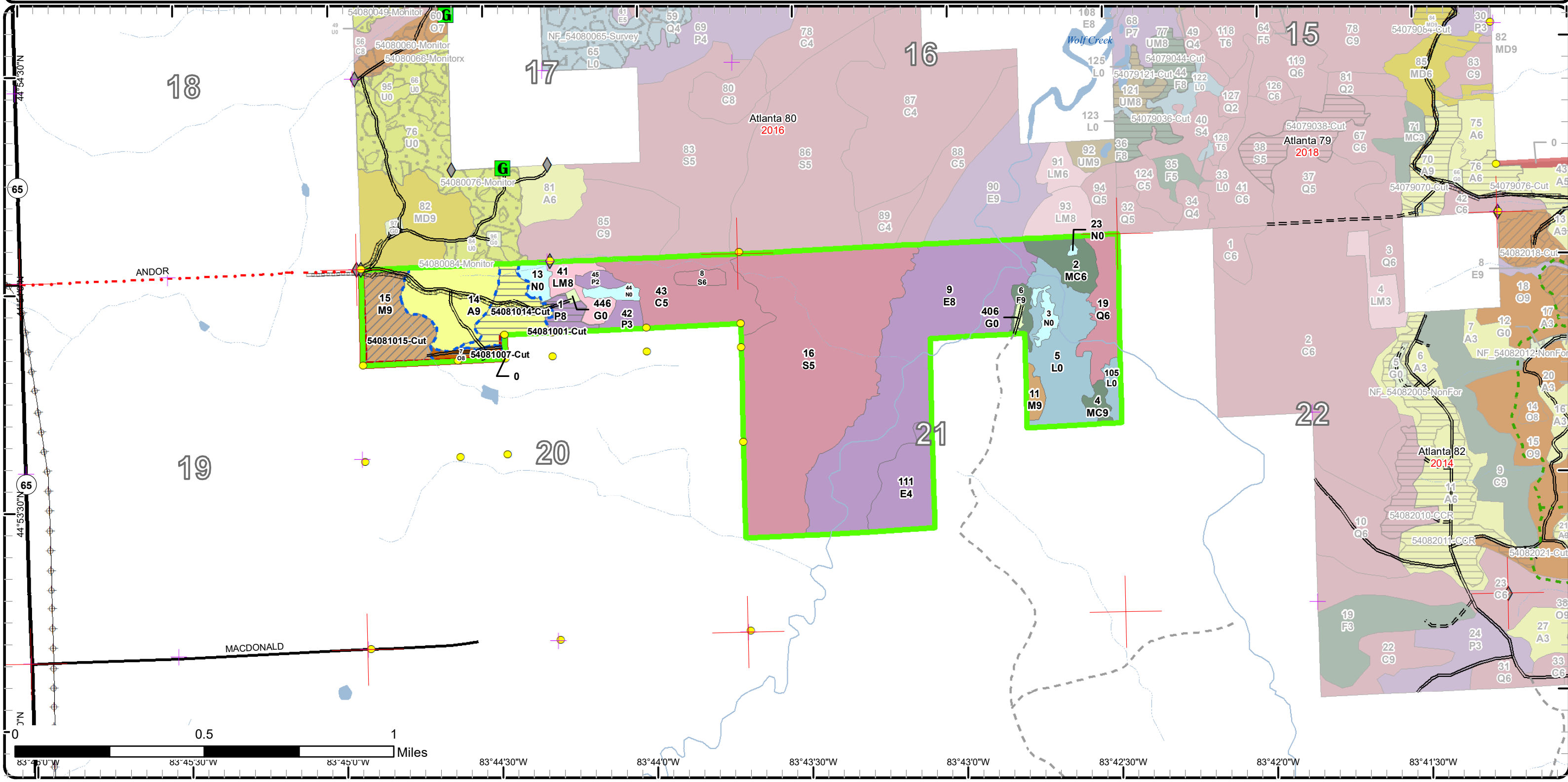
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map



Compartment: 81  
 T29N, R06E, Sec. 20, 21  
 County: Alpena  
 Unit: Atlanta  
 Mgmt Area: Alpena Lake Plain  
 YOE: 2020  
 Acres: 495 GIS Calculated  
 Examiner: Dale Parris  
 Map Revised: 10/2/2018  
 Map Phase: Post-Review

