



# Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42109

Entry Year 2018

Acreage: 1,716

County Luce

Management Area: County Line Hardwoods

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**Revision Date:** 2016-08-23

**Stand Examiner:** Don Kuhr

**Legal Description:**

T45N R10W sections 29, 30, 31, 33

**Identified Planning Goals:**

Promote multiple aged and diversified tree species where possible to reduce forest pest impacts and improve conditions for wildlife species. Retain/enhance the quality of recreational uses of the area. Provide for consistent, sustainable wood fiber production over the long term.

**Soil and topography:**

Kalkaska soils are most commonly found throughout the compartment with areas underlaid by Menominee – Graverat Complex soils. Lowland pockets are found on Carbondale – Lupton mucks. The topography is largely level to shallow rolling hills.

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

Private lands bound the compartment on the north and largely on the eastern sides. To the west, state lands are adjacent. The area receives heavy use by hunters and both ORV and snowmobile trails run through the compartment.

**Unique Natural Features:**

None identified

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

None identified

**Special Management Designations or Considerations:**

None identified

**Watershed and Fisheries Considerations:**

Fisheries Values: None

Fisheries Concerns: This compartment is located within the Northern Lake Michigan Management Unit. The small ponds located in this compartment are not actively managed by Fisheries Division and likely not providing much if any value as fisheries. Standard BMP's should apply when working near these waterbodies. Fisheries Division has no concerns over the proposed treatments in this compartment.

**Wildlife Habitat Considerations:**

Compartment 109 lies in southern Luce county in the St. Ignace sub-subsection and the County Line Hardwoods Management Area where black bear, goshawk, red-shouldered hawk, ruffed grouse, snowshoe hare and white-tailed deer are featured species. Northern hardwoods and aspen comprise much of the compartment with a few swamp conifer and fir stands and lowland areas scattered around. Pre-settlement vegetation data suggests that conifers might have been more prevalent in the past than occurs in the forest today.

Wildlife objectives will be achieved by the retention of hard and soft mast producing trees, wildlife den and nest trees and snags in harvested stands and the preservation of conifer components in aspen and hardwood stands. Forested corridors should be maintained to facilitate ease of movement between upland and lowland areas. Gray wolves, white-tailed deer, black bear, coyotes, ruffed grouse and marten are noteworthy wildlife species potentially using this compartment.

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

Surface sediments consist of lacustrine sand and gravel and coarse-textured till. There is insufficient data to determine the glacial drift thickness (>100 feet). The Silurian Cabothead Shale and Manitoulin Dolomite subcrop below the glacial drift. The Manitoulin could be quarried for stone. Several former sand/gravel pits and at least one active pit are located in the area and, sand and gravel potential appears to be good. There is no economic oil and gas production in the UP and there is no known metallic mineral potential in this area.

**Vehicle Access:**

On road vehicle access is considered to be excellent. A maintained, county gravel road forms the southern boundary for much of the compartment. Woods roads, both two wheel drive passable and four wheel drive passable exist throughout the compartment. State highway M -117 splits the compartment into western and eastern ends.

**Survey Needs:**

None.

**Recreational Facilities and Opportunities:**

The Sandtown single track ORV trail and Snowmobile Trail #45 run through portions of this compartment. Hunting is a major recreation event in this compartment because of it's location to Newberry and the hunting camps on nearby private lands.

**Fire Protection:**

Fires should be small and slow growing because of hardwood and swamp conifer types. Lowland soil types may limit the use of heavy equipment for suppression.

**Additional Compartment Information:****The following reports from the Inventory are attached:**

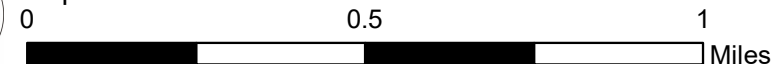
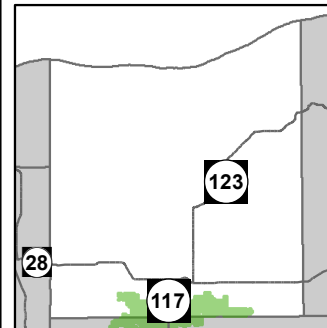
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

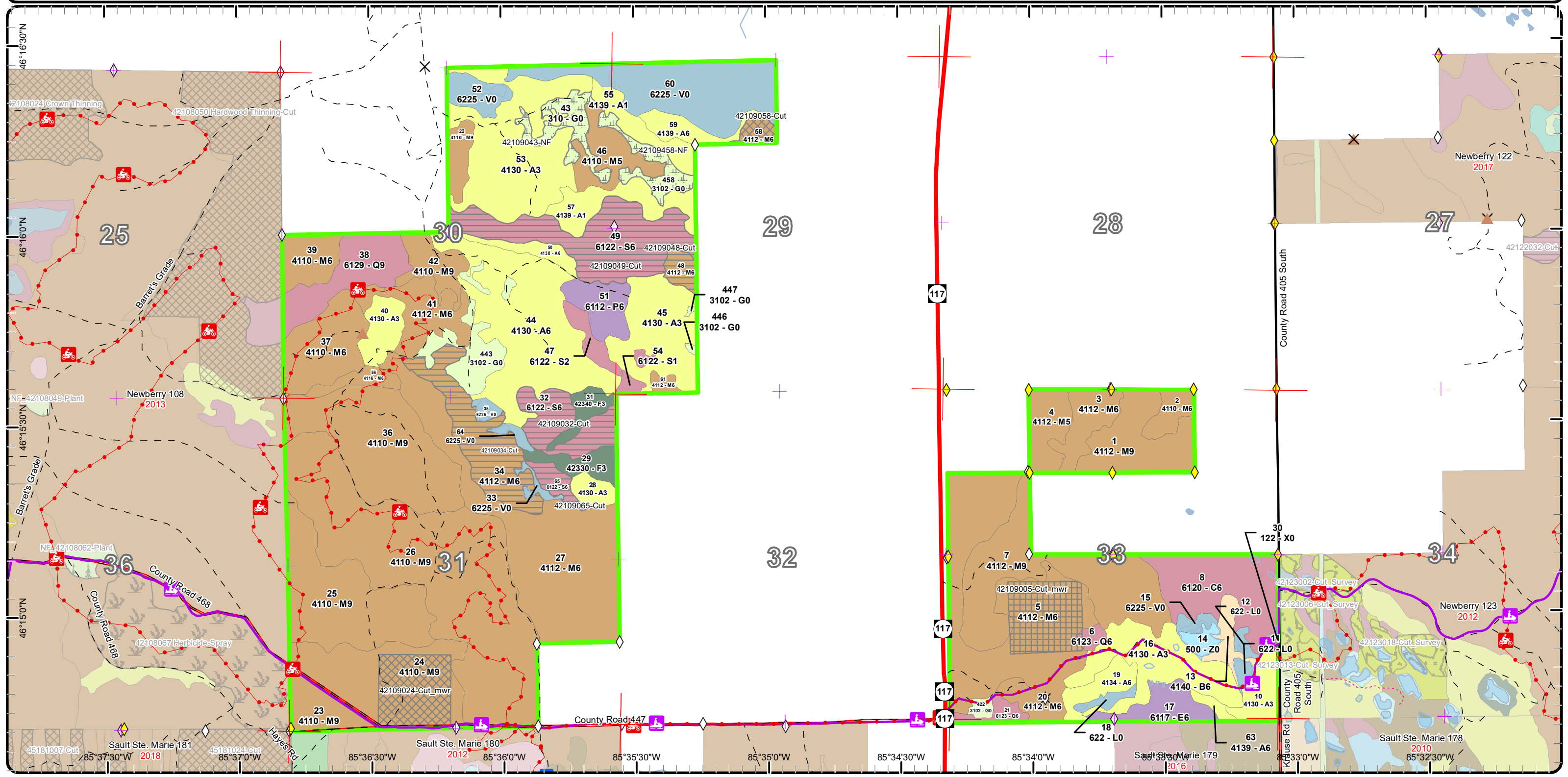
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 109  
 T45N R10W Sec. 29-31, 33  
 County: Luce  
 Unit: Newberry  
 Mgmt Area: County Line  
 Hardwoods  
 YOE: 2018  
 Acres: 1,716 GIS Calculated  
 Examiner: Don Kuhr  
 Map Revised: 10/27/2016  
 Map Phase: Post-Review

