



# Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 71120

Entry Year 2019

Acreage: 1,068

County Roscommon

Management Area: Upper Muskegon

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**Revision Date:** 2017-08-02

**Stand Examiner:** Doug Bates

**Legal Description:**

T22N R02W Sections 31-33

**Identified Planning Goals:**

Maintain current age and species diversity in a range of early and late successional ecosystems. A large percentage of aspen just coming up to maturity. Some have been slated to treat now to less the age class spike.

**Soil and topography:**

Terrain is rolling to level glacial outwash plain with alternating upland and lowland areas containing numerous drainages and marshes. Soils are mostly Croswell-AuGres sands in the uplands and Lupton/Tawas Mucks in the lowland swamps and drains.

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

Compartment is a solid block of state land with a few private in-holdings and is adjacent to state land on the north and west sides. Private land is within and adjacent to the compartment on the south and east sides is mostly undeveloped and used for hunting and other recreational purposes. Mid-Forest Lodge, a private hunting club, is directly south of the compartment.

**Unique Natural Features:**

Two mature natural pine stands are in the draft Biodiversity Stewardship Plan as Special Conservation Areas and several more are proposed to be added as SCA's to the draft plan.

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

None identified or found during field work. No concerns from State Archeological Office.

**Special Management Designations or Considerations:**

Stand 13 is very close to reaching the Type 1 old-growth status based on the average age. Several trees are in fact over 150+ years old.

**Watershed and Fisheries Considerations:**

Denton Creek flows through Compartment 120. This Compartment also has large areas of beaver floodings, cedar swamp, and lowland brush/marshes.

**Wildlife Habitat Considerations:**

Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, grouse, rabbits, and turkeys as well as non-game species.

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

Sand/gravel pits are not located in the area. There may be some sand and gravel potential on the uplands in the southern portion of Section 32. The abandoned Denton Creek Field is located in sections 27 & 28, just northeast of the compartment. All of the parcels in the compartment are currently leased by Marathon. However, Marathon has indicated they are leaving the state and have begun the process of releasing all of their remaining leases that are not held by production. There is no known metallic mineral potential in this part of the state.

**Vehicle Access:**

A seasonal county road with several forest roads branching off allow access to a larger percentage of the compartment. One forest roads has been cut off due to beaver activity. The snowmobile trail runs on the county road. Recent increased usage by wheeled ORV units have created large, steep sand embankments on corners that will make any usage by larger vehicles very difficult in current condition.

**Survey Needs:**

None.

**Recreational Facilities and Opportunities:**

Denton Creek ORV Route and Snowmobile Trail 6 occur on the main two-track thru the compartment. It is heavily utilized year round by ORV enthusiast and hunters. Compartment is heavily used for deer, grouse, and rabbit hunting due to its proximity to private land. Continue forest management efforts to address resource damage areas.

**Fire Protection:**

No fire protection issues in this compartment.

**Additional Compartment Information:**

The following reports from the Inventory are attached:

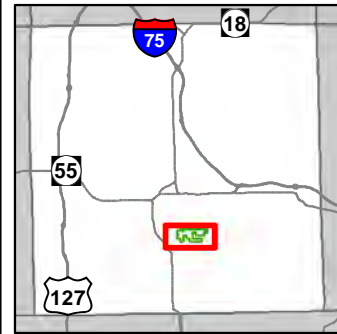
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

