



Compartment Review Presentation

Crystal Falls Forest Management Unit

Compartment 12169

Entry Year 2020

Acreage: 1,520

County Iron

Management Area: Peavy Moraine

Revision Date: 2018-08-17

Stand Examiner: Scott Sebero

Legal Description:

T42N-R31W Sections 23, 24, 26, 28, 33 & 34.

Identified Planning Goals:

Develop age class distribution in aspen type. Develop the quality while maintaining diversity in hardwood types. Maintain health of conifer types and increase acreage where possible. Develop buffers on streams. Maintain and improve road system.

Soil and topography:

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

State lands mixed with blocks company lands and small private parcels. Lands used mainly for hunting and fishing.

Unique Natural Features:

Peavy Pond and Gages Creek.

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Gages Creek is a Type 1 Trout Stream and is located within this compartment. A 300' buffer for those areas susceptible to Aspen regeneration is recommended. For areas not susceptible to Aspen regeneration, a 100' plus 5' per 1% increase in slope is recommended. There is also an unnamed Type 1 trout stream that flows into Gages Creek, although from aerial photos this looks dried up. There is also some drainage area in the northwestern portion that flows into Peavey Pond.

Wildlife Habitat Considerations:

This compartment contains part of the historic Lake Mary Deeryard that provides shelter and forage for deer in south Iron County. Featured species in this Management Area (Peavey End Moraine MA) include; eastern bluebird, black bear, woodcock, deer and wood duck. Moose, eagles, osprey, turkeys, sandhill cranes and wolves all have been documented in this compartment. Management for deer functional winter cover, including transition zones, movement corridors and conifer component, particularly hemlock, throughout the forage stands is critical in this compartment. Aspen age and stand size diversity are important management goals for deer, bear, grouse, woodcock and goshawks. The mature mixed pine component provides both winter cover for deer, and provides ideal habitat for black bears especially as refuge trees for cub rearing. It also provides critical nesting and perching habitat for bald eagle and osprey. Oak in the compartment provides most important for most of the featured species identified for this MA and is particularly important for black bear and deer. This compartment also includes a series of intensely managed aspen stands of various age classes to provide grouse habitat.

Mineral Resource and Development Concerns and/or Restrictions

Active sand/gravel pits are located three miles to the north and east, and there appears to be some sand & gravel potential within the compartment. Abandoned iron mines are not located nearby, but there was some iron exploration and prospects three miles southeast of the compartment. There has been previous mineral leasing activity within the compartment, and there may still be some metallic mineral potential. There is no known potential for economic oil and gas production in the UP.

Vehicle Access:

Good access to most of compartment. Gate in section 33 needs to be removed.

Survey Needs:

6 corners in section 24, 2 corners in section 23, 4 corners in section 26 and 1 corner in section 28.

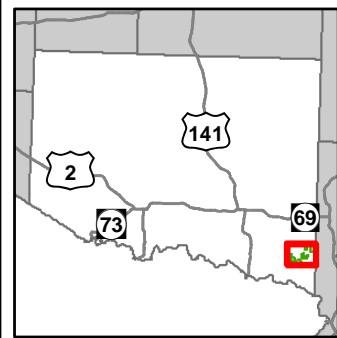
Recreational Facilities and Opportunities:**Fire Protection:****Additional Compartment Information:****The following reports from the Inventory are attached:**

- 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:

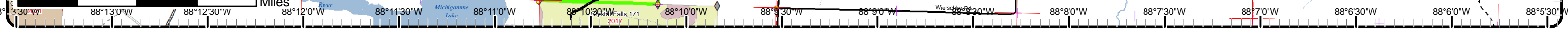
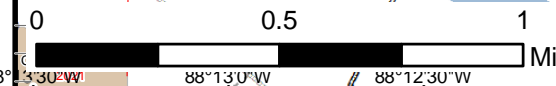
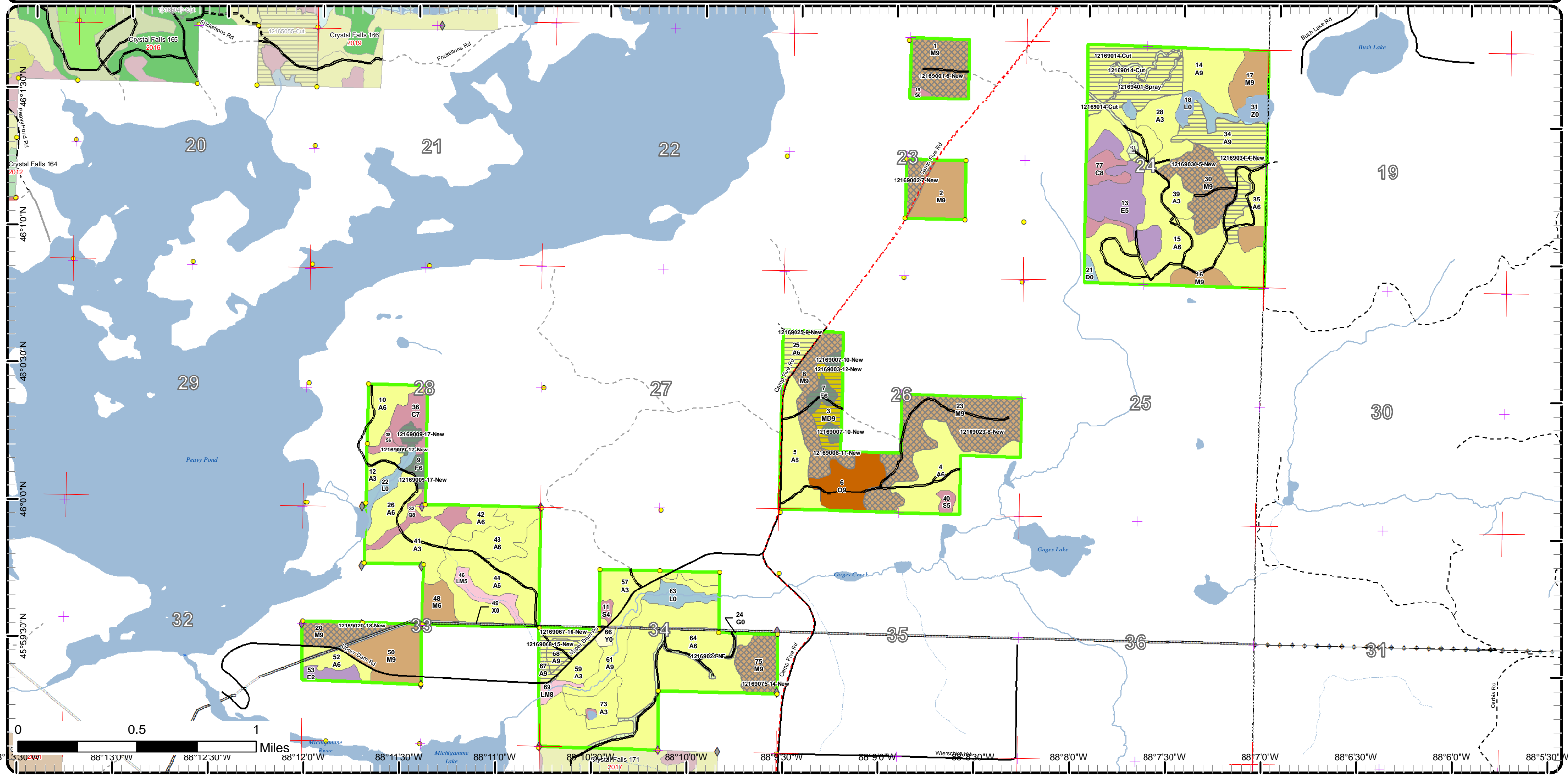
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map



