



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 71042

Entry Year 2018

Acreage: 1,477

County Roscommon

Management Area: AuSable Outwash

Revision Date: 2016-08-04

Stand Examiner: Dale Ekdom

Legal Description:

T24N R02W Sections 22-24

Identified Planning Goals:

Vegetation management in the AuSable Outwash management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character including several state wildlife area floodings, the Roscommon Forest Fire Experiment Station, threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on improving the age-class structure of aspen, harvesting older jack pine and regeneration of red pine and oak to help balance age-classes. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity and management of the state wildlife management areas. Expected trends within this 10-year planning period are an increase in non-native exotic plants, especially Phragmites in the wetland areas and increased recreational pressure.

Soil and topography:

Terrain is flat to gently rolling with some ridges and hills on the east and west ends of the compartment. Soils are Grayling, Roselawn, and Rubicon Sands in the upland areas and Rifle Peat in the Hudson Creek Swamp.

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

This compartment is a solid block of state land interspersed with a few private land parcels primarily used for hunting and other recreational uses. There is a small subdivision of permanent residences to the south of the compartment in Section 27. Bambi Lake Baptist Camp is in the northwest part of the compartment. There is a fairly equal mix of state land and private parcels surrounding this compartment.

Unique Natural Features:

This compartment contains portions of the Hudson Creek Swamp and the Roscommon Forest Fire Experiment Station (Section 22).

Archeological, Historical, and Cultural Features:

None known or detected during fieldwork.

Special Management Designations or Considerations:

Stands or portions of stands adjacent to Hudson Creek are designated as HCVA's due to Natural River concerns and there are several older white and red pine stands which may be Type 2 old growth at some future YOE if left untreated.

Watershed and Fisheries Considerations:

Hudson Creek is a tributary of the South Branch of the Au Sable River which has Natural River status.

Wildlife Habitat Considerations:

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

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of sand and gravel from ice-contact drift, glacial outwash, and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Mississippian Michigan Formation and Marshall Sandstone. The Michigan is quarried for gypsum and the Marshall was previously used as a building stone in other areas of the state. Bedrock is too deeply buried here to be of economic value. Most of the good gravel pits are associated with upland areas. The nearest gravel pit is located by Roscommon to the northwest, but there is good potential on the uplands, particularly around Sinkhole Hill in Section 22 and the southeast quarter of Section 24. St. Helen Field lies just to the east. The field has produced over 8.7 million bbls of oil and 14.7 Bcf gas from the Devonian Richfield Formation

and is in secondary recovery operations currently. Currently, all state land in this region is under lease for oil and gas exploration and production.

Vehicle Access:

Vehicle access to the upland areas of the compartment are good via the state highway, county roads, and forest two-tracks and trails.

Survey Needs:

Some survey work may be needed to accomplish timber sales.

Recreational Facilities and Opportunities:

Portions of the St. Helen snowmobile trail and the Geels North ORV trail/route run through this compartment. Lots of dispersed recreational activities such as hunting, hiking, and berry picking occur in this compartment. Assure logging ahead signs are placed on the trail to notify users of logging activity. Focus retention pockets in clusters along or near trail. Non-merchantable understory maintained adjacent to trail shall be protected and be maintained next to trail tread to promote narrow use. Retention of trees near or along the recreational trail that are substantial enough to withstand wind throw are encouraged. Sign posts and confidence markers shall be protected. Ensure logging activity does not obliterate the trail. All stumps immediately adjacent to the trail shall be Flush-Cut to ensure stumps do not result in unsafe conditions. Prohibit widening of any narrow track recreational trail, blocking trail crossings or leaving slash and debris on any recreational trail or road.

Fire Protection:

The west half of this compartment is a high hazard area due to the presence of the jack pine fuel types. However, response times to this compartment are short due to the close proximity to fire suppression forces and the excellent road system. There is a moderately-developed wildland-urban interface in and around this compartment.

Additional Compartment Information:

The following reports from the Inventory are attached:

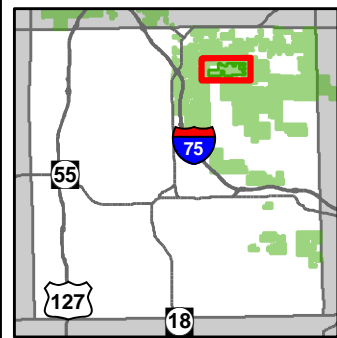
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