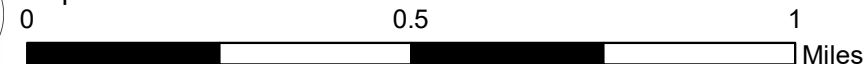
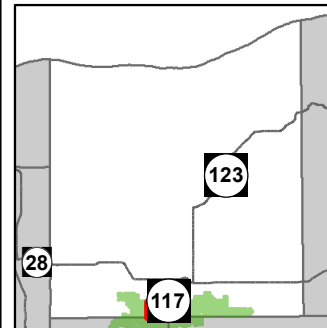


- |                                    |                                   |                           |
|------------------------------------|-----------------------------------|---------------------------|
| — Miris Corners                    | — Poor Dirt Roads                 | 310 - Herbaceous Openland |
| + Remonumented Section Corners     | — County Poor Dirt Roads          | 500 - Water               |
| ◆ Survey Grade GPS Corners         | — Rivers                          | 622 - Lowland Shrub       |
| ◇ Field Grade GPS Corners          | ▭ Compartment Boundary            | ■ Lakes                   |
| ✕ Gate                             | ▨ Selection (Group, Single Tree)  |                           |
| ▲ Berms                            | ▨ Clearcut (w/Reserves)           |                           |
| 🏍️ Motorcycle Trails (DNR License) | ▨ Other Treatment - See Comments  |                           |
| 🏍️ Snowmobile Trails               | ▨ Seed Tree (w/Reserves)          |                           |
| ● ORV License & Trail Permit       | ■ 411 - Northern Hardwood         |                           |
| — Designated Snowmobile Trails     | ■ 413 - Aspen Types               |                           |
| — Highway                          | ■ 414 - Other Upland Deciduous    |                           |
| — Paved Roads                      | ■ 423 - Other Upland Conifers     |                           |
| — County Gravel Roads              | ■ 611 - Lowland Deciduous Forest  |                           |
|                                    | ■ 612 - Lowland Coniferous Forest |                           |
|                                    | ■ 122 - Roads/Parking Lot         |                           |

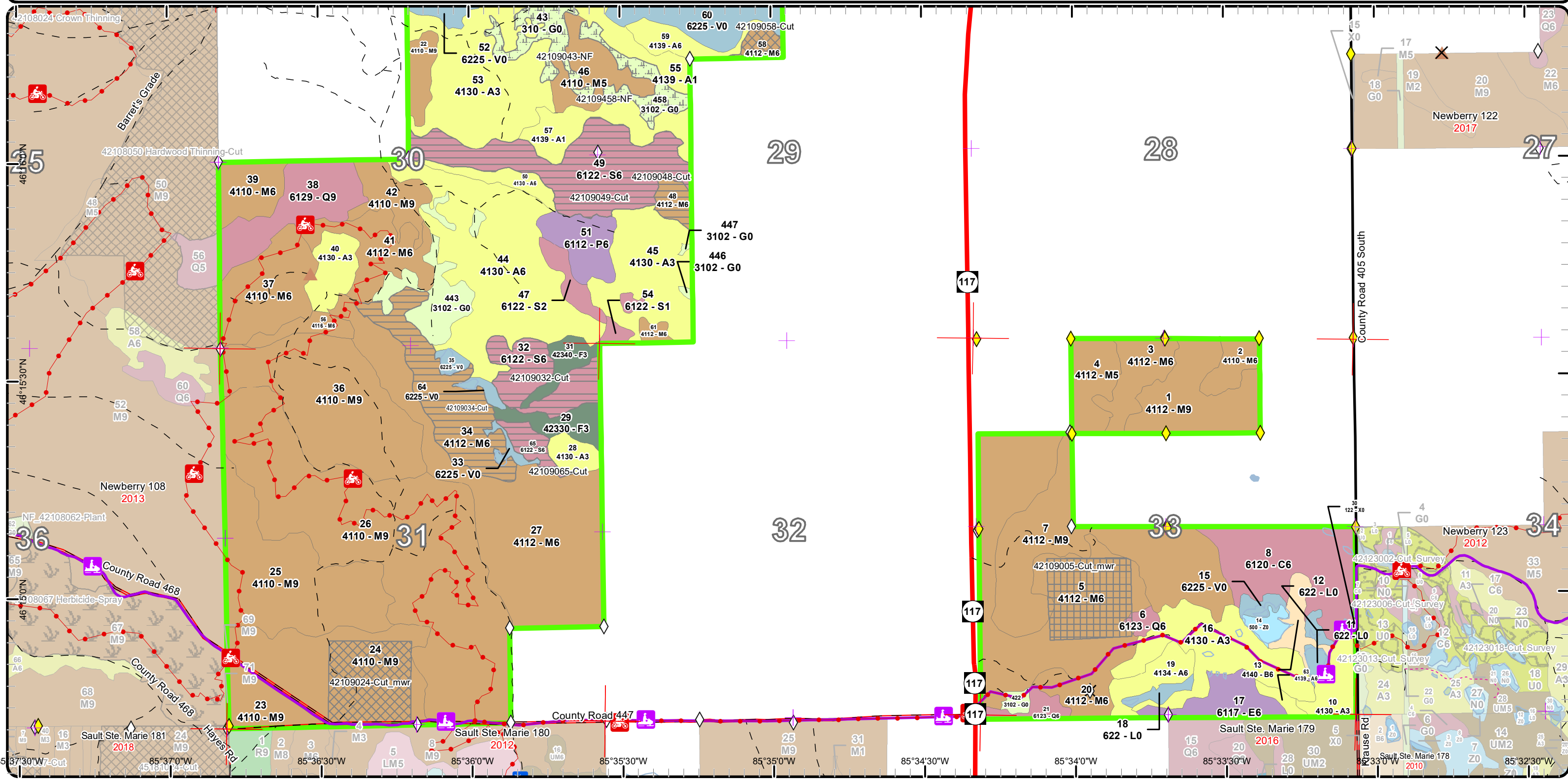


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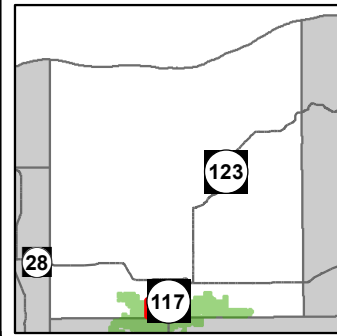
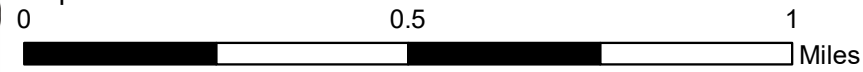


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- ▭ 622 - Lowland Shrub
- ▭ Lakes