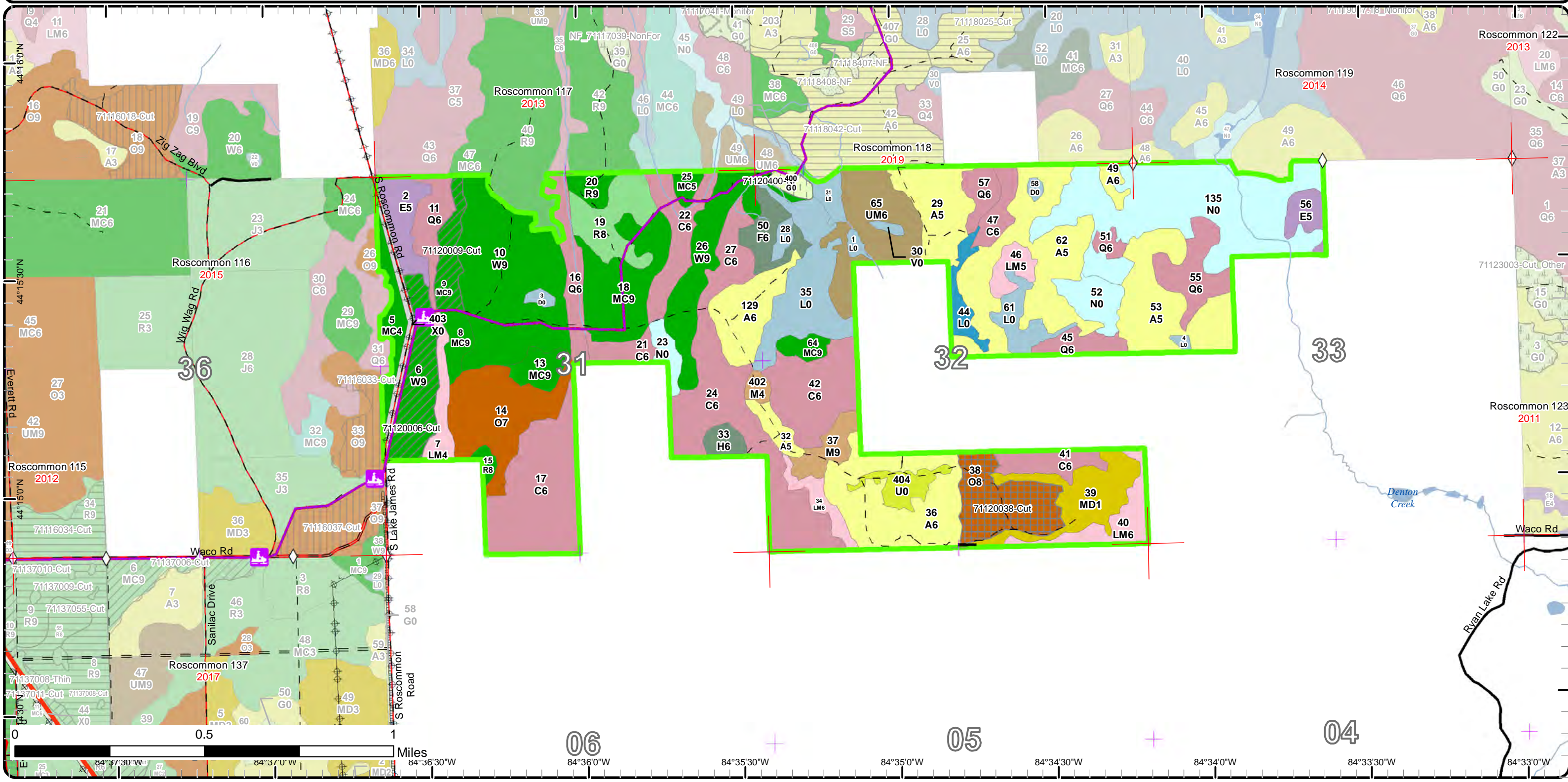
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 120  
 T22N, R02W, Sec. 31-33  
 County: Roscommon  
 Unit: Roscommon  
 Mgmt Area: Upper Muskegon  
 YOE: 2019  
 Acres: 1067.5 GIS Calculated  
 Examiner: Doug Bates  
 Map Revised: 8/2/2017  
 Map Phase: Review

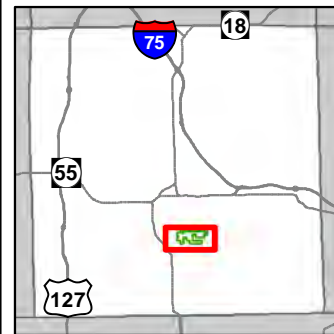


- |                                |                                     |                                    |
|--------------------------------|-------------------------------------|------------------------------------|
| — Miris Corners                | — County Poor Dirt Roads            | ■ 422 - Natural Pines              |
| ⊕ Remonumented Section Corners | — Poor Dirt Roads                   | ■ 423 - Other Upland Conifers      |
| ◇ Field Grade GPS Corners      | — Streams                           | ■ 430 - Upland Mixed Forest        |
| ⊞ Counties                     | — Lakes and Rivers All              | ■ 611 - Lowland Deciduous Forest   |
| — Culvert                      | — Pipeline                          | ■ 612 - Lowland Coniferous Forest  |
| 🚗 ORV Routes                   | ⊕ Powerline                         | ■ 613 - Lowland Mixed Forest       |
| 🏠 Snowmobile Trails            | ▭ Compartment Boundary              | ■ 110 - Low Intensity Urban        |
| — Designated ORV Route         | ▭ Opening Maintenance               | ■ 310 - Herbaceous Openland        |
| — Designated Snowmobile Trails | ▭ Thinning (Crown, Low, Systematic) | ■ 330 - Low Density Trees          |
| — Highway                      | ▭ Seed Tree (w/Reserves)            | ■ 622 - Lowland Shrub              |
| — Paved Roads                  | ■ 411 - Northern Hardwood           | ■ 623 - Emergent Wetland           |
| — County Gravel Roads          | ■ 412 - Oak Types                   | ■ 629 - Mixed non-forested wetland |
| — Gravel Roads                 | ■ 413 - Aspen                       | ■ Lakes                            |
|                                | ■ 419 - Mixed Upland Deciduous      |                                    |
|                                | ■ 421 - Planted Pines               |                                    |