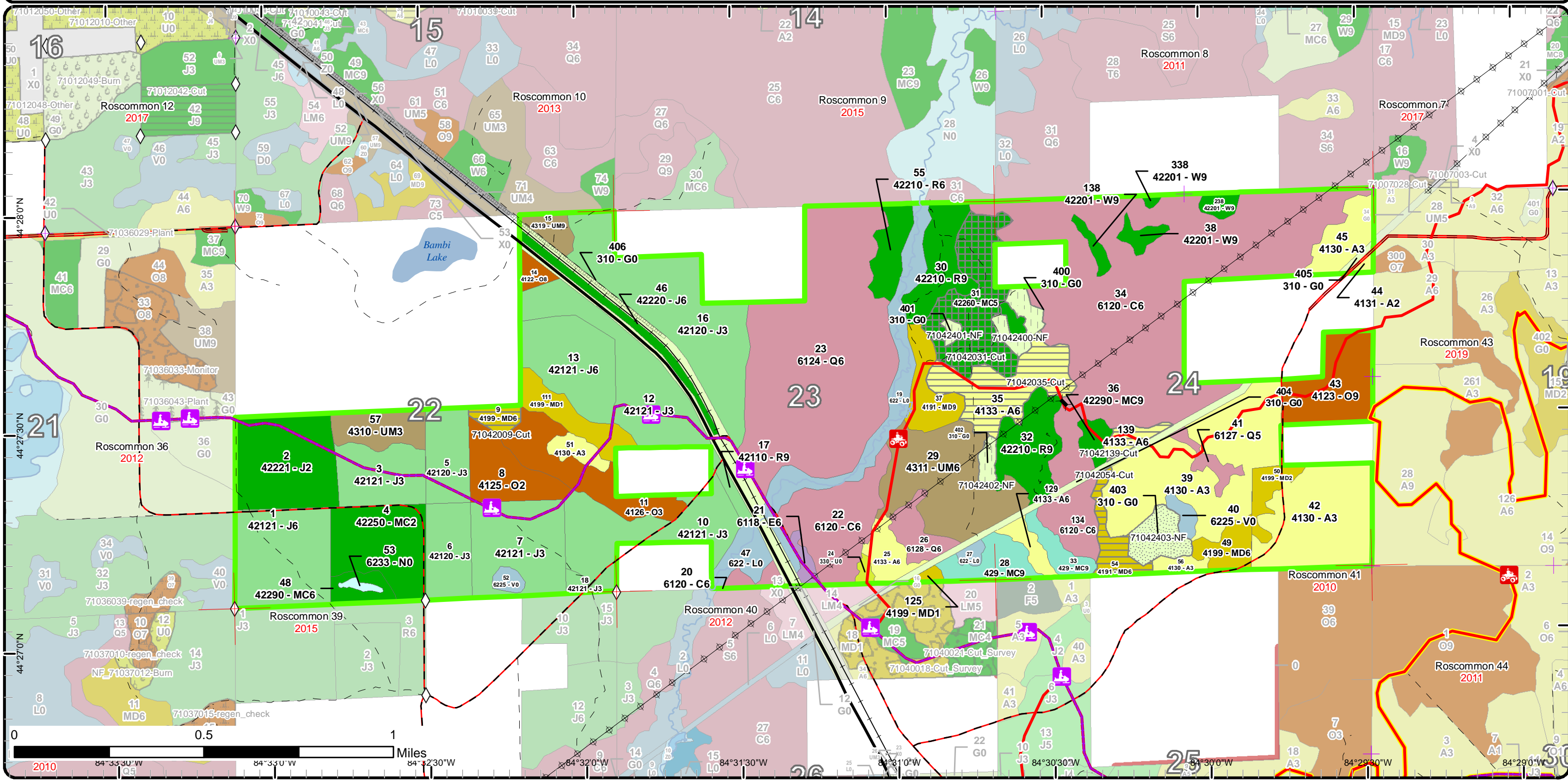
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 42
 T24N, R02W, Sec. 22-24
 County: Roscommon
 Unit: Roscommon
 Mgmt Area: AuSable Outwash
 YOE: 2018
 Acres: 1477 GIS Calculated
 Examiner: Dale Ekdorn
 Map Revised: 2/9/2017
 Map Phase: Post-Review

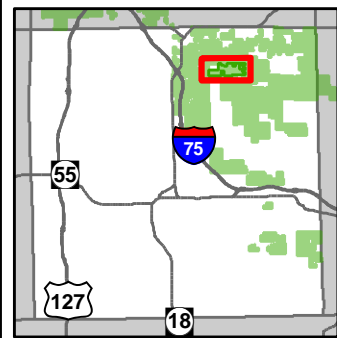


- Miris Corners
- Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Bridges
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Designated ATV Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Active Railroad
- Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Clearcut (w/Reserves)
- Opening Maintenance
- Mowing
- Seed Tree (w/Reserves)
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

