



# Compartment Review Presentation

## Traverse City Forest Management Unit

Compartment 61034

Entry Year 2020

Acreage: 3,055

County Manistee

Management Area: Manistee Plains

**Revision Date:** 2018-02-27

**Stand Examiner:** Patrick Cotant

### Legal Description:

24N, 14W, sections 19, 30, 31 - 24N, 15W, sections 13, 14, 23, 24, 25, 26, 36

### Identified Planning Goals:

Vegetation management in the Manistee Plains management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character including the Betsie River (a designated natural river), Bear Creek and the Grass Lake Flooding State Wildlife Management Area; threatened, endangered and special concern species; and provide for forest-based recreational uses. The primary attributes and associated uses that influence and drive management in the Manistee Plains management area are wood fiber production, wildlife habitat for existing species and recreational uses. Management activities will emphasize the age, size and species distribution within cover types. Expected trends within this 10-year planning period are increased recreation pressure and continued management to balance cover type age-class distributions for timber and wildlife habitat.

### Soil and topography:

The western edge of the compartment, the western portions of sections 14, 23, and 26 fall into Land Type Association 1111. This area is characterized by steep broken moraine ridges with excessively drained sandy soils. This part of the compartment is dominated by northern hardwoods.

The eastern portions of sections 14, 23, and 26 as well as the western portions of sections 13, most of section 24, and the northwest quarter of section 25 are characterized by Land Type Association 6111, a broad flat lake plain. Terrain is nearly level with few kettle depressions or lakes. Soils are deep, dry, excessively well drained sands. Forest cover types in this part of the compartment are dominated by conifer plantations, upland aspen, and a few northern hardwood stands composed predominantly of beech and red maple.

The remainder of section 25 and sections 19, 30, and 31 are part of Land Type Association 6131. This is a continuation of the broad flat, nearly level, lake plain that lies to the west, but with poorly drained sands and loamy sands. This eastern portion of the compartment is dominated by lowland aspen, lowland hardwoods, and a few smaller inclusions of conifer swamp.

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

There continues to be some residential and seasonal recreational development along the western part of the compartment. Private parcels in sections 14, 23, and 26 have recently been subdivided. There have been some new homes built just north of the compartment in the vicinity of Glover's Lake and one residence built in section 31 north of Big Four Rd. adjacent to State Forest land. Land use remains mostly rural, agricultural and forest recreational.

### Unique Natural Features:

### Archeological, Historical, and Cultural Features:

Archeological hit in T25NR15W, section 24 - Site 20MT40 is located in section 24. This site is not located on State Land.

### Special Management Designations or Considerations:

In the 1980's a Woodland Management Trail was established in the northwest quarter of section 26. The trail has since fallen into disrepair through lack of maintenance. A hardwood selection cut was done in the area of the timber management pathway during the last entry period. Aspen and pine plantations along the pathway will be treated this entry period. Plans to remark and maintain the trail have fallen by the wayside. Due to a lack of funding, the County Conservation District Forester who intended to institute these repairs and upgrades has thus far been unable. If suitable labor and funding can not be identified, consideration should be given to officially abandoning this little used trail and removing the sign at the trailhead.

### Watershed and Fisheries Considerations:

Green's Creek and its tributaries flow through Compartment 34. All are Designated Trout Streams. Green's Creek is a tributary to the Little Bear Creek in the Bear Creek watershed. Green's Creek supports a naturally reproducing population of brook trout, and likely supports populations of brown trout, coho salmon, and steelhead as well. For the aspen clearcut planned for Stand 69, a reasonable buffer should be left along the stream. This buffer should be sufficient so that beavers do not colonize the stream after the clearcut area begins to regenerate. Beavers can have major negative impacts on small trout streams such as this one.

### **Wildlife Habitat Considerations:**

The southeast half of this compartment is lowland complex situated on a glacial lake plain of saturated soils. Stands of lowland hardwoods and lowland aspen are the dominant habitat type at present. Lowland shrub and emergent wetland communities can also be found here. Great blue herons, deer, wood ducks, red-shouldered hawks, black bear, and wood frogs are just several of the many species that use these bottomland forests. Inclusions of drier soils support mainly aspen and some hardwoods. Timber treatments in deciduous stands should leave tops unchipped for horizontal cover and browse, create some large woody debris, and retain mast producing shrubs and trees. Pockets of lowland conifers are scattered throughout and should be perpetuated, and expanded in some areas. Lowland conifer stands provide valuable habitat components for black bear, snowshoe hare, northern waterthrushes, northern saw-whet owls, and wintering deer. Several openings can be found on the upland inclusions and add to the diversity of the area. These openings should be maintained in grass and shrubby cover for the benefit of wildlife.

The lake plain soils transition into excessively drained sandy soils in the northwest portion of the compartment. Hardwoods with scattered aspen stands and several pine plantations comprise most of the habitat types found here. Hardwood treatments should incorporate the preservation of tree species diversity, the retention of mature mast producing trees, and the protection of den, cavity, and downed trees. Many wildlife species, including broad-winged hawks, wild turkeys, southern flying squirrels, eastern gray squirrels, and Baltimore orioles, are associated with these forest types. Future management of the several pine plantations here should consider incorporating small (2-5 acre) islands that are left relatively un-thinned within mature stands to provide winter roosting cover for turkeys. This compartment falls within the Manistee Plains Management Area (MA) of the Regional State Forest Management Plan. Featured wildlife species for this MA are woodcock, beaver, mallard, pileated woodpecker, red-headed woodpecker, ruffed grouse, turkey, deer, and wood duck. Based on the natural disturbance history of the land type associations within the Manistee Plains MA, the MA plan calls for managing the amount of open/semi-open lands at or above the current level to provide habitat for species which use openings.

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

Surface sediments consist of glacial outwash and lacustrine (lake) sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 1,000 feet. Beneath the glacial drift are the Devonian Ellsworth and Antrim Shales. These shales are used for cement products. The nearest gravel pit is located one mile to the south and there should be potential on the uplands. This area is located within the Niagaran reef trend and also has Antrim Shale gas production. Most of the State land is currently leased for oil and gas development.

### **Vehicle Access:**

Due to the saturated soils and lowland nature of the eastern portion of this compartment, consideration should be given to closing existing roads in these areas. ORV damage is common on some of these roads. There is a Director's Order in place closing the SESE of section 19 to wheeled motorized vehicles. An opportunity to create a significant block of roadless forest exists in this compartment. This area is used heavily by firearm deer hunters who would be the most impacted by these closures.

### **Survey Needs:**

### **Recreational Facilities and Opportunities:**

Bear Lake - Betsie Valley Snowmobile trail #386 occurs within the compartment near Lumley and Swanson Roads. Glovers Boating Access Site, managed by Parks and Recreation Division, is located just north of the compartment. Green Creek and its tributaries are designated trout streams providing ample fishing, and hunting within the compartment.

### **Fire Protection:**

Platte River Field Office. Local coverage provided by Copemish-Cleon and Bear Lake Volunteer Fire Departments. Urban interface is not a real concern in this area, and this compartment consists of hardwood with mixed pine plantations. Travel time from the Platte River Field Office could allow a fire in a pine plantation to grow before large equipment arrived on scene.

### **Additional Compartment Information:**

**The following reports from the Inventory are attached:**

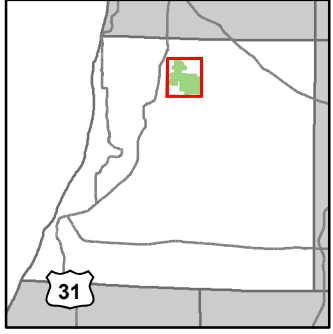
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

