



Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42091

Entry Year 2018

Acreage: 3,318

County Luce

Management Area: 8 Mile Corner

Revision Date: 2016-08-25

Stand Examiner: Jason Tokar

Legal Description:

T47N R11W Sections 2, 3, 10, 11, 14 & 15

Identified Planning Goals:

Timber management, wildlife habitat, and recreation are the main uses of the compartment. The goal is to maintain or improve the forest health, productivity and diversity of the area to promote and enhance these uses. Treatments prescribed will help ensure the sustainability of the forest resource and continue to enhance the quality of the wildlife habitat. Northern Hardwood management will continue with the current sustainable level, promoting an array of both age class and structural diversity. Red Pine management will be increased due to silvicultural conditions. Jack pine stands will be scarified for natural regeneration and followed by planting if necessary. Harvests will be increased in lowland spruce and birch stands. Planting of red oak seedlings in low quality hardwood stands is prescribed to provide a hard mast producing species in response to the loss of beech in the area (beech bark disease).

Soil and topography:

The main soil type of the compartment is Kalkaska sand, an outwash sand, found throughout much of the compartment. Lesser components of Wallace sand and Dillingham-Kalkaska soil complex also occur. Cover types found on these soil types are overwhelmingly northern hardwoods, natural white pine stands and large opening complexes. Aspen stands and red pine plantations also make up a substantial percentage of the cover types on these sandy soils. The northern portion of the compartment consists of Wallace-Spot complex and Carbondale/Lupton/Tawas mucks, supporting cover types of swamp conifers and black spruce. The overall topography of the compartment is level to slightly rolling.

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

The compartment is comprised of one large contiguous block of State land, with only one small private parcel within the compartment boundaries. State land borders the compartment to the east and south, while a mixture of State land and Nature Conservancy Land borders to the north. The Forestland Group borders the compartment on the west. Development in and around the compartment is low due to the large amount of State land in the vicinity. Several small camps are located around the compartment boundary. The main types of land use in the area are hunting, ORV and snowmobile riding, and dog sledding.

Unique Natural Features:

MNFI doesn't list any occurrences within the compartment. Potential is there for a variety of types of flora and fauna including red shouldered hawk, eagle, osprey, great blue heron, moose, wolf, and wood turtle.

Archeological, Historical, and Cultural Features:

The Bureau of History does not list any historical features within the compartment.

Special Management Designations or Considerations:

Historically, Sharptail grouse are known to inhabit the large opening complex(s) in and around the compartment. Prescribed fire is the proposed management tool to help maintain this intricate habitat complex.

Watershed and Fisheries Considerations:

Fisheries Values: Good

Fisheries Concerns: Camp One Creek is located in this compartment and is a non-designated trout stream. However, because this creek feeds into the South Branch Two Hearted River it likely serves as a nursery stream for young Brook Trout and other salmonids. A minimum buffer of 100 feet should be adhered to when treating stands adjacent to the stream.

Wildlife Habitat Considerations:

Compartment 91 lies in central Luce county in the Grand Marais Sandy End Moraine and Outwash ecological sub-

subsection and in the 8 Mile Corner Management Area and has blackburnian warbler, pileated woodpecker, ruffed grouse and white-tailed deer as featured species. The compartment is largely northern hardwoods with various conifer and aspen stands scattered throughout. Overall species diversity of stands is fair. Pre-settlement vegetation patterns appear to be consistent with current vegetation in this region of the subsection.

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. Final harvests of spruce and fir stands will retain some conifer and soft mast species for diversity. Some under-planting of mast producing species is planned in this compartment. Wildlife species expected to use this compartment include sharp-tailed and ruffed grouse, white-tailed deer, black bear, moose, fisher, marten, coyotes, gray wolves and fox.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of an end moraine of coarse-textured till, glacial outwash sand and gravel and postglacial alluvium, and peat & muck. There is insufficient data to determine the glacial drift thickness (>50 feet). The Ordovician Trenton and Black River formations subcrop below the glacial drift. The Trenton and Black River have been quarried for limestone/dolomite elsewhere in the UP. No sand/gravel pits are located in the area, but there appears to be some sand potential. There is no economic oil and gas production in the UP and there is no known metallic mineral potential in this area.

Vehicle Access:

The compartment is approximately 12 miles northwest of Newberry. There is substantial vehicle access to the compartment. County Road 453 runs northwest/southeast through the heart of the compartment, while County Road 422 runs east/west through the southern portion on the compartment. Several woods roads (two track), including Camp One Road and Murray Lake Road, transect the area providing additional access to the interior of the compartment.

Survey Needs:

For management activities to occur the following corners need to be set: Various corners in Sections 2 and 3 around the private property. Corner locations in the NW1/4 of Section 15 (private corners) should be verified for proper location.

Recreational Facilities and Opportunities:

Recreational facilities include the Silver Creek ORV Trail and the Three Mile Snowmobile Trail. Numerous miles of dog sled training route transect the compartment. Other recreational opportunities include hunting, hiking, wildlife viewing. The proximity of the compartment to the town of Newberry lends to a high amount of hunting activity. Numerous hunting camps are located around the compartment boundary.

Fire Protection:

A few areas of Pine and grass cover types have potential for limited large fire runs. Upland sandy soils will allow for use of heavy fire suppression equipment, except northern part where lowland cover types are present.

Additional Compartment Information:

Two 30 acre blocks of hardwoods will be managed under the MSU/Walters research project.

The following reports from the Inventory are attached:

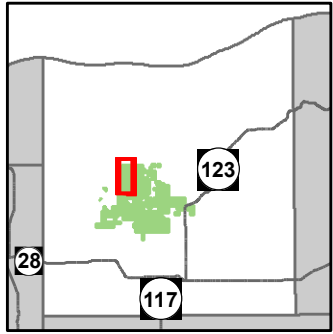
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

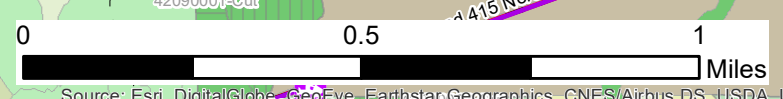
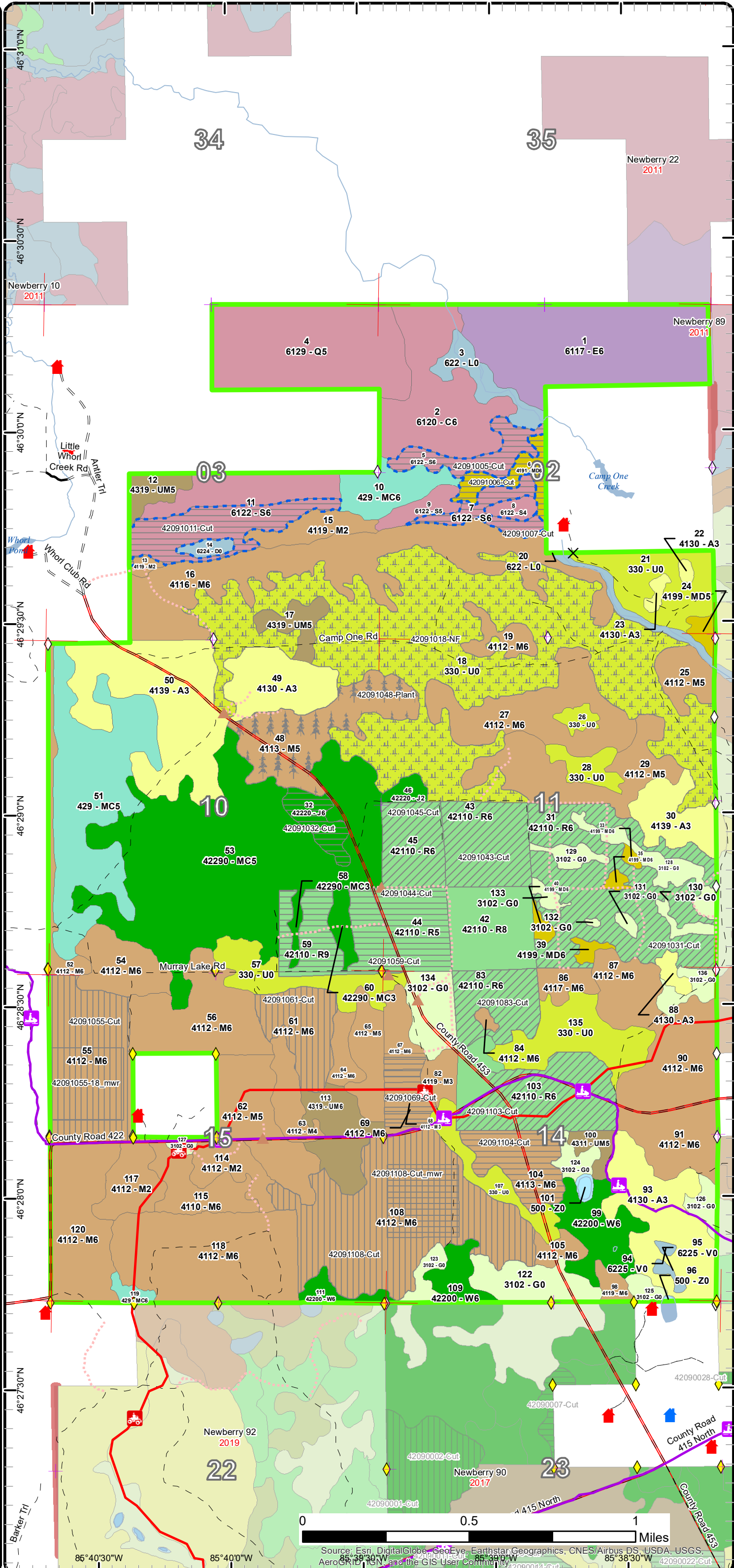
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 91
 T47N R11W Sec.
 02,03,10,11,14,15
 County: Luce
 Unit: Newberry
 Mgmt Area: 8 Mile Corner
 YOE: 2018
 Acres: 3,318 GIS Calculated
 Examiner: Jason Tokar
 Map Revised: 11/7/2016
 Map Phase: Post-Review



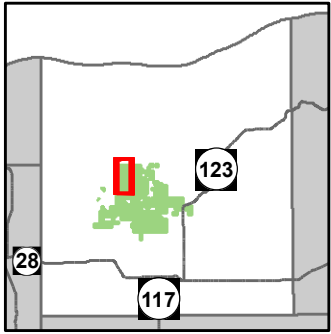
- Miris Corners
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- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- ✕ Gate
- ▲ Berms
- 🏠 Cabin
- 🏠 House
- 🛵 ORV Trails
- 🛷 Snowmobile Trails
- Designated ATV Trails
- Designated Snowmobile Trails
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Closed Roads
- Rivers
- Compartment Boundary
- Treatments with Site Conditions
- Clearcut (w/Reserves)
- Planting (tree species)
- Other Treatment - See Comments
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Seed Tree (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- Lakes