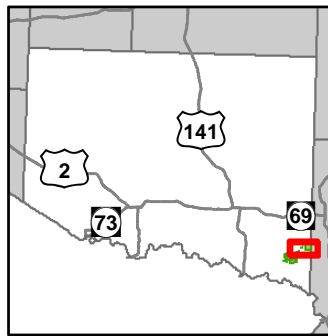
Compartment: 169
 T42N, R31W, Sec. 23, 24, 26, 28,
 33, 34
 County: Iron
 Unit: Crystal Falls
 Mgmt Area: Peavy Moraine
 YOE: 2020
 Acres: 1,520 GIS Calculated
 Examiner: Scott Sebero
 Map Revised: 12/17/2018
 Map Phase: Post-Review

- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- ◆ Field Grade Corners
- - - Counties
- == DNR - Secondary Forest Road
- == Federal / State / County - Paved Road
- - - Federal / State - Dirt / Gravel Road
- . - . County - Gravel Road
- - - Private - Dirt / Gravel Road
- - - Designated Bicycle Trails
- Intermittent Stream
- Island in Lake or River
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Pipeline
- ⊕ Powerline
- ▭ Compartment Boundary
- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- ▨ Pesticide
- ▨ Opening Maintenance
- ▨ 411 - Northern Hardwood
- ▨ 412 - Oak Types
- ▨ 413 - Aspen
- ▨ 419 - Mixed Upland Deciduous
- ▨ 423 - Other Upland Conifers
- ▨ 611 - Lowland Deciduous Forest
- ▨ 612 - Lowland Coniferous Forest
- ▨ 613 - Lowland Mixed Forest
- ▨ 110 - Low Intensity Urban
- ▨ 310 - Herbaceous Openland
- ▨ 500 - Water
- ▨ 622 - Lowland Shrub
- ▨ 710 - Sand/Soil
- ▨ Lakes