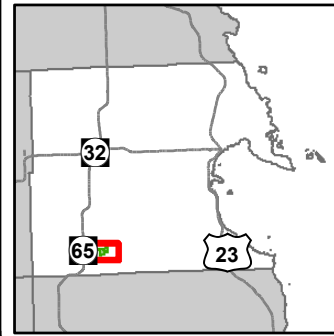
- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- County - Gravel Road
- Private - Dirt / Gravel Road
- Designated Hiking Trails
- Designated Bicycle Trails
- Designated Ski Trails
- Gate
- Culvert
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Thinning (Crown, Low, Systematic)
- No Stand Data
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



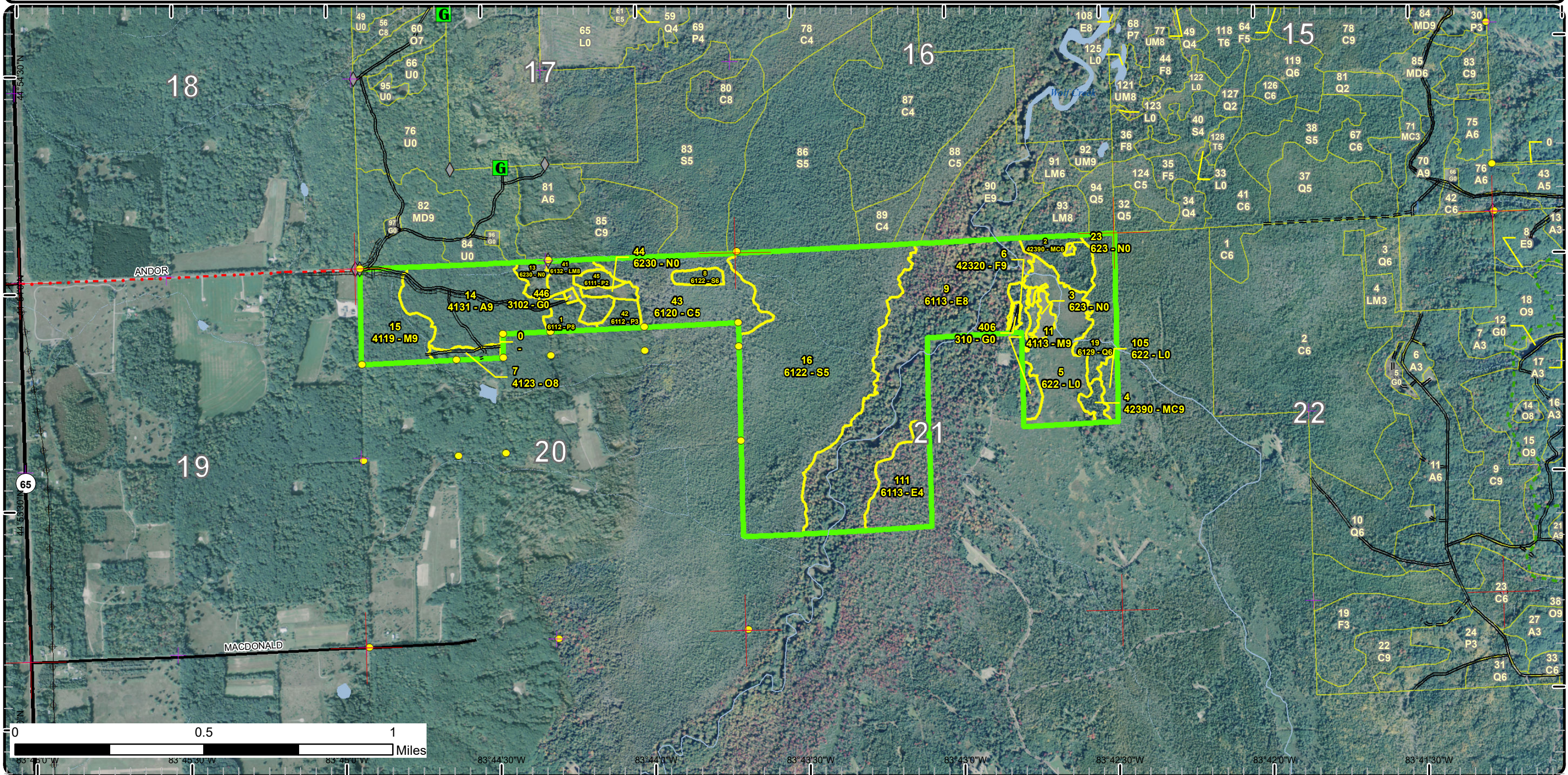


# Stand Boundary Map

Compartment: 81  
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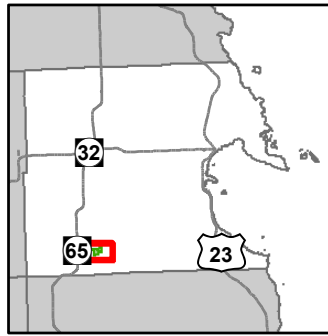
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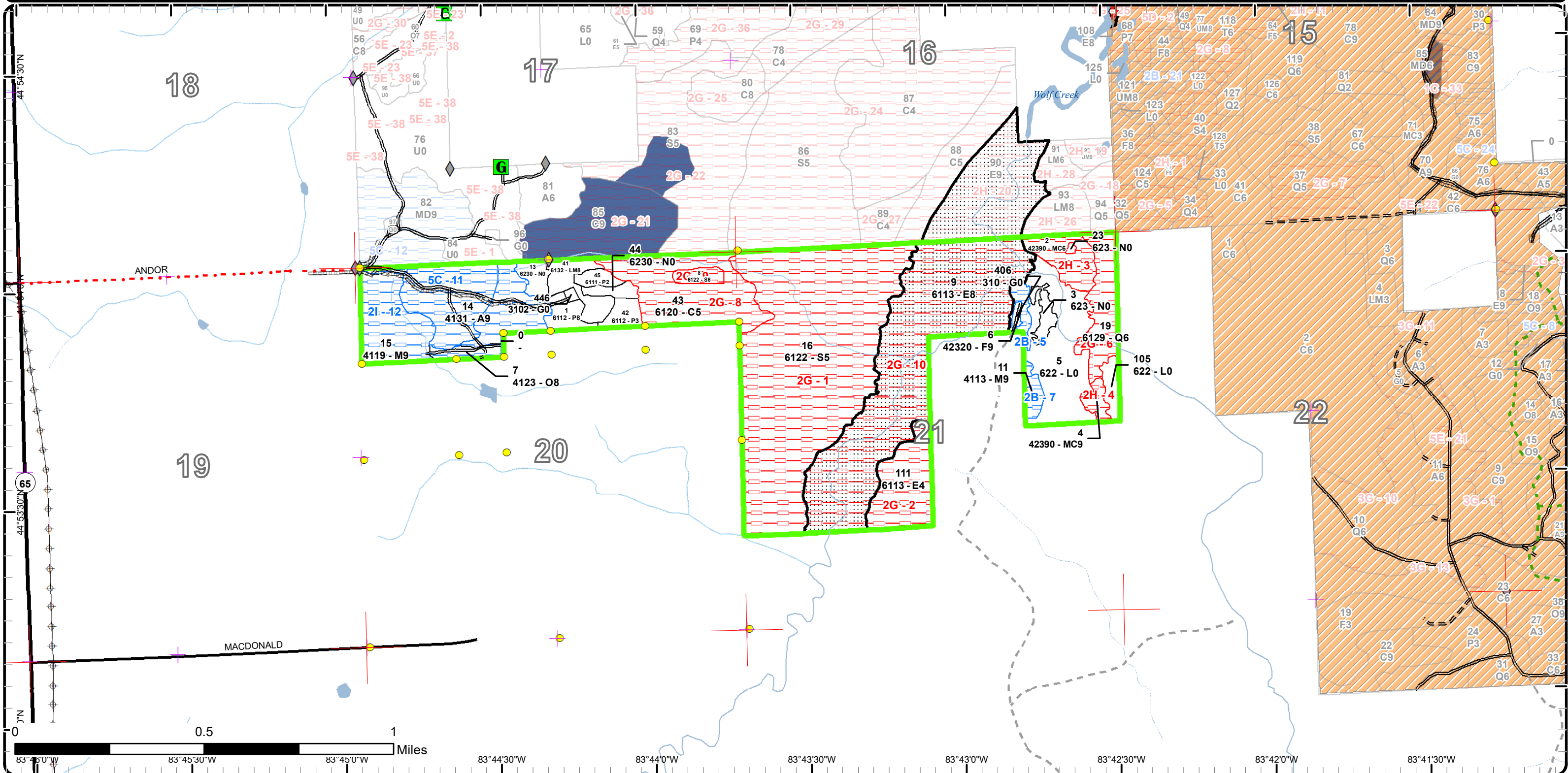