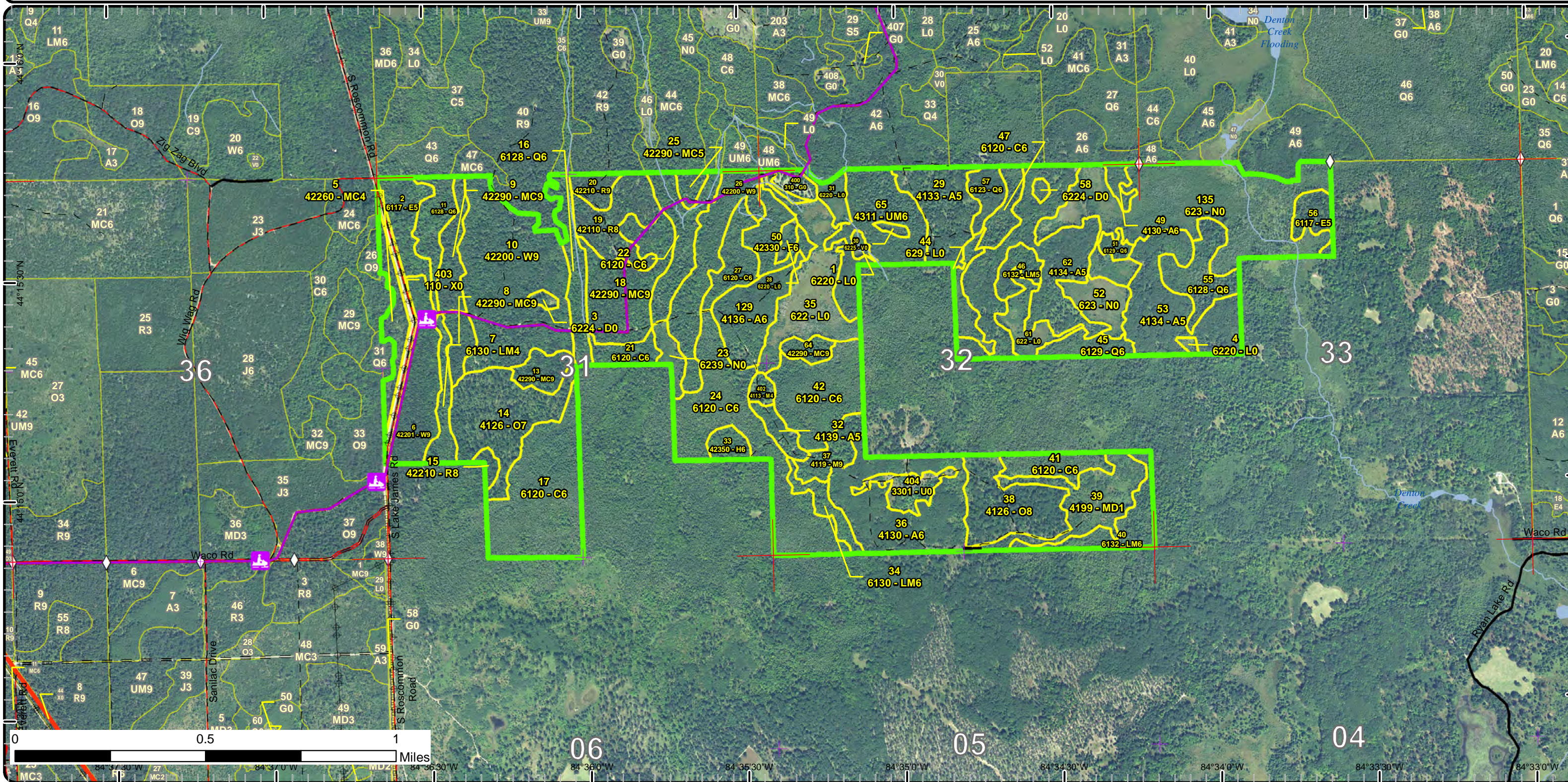


# Stand Boundary Map

Compartment: 120  
 T22N, R02W, Sec. 31-33  
 County: Roscommon  
 Unit: Roscommon  
 Mgmt Area: Upper Muskegon  
 YOE: 2019  
 Acres: 1067.5 GIS Calculated  
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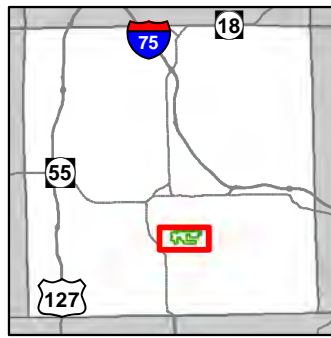


- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Counties
- Culvert
- Ⓜ ORV Routes
- Ⓜ Snowmobile Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- - - Poor Dirt Roads
- Streams
- ▭ Lakes and Rivers All
- Pipeline
- Ⓜ Powerline
- Compartment Boundary
- Stand Boundaries
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers