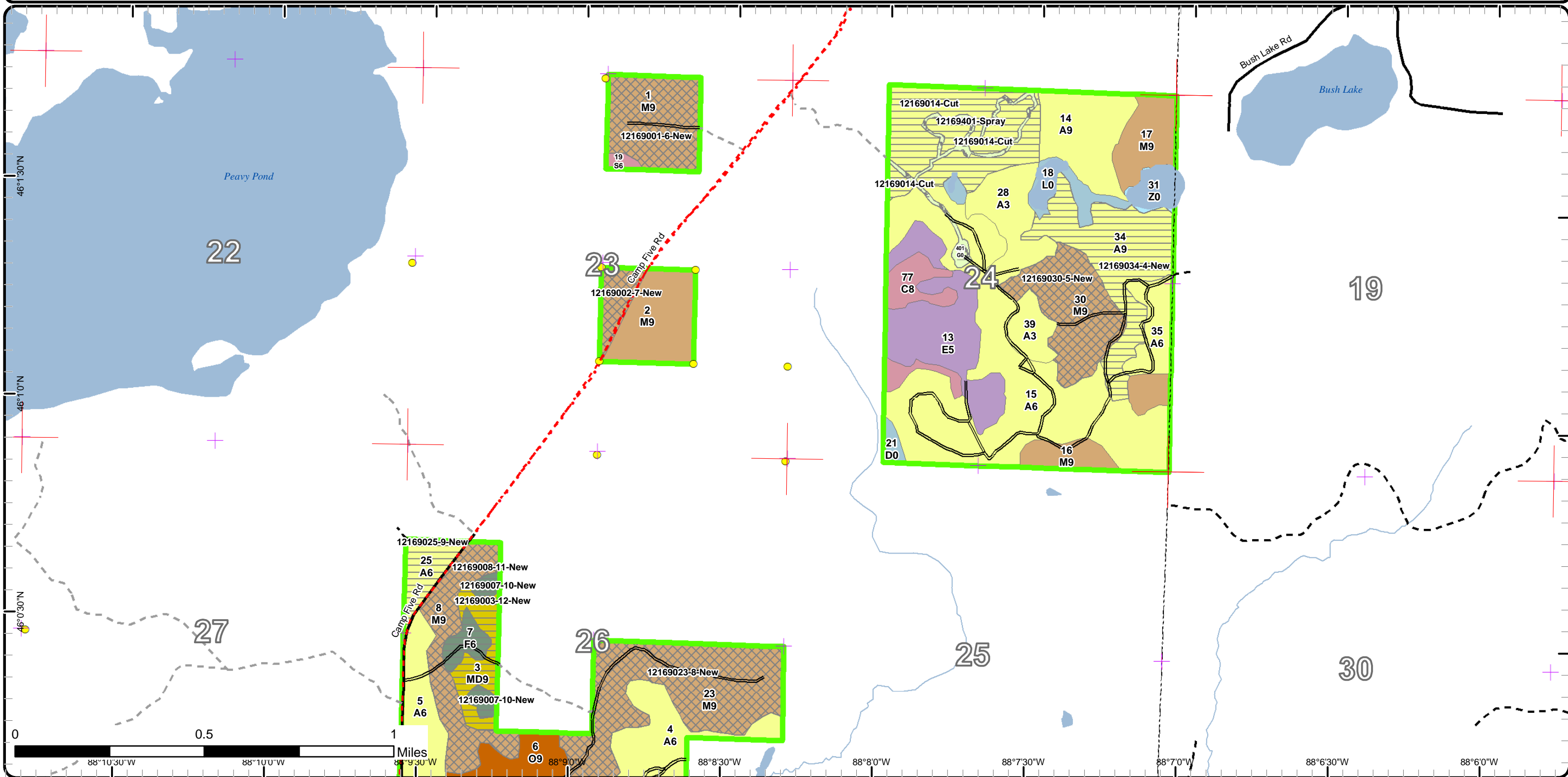


Cover Type & Treatments Map

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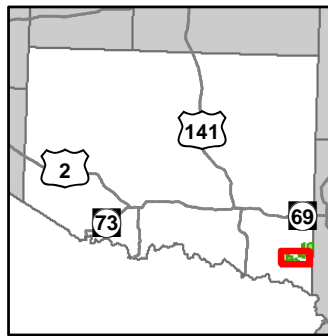


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|---|-----------------------------------|
| — Miris Corners | — Compartment Boundary |
| — Remonumented Section Corners | — Selection (Group, Single Tree) |
| ● Survey Grade Corners | — Clearcut (w/Reserves) |
| — Counties | — Pesticide |
| — DNR - Secondary Forest Road | — 411 - Northern Hardwood |
| — Federal / State / County - Paved Road | — 412 - Oak Types |
| — Federal / State - Dirt / Gravel Road | — 413 - Aspen |
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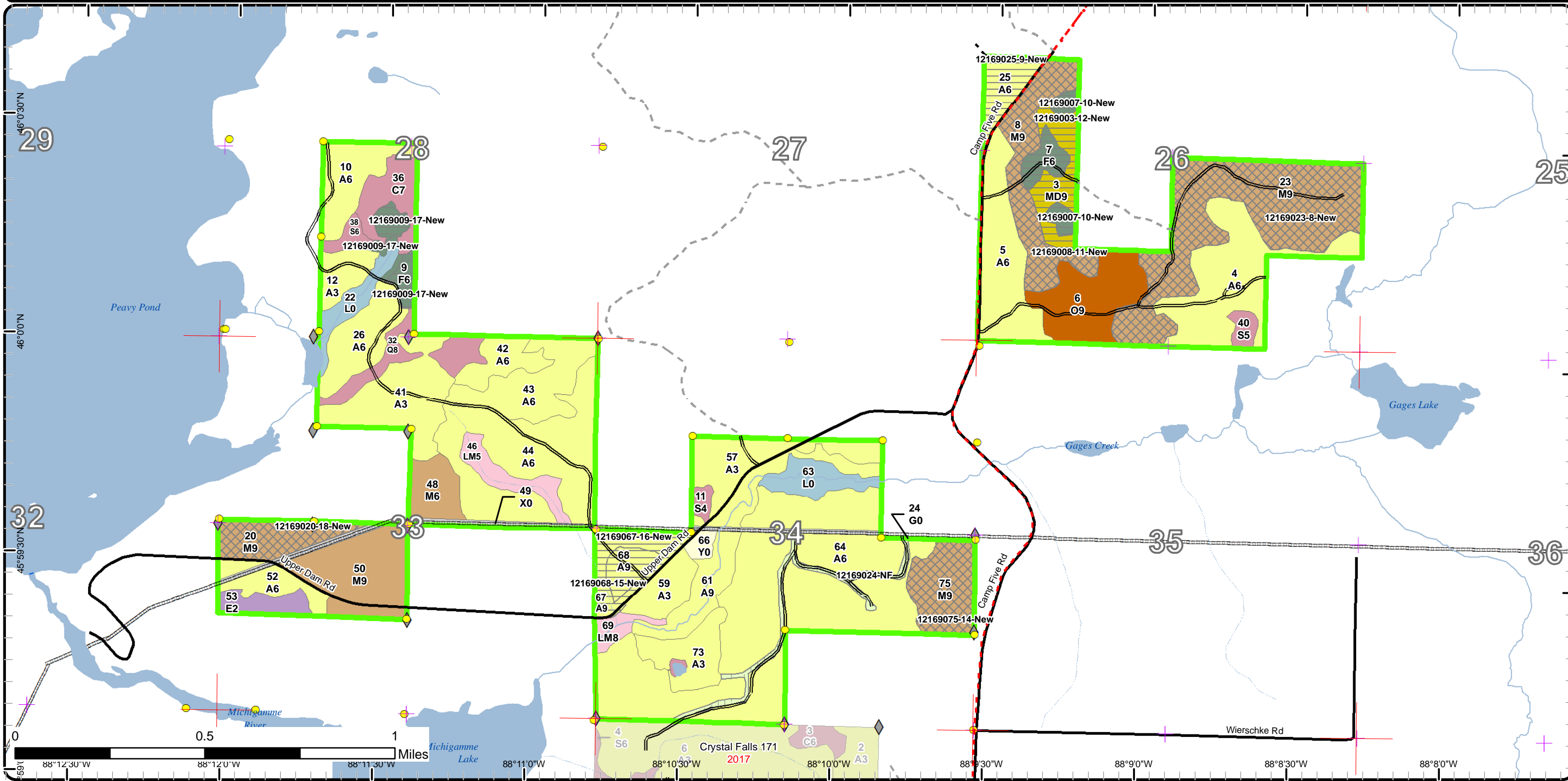


