



Compartment Review Presentation

Roscommon Forest Management Unit

Compartment 71052

Entry Year 2020

Acreage: 2,504

County Roscommon

Management Area: Ogemaw Hills

Revision Date: 2018-07-25

Stand Examiner: Doug Bates

Legal Description:

Sections 3, 10-11, & 14-15, T21N-R1W and Section 34, T22N-R1W, Roscommon County

Identified Planning Goals:

Vegetation management in the Ogemaw Hills management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year period will focus on treating a sizable portion of the mature oak species to promote regeneration of said species and balance age class distributions of oak and aspen. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation.

Soil and topography:

Terrain is mainly level glacial outwash plain with an occasional small moraine.
Soils are primarily Grayling sand in the upland areas with Rifle peat in the lower drainages.

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

This is a contiguous block of state land. The area is rural with the private property interfaces along the borders being seasonal residences and/or hunt clubs.

Unique Natural Features:

None identified.

Archeological, Historical, and Cultural Features:

None identified in the system. Signs of old narrow gauge railroad beds within some stands.

Special Management Designations or Considerations:

With such a large volume of oak cover types within this compartment, continued monitoring and prevention of oak wilt is a must. Rapid control and isolation will be a priority to stop the continued spread of the disease if it is found within the area.

Watershed and Fisheries Considerations:

A large lowland complex feeds into the West Branch of the Tittabawassee River. Dunham Lake at the south edge of the compartment also feeds into this river course.

Wildlife Habitat Considerations:

This compartment contains a high percentage of aspen cover which is important to manage in a diversity of age classes to benefit grouse and woodcock. Additionally, deer density in the area is relatively high as it shares much of the boundary with private hunt clubs. Larger size cuts for short rotation species will help disperse deer browse impacts. Oak management to promote mast production for wildlife is critical, especially white oak. Maintain ecosystem diversity in the compartment via habitat manipulation to benefit game species such as deer, bear, grouse, turkeys, as well as other non-game species.

Mineral Resource and Development Concerns and/or Restrictions

The county road commission operates a sand/gravel pit two miles to the northwest, and there appears to be some good sand & gravel potential within the compartment. There has been some minor oil production from Devonian reservoirs in the area, and one well was drilled within the compartment to test the Collingwood formation but it was not a successful well. There are no active mineral leases in the compartment, but there is some active oil & gas leasing to the northwest. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Access is good with numerous forest roads emanating off off seasonal county roads such as Dunham Lake and Railroad Grade.

Survey Needs:

None necessary at this time.

Recreational Facilities and Opportunities:

Michigan Cross Country Cycle Trail from St. Helen to M-30 and Midland to Mackinaw Scout hiking trail occurs in this compartment in sections T22N R01W Sec.34 & T21N R01W Sec.11,14, and 15. All sign posts and confidence markers shall be protected. Dispersed recreation occurs throughout the compartment for berry / mushroom picking, deer hunting and small game hunting, camping, and wildlife viewing. (A.2018)

Fire Protection:

This compartment has a minimal amount of high hazard fuel stands in it. Because of the amount of recreational use in the compartment there is a history of the compartment being a fire prone area. Access is good in the 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**

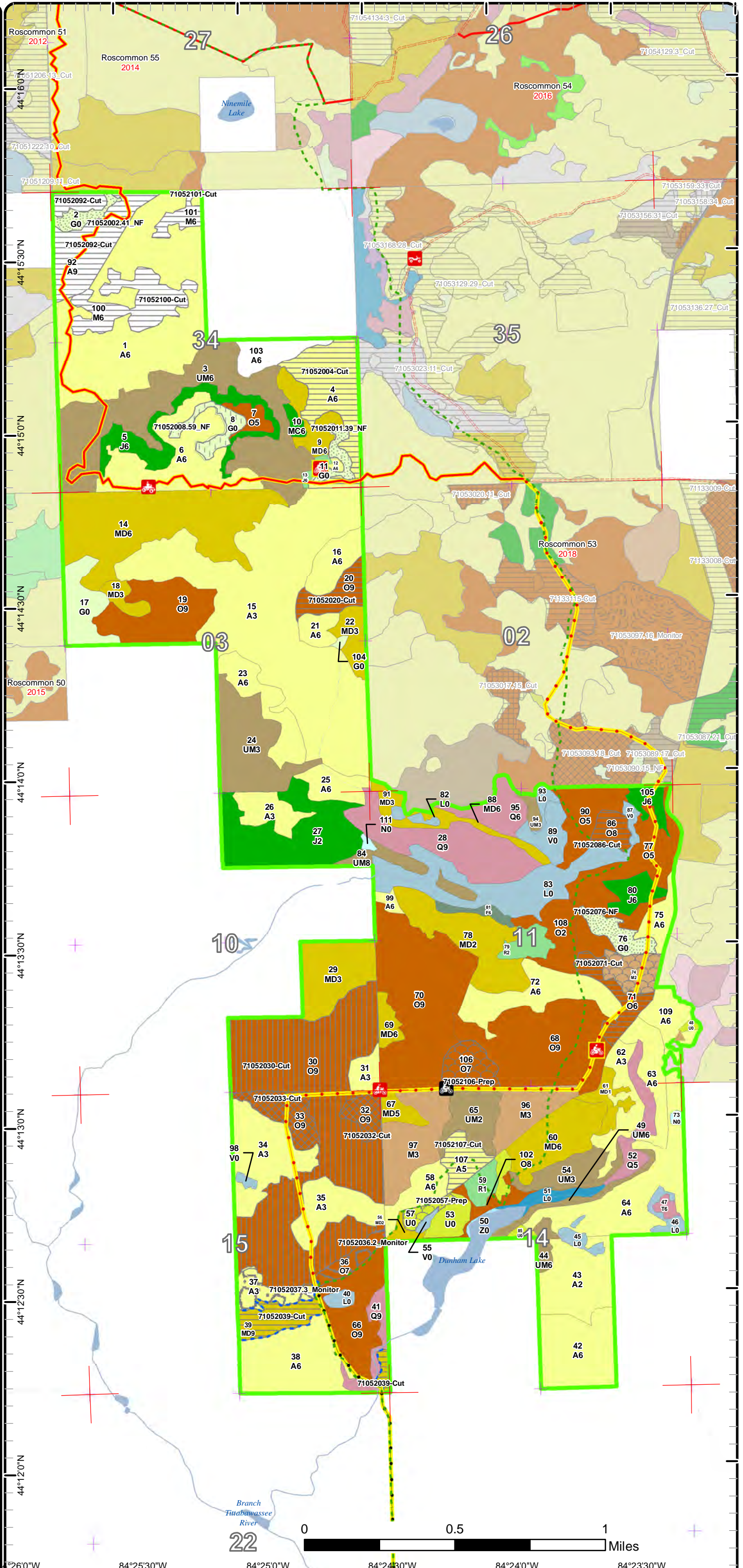
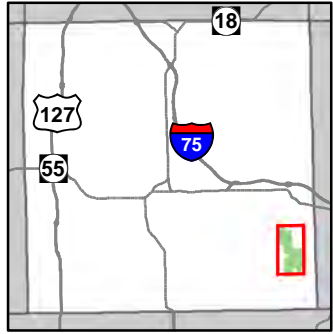
The following information is displayed, where pertinent, on the attached compartment maps:

- 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: 52
 T21N, R01W, Sec. 2, 3, 10, 11, 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018

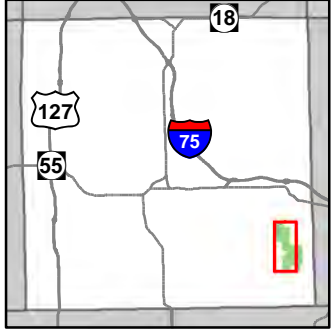


- Miris Corners
- Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Berms
- Culvert
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Regeneration Survey
- Shelter Wood (w/Reserves)
- Opening Maintenance
- Mowing
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- Lakes

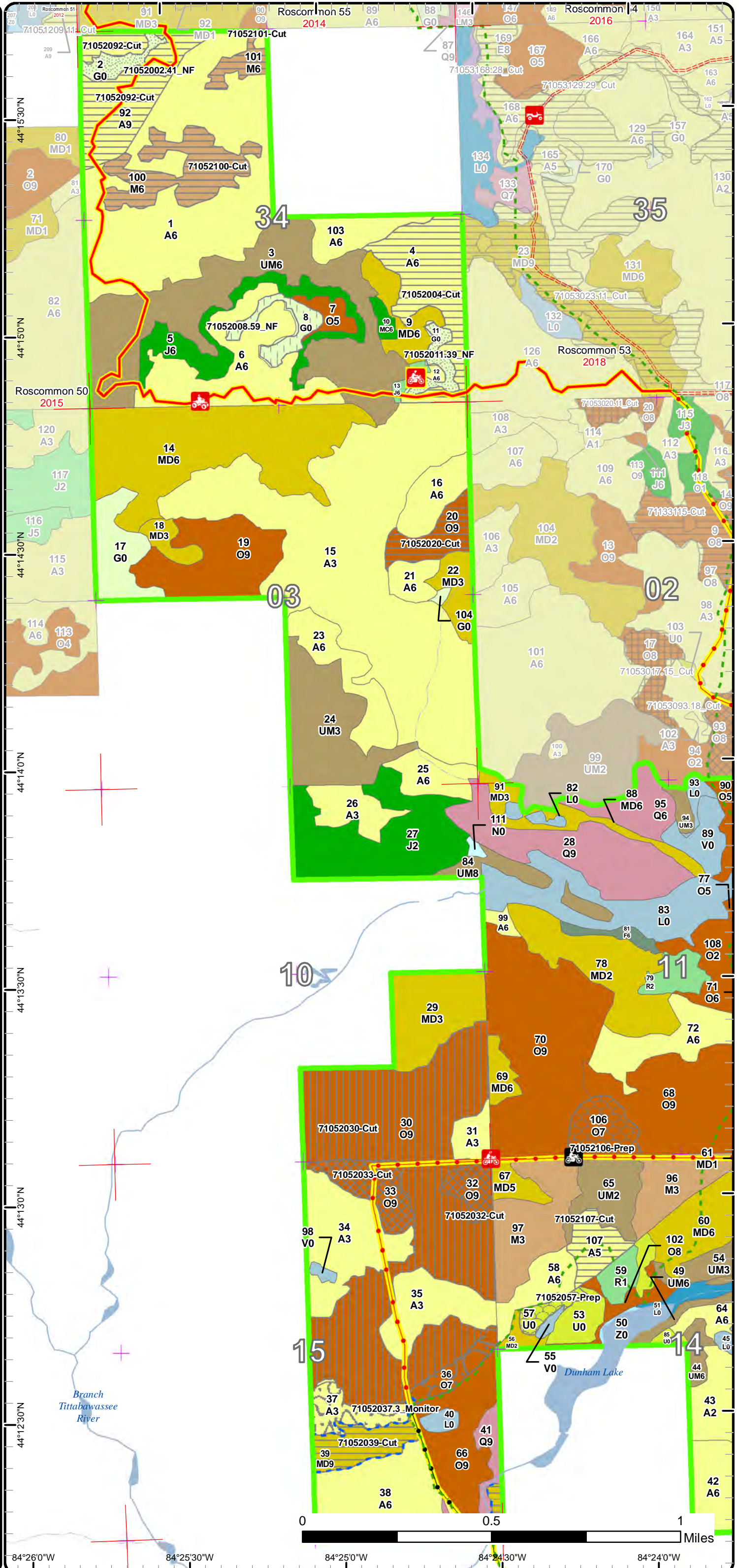
Cover Type & Treatments Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11,
 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