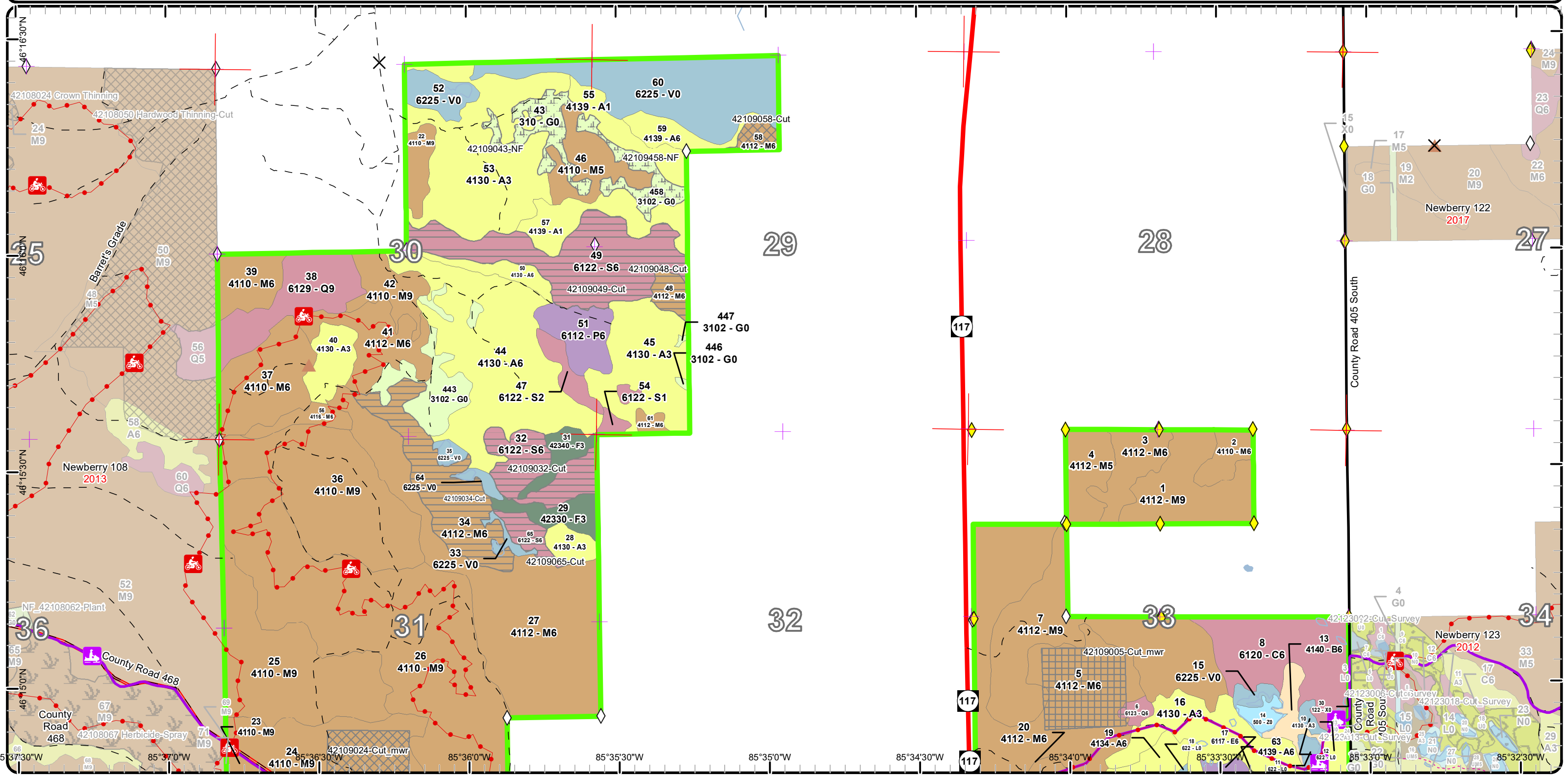


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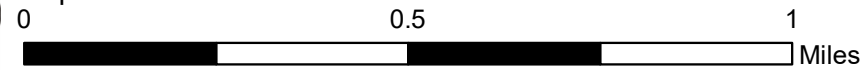
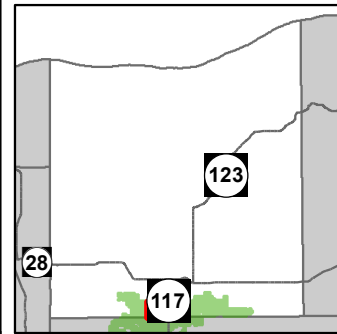