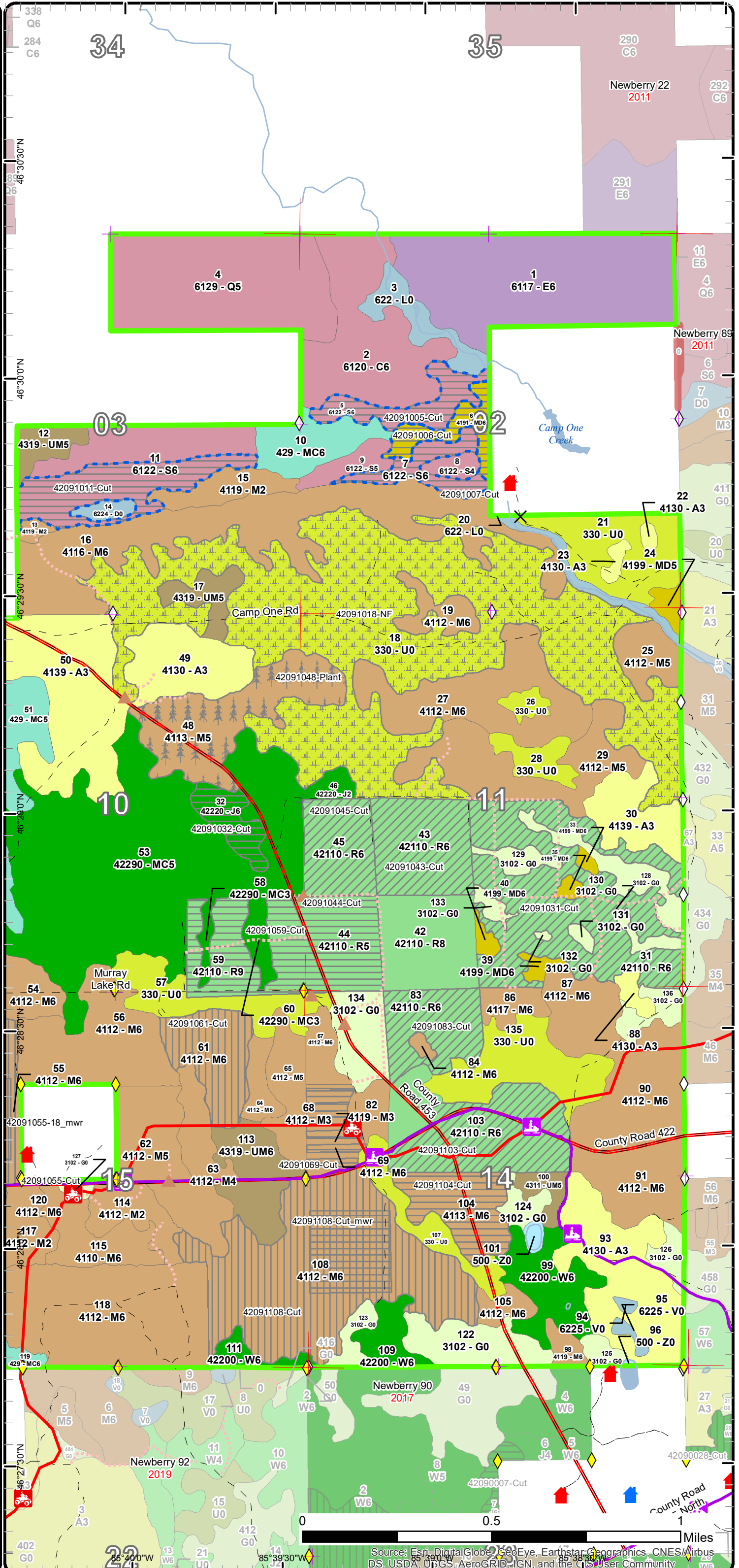
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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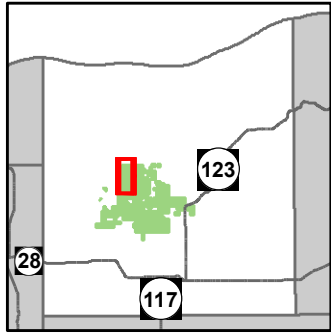
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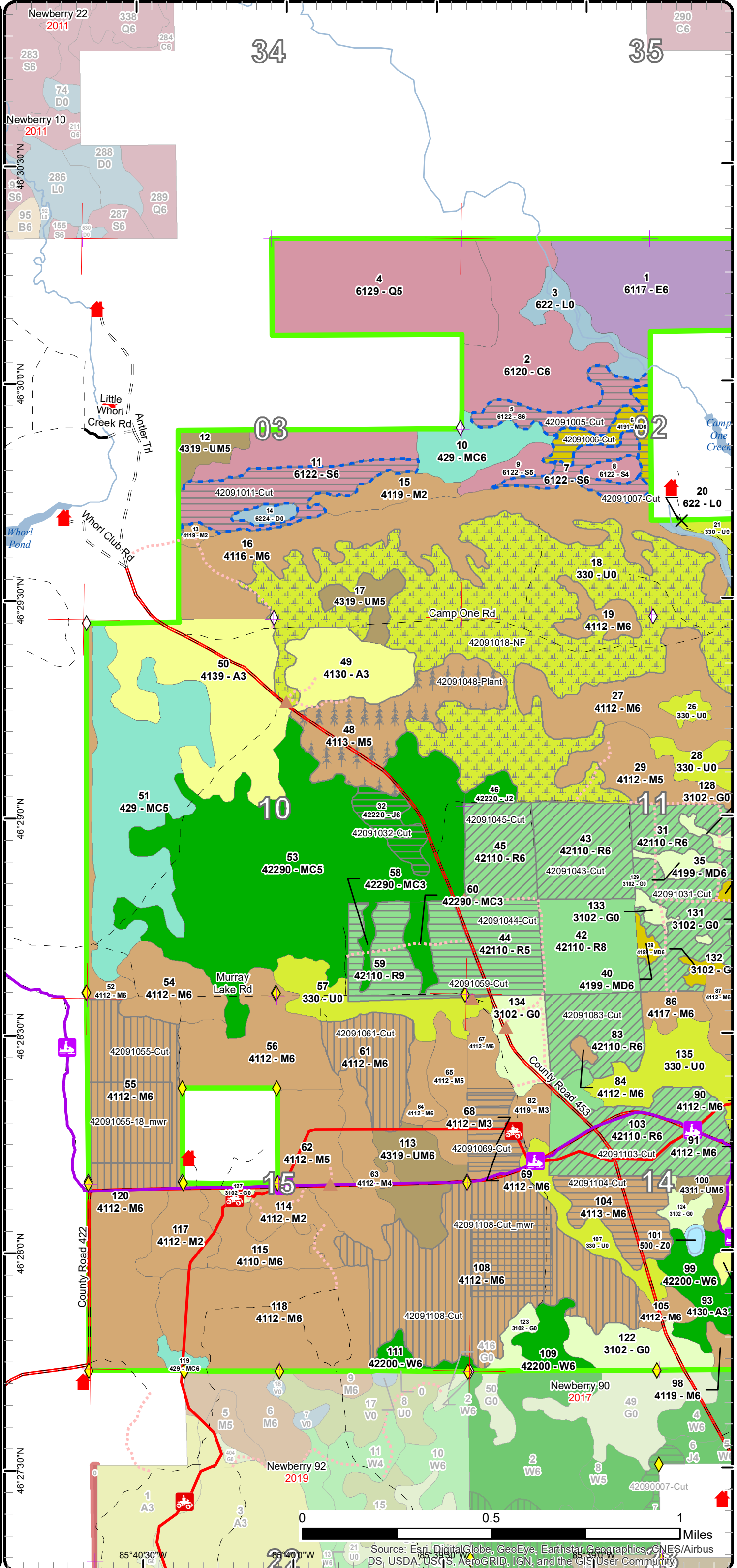
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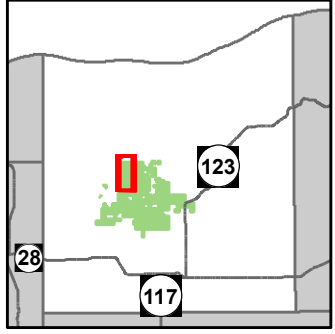


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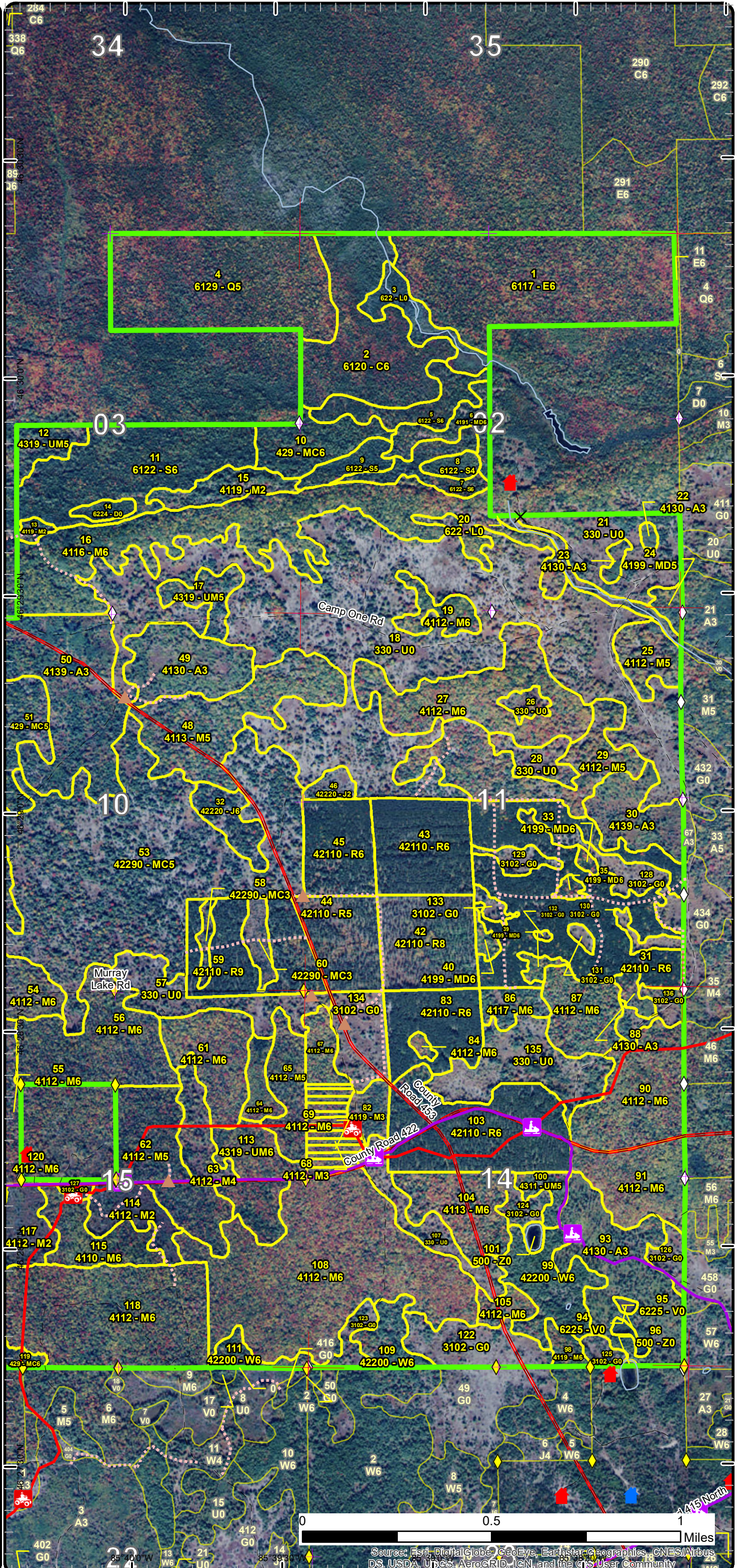