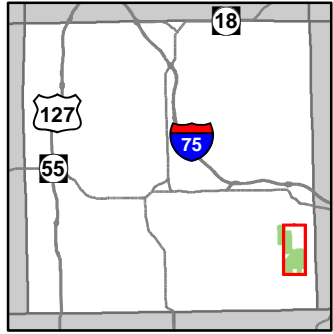
- Miris Corners
- Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Regeneration Survey
- Shelter Wood (w/Reserves)
- Opening Maintenance
- Mowing
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- Lakes



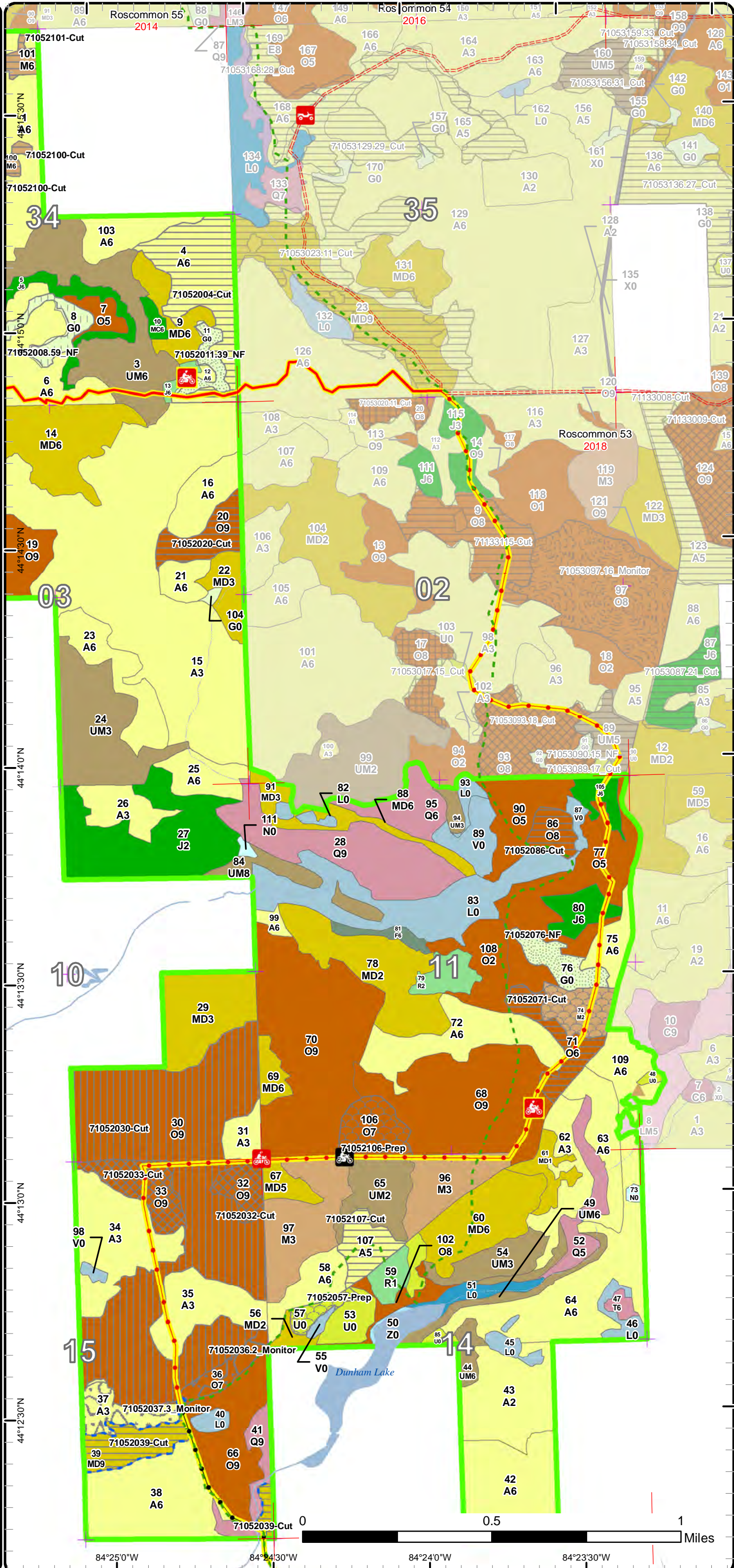
Cover Type & Treatments Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11, 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



- Miris Corners
- Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Berms
- Culvert
- Compartment Boundary
- Treatments with Site Conditions
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Regeneration Survey
- Shelter Wood (w/Reserves)
- Opening Maintenance
- Mowing
- Site Prep
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland
- Lakes

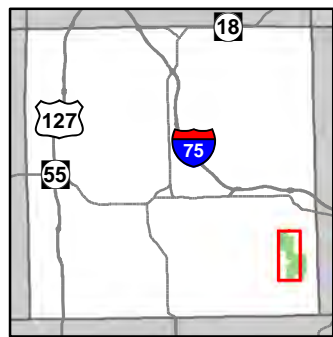


84°25'0"W 84°24'30"W 84°24'0"W 84°23'30"W

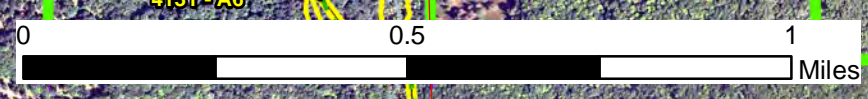
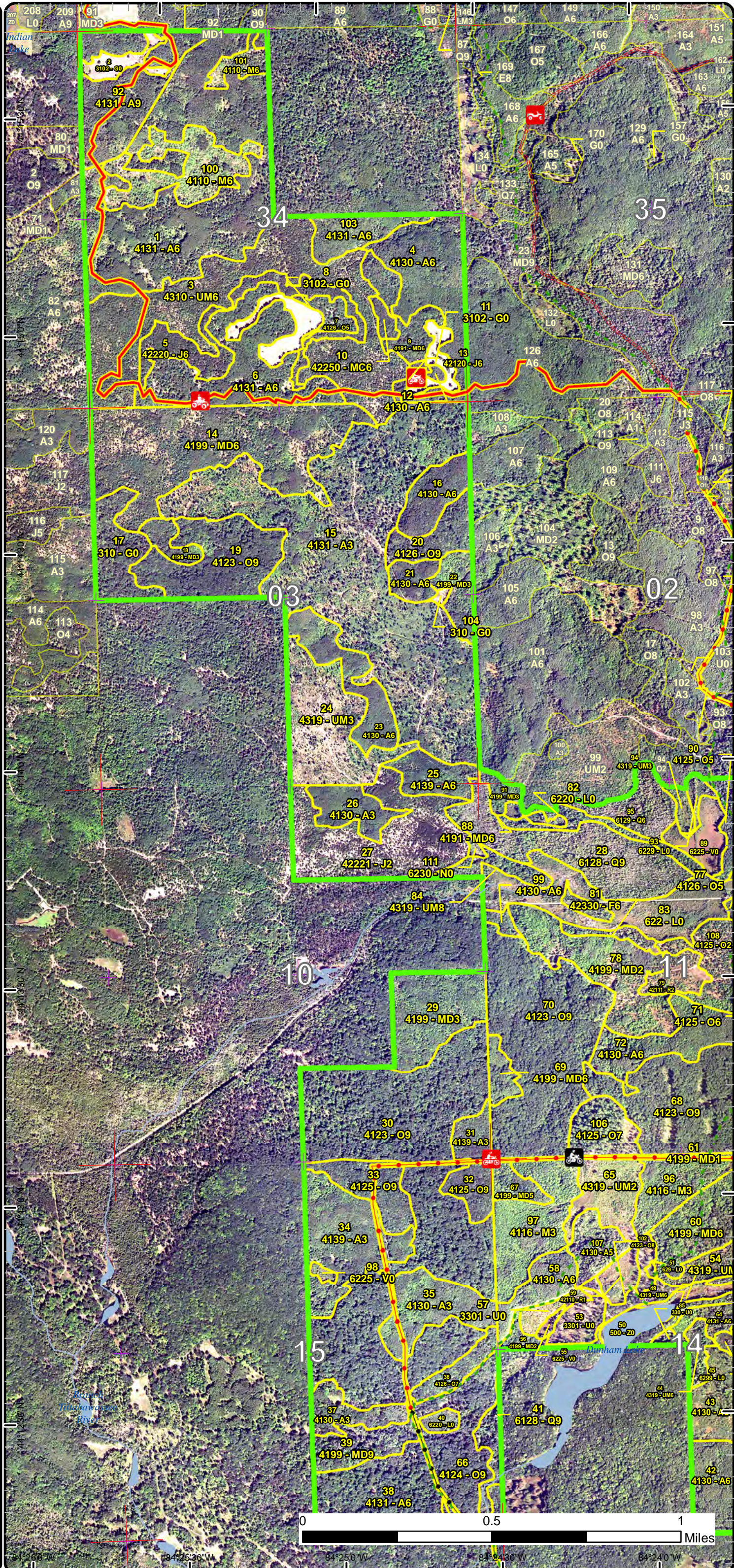
Stand Boundary Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11,
 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