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|--|---|--|
| <ul style="list-style-type: none"> <li>— Miris Corners</li> <li>+ Remonumented Section Corners</li> <li>◆ Survey Grade GPS Corners</li> <li>◇ Field Grade GPS Corners</li> <li>✕ Gate</li> <li>▲ Berms</li> <li>🏍 Motorcycle Trails (DNR License)</li> <li>🏂 Snowmobile Trails</li> <li>● ORV License &amp; Trail Permit</li> <li>— Designated Snowmobile Trails</li> <li>— Highway</li> <li>— Paved Roads</li> <li>— County Gravel Roads</li> </ul> | <ul style="list-style-type: none"> <li>- - Poor Dirt Roads</li> <li>- - Trail (Non-Recreation)</li> <li>— Rivers</li> <li>— Compartment Boundary</li> <li>⊠ Selection (Group, Single Tree)</li> <li>▭ Clearcut (w/Reserves)</li> <li>▨ Other Treatment - See Comments</li> <li>▧ Seed Tree (w/Reserves)</li> <li>■ 411 - Northern Hardwood</li> <li>■ 413 - Aspen Types</li> <li>■ 414 - Other Upland Deciduous</li> <li>■ 423 - Other Upland Conifers</li> <li>■ 611 - Lowland Deciduous Forest</li> <li>■ 612 - Lowland Coniferous Forest</li> <li>■ 122 - Roads/Parking Lot</li> </ul> | <ul style="list-style-type: none"> <li>■ 310 - Herbaceous Openland</li> <li>■ 500 - Water</li> <li>■ 622 - Lowland Shrub</li> <li>■ Lakes</li> </ul> |
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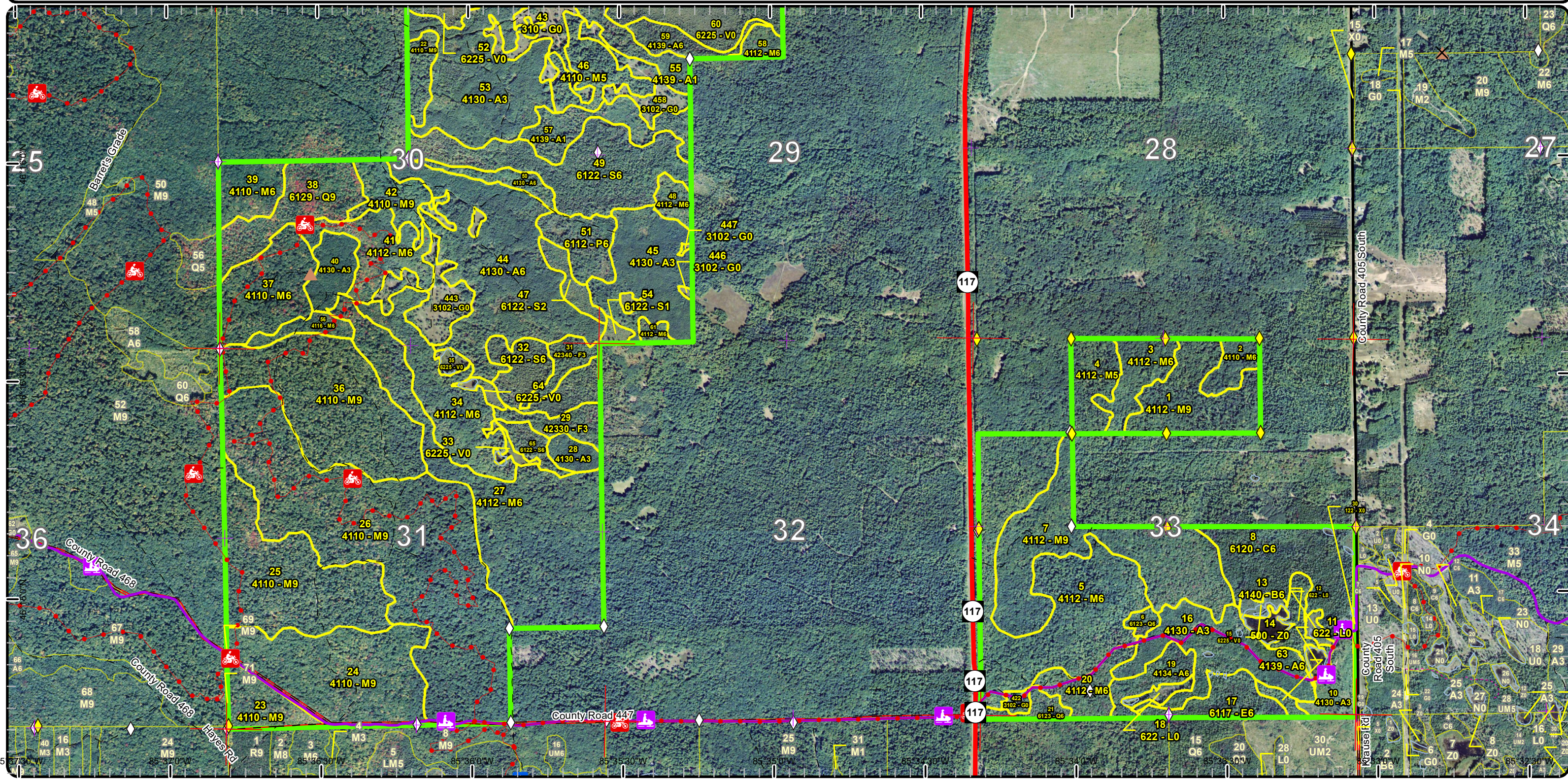
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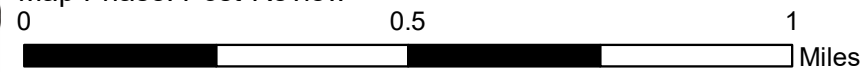
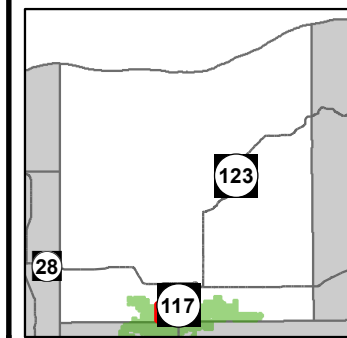
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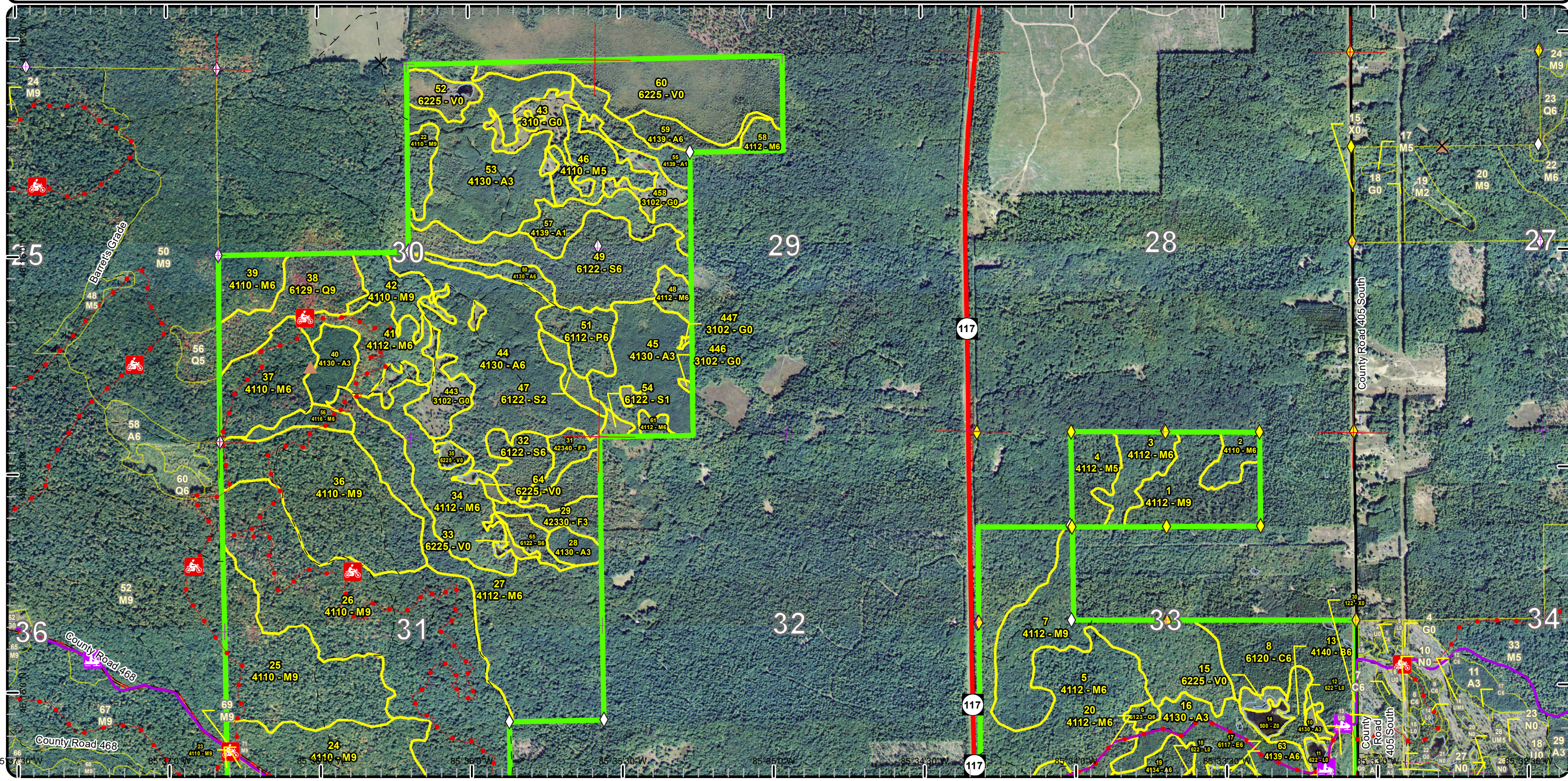


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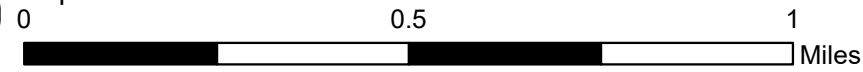
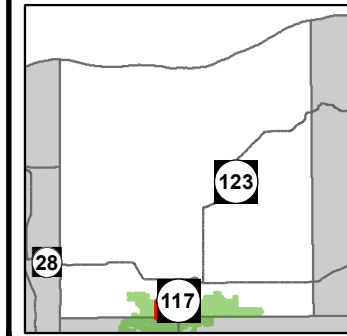