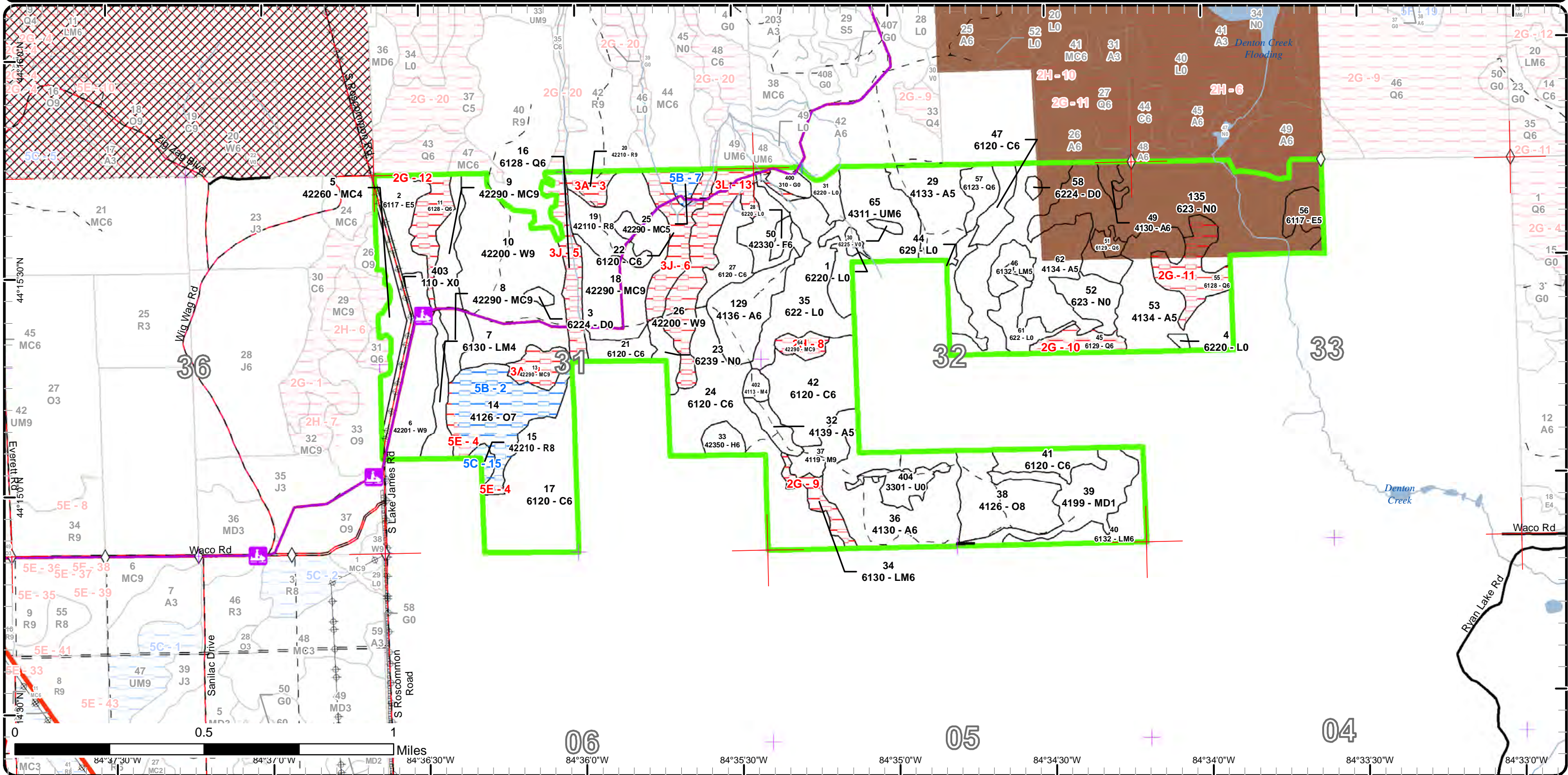


# Special Conservation Areas & Site Conditions Map

Compartment: 120  
 T22N, R02W, Sec. 31-33  
 County: Roscommon  
 Unit: Roscommon  
 Mgmt Area: Upper Muskegon  
 YOE: 2019  
 Acres: 1067.5 GIS Calculated  
 Examiner: Doug Bates  
 Map Revised: 8/2/2017  
 Map Phase: Review



- Miris Corners
- + Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Culvert
- ORV Routes
- Snowmobile Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 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)
- 3A: Conservation Values incompatible with harvest at this time
- 3J: Water quality / BMPs (stream, river, or lake)
- 3L: Other wildlife concerns
- 5E: Long-Term Retention
- Stand Boundaries
- Wildlife Management Areas



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	45	0	144	0	0	0	0	0	0	0	0	0	0	0	0	189
Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Cedar	0	0	0	0	0	0	0	0	0	0	186	0	0	0	0	0	0	0	186
Hemlock	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
Herbaceous Openland	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Low-Density Trees	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Conifers	0	0	0	0	7	0	0	0	0	15	28	0	12	0	0	0	0	0	61
Lowland Deciduous	0	0	0	0	0	0	0	8	14	0	0	0	0	0	0	0	0	0	22
Lowland Mixed Forest	0	0	0	0	7	0	9	0	0	7	15	0	0	0	0	0	0	0	37
Lowland Shrub	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Marsh	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
Mixed Upland Deciduous	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Natural Mixed Pines	0	0	0	0	0	0	11	0	32	0	7	15	0	0	13	0	0	0	77
Northern Hardwood	0	0	0	0	0	3	0	0	0	0	10	0	0	0	0	0	0	0	13
Oak	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	64
Red Pine	0	0	0	0	0	0	21	0	0	0	2	6	0	0	0	0	0	0	28
Treed Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Mixed Forest	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	33
Upland Spruce/Fir	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
White Pine	0	0	0	0	0	0	94	30	0	0	0	0	0	0	0	0	0	0	124
<b>Total</b>	<b>190</b>	<b>0</b>	<b>26</b>	<b>45</b>	<b>14</b>	<b>192</b>	<b>135</b>	<b>38</b>	<b>46</b>	<b>27</b>	<b>313</b>	<b>21</b>	<b>12</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1066</b>