- Miris Corners
 - Remonumented Section Corners
 - Counties
 - Motorcycle Trails (DNR License)
 - MCCCT Trails
 - Motorcycle Trails
 - ORV Trails
 - ORV Routes
 - Designated Hiking Trails
 - ORV License
 - ORV License & Trail Permit
 - Designated ATV
 - Designated ORV Route
 - Michigan Cross Country Cycle Trail (MCCCT)
 - Intermittent Stream
 - Lake/Pond
 - Perennial River
 - Lakes and Rivers All
 - Compartment Boundary
 - Stand Boundaries
- 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 430 - Upland Mixed Forest
 - 612 - Lowland Coniferous Forest
 - 310 - Herbaceous Openland
 - 330 - Low Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 629 - Mixed non-forested wetland

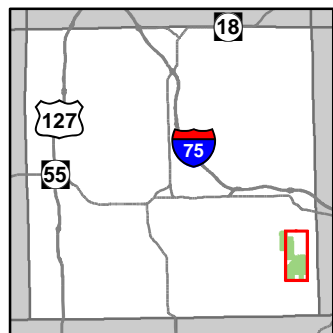


84°26'W 84°25'36"W 84°25'6"W 84°24'30"W 84°24'0"W

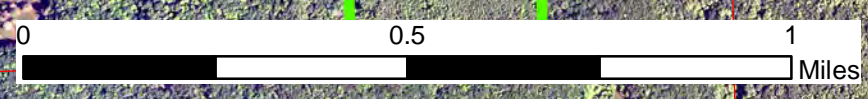
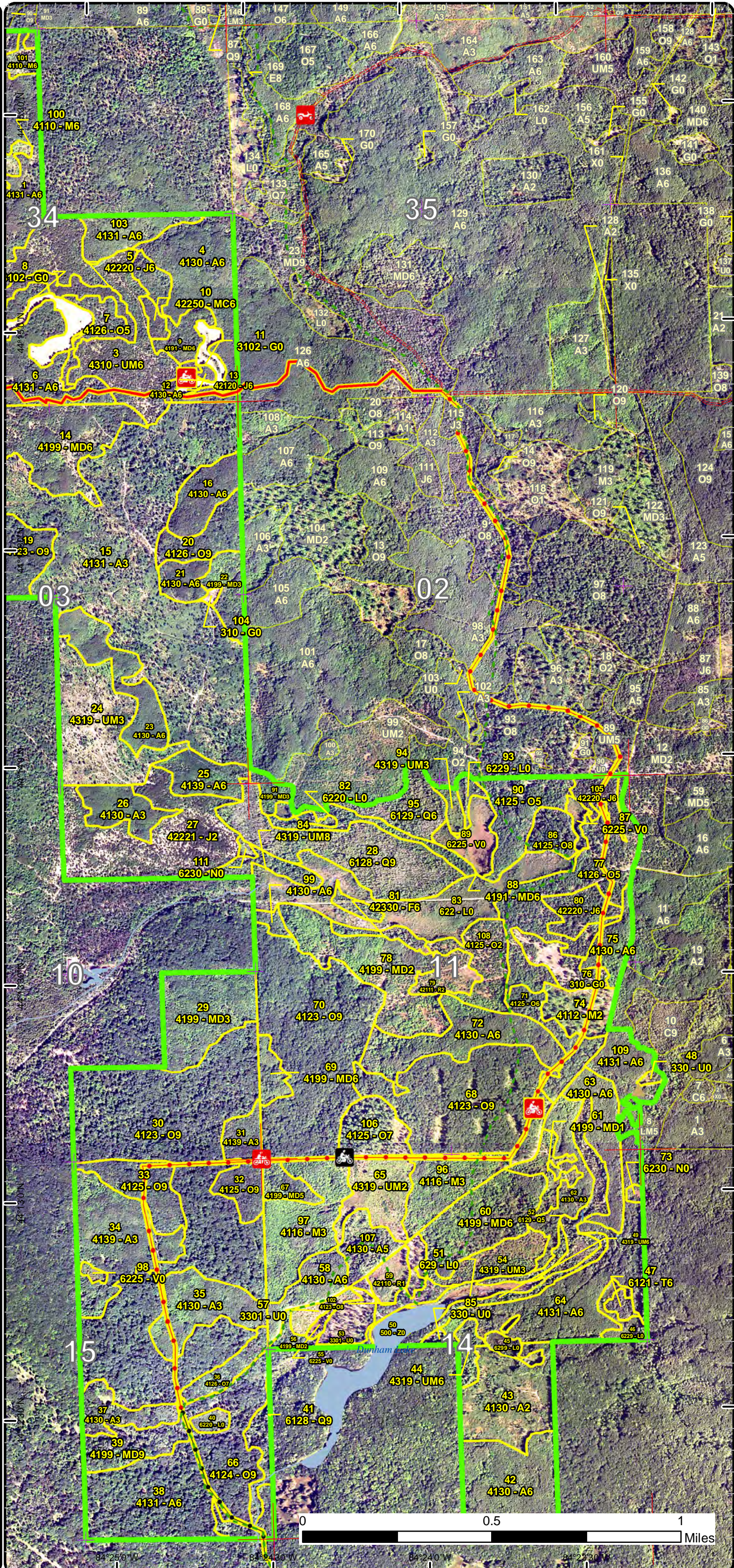
Stand Boundary Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11,
 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



- Miris Corners
- Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Berms
- Culvert
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 629 - Mixed non-forested wetland

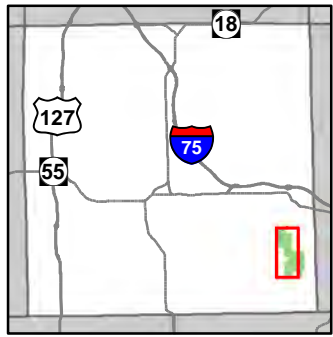


84°25'6" W 84°24'30" W 84°24'0" W 84°23'30" W

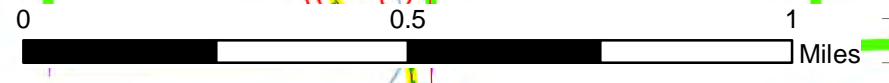
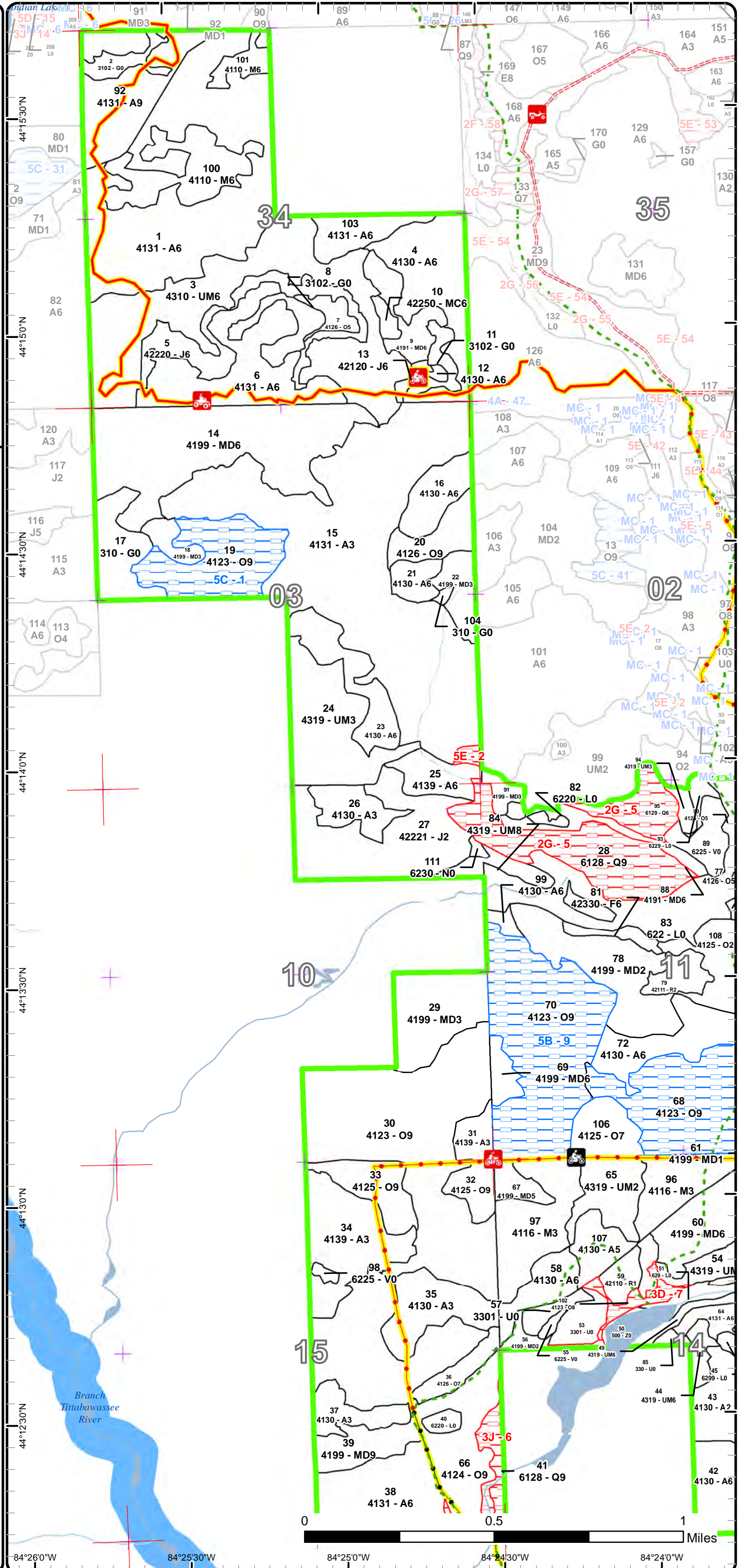
Special Conservation Areas & Site Conditions Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11, 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