Cover Type & Treatments Map

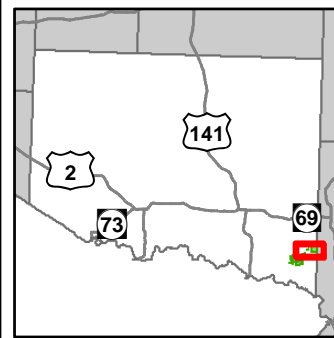
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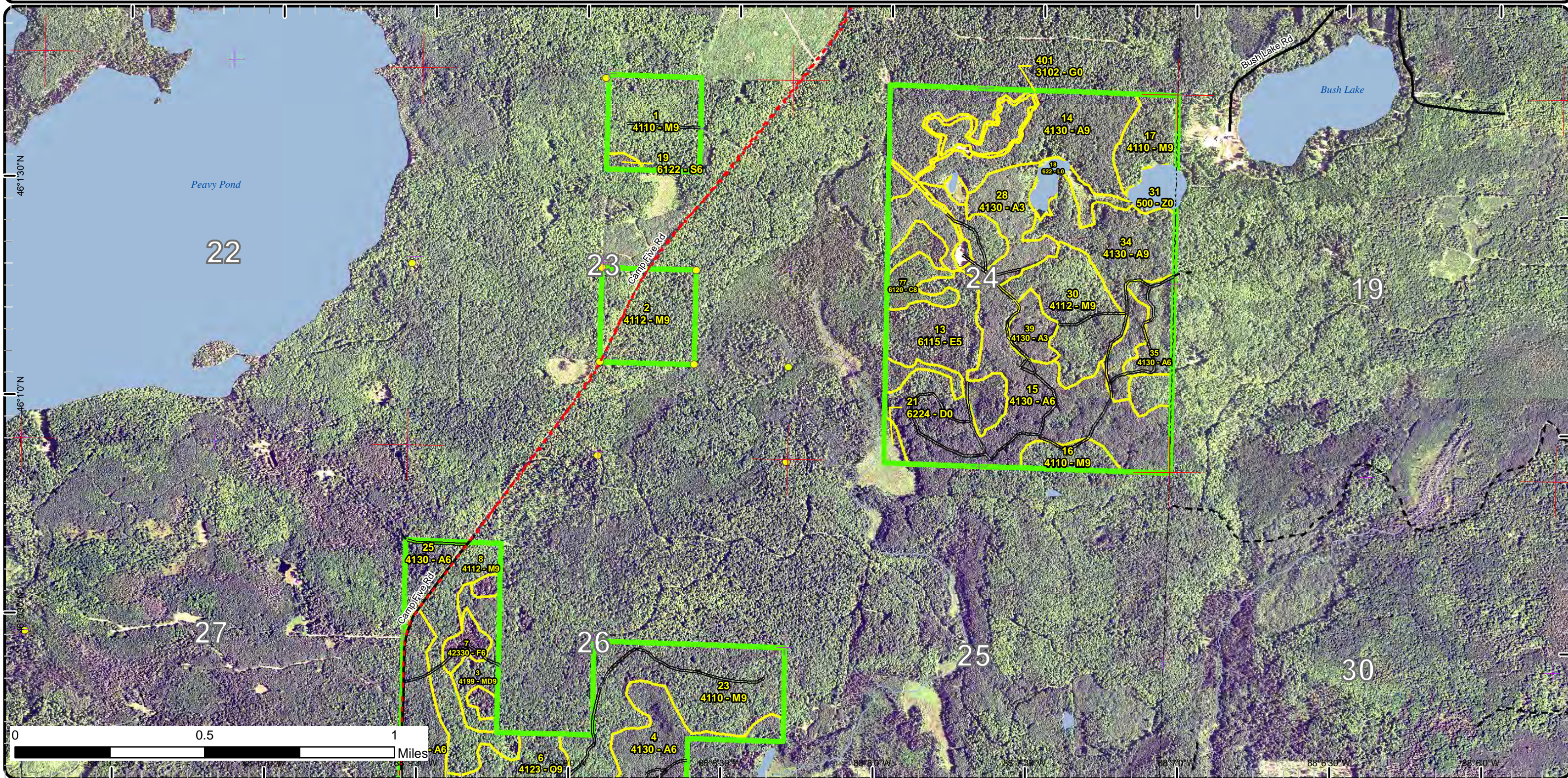


Stand Boundary Map



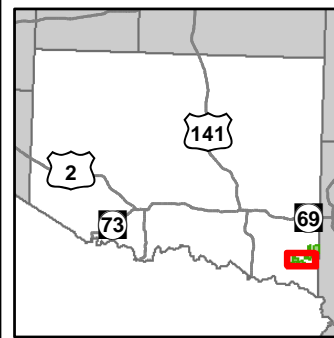
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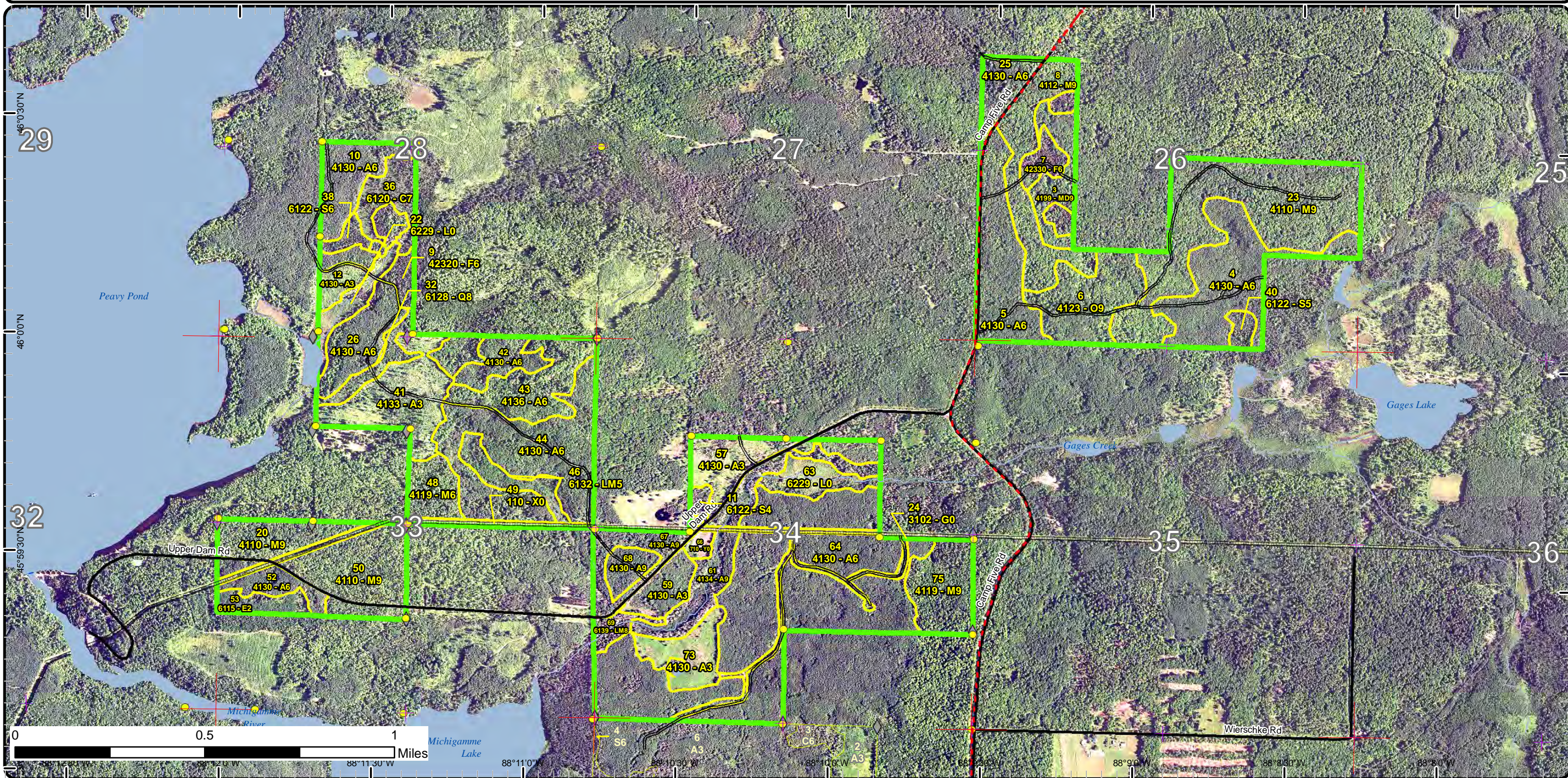