## Report 2 – Treatment Summary

Roscommon Mgt. Unit  
Year of Entry: 2019

Acres of Harvest

Compartment 120  
Total Compartment Acres: 1,068

Commercial Harvest - 64  
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
Natural Mixed Pines	0	0	0	0	0	11	0	0	0	11
Oak	0	0	0	28	0	0	0	0	0	28
White Pine	0	0	0	0	0	25	0	0	0	25
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	64	0	0	0	0	0	0	4	0	68
Next Step	0	0	0	0	0	0	64	0	4	68
<b>Total</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>8</b>	<b>137</b>



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
6	71120006-Cut	25.2	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	52	111- 140	Harvest	Crown Thinning	42201 - Natural White Pine, Mixed Deciduous	Even-Aged	Proposal

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

Prescription Thin the stand to a 70-90 basal area removing the poorly formed white pine and multi-stemmed maples. Release white pine crop trees in both size classes. Remove all merchantable aspen to restart these clones within the stand for diversity which will result in a lower basal area in these locations. Roundwood operation only and need to have a snowmobile trail protection spec.

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

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

9	71120009-Cut	11.1	42290 - Natural Mixed Pine	Sawtimber Well	105	141- 170	Harvest	Crown Thinning	42290 - Natural Mixed Pine	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Thin the red pine and white pine to a 90-120 basal area. Side toward leaving red pine over white where applicable. Target removing the larger pines up to the 26 inch diameter class. Follow-up by removing the poorer quality trees and manage for the crop trees, smaller saw class of pines. Cut all maple, balsam fir, and spruce that are of merchantable size to aid in operability. Roundwood operation only. Leave shade trees over any hemlock found within or on the boundary of the stand.

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

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

38	71120038-Cut	28.1	4126 - White, Black, N. Pin Oak	Sawtimber Medium	95	51-80	Harvest	Seed Tree	4122 - Oak, Pine	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Remove oak overstory down to 20-30 basal area. Remove the red oak species before white oaks, and leave the largest masteds oaks. Roundwood operations only. Put the percentage damage to regeneration higher for allotment. Advise producer to protect the red pine regeneration over the maple.

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

Acceptable Regen: oak with red pine, aspen and other species.

Other Comment:

Proposed Start Date: 10/01/2018

400	71120400-NF	4.0	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Denton Creek Field 16.

Specs:

Next Step NonForestMgt, Herbaceous/Crop/Grass Planting  
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018





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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
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Total Treatment Acreage Proposed: 68.4

## Report 4 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment: 120

Year of Entry: 2019

### Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions									
		With Condition	Not Available		5B	5C	2G	2H	3A	3J	3L	5E		
189	189	0	0	Aspen			0							
1	1	0	0	Bog										
186	168	0	19	Cedar						19				
5	5	0	0	Hemlock										
4	4	0	0	Herbaceous Openland										
9	9	0	0	Low-Density Trees										
62	10	0	52	Lowland Conifers			37			15				
21	21	0	0	Lowland Deciduous										
38	30	0	7	Lowland Mixed Forest			7							
62	62	0	0	Lowland Shrub										
102	102	0	0	Marsh										
26	26	0	0	Mixed Upland Deciduous										
77	61	4	13	Natural Mixed Pines	4			5	8					
13	13	0	0	Northern Hardwood										
65	28	32	4	Oak	32									4
29	21	2	6	Red Pine		2			6					
3	3	0	0	Treed Bog										
33	33	0	0	Upland Mixed Forest										
12	12	0	0	Upland Spruce/Fir										
9	9	0	0	Urban										
123	94	0	30	White Pine								30		
1,068	900	38	129	Total Forested Acres	36	2	45	5	13	33	30	4		
	84%	4%	12%	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	3A: Conservation Values incompatible with harvest at this time	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Age of stand and evidence of no harvest activity qualifies stand as Type 1 Old Growth.							

## Report 4 – Site Conditions

Roscommon Mgt. Unit  
Doug Bates : Examiner

Compartment: 120  
Year of Entry: 2019

2	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	33	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
3	<b>Unavailable</b>	<b>3A: Conservation Values incompatible with harvest at this time</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand is going to managed toward type 1 old growth. It has never had harvest activity and it was agreed to manage it as such.							
4	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	19	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment: 120

Year of Entry: 2019

8	<b>Unavailable</b>	<b>2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)</b>	5	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
9	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	7	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
11	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	17	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
13	<b>Unavailable</b>	<b>3L: Other wildlife concerns</b>	30	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Wildlife Division found numerous cavity trees and structure beneficial to wildlife species as an untreated stand. Will be left.							