- Miris Corners
- Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- 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)
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer

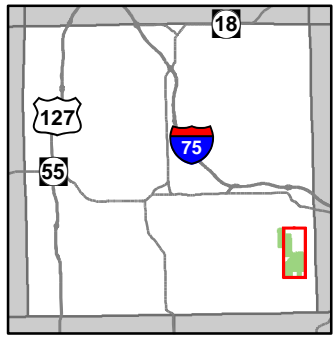


84°26'0"W 84°25'30"W 84°25'0"W 84°24'30"W 84°24'0"W

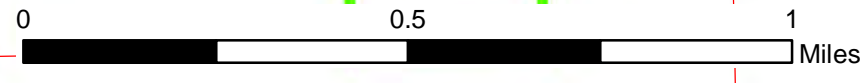
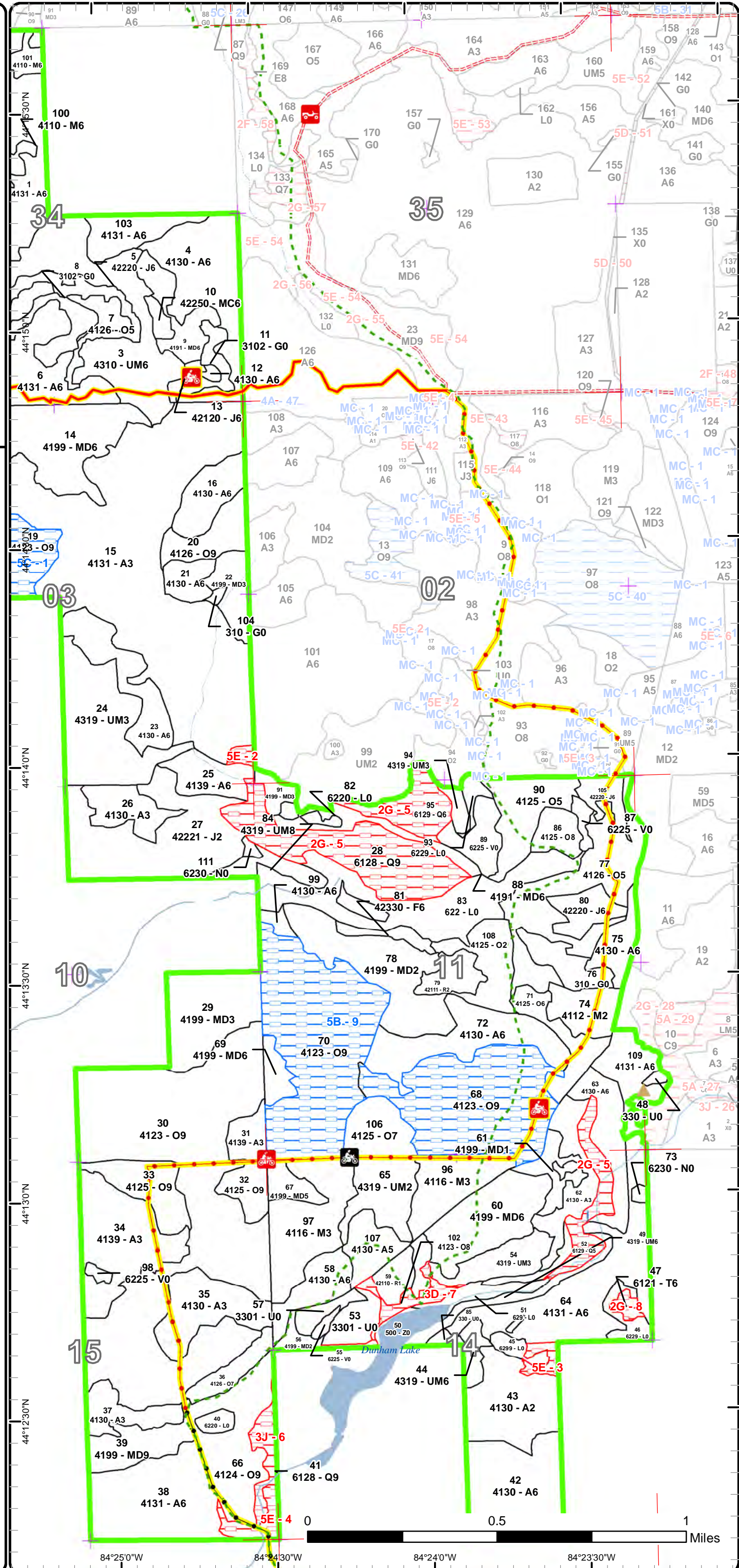
Special Conservation Areas & Site Conditions Map

Compartment: 52
 T21N, R01W, Sec. 2, 3, 10, 11,
 14, 15
 T22N, R01W, Sec. 34

County: Roscommon
 Unit: Roscommon
 Mgmt Area: Ogemaw Hills
 YOE: 2020
 Acres: 2,504 GIS Calculated
 Examiner: Doug Bates
 Map Revised: 12/27/2018



- Miris Corners
- + Remonumented Section Corners
- Counties
- Motorcycle Trails (DNR License)
- MCCCT Trails
- Motorcycle Trails
- ORV Routes
- Designated Hiking Trails
- ORV License
- ORV License & Trail Permit
- Designated ATV
- - - Designated ORV Route
- Michigan Cross Country Cycle Trail (MCCCT)
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Berms
- Culvert
- 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)
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes



84°25'0"W 84°24'30"W 84°24'0"W 84°23'30"W

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	48	215	243	118	253	40	0	0	0	0	0	0	0	0	0	0	0	917
Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Herbaceous Openland	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Jack Pine	0	0	0	55	0	47	0	0	0	0	0	0	0	0	0	0	0	0	101
Low-Density Trees	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Conifers	0	0	0	16	0	0	0	0	0	0	0	11	0	14	0	0	46	0	87
Lowland Shrub	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
Marsh	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	0	0	68	129	56	14	0	0	0	0	19	0	0	0	0	0	0	0	286
Natural Mixed Pines	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Northern Hardwood	0	13	55	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	104
Oak	0	0	18	0	0	73	0	0	0	0	416	53	27	0	0	0	0	0	587
Red Pine	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Tamarack	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Mixed Forest	0	81	0	100	0	13	0	0	0	0	12	0	0	0	0	0	0	6	212
Upland Spruce/Fir	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	183	158	356	543	179	443	40	0	0	0	447	64	27	14	0	0	46	6	2503



Report 2 – Treatment Summary

Roscommon Mgt. Unit
Year of Entry: 2020

Acres of Harvest

Compartment 52
Total Compartment Acres: 2,504

Commercial Harvest - 365
Harvests with Site Condition - 19
Next Step Harvest - 15
Habitat Cut - 16

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	92	0	0	0	0	0	0	0	0	92
Mixed Upland Deciduous	19	0	0	0	0	0	0	0	0	19
Northern Hardwood	37	0	0	0	0	0	0	0	0	37
Oak	37	27	0	0	172	0	0	0	0	236
Total	185	27	0	0	172	0	0	0	0	384

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	384	34	0	0	0	21	0	34		473
Next Step	16	368	108	0	0	280	606	34		1410
Total	400	402	108	0	0	280	627	68		1884



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	71052002.41_NF	7.2	3102 - Grass	Nonstocked			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, Nine Mile Field 15.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/24/2012

4	71052004-Cut	40.2	4130 - Aspen	Poletimber Well	43	81-110	Harvest	Clearcut with Retention	4130 - Aspen	Even-Aged	Draft Field Boundary
---	--------------	------	--------------	-----------------	----	--------	---------	-------------------------	--------------	-----------	----------------------

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches. Place a retention island about 5% in size towards the upper north middle of stand. Place drumming log

Specs: spec. and wildlife opening protection language in sale.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Fully stocked aspen stand.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

8	71052008.59_NF	9.4	3102 - Grass	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Draft Field Boundary
---	----------------	-----	--------------	------------	--	--	--------------	---------------------------------	---------------------------	--	----------------------

Habitat Cut: No**Site Condition:**

Prescription Mow, cultivate, fertilize, seed as required to maintain established Wildlife Opening, Nine Mile Field 19.

Specs:

Next Step NonForestMgt, Herbaceous/Crop/Grass Planting

Treatments:

Acceptable

Regen:

Other Possibly plant Rye.

Comment:

Proposed Start Date: 10/24/2012

11	71052011.39_NF	6.4	3102 - Grass	Nonstocked			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, Nine Mile Field 20.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/24/2012



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
20	71052020-Cut	14.1	4126 - White, Black, N. Pin Oak	Sawtimber Well	107	111-140	Harvest	Clearcut with Retention	4126 - White, Black, N. Pin Oak	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches. Place a retention island on a high knoll towards the center of the stand of 5 percent by size.

Specs:

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Roller Chopping; Pesticide, (Inactive)Skidder/Mechanical; SitePrep, Trenching;

Treatments: Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Oak to moderate stocking. If fails, convert to a red pine plantation.

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

30	71052030-Cut	171.8	4123 - Red Oak	Sawtimber Well	95	81-110	Harvest	Shelterwood with Retention	4121 - Oak, Aspen	Two-Aged	Draft Field Boundary
----	--------------	-------	----------------	----------------	----	--------	---------	----------------------------	-------------------	----------	----------------------

Habitat Cut: No**Site Condition:**

Prescription Mark oak within stand to have a residual basal area between 40 and 60. Targeting to leave the healthiest, largest crowned oaks in place. Side

Specs: towards white oaks when possible. Cut all red maple with no diameter stopper. Spread slash out uniformly over site. Do not removed any oak with dense aspen understory plus do not cut any of this aspen understory. Follow-up with a scarification of the ground with a forestry disc where the oak/maple were removed. Monitor maple regrowth with a possible release spray for oak regeneration. Place trail protection specs.