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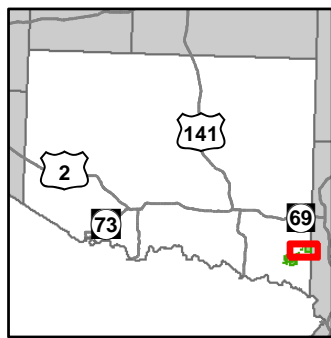


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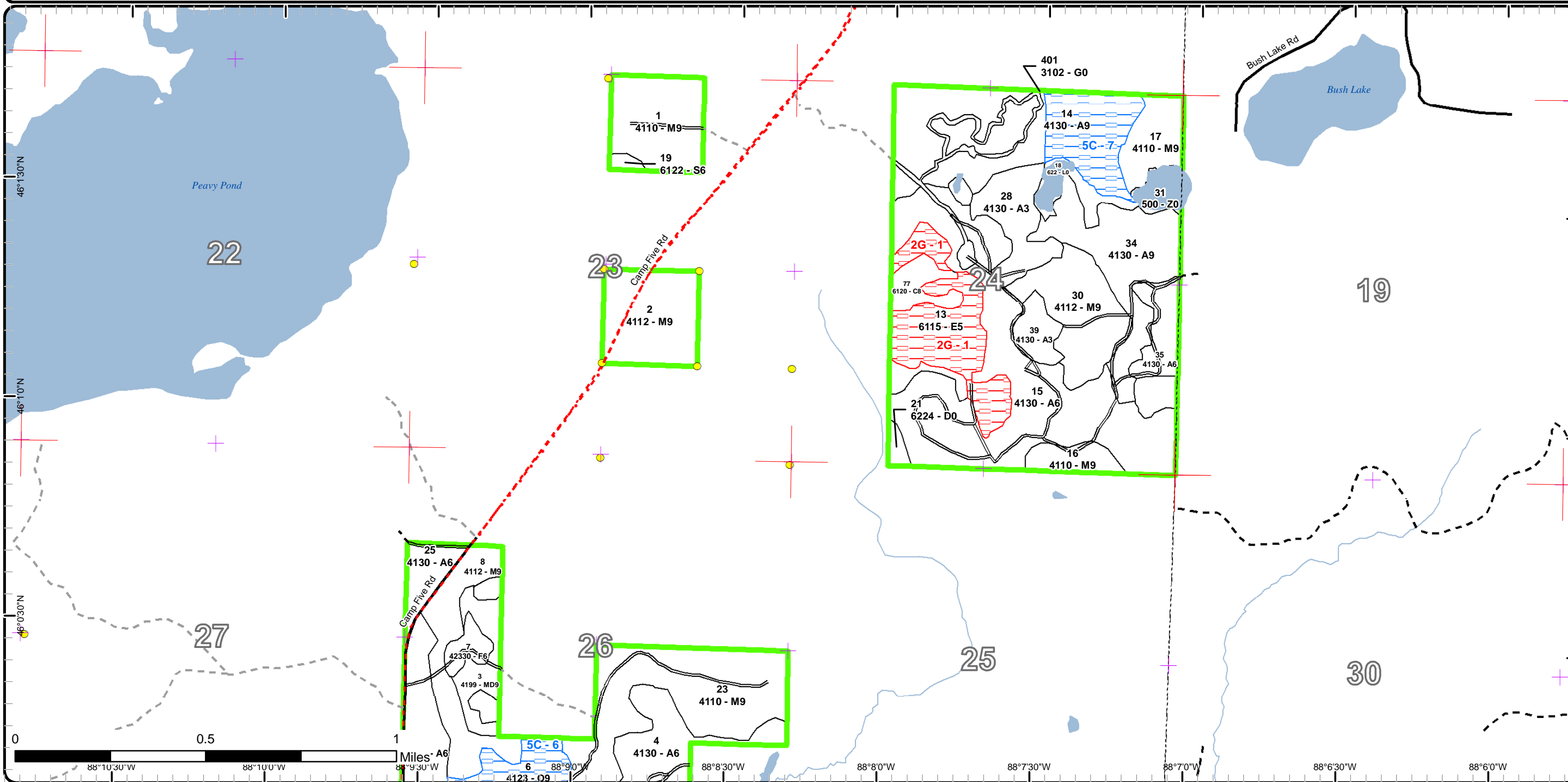


Special Conservation Areas & Site Conditions Map

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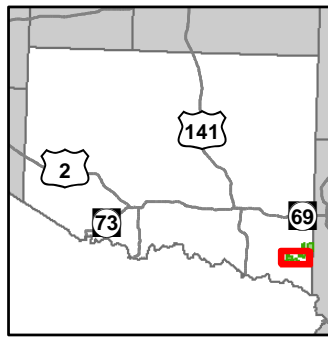


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- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- Stand Boundaries