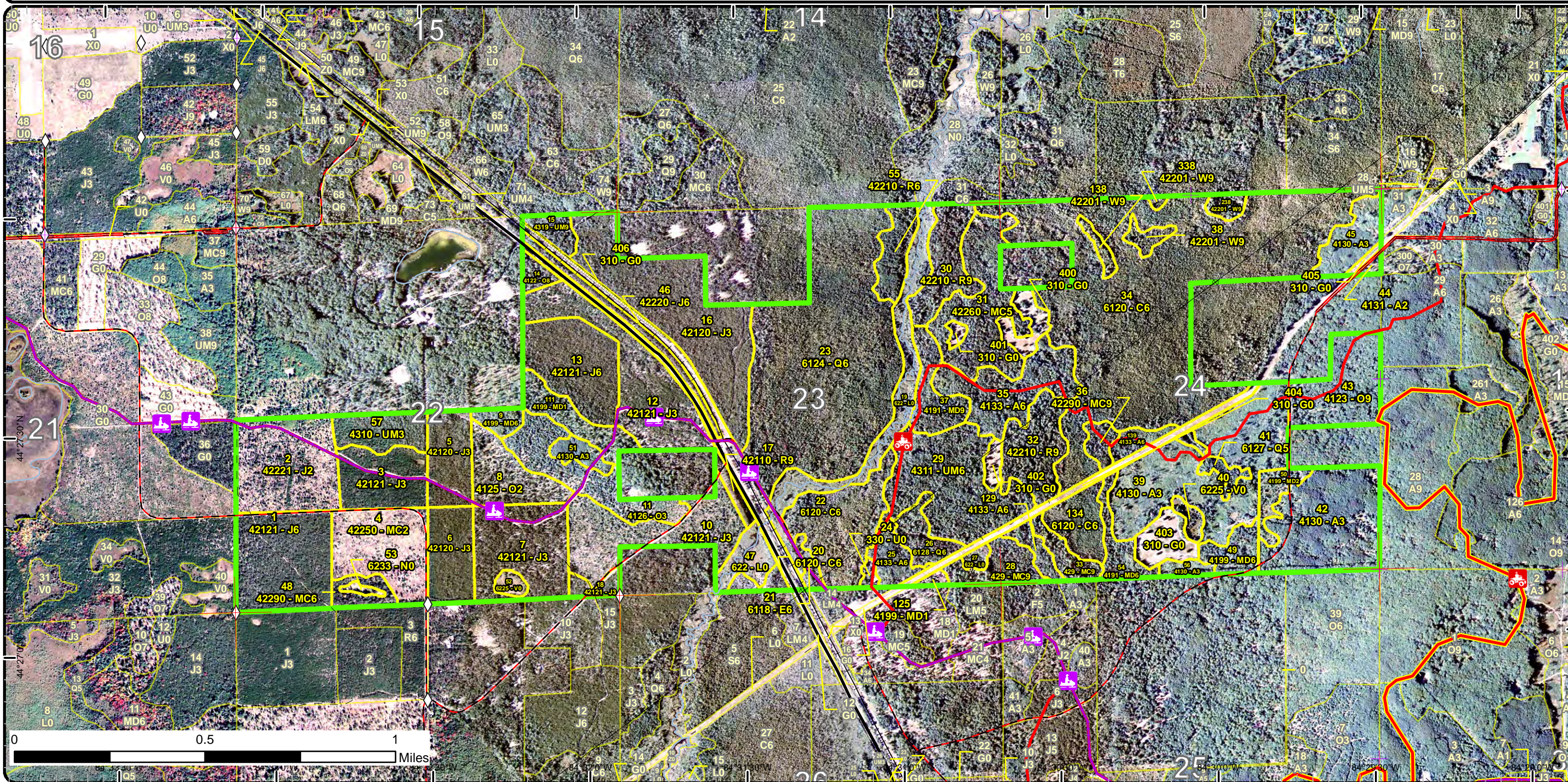


Stand Boundary Map

Compartment: 42
 T24N, R02W, Sec. 22-24
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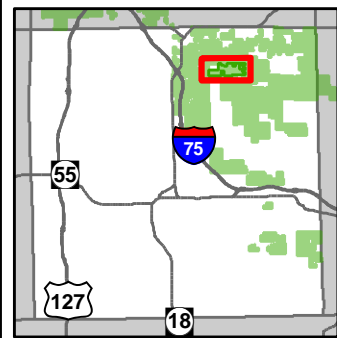


- Miris Corners
- Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Bridges
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Designated ATV Trails
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Active Railroad
- Rivers
- Pipeline
- Powerline
- Compartment Boundary
- Stand Boundaries
- 412 - Oak Types
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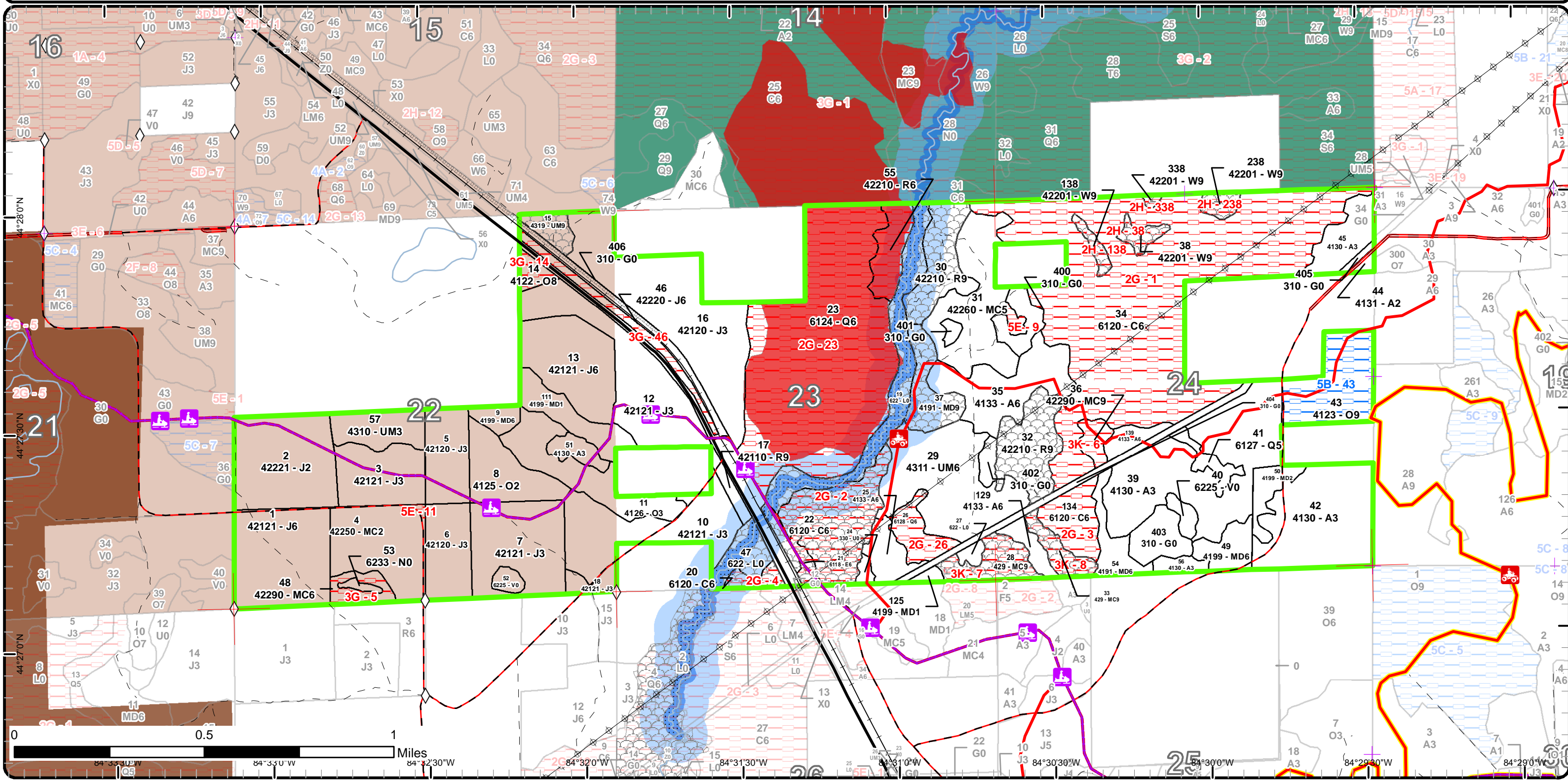