Stand Boundary Map

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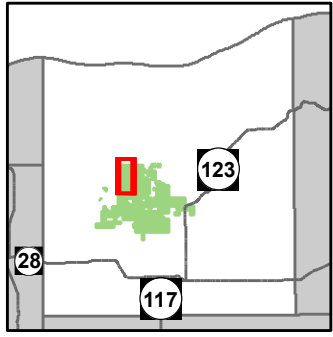
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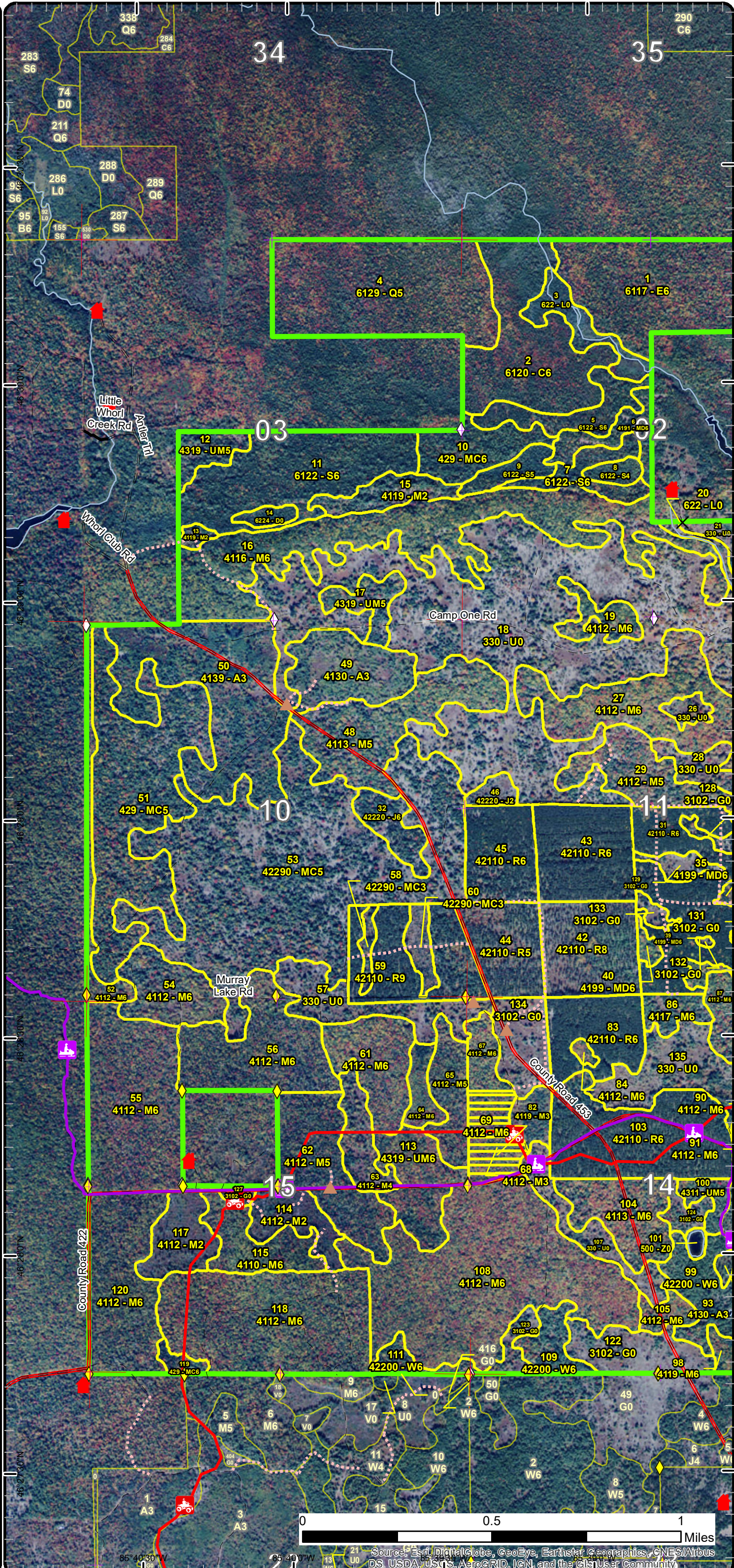
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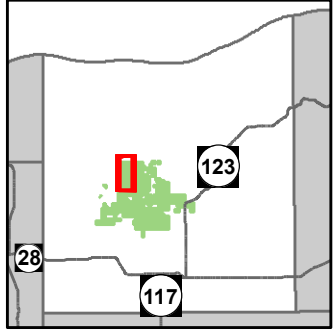


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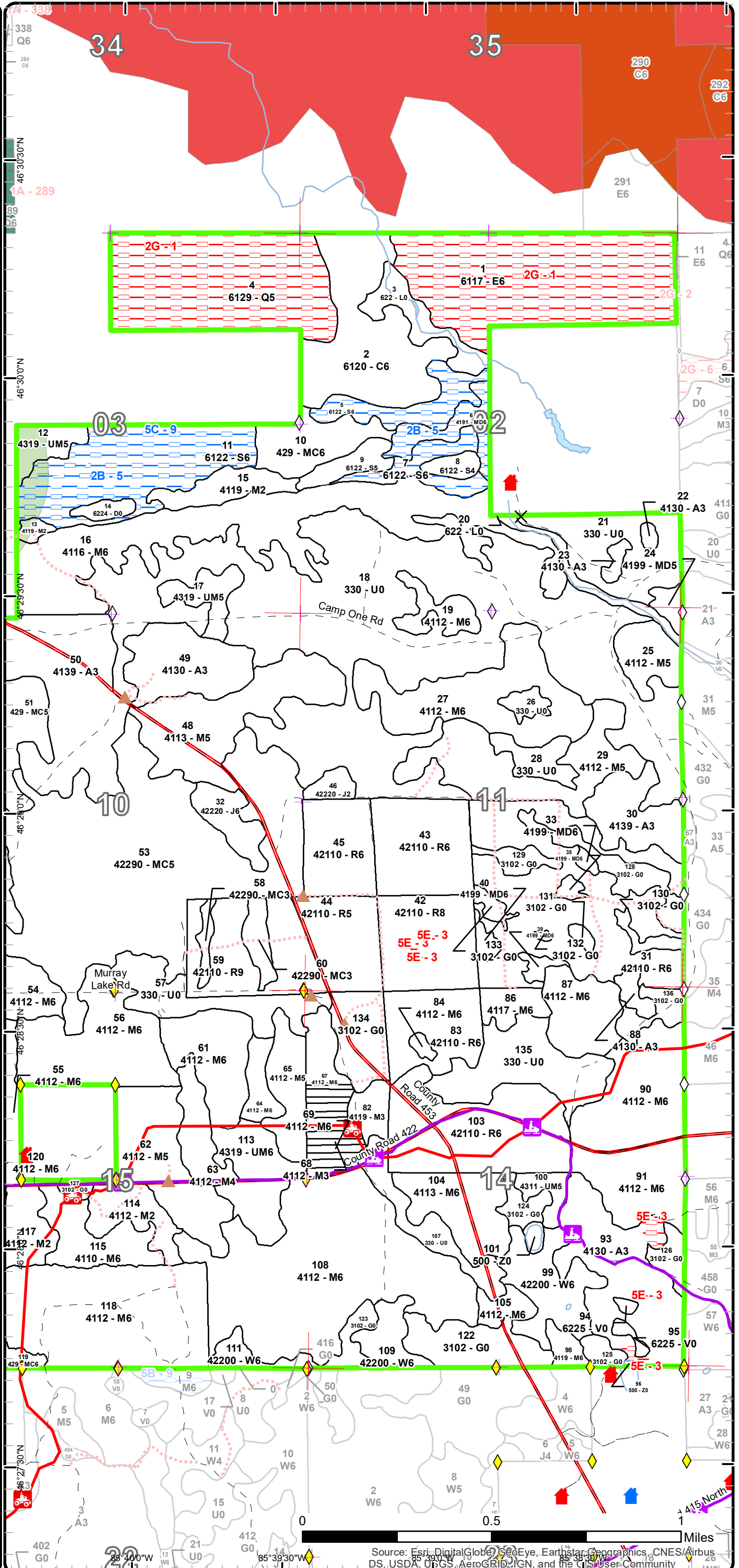


Special Conservation Areas & Site Conditions Map

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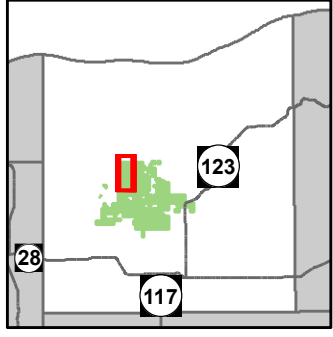


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- ▭ Compartment Boundary
- ▭ Available w/ Constraints
- ▭ Unavailable
- 2B: Unknown if access through adjacent landowner(s) is possible
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2G: Too wet (sensitive soils, does not include access issues)
- 5E: Long-Term Retention
- ▭ Stand Boundaries
- ▭ Ecological Reference Areas
- ▭ Cold Water Streams
- ▭ Cold Water Lakes
- ▭ Recreational/Scenic Value Area
- ▭ Possible Type 2 Old Growth