## Report 4 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment: 120

Year of Entry: 2019

15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	2	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

<b>Conservation Area</b>	<b>Type</b>	<b>Description</b>
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Stand	Roscommon Mgt. Unit		Report 7 – Forested Stands			Compartment: 120 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	13.6	75	81-110	Numerous low ground swales with maple overstories and dense balsam fir understory. On the higher ground knobs find some oak with a dense fir understory. White pine is throughout the overstory in all areas. The maple appears to have been suppressed by its age versus diameter. 85% of the maple is multi-stemmed.
5	42260 - Natural Pine, Mixed Deciduous	Poletimber Poor	11.1	52	51-80	- Cut July/August 2010. White pine stand that has a powerline easement running along the east side with about 20+ feet of it treed but is marked for clearing by the power company. The southern portion of the stand is less stocked than the north end. Decent regeneration coming in. Large oak were left for mast and canopy closure.
6	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	25.2	52	111-140	Immature white pine stand with light regeneration in the understory. The northern third of the stand contains a fair amount of aspen. Recommend thinning the stand removing the poor formed white pine from weeviling. Good time to do it because the regeneration is light so will have less operations damage. Remove all the aspen to restart it within the stand.
7	6130 - Fir, Aspen, Maple	Poletimber Poor	9.1	55	51-80	Broadbased drainage with more tag alder mixed with swamp grass along the stream banks and slightly forested sloped banks.
8	42290 - Natural Mixed Pine	Sawtimber Well	6.8	97	81-110	The understory is about an even mix of balsam fir and white pine which together are creating a dense understory. The red pine is the main canopy with white pine as the mid-canopy.
9	42290 - Natural Mixed Pine	Sawtimber Well	11.1	105	141-170	Heavy balsam fir understory particularly where the white pine overstory is the heaviest. Recommend thinning the stand targeting the larger pines, those of poor quality, leaving the smaller better quality ones. The southern half (5 acres) is where most of the red pine is congregated and was thinned in the summer 2010. The northern half is of higher white pine stocking and the heavier understory. Recommend removing the merchantable trees of the fir, spruce, maple to aid in operability.
10	42200 - Natural White Pine	Sawtimber Well	68.4	55	111-140	Southern portion if the stand has larger pine and higher stocking levels. The understory is a combination of fir and white pine together forming heavy densities. There are numerous small aspen clones throughout the stand. Recommend holding the stand at least one more rotation and then remove the aspen and start thinning out the poor quality pine.
11	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	12.2	110	171-200	The predominate species is cedar. There is a free flowing stream that bisects the stand and along this stream is where the hemlock is concentrated. On the higher knobs you find the maple, aspen, and larger pines. This is also where the understory is the heaviest with balsam fir. No other regeneration of significance found. Heavy deer usage.
13	42290 - Natural Mixed Pine	Sawtimber Well	7.7	130	111-140	Natural white pine stand with hummocky ground in some spots. The outer perimeter has overmature oak. Dense white pine regeneration throughout. Best to leave stand for regeneration purposes. There are trees within this site that are 150+ years old. The average size is not quite there but will. Stand has had not activity. Leave for Type 1 old growth.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4126 - White, Black, N. Pin Oak	Sawtimber Poor	36.5	97	51-80	Stand was treated in 2010 and had approximately 40 basal area of large oaks left for mast and shelter. All white and red pine were left. Those pine at merchantable size add another 10-20 basal area. The stand was treated to release the white pine understory and appears to be working. Best to leave the oak overstory, not much in value timber wise, better for mast/future snags. Also don't want to damage new regeneration.
15	42210 - Natural Red Pine	Sawtimber Medium	2.4	97	51-80	Stand was thinned in 2010. Has decent regeneration coming back. Let go for a couple more rotations and remove most of the largest overstory trees down to 40 basal area and allow stand to convert to white pine.
16	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	14.5	89	81-110	Free flowing stream with moderately sloping banks. Where the stream is find many blowdowns and tag alder. The banks is heavy to pine and maple.
17	6120 - Lowland Cedar	Poletimber Well	47.8	93	81-110	Dense understory of fir and spruce. The overstory is a sparse cedar/maple mostly. Ash all dead. Standing water under snow.
18	42290 - Natural Mixed Pine	Sawtimber Well	32.3	72	81-110	The understory is a dense wall of fir with some white pine and even red pine lost in the mix. The predominate species is red pine followed by white pine and then junky maple. Couple options, could cut pockets by removing all overstory and contend with damage to understory or leave and in next rotation remove all species and replant to red pine.