# Special Conservation Areas & Site Conditions Map

Compartment: 81  
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 Unit: Atlanta  
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- == DNR - Secondary Forest Road
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- - - County - Gravel Road
- - - Private - Dirt / Gravel Road
- - - Designated Hiking Trails
- - - Designated Bicycle Trails
- - - Designated Ski Trails
- G** Gate
- Culvert
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 2I: Survey needed
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Stand Boundaries
- SCA
- Ecological Reference Areas
- Eastern Massasauga Managed Land
- Cold Water Streams
- Cold Water Lakes
- Spring or Seep
- 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	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	42
Cedar	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	36
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Aspen/Balsam Poplar	0	0	0	7	0	0	0	0	6	0	0	0	0	0	0	0	0	0	13
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	0	22	106	0	0	0	0	0	128
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Lowland Shrub	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
Lowland Spruce/Fir	0	0	0	0	0	0	3	146	0	0	0	0	0	0	0	0	0	0	149
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	0	0	0	0	0	0	0	24	0	0	4	0	0	0	0	0	0	28
Oak	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14
Upland Spruce/Fir	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
<b>Total</b>	<b>52</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>146</b>	<b>34</b>	<b>0</b>	<b>36</b>	<b>39</b>	<b>106</b>	<b>14</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>496</b>



## Report 2 – Treatment Summary

Atlanta Mgt. Unit

Compartment 81

Year of Entry: 2020

Acres of Harvest

Total Compartment Acres: 495

Commercial Harvest - 6  
 Harvests with Site Condition - 44  
 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	16	0	0	0	0	0	0	0	0	16
Lowland Aspen/Balsam Poplar	6	0	0	0	0	0	0	0	0	6
Northern Hardwood	0	0	0	0	24	0	0	0	0	24
Oak	4	0	0	0	0	0	0	0	0	4
<b>Total</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	49	0	0	0	0	0	0	0	0	49
Next Step	0	0	0	0	0	26	0	0	0	26
<b>Total</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</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	54081001-Cut	5.8	6112 - Lowland Aspen	Sawtimber Medium	74	51-80	Harvest	Clearcut	6112 - Lowland Aspen	Even-Aged	Draft Field Boundary

**Habitat Cut: No****Site Condition:**Prescription Clear-cut.Specs:

Do not harvest any cedar, white spruce, or white pine to promote future stand diversity.

Harvest in frozen winter.

Protect the sparse spruce regeneration and pine regeneration if present.

Include the "Dead and Down Creation, Grouse" log Specification 5.2.4.4 in the sale contract.

Next Step Monitoring, Natural Regen (Intermediate)Treatments:Acceptable Regen: Acceptable regeneration is a low to medium stocked stand of aspen, spruce, pine, paper birch, balsam fir, and red maple.Other

Retention is not necessary due to the small size of the stand.

Comment:

We may have to do something to the Russian olive to help the stand to regenerate. Russian olive blankets the understory.

Proposed Start Date: 10/1 /2019

7	54081007-Cut	3.8	4123 - Red Oak	Sawtimber Medium	104	51-80	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition: Survey Needed**Prescription Clear-cut. Retention is not necessary due to the small size of the stand.Specs:Next Step Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Regen: Acceptable regeneration is a mix of oak, sugar maple, aspen, and paper birch.Other

Action will need to be taken to stop the further spread of autumn olive in this stand.

Comment:Proposed Start Date: 10/1 /2019

14	54081014-Cut	16.1	4131 - Aspen, Oak	Sawtimber Well	51	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition: Survey Needed**Prescription Clear-cut with retention.Specs:

Retain 3-10% of the stand in multiple pockets focused around large crowned oak.

Retain the trace amount of pine present in the overstory, some of which are Legacy trees.

Retain the sparse spruce in the understory to promote stand diversity.

Include the "Dead and Down Creation, Grouse" log Specification 5.2.4.4 in the sale contract.