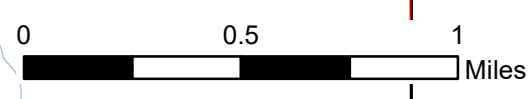
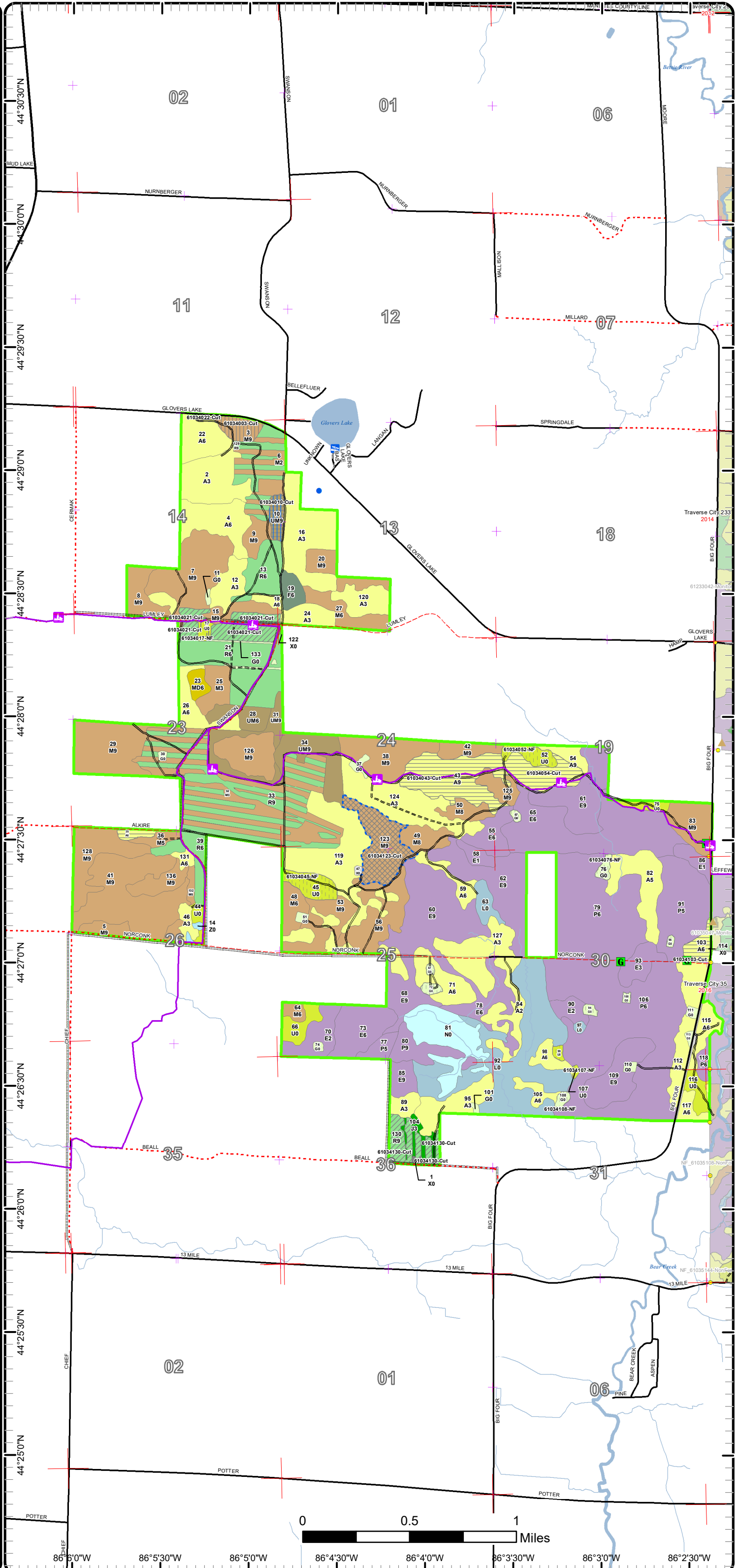
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 34  
 T24N - R14W Sec. 19,30,31  
 T24N - R15W Sec. 13,14,23-26,36  
 County: Manistee  
 Unit: Traverse City  
 Mgmt Area: Manistee Plains  
 YOE: 2020  
 Acres: 3,055 GIS Calculated  
 Examiner: Patrick Cotant  
 Map Revised: 10/11/2018  
 Map Phase: Post - Maps



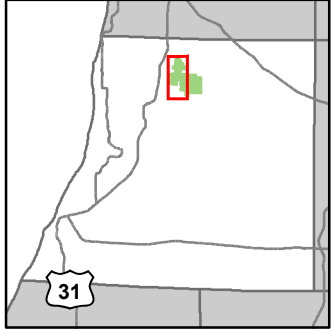
- Miris Corners
- Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State / County - Paved Road
- County - Gravel Road
- County - Dirt Road (Seasonal)
- Snowmobile Trails
- Designated Snowmobile Trails
- Lake/Pond
- Perennial River
- Lakes and Rivers All
- Berms
- Gate
- Boating Access Site
- Culvert
- Tower
- Pipeline
- Compartment Boundary
- Treatments with Site Conditions
- Other Treatment - See Comments
- Selection (Group, Single Tree)
- Clearcut (w/Reserves)
- Seed Tree (w/Reserves)
- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Opening Maintenance
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 110 - Low Intensity Urban
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes



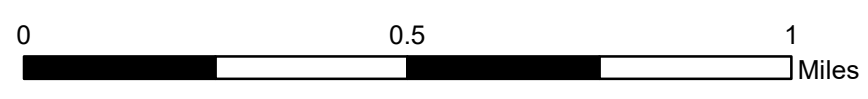
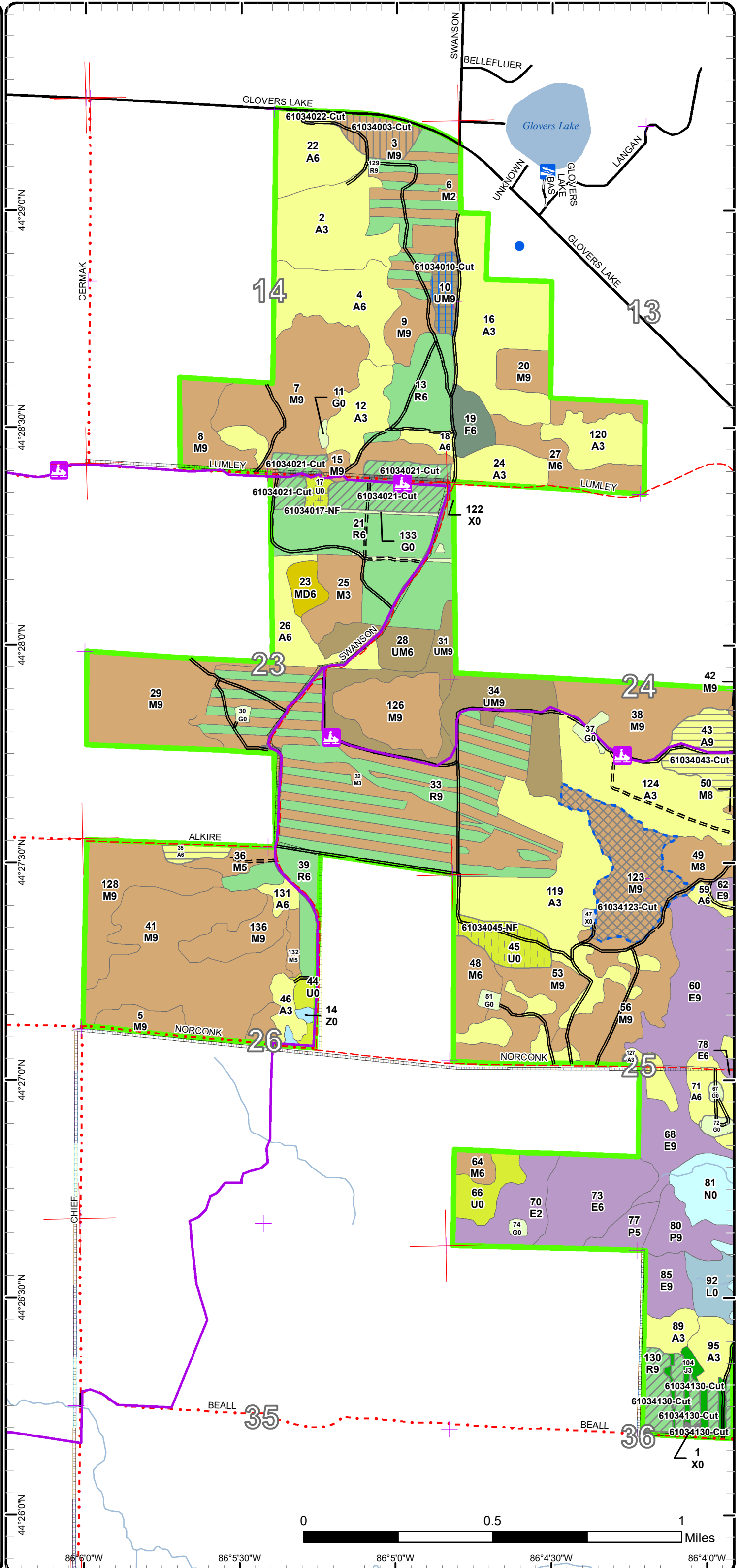
86°30'W 86°5'30"W 86°5'0"W 86°4'30"W 86°4'0"W 86°3'30"W 86°3'0"W 86°2'30"W