Special Conservation Areas & Site Conditions Map

Compartment: 42
 T24N, R02W, Sec. 22-24
 County: Roscommon
 Unit: Roscommon
 Mgmt Area: AuSable Outwash
 YOE: 2018
 Acres: 1477 GIS Calculated
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 Map Revised: 2/9/2017
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- Miris Corners
- + Remonumented Section Corners
- ◇ Field Grade GPS Corners
- Bridges
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Designated ATV Trails
- - - Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- Paved Roads
- County Gravel Roads
- - - County Poor Dirt Roads
- - - Poor Dirt Roads
- Active Railroad
- Rivers
- - - Pipeline
- Powerline
- Compartment Boundary
- Available w/ Constraints
- - - Unavailable
- 5B: Maintain for regeneration purposes
- 2G: Too wet (sensitive soils, does not include access issues)
- 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)
- 3G: Other Influence zones - See comments
- 3K: Rare or unique landforms
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Wildlife Management Areas
- Research, Development, and Military Lands
- 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	86	6	48	0	45	5	0	0	0	0	0	0	0	0	0	0	0	190
Bog	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Cedar	0	0	0	0	0	0	0	0	0	0	0	246	0	4	0	0	0	0	250
Herbaceous Openland	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Jack Pine	0	0	85	86	197	0	0	0	0	9	0	0	0	0	0	0	0	0	377
Low-Density Trees	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Conifers	0	0	0	0	0	0	5	0	0	0	10	0	138	0	0	0	0	0	153
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Lowland Shrub	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	2	15	8	0	14	20	0	0	0	5	0	0	0	0	0	0	0	64
Natural Mixed Pines	0	33	0	0	0	38	0	0	0	12	0	0	0	0	0	0	0	0	83
Oak	0	0	47	0	0	0	0	0	0	0	29	4	0	0	0	0	0	0	79
Red Pine	0	0	0	0	0	0	0	0	4	0	0	0	12	0	0	0	0	42	58
Upland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20
Upland Mixed Forest	0	0	0	14	0	49	6	0	0	0	0	0	0	0	0	0	0	0	69
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12
Total	119	121	153	156	197	146	36	0	4	21	47	250	150	36	0	0	0	42	1477



Report 2 – Treatment Summary

Roscommon Mgt. Unit
Year of Entry: 2018

Acres of Harvest

Compartment 42
Total Compartment Acres: 1,477

Commercial Harvest - 85
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	35	0	0	0	0	0	0	0	0	35
Mixed Upland Deciduous	14	0	0	0	0	0	0	0	0	14
Natural Mixed Pines	0	0	0	36	0	0	0	0	0	36
Total	50	0	0	36	0	0	0	0	0	85

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	85	0	0	0	0	0	0	24	0	109
Next Step	0	0	0	0	0	0	85	0	24	109
Total	85	0	0	0	0	0	85	0	48	218



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
9	71042009-Cut	4.8	4199 - Other Mixed Upland Deciduous	Poletimber Well	94	81-110	Harvest	Clearcut	4131 - Aspen, Oak	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> CC and manage for aspen, leave WP and WO, accept whatever amount and type of regeneration occurs, no retention due to size of stand and terrain											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> accept whatever amount and type of regeneration occurs											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2017											
31	71042031-Cut	35.7	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	43	51-80	Harvest	Seed Tree with Retention	42121 - Planted Jack Pine, Mixed Deciduous	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> final harvest and allow to regenerate naturally, mark up to 10 SF per acre of oak and jack pine to leave for a seed source, retention will be the area between the arms of the grassy opening and buffers on the openings and swamp, line out a couple of areas of W6 and R9 for diversity											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Intermediate)											
<u>Treatments:</u>											
<u>Acceptable</u> Any combination of natural jack pine and other species to a fully stocked stand, trench and plant jack pine if stand is not fully stocked											
<u>Regen:</u>											
<u>Other</u> may need survey to locate/set NW corner of private parcel, SW corner is in but NW corner was never found, add protection specs and signing											
<u>Comment:</u> specs for the ORV trail											
<u>Proposed Start Date:</u> 10/01/2017											
35	71042035-Cut	30.3	4133 - Aspen, Mixed Pine	Poletimber Well	43	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Final harvest for aspen management, mark up to 2 oaks/acre for wildlife mast, line out up to 2 areas heavy to W6 or RP SL for diversity, no retention of aspen as the intent is to expand the aspen into areas which are not aspen now, buffer swamp edge and grassy openings as necessary											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Any combination of aspen and other species to a fully stocked stand											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2017											
54	71042054-Cut	9.5	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	50	81-110	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Final harvest and manage for mix of oak/aspen/JP, leave all oak and white pine, leave north arm off the sale for retention and buffer swamp edge											
<u>Specs:</u> for BMP's											
<u>Next Step</u> Monitoring, Natural Regen (Intermediate)											
<u>Treatments:</u>											
<u>Acceptable</u> Any combination of jack pine and hardwoods to a fully stocked stand											
<u>Regen:</u>											
<u>Other</u> trench and plant red pine if natural regeneration fails, no specific retention due to the small size of the cut											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2017											