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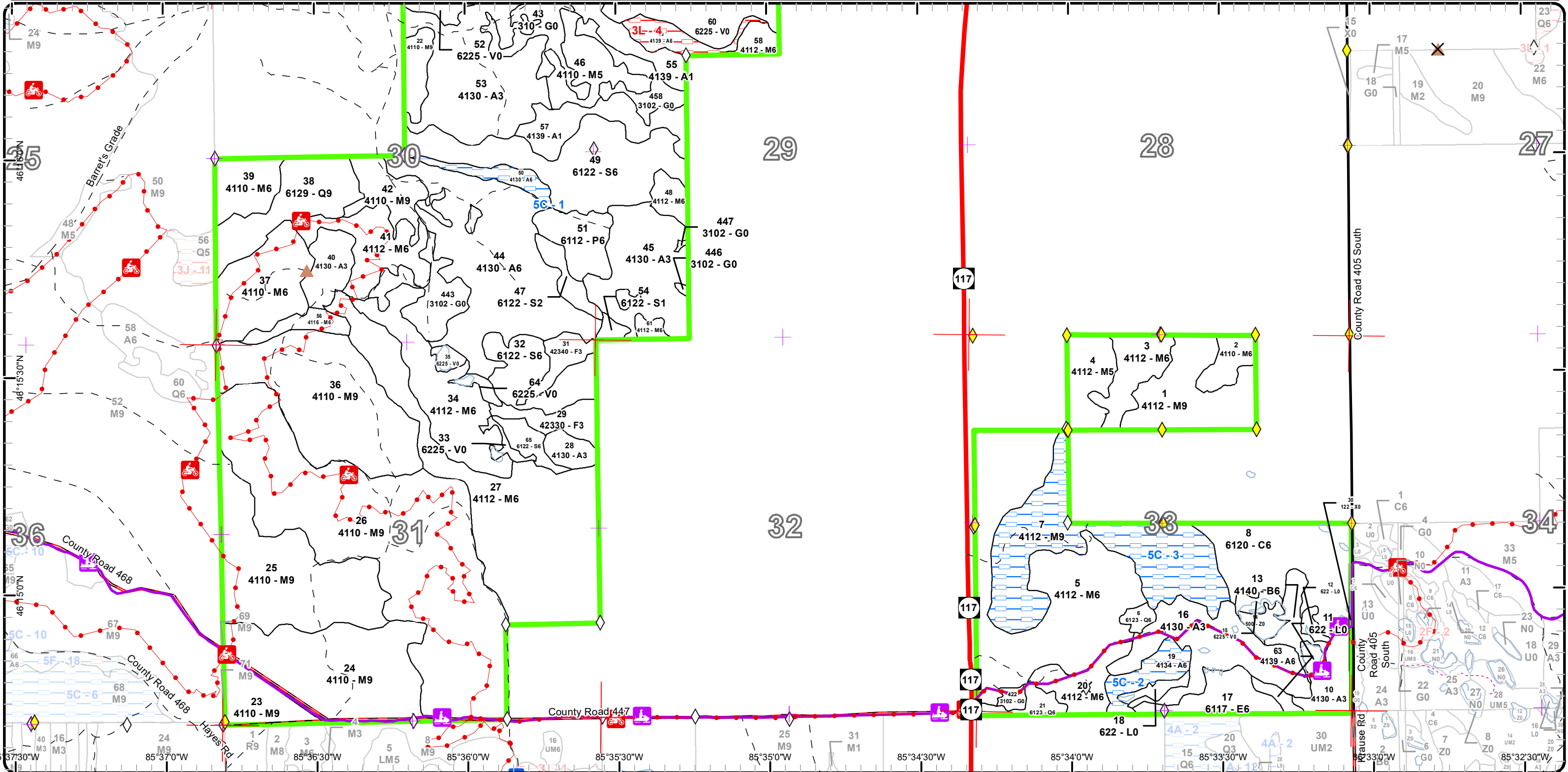


# Special Conservation Areas & Site Conditions Map

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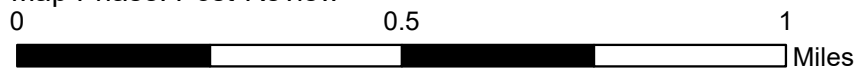
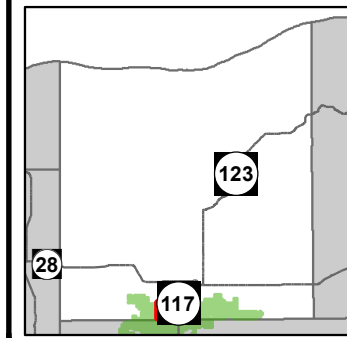
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- ▭ Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3L: Other wildlife concerns
- ▭ Stand Boundaries



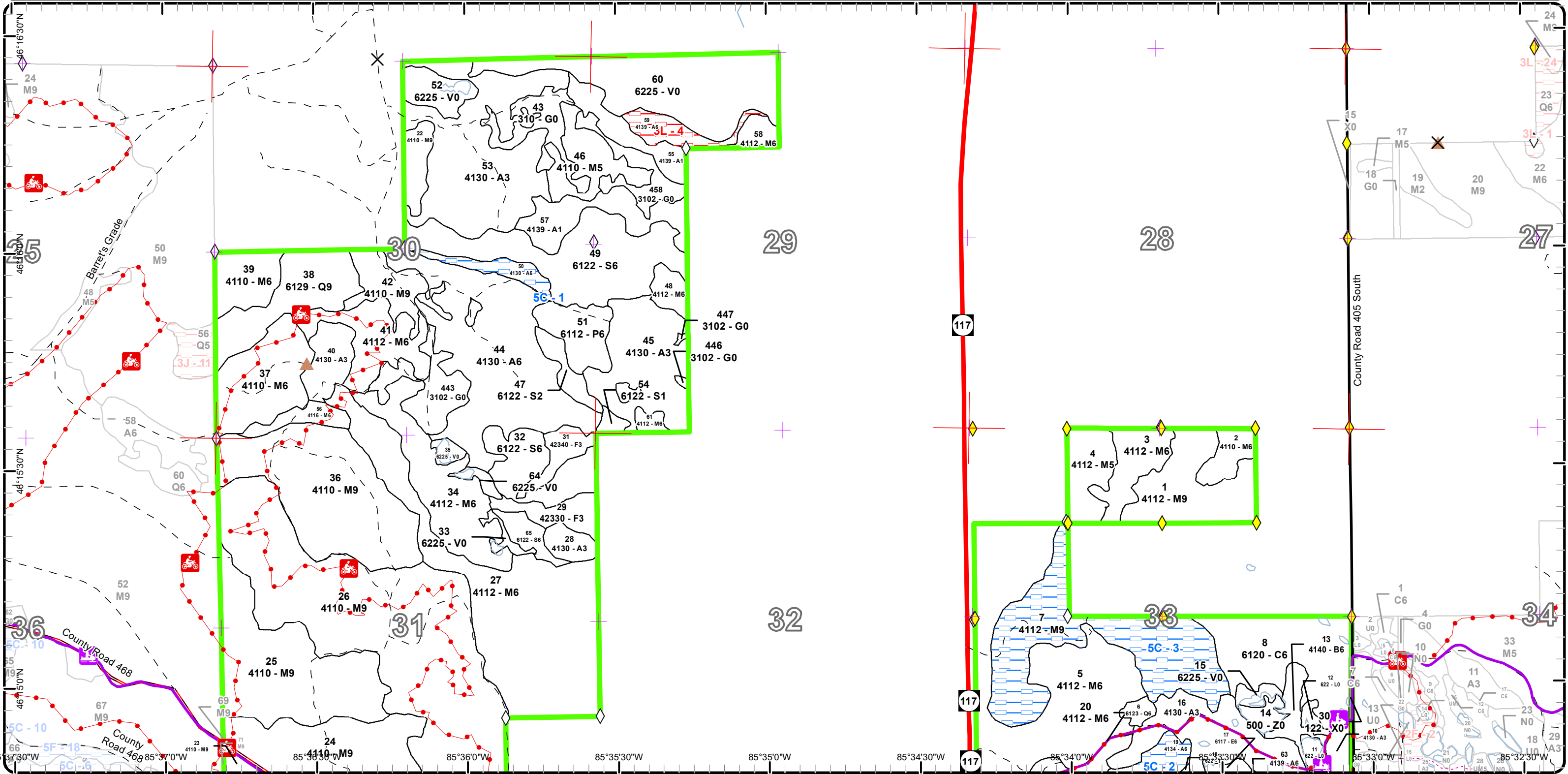


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- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3L: Other wildlife concerns
- Stand Boundaries
- Cold Water Streams