Next Step Monitoring, Natural Regen (Re-Inventory)Treatments:Acceptable Regen: Acceptable regeneration is a medium to well stocked stand of aspen, oak, and sugar maple.OtherComment:Proposed Start Date: 10/1 /2019





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
15	54081015-Cut	23.7	4119 - Mixed Northern Hardwoods	Sawtimber Well	77	111- 140	Harvest	Crown Thinning	4119 - Mixed Northern Hardwoods	Even-Aged	Draft Field Boundary

**Habitat Cut: No**      **Site Condition: Survey Needed**Prescription Crown Thinning. Thin to 80 BA.Specs: Mark to retain 1-2 large of the largest crowned beech per acre where present. Favor the retention of beech with bear claw marks, if present.Next Step  
Treatments:Acceptable This is not a regeneration harvest.  
Regen:Other Per Shannon Hanna who studied BBD, bear marred trees tend to be BBD resistant.Comment: When marking to thin, consider removing aspen first understanding that they will need space marked out to land in. Oak will also need room to land. Consider leaving large crowned oak as long term mast trees; otherwise change prescription to facilitate room for them to be felled.Proposed Start Date: 10/1 /2019

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**Total Treatment  
Acreage Proposed: 49.4**

## Report 4 – Site Conditions

Atlanta Mgt. Unit  
Dale Parris : Examiner

Compartment: 81  
Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions					
		With Condition	Not Available		2B	2I	5C	2G	2H
42	0	<b>42</b>	0	Aspen		16	26		
36	0	<b>0</b>	36	Cedar				36	
2	2	<b>0</b>	0	Herbaceous Openland					
13	13	<b>0</b>	0	Lowland Aspen/Balsam Poplar					
17	0	<b>0</b>	17	Lowland Conifers				17	
129	0	<b>0</b>	129	Lowland Deciduous				129	
9	9	<b>0</b>	0	Lowland Mixed Forest					
38	38	<b>0</b>	0	Lowland Shrub					
149	0	<b>0</b>	149	Lowland Spruce/Fir				149	
11	11	<b>0</b>	0	Marsh					
27	0	<b>27</b>	0	Northern Hardwood	4	24			
4	0	<b>4</b>	0	Oak		4			
14	0	<b>0</b>	14	Upland Conifers					14
4	0	<b>4</b>	0	Upland Spruce/Fir	4				
494	72	<b>77</b>	345	Total Forested Acres	7	43	26	330	14
	15%	<b>16%</b>	70%	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	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	146	5A: Not able to obtain desirable regeneration	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	22	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



## Report 4 – Site Conditions

Atlanta Mgt. Unit  
Dale Parris : Examiner

Compartment: 81  
Year of Entry: 2020

3	<b>Unavailable</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand makes for a diversity pocket in a lowland dominated area. Besides being inaccessible for harvest, this stand is beneficial to wildlife as is.							
4	<b>Unavailable</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> It is not likely that this stand is accessible due the to surrounding lowland and the lack of a private land access road. It would not make economic sense, with the amount of work it would take to gain access, for this stand to be harvested. In addition, this stand adds diversity to the area that is beneficial to wildlife.							
5	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	17	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Atlanta Mgt. Unit  
Dale Parris : Examiner

Compartment: 81  
Year of Entry: 2020

8	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	36	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
9	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	106	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	26	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Available</b>	<b>2I: Survey needed</b>	44	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							





**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
	Habitat Area	Habitat Corridor	SCA	40
<b>Comments</b>				
Flood Plain Forest; retain forest for protection of downstream areas/residences when under flood conditions				
	Habitat Area	Habitat Corridor	SCA	106
<b>Comments</b>				
Flood Plain Forest; retain forest for protection of downstream areas/residences when under flood conditions				