Next Step SitePrep, Scarification; Pesticide, (Inactive)Skidder/Mechanical; Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Oak to moderate stocking.

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

32	71052032-Cut	9.3	4125 - Black, N. Pin Oak	Sawtimber Well	112	111-140	Harvest	Single Tree Selection	4126 - White, Black, N. Pin Oak	Uneven-Aged	Draft Field Boundary
----	--------------	-----	--------------------------	----------------	-----	---------	---------	-----------------------	---------------------------------	-------------	----------------------

Habitat Cut: No**Site Condition:**

Prescription Thin to 70-90 BA. Leave the best quality oak, manage for crop tree oaks in this stand. Fair percentage of oaks in the transition zone size

Specs: between pole and sawlog sized. Leave some red maple if they are not suppressed and are sawlog quality or poles with sawlog potential. Very little underscore and it is witch hazel. Take all aspen trees. Decent size clone in center of stand. Place trail protection specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak with mixed deciduous

Regen:OtherComment:

Proposed Start Date: 10/1 /2019

33	71052033-Cut	17.5	4125 - Black, N. Pin Oak	Sawtimber Well	112	111-140	Harvest	Single Tree Selection	4126 - White, Black, N. Pin Oak	Uneven-Aged	Draft Field Boundary
----	--------------	------	--------------------------	----------------	-----	---------	---------	-----------------------	---------------------------------	-------------	----------------------

Habitat Cut: No**Site Condition:**

Prescription Thin to 70-90 BA. Leave the best quality oak, manage for crop tree oaks in this stand. Fair percentage of oaks in the transition zone size

Specs: between pole and sawlog sized. Leave some red maple if they are not suppressed and are sawlog quality or poles with sawlog potential. Understory is witch hazel and red maple. Take all aspen trees. Place trail protection specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Oak with mixed deciduous.

Regen:OtherComment:

Proposed Start Date: 10/1 /2019



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
66	71052036.2_Monitor	8.9	4124 - Red with White Oak	Sawtimber Well	95	81-110	Monitoring	Natural Regen (Re-Inventory)	4121 - Oak, Aspen	Two-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription Specs:</u>											
<u>Next Step Treatments:</u>											
<u>Acceptable Regen:</u> Oak, red maple, aspen mix											
<u>Other Comment:</u> Percent to Treat = 100%											
<u>Proposed Start Date:</u> 10/30/2017											
37	71052037.3_Monitor	12.4	4130 - Aspen	Sapling Well	2	Immature	Monitoring	Natural Regen (Re-Inventory)	413 - Aspen	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription Specs:</u>											
<u>Next Step Treatments:</u>											
<u>Acceptable Regen:</u> Aspen to full stocking											
<u>Other Comment:</u> Percent to Treat = 100%											
<u>Proposed Start Date:</u> 10/30/2017											
39	71052039-Cut	19.3	4199 - Other Mixed Upland Deciduous	Sawtimber Well	96	111-140	Harvest	Clearcut	4131 - Aspen, Oak	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition: Long-Term Retention								
<u>Prescription Specs:</u> Final harvest stand to try and stimulate aspen to spread throughout stand more. Oak will not seed well, so maybe can get some stump sprouting. Mark 20-30 basal area of the largest diameter/crowned oaks for mast, side to white oaks. Remove all species but those marked in green and any white pine 8 inches and under. Place line around the vernal ponds located on the north side of stand. Place trail protection specs.											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Acceptable Regen:</u> Aspen with a mixed deciduous of oak and maple to full stocking would be acceptable.											
<u>Other Comment:</u> The portion of this stand that is separated and isolated to the southeast of the main stand is to be left for retention. It is mostly mature aspen with some oak. It is on a steep hillside that will be damaged trying to cut and lead to erosion.											
<u>Proposed Start Date:</u> 10/1 /2019											
57	71052057-Prep	5.0	3301 - Low Density Deciduous Trees	Nonstocked	0	Unspecified	SitePrep	Roller Chopping	4211 - Planted Red Pine	Even-Aged	Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription Specs:</u> Roller chop the entire site followed-up by an herbicide treatment of any regrowth of woody competition. Trench the site and plant to red pine. Release spray if necessary.											
<u>Next Step Treatments:</u> Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)											
<u>Acceptable Regen:</u> Full stocking to pure red pine plantation											
<u>Other Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2018											



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
71	71052071-Cut	14.3	4125 - Black, N. Pin Oak	Poletimber Well	94	51-80	Harvest	Clearcut	4126 - White, Black, N. Pin Oak	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches. Do not cut any white oak with a dbh. over 12 inches. Leave no retention island. Place trail protection
Specs: specs.

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Scarification; Monitoring, Natural Regen (Intermediate); Pesticide,
Treatments: (Inactive)Skidder/Mechanical; SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artifi

Acceptable Oak to moderate stocking levels. If fails to meet this level, establish red pine onsite.
Regen:

Other If soil disturbing works on regenerating oaks within the stand immediateley to the north of this stand, try it on this site. If that does not work, treat
Comment: any woody regeneration that is coming in and convert site to red pine.

Proposed Start Date: 10/1 /2019

74	71052074- Prep	13.4	4112 - Maple, Beech, Cherry Association	Sapling Medium	7	Immature	SitePrep	Scarification	412 - Oak Types	Even-Aged	Field Boundary
----	-------------------	------	---	----------------	---	----------	----------	---------------	-----------------	-----------	----------------

Habitat Cut: No**Site Condition:**

Prescription Roller chop/scarify site with forestry disk except for large aspen clones areas if present. Disturb soil to provide seed bed for natural seeding from
Specs: residual trees. Time scarifying treatment in fall during an acorn producing year. Place trail protection specs.

Next Step Monitoring, Natural Regen (Intermediate); Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Oak species to a medium stocking. If oak fails to restock, plant the site to red pine. Red pine to 80% free to grow.
Regen:

Other If the oak fails to regenerate to a medium stocking, trench and interplant site with red pine in open areas.

Comment:

Proposed Start Date: 10/1 /2018

76	71052076-NF	11.2	310 - Herbaceous Openland	Nonstocked			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, Nine Mile Field 14.

Specs:

Next Step NonForestMgt, Mowing

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

86	71052086-Cut	8.5	4125 - Black, N. Pin Oak	Sawtimber Medium	95	81-110	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Even-Aged	Draft Field Boundary
----	--------------	-----	--------------------------	------------------	----	--------	---------	-------------------------	-------------------	-----------	----------------------

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches with the following exceptions: do not cut any red pine. do not cut any white oak with a dbh over 12
Specs: inches. Place the south line along the top of the ridge that slopes down to the "I" type. This will be used for retention. Access will be through the barren valley that runs from the road north of the stand, through stand 90 and touches the northwest corner of this stand.

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Roller Chopping; Pesticide, (Inactive)Skidder/Mechanical; SitePrep, Trenching;

Treatments: Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Oak with aspen to a moderate stocking. If fails to meet that stocking level, plant to red pine.

Regen:

Other Have the site roundwooded and have the wood hauled up to the grass opening in the compartment to the north. Do not want a new haul road
Comment: created for this small of stand.

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
92	71052092-Cut	39.9	4131 - Aspen, Oak	Sawtimber Well	51	81-110	Harvest	Clearcut with Retention	4131 - Aspen, Oak	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches. Place a retention island of 5 percent somewhere close to the middle of the the south stand portion that
Specs: has both oak and aspen within it. Place drumming log spec. and do not use the wildlife opening for timber sale activity.

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

Acceptable aspen and oak to full stocking
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

100	71052100-Cut	30.2	4110 - Sugar Maple Association	Poletimber Well	44	1-50	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
-----	--------------	------	-----------------------------------	--------------------	----	------	---------	----------	----------------------------	-----------	-------------------------

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species, small enough volume that may not need chipped to facilitate trenching. If not chipped, slash must be scattered evenly
Specs: over the entire stand area and not concentrated in "windrow" areas. No retention due to cover type conversion.

Next Step SitePrep, Roller Chopping; Pesticide, (Inactive)Skidder/Mechanical; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial
Treatments: Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Planted red pine to full stocking.
Regen:

Other Dependent on the amount of woody vegetation under two inches, still not have to roller chop some areas and then possibly require a herbicide
Comment: pre-treatment to suppression cherry from re-sprouting prior to planting.

Proposed Start Date: 10/1 /2019

101	71052101-Cut	6.7	4110 - Sugar Maple Association	Poletimber Well	44	1-50	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
-----	--------------	-----	-----------------------------------	--------------------	----	------	---------	----------	----------------------------	-----------	-------------------------

Habitat Cut: No**Site Condition:**

Prescription Final harvest all species to two inches. Possibly not enough volume within the stand that chipping may be required. If do not chip, slash needs
Specs: to be scattered evenly over the entire stand area and not windrowed. No retention do to stand conversion.

Next Step Pesticide, (Inactive)Skidder/Mechanical; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial
Treatments: Regen(3yr); SitePrep, Roller Chopping

Acceptable fully stocked red pine plantation
Regen:

Other Dependent on the amount of woody vegetation under two inches, still not have to roller chop some areas and then possibly require a herbicide
Comment: pre-treatment to suppression cherry from re-sprouting prior to planting.

Proposed Start Date: 10/1 /2019

106	71052106- Prep	15.5	4125 - Black, N. Pin Oak	Sawtimber Poor	94	1-50	SitePrep	Scarification	412 - Oak Types	Even-Aged	Field Boundary
-----	-------------------	------	-----------------------------	-------------------	----	------	----------	---------------	-----------------	-----------	----------------

Habitat Cut: No**Site Condition:**

Prescription Roller chop/scarify site with forestry disk except for large aspen clones areas if present. Disturb soil to provide seed bed for natural seeding from
Specs: residual trees. Time scarifying treatment in fall during an acorn producing year. Place trail protection specs.