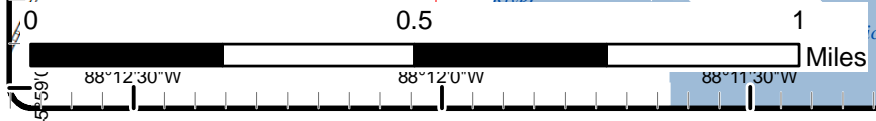
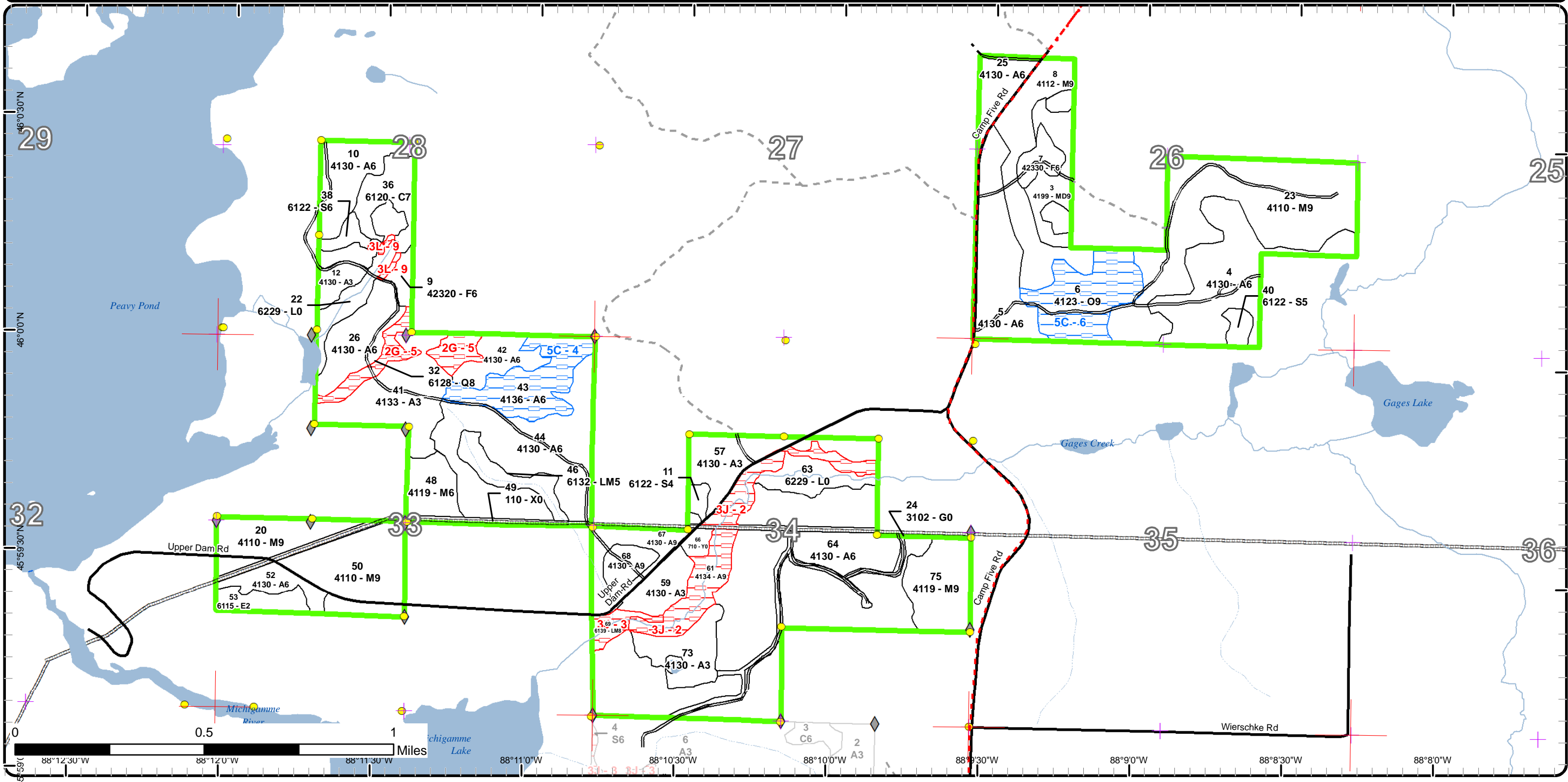


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Report 1 – Total Acres by Cover Type and Age Class



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	78	53	0	473	50	174	16	0	31	0	0	0	0	0	0	0	0	875
Cedar	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	31
Herbaceous Openland	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
Lowland Deciduous	0	0	0	0	9	0	0	0	0	0	46	0	0	0	0	0	0	0	54
Lowland Mixed Forest	0	0	0	0	0	11	0	0	0	0	6	0	0	0	0	0	0	0	17
Lowland Shrub	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	2	10
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16
Northern Hardwood	0	0	0	0	0	0	0	0	0	13	349	0	0	0	0	0	0	0	361
Oak	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	32
Sand, Soil	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Treed Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Spruce/Fir	0	0	0	0	0	0	0	12	0	0	10	0	0	0	0	0	0	0	22
Urban	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	82	78	53	0	482	61	174	28	0	44	513	0	0	0	0	0	0	2	1515



Report 2 – Treatment Summary

Crystal Falls Mgt. Unit
Year of Entry: 2020

Acres of Harvest

Compartment 169
Total Compartment Acres: 1,520

Commercial Harvest - 56
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 370

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	142	0	0	0	0	0	0	0	0	142
Mixed Upland Deciduous	16	0	0	0	0	0	0	0	0	16
Northern Hardwood	0	247	0	0	0	0	0	0	0	247
Upland Spruce/Fir	21	0	0	0	0	0	0	0	0	21
Total	179	247	0	0	0	0	0	0	0	426

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	426	0	0	0	0	10	0	0	10	445
Next Step	0	0	0	10	0	0	435	0	0	445
Total	426	0	0	10	0	10	435	0	10	890



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	12169001-6- New	37.0	4110 - Sugar Maple Association	Sawtimber Well	90	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

Habitat Cut: Yes

Site Condition:

Prescription Mark to 80 BA, opening up around large oak and clean out canopy gaps where large crown trees are removed. Favor yellow birch.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of maple, oak and pine.

Regen:

Other Leave red and white pine, oak and hemlock.

Comment: Retain spruce and balsam two stick and smaller, 6" DBH. Protect vernal ponds.

Proposed Start Date: 10/1 /2019

2	12169002-7- New	10.4	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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Habitat Cut: Yes

Site Condition:

Prescription Mark to 80 BA. Favor yellow birch.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of maple, birch and pine.

Regen:

Other Leave red and white pine, oak and hemlock.

Comment: Retain spruce and balsam two stick and smaller, 6" DBH. Protect vernal ponds.