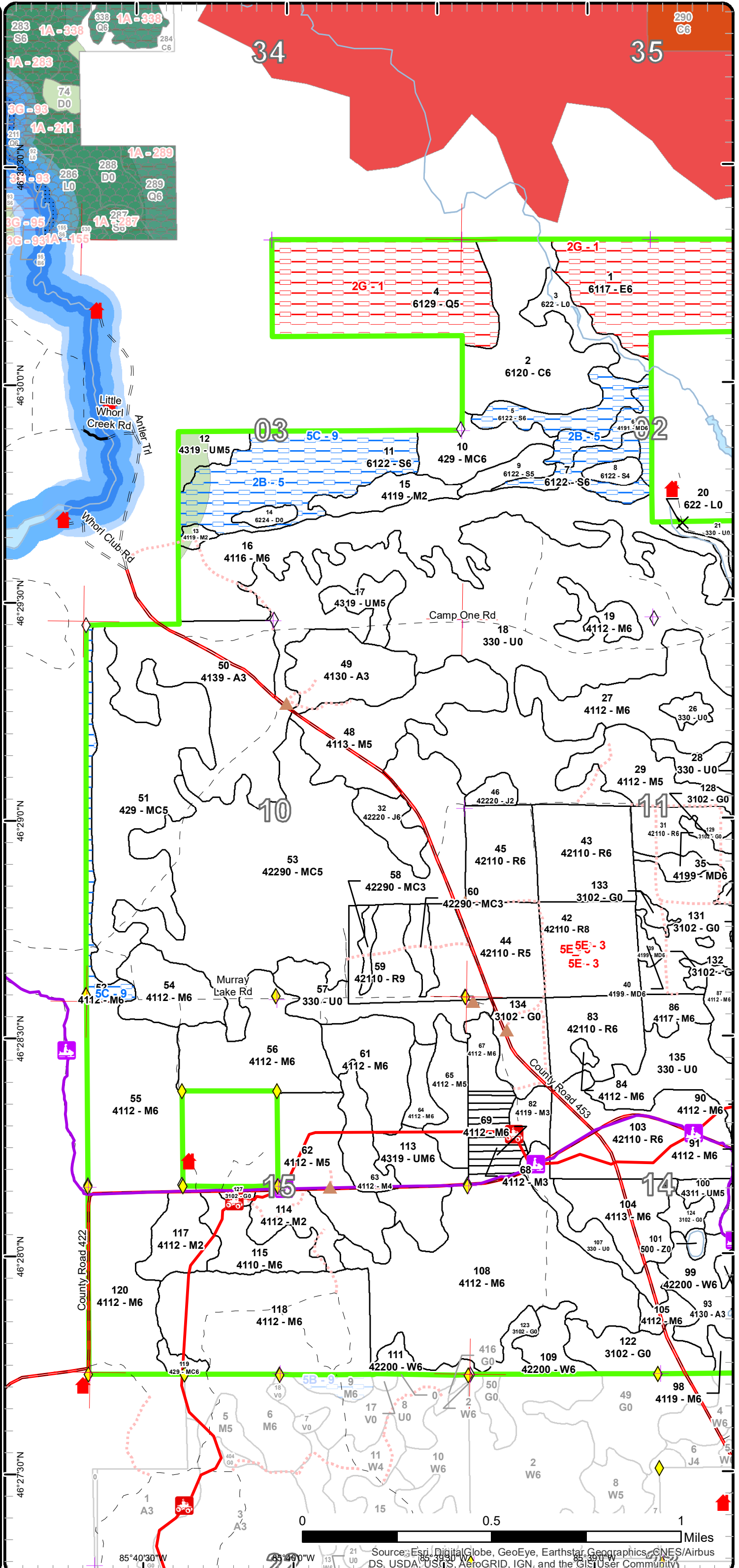


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- 2G: Too wet (sensitive soils, does not include access issues)
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Habitat Corridor
- Recreational/Scenic Value Area
- Possible Type 2 Old Growth



Source: Esri, DigitalGlobe, GeoEye, Earthstar, Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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	130	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	221
Bog	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Cedar	0	0	0	0	0	0	0	0	0	68	0	0	0	0	0	0	0	0	68
Herbaceous Openland	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117
Jack Pine	0	6	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	20
Low-Density Trees	462	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	462
Lowland Conifers	0	0	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	0	96
Lowland Deciduous	0	0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	0	0	114
Lowland Shrub	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Lowland Spruce/Fir	0	0	0	0	0	15	0	0	0	15	0	0	89	0	0	0	0	0	119
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	15	29
Natural Mixed Pines	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222	234
Northern Hardwood	0	40	0	0	18	18	0	9	0	48	0	0	0	0	0	0	0	1038	1171
Red Pine	0	0	0	0	0	136	0	254	0	0	0	0	0	0	0	0	0	0	390
Treed Bog	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Upland Conifers	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	127	131
Upland Mixed Forest	0	0	0	0	0	0	7	41	0	0	0	0	0	0	0	0	0	13	60
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
White Pine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	52
Total	614	176	103	0	18	169	21	304	14	231	114	0	89	0	0	0	0	1467	3319



Report 2 – Treatment Summary

Newberry Mgt. Unit

Year of Entry: 2018

Acres of Harvest

Compartment 91

Total Compartment Acres: 3,318

Commercial Harvest - 639
 Harvests with Site Condition - 88
 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
Jack Pine	14	0	0	0	0	0	0	0	0	14
Lowland Spruce/Fir	73	0	0	0	0	0	0	0	0	73
Mixed Upland Deciduous	14	0	0	0	0	0	0	0	0	14
Northern Hardwood	41	0	0	30	217	0	0	0	0	289
Red Pine	72	0	0	0	0	265	0	0	0	336
Total	215	0	0	30	217	265	0	0	0	727

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	727	0	56	0	0	0	0	0	318	1101
Next Step	0	116	287	0	72	102	806	0	0	1383
Total	727	116	342	0	72	102	806	0	318	2483



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	42091005-Cut	19.9	6122 - Black Spruce	Poletimber Well	114	111- 140	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary

Habitat Cut: No **Site Condition: Unknown Access**

Prescription Clearcut with retention. Winter harvest. Limiting factors of access. Best access to the sale is through the private property to the east (Chevrolet Camp) and this is very questionable. Alternate access is possible via and old road in section 3 (down the bluff).

Specs:

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Management objective of lowland spruce. Alternate acceptable management objective of swamp conifer.

Regen:

Other Include stands 6 and 7 with this stand as one timber sale due to winter ground and private access.

Comment:

Proposed Start Date: 10/01/2017

6	42091006-Cut	14.3	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	76	51-80	Harvest	Clearcut	4193 - Birch, Aspen	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription Clearcut. No retention, narrow stand with a lot of edge. Winter sale. Leave some large diameter white birch, yellow birch and/or aspen in the boundary line.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Management objective of white birch. Alternate management objective of white birch with spruce and red maple.

Regen:

Other Stand should be set up as one sale along with Stands 5 and 7 due to access issues.

Comment:

Proposed Start Date: 10/01/2017

7	42091007-Cut	15.4	6122 - Black Spruce	Poletimber Well	86	81-110	Harvest	Clearcut	6122 - Black Spruce	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription Clearcut, no retention. Long narrow stand with alot of edge.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Management objective of lowland spruce. Alternate management objective of lowland conifer mixed stand.

Regen:

Other Prescribe for final harvest along with stands 5 and 6 and a winter sale. Access is through the private land adjacent to the east.

Comment:

Proposed Start Date: 10/01/2017

11	42091011-Cut	38.1	6122 - Black Spruce	Poletimber Well	114	81-110	Harvest	Clearcut with Retention	6122 - Black Spruce	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription Clearcut with retention. Harvest the south half of the stand. Leave conifers 4 inches and less in diameter as residual/retention. Winter access.

Specs: Follow Two Hearted River Natural River Plan.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Management objective of lowland spruce. Alternate management objective of mixed lowland conifer.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	42091018-NF	318.0	330 - Low-Density Trees	Nonstocked		Unspecified	NonForestMgt	Other - Specify	310 - Herbaceous Openland		Field Boundary

Habitat Cut: No

Site Condition:

Prescription Stand is prescribed for opening maintenance using the "Ruffed Grouse Machine". Maintenance will be via grinding trees to reduce encroachment of woody vegetation and promote large opening complex. Promote favorable grasses for various wildlife species. Historically this area was managed as a sharptail grouse management area.

Next Step Monitoring, Other - Specify
Treatments:

Acceptable Regen:

Other Comment: Stand was prescribed for a multiple year burn plan in previous year of entry.

Proposed Start Date: 10/01/2017

31	42091031-Cut	104.9	42110 - Planted Red Pine	Poletimber Well	47	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription 3rd row thinning. N/S rows. Remove trees of all species in every 3rd row. Also remove any merchantable maple, aspen and jack pine in adjacent rows. Maintain white pine in adjacent rows.

Next Step
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2017

32	42091032-Cut	14.4	42220 - Natural Jack Pine	Poletimber Well	56	81-110	Harvest	Clearcut	4222 - Natural Jack Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Clearcut. No reserves. Small acreage stand with lots of species diversity and age class diversity surrounding the stand. Leave some spruce in the boundary line. Harvest to promote jack pine regeneration and increase overall species diversity in the area. Scarify following harvest.

Next Step SitePrep, Scarification; Monitoring, Natural Regen (Intermediate)
Treatments:

Acceptable Regen: Jack pine with a component of white pine, aspen

Other Comment:

Proposed Start Date: 10/01/2017

43	42091043-Cut	42.2	42110 - Planted Red Pine	Poletimber Well	67	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Second thinning. Residual BA of 120-140. Some areas are open from previous thinning. Open up the canopy around the areas of good red pine regeneration.

Next Step
Treatments:

Acceptable Regen:

Other Comment: Likely final harvest and replant in 10 years.

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
44	42091044-Cut	30.1	42110 - Planted Red Pine	Poletimber Medium	67	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Clearcut. No Retention due to follow up prescribed burn and to facilitate planting operations.											
<u>Specs:</u>											
<u>Next Step Treatments:</u> Burn, Slash; SitePrep, Trenching; Planting, Initial Plant; Pesticide, Aerial; Monitoring, Natural Regen (Intermediate); Planting, Replant											
<u>Acceptable Regen:</u> Planted Red Pine.											
<u>Other Comment:</u> Follow harvest with a prescribed burn for site prep, trench and plant to red pine.											
<u>Proposed Start Date:</u> 10/01/2017											
45	42091045-Cut	30.6	42110 - Planted Red Pine	Poletimber Well	47	141-170	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> 3rd row thinning. N/S rows. Remove trees of all species in every 3rd row. Also remove any merchantable maple, aspen and jack pine in adjacent rows. Maintain white pine in adjacent rows.											
<u>Specs:</u>											
<u>Next Step Treatments:</u>											
<u>Acceptable Regen:</u>											
<u>Other Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2017											
48	42091048-Plant	55.5	4113 - R.Maple, Conifer	Poletimber Medium	81	51-80	Planting	Underplant	411 - Northern Hardwood	Uneven-Aged	Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Plant 40-50 oak within the stand to provide future hard mast. Planting is to help offset the loss of hard mast due to beech bark disease.											
<u>Specs:</u>											
<u>Next Step Treatments:</u> Monitoring, Other - Specify											
<u>Acceptable Regen:</u> Northern Hardwoods with Oak											
<u>Other Comment:</u>											
<u>Proposed Start Date:</u> 10/26/2016											
55	42091055-18_mwr	29.6	4112 - Maple, Beech, Cherry Association	Poletimber Well	86	81-110	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Group Selection harvest marked to the specifications of the Mike Walter's Research team. This stand will be harvested leaving all tops greater than 8".											
<u>Specs:</u>											
<u>Next Step Treatments:</u> Monitoring, Natural Regen (Intermediate)											
<u>Acceptable Regen:</u> Red Maple with a mixed northern hardwoods and conifer component.											
<u>Other Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2016											



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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
55 42091055-Cut	44.1	4112 - Maple, Beech, Cherry Association	Poletimber Well	86	81-110	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Shelterwood harvest. Reduce BA to 40-60 depending on quality of possible residual. Some areas the residual could be 40 sq ft due to low quality and advanced regeneration present. Leave hemlock patches intact, release around the drip line. Remove merchantable balsam. Remove any beech that still has merchantable product in it.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red Maple with a mixed northern hardwoods and conifer component.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2016

59 42091059-Cut	41.7	42110 - Planted Red Pine	Sawtimber Well	69	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Clearcut. No Retention due to follow up prescribed burn and to facilitate planting operations.

Specs:

Next Step Burn, Slash; SitePrep, Trenching; Planting, Initial Plant; Pesticide, Aerial; Monitoring, Natural Regen (Intermediate); Planting, Replant

Treatments:

Acceptable Planted Red Pine

Regen:

Other Follow harvest with a prescribed burn for site prep, trench and plant to red pine.