Next Step Monitoring, Natural Regen (Intermediate); Harvest, Clearcut; Pesticide, Skidder - Site Prep; SitePrep, Trenching; Planting, Initial Plant;
Treatments: Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Oak to moderate stocking, if fails to regenerate to oak plant to red pine to 80% free to grow..
Regen:

Other If oak fails to regenerate to moderate stocking, remove the oak overstory and plant the stand to a red pine plantation.
Comment:

Proposed Start Date: 10/1 /2018



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
107	71052107-Cut	12.2	4130 - Aspen	Poletimber Medium	44	1-50	Harvest	Clearcut	413 - Aspen	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Final harvest all species to two inches. No retention due to the poor condition of the current cover type. Place drumming log spec in sale Place
Specs: trail protection specs..

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

Acceptable moderately stocked aspen/mixed deciduous.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

**Total Treatment
Acreage Proposed: 473.4**

Report 4 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment: 52
Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available		Dominant Site Conditions						
		With Condition				5B	5C	2G	3D	3J	5E	
917	617	0		299	Aspen							299
17	17	0		0	Bog							
57	57	0		0	Herbaceous Openland							
102	102	0		0	Jack Pine							
21	19	0		1	Low-Density Trees							1
88	0	0		88	Lowland Conifers			77		11		
77	73	0		5	Lowland Shrub							5
2	2	0		0	Marsh							
286	283	0		3	Mixed Upland Deciduous							3
3	3	0		0	Natural Mixed Pines							
105	105	0		0	Northern Hardwood							
587	383	197		8	Oak	157	39		8			
16	16	0		0	Red Pine							
3	0	0		3	Tamarack			3				
212	206	0		6	Upland Mixed Forest							6
5	5	0		0	Upland Spruce/Fir							
6	6	0		0	Water							
2,504	1,895	197		413	Total Forested Acres	157	39	80	8	11		314
	76%	8%		16%	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	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Roscommon Mgt. Unit
Doug Bates : Examiner

Compartment: 52
Year of Entry: 2020

3	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	5E: Long-Term Retention	3	2F: Too steep	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	77	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	3D: Recreational / Scenic values	8	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Roscommon Mgt. Unit