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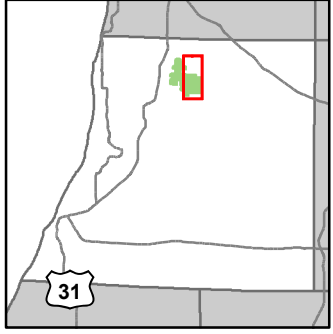
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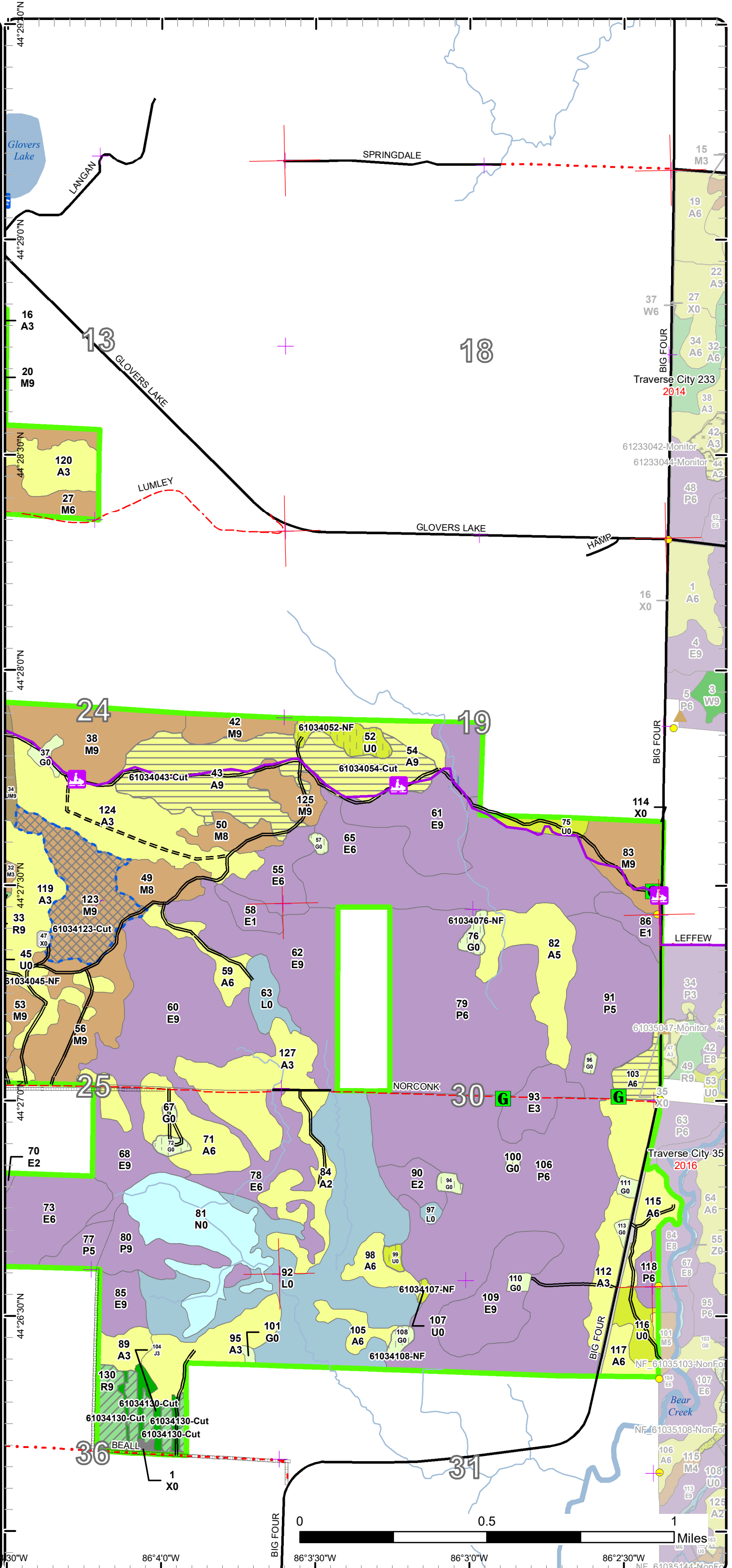
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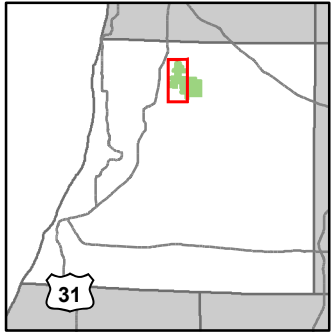


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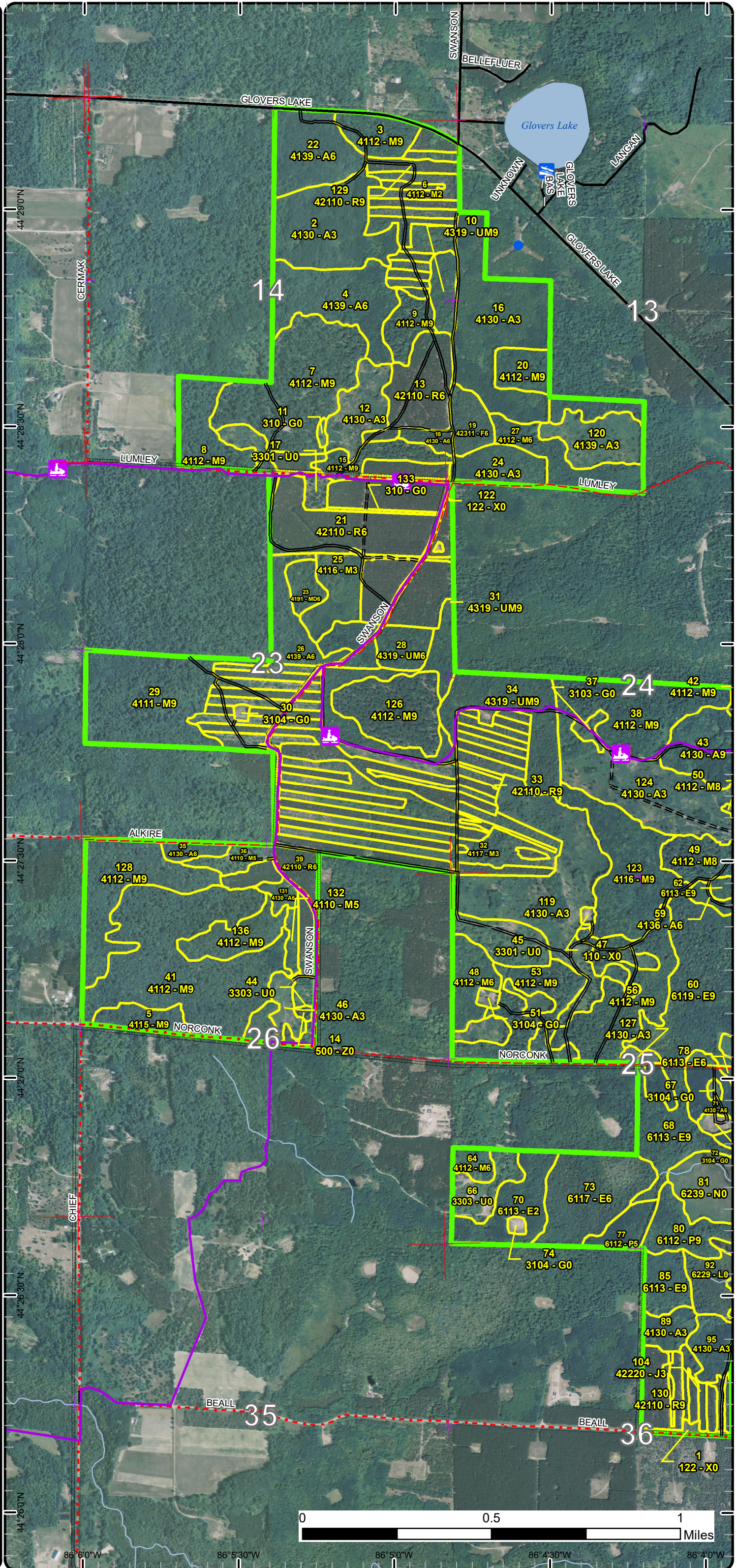


# Stand Boundary Map

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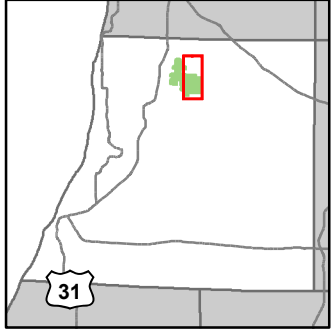