## 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.





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6112 - Lowland Aspen	Sawtimber Medium	5.6	74	51-80	The understory is a continuous layer of what appears to be Russian olive.
2	42390 - Mixed Non-Pine Upland Conifers	Poletimber Well	11.2	126	51-80	The cedar is concentrated to the north and west where the ground tends to be the highest. Scattered legacy white pine are present and mostly on the higher ground. The southwest portion of the stand is somewhat lower ground and is more dominant to pole and sometimes log sized black spruce. This stand makes for a diversity pocket in a lowland dominated area. Besides being inaccessible for harvest, this stand is beneficial to wildlife as is.
4	42390 - Mixed Non-Pine Upland Conifers	Sawtimber Well	3.3	124	111-140	The southern portion is more dominant to white spruce and the northern portion of the stand is more dominant to cedar. A large illegal hunting shack is present at the southern end of the stand with illegal shooting lanes cut to the north, east, and west. It is not likely that this stand is accessible due to the surrounding lowland and the lack of a private land access road. It would not make economic sense, with the amount of work it would take to gain access, for this stand to be harvested. In addition, this stand adds diversity to the area that is beneficial to wildlife. (OPIC - FMD: "The walk in is ugly. I recommend hip boots. Inaccessible by vehicles unless airborne. Sand ridge along small stream." --RDS, 1997)
6	42320 - Upland Spruce	Sawtimber Well	3.5	71	81-110	There were fresh tire tracks all the way to Wolf Creek when this stand was visited in January of 2018. The hunting shack at the south end of the stand along the north edge of the private land is deteriorating and is no longer in use. There is much windthrow of large spruce. (OPIC - FMD: "This stand has been mostly cleared and planted to cover crops, presumably by hunt camp to the south. The name on the permanent blind in the stand is D. Williams, 38468 Kingsbury, Livonia, MI 48154. A certified letter was sent November 1997 to inquire about clearing and blind. It came back forwarding order expired." --RDS, 1997)
7	4123 - Red Oak	Sawtimber Medium	3.8	104	51-80	
8	6122 - Black Spruce	Poletimber Well	3.3	56	51-80	This was likely the 5 or so acres that is documented as being harvested in this quarter-quarter in 1962. Aging a 6" DBH black spruce verified the 1962 harvest year aging at $43 + 10 = 53$ . In 1981 two strips were cut out of this stand totaling 2 acres. One strip ran through the northern edge of the stand and one was parallel and shorter to the south.
9	6113 - Lowland Maple	Sawtimber Medium	106.2	118	51-80	The red maple in this stand reaches 30+ inches in DBH. Large wildlife and den trees are present. Scattered pockets of tall grass and cattails exist within the stand. When this stand was inventoried in January of 2018, 1-2 feet of standing water was frozen over with the whole stand under water. This stand slows moving water during the flood season. (OPIC - FMD: CREEK BOTTOM, LOTS OF DEAD WOOD; VERY WET. WIDELY SCATTERED TIMBER IN PLACES. IF CUT IT WOULD LIKELY COME BACK TO CATTAILS AND MARSH GRASS.)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	4113 - R.Maple, Conifer	Sawtimber Well	3.7	108	51-80	Very old red maple is consistent throughout and makes up a majority of the canopy. Younger aspen is present, indicating past stand disturbance. A dense layer of intermediate and rarely co-dominant balsam fir make up the lower portion of the canopy. This stand is full of trespass roads that have been created by the adjacent land owner. A large solar powered feed spreader, placed by the adjacent private land owner, is present at the southern end of the stand.
14	4131 - Aspen, Oak	Sawtimber Well	42.4	51	81-110	In 1967 all aspen, red maple, white birch, and red oak with a merchantable stick were harvested. Some marked oak were retained. In 1982 hardwood trees considered to be residual were removed from throughout this stand to create winter deer browse and for releasing the remaining trees.(OPIC - FMD: SCATTERED OAK, MAPLE, ASH, AND BEECH WERE LEFT THROUGHOUT.)
15	4119 - Mixed Northern Hardwoods	Sawtimber Well	23.7	77	111-140	2018 BA Measurements (140, 110, 120, 110, 130). Aging both aspen and oak verified an age of just over 100 in the winter of 2018. The sugar maple vary much in diameter and likely age due to their being shade tolerant. There is much ash and aspen windthrow and mortality within the stand. The dead standing and fallen ash are no longer salvageable. There are the beginning signs of beech bark disease. The red oak are most prevalent to the north.
16	6122 - Black Spruce	Poletimber Medium	145.6	65	51-80	When this stand was visited in January of 2018 there was standing water throughout. The trees are stunted due to the saturated soil. The ground is mostly covered with moss. Scattered large white pine are present with unhealthy crowns with sparse needles. This stand is too wet to harvest. Judging from near by harvests where cedar has been cut, if this stand were harvested it is likely that this stand would convert to cattails and swamp grass long term.
19	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	17.0	132	51-80	This stand was under 1-2 feet of water throughout when this stand was inventoried in January of 2018. Where the southern portion of the stand meets the private property to the east, there is an illegal hunting shack on state land with illegal shooting lanes cut.
41	6132 - Mixed Lowland Forest with Cedar	Sawtimber Medium	8.9	104	111-140	A 1 acre inclusion pocket of poor quality log sized aspen is in the center of this stand. Russian olive blankets the southern portion of the understory. (OPIC - FMD: A two-track through this stand appears to be infested with russian olive.)
42	6112 - Lowland Aspen	Sapling Well	4.3	21	1-50	Russian olive blankets the understory. (OPIC - FMD: Cut be previous owner. A2F1 with occasional large white pine. Cedar not regenerating. Appears to be infested with russian olive.)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	6120 - Lowland Cedar	Poletimber Medium	35.8	93	141-170	Cedar is present throughout at varying densities. The cedar has major dieback in approximately 90% of crowns in the area that makes up the central portion of the stand. About 50% of the cedar are already dead. Balsam fir and spruce are slowly taking over. Cedar are still relatively healthy along the outer edges of the stand. The cedar tend more to the small log size to the west. There was no cedar regeneration present. This stand is pleasant to walk through in frozen winter but would otherwise be treacherous. The soil is mostly moss covered, especially to the east, with standing water consistently present throughout the stand. This stand is too wet for harvesting. Large white pine with space crowns are scattered throughout the eastern portion of the stand. (OPIC - FMD: VERY WET SITE, BETTER CEDAR ON WEST EDGE. CUTTING DOES NOT YEILD CEDAR REGEN; IN MANY PLACES WHERE THIS STAND HAS BEEN CUT IT NOW SUPPORTS CATTAILS AND SWAMP GRASS. This stand consists of patches which vary in composition. It is typically cedar plus another species, including balsam poplar, balsam fir, and white pine. Cedar can reach 12" DBH on west edge.)
45	6111 - Lowland Balsam Poplar	Sapling Medium	2.9	21	1-50	OPIC - FMD: Cut be previous owner. A2F1.
111	6113 - Lowland Maple	Poletimber Poor	22.4	108	1-50	This stand is basically a continuation of the maple flood plain to the west except this stand has full coverage of tag alder, grass, and cattails. This stand was covered by 0-2 feet of water frozen over in January of 2018 when it was visited.