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
139	71042139-Cut	5.1	4133 - Aspen, Mixed Pine	Poletimber Well	50	Unspecified	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription final harvest with no retention due to forest health concerns and size/configuration of the stand, leave all oak for wildlife mast
Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any combination of aspen and other species to a fully stocked stand

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

400	71042400-NF	8.0	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Rosco-St. Helen Field 4.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

401	71042401-NF	1.6	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Rosco-St. Helen Field 5.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

402	71042402-NF	3.3	310 - Herbaceous Openland	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Rosco-St. Helen Field 6.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
403	71042403-NF	10.9	310 - Herbaceous Openland	Nonstocked		Unspec ified	NonForestMgt	Mowing	310 - Herbaceous Openland		Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Rosco-St. Helen Field 7.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment
Acreage Proposed: 109.2**

Report 4 – Site Conditions

Roscommon Mgt. Unit
Dale Ekdom : Examiner

Compartment: 42
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions					
		With Condition	Not Available		5B	2G	2H	3G	3K	5E
189	189	0	0	Aspen		0			0	
6	6	0	0	Bog						
250	0	0	250	Cedar		250				
66	66	0	0	Herbaceous Openland						
377	368	0	9	Jack Pine				9		
2	2	0	0	Low-Density Trees						
154	5	0	148	Lowland Conifers		148				
3	0	0	3	Lowland Deciduous		3				
44	44	0	0	Lowland Shrub						
1	1	0	0	Marsh						
62	62	0	0	Mixed Upland Deciduous		0				
83	68	0	14	Natural Mixed Pines				7	5	3
80	47	29	4	Oak	29			4		
58	46	0	12	Red Pine		12				
20	0	0	20	Upland Conifers		0			20	
70	70	0	0	Upland Mixed Forest						
12	0	0	12	White Pine			12			
1,477	975	29	473	Total Forested Acres	29	414	12	20	25	3
	66%	2%	32%	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)	198	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdor : Examiner

Compartment: 42

Year of Entry: 2018

2	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3G: Other Influence zones - See comments	7	3D: Recreational / Scenic values	5E: Long-Term Retention	Unspecified	Unspecified
Comments:							
6	Unavailable	3K: Rare or unique landforms	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: checked during spruce budworm analy							
7	Unavailable	3K: Rare or unique landforms	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments: checked during spruce budworm analy							

Report 4 – Site Conditions

Roscommon Mgt. Unit

Dale Ekdorn : Examiner

Compartment: 42

Year of Entry: 2018

8	Unavailable	3K: Rare or unique landforms	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Retention left when Stand #4 was cut							
14	Unavailable	3G: Other Influence zones - See comments	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Visuals on M-76							
23	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	150	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
26	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Roscommon Mgt. Unit

Compartment: 42

Dale Ekdorn : Examiner

Year of Entry: 2018

38	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
43	Available	5B: Maintain for regeneration purposes	29	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
46	Unavailable	3G: Other Influence zones - See comments	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Visuals on M-76							
138	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
238	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
338	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							



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
	Potential Old Growth		SCA Removal	1
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	1
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	3
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	4
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	4
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	6
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	8
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	8
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	12
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	23
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			
	Potential Old Growth		SCA Removal	34
Comments	This area no longer meets the criteria to be classified as a Special Conservation Area.			



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
	Potential Old Growth		SCA Removal	41

Comments

This area no longer meets the criteria to be classified as a Special Conservation Area.



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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	41.8	39	1-50	J3 planted 1978, jack pine is approaching pole-size, oak came in later and is slower growing, transitioning to J6
2	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Medium	41.5	16	Immature	Cut 2000 with a 4" Spec and left to regenerate naturally, now J3O2W4, most oak is 1-2" DBH and is both stump-sprout and seedling origin, JP ranges from 2-4" DBH and is somewhat 2-aged, also scattered red and white pine poles were left
3	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	23.5	27	Immature	J3 planted in 1990, scattered oak saps and poles also, nrth end is heavier to hardwoods
4	42250 - Pine, Oak	Sapling Medium	33.1	8	Immature	Cut summer 2009 to 4" Spec, left some oak and R/W pine SL's, now stands is J2R4W4O2, should be fully stocked next YO, very similar to stand #2 but better stocking overall
5	42120 - Planted Jack Pine	Sapling Well	18.6	39	1-50	J3 in transition to J6, planted 1978, stand has a few scattered RP poles/SL also
6	42120 - Planted Jack Pine	Sapling Well	19.6	27	Immature	J3 planted 1990
7	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	36.8	33	1-50	CUT TO 4" IN 1984 (OR WILDFIRE) AND THEN PLANTED WHICH CREATED A 2 AGED STAND, NOW POLESIZE AND SOME SAP SIZE JACK PINE
8	4125 - Black, N. Pin Oak	Sapling Medium	20.5	16	Immature	Cut 2001 to 4" spec and allowed to regenerate naturally, stand mostly oak saps from stump sprouts/seedling origin with some JP saps but has a few scattered pole size trees also
9	4199 - Other Mixed Upland Deciduous	Poletimber Well	4.8	94	81-110	Oak /Aspen stand near the top of a ridge with good frost drainage, mostly oak to the north and aspen to the south, good regeneration of A/M/O after Bambi Lake to the north cut on their property, difficult access due to steeper terrain. private property, and no roads directly to the stand, final harvest this stand if access can be gained w/o too much difficulty
10	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	38.5	14	Immature	planted to JP in 2003 after cutting in 2001
11	4126 - White, Black, N. Pin Oak	Sapling Well	26.4	16	Immature	Cut 2001 with stand #8 and 10 but much less jack pine than both these other stands, also more white oak, overall stand is growing well although the east part burned in a wildfire within the last 10 years
12	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	43.2	27	Immature	J3 with scattered JP poles also, left scattered islands of J5/6 along M-76 for visuals when cut
13	42121 - Planted Jack Pine, Mixed Deciduous	Poletimber Well	33.0	39	1-50	Planted J3 with scattered oak transitioning to J6, slow-growing and just at pole-size