Proposed Start Date: 10/1 /2019

3	12169003-12- New	16.3	4199 - Other Mixed Upland Deciduous	Sawtimber Well	90	81-110	Harvest	Clearcut with Retention	4121 - Oak, Aspen	Two-Aged	Draft Field Boundary
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Habitat Cut: Yes

Site Condition:

Prescription Cut all aspen and maple 2" DBH or greater. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine,

Specs: cedar, hemlock or oak will be cut.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of aspen, hardwood and softwood.

Regen:

Other Leave a few large diameter yellow birch.

Comment:

Proposed Start Date: 10/1 /2019

7	12169007-10- New	12.3	42330 - Upland Fir	Poletimber Well	60	81-110	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Draft Field Boundary
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Habitat Cut: Yes

Site Condition:

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine,

Specs: cedar, hemlock or oak will be cut.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mix of fir, aspen and hardwood.

Regen:

Other Leave any legacy trees.

Comment:

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
8	12169008-11-New	33.7	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary

Habitat Cut: Yes**Site Condition:**

Prescription Mark to 80 BA. Open up around large oak and clean out canopy gaps where large crown trees are removed. Cut spruce and balsam 6" DBH or greater. No red and white pine, cedar, hemlock or oak will be cut.

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

Acceptable Mix of maple, oak and pine.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

9	12169009-17-New	8.8	42320 - Upland Spruce	Poletimber Well	93	81-110	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine, cedar, hemlock or oak will be cut.

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

Acceptable Mix of spruce, aspen and hardwood.
Regen:

Other Leave 1 chain buffer along both sides of wet drain, stand 22. Buffer 1 chain around broad wing nest in west side of south block.
Comment:

Proposed Start Date: 10/1 /2019

14	12169014-Cut	55.7	4130 - Aspen	Sawtimber Well	52	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine or oak will be cut.

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

Acceptable Mix of aspen and fir.
Regen:

Other Red line out any ash pockets. Winter cut to avoid spread of wild parsnip. May adjust treatment area to retain areas heavier to hardwood and cut areas with less hardwood. Acres of cut will not change significantly.
Comment:

Proposed Start Date: 10/1 /2019

20	12169020-18-New	18.5	4110 - Sugar Maple Association	Sawtimber Well	90	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Mark to 80 BA. Open up around large oak and clean out canopy gaps where large crown trees are removed. Cut spruce and balsam 6" DBH or greater. Oak will not be cut except for health reasons. No red or white pine, cedar or hemlock will be cut.

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

Acceptable Mix of maple, oak and ash.
Regen:

Other Protect black ash pockets and oak saps.
Comment:

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
23	12169023-8- New	84.3	4110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary

Habitat Cut: Yes**Site Condition:**

Prescription Mark to 80 BA. Open up around large oak and clean out canopy gaps where large crown trees are removed. Cut spruce and balsam 6" DBH or larger. Favor Yellow birch. No oak, red or white pine, cedar or hemlock will be cut.

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

Acceptable Mix of maple and oak.
Regen:

Other Leave some large diameter cavity trees for wildlife.
Comment:

Proposed Start Date: 10/1 /2019

24	12169024-NF	9.6	3102 - Grass	Nonstocked	0	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	3102 - Grass		Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Hunter walking trail opening maintenance
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2018

25	12169025-9- New	12.6	4130 - Aspen	Poletimber Well	48	81-110	Harvest	Clearcut with Retention	4133 - Aspen, Mixed Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine, cedar, hemlock or oak will be cut.

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

Acceptable Mix of aspen and pine.
Regen:

Other
Comment:

Proposed Start Date: 10/1 /2019

30	12169030-5- New	38.6	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	141- 170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Mark to 80 BA. Cut all aspen, spruce and balsam 6" DBH or greater. Leave all red and white pine, cedar, hemlock and oak.

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

Acceptable Mix of maple, aspen and pine.
Regen:

Other
Comment:

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
34	12169034-4- New	49.5	4130 - Aspen	Sawtimber Well	52	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary

Habitat Cut: Yes**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine, cedar, hemlock or oak will be cut.

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

Acceptable Mix of aspen, spruce and balsam.
Regen:

Other Mark out ash drains and intermittent creek.
Comment:

Proposed Start Date: 10/1 /2019

67	12169067-16- New	15.7	4130 - Aspen	Sawtimber Well	66	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine or oak will be cut.

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

Acceptable Mix of aspen and fir.
Regen:

Other Retention will be in drain marked out in SW part of stand.
Comment:

Proposed Start Date: 10/1 /2019

68	12169068-15- New	8.0	4130 - Aspen	Sawtimber Well	53	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Cut all aspen and maple 2" DBH or larger. Cut all spruce, balsam and birch with one or more pulpwood stick, 4" DBH. No red or white pine or oak will be cut.

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

Acceptable Mix of aspen and fir.
Regen:

Other Retention will be in drain, marked out in stand 67.
Comment:

Proposed Start Date: 10/1 /2019

75	12169075-14- New	24.4	4119 - Mixed Northern Hardwoods	Sawtimber Well	92	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
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Habitat Cut: Yes**Site Condition:**

Prescription Mark hardwood to 80BA. Open up around large crown oak trees. Favor yellow birch. Cut all aspen, spruce and balsam 6" DBH or greater.

Specs: Leave all red and white pine, cedar, hemlock and oak.

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

Acceptable Mix of maple, oak and aspen.
Regen:

Other Some slopes too steep to operate on may leave some aspen which will serve as soft snags for wildlife. Protect vernal ponds.
Comment:

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
401	12169401-Spray	9.6	3102 - Grass	Nonstocked		Unspecified	Pesticide	Hand Application	3102 - Grass		Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Herbicide treatment for control of wild parsnip
Specs:

Next Step Seeding, Machine Seed; Monitoring, Invasive Species
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/1 /2018

Total Treatment Acreage Proposed: 445.0

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment: 169

Year of Entry: 2020

Availability for Management

Total Acres	Acres Available	Acres Available With Condition	Acres Not Available	Dominant Site Conditions			
Acres	Available	With Condition	Not Available	5C	2G	3J	3L
874	783	60	31	Aspen	60		31
31	31	0	0	Cedar			
19	19	0	0	Herbaceous Openland			
15	0	0	15	Lowland Conifers		15	
55	8	0	46	Lowland Deciduous		46	
17	11	0	6	Lowland Mixed Forest			6
36	36	0	0	Lowland Shrub			
14	14	0	0	Lowland Spruce/Fir			
16	16	0	0	Mixed Upland Deciduous			
362	362	0	0	Northern Hardwood			
32	0	32	0	Oak	32		
3	3	0	0	Sand, Soil			
3	3	0	0	Treed Bog			
23	21	0	2	Upland Spruce/Fir			2
13	13	0	0	Urban			
8	8	0	0	Water			
1,520	1,329	92	99	Total Forested Acres	92	61	36
	87%	6%	7%	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)	46	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	31	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments: Buffer for Gages Creek.							