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	12	79	225	0	0	0	11	15	8	0	0	0	0	0	0	0	0	350
Bog	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Cedar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	47
Herbaceous Openland	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Lowland Aspen/Balsam Poplar	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Conifers	0	0	0	0	0	0	0	9	32	0	0	0	0	0	0	0	0	0	41
Lowland Deciduous	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	16
Lowland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Lowland Spruce/Fir	0	0	4	8	0	0	0	0	0	90	0	0	0	0	0	0	0	0	102
Northern Hardwood	0	0	0	0	0	0	60	20	6	9	0	0	0	5	0	0	0	863	963
Paper Birch	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	8
Upland Spruce/Fir	0	0	0	0	0	11	8	0	0	0	0	0	0	0	0	0	0	0	19
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
<b>Total</b>	<b>153</b>	<b>12</b>	<b>83</b>	<b>250</b>	<b>0</b>	<b>20</b>	<b>68</b>	<b>40</b>	<b>69</b>	<b>107</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>910</b>	<b>1716</b>



## Report 2 – Treatment Summary

Newberry Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 109

Total Compartment Acres: 1,716

Commercial Harvest - 202  
 Harvests with Site Condition - 0  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Lowland Spruce/Fir	90	0	0	0	0	0	0	0	0	90
Northern Hardwood	47	36	0	30	0	0	0	0	0	113
<b>Total</b>	<b>137</b>	<b>36</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>203</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	203	0	0	0	0	0	0	27	0	229
Next Step	0	60	41	0	0	60	142	0	0	303
<b>Total</b>	<b>203</b>	<b>60</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>142</b>	<b>0</b>	<b>27</b>	<b>533</b>



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
5	42109005- Cut_mwr	29.9	4112 - Maple, Beech, Cherry Association	Poletimber Well	71	81-110	Harvest	Seed Tree	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

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

Prescription Seed Tree harvest conducted by Mike Walter's research team. Stand will have a follow up treatments herbicide and scarification.

Specs:

Next Step Pesticide, Hand Application; SitePrep, Scarification

Treatments:

Acceptable Northern hardwood

Regen:OtherComment:

Proposed Start Date: 10/01/2016

24	42109024- Cut_mwr	30.2	4110 - Sugar Maple Association	Sawtimber Well	81	81-110	Harvest	Group Selection	411 - Northern Hardwood	Two-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Group Selection harvest marked to the specifications of the Mike Walter's Research team. Stand will have a follow up treatments herbicide and scarification.

Specs:

Next Step Pesticide, Hand Application; SitePrep, Scarification

Treatments:

Acceptable Northern hardwood

Regen:OtherComment:

Proposed Start Date: 10/01/2016

32	42109032-Cut	24.4	6122 - Black Spruce	Poletimber Well	84	111- 140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription leave hemlock and some white pine

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Black spruce, hemlock, white pine, paper birch, red maple, cedar, tamarack

Regen:

Other access from north through private

Comment:

Proposed Start Date: 10/01/2017

34	42109034-Cut	40.7	4112 - Maple, Beech, Cherry Association	Poletimber Well	57	111- 140	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription clear cut, leave pockets of good hardwood poles and all conifer except balsam fir. This may cause significant acreage change.

Specs:

Next Step Planting, Underplant; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, balsam fir, red maple, sugar maple, cherry

Regen:

Other creating another age cohort of evenaged trees to supplement the other even aged stands. This would be a good candidate to under plant oak.

Comment:

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
43	42109043-NF	14.8	310 - Herbaceous Openland	Nonstocked	0	Unspec ified	NonForestMgt	Other - Specify	3102 - Grass		Draft Field Boundary

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

Prescription After soil testing, add prescribed amounts of lime and fertilizer. May need to seed in clover.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

48	42109048-Cut	6.3	4112 - Maple, Beech, Cherry Association	Poletimber Well	71	81-110	Harvest	Clearcut with Retention	4199 - Other Mixed Upland Deciduous	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Clear cut with retention

Specs:

Next Step

Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable

red maple, aspen, white pine, sugar maple, Balsam fir, cherry

Regen:

Birch

Other

Cut with spruce stand #49. Leave all conifer other than balsam fir.

Comment:

Proposed Start Date: 10/01/2018

49	42109049-Cut	58.8	6122 - Black Spruce	Poletimber Well	81	141- 170	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription Clear cut, leave hemlock and some white pine

Specs:

Next Step

Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable

Black Spruce, tamarack, cedar, red maple, hemlock, white pine, paper birch

Regen:

Other

Winter cut, access from north through private

Comment:

Proposed Start Date: 10/01/2017

58	42109058-Cut	5.4	4112 - Maple, Beech, Cherry Association	Poletimber Well	121	51-80	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Draft Field Boundary
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**Habitat Cut: No****Site Condition:**

Prescription mark to 80 BA.

Specs:

Next Step

Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable

Red maple, Sugar maple, aspen, cherry, hemlock

Regen:

Other

quality is lower on the west side can mark heavier to salvage lower quality trees. Access through private start date 10-26-2016

Comment:

Proposed Start Date: 10/26/2016



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
65 42109065-Cut	6.8	6122 - Black Spruce	Poletimber Well	84	111-140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary

**Habitat Cut: No**

**Site Condition:**

Prescription clear cut, leave hemlock, white pine

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable black spruce, cedar, tamarack, hemlock, red maple, paper birch, white pine

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

458 42109458-NF	12.1	3102 - Grass	Nonstocked		Unspecified	NonForestMgt	Other - Specify	3102 - Grass		Draft Field Boundary
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**Habitat Cut: No**

**Site Condition:**

Prescription After soil testing, apply lime and fertilizer. Could benefit from clover seeding.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

**Total Treatment Acreage Proposed: 229.4**

## Report 4 – Site Conditions

Newberry Mgt. Unit

Don Kuhr : Examiner

Compartment: 109

Year of Entry: 2018

### Availability for Management

Total Acres	Acres Available	Acres Avail With Condition	Acres Not Available	Dominant Site Conditions		
Acres	Available	With Condition	Not Available	5C	3L	
349	319	20	11	Aspen	20	11
85	85	0	0	Bog		
47	47	0	0	Cedar		
52	52	0	0	Herbaceous Openland		
17	17	0	0	Lowland Aspen/Balsam Poplar		
41	41	0	0	Lowland Conifers		
16	16	0	0	Lowland Deciduous		
9	9	0	0	Lowland Shrub		
101	101	0	0	Lowland Spruce/Fir		
965	891	74	0	Northern Hardwood	74	
8	8	0	0	Paper Birch		
19	19	0	0	Upland Spruce/Fir		
2	2	0	0	Urban		
5	5	0	0	Water		
1,716	1,611	94	11	Total Forested Acres	94	11
	94%	5%	1%	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	8	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	5F: Evaluated for Forest Health Considerations	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Full of short steep hills and low ground between. Evaluated for SBW.							

## Report 4 – Site Conditions

Newberry Mgt. Unit

Don Kuhr : Examiner

Compartment: 109

Year of Entry: 2018

3	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	74	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Treat next entry. Poorer quality stand, wait to results of Walters project in stand 5.							
4	<b>Unavailable</b>	<b>3L: Other wildlife concerns</b>	11	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Transition area and wildlife 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
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Comments