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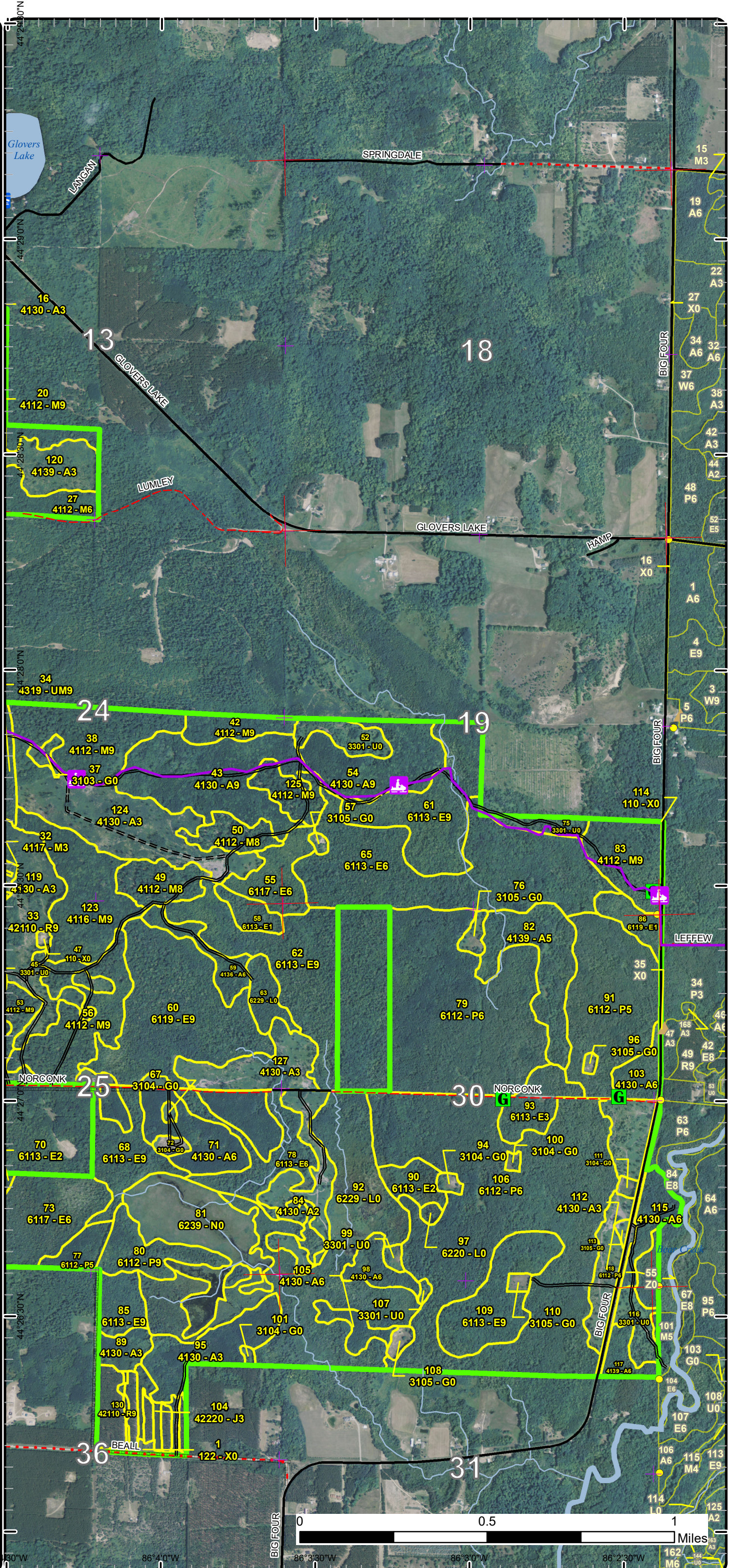


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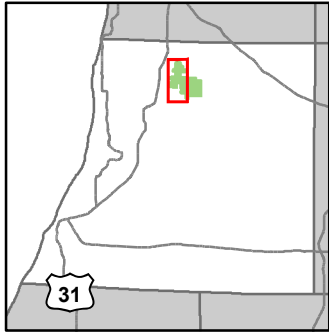
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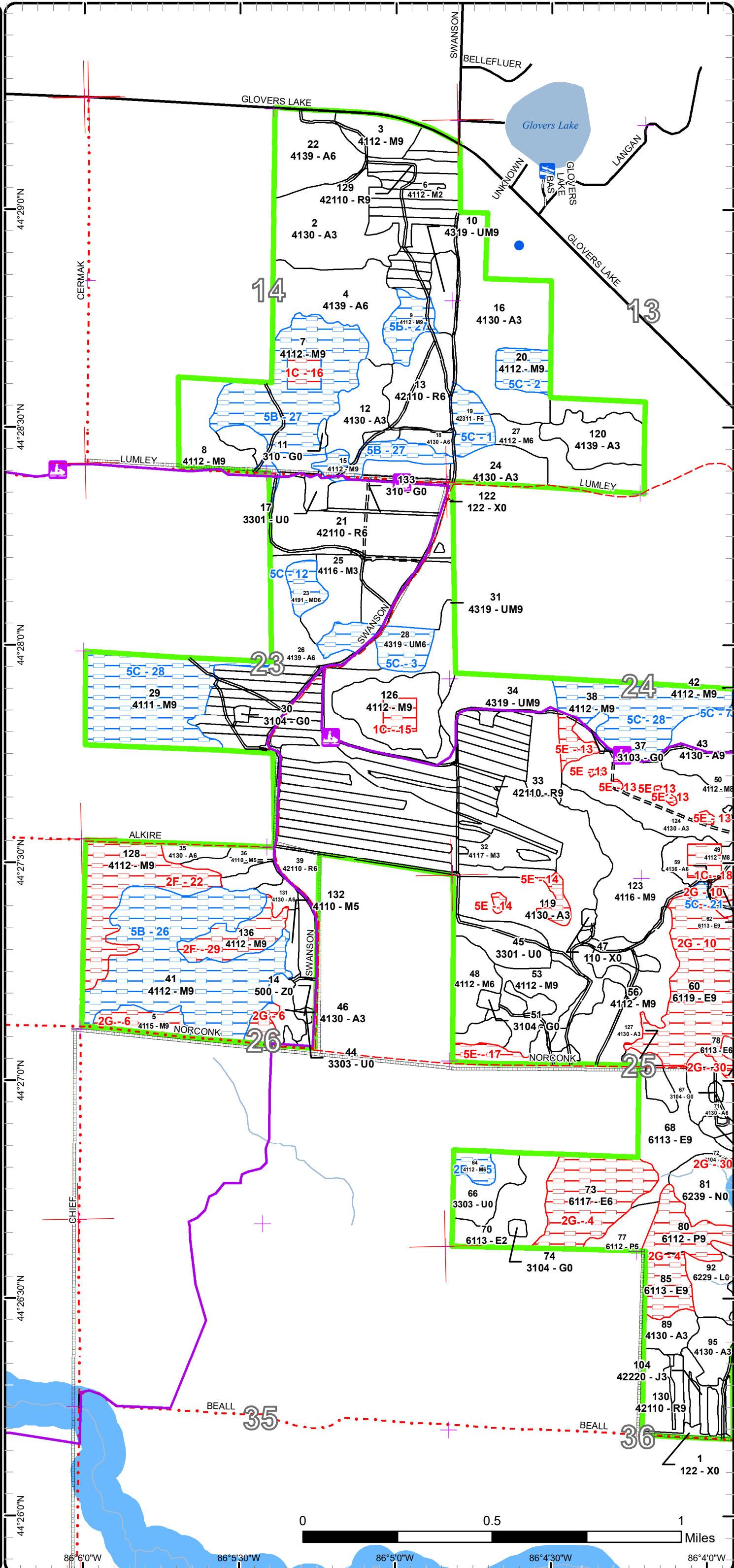


# Special Conservation Areas & Site Conditions Map

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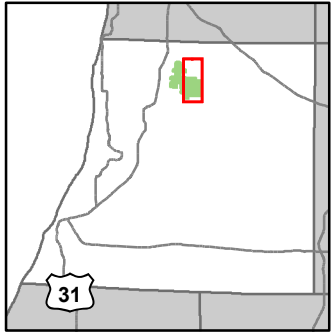


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  - Pipeline
  - Compartment Boundary
  - Available w/ Constraints
  - Unavailable
- 5B: Maintain for regeneration purposes  
 5C: Delay treatment for age/size class diversity or exceptional site quality  
 1C: Other dept or div proc/practices  
 2F: Too steep  
 2G: Too wet (sensitive soils, does not include access issues)  
 5E: Long-Term Retention
- Stand Boundaries
  - Cold Water Streams
  - High Priority Trout Stream Buffer