Doug Bates : Examiner

Compartment: 52

Year of Entry: 2020

9	Available	5B: Maintain for regeneration purposes	157	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4131 - Aspen, Oak	Poletimber Well	121.2	44	81-110	Large stand mostly aspen and oak. Covertypes is clonal, having patches of aspen and patches of oak, some areas are mixed. The concentration of canopy species is variable.
3	4310 - Pine, Oak Mix	Poletimber Well	100.4	21	1-50	Jack pine with mixed oak and cherry. Stand was regenerated in 1996 or 1997. Trenched and jack pine was direct seeded in Dec. 1997. The pine is not of good quality for saw material. Almost all the pine are bushy, not self-limbing, and have large limbs all the way to the base.
4	4130 - Aspen	Poletimber Well	40.2	43	81-110	Decent aspen stand in rolling terrain. Pockets of oak/cherry mixed in, mainly on the fringes. Stand for the most part is fairly solid to aspen. Very little maple with the understory being mainly oak.
5	42220 - Natural Jack Pine	Poletimber Well	26.1	43	51-80	Jack pine stand originated around 1975. Old fire plow lines present. There is a fair amount of coarse woody debris from dying jack pine. Could be a stand to cut early in need to balance jack pine age classes within the compartment.
6	4131 - Aspen, Oak	Poletimber Well	49.0	43	81-110	Aspen is of varying quality and size with numerous pockets of aspen in the saw class right next to pockets of aspen barely pole sized. Grass inclusions on the east end are used for camping. The oak species take up the areas void of aspen. Heavy regeneration of it in the understory of the oak canopy. Just small amounts of oak understory within the aspen.
7	4126 - White, Black, N. Pin Oak	Poletimber Medium	5.7	43	1-50	Oak stand, mostly black oak. Density is low especially in the central part of the stand,
9	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	14.2	43	51-80	Smaller diameter oaks. Aspen clones mixed in. Evenly scattered jack pine in stand also.
10	42250 - Pine, Oak	Poletimber Well	3.0	43	81-110	Jack pine stand with trace amounts of oak, year of origin is around 1975. Saplings and poles with very little understory aside from bracken fern.
12	4130 - Aspen	Poletimber Well	1.1	41	51-80	Small bigtooth aspen stand with trace oak surrounded on three sides by a wildlife food plot.
13	42120 - Planted Jack Pine	Poletimber Well	2.4	43	51-80	Half way decent plantation. Numerous blow-downs of sapling sized poles.
14	4199 - Other Mixed Upland Deciduous	Poletimber Well	91.0	21	1-50	This stand was clearcut in 1997 and was trenched but doesn't appear to have been planted. Jack pine seeded in naturally. The species distribution is uneven, there is aspen and oak pockets and small open areas scattered throughout the stand.
15	4131 - Aspen, Oak	Sapling Well	197.0	12	Immature	This stand was harvested in 2006 all trees except for the white oak were cut. The stand is now two-aged. There is black oak regen from stump sprouts and single stems. The basal area and species distribution are both variable, Willow is scattered throughout.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4130 - Aspen	Poletimber Well	15.4	42	111-140	Nice vigorous bigtooth aspen stand with red maple and a small amount of oak. This is quality timber, there is good potential for sawlogs. The stand is self thinning, there is some CWD. Part of this stand extends east into the adjacent compartment.
18	4199 - Other Mixed Upland Deciduous	Sapling Well	6.4	21	Immature	Small aspen and maple stand that was part of a larger harvest in 1997.
19	4123 - Red Oak	Sawtimber Well	39.2	109	81-110	Nice healthy, mature red oak. The red maple understory is developing and is dense in places, there is a small amount of white pine. Thinning will likely promote and increase the vigour of the red maple understory and accelerate the succession of the stand moving it towards a mixed maple and pine cover type. This is a good site and the red oak is healthy if we leave the best trees they should live to be quite old and remain a dominant presence in the stand.
20	4126 - White, Black, N. Pin Oak	Sawtimber Well	14.1	107	111-140	Mixed oak, black/red hybrid. The trees are healthy. According to previous cutting records this stand may have been selection harvested in 1968. Has an open understory. Only white oak has any size class that could benefit from thinning. Recommend a final harvest and leave retention pocket of 5 percent on a high knoll towards the middle of the stand. Far northeast corner does have heavy understory of maple and some oak..
21	4130 - Aspen	Poletimber Well	8.1	21	Unspecified	Aspen stand mixed with maple and oak that was regenerated in 1997.
22	4199 - Other Mixed Upland Deciduous	Sapling Well	11.5	11	Immature	Stand treated in 2007. There is a small aspen pocket at the north end but the majority of the north 2/3rds is maple with oak mixed in. The southern 1/3rd is an aspen clone with heavy maple understory.
23	4130 - Aspen	Poletimber Well	23.1	21	Unspecified	This stand was regenerated in 1997. The species composition is aspen with oak and maple. On a ridge.
24	4319 - Mixed Upland Forest	Sapling Well	43.5	8	Immature	This stand was regeneration harvested in 2006. There was oak, red maple and cherry regenerating but not enough to have a fully stocked stand. In 2009 the stand was trenched and in 2010 it was hand planted to red pine at 600 trees per acre. The red pine looks healthy with very little mortality. About 20 basal area of white oak poles/saw left.
25	4139 - Aspen, Mixed Deciduous	Poletimber Well	13.4	21	51-80	The east/west ends are smaller diameter aspen with a higher component of oak and jack pine. The middle is the best quality aspen.
26	4130 - Aspen	Sapling Well	13.8	21	Immature	Aspen that was regenerated in 1997 there is some jack pine, oak and maple mixed in.
27	42221 - Natural Jack Pine, Mixed Deciduous	Sapling Medium	55.3	21	Immature	Jack pine stand that was regenerated in 1997. The regeneration looks natural and is dense in some areas sparse in others. The areas sparse of jack pine are mostly open with a handful of individual stemmed oaks/cherries scattered about. The "open" areas are too scattered to make it logistically feasible to plant to increase stocking levels.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	46.4	150	141-170	Lowland coniferous stand with dominant white pine more in the north. Band of tamarack along the southern fringe. There was stand in water at the time of inventory with numerous flow-age channels into the tag alder marsh. The regeneration is very dense with no consistent one type of sub-canopy. Each species is sporadically mixed about. Too sensitive of soils to try and treat.
29	4199 - Other Mixed Upland Deciduous	Sapling Well	32.0	22	1-50	Mixed stand of maple, oak, aspen and cherry, the oak and maple are mostly stump sprouts.
30	4123 - Red Oak	Sawtimber Well	172.1	95	81-110	The aspen and red maple were all harvested out in 1997. The regeneration is prolific red maple with aspen clones being the only other regeneration. No oak regeneration to speak of. Can either wait and manage the maple and over time let the stand convert to maple/aspen, or with the red oak being good quality and healthy we may want to try and get oak to regenerate. Looking for an oak stand with a well pronounced aspen component. Bring the basal area down to between 40 and 60. Leave the healthiest oaks with the largest crowns. Cut all the maple out at the same time. Do not mark to remove oak in the aspen clones and leave the aspen also. Then run over the treated areas with a forestry disc to expose mineral soil. May require waiting a year or so post harvest to allow the tops left to dry out and become more brittle. This will also allow any red maple to start to regenerate before it is chopped up again. May want to put in a release herbicide spray treatment just in case. There are too many variables to try a prescribed burn. First, with the size of the stand there would be too much line work needed not only on the perimeter but also isolating the numerous aspen areas within the stand we don't want burnt that this increases the oak wilt potential exponentially. Secondly, the oak litter thickness would require multiple lower intensity burns to try and accomplish exposing the mineral soil as too much heat would likely cat face the residual oaks leading to oak wilt vectors. Thirdly, the terrain undulates with hills and valleys where it would be much harder to control the fire intensities. A forestry disc can go around the clones and be done outside the oak wilt window.
31	4139 - Aspen, Mixed Deciduous	Sapling Well	7.9	22		Small aspen stand that was regenerated in 1996. The red oak is mostly from stump sprouts.
32	4125 - Black, N. Pin Oak	Sawtimber Well	9.3	112	111-140	Mature red oak stand with red maple and bigtooth aspen there is very little understory development. The terrain is hilly.
33	4125 - Black, N. Pin Oak	Sawtimber Well	17.5	112	111-140	Oak stand that is healthy and doesn't appear to have been managed. The terrain is hilly, the understory has witch hazel and red maple.
34	4139 - Aspen, Mixed Deciduous	Sapling Well	38.6	22	Immature	Mixed upland stand with aspen, red maple and oak that was regenerated in 1996. The west side along private has numerous small openings that is more oak and maple. The east 2/3rds is the dense aspen.
35	4130 - Aspen	Sapling Well	24.8	22	Immature	Aspen and red maple stand the ear of origin is 1996.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	4126 - White, Black, N. Pin Oak	Sawtimber Poor	8.9	94	1-50	Stand was treated in the winter 2016. All the aspen was removed and the oak/maple was marked to about 30 B.A. for residual. Aspen regeneration is starting to fill in in pockets. Some red maple also. The regeneration is still very light at this time.
37	4130 - Aspen	Sapling Well	12.6	2	Immature	Stand final harvested in the winter 2016. Has come back well to aspen but the deer are browsing heavily. Where look see aspen saplings with top leader broke and hanging
38	4131 - Aspen, Oak	Poletimber Well	45.9	21	1-50	the stand was treated in 1996 when the aspen and red maple were removed. they are at the age now that they're in the canopy. The main cover type now is aspen. The aspen and maple have filled around the oak so much that there is no way to remove them especially with the large tops without destroying to much of the young growth. Only about a 2-3 acre piece in the southwest corner of oak with no regeneration under it. Not large enough to treat on its own.
39	4199 - Other Mixed Upland Deciduous	Sawtimber Well	19.4	96	111-140	This is a mature upland stand that appears to have not been managed. The upland portion contains the oak, the north third is a slope downhill containing the aspen and white pine. Several vernal depressions lie along the north line at the bottom of the ridge.
41	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	11.4	109	111-140	A branch of the Tittabawasee flows out of Dunham Lake through this stand, which is a riparian zone. The creek is 3-6 ft across. The stand is mixed cedar, white pine and some hardwoods.
42	4130 - Aspen	Poletimber Well	39.0	38	81-110	A very nice aspen stand that is just on the edge from being classed as saw sized. A high knob in the north central portion of the stand is sparser and lower quality trees. Those on the flats are impressive for their age.
43	4130 - Aspen	Sapling Medium	35.0	7	Immature	Stand cut in summer 2011. Was sparse in some areas prior to harvest and mostly trembling aspen. It has regenerated this way also. On the upper end of the canopy closure percentage. Retention pocket of aspen left in the northeast corner along the marsh. The terrain was to steep to harvest and not cause erosion into the wetland. About an acre and a half island of pure cherry left in the center of the stand. Couple small wet potholes at the south end.
44	4319 - Mixed Upland Forest	Poletimber Well	5.8	40	51-80	A stand created from the remnants of three small stands. In the south is a leatherleaf bog overtopped by legacy white pines. The high ground surrounding it is pole sized white pine. In the middle is a ridge of young maple, oak, and aspen from a past treatment. At the north is a tag alder marsh with some smaller white pine scattered in but mostly on the north fringe.
47	6121 - Tamarack	Poletimber Well	2.6	40	51-80	Tamarack and spruce island with a leatherleaf and moss ground cover.
49	4319 - Mixed Upland Forest	Poletimber Well	12.9	40	81-110	Narrow strip of a north facing slope that goes down to the Dunham lake marsh area and a cedar complex on the east half. It is a mix of pine, maple, oak and some aspen. Will never be able to commercially treat.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
52	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	14.4	122	1-50	Diverse stand with pockets of cedar, then open areas of tag alder and then large white pine. Ground is saturated and appears to be most of the time so is not feasible to be treated.
54	4319 - Mixed Upland Forest	Sapling Well	14.4	8	Immature	Trenched in 2009; Planted to red pine in 2010. The red pine re doing very well where there is no competition. Over 7 foot tall, however where the competition from cherry, maple, and some oak, they are not able to grow as freely and are 2-3 foot tall. Would require an aerial release but the total acreage in area to treat does not justify benefit over cost.
56	4199 - Other Mixed Upland Deciduous	Sapling Medium	3.5	15	Immature	Couple of larger aspen clones with larger amounts of maple, mostly stump sprouted. The oak being red is mainly from seed and not stump sprouted and is thin in concentrations. There is a strip of mature oak along the south line that was left as a buffer along the private property.
58	4130 - Aspen	Poletimber Well	14.0	35	81-110	Very nice aspen stand with a good number of aspen in the saw class.
59	42110 - Planted Red Pine	Sapling Poor	6.9	5	Immature	Wildfire burned through sapling sized stand of aspen in spring 2010. Killed most of the aspen except a large pocket in the southwest corner. Site was trenched and planted to red pine where the aspen was killed.
60	4199 - Other Mixed Upland Deciduous	Poletimber Well	31.7	35	51-80	Predominately a red maple stand with some red and white oak species individually spaced about stand. 90% of the maple are stump sprouted multi-stemmed trees. The south fringe is more open with mainly poor quality cherry. Aspen clone at the east side. Also a pocket of oak/maple regeneration on the northeast tip that is from a treatment done 16 years ago that failed in the majority of the stand. Combined that small pocket that did come back with this stand for better management.