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## Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	36.3	81	51-80	Stand harvested via thinning as sale #028-11-01, Goodwin Hardwoods. Completed 04/17/2013.
2	4110 - Sugar Maple Association	Poletimber Well	9.1	81	51-80	OPIC - FMD: Low quality M6. Appears to have been cut heavily in the past and now has good H.maple regen 20-30' tall, 1-2" dbhs. Residual pole/sawtimber trees are poor (junk) - seams, low limbs, heavy knots, rot. Let saplings move into poletimber size classes to allow for a feasible thinning. Good example of how a stand's management can be set back due to overcutting in the past.
3	4112 - Maple, Beech, Cherry Association	Poletimber Well	17.2	68	81-110	
4	4112 - Maple, Beech, Cherry Association	Poletimber Medium	17.4	91	51-80	Access would be through private land Road system runs along southern edge of the compartment from Co. Rd. 405 to the east.  Stand harvested via thinning as sale #028-11-01, Goodwin Hardwoods. Completed 04/17/2013.
5	4112 - Maple, Beech, Cherry Association	Poletimber Well	99.5	71	81-110	OPIC - FMD: Good H.maple and beech sapling stocking, 4-14'. Pockets of good quality H.maple sawtimber 14-18" dbh, 1-2 log heights. Widespread epicormic branching on poletimber where it had been thinned heavier in the past. Balsam fir sapling inclusions/component. Y.birch, beech timber also present in minor quantity. Hold until next inventory cycle to allow mix hardwood regen to gain in size. There is currently wide spread deer browsing on H. maple saplings 3' tall and under.
6	6123 - Lowland Fir	Poletimber Well	3.1	68	111-140	Small mixed conifer acreage adjacent to northern hardwoods and A3 to the east, good wildlife pocket..
7	4112 - Maple, Beech, Cherry Association	Sawtimber Well	74.1	101	111-140	Maple seedlings are browsed.
8	6120 - Lowland Cedar	Poletimber Well	47.1	61	81-110	OPIC - FMD: Heavily stocked lowland conifer swamp. Areas of well stocked cedar poletimber which appears healthy - scattered cedar seedlings approx 1' high are present. More open areas have tige alder growth. Lesser components of B.spruce and tamarack. Edges of the stand show typical transitional areas to uplands and hold heavy balsam fir sapling growth. Wet ground - springy, unfrozen water evident (1/06).
10	4130 - Aspen	Sapling Well	12.0	8	Immature	**Stand is set up as part of joint sale (2007 yoe) with the Naubinway Field Office. Sale name = M.E.'s Mystery Mix.
13	4140 - Other Upland Deciduous	Poletimber Well	8.5	47	81-110	OPIC - FMD: P. birch timbered ridge running N - S between two bogs/ponds. F3 (balsam fir) poletimber understorey - 6-7" dbh, 2-4 stick heights. Excellent wildlife travel corridor. Birch is showing mortality and is scattered in pockets.
16	4130 - Aspen	Sapling Well	42.5	28	Immature	OPIC - FMD: Young aspen, well stocked. Beaver Pond Birch T. Sale (sale #005-87) cut complete 6/89. Bracken fern, beaked hazel.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
17	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	16.3	71	81-110	OPIC - FMD: High ground ridges interspersed among low ground. High ground has spruce/fir saplings and scattered aspen poletimber. Stand is a mix of cedar 6-10" 1-3 stick, black spruce 4-8" dbh, 3-5 stick heights. Areas of heavy balsam sapling advanced regen. Scattered white pine and hemlock on the knolls and ridges. Bracken fern, labrador tea. Soil = Spot-Finch complex.
19	4134 - Aspen, Spruce/Fir	Poletimber Well	12.0	71	81-110	OPIC - FMD: Heavy balsam fir sapling growth, 6-15' high. Scattered aspen, paper birch. Lower areas have hemlock and cedar component. Transitional area from beaver meadow/tag alder to uplands/hardwoods. Leave as buffer strip and travel corridor. Soil = Spot
20	4112 - Maple, Beech, Cherry Association	Poletimber Well	14.8	86	81-110	OPIC - FMD: Northern hardwood poletimber 4-8" dbh, 3-5 stick heights. Any sawtimber sized trees are low quality- seams, low forks, etc. Scattered balsam and spruce saplings. There are areas showing higher incidence of defect in the red maple. Hold to thin with Stand 5 in the next cutting cycle. ORV trail in stand.
21	6123 - Lowland Fir	Poletimber Well	6.2	61	141-170	OPIC - FMD: Mixed stand - cedar, balsam, spruce, hemlock, white pine. Poor quality mixed hardwood poletimber (mainly yellow birch). Wet ground - springs. High ground ridges running through stand, balsam and hemlock. Soil = Spot-Finch complex
22	4110 - Sugar Maple Association	Sawtimber Well	9.4	81	51-80	Thinned when aspen cut.
23	4110 - Sugar Maple Association	Sawtimber Well	16.5	91	81-110	OPIC - FMD: Well formed trees. Sawtimber is 12-16" dbh, 1-2 log heights. Good growth of H.maple saplings 6-10' tall. Beech, black cherry, yellow birch component. Scattered balsam saplings. Hold to thin with Stand 24 in next cutting cycle.
24	4110 - Sugar Maple Association	Sawtimber Well	68.6	81	81-110	McAlpine Pond Hardwood T. Sale (sale #021-88) cut completed 7/89. Delay harvest to protect heavy mixed hardwood advanced regen. Stand lies along Co. Rd. 468 and snowmobile trail. self thinned when beech died.
25	4110 - Sugar Maple Association	Sawtimber Well	68.5	91	51-80	Stand harvested via selection harvest as sale #046-08-01, Resistant Beech Hardwoods. Completed 08/14/2012. Regeneration check needed in 2016.  regen beech 10 ft whips lots of sugar maple regen all browsed 1-3 ft
26	4110 - Sugar Maple Association	Sawtimber Well	175.7	91	81-110	Majority of stand is showing good H.maple and beech regen 2-4' high browsed. County Line Hardwood T. Sale (sale # 016-98) cut completed 9/02. Southern part of stand runs along Co Rd. 468. ORV trail in stand.
27	4112 - Maple, Beech, Cherry Association	Poletimber Well	106.0	81	81-110	. Beech Ridge Hardwood T.Sale (sale #08-91) cut completed 6/93. ORV trail runs through N. end of stand.
28	4130 - Aspen	Sapling Well	6.8	24	1-50	OPIC - FMD: Good young aspen stand, 2-3" dbhs 20-30'tall. Beaked hazel, raspberry understory. Tag alder present in scattered low areas. Balsam fir sapling pockets. Good prevalence of large, downed logs for grouse drumming.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
29	42330 - Upland Fir	Sapling Well	10.8	46	81-110	Balsam fir seedling/saplings 16-25' tall. P.birch poletimber 5-7"dbh, 3-4 stick heights (p. birch is in severe decline and majority has suffered mortality already). Scattered R. maple poletimber. Steep ridge with orv trail from private.
31	42340 - Upland Spruce/Fir	Sapling Well	8.3	52	51-80	OPIC - FMD: Ridge top stand, young balsam fir (understory) with white pine overstory, 10-14"dbh, 4-5 stick heights. Scattered paper birch and r. maple poletimber. Bracken fern, blueberry.
32	6122 - Black Spruce	Poletimber Well	24.4	84	111-140	OPIC - FMD: B. spruce poletimber 4-8"dbh, 1-4 stick heights. Scattered white pine sawtimber sized - low quality (pulp). Occasional ridges, high ground. Sphagnum, blueberry, bracken fern ground cover.
34	4112 - Maple, Beech, Cherry Association	Poletimber Well	40.7	57	111-140	
36	4110 - Sugar Maple Association	Sawtimber Well	77.8	111	81-110	AFPO habitat type. ORV trail through stand. Stand harvested via selection harvest as sale #006-08-01, C, 109 Hardwoods. Completed 02/16/2012. West half 40-50 BA Full of raspberries and elderberries, hard maple regen underneath. East half 100 - 130 BA with hard maple regen 1-2 ft. Beech dead or dying.
37	4110 - Sugar Maple Association	Poletimber Well	34.3	91	81-110	Part of County Line Hardwood T. Sale (sale # 016-98) cut completed 9/02.
38	6129 - Mixed Coniferous Lowland Forest	Sawtimber Well	31.6	77	111-140	OPIC - FMD: B.spruce, tamarack, hemlock, cedar. White pine on small knolls. Tag alder pockets. Scattered areas heavier stocked to hemlock with hemlock regen 3-10' tall. Excellent wildlife travel corridor
39	4110 - Sugar Maple Association	Poletimber Well	16.2	101	81-110	Poor access - do not want to put in a new road that would need to cross through Stand 38. Private to north. Possible to treat with adjacent compartment to the west in the future.
40	4130 - Aspen	Sapling Well	13.3	26	Immature	OPIC - FMD: Aspen regen 20-35' tall, 3-5"dbh. B.cherry stump sprouts. Beaked hazel, raspberry. Barretts Grade T. Sale sale completed 6/93. ORV trail runs along E. side of stand.
41	4112 - Maple, Beech, Cherry Association	Poletimber Well	26.1	71	81-110	ORV trail
42	4110 - Sugar Maple Association	Sawtimber Well	15.1	85	81-110	OPIC - FMD: N. part of stand appears to have been thinned approx. 20 yrs ago. Good to excellent form, few poletimber diam classes represented. Sawtimber 12-16"dbh, 1-3 log heights. Inclusions of highly stocked b.cherry sawtimber sized trees 12-14"dbh (black knot) In previously thinned area, excellent H.maple and beech regen. Hold until next cutting cycle to include it with adjacent stands.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4130 - Aspen	Poletimber Well	87.1	24	Immature	OPIC - FMD: Overall stand just beginning to enter poletimber size class. Scattered grass openings with tag alder present, low area inclusions. Aspen is 2-4" dbh 20-30' tall. Balsam fir sapling inclusions. Access road is wet (10/05), winter access only. Beaked hazel, raspberry, bracken fern. Barretts Grade T. Sale cut completed 6/93
45	4130 - Aspen	Sapling Well	42.4	16	Immature	OPIC - FMD: Aspen 10-17" high. Beaked hazel, balsam saplings, r. maple, b. cherry sapling component. Lower areas hold tag alder. M-117 Aspen T. Sale (sale #031-98) cut completed 6/01
46	4110 - Sugar Maple Association	Poletimber Medium	19.4	51	1-50	scattered poles, cut through with aspen sale.
47	6122 - Black Spruce	Sapling Medium	7.5	24	Immature	OPIC - FMD: Overall stand just beginning to enter poletimber size class. Scattered grass openings with tag alder present, low area inclusions. Aspen is 2-4" dbh 20-30' tall. Balsam fir sapling inclusions. Access road is wet (10/05), winter access only. Beaked hazel, raspberry, bracken fern. Barretts Grade T. Sale cut completed 6/93
48	4112 - Maple, Beech, Cherry Association	Poletimber Well	6.3	71	81-110	Private access. Low hardwood site quality.
49	6122 - Black Spruce	Poletimber Well	58.8	81	141-170	OPIC - FMD: Black spruce poletimber 4-8" dbh, scattered open areas with light tag alder and tamarack inclusions. Widely scattered small high ground "islands" with balsam fir and hemlock.
50	4130 - Aspen	Poletimber Well	7.9	82	111-140	OPIC - FMD: Pockets of good aspen, 12-16" dbh, 6-8 stick heights. Thick balsam fir understory. Areas of sparse growth with R. maple poletimber/saplings. Stand lies on a steep, narrow ridgetop that buffers a conifer swamp - good wildlife corridor and grouse budding source and cover being adjacent to A3 to the south. As stand progresses east the aspen thins out giving to low quality r. maple poletimber, balsam fir sapl and scattered aspen. With the stand being a steep, narrow ridge and a small acreage, retain for wildlife travel corridor and transition area to the conifer swamp to the north.
51	6112 - Lowland Aspen	Poletimber Well	16.6	24	Immature	OPIC - FMD: Overall stand just beginning to enter poletimber size class. Scattered grass openings with tag alder present, low area inclusions. Aspen is 3-6" dbh 25-35' tall. Balsam fir sapling inclusions. Access road is wet (10/05), winter access only. Beaked hazel, raspberry, bracken fern. Barretts Grade T. Sale cut completed 6/93
53	4130 - Aspen	Sapling Well	75.0	25	Immature	OPIC - FMD: Aspen saplings 30' tall - tag alder inclusions in the lower areas. Soil = Spring Lake
54	6122 - Black Spruce	Sapling Poor	3.9	15	Immature	M-117 Aspen T. Sale (sale #031-98) cut completed 6/01
55	4139 - Aspen, Mixed Deciduous	Sapling Poor	14.3	17	Immature	Soil = Solona  Stand harvested via final harvest as sale #045-08-01, Plum Creek Access Mix. Completed 08/30/10.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	7.4	81	81-110	
57	4139 - Aspen, Mixed Deciduous	Sapling Poor	22.4	17	Immature	Stand harvested via final harvest as sale #045-08-01, Plum Creek Access Mix. Completed 08/30/10.
58	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.4	121	51-80	Access through Private.
59	4139 - Aspen, Mixed Deciduous	Poletimber Well	10.6	67	81-110	OPIC - FMD: Aspen 9-12" dbhs, 5-7 stick heights. Mix of r.maple, balsam fir, black spruce transitional area to the conifer swamp to the north - many wet pockets (standing water/ice in Dec.). Scattered large w.pine. Retain as a transitional buffer to the swamp to the north and east. Soil = Solona.
61	4112 - Maple, Beech, Cherry Association	Poletimber Well	2.8	61	51-80	
63	4139 - Aspen, Mixed Deciduous	Poletimber Well	3.0	71	51-80	OPIC - FMD: Mature aspen, 6-12" dbh, 4-7 stick heights. Associated p.birch poletimber is showing mortality and in most places already dead - good for wildlife snags. Steep ridges throughout the stand, most looked to have access to the tops, for the most part, inoperable hillsides. Scattered throughout the stand are wet pockets at the bottoms of ridges - harvesting operations should avoid unless under well frozen conditions.
65	6122 - Black Spruce	Poletimber Well	6.8	84	111-140	OPIC - FMD: B. spruce poletimber 4-8" dbh, 1-4 stick heights. Scattered white pine sawtimber sized - low quality (pulp). Occasional ridges, high ground. Sphagnum, blueberry, bracken fern ground cover.