Comment:

Proposed Start Date: 10/01/2017

61 42091061-Cut	31.2	4112 - Maple, Beech, Cherry Association	Poletimber Well	96	111-140	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Shelterwood. Residual BA of 40-60. Remove large diameter, overmature maple as well as maple with dieback in the crowns. Remove balsam and any spruce. Leave any hemlock if present.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red maple with component of beech, cherry, yellow birch, balsam and spruce

Regen:

Other

Comment:

Proposed Start Date: 10/01/2017

69 42091069-Cut	10.5	4112 - Maple, Beech, Cherry Association	Poletimber Well	91	81-110	Harvest	Clearcut	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Final harvest. Clearcut, no reserves. Narrow strips to harvest. Do not harvest the strip that the ORV trail runs through...retain this strip.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red Maple with components of sugar maple, yellow birch, beech, black cherry, balsam and white pine.

Regen:

Other

Adjacent strips were harvested 30 years ago, very nice regeneration.

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
83	42091083-Cut	31.7	42110 - Planted Red Pine	Poletimber Well	67	171- 200	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary

Habitat Cut: No**Site Condition:**

Prescription Thin stand to 120-140 BA, lower in areas of larger diameters. Thin stand to release crowns and improve growth on residual red pine. Maintain
Specs: stand 84 this entry year.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2017

103	42091103-Cut	55.1	42110 - Planted Red Pine	Poletimber Well	69	141- 170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Prescribe stand for a thinning (second thinning). Residual BA of 100-110. Thin stand to release crowns. Portions of the stand NW and NE of
Specs: Co Rd intersection do not need to be thinned (larger diameters and lower BA).

Next Step
Treatments:

Acceptable
Regen:

Other Summer harvest if hauling is to occur on Co Rd 422, due to snowmobile trail concerns.
Comment:

Final Harvest and replant stand to red pine next entry year.

Proposed Start Date: 10/01/2017

104	42091104-Cut	30.8	4113 - R.Maple, Conifer	Poletimber Well	83	51-80	Harvest	Clearcut with Retention	4117 - Mixed N. Hardwood - Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Clearcut with retention. Leave all large diameter white pine, 18 inch and greater, to total 1 per every 3 acres (retain some smaller diameter white
Specs: pine if not enough 18 inch and greater). Retain white birch. Remove all red maple, smaller white pine, beech, and other misc species.

Next Step Monitoring, Natural Regen (Re-Inventory); Planting, Initial Plant
Treatments:

Acceptable Mixed northern hardwoods species with a component of white pine.
Regen:

Other Wildlife to plant oak following harvest.
Comment:

Proposed Start Date: 10/01/2017

108	42091108-Cut	112.5	4112 - Maple, Beech, Cherry Association	Poletimber Well	95	111- 140	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Even-Aged	Draft Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Shelterwood harvest. Reduce BA to 40-60 depending on quality of possible residual. Concentrate on 8 inch RM as residual as it is the best
Specs: quality in the stand. Leave hemlock patches intact, release around the drip line. Remove merchantable balsam. Remove any beech that still has merchantable product in it. In areas of white pine (mostly stand edges), reduce BA to 40-50 by removing white pine.

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

Acceptable Red Maple with component of sugar maple, yellow birch, beech, cherry, balsam and white pine
Regen:

Other Underplant oak following harvest.
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
108	42091108-Cut_mwr	29.9	4112 - Maple, Beech, Cherry Association	Poletimber Well	95	111-140	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:

Other
Comment:

Proposed Start Date: 10/01/2016

Total Treatment Acreage Proposed: 1100.5

Report 4 – Site Conditions

Newberry Mgt. Unit
Jason Tokar : Examiner

Compartment: 91
Year of Entry: 2018

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	Dominant Site Conditions				
		With Condition	Not Available		2B	5C	5F	2G	5E
221	216	0	4	Aspen					4
3	3	0	0	Bog					
68	68	0	0	Cedar					
117	117	0	0	Herbaceous Openland					
20	20	0	0	Jack Pine					
462	462	0	0	Low-Density Trees					
96	0	0	96	Lowland Conifers				96	
114	0	0	114	Lowland Deciduous				114	
25	25	0	0	Lowland Shrub					
119	15	104	0	Lowland Spruce/Fir	74	30			
29	15	14	0	Mixed Upland Deciduous	14				
234	234	0	0	Natural Mixed Pines					
1171	1101	70	0	Northern Hardwood		15	55		
389	388	0	1	Red Pine					1
4	4	0	0	Treed Bog					
131	131	0	0	Upland Conifers					
61	31	30	0	Upland Mixed Forest			30		
3	3	0	0	Water					
52	52	0	0	White Pine					
3,318	2,885	218	215	Total Forested Acres	88	45	85	209	6
	87%	7%	6%	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)	209	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Newberry Mgt. Unit
Jason Tokar : Examiner