61	4199 - Other Mixed Upland Deciduous	Sapling Poor	8.9	16	Immature	Portion of a past treatment that failed to regenerate very well. There is a pocket of good oak regeneration up at the northwest corner but the remaining regeneration is sporadic red maple, cherry, and a few aspen. Fair amount of open areas. Could possible treat by spraying, roller chopping, and then planting to red pine. The trouble is the stand's shape is not very conducive of aerial spraying and the regeneration is to tall for the skidder. Leave for now and maybe will fill in some more. Will never be a fully stocked stand, moderate at best.
62	4130 - Aspen	Sapling Well	18.0	16	Immature	Regenerating aspen stand that has several sparse areas of cherry and some oak. Parts of this stand are on a slight ridge.
63	4130 - Aspen	Poletimber Well	18.7	35	81-110	Nice aspen stand at the higher end of the pole class. There are a couple wet drains passing through the stand draining form east to west.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4131 - Aspen, Oak	Poletimber Well	51.9	26	81-110	Treated in 1992. Resulted in some good aspen in places. There are some pockets like the west tip and the central area up to the private property that is sparser and contains oak, maple, cherry, and scrubby aspen. At the north end there is a stream with a defined bed and banks emanating from stand 8, Compartment 53 and flow into the cedar complex that eventually dumps into Dunham Lake.
65	4319 - Mixed Upland Forest	Sapling Medium	19.9	5	Immature	Stand was part of a wildfire and killed off the regenerating aspen/maple. It was roller chopped in 2011 and planted to red pine in 2013. The red maple regenerated from the fire/chopping and is competing with the red pine. The red pine in doing real good where the maple is vacant. Would require aerial release but not enough acreage in area to meet cost over benefits.
66	4124 - Red with White Oak	Sawtimber Well	32.3	95	81-110	The aspen and red maple were removed leaving a log class oak stand. No oak regeneration, just heavy maple and some scattered aspen. No pole sized oaks. Leave the stand for now, similar to stand 30. See how the treatment goes in Stand 30 and possibly apply it to this stand next YOE.
67	4199 - Other Mixed Upland Deciduous	Poletimber Medium	6.9	35	51-80	Stand treated in 1983. The west half is rolling terrain with mostly stump sprouted red maple as canopy species. The east half is a steep south facing aspect that is oak canopy species with an aspen clone at the peak. Regeneration in understood matches canopy species.
68	4123 - Red Oak	Sawtimber Well	70.1	94	81-110	Maple was removed and the oak thinned in 2012. The only regeneration is stump sprouting maples. No oak sprouted in the thinned areas or from stumps. Half dozen 1 acre sized clearcut pockets were spaced through the stand. Only regeneration coming back in them is maple. The maple is high to full density in these pockets. Leave the stand for now to see if other treatments being proposed in the area work to get oak back. The Midland to Mackinaw Trail passes through the stand.
69	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.6	35	81-110	Stand was treated in 1983 removing aspen and maple. This created a stand with an aspen clone at the north and south ends. In the middle is a mature oak pocket with a dense regrowth of maple and some aspen. Leave oak as is and treat when aspen is ready. Giving mast for the time being.
70	4123 - Red Oak	Sawtimber Well	87.4	94	51-80	Mature oak stand with a full component of maple in the mid and sub-canopies. The basal area is at the upper end yet not high enough to thin. No poles or small saw class to manage for. This is healthy red oak and will hold at this time.
71	4125 - Black, N. Pin Oak	Poletimber Well	14.3	94	51-80	Aspen and maple were removed in a prior treatment. The oak is mature with a heavy mid and sub-canopy of maple with some small aspen pockets. No way a seed tree will work, the oak couldn't compete with the maple at their current levels. Final harvest all species except the white oaks.
72	4130 - Aspen	Poletimber Well	32.9	35	111-140	Nice aspen stand with not much maple regeneration in the understory. Just on the edge of being saw class sized. Bisected N/S by the Midland to Mackinaw Trail. Some scattered oaks of saw class size scattered throughout. Not enough to count though.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
74	4112 - Maple, Beech, Cherry Association	Sapling Medium	13.4	7	Immature	stand was treated in the fall 2011 as a seed tree harvest. Tentative plan was to Rx burn it prior to this but wasn't. Last inventory stated in may need to be inter-planted amongst oak sprouts, trouble is there is almost none. The few oak stump sprouts that came back will be of little benefit. It has regenerated to red maple. Propose a last chance to get oak in. First it needs to be roller chopped and then followed up with herbicide. Will see if the roller chopper will scarily the soil enough for the oak seeding. If possible after the roller chopping and spraying is done, run over area with forestry disc. If oak then fails to regenerate, plant site to red pine.
75	4130 - Aspen	Poletimber Well	10.3	35	81-110	Decent aspen stand with fair amount of maple regeneration in the understory. The stand grades upslope from the road to the west. The aspen is on the slope and ridge top. The bottom east edge is young oak regeneration.
77	4126 - White, Black, N. Pin Oak	Poletimber Medium	45.1	45	1-50	Sparsely stocked, poor quality oak stand. Most of the oak is from stump sprouting. Cherry is scattered throughout along with jack pine. The aspen is along the bog edge on the west side.
78	4199 - Other Mixed Upland Deciduous	Sapling Medium	39.5	16	Immature	Mixed stand that is high on the canopy closure scale. Majority of the open areas have oak seedlings in them but are getting browsed heavily. The stump sprouted oaks and those in dense areas are not being browsed. Larger maple pocket at the west end.
79	42111 - Planted Red Pine, Mixed Deciduous	Sapling Medium	9.1	8	Immature	Trenched in 2009; Planted to red pine in 2010. Decent red pine where there is no competition. Those under competition are half the height. To much oak as competition to try and release. Leave to go to a mixed stand.
80	42220 - Natural Jack Pine	Poletimber Well	10.5	47	51-80	Jack pine reaching maturity. Could also treat if need to restart jack pine acreage in this M.A.. Midland to Mackinaw Trail bisects the stand.
81	42330 - Upland Fir	Poletimber Well	4.7	35	51-80	North facing slope is mainly balsam fir. Narrow strip with about half too steep too treat without causing erosion concerns.
84	4319 - Mixed Upland Forest	Sawtimber Medium	11.5	90	81-110	Mature oak stand on a narrow ridge. There are younger maple, white pine, and fir coming in along with areas of heavy balsam fir understory. By the time you take out the slopes that go into the wet stands on wither side there would not be enough area to justify treating. Best to leave oak now for mast and let area convert. Is receiving a lot of hunter use.
86	4125 - Black, N. Pin Oak	Sawtimber Medium	8.5	95	81-110	Couple of higher knolls with overmature oak. Small aspen clone on east side. Many of the pin oaks are dying out. Trouble is no regeneration is coming in of a merchantable species. Just cherry. This is a lower quality oak so should get some stump sprouting as did with the stand to the west. Treat with a harvest.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
88	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	10.3	35	51-80	Narrow high ridge between two wet stands. Appears to may have been used by a narrow gauge rail at one time. There is a two-track that runs the entire length but there are wet flows across the trail causing RDR issues so the road should be blocked off. Largest timber is at the far west end. Mostly younger growth.
90	4125 - Black, N. Pin Oak	Poletimber Medium	21.9	45	51-80	Almost all the oak is stump sprouted in multiple stems. No understory except for cherry. Pocket of aspen in the middle towards the north end. The canopy is at the lower percentile. The norther end is sparser. There are valley's that are barren. The best growth is on the higher knolls, mainly in the southern 2/3rds.
91	4199 - Other Mixed Upland Deciduous	Sapling Well	4.7	16	Immature	Mixed stand with some small open areas but mostly canopied.
92	4131 - Aspen, Oak	Sawtimber Well	39.9	51	81-110	Better quality aspen stand than the stand east of road. The portion of the stand north of the wildlife food plot is slightly older than the rest of the aspen in the area. Will treat this aspen now to stagger the age class and acreage of treatment for aspen in this area.
94	4319 - Mixed Upland Forest	Sapling Well	3.5	8	Immature	Planted to red pine in 2010 with a heavy competition from natural regeneration. Will be a mixed stand.
95	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	16.2	25	1-50	Wet soil with scattered merchantable trees. Dense balsam fir and tag alder regeneration/understory. Never will treat.
96	4116 - Mixed N. Hardwood - Aspen	Sapling Well	21.2	15	1-50	Almost solid red maple. Regen was too far advanced to get it planted.
97	4116 - Mixed N. Hardwood - Aspen	Sapling Well	33.3	15	Immature	Majority is red maple. Northern third of stand is lighter in stocking than remaining stand. Couple good aspen clones within stand one in particular along the south central line.
99	4130 - Aspen	Poletimber Well	2.7	35	Unspecified	Ridge of small diameter aspen that drops down into swale at northwest end. Has some oak scattered in. Maple is the second highest component and heavier to the west end.
100	4110 - Sugar Maple Association	Poletimber Well	30.2	44	1-50	Portion of stand 1 that did not regenerate well. Kind of in a shallow valley. The aspen in here is not in a clone but rather dispersed throughout. Mostly cherry that is to large to roller chop efficiently. Will have to put in with adjacent commercial harvest to get cut to where the site can be converted to red pine.
101	4110 - Sugar Maple Association	Poletimber Well	6.7	44	1-50	Portion of stand one that did not regenerate, just a small sparse aspen clone diffused at the east end with the remaining being cherry. This stand needs to be treated. The cherry is larger than can be chopped. Setup with adjacent timber sale and then after cut, trench and plant to red pine. Can access stand via the two-track at the north end of the stand's finger that sticks up too the north.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
102	4123 - Red Oak	Sawtimber Medium	7.6	95	51-80	Oak stand fringing Dunham Lake's north side. It is heavily used for dispersed camping on the lake. Has received soil damaging activities in the past. Leave for erosion issued into the lake and recreational usage.
103	4131 - Aspen, Oak	Poletimber Well	14.3	43	51-80	A valley bottom on the south end that slopes upward to the north. This is where the pockets of oak and cherry are dominant. Site quality varies, consequently so does the quality of the timber.
105	42220 - Natural Jack Pine	Poletimber Well	7.5	47	51-80	Pushing maturity for jack pine. Not good quality form wise. Can treat if need to restart jack pine acreage in the area.
106	4125 - Black, N. Pin Oak	Sawtimber Poor	15.5	94	1-50	Portion of oak stand involved in the Dunham Lake Fire. It was seed tree harvested in 2012 but the basal area was more shelterwood density of 30-40. The only regeneration coming back is maple. Recommend going in and roller chopping the maple, spray and scarify the soil to try and get oak regeneration.
107	4130 - Aspen	Poletimber Medium	12.2	44	1-50	Large portion of this stand was involved in a wildfire around 2009 which resulted in large pockets of aspen mortality. The aspen failed to regenerate well in these pockets instead replaced by red maple. Those trees that survived the initial fire are stressed and showing signs of decline/decay and should be treated restarting the whole stand. This might stimulate a flush of aspen regeneration instead of maple.
108	4125 - Black, N. Pin Oak	Sapling Medium	17.5	16	Immature	Sparse mostly stump sprouted oaks. Oaks seeding in are being browsed. High component of cherry particularly in the south end.
109	4131 - Aspen, Oak	Poletimber Well	15.6	26	81-110	Treated in 1992. Resulted in some good aspen. At the north end there is a stream with defined bed and banks emanating from stand 8, Compartment 53, through another aspen stand, into a cedar complex that eventually dumps into Dunham Lake.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	3102 - Grass	7.2	Yes	Wildlife opening
8	3102 - Grass	10.4	Yes	wildlife opening.
11	3102 - Grass	7.0	Yes	Wildlife opening
17	310 - Herbaceous Openland	20.8	No	Mature stand of aspen, oak and pine of medium to low timber quality which was final harvested Spring 2016, left scattered large crowned healthy oak trees
40	6220 - Alder/willow	3.2	No	
45	6299 - Lowland Shrub (OI)	4.5	No	Tag alder and leatherleaf marsh. Some white spruce poles in a pocket at the north end.
46	6229 - Mixed lowland shrub	5.5	No	Tag alder marsh with a small plot of high ground on the southeast corner that contains a survey corner.
48	330 - Low-Density Trees	1.1	No	Frost pocket with some cherry brush, spruce, but nothing of any concentration.
50	500 - Water	5.9	No	DUNHAM LAKE.
51	629 - Mixed non-forested wetland	7.9	No	marsh
53	3301 - Low Density Deciduous Tree	12.6		Large red oak were left for mast, aspen regen expected; Trenched in 2013; White pine planted in 2014 incomplete, ran out of seedlings; completed in 2015
55	6225 - Bog	1.5	No	Leatherleaf bog
57	3301 - Low Density Deciduous Tree	5.0	No	Failed to regenerate harvest that was proposed to be planted to red pine last time around but was not done. Needs to be sprayed, roller chopped, and then planted to red pine. Could combine an aerial spray with the release that should be done to stands 54 and 65 to the east.
73	6230 - Cattail	1.1	No	Cattail marsh with a fringe of tag alder followed up by a red maple band around the outer most perimeter. Even though the maple is on slightly higher ground, there still is about a foot of water.
76	310 - Herbaceous Openland	11.2	Yes	Maintained wildlife opening that is next to an ORV trail. Orv's are damaging the opening. The eroded hills where put slash in a few years ago to stop the illegal traffic failed.
82	6220 - Alder/willow	2.7	No	Tag alder stand



Stand	Cover Type	Acres	Managed Site	General Comments:
83	622 - Lowland Shrub	50.2	No	Tag alder marsh with several flowing water courses.
85	330 - Low-Density Trees	1.8	No	Grass opening resulting from a portion of a past treatment that failed to regenerate. Approximately 10-20 feet of mature trees along the stands south line are on state land. Found survey pins.
87	6225 - Bog	2.9	No	OPIC - FMD: OI Stand Year Origin was
89	6225 - Bog	11.6	No	High water forms a pond in the spring. Remnants of an old narrow gauge railroad bed through the bog. The raised bed is supporting tree growth.
93	6229 - Mixed lowland shrub	3.3	No	Tag alder marsh with a narrow gauge railroad bed bisect the stand. The raised bed is growing tree species such as maple, birch, and spruce.
98	6225 - Bog	1.5	No	
104	310 - Herbaceous Openland	0.9	No	
111	6230 - Cattail	1.1	No	Marsh