Stand	Cover Type	Acres	Managed Site	General Comments:
11	622 - Lowland Shrub	3.0	No	OPIC - FMD: Tag alder
12	622 - Lowland Shrub	2.4	No	OPIC - FMD: Tag alder
14	500 - Water	4.6	No	OPIC - FMD: old beaver pond
15	6225 - Bog	3.5	No	OPIC - FMD: Tag alder surrounding old beaver pond, widely scattered associated stunted black spruce and tamarck
18	622 - Lowland Shrub	3.5	No	OPIC - FMD: Tag alder/swamp grass opening with scattered "pot hole" water holes. Steep ridges surrounding the stand.
30	122 - Road/Parking Lot	2.4	No	
33	6225 - Bog	2.6	No	OPIC - FMD: Open leatherleaf bog with standing water. Scattered, stunted black spruce sapling size
35	6225 - Bog	2.8	No	OPIC - FMD: Leatherleaf bog/water. Beaver activity.
43	310 - Herbaceous Openland	14.8	No	
52	6225 - Bog	11.0	No	OPIC - FMD: Tag alder lowland - scattered white pine, dead snags
60	6225 - Bog	62.0	No	OPIC - FMD: leather leaf bog - scattered, stunted black spruce
64	6225 - Bog	2.7	No	OPIC - FMD: Open leatherleaf bog with standing water. Scattered, stunted black spruce sapling size
422	3102 - Grass	2.5	No	OPIC - FMD: Grass opening with bracken and trees (mainly aspen with scattered, low quality black cherry) beginning to fill in.
443	3102 - Grass	21.2	No	Grass/upland brush opening. Widely scattered b. cherry, r. maple pole timber and seedlings
446	3102 - Grass	0.5	No	OPIC - FMD: At edge of M 117 Aspen sale (#031-98), surrounded by A3
447	3102 - Grass	0.4	No	OPIC - FMD: Grass opening inside old M-117 Aspen T. Sale, surrounded by A3
458	3102 - Grass	12.1	No	OPIC - FMD: Grass opening with scattered trees filling in at edges- aspen, black cherry. Area appears to be old landings/possible camp area. Poor grass opening - sparse grass, reindeer moss, bracken