Stand	Cover Type	Acres	Managed Site	General Comments:
3	623 - Emergent Wetland	3.5	No	This marsh is completely covered with tall grass and has scattered pockets of tag alder. (OPIC - FMD: MARSH GRASS- The stream going through is braided, recommend hip boots.)
5	622 - Lowland Shrub	33.7	No	This stand is a consistant covering of tag alder. When this stand was inventoried in January of 2018 the entire stand was under 1-2 feet of water frozen over.
13	6230 - Cattail	4.3	No	This stand is mostly cattails with some scattered tree, shrub, and grass pockets. All trees with a merchantable stick in the northern 2.5 acres of this stand were harvested in 1985. (OPIC - FMD: --, MOSTLY CATTAILS NOW--THIS IS THE HEADWATERS OF A SMALL STREAM WITH MANY SEEPS. SHOULD NEVER HAVE BEEN CUT. WEST EDGE IS UPLAND; EAST IS VERY WET. DRAINS TO THE NORTHEAST.)
23	623 - Emergent Wetland	0.4	No	This stand is a low area with complete tall grass coverage. It is wet throughout. Wet meadow or marsh would best describe this opening. (OPIC - FMD: Marshy bog hole. Has cedar and fir on sandy ridge surrounding.)
44	6230 - Cattail	2.9	No	This stand is mainly cattails with scattered spruce and aspen saplings. This stand was harvested with the adjacent stand but has not regenerated. This stand adds some diversity to the area and makes for a nice cover break.
105	622 - Lowland Shrub	4.1	No	This stand has full coverage of tag alder with, scattered cedar, red maple, and white spruce of pole/log size. Spruce saplings are scattered within.
406	310 - Herbaceous Openland	1.0	No	This opening is slowly filling in with spruce. Judging from the herbaceous ground cover, this opening has not been planted in a long time. (OPIC - FMD: Note from 1997: "This stand is accessed by private land south of the river. The private hunting club has CREATED AND enlarged this wildlife opening to encompass almost all of stand 6. CO'S NOTIFIED. Rye winter of 97.")
446	3102 - Grass	0.6	No	Autumn olive has taken over almost half of this oil well so it could be called upland shrub. (OPIC - FMD: Gas well.)