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
14	4122 - Oak, Pine	Sawtimber Medium	4.0	108	1-50	small triangular stand left as buffer for cut to the south, decadent oak and jack pine but filling in nicely with a mix of conifer saplings, lots of jack pine blow-down, maintain as a buffer and let oak/JP over-story break-up naturally as stand is too small to bother with, oak/JP are poor quality, and conifers in the under-story are doing well
15	4319 - Mixed Upland Forest	Sawtimber Well	6.0	52	1-50	east end is more upland and heavy to WP poles/SL's, west end is lower and wetter terrain and heavier to A/RM with one nice pocket of legacy size white pine, bulk of stand is younger (1960's -1980's YOO) W6 with some younger HW's also, retain this stand to protect pocket of W9 Type I old growth, two aged going to all-aged
16	42120 - Planted Jack Pine	Sapling Well	66.9	39	Unspecified	cut, roller-chopped, and then planted in 1978, still in transition to J6 as stand is very slow growing, scattered pole-size oaks also
17	42110 - Planted Red Pine	Sawtimber Well	3.7	70	111-140	west of Deep Woods road thinned in 1988, east of Deep Woods Road thinned in 1998, parts ready to be thinned again and other parts not so much, thin or hold as desired but keep stand as buffer on M-76 for now
18	42121 - Planted Jack Pine, Mixed Deciduous	Sapling Well	4.4	19	Immature	Cut and regenerated with stand to the south in 71039 (Stands 10/15) in 1998, planted JP and natural oak
20	6120 - Lowland Cedar	Poletimber Well	3.9	128	81-110	Mix of swamp hardwoods overtopping swamp conifers and tagalder/balsam fir in the sub-canopy, wet stand in the the floodplain of Hudson Creek, east lobe is heavier to hardwoods than the west lobe, both lobes are separated by an intermittent stream flowing into Hudson Creek, HCVA = PART OF THIS STAND IS WITHIN THE BUFFER ZONE FOR A NATURAL RIVER (TRIBUTARY)
21	6118 - Lowland Deciduous with Cedar	Poletimber Well	3.3	95	Unspecified	Very wet stand consisting of pockets of tag alder scattered amongst deciduous trees, oldest aspen is over-mature but there are areas of A3/A6, PART OF THIS STAND IS WITHIN THE BUFFER FOR A NATURAL RIVER (TRIBUTARY) = H.C.V.A.
22	6120 - Lowland Cedar	Poletimber Well	33.9	109	Unspecified	Cedar stand which is growing well with no stagnation noted, non-commercial removal of A/RM/WB occurred in 1976, west edge along Hudson Creek is heavy to tamarack and black spruce, PART OF THIS STAND IS WITHIN THE BUFFER ZONE OF A NATURAL RIVER (TRIBUTARY) = H.C.V.A.
23	6124 - Lowland Spruce-Fir	Poletimber Well	138.4	113	51-80	Mix of NWC, BS, and BF poles with scattered R/W pine XL's, heavy balsam fir under-story in spots and scattered potholes with tag alder
25	4133 - Aspen, Mixed Pine	Poletimber Well	9.2	43	Unspecified	poor quality A6 just reaching pole-size, areas of stand are heavy to oak poles in spots, also has scattered RP log trees thru-out stand, DBH's on this stand are still fairly small so recommend holding this stand until next YOY
26	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	9.9	90	81-110	wet cedar/swamp conifer stand with a few "upland" areas of hardwoods, not worth the hassle to attempt to treat the more "upland" areas of this stand