19	42110 - Planted Red Pine	Sawtimber Medium	20.5	58	81-110	Thinned in 2010. Nice red pine stand with moderate regeneration of white pine.
20	42210 - Natural Red Pine	Sawtimber Well	5.6	101	171-200	Nice natural red pine stand that has not been treated. It was slated in the past for potential old growth. Could let stand go and work that way or treat it with a thinning.
21	6120 - Lowland Cedar	Poletimber Well	7.0	93	171-200	Small diameter densely stocked cedar with hemlock. Heavy deer sign with little understory regen. but fir.
22	6120 - Lowland Cedar	Poletimber Well	18.7	99	141-170	Free flowing stream with gradual sloping sides. The sides are dense cedar followed by maple and then other conifers. The area along the stream bed is more open with tag alder. The east branch of the stand at the north end is a seasonal draw that dumps into the stream. Deer activity is high. Leave for BMP's concerns.
24	6120 - Lowland Cedar	Poletimber Well	51.5	93	111-140	Dense cedar stand with intermittent drainages all over. Lots of deer activity.
25	42290 - Natural Mixed Pine	Poletimber Medium	3.6	107	51-80	White and red pine overstory with a dense understory of balsam fir and white pine underneath. The central portion of the stand with more open canopy a large percentage of the saplings are bent over, broken and/or dead from a heavy snow in previous year. Best course is to kept the overstory to protect the current understory.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	42200 - Natural White Pine	Sawtimber Well	29.6	60	201+	Multi-aged white pine stand that could use a thinning to bring the basal area down, but wildlife division staff found numerous cavity trees and some scattered upland cedar that they would like the stand left for wildlife concerns.
27	6120 - Lowland Cedar	Poletimber Well	12.4	91	141-170	Lowland cedar with some higher dry knolls. A narrow swale bisects the stand from north to south with several intermittent drains scattered about feeding it from within the cedar. Fir is basically the only regeneration. Lots of deer yarding sign.
29	4133 - Aspen, Mixed Pine	Poletimber Medium	23.2	41	51-80	More open aspen stand right on the verge to being a sawclass size. The open areas contain wet "potholes" or cherry brush. Area not as open, but not stocked with aspen is where find the large pine, mainly red pine. Larger diameter trees than stand to west even being same age.
32	4139 - Aspen, Mixed Deciduous	Poletimber Medium	5.6	40	Unspecified	Poor quality aspen site that is not filling in well. The upper most portion of the ridge is where the aspen is found. The outer portions are a mix of stump sprouted maples, fir, and white pine.
33	42350 - Upland Hemlock	Poletimber Well	5.3	83	141-170	Converting to a hemlock stand. Evidence of nurse logs. Age is estimate, rings so tight.
34	6130 - Fir, Aspen, Maple	Poletimber Well	7.2	88	81-110	A narrow high ground ridge that slopes off into low ground on three sides. The high ground has maple approaching maturity with a dense balsam fir understory. The wet areas have fir of merchantable size amongst the cedar. The understory though is light. Could try and treat the high ground but it is broken up by criss-crossing drainages. Best to leave and let convert to balsam fir.
36	4130 - Aspen	Poletimber Well	44.8	25	Unspecified	Good aspen regeneration with the eastern outer fringe being more stump sprouted maple and sparse oak.
37	4119 - Mixed Northern Hardwoods	Sawtimber Well	9.6	91	81-110	High ground maple stand with a failing birch component. Last inventory cycle the stand typed out as a birch stand, but enough have died to change it to maple. The understory is full of balsam fir throughout.
38	4126 - White, Black, N. Pin Oak	Sawtimber Medium	28.1	95	51-80	Aspen and red maple removed in 1999. In 2009 red pine was interplanted where regeneration lacked. There is still quite a bit of oak canopy left that is hampering some areas of regeneration. Ideally more canopy should have been removed before interplanting of the red pine. Still need to bring the basal area down to around 20-30. Will get some damage to regeneration but the red pine in particular under the oaks is being stunted and won't amount to much if left in it's current state.
39	4199 - Other Mixed Upland Deciduous	Sapling Poor	25.8	18	Immature	Final harvest done in 1999 that resulted is very sparse aspen regeneration. Find most of the aspen in isolated clones. The most prevalent regeneration is oak followed by maple. This is going to be a mixed stand with numerous open areas throughout.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	14.5	91	111-140	Mixed stand with cedar still being the dominant species. Heavy fir understory with numerous blowdowns. Deer sign all over. Slightly higher ground pocket on the southeast corner. Find most aspen here.
41	6120 - Lowland Cedar	Poletimber Well	10.6	93	201+	Dense cedar stand with some course woody debris. Not as much blowdown as other cedar stands. Those small open pockets caused by blowdown is where find balsam fir regeneration. Otherwise the understory under the cedar canopy is void of any regeneration.
42	6120 - Lowland Cedar	Poletimber Well	30.4	93	111-140	Dense cedar with maple mixed in. Regeneration mostly balsam fir with some maple on the outer fringes. Find some white pine and a trace of spruce on the outer fringes also.
45	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	8.1	94	51-80	The eastern half is dense balsam fir saplings with a sporadic aspen or cedar mixed in. Some little aspen clones mixed in with the western side containing the majority of the cedar.