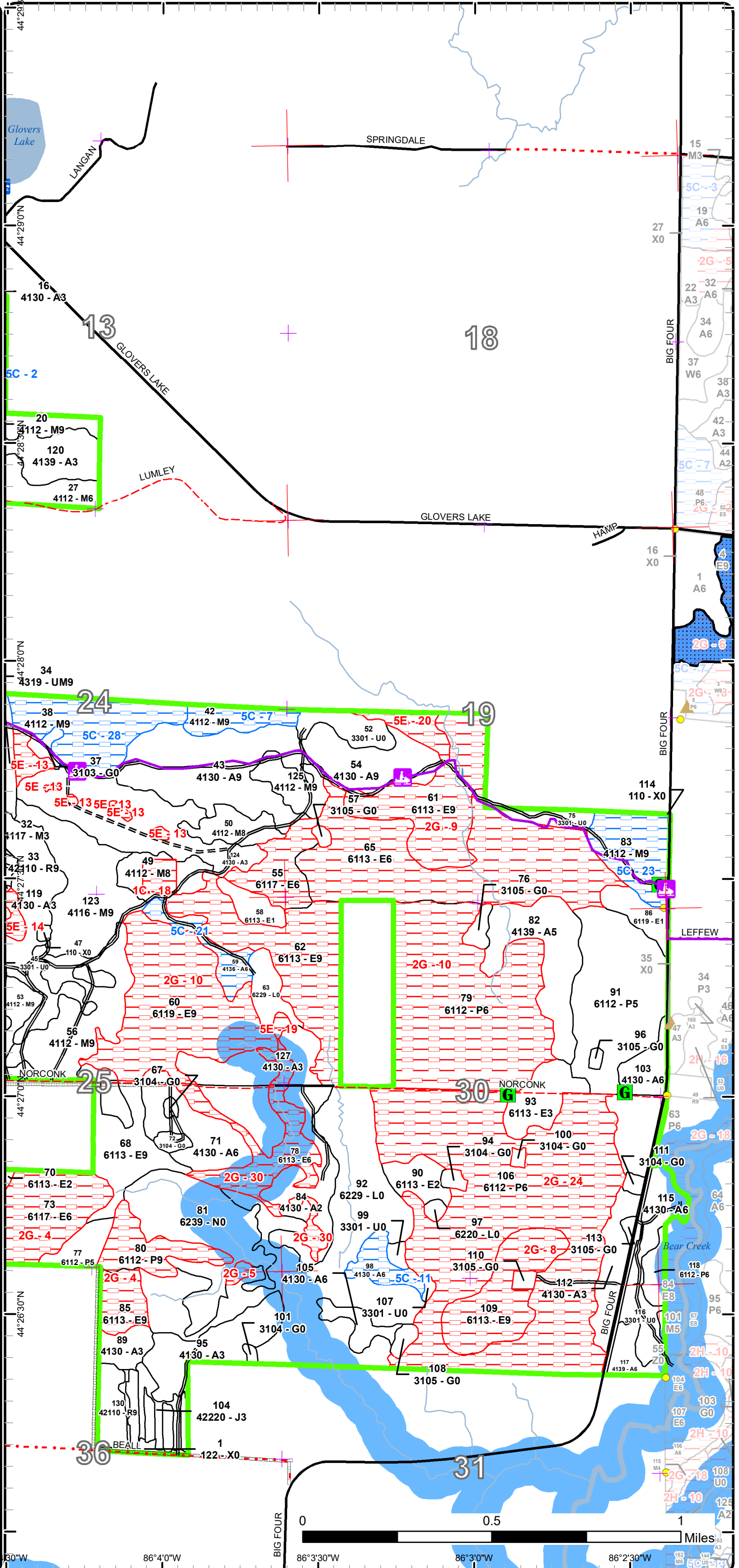


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- High Priority Trout Stream Buffer
- Riparian Area



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	267	8	176	65	110	34	67	0	0	0	0	0	0	0	0	0	0	727
Herbaceous Openland	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Jack Pine	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Low-Density Trees	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
Lowland Aspen/Balsam Poplar	0	0	0	0	378	6	0	21	0	0	0	0	0	0	0	0	0	0	403
Lowland Deciduous	0	0	0	10	39	16	0	55	12	0	328	0	0	0	0	0	0	34	493
Lowland Shrub	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
Marsh	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Mixed Upland Deciduous	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Northern Hardwood	0	118	0	23	14	0	4	68	0	17	520	0	0	0	0	0	0	0	764
Red Pine	0	0	0	0	0	0	0	261	0	0	0	0	0	0	0	0	0	0	261
Upland Mixed Forest	0	0	0	0	0	0	16	66	0	0	0	0	0	0	0	0	0	0	82
Upland Spruce/Fir	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Urban	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>300</b>	<b>385</b>	<b>16</b>	<b>209</b>	<b>496</b>	<b>132</b>	<b>71</b>	<b>538</b>	<b>12</b>	<b>17</b>	<b>848</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>3055</b>



## Report 2 – Treatment Summary

Traverse City Mgt. Unit  
Year of Entry: 2020

Acres of Harvest

Compartment 34  
Total Compartment Acres: 3,055

Commercial Harvest - 168  
Harvests with Site Condition - 41  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	88	0	0	0	0	0	0	0	0	88
Lowland Aspen/Balsam Poplar	10	0	0	0	0	0	0	0	0	10
Northern Hardwood	0	41	0	0	13	0	0	0	0	54
Red Pine	0	0	0	0	0	49	0	0	0	49
Upland Mixed Forest	0	0	0	9	0	0	0	0	0	9
<b>Total</b>	<b>98</b>	<b>41</b>	<b>0</b>	<b>9</b>	<b>13</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>209</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	209	0	0	0	0	0	0	46	0	255
Next Step	0	0	0	0	0	0	160	0	0	160
<b>Total</b>	<b>209</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>160</b>	<b>46</b>	<b>0</b>	<b>415</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
3	61034003-Cut	12.9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	95	111-140	Harvest	Shelterwood with Retention	411 - Northern Hardwood	Even-Aged	Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Treat stand with a shelterwood harvest, leaving approximately 40-60 BA of well formed individuals, focusing mainly on leaving sugar maple with other species represented as retention in lower numbers. Goal is to obtain dense regeneration of all species and to increase the potential of the sugar maple regeneration present to advance into the sapling layer. Treat western finger north and east of two track by removal of aspen and beech. Leave well formed sugar maple saps in this area.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable beech, black cherry, aspen, red maple and sugar maple should all be expected.

Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

10	61034010-Cut	8.9	4319 - Mixed Upland Forest	Sawtimber Well	67	141-170	Harvest	Seed Tree	42201 - Natural White Pine, Mixed Deciduous	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Mark to leave well formed white pine, sugar maple and some black cherry as a seed source throughout stand. White pine pockets are random throughout stand, making up about 50% of overall canopy, remainder is mixed hardwood.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Expect beech, aspen, sugar maple, red maple, black cherry and white pine to regenerate throughout stand.

Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

17	61034017-NF	3.8	3301 - Low Density Deciduous Trees	Nonstocked			NonForestMgt	Fruit Tree/Shrub Planting	330 - Low-Density Trees		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Prune remnant apple trees. Replace some of the dead apple trees with apple, crabapple, or other native fruiting shrub spp.

Specs:

Next Step

Treatments:

Acceptable  
Regen:

Other Could plant to a portion to low maintenance herbaceous cover suitable for wildlife cover and forage.

Comment:

Proposed Start Date: 10/1 /2019

21	61034021-Cut	29.5	42110 - Planted Red Pine	Poletimber Well	63	111-140	Harvest	Crown Thinning	42110 - Planted Red Pine	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Thin red pine, removing approximately 1/3 of overall volume with the focus of removal on poorly formed or otherwise defected trees that are lower quality.

Specs:

Next Step

Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019



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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
22 61034022-Cut	1.9	4139 - Aspen, Mixed Deciduous	Poletimber Well	41	51-80	Harvest	Clearcut with Retention	4116 - Mixed N. Hardwood - Aspen	Two-Aged	Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Remove all aspen and beech, retain well formed sugar maple and some black cherry poles.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen, sugar maple, red maple and black cherry are expected and acceptable.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

35 61034035-Cut	4.8	4130 - Aspen	Poletimber Well	48		Harvest	Clearcut	413 - Aspen	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest aspen in conjunction with small treatment in stand 128. Remove all aspen, protect small amount of sugar maple regen present

Specs: throughout stand as best as possible.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen and mixed deciduous species are expected to regenerate throughout stand.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

43 61034043-Cut	55.6	4130 - Aspen	Sawtimber Well	61	Unspec ified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest aspen and majority of other species. Leave islands scattered around stand; along southern edges near stand 124 and along

Specs: snowmobile trail to account for retention and aesthetics. Treatment area is 55 acres, actual harvest area after sale set up should be approximately 45-50 acres.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, white pine and mixed hardwood species should be expected to regenerate.

Regen:

Other

Comment:

Proposed Start Date: 10/1 /2019

45 61034045-NF	15.3	3301 - Low Density Deciduous Trees	Nonstocked		Unspec ified	NonForestMgt	Brush Cutting	3205 - Mixed Upland Shrub		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs

Specs: and/or conifers for wildlife food and cover. Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. May need to fertilize plantings and protect with wire cages or tubex.

Could plant to a portion to low maintenance herbaceous cover suitable for wildlife cover and forage.

Next Step

Treatments:

Acceptable

Regen:

Other Disk or trench illegal trails in south portion of stand. Probably should plant white spruce to keep trails from being used.

Comment:

Proposed Start Date: 10/1 /2019



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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
52 61034052-NF	10.6	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Brush Cutting	320 - Upland Shrub		Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. May need to fertilize plantings and protect with wire cages or tubex.

Next Step  
Treatments:

Acceptable  
Regen:

Other Prune remnant apple trees.  
Comment:

Proposed Start Date: 10/1 /2019

54 61034054-Cut	25.9	4130 - Aspen	Sawtimber Well	54	Unspecified	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest stand with majority of treatment north of snow trail, mark to leave small island of hardwoods in center portion of stand, this area should still have all beech and aspen removed from it. Mark to leave a few large red maple along snowmobile trail. Include specs to protect trail during harvest and hauling operations.