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	429 - Mixed Upland Conifers	Sawtimber Well	12.7	126	51-80	Terrain is upland ridges with lowland swales, upland parts are oak/RM/WP logs and poles with RM/WP saplings, low/wet swales are WP logs and XL's with NWC poles, oldest white pine is 125 years old, could treat upland portions with some sort of thinning where the BA is more dense but would be lots of work for little return given all the low/west swales so recommend holding stand for ecological value of Type 1 or 2 old growth designation in some future YOE.
29	4311 - Pine, Aspen Mix	Poletimber Well	49.2	44	51-80	Stand was cut under several permits in 1973 but pole-size R/W pine and oak were left and these are now SL size and larger, stand is a fairly even mix of TA/RM/JP poles but consists of areas heavy to RP or oak SL's interspersed with areas heavy to A6, J6, and W6, aspen and JP are doing OK but it is still fairly small in a lot of spots, W6 spots are decent quality WP, recommend holding this stand until next YOE and then trying to separate out oak/RP SL areas and W6 areas from the A6/J6 areas and regenerating the aspen and jack pine areas st that time.
30	42210 - Natural Red Pine	Sawtimber Well	19.8	113	81-110	Stand borders Hudson Creek floodplain to the west (HCVA?), may have has some hardwoods and/or jack pine taken out in previous YOE's, parts are solid R9 with little understory, other parts are HW's overtop WP saps and poles, other parts are W/R pine XL's over WP saplings, this stand is fairly unique in the RFMU with large pines, lots of blowdown/gaps, regenerating itself to O/S species. Recommend holding for Type 1 and 2 old growth in a future YOE or could thin now using big tree management techniques to enhance OG characteristics.
31	42260 - Natural Pine, Mixed Deciduous	Poletimber Medium	37.8	43	51-80	Stand was cut under several permits in 1974 but they left pole-size R/W pine and oak which are now SL and XL size, some indication of small machine planting of WP in this stand also in 1969, stand is now a mix of JP/WP/Aspen and consists of areas heavy to J6 interspersed with areas of A6 or W6, a lot of the white pine is weeviled, recommend cutting now and regenerating to jack pine
32	42210 - Natural Red Pine	Sawtimber Well	22.6	117	141-170	Natural RP mixed with a few hardwoods and WP, hardwoods are mostly in the mid-canopy, mostly an upland stand but there are numerous wet potholes scattered thru-out stand, the east edge has a fairly steep bank grading into the cedar swamp to the east, understory in the wetter areas has lots of BF saplings and the more upland areas are mostly RM/WP saplings, stand is at least 2 and possibly 3 ages going towards or at all-aged, age of the red pine is from the largest/oldest trees with a range of younger ages also, consider thinning to 120 SF but with the WP understory so well distributed thru-out the stand so it would be challenging to treat this stand without destroying all the understory. Recommend holding for Type 1 or 2 old growth at some future YOE.
33	429 - Mixed Upland Conifers	Sawtimber Well	7.6	126	51-80	Large XL WP with smaller pole and SL size hardwoods in the mid-canopy, 3 aged with WP/RM saplings in the understory, upland terrain but with lots of wet potholes of cedar and fir and a water table thru-out the stand which is close to the surface, long narrow transition zone between upland and lowland, recommend holding and managing for Type 1 or 2 old growth in some future YOE.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
34	6120 - Lowland Cedar	Poletimber Well	198.2	103	Unspecified	Poor quality NWC stand, some records found of old cedar cuts which were attempted in this stand in 1977/78 but the ones I found did not have any regenerating cedar in them, too wet to operate
35	4133 - Aspen, Mixed Pine	Poletimber Well	30.3	43	81-110	Stand was cut under several permits in 1974 but left pole size R/W pine and oak which are now mostly log size, stand consist of A6 clones with areas heavy to W6 or J6 or RP SL, aspen is better quality/larger and more dense than the stand to the south (St #29), recommend cutting this stand now to regenerate aspen and balance aspen age classes, stand is somewhat 2 aged but not as much as St #29
36	42290 - Natural Mixed Pine	Sawtimber Well	5.0	83	111-140	small stand of natural pine, around 50/50 mix of upland and lowland and fairly equal mix of R/W pine, ORV trail goes thru the stand (mostly on boardwalk), south part of the stand is upland and it grades into lower ground with more WP as you go north, potentially type 1 or Type 2 old growth if left alone for a few YOE's and not worth messing with treating now with any type of thinning due to the wet pockets.
37	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	14.2	44	81-110	Stand borders floodplain of Hudson Creek to the west which is an HCVA (Tributary to a Natural River), stand is mostly older hardwoods over-topping WP saplings and poles with scattered hardwood saplings and poles, there is some indication that some jack pine and hardwoods were removed in some past YOE's, stand is two-aged going towards all-aged, recommend holding stand until white pine becomes more merchantable, maintain for now as a buffer on the Hudson Creek HCVA
38	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	4.1	125	111-140	natural WP/mixed deciduous stand, somewhat drier island surrounded by cedar swamp, no access due to terrain
39	4130 - Aspen	Sapling Well	66.7	5	Immature	Cut out-of-YOE in 2012 in search for better aspen age class distribution, left all oak
41	6127 - Lowland Pine	Poletimber Medium	5.3	50	51-80	leftover wet area/heavy pine are from when surrounding aspen was cut, mix of upland pine and lowland conifers/HW's, scattered XL R/W pine thru-out and a few oaks in the more upland parts, hardwoods are approx. 50 years old and the pine approx. 70 years old, leave for BMP's
42	4130 - Aspen	Sapling Well	47.7	27	Immature	nice A3 regeneration which is still transitioning to A6
43	4123 - Red Oak	Sawtimber Well	28.9	99	81-110	stand was shelterwood prep cut in 2010 by removing aspen, red maple, and marked oak and now ranges from O9M1 to O7A3, there is a nice BTA A3 clone in the SE corner, stand also has scattered WP saplings and poles with a few RP XL's, oak is decent quality black/red/white oak, there is also some oak seedlings starting in some of the more open spots, +ORV trail goes thru north end of the stand, no treatment necessary at this time as it would be better to hold off until more oak is established in the u.s.
44	4131 - Aspen, Oak	Sapling Medium	1.6	7	1-50	cut in Fall 2009 with Stand #30 to the west in 71043, regenerated to a mix of A/RM with over-story oaks