Compartment: 91
Year of Entry: 2018

2	Available	5F: Evaluated for Forest Health Considerations	55	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Evaluated for SBW.							
3	Unavailable	5E: Long-Term Retention	6	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Available	5F: Evaluated for Forest Health Considerations	30	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Evaluated for SBW.							
5	Available	2B: Unknown if access through adjacent landowner(s) is possible	88	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	45	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
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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.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	113.6	91	81-110	Red maple, white birch with some white spruce, black spruce, cedar and white pine. Low ground. Very wet. Mainly an E type with a good "Q" component. Access is very questionable. Good understory 20 ft tall of a mix of species (RM, WB, S, C, Bal).
2	6120 - Lowland Cedar	Poletimber Well	67.8	87	81-110	Mainly cedar with a good mix of black spruce and some white birch. Areas of blowdown. Very wet stand. Lots of variability throughout the stand. Black spruce showing signs of decline. Access is questionable.
4	6129 - Mixed Coniferous Lowland Forest	Poletimber Medium	95.7	87	51-80	
5	6122 - Black Spruce	Poletimber Well	19.9	114	111-140	Mature black spruce. Fairly healthy. Some blowdown in spots creating open areas. Nice spruce throughout most of the stand. Wallace-Spot soil complex.
6	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	14.3	76	51-80	Ridge of white birch, spruce and low quality red maple. Clumps of birch. Open in areas. Small diameters in red maple. Some mortality in the white birch. Steep slope in areas. Low quality timber. Access is through private land to the east (Chevrolet Camp). Possible alternate access via old road in section 3 (questionable due to winter cut and slope of road).
7	6122 - Black Spruce	Poletimber Well	15.4	86	81-110	Lower quality spruce than the spruce stand to the north (stand 5). Limby, short heights. More white pine and tamarack mixed in. Large diameter white pine but low quality (limby). Slight ridges running east and west.
8	6122 - Black Spruce	Poletimber Poor	5.2	42	1-50	Mix of tamarack and black spruce. Short heights and small diameters. Wet ground, bog.
9	6122 - Black Spruce	Poletimber Medium	9.8	42	51-80	Mix of tamarack and black spruce. Short heights and small diameters. Wet ground.
10	429 - Mixed Upland Conifers	Poletimber Well	23.9	91	81-110	Slightly higher ground than the adjacent black spruce stands. Slight ridge running mainly east and west. Mix of higher ground and lower areas. Real mix of species (red maple, black spruce, balsam, white birch, aspen) under some larger white pine. Large diameter white pine is pulp quality, very limby. Possible harvest of the stand in 10-20 years.
11	6122 - Black Spruce	Poletimber Well	69.0	114	81-110	Parts of the stand are thick with nice spruce while other areas have substantial blowdown and only tamarack and white pine residual. Thick S2/S3 understory in areas of blowdown. Some areas are slightly wetter with lower BA. Winter access through private to the west or via old road down the hill through stand 16. Access is somewhat questionable and considered a limiting factor.
12	4319 - Mixed Upland Forest	Poletimber Medium	11.0	62	1-50	Primarily upland spruce with white pine and some red maple and aspen. Fairly open stand. Small diameter cherry in open areas. Pockets of F6.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
13	4119 - Mixed Northern Hardwoods	Sapling Medium	2.8	41	1-50	Semi open stand, really mix of species filling in the opening. Red maple, white pine, black spruce, black cherry and some aspen. East end has more cherry and open grown white pine. Stand is transitioning from a sapling stand to a small diameter pole stand.
15	4119 - Mixed Northern Hardwoods	Sapling Medium	15.2	41	1-50	Semi open stand, really mix of species filling in the opening. Red maple, white pine, black spruce, black cherry and some aspen. East end has more cherry and open grown white pine. Stand is transitioning from a sapling stand to a small diameter pole stand.
16	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	115.4	91	81-110	Red maple, beech, aspen and some white birch. Majority of the stand is on a steep slope. Portions of the stand reaching out into the open stand to the south (G/U) are more of an M5/M3 with limby red maple and beech, multiple stems and lower quality. Northern edge of the stand has pockets of aspen and white birch. Some white pine near the northern edge of stand as well. Areas in the stand with high BA of aspen, mostly on the slope.
17	4319 - Mixed Upland Forest	Poletimber Medium	12.5	81	51-80	Very open stand. Large diameter, open grown white pine, smaller limby white pine, multiple stem red maple and small diameter cherry. Understory of white pine and cherry. Some white birch clumps.
19	4112 - Maple, Beech, Cherry Association	Poletimber Well	11.1	91	81-110	M6/M5 stand with red maple, beech and a smaller component of aspen and white birch. Red maple sugar maple and beech clumps over advanced regeneration of maple 20-30 ft tall. Open areas throughout. Thick M3 through most of the stand. Poor quality. Sprout origin. Possible management in 10-20 years once understory moves into merchantable size class.
22	4130 - Aspen	Sapling Well	1.7	6	Immature	Old notes: Two small pockets of mature aspen surrounded by "G" type, north Camp One Road near the Chevy Camp. Aspen showing some rot. Maple and spruce component. 2016: Stand harvested as sale #036-08-01, Camp One Patches. Completed 06/10/11. Good aspen regeneration with a component of red maple. Small acreage stand.
23	4130 - Aspen	Sapling Well	3.0	6	Immature	Old notes: Two small pockets of mature aspen surrounded by "G" type, north Camp One Road near the Chevy Camp. Aspen showing some rot. Maple and spruce component. 2016: Stand harvested as sale #036-08-01, Camp One Patches. Completed 06/10/11. Small aspen pocket. Good aspen regeneration with some red maple. 10-20 ft tall average.
24	4199 - Other Mixed Upland Deciduous	Poletimber Medium	4.8	81	1-50	Clumps of red maple and small diameter white birch. Scattered aspen clones. A few large white pine and some balsam.
25	4112 - Maple, Beech, Cherry Association	Poletimber Medium	16.4	86	1-50	Open grown red maple and sugar maple. Multi-stem clumps. Polw size black cherry. Limby open grown white pine. Low quality maple.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4112 - Maple, Beech, Cherry Association	Poletimber Well	58.8	91	51-80	M6/M5 stand with red maple, beech and a smaller component of aspen and white birch. Red maple and beech clumps. Low quality red maple and hard maple clumps over advanced regeneration of maple 20-30 ft tall. Fair amount of top dieback. White birch regeneration around open areas. Open areas throughout. Thick M3 through most of the stand. Poor quality. Sprout origin. Good stand to hold for wildlife cover. Possible management in 10-20 years once understory moves into merchantable size class.
29	4112 - Maple, Beech, Cherry Association	Poletimber Medium	50.1	91	1-50	Mostly an M5 with open areas. Western portion of the stand has more of a white pine component. Low quality red maple and hard maple clumps over advanced regeneration of maple 20-30 ft tall. Fair amount of top dieback. Thick M3 understory throughout most of the stand. White birch regeneration around open areas. Beech bark disease is heavy in the stand. Beech is in bad shape and dying out. Discussion with wildlife biologist to prescribe planting oak seedlings or acorns throughout the stand to replace the mast that is being lost by the beech dying out. Concentrate on planting in the open areas or areas with less understory. No timber harvesting activities within the stand for 20-30 years to allow for the oak to become established.
30	4139 - Aspen, Mixed Deciduous	Sapling Well	26.6	6	Immature	Stand has a lot of variability throughout. Western and northern portions are more open grown with thick M3 understory of cherry, aspen, and some maple. More aspen in the southern and eastern portions of the stand. Poor quality in the red maple throughout the stand, clumps. Fair amount of dieback in the red maple crowns. A few large diameter white pine. Site is better suited for aspen. 2016: Stand harvested as sale #036-08-01, Camp One Patches. Completed 06/10/11. Regenerating nicely to aspen and maple. Northern portion is mainly beech and maple regen 5-10 ft tall. Pockets of small 4-5 inch maple retained after the harvest. Stump sprout red maple and cherry. Good aspen regeneration in the southern and eastern portions of the stand.
31	42110 - Planted Red Pine	Poletimber Well	104.9	47	171-200	Young red pine, planted in 1970. Pretty good N/S rows. Rows do disappear in spots. Pockets of hardwoods throughout. Old abandoned roads will provide access through the stand when it is managed. Some large limby white pine scattered throughout.
32	42220 - Natural Jack Pine	Poletimber Well	14.4	56	81-110	Small acreage stand separated out from larger surrounding stand 53. Pockets of mature jack pine, red pine and white pine. Mostly open grown jack pine but a few pockets of taller 4-5 stick jack pine. Clumps of red maple, limby white pine and one nice pocket of red pine sawtimber. 90-100 BA in good jack pine pockets.
33	4199 - Other Mixed Upland Deciduous	Poletimber Well	1.7	86	51-80	Small pockets of multiple stem red maple, sugar maple, some aspen and red pine. Stands add diversity to the surrounding stand 31 (R6). Hold for diversity when stand 31 is thinned.
35	4199 - Other Mixed Upland Deciduous	Poletimber Well	2.3	86	51-80	Small pockets of multiple stem red maple, sugar maple, some aspen and red pine. Stands add diversity to the surrounding stand 31 (R6). Hold for diversity when stand 31 is thinned.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
39	4199 - Other Mixed Upland Deciduous	Poletimber Well	3.2	86	51-80	Small pockets of multiple stem red maple, sugar maple, some aspen and red pine. Stands add diversity to the surrounding stand 31 (R6). Hold for diversity when stand 31 is thinned.
40	4199 - Other Mixed Upland Deciduous	Poletimber Well	3.1	86	51-80	Small pockets of multiple stem red maple, sugar maple, some aspen and red pine. Stands add diversity to the surrounding stand 31 (R6). Hold for diversity when stand 31 is thinned.
42	42110 - Planted Red Pine	Sawtimber Medium	40.8	67	51-80	<p>Primarily mature jack pine with a good component of red pine. Originally was one stand along with stand 44. Prescribe the stand for final harvest. To promote better jack pine regeneration, remove all red pine with the harvest. Follow the harvest with scarification for natural jack pine regeneration. Follow scarification with planting if natural regeneration is not present. Management objective of jack pine. ***Compartment Review*** -- prescribed burn prescription was removed at request of TMS and Unit Fire Supervisor. ***During timber sale preparation, it was found that the volume of red pine within the stand is considerably higher than was thought during OI. It was decided that the best way to treat the stand would be to change the method of cut from a final harvest to a shelterwood prep harvest, thus leaving a component of red pine residual after the harvest, rather than removing all of the red pine from the stand. The residual BA of the red pine with vary throughout the stand following the harvest. The Management Objective (MO) for the stand will remain as jack pine. Based on the results/regeneration in the adjacent harvest (stands 59 and 60 west of Co Rd 453) it is expected that regeneration of both jack pine and red pine will occur. It was also decided to leave 3 small retention areas of hardwoods, totaling 1.3 acres, within the stand for diversity. The harvest will be followed by scarification for natural jack pine and red pine regeneration. This is an addition to the stand prescription as no cultural work was prescribed at the time of the review. These changes were approved by all compartment review participants via a letter during timber sale preparation work.</p> <p>2016: Stand harvested via shelterwood as sale #039-08-01, Crossroads Pine. Completed 08/30/10. FTP #42-769 completed 8/29/2011. Not much red pine regeneration but a decent amount of jack pine, maple and beech regeneration.</p>
43	42110 - Planted Red Pine	Poletimber Well	42.2	67	141-170	Nice tall, red pine stand. Stand was thinned in the fall of 2000 (sale #12-98-01). Jack pine and misc. species were removed along with some marked red pine. FTP #42-439 scarification never completed. May 2004, regen check found well stocked level of mixed regen (J/R/W/other). Areas where the jack pine was thicker are more open with some good jack pine regeneration. Other areas have higher residual red pine basal area. Lots of 14 inch red pine. Fair amount of the stand is in the 812 inch diameter classes. Red pine regeneration is thick in the skid trails from previous sale, 2-4 ft tall. Good amount of white pine 3-5 ft tall in the understory.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	42110 - Planted Red Pine	Poletimber Medium	30.1	67	81-110	<p>Old notes: Mixed plantation, mainly red pine with jack pine. Limby, mature jack pine. Originally was one stand with stand 42 to the east. Separated into two stands. This portion has a higher BA of red pine than jack pine. Manage for red pine. Some mortality in the jack pine. Pockets of a 50/50 mix of red and jack pine. Scattered white pine and hardwoods. Prescribe the stand for a thinning. Remove all jack pine, hardwoods, and some red pine in the areas of thicker red pine BA. Management objective of red pine.</p> <p>2016: Stand harvested via thinning as sale #039-08-01, Crossroads Pine. Completed 08/30/10. FTP #42-769 completed 8/29/2011. Stand was thinned to improve the growth on the residual stand. Stand was scarified to promote better red pine regeneration. Maple and beech regeneration are thick in spots. Some small 2-4 ft tall jack pine regen in open areas. No red pine regeneration to speak of. Many trees in the 14 inch diameter class.</p>
45	42110 - Planted Red Pine	Poletimber Well	30.6	47	141-170	<p>Stand was planted in 1970. North/south rows. Northern portion of the stand has better rows, thicker stand. Southern portion is semi open, limby red pine. Some jack pine. Scattered large diameter white pine.</p>
46	42220 - Natural Jack Pine	Sapling Medium	5.5	7	Immature	<p>Small stand of jack pine on the north side of young red pine plantation. Main part of the stand is mature, tall jack pine. Edges of the stand are more open grown and patchy. Some blowdown. Prescribe for final harvest. Follow the harvest with a prescribed burn. If the burn does not take place within one year of completion of the sale, the burn should be cancelled and the site should be scarified to ensure the seed source is still viable. Follow scarification with planting if needed.</p> <p>Stand final harvested as sale #039-08-01, Crossroads Pine. Completed 08/30/10. Scarification yet to be done as of 12/03/10. FTP #42-769 completed 8/29/2011. Stand has regenerated to jack pine with a component of maple, cherry and white pine. Patchy regeneration.</p>
48	4113 - R.Maple, Conifer	Poletimber Medium	55.5	81	51-80	<p>Mix of red maple, beech, and white birch. Averaging 60 BA, less in areas. Pockets of white pine and jack pine. More white pine near the county road. Low quality overstory. Clumps of maple. Good understory of hardwoods and aspen. Heavy beech bark disease. Discussion with wildlife biologist to plant oak seedlings and/or acorns throughout the stand to replace the most being lost by the beech dying out from beech bark disease. Concentrate the planting to the open areas and those areas where there is less understory. Hold stand for 30-40 years without harvesting prescription to allow the oak to become established.</p>
49	4130 - Aspen	Sapling Well	35.0	6	Immature	<p>Old Notes: Aspen and beech with red maple. Center of the stand is solid beech with heavy beech bark disease, barking is sluffing off, crowns are almost half dead. Aspen clones are mature showing some decline. Red maple is low quality, clumps. Thick beech understory throughout. Open in areas. Pockets of better quality aspen. Good aspen site index.</p> <p>2016: Stand harvested as sale #036-08-01, Camp One Patches. Completed 06/10/11. Regeneration of aspen coming in thick throughout most of the stand. Good component of beech (mainly from before harvest), maple stump sprouts, and some white pine and balsam.</p> <p>Regen 2015: Fully stocked with aspen and cherry.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	4139 - Aspen, Mixed Deciduous	Sapling Well	90.9	15	Immature	Stand was harvested as sale #031-99-01. Completed in 2002. Stand is regenerating well to a mix of aspen, red maple, cherry, balsam and spruce. Lots of variability in the regeneration species mix. Primarily maple and aspen regeneration. Some residual trees left from the harvest (marked leave trees - white pine). Also a few beech and cherry appear to have been left after harvest (no product/not wanted). Stand is converting over to more of an aspen type with a good component of maple and cherry.
51	429 - Mixed Upland Conifers	Poletimber Medium	102.9	71	51-80	White pine stand containing some large diameter, limby white pine. Multiple age and size classes of white pine throughout the stand. Component of red maple, scattered spruce and cherry. Open in areas and very thick in others. Pockets of white pine and yellow birch regeneration. Typical of a younger, natural white pine stand in the area. Open areas within the stand are filling in. Kalkaska sand.
52	4112 - Maple, Beech, Cherry Association	Poletimber Well	14.9	89	111-140	Long narrow north/south strip of hardwoods bordering on ForestLand Group property. PVT land was thinned 10 years ago. Areas with nice straight, tall trees. Some areas with dieback in some of the red maple crowns, 20-30% of crowns.
53	42290 - Natural Mixed Pine	Poletimber Medium	222.3	101	1-50	Very open stand. Large opening complex (burned in the past) that is filling in with open grown, large diameter white pine, smaller limby white pine, scattered multiple stem red maple and small diameter black cherry. A few pockets of black spruce and scattered red pine, jack pine and white birch. Southeastern corner of the stand (old stand 47) has a high component of small, young white pine that is thick in spots.
54	4112 - Maple, Beech, Cherry Association	Poletimber Well	26.7	81	51-80	M5/M6, Fairly open grown maple stand. Shorter heights, limby, multiple stems. Average diameter 7-8 inch. Open areas are more of an M4/M3. Good cherry component. Some areas with white pine. Scattered large white spruce and balsam. White pine, spruce and balsam in understory. Kalkaska sand.
55	4112 - Maple, Beech, Cherry Association	Poletimber Well	74.8	86	81-110	FTP #274 (7-1-77) - thinned by CETA crew for firewood. Mainly red maple with a component of sugar maple, cherry and some scattered hemlock. Some large diameter white pine. Scattered large diameter spruce. Fair amount of dieback throughout of the stand. Dieback seems to be worse in the areas where the stand was thinned heavily last time. Overall quality of the overstory is lower in many parts of the stand. Sugar Maple is showing a lot of top dieback. Stand quality is less in the southern portions of the stand with higher conifer component. Good advanced regeneration in areas with open canopy.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
56	4112 - Maple, Beech, Cherry Association	Poletimber Well	54.0	96	51-80	<p>Old notes: FTP #274 (7-1-77) - thinned by CETA crew for firewood. Some good quality in the sugar maple poles (8-9 inch). Understory of maple and beech is fairly thick in many areas. Pockets of balsam. Less quality and dead tops mainly in red maple. Scattered beech and large diameter white pine and white spruce. Lower quality near the north edge of the stand. Prescribe stand for thinning. Remove lower quality trees and reduce the BA to improve the growth on the residual stand. Concentrate marking to remove poor quality red maple, beech and trees with dead tops. Management objective of northern hardwoods.</p> <p>2016: Stand harvested via thinning as sale #033-08-01, "Murray Lake Road Hardwoods". Completed 12/15/11. Averaging 70-80 sq ft residual BA. Residual stand looks pretty healthy. Slight dieback in a few pockets but not bad. Primarily red maple with sugar maple. Beech that was left in the stand is alive but in rough shape (BBD). Very thick understory as a result of the harvest. Good regeneration.</p>