Report 4 – Site Conditions

Crystal Falls Mgt. Unit

Scott Sebero : Examiner

Compartment: 169

Year of Entry: 2020

3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
Comments: Buffer for Gages Creek.							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	15	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	32	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Unavailable	3L: Other wildlife concerns	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Movement corridor.							

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.



Stand	Crystal Falls Mgt. Unit		Report 7 – Forested Stands			Compartment: 169 Year of Entry: 2020
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4110 - Sugar Maple Association	Sawtimber Well	37.0	90	141-170	Thinned in 2002.
2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	39.6	90	81-110	Stand thinned, east side of road in 2012.
3	4199 - Other Mixed Upland Deciduous	Sawtimber Well	16.3	90	81-110	
4	4130 - Aspen	Poletimber Well	48.0	37	51-80	
5	4130 - Aspen	Poletimber Well	37.8	42	51-80	
6	4123 - Red Oak	Sawtimber Well	32.0	90	111-140	Should think about regenerating oak next entry. Stump sprouted maple will be merchantable next entry.
7	42330 - Upland Fir	Poletimber Well	12.3	60	81-110	
8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	33.7	90	111-140	
9	42320 - Upland Spruce	Poletimber Well	10.4	93	81-110	
10	4130 - Aspen	Poletimber Well	24.9	33	51-80	
11	6122 - Black Spruce	Poletimber Poor	3.8	90	1-50	
12	4130 - Aspen	Sapling Well	6.5	5	Immature	
13	6115 - Lowland Ash	Poletimber Medium	46.0	90	51-80	
14	4130 - Aspen	Sawtimber Well	88.1	52	81-110	Spruce mainly in east half of stand.
15	4130 - Aspen	Poletimber Well	125.7	33	51-80	
16	4110 - Sugar Maple Association	Sawtimber Well	17.2	90	81-110	
17	4110 - Sugar Maple Association	Sawtimber Well	19.2	90	81-110	OPIC - FMD: cut in 2002
19	6122 - Black Spruce	Poletimber Well	2.1	90	81-110	



Stand	Crystal Falls Mgt. Unit		Report 7 – Forested Stands			Compartment: 169 Year of Entry: 2020	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
20	4110 - Sugar Maple Association	Sawtimber Well	18.5	90	141-170	Stand thinned in 2007 as Magnetic Hardwoods. Pocket of red oak in NW part of stand.	
23	4110 - Sugar Maple Association	Sawtimber Well	84.3	90	111-140	Thinned in 2002.	
25	4130 - Aspen	Poletimber Well	12.6	48	81-110		
26	4130 - Aspen	Poletimber Well	21.2	33	51-80		
28	4130 - Aspen	Sapling Well	24.1	16	Immature		
30	4112 - Maple, Beech, Cherry Association	Sawtimber Well	38.6	90	141-170	THINNED IN 2002	
32	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Medium	15.0	90	51-80		
34	4130 - Aspen	Sawtimber Well	49.5	52	81-110		
35	4130 - Aspen	Poletimber Well	15.1	33	51-80		
36	6120 - Lowland Cedar	Sawtimber Poor	15.0	90	1-50		
38	6122 - Black Spruce	Poletimber Well	4.0	93	81-110		
39	4130 - Aspen	Sapling Well	10.5	16	51-80		
40	6122 - Black Spruce	Poletimber Medium	4.0	90	51-80		
41	4133 - Aspen, Mixed Pine	Sapling Well	35.4	5	Immature		
42	4130 - Aspen	Poletimber Well	12.2	33	51-80		
43	4136 - Aspen, Mixed Conifer	Poletimber Well	28.1	53	81-110	Most of stand on rocks. Pocket of red pine poles in south along road. Pocket of white pine logs in center of stand.	
44	4130 - Aspen	Poletimber Well	64.0	33	51-80		
46	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	11.2	40	1-50		



S t a n d	Crystal Falls Mgt. Unit		Report 7 – Forested Stands			Compartment: 169 Year of Entry: 2020
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4119 - Mixed Northern Hardwoods	Poletimber Well	13.2	88	51-80	Thinned 2013
50	4110 - Sugar Maple Association	Sawtimber Well	36.0	90	81-110	Stand thinned in 2007 as Magnetic Hardwoods.
52	4130 - Aspen	Poletimber Well	12.3	32	51-80	
53	6115 - Lowland Ash	Sapling Medium	8.5	32	Immature	
57	4130 - Aspen	Sapling Well	19.1	3	Immature	
59	4130 - Aspen	Sapling Well	18.5	12	Immature	
61	4134 - Aspen, Spruce/Fir	Sawtimber Well	30.8	88	51-80	
64	4130 - Aspen	Poletimber Well	149.4	33	51-80	
67	4130 - Aspen	Sawtimber Well	15.7	66	81-110	Spruce in poor shape, impacted by budworm.
68	4130 - Aspen	Sawtimber Well	8.0	53	81-110	
69	6139 - Mixed Lowland Forest	Sawtimber Medium	5.6	93	51-80	
73	4130 - Aspen	Sapling Well	16.9	3	Immature	
75	4119 - Mixed Northern Hardwoods	Sawtimber Well	24.4	92	111-140	Thinned in 2007 as Magnetic Hardwoods.
77	6120 - Lowland Cedar	Sawtimber Medium	15.9	90	51-80	



Stand	Cover Type	Acres	Managed Site	General Comments:
18	622 - Lowland Shrub	13.0	No	OPIC - FMD: OI Stand Year Origin was
21	6224 - Treed Bog	3.2	No	
22	6229 - Mixed lowland shrub	10.4	No	Beaver pond contained within stand.
24	3102 - Grass	9.6	Yes	Hunter Walking Trail
31	500 - Water	7.7	No	Small shallow pond. Cattails.
49	110 - Low Intensity Urban	13.1	No	power line
63	6229 - Mixed lowland shrub	12.6	No	
66	710 - Sand, Soil	2.9	No	gravel pit
401	3102 - Grass	9.6	Yes	Hunter walking trail.