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
45	4130 - Aspen	Sapling Well	14.0	8	Immature	Cut summer 2009, extends into 71043 (Stand #31) to the east, nice TA/RM regeneration, scattered oak saps/SL's also
46	42220 - Natural Jack Pine	Poletimber Well	9.0	84	111-140	Long narrow strip of trees between M-76 and the RR R.O.W., mostly jack pine but scattered hardwoods and some planted red pine also, maintain as buffer along this travel corridor
48	42290 - Natural Mixed Pine	Poletimber Well	6.7	84	111-140	This stand was left when Stand 34 was treated as it is about 1/2 upland and 1/2 lowland with a water table that is close to the surface thru-out the stand, red and white pine is growing well and jack pine is declining, there is a small wet run (Stand #53) in the middle of the stand, driest ground is along the south boundary which has BF ground cover, the north 2/3rds of the stand has leather-leaf ground cover, maintain indefinitely as a stand of larger trees surrounded by younger stands and as retention area for stand to the north
49	4199 - Other Mixed Upland Deciduous	Poletimber Well	9.6	50	81-110	Cut with Stand #39 in 2012, over-story oak was thicker in this stand, oak is very poor quality black oak with some white oak, retain this stand until under-story aspen is merchantable again as oak is not worth going back and cutting.
50	4199 - Other Mixed Upland Deciduous	Sapling Medium	7.7	27	Immature	Cut with adjacent Stand #42 in 1990 but aspen regeneration was poor in this spot so stand is now more open with oak stump sprouts and red maple stump sprouts dominating but aspen still a component
51	4130 - Aspen	Sapling Well	5.7	16	Immature	Nice A3 clone at the top of the ridge, regenerated in 2001, bulk of stand is A3 but there are a few spots which are sparser
54	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	9.5	50	81-110	stand was leftover from when the aspen to the east was cut an is a mix of everything, everything is poorer quality stems especially the aspen and the jack pine, aspen starting with hypox. conker, stand is a mix of areas heavy to oak (SE), aspen (middle), jack pine (SW), and white pine (north arm), recommend final harvesting but leaving oak and white pine for seed source and diversity, should regenerate to mix of aspen and jack pine but trench/plant red pine as an alternate if this fails, could leave the north arm off the sale as this is mostly white pine, CC no retention due to size and shape of the treatment AND for forest health reasons
55	42210 - Natural Red Pine	Poletimber Well	11.9	113	141-170	data taken from Stand #30 on east side of Hudson Creek, no access due to wet terrain
56	4130 - Aspen	Sapling Well	3.6	5	Immature	Cut out-of-YOE in 2012 in search for better aspen age class distribution, left all oak
57	4310 - Pine, Oak Mix	Sapling Well	14.4	27	Immature	J3 planted in 1990, scattered oak saps and poles also, nrth end is heavier to hardwoods
111	4199 - Other Mixed Upland Deciduous	Sapling Poor	14.8	16	1-50	removed a/J/M in Fall 2000, Shelterwood cut in Fall 2010, lots of O/A/M regeneration as well as W/R pine poles and R/W oak SL's, regeneration is 2000 and 2010 YOO



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
125	4199 - Other Mixed Upland Deciduous	Sapling Poor	1.7	3	Immature	Stand was cut with the stand to the south in 71041, 4" spec cut but also leaving all R/W pine and oak, stand is a fairly equal mix of O/A/M with scattered conifers
129	4133 - Aspen, Mixed Pine	Poletimber Well	5.6	44	Unspecified	Stand was cut under several permits in 1973 but pole-size R/W pine and oak were left at that time and these are now SL size, aspen/RM/JP are still fairly small yet so recommend holding stand and cutting next YOE or cutting with the stand to the south in 71041 (2020 YOE).
134	6120 - Lowland Cedar	Poletimber Well	14.1	103	Unspecified	poor quality NWC stand, too wet to operate, scattered WP XL trees
138	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	3.1	125	111-140	natural WP/mixed deciduous stand, somewhat drier island surrounded by cedar swamp, no access due to terrain
139	4133 - Aspen, Mixed Pine	Poletimber Well	5.1	50	Unspecified	Stand of aspen/red maple/oak mixed with R/W pine and jack pine, stand grades from upland on the south along the powerline ROW to lowland as it dives into the swamp to the north, some hypox. canker starting on the aspen so should be cut to manage for aspen and to balance the aspen age classes, ORV trail goes thru the stand
238	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	3.8	125	111-140	natural WP/mixed deciduous stand, somewhat drier island surrounded by cedar swamp, no access due to terrain
338	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	0.8	125	111-140	natural WP/mixed deciduous stand, somewhat drier island surrounded by cedar swamp, no access due to terrain



Stand	Cover Type	Acres	Managed Site	General Comments:
19	622 - Lowland Shrub	32.2	No	OPIC - FMD: FLOODPLAIN OF HUDSON CREEK, H.C.V.A. = WITHIN BUFFER ZONE OF NATURAL RIVER (TRIBUTARY)
24	330 - Low-Density Trees	1.8	No	Upland brush/ low density trees, mostly pin cherry with scattered trees of various sizes and species, ORV trail goes thru stand
27	622 - Lowland Shrub	2.1	No	Lowland shrub with scattered swamp conifers
40	6225 - Bog	3.4	No	Bog surrounded by screen of both deciduous and coniferous trees
47	622 - Lowland Shrub	9.6	No	OPIC - FMD: FLOODPLAIN OF HUDSON CREEK, H.C.V.A. = WITHIN BUFFER ZONE OF NATURAL RIVER (TRIBUTARY)
52	6225 - Bog	2.9	No	
53	6233 - Wet Meadow	1.4	No	
400	310 - Herbaceous Openland	8.0	Yes	OPIC - FMD: MAINTAINED WILDLIFE OPENING
401	310 - Herbaceous Openland	1.6	Yes	OPIC - FMD: MAINTAINED WILDLIFE OPENING
402	310 - Herbaceous Openland	3.3	Yes	OPIC - FMD: MAINTAINED WILDLIFE OPENING
403	310 - Herbaceous Openland	10.9	Yes	OPIC - FMD: MAINTAINED WILDLIFE OPENING
404	310 - Herbaceous Openland	11.6	No	PIPELINE/POWERLINE R.O.W.
405	310 - Herbaceous Openland	1.2	No	PIPELINE/POWERLINE R.O.W.
406	310 - Herbaceous Openland	29.3	No	R.R./M-76 R.O.W.