46	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	6.8	39	51-80	Intermittent stream flowing along the east side. Couple of pockets cedar separated by a tag alder draw. Wet ground most areas.
47	6120 - Lowland Cedar	Poletimber Well	7.8	93	111-140	Good amount of blowdown and coarse wood debris. The outer fringes have more maple and fir with sporadic cedar. Towards the center mostly cedar with basal areas in the 170 range. Numerous logs also with no understory.
49	4130 - Aspen	Poletimber Well	3.5	41	Unspecified	Decent aspen stand that could be treated this rotation. If do harvest, harvest with stand 62 and stand 26 in Compartment 118 to the north. Best access to this stand and Stand 26 to the north is through stand 62 to the west.
50	42330 - Upland Fir	Poletimber Well	11.9	47	51-80	Mostly upland site with some smaller swales containing small intermittent streams. There is a smaller pocket of large white pine with a balsam fir understory, but mostly the stand is dense fire in the canopy and/or mid-canopy with individual trees of other species mixed in.
51	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	2.9	95	111-140	The west third is slightly higher elevation and has an aspen/balsam fir mix that grades into a cedar/fir mix. Heavy amount of course woody debris. The southern line is a large beaver dam from years ago. There are cedar trees growing out of the dam.
53	4134 - Aspen, Spruce/Fir	Poletimber Medium	38.1	40	111-140	The balsam fir is very prevalent in both the sub and mid-canopies. Numerous small wet pockets scattered about. Would need to be cut in winter and will require at least one culvert and all the composite mats we have to cross a tag alder marsh created by a large beaver dam. There is the old haul route from when it was cut last time still present in stand.
55	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	17.0	92	1-50	Very sparse cedar stand with any of the cedar still alive most of them have top dieback. The understory is a dense combination of balsam fir and tag alder.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	7.5	65	51-80	WET TO SEASONALLY WET, ASPEN PRETTY MUCH GONE DUE TO OLD AGE AND BEAVER ACTIVITY, NO ACCESS DUE TO TERRAIN AND PRIVATE PROPERTY
57	6123 - Lowland Fir	Poletimber Well	7.2	39	51-80	Dense balsam fir sub and mid-canopies. Aspen and maple are in the main canopy. Wet hummocky terrain with small feeder drains into the intermittent stream to the east of stand.
62	4134 - Aspen, Spruce/Fir	Poletimber Medium	52.6	40	Unspecified	The largest diameter aspen is a the original clone epicenter. The diameter and density tapers off drastically as it spreads out.
64	42290 - Natural Mixed Pine	Sawtimber Well	4.8	130	111-140	Ridge of high ground with large white and red pine almost to Type 1 old growth class. No evidence of activity, with some of the pines being over 150 years old.
65	4311 - Pine, Aspen Mix	Poletimber Well	33.1	41	Unspecified	The east half of the stand has a very dense balsam fir understory with an overstory of mostly red and white pine. Some maple and aspen overstory is scattered in there also. The west side has the aspen, but it is smaller in diameter for its age and believe the heavy fir competition has contributed to this. The fir is heavy in both the understory mid-canopy. Numerous small swales throughout the stand. If need to restart some acres this could be a candidate. Recommend winter harvest though.
129	4136 - Aspen, Mixed Conifer	Poletimber Well	20.8	41	Unspecified	Aspen stand with a heavy sub-canopy of balsam fir entering into the mid-canopy. Where the fir is absent, the aspen's diameter is saw class. Along the west fringe find most of white pine. Several small swales throughout the stand. There was a grass type that lumped into this stand. Suspect it was part of this stand before, but after treatment did not reforest as well. It now has enough canopy to be forested. Lot of the maple is here.
402	4113 - R.Maple, Conifer	Poletimber Poor	3.0	40	1-50	Opening created from a past harvest that did not regenerate well or fast. Just finally reached forest canopy closure status. Possibly treat with stand 32 in future and make a maintained opening or if does not regenerate well again, plant with red pine. Maple is poor quality numerous stemmed stump sprouts.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	6220 - Alder/willow	1.8	No	
3	6224 - Treed Bog	1.8	No	
4	6220 - Alder/willow	1.1	No	Tag alder marsh with an old two track along the very north edge.
23	6239 - Mixed Emergent Wetland	5.6	No	OLD BEAVER FLOODING
28	6220 - Alder/willow	2.6	No	
30	6225 - Bog	1.3	No	Leatherleaf bog.
31	6220 - Alder/willow	5.2	No	
35	622 - Lowland Shrub	33.3	No	BEAVER FLOODING
44	629 - Mixed non-forested wetland	7.5	No	
52	623 - Emergent Wetland	11.2	No	BEAVER FLOODING
58	6224 - Treed Bog	1.3	No	
61	622 - Lowland Shrub	10.5	No	
135	623 - Emergent Wetland	85.4	No	S.C.A. = PORTIONS OF THIS RECENTLY EXPANDED WETLAND WERE PART OF THE ORIGINAL OG/BS PLAN
400	310 - Herbaceous Openland	4.0	Yes	Opening maintained by Wildlife Division.
403	110 - Low Intensity Urban	8.5	No	POWERLINE and PIPELINE R.O.W., ALSO HAS SEASONALLY COUNTY ROAD WITHIN R.O.W.
404	3301 - Low Density Deciduous Tree	8.7	No	Final harvest done in 1992 that failed to regenerate. Has scattered oak, cherry, and small aspen clones. It is not a designated wildlife opening.