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

Acceptable Aspen, white pine and mixed hardwood species are expected to regenerate.  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

57 61034057-NF	1.3	3105 - Mixed Upland Herbaceous	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription May want/need to plant herbaceous species for wildlife forage needs. Consider an appropriate native species, but don't rule out pasture mix (i.e. alfalfa/clover). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

67 61034067-NF	1.1	3104 - Degraded	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Seed in forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex. If possible also plant the abandoned access road as Hunter Trail.  
Comment:

Proposed Start Date: 10/1 /2019



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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
72 61034072-NF	2.7	3104 - Degraded	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	212 - Non-tilled Herbaceous Agriculture		Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Seed in forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex. If possible also plant the abandoned access road as Hunter Trail.

Proposed Start Date: 10/1 /2019

76 61034076-NF	3.5	3105 - Mixed Upland Herbaceous	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Continue previous prescription of planting herbaceous forage crop for wildlife food and cover, along with stand 96 and the access road. The access road should be treated as a Hunter Trail. Expand Hunter trail along old logging roads in adjoining stands as possible. Previous crops have been annual rye.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

94 61034094-NF	2.0	3104 - Degraded	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Should re-vegetate to low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable reconditioning. Manage with stands 100, 94, 99, 107, and 108.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex. If possible also plant the abandoned access road as Hunter Trail.

Proposed Start Date: 10/1 /2019

96 61034096-NF	1.1	3105 - Mixed Upland Herbaceous	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Continue previous prescription of planting herbaceous forage crop for wildlife food and cover, along with stand 76 and the access road. The access road should be treated as a Hunter Trail. Expand Hunter trail along old logging roads in adjoining stands as possible. Previous crops have been annual rye.

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019





S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
99	61034099-NF	1.9	3301 - Low Density Deciduous Trees	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Should re-vegetate to low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable  
Specs: reconditioning. Manage with stands 100, 94, 99, 107, and 108.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages  
Comment: or tubex. If possible also plant the abandoned access road as Hunter Trail.

Proposed Start Date: 10/1 /2019

100	61034100-NF	1.1	3104 - Degraded	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Should re-vegetate to low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable  
Specs: reconditioning. Manage with stands 100, 94, 99, 107, and 108.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages  
Comment: or tubex. If possible also plant the abandoned access road as Hunter Trail.

Proposed Start Date: 10/1 /2019

91	61034103-Cut	9.5	6112 - Lowland Aspen	Poletimber Medium	30	Unspec ified	Harvest	Clearcut with Retention	6112 - Lowland Aspen	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Final harvest aspen, retain balsam fir for thermal cover and some vertical structure. In addition, retain a small amount of red maple. Some wet  
Specs: areas present, most notably in SE portion of stand and along N/NW edge.

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

Acceptable Aspen, red maple and balsam fir are expected to regenerate.  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

107	61034107-NF	1.0	3301 - Low Density Deciduous Trees	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Should re-vegetate to low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable  
Specs: reconditioning. Manage with stands 100, 94, 99, 107, and 108.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages  
Comment: or tubex. If possible also plant the abandoned access road as Hunter Trail.

Proposed Start Date: 10/1 /2019



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
108	61034108-NF	2.6	3105 - Mixed Upland Herbaceous	Nonstocked			NonForestMgt	Herbaceous/Crop /Grass Planting	310 - Herbaceous Openland		Approved Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription 8Should re-vegetate to low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable  
Specs: reconditioning. Manage with stands 100, 94, 99, 107, and 106.

Next Step  
Treatments:

Acceptable  
Regen:

Other Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages  
Comment: or tubex. If possible also plant the abandoned access road as Hunter Trail. Will need to block trespass from private property to the south. Fell trees and plant pine, or possible gate.

Proposed Start Date: 10/1 /2019

123	61034123-Cut	40.8	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	61	111-140	Harvest	Group Selection	4139 - Aspen, Mixed Deciduous	Two-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition: Long-Term Retention**

Prescription Final harvest all aspen and beech, retain islands (5-10 acres total) of more concentrated hardwoods, preferably of better quality. Within these  
Specs: islands, all beech and aspen should be harvested. Between islands, some larger seed producing sugar and red maple should be retained along with some scattered black cherry. This individual tree retention should not be more than 10BA. Islands should be scattered but some along north and west edges would be desirable to account for some visual aesthetics near more recent cuts.

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

Acceptable Expect aspen and mixed hardwood species to regenerate.  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

130	61034130-Cut	19.4	42110 - Planted Red Pine	Sawtimber Well	64	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Approved Proposal
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**Habitat Cut: No**

**Site Condition:**

Prescription Thin stand by removing approximately 1/3 of overall volume, reducing BA to approximately ~120 sq ft/ac.  
Specs:

Next Step  
Treatments:

Acceptable  
Regen:

Other  
Comment:

Proposed Start Date: 10/1 /2019

**Total Treatment  
Acreage Proposed: 257.2**

## Report 4 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

### Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available	Dominant Site Conditions									
		With Condition			2B	5B	5C	1C	2F	2G	5E			
727	532	21		174	Aspen			21						174
32	32	0		0	Herbaceous Openland									
8	8	0		0	Jack Pine									
65	65	0		0	Low-Density Trees									
404	73	0		331	Lowland Aspen/Balsam Poplar							331		
492	89	0		403	Lowland Deciduous							403	0	
132	132	0		0	Lowland Shrub									
47	47	0		0	Marsh									
7	0	7		0	Mixed Upland Deciduous			7						
764	335	302		126	Northern Hardwood	5	160	137	15	51	14		46	
261	261	0		0	Red Pine									
82	33	16		32	Upland Mixed Forest			16					32	
10	0	10		0	Upland Spruce/Fir			10						
22	12	9		0	Urban			9						
2	2	0		0	Water									
3,056	1,624	366		1,066	Total Forested Acres	5	160	200	15	51	748		253	
	53%	12%		35%	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	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

## Report 4 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

3	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	16	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	65	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
6	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	14	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
Age/size class diversity with surrounding aspen being cut.							

## Report 4 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

8	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	34	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
9	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	46	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
10	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	357	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Very wet stands with creeks, seeps and springs throughout many areas of included hard factored stands. When adjacent stands are harvested, consider small lowland inclusions in harvest.							
11	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
13	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

14	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
15	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> ongoing research project.							
16	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Walters Project							
17	Unavailable	5E: Long-Term Retention	6	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Steeper slopes and small creek in valley within this section of stand 53. Was left out of harvest boundary when stand was treated last YOE. Small creek flows through bottom land of stand.							
18	Unavailable	1C: Other dept or div proc/practices	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Walters Research, PLEASE DO NOT DELETE!							
19	Unavailable	5E: Long-Term Retention	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
20	Unavailable	5E: Long-Term Retention	8	2F: Too steep	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Long term retention for stand 54 - chosen sue to the topography of this portion of the stand, with north facing slope terminating at PVT property which would allow limited operation for equipment to turn around.							

## Report 4 – Site Conditions

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

21	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	12	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
22	<b>Unavailable</b>	<b>2F: Too steep</b>	36	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> This stand is very steep in most places aside from N/NE portion. Overall BA is low so even a small treatment in that area is not recommended at this time.							
23	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	25	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
24	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	201	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Overall very wet stands with sheet flow, creeks and springs throughout much of stand area. Some portions of stand are slightly upland but overall stand is lowland. Consider small areas of stand near edges and old access trails for harvest when volume warrants.							
25	<b>Available</b>	<b>2B: Unknown if access through adjacent landowner(s) is possible</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
26	<b>Available</b>	<b>5B: Maintain for regeneration purposes</b>	86	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

Traverse City Mgt. Unit

Patrick Cotant : Examiner

Compartment: 34

Year of Entry: 2020

27	Available	<b>5B: Maintain for regeneration purposes</b>	75	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
28	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	90	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
29	Unavailable	<b>2F: Too steep</b>	15	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
30	Unavailable	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	30	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