58	42290 - Natural Mixed Pine	Sapling Well	4.1	17	Immature	<p>Sale #12-98-01. Cut in Dec 2000. Jack pine (10-20 ft tall) regen with red maple, red pine and some white pine. Scattered residual red pine poles/logs. Scattered residual white pine. Strips cut out of the surrounding red pine plantation when harvested last time (2000).</p>
59	42110 - Planted Red Pine	Sawtimber Well	41.7	69	141-170	<p>Thinned as sale #12-98-01. Completed in Dec. 2000. FTP #42-439 - scarification never completed. May 2004, regen check found well stocked stand of mixed regeneration. Variable residual basal area. Areas have decent red pine regeneration but not throughout the stand. Old abandoned road E/W through the stand is filling in nicely with red pine 1-3 ft tall.</p> <p>West half of the stand has alot of white pine regeneration and not as much maple and beech. The east half of the stand has less white pine and red pine regeneration and more maple, beech and cherry in the open areas. Stand BA is up to 180 in the west half and down to 90 BA in parts of the east half. Better red pine regeneration in old road and skid trails from the harvest (naturally scarified). Red Pine overstory is averaging 13-14 inch dbh.</p>
60	42290 - Natural Mixed Pine	Sapling Well	8.1	17	Immature	<p>Stand harvested as sale #12-98-01. Completed in Dec. 2000. Mainly jack pine regen with good component of cherry and red pine, some red maple. Stand appears to have been more of a jack pine dominated stand prior to the harvest. Essentially a clearcut portion of the original stand 12.</p>
61	4112 - Maple, Beech, Cherry Association	Poletimber Well	31.2	96	111-140	<p>Stand is slightly better in quality than stand 65. Less understory with more balsam mixed in. Some trees showing some decline. Dieback in a fair number of the maple tops. Decent quality red maple with sugar maple. Areas of large diameter maple, mainly pulp quality. Good quality present in the small diameter maple.</p>
62	4112 - Maple, Beech, Cherry Association	Poletimber Medium	44.8	98	51-80	<p>Stand was cut on FTP #274 (7-1-77) for firewood. Partially cut again as "Goose Lake Area" (no year).</p> <p>2016: Stand harvested via shelterwood as sale #033-08-01, "Murray Lake Road Hardwoods". Completed 12/15/11. Good regeneration of various species throughout the stand. Still some areas with dead tops in the maple overstory, but patchy. Component of hemlock, spruce, balsam and white pine. ORV trail runs through the stand. Possible harvest of overstory in 10 years once regeneration/understory is more established.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
63	4112 - Maple, Beech, Cherry Association	Poletimber Poor	16.8	66	1-50	Open stand with low quality, multiple stem, crooked red maple and scattered black cherry. Short heights. Limby white pine throughout. Pockets of M5, other areas are more of an upland brush type. Large, old white pine stumps.
64	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.4	69	81-110	Slight change in elevation from the surrounding stands. Thicker stand. More red maple, cherry and scattered large diameter white pine and white spruce. Small diameter red maple and cherry are fair quality. Good component of cherry. Good wildlife value to the stand for cover and variety of species. Hold the stand for 10-20 years for diversity as all the adjacent hardwood stands are currently prescribed for this entry year.
65	4112 - Maple, Beech, Cherry Association	Poletimber Medium	20.6	93	51-80	Stand harvested via shelterwood as sale #033-08-01, "Murray Lake Road Hardwoods". Completed 12/15/11. Good regeneration from the harvest. Mostly beech regen but a good component of maple. Some dieback in the smaller diameter overstory maple. Small pockets of hemlock.
67	4112 - Maple, Beech, Cherry Association	Poletimber Well	10.4	91	81-110	Stand was treated with a shelterwood harvest in 1987 (sale #22-87-01). Residual BA of 60 sq ft. Nice thick regeneration as the understory (red maple, sugar maple, beech, yellow birch). Pockets of balsam in the understory. Lower quality in the residual overstory with some dead tops. Overstory canopy is still very open. Scattered hemlock. Check BA in 20 years for possible management. Kalkaska sand.
68	4112 - Maple, Beech, Cherry Association	Sapling Well	9.1	30	Immature	Stand was harvested in 1987 (sale #22-87-01). These stands were the cut strips, running east and west. Very nice hardwood regeneration, much of it over 30 ft tall. Mainly red maple and sugar maple with a component of yellow birch, beech and black cherry. Better maple component than in the understory of the uncut strips. Pockets of slightly older balsam. Thick stands. Kalkaska sand.
69	4112 - Maple, Beech, Cherry Association	Poletimber Well	10.5	91	81-110	These are the uncut strips from sale #22-87-01. Low quality overstory with thick understory. Mainly red maple. Multiple stems, some crooked trees. Top dieback in red maple and areas with dead trees (much of it sugar maple). Not a high basal area, poor quality in most of the red maple. Component of balsam, beech, sugar maple, yellow birch, spruce.
82	4119 - Mixed Northern Hardwoods	Sapling Well	8.9	30	Immature	Stand was final harvested in 1987 as sale #22-87-01. Stand is now an M3/M4 (mainly red maple and black cherry) with a substantial balsam (F4) component remaining from the harvest. Open grown, young white pine throughout.
83	42110 - Planted Red Pine	Poletimber Well	31.7	67	171-200	Stand was thinned in the fall of 2000 (sale #12-98-01). All jack pine, white pine and misc species were removed. Very uniform stand. FTP #42-439 scarification never completed. May 2004 regen check found well stocked level of mixed regeneration (J/R/W/other) FTP closed. Good heights. Some "snap" in some red pine (beetle damage spots). Kalkaska sand. 2016: Nice red pine stand. Small sawlog size on average. Larger diameters seem to be in the western portion of the stand and eastern portion has slightly smaller diameters. Areas of good white pine regeneration up to 5 ft tall, result of last harvest. BA is high.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
84	4112 - Maple, Beech, Cherry Association	Poletimber Well	1.9	81	51-80	Small acreage, low quality red maple stand within the red pine plantation. Clumpy red maple, multiple stems. Some beech, most is dying out. Small diameters. Some dieback in the red maple. Hold stand for 10 years. Cut stand when final harvest stand 83 next year of entry and plant it to red pine.
86	4117 - Mixed N. Hardwood - Pine	Poletimber Well	9.6	76	51-80	Low quality red maple and beech with a good component of white pine. Multiple stem maple, small diameters. Larger diameter, multi stem white pine near stand edges along openings. Beech is mostly dying out.
87	4112 - Maple, Beech, Cherry Association	Poletimber Well	25.2	86	81-110	Stand cut by selection as sale #30-99-01. Completed 2/13/03. Primarily red maple with some hard maple and beech. Clumpy red maple, poor quality beech (BBD). Average stand diameter of 9 inches. Some top dieback in the maple. About half of the beech is alive with good full crowns. Scale is evident on beech but not heavy. Good understory 1-2 in dbh and 10-20 ft tall, mainly beech. Not much maple regeneration, couple small pockets. FTP #C42-513 completed 6/2/2006 - corrections crew (Camp Cusino) under planted white pine seedlings (3-0 stock) throughout the stand. Check stand in 10 years for possible thinning
88	4130 - Aspen	Sapling Well	4.8	8	Immature	Stand harvested as "Camp Brandon Aspen", sale #037-08-01. Complete 11/25/09. Good aspen regeneration with a component of red maple and some cherry. More cherry and maple regen along the edges of opening. Some residual white pine poles and small diameter white birch. Nice thick stand.
90	4112 - Maple, Beech, Cherry Association	Poletimber Well	46.0	86	81-110	Stand was thinned as sale #30-99-01. Thinned in 2003. Best quality is in the 8-9 inch diameter class. Good quality throughout. Vernal pond on east side of stand. Rolling hills. Scattered beech and cherry. Stand canopy is still fairly open in many areas. A few pockets where the BA is high enough to warrant a selection cut, but overall the stand is still open. BA ranges from 50-60 up to 110. Thick understory of beech with maple and white pine. Portions of the stand are more of an M5 with white pine, low quality. Let the understory/regeneration grow and check for possible selection harvest in next year of entry.
91	4112 - Maple, Beech, Cherry Association	Poletimber Well	33.2	86	81-110	M6 stand. Thinned in 1988 (north half), sale #24-87-01. All aspen, spruce, balsam, hemlock and white pine were removed along with marked hardwoods. Good understory in the portion of the stand that was thinned. Good quality sugar maple in the southeastern portion of the stand. Nice tall, high quality sugar maple. The southeast corner of the stand could be thinned if the adjacent hardwood stand in Comp 89 is prescribed in 2011.
93	4130 - Aspen	Sapling Well	58.7	8	Immature	Old notes: Primarily mature aspen with a good white pine component in areas. Pockets of thicker white pine. Aspen quality increases in the interior of the stand, less quality near the edges along the openings. 2016: Stand harvested as "Camp Brandon Aspen", sale #037-08-01. Complete 11/25/09. Stand has regenerated nicely to aspen, 10-20 ft tall and 1-2 inch diameter and some red maple, stump sprouts up to 10 ft tall. Residual larger diameter white pine left.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	4119 - Mixed Northern Hardwoods	Poletimber Well	5.6	81	81-110	Low quality, clumps of red maple. Some overmature aspen. Lots of balsam and white pine in the understory. Open canopy in spots. Quality decreases along edges.
99	42200 - Natural White Pine	Poletimber Well	30.2	91	111-140	All aged white pine stand. Typical of white pine stands in this area. Large diameter, older white pine with smaller diameter better quality younger white pine throughout. Pockets of aspen. Pockets of low quality red maple. White pine of all size classes, ages, heights throughout the stand. Wallace sand.
100	4311 - Pine, Aspen Mix	Poletimber Medium	7.4	51	51-80	Open grown young aspen and white pine. Wallace sand.
103	42110 - Planted Red Pine	Poletimber Well	67.2	69	141-170	Planted in 1948. Stand was thinned in 1995 (sale #44-92-01). Red pine thinned and all hardwoods were removed. ORV trail runs through the stand. Kalkaska sand. 2016: Stand harvested via thinning as sale #039-08-01, Crossroads Pine. Completed 08/30/10. Stand is mainly pole size red pine and small sawlog size red pine. Portion of the stand NW of the county road intersection and also NE of co rd intersection has larger diameters and slightly lower BA. Nice tall red pine. Evidence of scattered, single tree mortality.
104	4113 - R.Maple, Conifer	Poletimber Well	30.8	83	51-80	Low quality red maple with good component of open grown white pine. Red maple averages 9 inch dbh, multiple stem. Open in many areas. Pockets of M6. Variable diameter and heights in the white pine. Thick white pine regeneration in open areas. Scattered large diameter white pine (18"+). Old notes (previous entry year) state "Poor quality, try to get white pine regeneration". Stand quality is better east of Co Rd 453. Component of white birch west of the road.
105	4112 - Maple, Beech, Cherry Association	Poletimber Well	7.4	86	81-110	Clumps of low quality, pole size red maple, small diameter, multiple stems. Large diameter white pine, some cherry beech and white birch.
108	4112 - Maple, Beech, Cherry Association	Poletimber Well	142.4	95	111-140	Sale #8-74A - stand was thinned (shelterwood) to remove overmature poor quality hemlock, hardwoods, spruce and balsam. 2016: Red maple with a component of hard maple, beech, yellow birch, and scattered white spruce. Scattered large white pine, more near stand edges. Beech in the stand is almost all dead or in very bad shape from BBD. Top dieback in the red maple and larger diameter red maple is overmature. Edges near openings have smaller diameters, clumps, are lower quality and have more balsam understory. Portions of the stand were previously cut, these areas have larger diameters, better quality, some sawtimber and more advanced regeneration. West half of the stand was a separate stand last entry year (Stand 112). Combined into one stand for management. Basal areas are slightly lower in portions of the west half but other stand characteristics are the same throughout.
109	42200 - Natural White Pine	Poletimber Well	13.3	92	141-170	Natural white pine stand. White pine of various diameters. Large diameter, tall, older trees over younger, small diameter trees. Many trees are limby. Diameters range from 8 inches up to 22 inches and larger. Very typical of the natural white pine stands in the area. Kalkaska sand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
111	42200 - Natural White Pine	Poletimber Well	8.2	92	141-170	Natural white pine stand. White pine of various diameters. Large diameter, tall, older trees over younger, small diameter trees. Many trees are limby. Diameters range from 8 inches up to 22 inches and larger. Very typical of the natural pine stands in the area. Kalkaska sands.
113	4319 - Mixed Upland Forest	Poletimber Well	29.7	64	81-110	Sale #15-77 - north half of the stand was thinned by selection harvest (All marked hardwoods and white pine were removed along with all merchantable hemlock, balsam and white spruce). Low quality red maple. Balsam, white spruce and black cherry. Some mountain ash. Lots of species and structural diversity. Open areas with a lower basal area. Some pockets thicker to maple and others of more balsam. Some good quality in the balsam, white spruce and black cherry. Understory contains a lot of 2-4 inch balsam. Younger stand. Good wildlife value. Watch for SBW due to high balsam and spruce components.
114	4112 - Maple, Beech, Cherry Association	Sapling Medium	18.7	6	Immature	Old notes: Balsam with white spruce, red maple and black cherry. A few yellow birch and hemlock. Open areas. Pockets of small diameter balsam. Some balsam showing rot and insect problems. Southern portion of the stand has a higher component of black cherry. Leave white pine, yellow birch and hemlock for aesthetics and diversity along the county road. Stand harvested as sale #032-08-01, "Clark's Paradise Mix". Completed 12/15/11. Regen 2016: Well stocked with cherry sprouts and seedlings. Some patches of spruce and balsam fir. Deer browse on red maple sprouts. Red maple stump sprouts. Stand is beginning to fill in. Semi open still.
115	4110 - Sugar Maple Association	Poletimber Well	24.1	86	81-110	Old notes: FTP #243 (6-19-75) - non commercial thinning. Sale #7-76A - removed all merchantable conifers. Nice, better quality hard maple stand. Quality decreases along the east and west stand edges. Nice straight boles in many of the 10 inch diameter maple. Some dieback in the red maple. Scattered black cherry. 2016: Stand harvested as sale #032-08-01, "Clark's Paradise Mix". Completed 12/15/11. Regeneration check needed in 2015. Stand is regenerating to a mix of maple and beech saplings. Some balsam regen as well. Primarily a sugar maple stand with red maple, cherry and beech. Occasional hemlock. Beech is mostly dead. Stand BA is currently 80-90 sq ft. Light dieback in a few residual trees.
117	4112 - Maple, Beech, Cherry Association	Sapling Medium	20.9	6	Immature	OPIC - FMD: Balsam fir with white spruce, cherry and low quality red maple. Balsam is mature. Stand includes the low quality red maple along stand edges. Northern portion of the stand includes red maple pocket with heavy crown dieback, very poor quality. Stand harvested as sale #032-08-01, "Clark's Paradise Mix". Completed 12/15/11. Regen 2016: Well stocked with cherry sprouts and seedlings. Some patches of spruce and balsam fir. Deer browse on red maple sprouts. Red maple stump sprouts. Stand is not fully stocked yet.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
118	4112 - Maple, Beech, Cherry Association	Poletimber Well	92.4	86	81-110	<p>Old notes: Recently thinned as sale #032-99-01 "Section 15 Hardwoods". Completed in June 2003. Minimal residual logging damage. Nice regeneration coming in throughout the stand. Kalkaska sand. Stand also thinned as sale #12-73 (west half) and sale #11-73 (east half) - all marked hardwoods along with all balsam, white spruce and hemlock were removed.</p> <p>2016: Stand has good advanced regeneration. Some areas with a lot of top dieback and decline. Other areas are healthy. Diameter range from 8-14 inches. BA range from 90-110 average. Beech in stand but mostly dead.</p>
119	429 - Mixed Upland Conifers	Poletimber Well	4.1	80	81-110	<p>Small stand of balsam fir, spruce, red maple, large diameter white pine and hemlock. Small "vernal pond" within the stand. East half is more large diameter white pine. West half has more balsam and spruce.</p>
120	4112 - Maple, Beech, Cherry Association	Poletimber Well	55.2	91	51-80	<p>FTP #246 (7-30-75) - non commercial thinning. Sale #21-75 - all marked hardwoods cut along with all merchantable spruce, balsam, hemlock and white pine. Maple stand (mostly red maple). Fair amount of crown dieback, decline and mortality in the red maple. Up to 30% dieback in the red maple. Advanced understory (2-4 inch dbh) in many parts of the stand. Crown dieback is heavier in spots. Areas within the stand have higher component of better quality hard maple. Yellow birch and beech component, scattered spruce and hemlock. Manage stand with a selection harvest. Residual BA should be 70 sq ft on average, with areas of more crown dieback having a residual BA down around 50 sq ft. Marking to concentrate on trees with dieback and signs of decline. Favor better quality red and hard maple poles as residual. Also leave spruce and hemlock as residual. Maintain a yellow birch component. Create regeneration gaps. Management objective of northern hardwoods.</p> <p>2016: Stand harvested as sale #032-08-01, "Clark's Paradise Mix". Completed 12/15/11. Residual BA ranges from 50-70 sq ft. Good regeneration from the harvest. Maple stump sprouting. North half of the stand has more of a conifer component. Some dieback in the crowns of the residual trees from the harvest.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
3	622 - Lowland Shrub	16.5	No	corridor along Camp One Creek
14	6224 - Treed Bog	4.4	No	Bog with stunted black spruce
18	330 - Low-Density Trees	318.0	Yes	<p>Large opening complex with pockets of short, low quality red maple and beech. Scattered small cherry throughout. Scattered low quality white birch. Some pockets of M3. Prescribe for opening maintenance with a prescribed burn. Purpose of the burn will be to reduce the encroaching hardwoods, bracken fern and reindeer moss. Try to promote more wildlife favorable herbaceous species (grasses). Will likely need to be a multi-year burn plan to ensure reduction of the encroaching hardwoods. Wildlife Biologist has agreed to this prescription to maintain the area for potential sharptail habitat. Known occurrence of sharptail in Comp 90 to the south. ***Notes from 1986 on old compt header - "Area (compartment) is part of original sharptail grouse management area. To attract the viable flock of sharptail this area once held, these openings must be cut, burned, or machine scalped, something that has not been done in 20 years."</p>
20	622 - Lowland Shrub	8.7	No	"Ravine" with a small drainage flowing through it.
21	330 - Low-Density Trees	37.4	No	<p>Large opening complex with pockets of short, low quality red maple and beech. Scattered small cherry throughout. Scattered low quality white birch. Some pockets of M3/M5.</p>
26	330 - Low-Density Trees	4.8	No	<p>Small opening within thicker maple stand. Pockets of short, low quality red maple and beech. Scattered small cherry throughout. Scattered low quality white birch. Some pockets of M3.</p>
28	330 - Low-Density Trees	11.1	No	<p>Opening in the middle of a semi open hardwood stand. Pockets of short, low quality red maple and beech. Scattered small cherry throughout. Scattered low quality white birch. Some pockets of M3.</p>
57	330 - Low-Density Trees	29.7	No	Scattered cherry, limby white pine and red maple. Open areas starting to fill in
94	6225 - Bog	1.2	No	
95	6225 - Bog	2.2	No	
96	500 - Water	0.3	No	North end of small pond/lake (Death Pond).
101	500 - Water	2.3	No	small pond
107	330 - Low-Density Trees	19.7	No	Scattered small diameter maple and cherry. Some small white pine. Follows a "valley". Possible opening maintenance in 20 years.
122	3102 - Grass	25.1	No	Large opening with scattered bushy white pine and scattered individual cherry and aspen. Bracken fern and reindeer moss. Kalkaska sand.