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.
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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4130 - Aspen	Sapling Well	39.3	26		Good quality aspen regen throughout with sugar maple, black cherry and red maple present, scattered beech in underscore. Moving from sap to pole sized with some aspen poles present. Good quality site.
3	4112 - Maple, Beech, Cherry Association	Sawtimber Well	12.9	95	111-140	Stand is growing well following treatment although some areas have significant epicormic branching on larger canopy trees. Heavy scale on all remaining beech. Ba ranges from 110-160 with some variation. Stand was treated last entry period with a selection cut. Heavy ironwood regeneration present, some beech, and very little sugar maple.
4	4139 - Aspen, Mixed Deciduous	Poletimber Well	34.3	41		Mixed stand dominated by mediocre aspen with hardwoods scattered throughout, sometimes in more dominant quantities. Some large beech scattered around stand along with white pine pockets, both of these species look like they were left following last harvest. Good quality site. Trace amounts (< 2%) of white ash in canopy.
5	4115 - Y.Birch, Hemlock NH	Sawtimber Well	13.6	95	111-140	This portion (multi part stand containing two separate pieces) of the larger surrounding hardwood complex contains some high water table areas with multiple pockets of standing water. Hemlock is also a major component in both the over story and under story. Some big tooth aspen present along Norconk rd.
6	4112 - Maple, Beech, Cherry Association	Sapling Medium	23.4	3	1-50	Mixed stand with variation between strips in terms of size, overall stocking and species composition. Some areas are very thick with hardwood regen while others contain retained pole and small log sized hardwood species. Scattered pockets of white pine also present in variable sizes. A fair amount of stand area also contains dead standing and blown down dead jack pine which has created quite a mess and presents issues with potential future management. Clearcut mature planted jack pine fall 2015; some advanced hardwood regeneration remains.
7	4112 - Maple, Beech, Cherry Association	Sawtimber Well	57.3	95	51-80	Low quality, overall small diameter with larger beech present that were retained for mast, significant hemlock component throughout that is providing valuable cover. Middle of stand appears to have a pocket of some nice quality sugar maple that would benefit from crown release. Also, concerns for Beach Bark Disease in this area may warrant a treatment to reduce bbd risks. There was an unoccupied stick nest observed in the stand.
8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	19.4	95	81-110	Heavy raspberries in some of the regeneration gaps.
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	10.5	95	81-110	Seems to be responding well to recent cut however regent is limited to beech, ironwood and trace hemlock. Some scattered black cherry.
10	4319 - Mixed Upland Forest	Sawtimber Well	8.9	67	141-170	Mixed stand with wpm dominant. Larger hardwoods scattered throughout and concentrated in clumps. some high concentrations of sugar maple regeneration along with areas of significant beech under story.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4130 - Aspen	Sapling Well	22.2	6	Immature	Harvested in 2011, regenerating well with deciduous and coniferous species scattered throughout. Old - clearcut in the fall of 2011 under contract 61-050-10-01
13	42110 - Planted Red Pine	Poletimber Well	25.6	61	111-140	Fair quality, BA hovers in the lower end of the range entered for stand - 110/120 sq ft/ac. Rows are a bit squirrely but operable with no issue as they are somewhat wide. Recommend treating next YOY with thinning.
15	4112 - Maple, Beech, Cherry Association	Sawtimber Well	11.8	95	51-80	
16	4130 - Aspen	Sapling Well	54.7	26		Scattered hemlock over top aspen, red maple, black cherry and beech. Some sapling sized hemlock present in places.
18	4130 - Aspen	Poletimber Well	4.3	37		Small diameter mix of red maple, aspen and cherry, mediocre quality. Heavy witch hazel in sub-canopy.
19	42311 - Planted Spruce, Mixed Deciduous	Poletimber Well	10.4	57	81-110	
20	4112 - Maple, Beech, Cherry Association	Sawtimber Well	10.3	95	141-170	Large diameter on average throughout all species, specifically beech. Trace yellow birch, low density hemlock in under story. Some decent quality in red and sugar maple and cherry, however a fair amount of defect is also present. Beech is mediocre quality but contributing significant wildlife values to stand. Good coarse woody debris present. Stand contains many cavity trees (beech, sugar maple, hemlock). Good potential for RSH nesting, but no evidence of any active or abandoned nests.
21	42110 - Planted Red Pine	Poletimber Well	89.4	63	111-140	Large contiguous red pine stand with light under story in most areas, some trace beech regen. Fair quality overall, some pockets of smaller diameter trees with shorter height. Ba is variable, ranging from 110-190, averaging approximately 140. Typed as pole sized stand but definitely a significant log sized component throughout and especially in higher quality areas. Portions of stand were row thinned in most recent treatment while majority was marked as a second thinning, as expected, ba is higher and more defect remains in areas only row thinned. Consider thinning stand north of Lumley Rd, treat portions of stand next yoe with mix of fh/replant and thinning.
22	4139 - Aspen, Mixed Deciduous	Poletimber Well	26.8	41	51-80	Aspen with significant hardwood component of sugar and some red maple along with black cherry. Mainly pole sized trees throughout with some larger trees along perimeter of stand. Overall sugar maple is in the 4-6" range, aspen a bit bigger on average. Wait until next yoe and evaluate for treatment options. Good quality site, a few trillium and leeks present
23	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	7.0	57	51-80	Small diameter spruce providing good thermal and visual cover, minimal under story, lots of wildlife use.
24	4130 - Aspen	Sapling Well	14.5	26	Unspecified	A3 stand, moving to pole size with some small pole sized trees present. General north facing slope in northern edge of stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4116 - Mixed N. Hardwood - Aspen	Sapling Well	15.8	26	1-50	Poor aspen regeneration. Stand is dominated by black cherry.
26	4139 - Aspen, Mixed Deciduous	Poletimber Well	19.5	39		Mixed deciduous stand with aspen dominant overall but other species high in density in places. Overall low quality, minimal desirable regeneration. Aspen and red maple are small in diameter, in general.
27	4112 - Maple, Beech, Cherry Association	Poletimber Well	26.8	66	81-110	Small diameter mixed deciduous stand dominated by poet sized, clumpy red maple with bc, aspen and sugar maple also present. Size variability with some sapling pockets present, along with some larger black cherry present in clumps. Generally pole sized.
28	4319 - Mixed Upland Forest	Poletimber Well	16.0	57	51-80	
29	4111 - S.Maple, Hard Mast Association	Sawtimber Well	52.2	95	81-110	Fair quality stand, variable in terms of stocking throughout, quite a few canopy gaps both round and linear in form, occupied mainly by beech and ironwood with some small pockets of sugar maple and cherry. Stand BA averages approximately 80 sq ft/ac. white ash that was not removed during last harvest is for the most part dead standing, very few individuals look like they are alive. Beech is in fair condition, not great in form to begin with but it doesn't look as though there's any mortality at this time directly resulting from BBD. Old comment - most regeneration is beech and ironwood. The only sugar maple regeneration that is well established is occurring in the few large canopy gaps that were created.
31	4319 - Mixed Upland Forest	Sawtimber Well	24.4	69	111-140	Lower quality stand, larger white pine with varying size class red maple, beech, sugar maple and cherry making up remainder of canopy. Looks to be the result of past removal harvest where wp were left. Some jack pine pockets. Consider harvest next yoe removing majority of trees aside from some leave tree wp and scattered hardwoods. Good quality black cherry. 2 stick nests present in ne portion of stand, unknown if active.
32	4117 - Mixed N. Hardwood - Pine	Sapling Well	95.2	4	Immature	Stand area dominated by beech sprouts with red maple, scotch pine, white spruce and red pine present in western edges of more southern strips. Cherry saplings scattered more uniformly throughout. Deciduous component ranges from 5-20' in height with overall average of approximately 10'. Clearcut; operation was off and on between spring 2012 and fall 2015. Some deciduous saplings (ironwood, beech, red maple) and scattered mature hardwoods.
33	42110 - Planted Red Pine	Sawtimber Well	84.4	62	111-140	Growing well following thinning, stand has transitioned from pole to log class. Minimal defect remains throughout, ba averages 110-120, beech under story heavy in places. Thinned spring 2012.
34	4319 - Mixed Upland Forest	Sawtimber Well	32.5	67	51-80	Mixed stand, very similar in structure to stand 31 just to the west. Red maple and beech saps/poles make up remainder of canopy with cherry, jack pine and some aspen also present.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4130 - Aspen	Poletimber Well	4.8	48		Good quality aspen, mix of pole and log sized trees with sugar maple, beech, red maple along with trace bc and basswood present. Some fair quality sugar maple, in general hardwood species on stand are mediocre quality. Consider treating by removing aspen and marking to leave some sugar maple and other wolfy trees providing wildlife value.
36	4110 - Sugar Maple Association	Poletimber Medium	7.0	28	1-50	Previously typed as a u-type but should be considered forested now with a mix of sugar maple, cherry and aspen along with scattered white pine. Sugar maple saps/poles are good quality in general. Some moss. Old foundation. Frontage on 2 different 2 tracks and borders private to the north.
38	4112 - Maple, Beech, Cherry Association	Sawtimber Well	37.6	95	81-110	Thinned stand, resulting in very similar situation as other hardwood treatments, very thick beech underscore with very little else in terms of regen. Significant beech component remains, mediocre quality hardwoods overall.
39	42110 - Planted Red Pine	Poletimber Well	17.6	61	141-170	Stand is growing well following harvest, ba hovering pretty consistently at 150 sq Ft/ac. Not a great deal of defect, some scattered throughout along with a few small pockets of mortality. Dense beech and sugar maple regeneration present throughout much of stand.
41	4112 - Maple, Beech, Cherry Association	Sawtimber Well	85.7	95	81-110	Red and sugar maple dominated with black cherry scattered throughout. Red maple more common in southern portion of stand with lower elevation and higher water table, sugar maple and bc more common on upper slopes and in north. Beech regen thick throughout with scattered bc, rm and trace sm. Some ironwood as well. This was part of the original stand which now has separate pieces - stand 128. Stand 41 was salvage harvested under tsale contract 051-13-01, with all beech and white ash being removed. No other trees were removed, BA ranges from 60-120 sq ft/ac with occasional pockets slightly higher.
42	4112 - Maple, Beech, Cherry Association	Sawtimber Well	11.8	88	111-140	Mixed deciduous stand with variable size throughout, especially with beech and red maple. Aspen present throughout in low numbers with some small pockets of higher density along south stand edge. Significant red maple and beech sap and pole sized component. Overall, low quality. Consider treatment next yoe.
43	4130 - Aspen	Sawtimber Well	55.6	61	Unspecified	Mixed stand with aspen dominant overall, similar to many of the deciduous stands in area, mediocre quality hardwoods occupy remainder of canopy. Snowmobile trail traverses length of stand east to west. Trail through stand passes through some small, variable openings with some saplings present. Too small to delineate, Consider for potential retention areas during sale set up, joined with adjacent surrounding aspen pockets.
46	4130 - Aspen	Sapling Well	6.6	5	Immature	