Stand	Cover Type	Acres	Managed Site	General Comments:
123	3102 - Grass	7.2	No	Opening with open grown white pine, jack pine and scattered aspen pockets. Starting to fill in. Kalkaska sand.
124	3102 - Grass	6.8	No	OPIC - FMD: Open, rolling topography.
125	3102 - Grass	4.5	No	OPIC - FMD: Small opening on north side of small pond/lake (Camp Brandon and Death Pond)
126	3102 - Grass	6.8	No	Grass opening that extends into compartment 42089 to the east.
127	3102 - Grass	2.6	No	Small opening along both sides of Co Rd 422 bordering on the private land. A few planted red pine along the private property to the north.
128	3102 - Grass	16.7	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
129	3102 - Grass	6.3	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
130	3102 - Grass	4.4	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
131	3102 - Grass	2.0	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
132	3102 - Grass	0.6	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
133	3102 - Grass	3.3	No	Small grass openings within the red pine plantation, rolling terrain. Kalkaska sand.
134	3102 - Grass	21.3	Yes	Open "G" type with a few open grown white pine. Small diameter black cherry and pin cherry throughout. Possible RX burn to reduce encroachment of cherry, reduce ferns and reindeer moss. Opening maintenance burn. Promote more wildlife favorable grasses. May need to TSI the stand prior to the burn. ***Notes from 1986 compartment header - "Area was part of original sharptail grouse management area. To attract the viable flock of sharptail this area once held, these openings must be cut, burned, or machine scalped - something that has not taken place in twenty years."
135	330 - Low-Density Trees	41.0	No	Opening has filled in with fair amount of cherry, maple and white pine. Some scattered spruce. Steep terrain in western end.
136	3102 - Grass	9.0	No	opening filling in with cherry and white pine.