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4112 - Maple, Beech, Cherry Association	Poletimber Well	13.9	37	51-80	Mixed stand, growing fairly well. Mediocre quality hardwoods overall with some better quality individual trees and pockets throughout stand. Transitioning from pole/sapling to overall pole size class. Scattered larger diameter trees throughout stand.  Old comment - Appears this was an unsuccessful attempt to regenerate aspen on this site. The site is more of a hardwood site
49	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	15.1	95	81-110	Fair quality hardwood stand responding similar to stands to the south following most recent treatment. Hovering in lower end of 81-110 ba range. Thick beech under story throughout. Stand was thinned in summer 2012.
50	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	11.2	95	51-80	Mediocre quality hardwood stand treated last YOY, BA stil in the 60-80 sq ft range. Dense beech regen present in much of the stand with red maple regen also present, trace black cherry regen in the form of stump sprouts. Stand was thinned in summer 2012.
53	4112 - Maple, Beech, Cherry Association	Sawtimber Well	26.2	90	51-80	Stand treated, responding fairly well however a decent amount of epicormic branching is present following treatment, especially in sugar maple. Beech understory is high in most areas of stand, some other regen present in lower densities.
54	4130 - Aspen	Sawtimber Well	34.3	54	Unspecified	Aspen stand with red maple, beech and bc throughout, also sugar maple present. Trace white pine and hemlock. Significant topo throughout stand compared to surrounding area.
55	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	18.4	93	51-80	Lowland stand with some seeps and sheet flow in spots, high water table throughout. Red maple dominant with hemlock thick in spots, mostly pole understory and pole/small log canopy individuals. small number of yellow birch present, trace yellow birch regen in spots along edges of stand. Pockets of heavy hemlock.
56	4112 - Maple, Beech, Cherry Association	Sawtimber Well	39.7	95	81-110	Thinned in 2011, growing fairly well, significant epicormic branching in spots, overall stand is fair to good quality with some nice stems in areas where density was left a bit higher. Significant variability in stocking in some portions of stand. Beech, sum, rm, Aspen and bc present throughout under story. Old grade runs up through middle of stand. Traces (< 2%) of paper birch present in stand.
58	6113 - Lowland Maple	Sapling Poor	7.4	38	Unspecified	Wet throughout much of stand at time of inventory, only visited NW finger. Some variability in stocking with some more open areas. Multi-stem red maple sprout regeneration from old cut. Areas of standing water and grasses/sedges.
59	4136 - Aspen, Mixed Conifer	Poletimber Well	11.5	61	Unspecified	Small upland stand with aspen and red maple dominant. Red maple and hemlock understory both working their way into the intermediate areas of the canopy in spots. edges and small areas of internal portions of stand are wet with high water table in adjacent lowland stands. Stand is narrow upland area along old oil well access road. Traces of paper and yellow birch in stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
60	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	75.3	95		Large deciduous lowland complex with hemlock throughout in under story and some intermediate portions of the canopy. Standing water in much of stand with seeps and springs present as well. Trace beech and black cherry along edges of stand.
61	6113 - Lowland Maple	Sawtimber Well	45.9	91	51-80	Lowland stand with creek flowing through it - conifers are more concentrated along creek areas. Aspen is mediocre quality because of standing water/high water table. Understory is fairly stocked in places, contains some red maple along with lowland shrubs. Standing water throughout at time of inventory.
62	6113 - Lowland Maple	Sawtimber Well	55.7	95	51-80	Lowland stand with seeps and sheet flow, eventually converging to form a small branch of Greens Creek in southern portion of stand, standing water throughout much of stand at time of inventory. Hemlock dense in places, cedar concentrated near areas of creek and most wet spots of stand. Red maple size is variable in much of stand, some areas of larger log sized trees and other areas of poles in the 6-9" range. Placed overall average DBH for RM at 10". Ash is deteriorating quickly.
64	4112 - Maple, Beech, Cherry Association	Poletimber Well	5.3	85	81-110	Isolated stand, access is across PVT, blocked by lowland stands and PVT boundaries. Fair quality, trace BC.
65	6113 - Lowland Maple	Poletimber Well	98.0	91		Mixed stand with size and stocking variability throughout along with areas of upland and lowland throughout, although majority of stand is lowland. Creek runs through stand and near edge, leading to higher concentration of cedar, hemlock and black ash in vicinity of creek course. West part of stand contains more log sized trees of the older age class. East end is dominated more by pole size trees of the younger age class. However both age classes appear to occur throughout.
68	6113 - Lowland Maple	Sawtimber Well	24.7	67	Unspecified	Mixed stand, conifers concentrated in pockets throughout stand. Creeks flow through and join in center of stand then flow into adjacent stand 81. Very high water table within stand along with seeps and springs flowing to creeks.
70	6113 - Lowland Maple	Sapling Medium	21.5	35	Unspecified	Small diameter lowland stand with variable stocking, some areas have fully developed into tag alder swamps. Some balsam fir in understory, evenly distributed.
71	4130 - Aspen	Poletimber Well	40.9	26	Unspecified	Multi part aspen stand, transitioning to pole size with a significant component of sapling sized trees still remaining throughout. High water table in areas of stand, some standing water in places but overall stand sits on slight upland surrounded by e-type. trace hemlock in spots along with some balsam fir scattered throughout understory.
73	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	34.4	95	Unspecified	Wet throughout, hummocky ground, could not quite reach edge of stand.
77	6112 - Lowland Aspen	Poletimber Medium	8.6	35	Unspecified	Lowland stand with standing water throughout much of stand, variability in terms of size/stocking within the aspen species composition. scattered tag alder in more open areas of stand, most notably in northern area.





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
78	6113 - Lowland Maple	Poletimber Well	29.8	67		A branch of Green's Creek flows through stand.
79	6112 - Lowland Aspen	Poletimber Well	109.8	32	Unspecified	There are a few upland inclusions in the stand, but it is mostly lowland. Old ruts on skid trails from previous cut are serving as small vernal ponds in the spring.
80	6112 - Lowland Aspen	Sawtimber Well	20.5	67	Unspecified	WLD has interest in potential wildlife cut in this stand.
82	4139 - Aspen, Mixed Deciduous	Poletimber Medium	34.0	32	Unspecified	Narrow stand with upland ridge in center and upland/lowland edges on either side. Variable in terms of stocking with some areas fully stocked, obviously lower stocking along trail where opening maintenance is prescribe to take place-averages about 75% canopy closure. Cedar, hemlock and fir in wetter areas, lots of wildlife activity. Size variability throughout, generally large sapling, small pole size aspen and red maple with some small clones in the large pole size class.
83	4112 - Maple, Beech, Cherry Association	Sawtimber Well	24.8	94	111-140	Mediocre quality red maple stand with some fair quality in places. Trace aspen in places. Hemlock is significant component in portions of stand mainly in subcanopy but a fair amount of trees are advancing into intermediate canopy level. High water table in portions of stand, some standing water. Traces (< 2%) of beech in canopy. Area that was marked last time then buffered out for nest still contains a nest, unknown whether it is active at this time. Remainder of stand outside this buffer area has a BA that hovers in the 110-120 sq ft/ac range and that includes hemlock poles and small logs present.
84	4130 - Aspen	Sapling Medium	24.2	5	Unspecified	Stand was harvested in spring of 2013 under tsale contract 023-10. Scattered leave trees were marking, mix of species - some aspen, red maple, etc. Inaddition, no cedar or hemlock were harvested. -PC
85	6113 - Lowland Maple	Sawtimber Well	12.1	79	81-110	Lowland stand, high water table throughout. Red maple transitioning to log sized, some variability in size and some pockets of variable stocking throughout stand. Inventoried when frozen and could not access too far into interior of stand because of standing water. Fair amount of blowdown in places. South edge of stand is slightly more upland, transition zone between adjacent aspen and this stand. Sugar maple occurs in this part of stand.
86	6119 - Mixed Lowland Deciduous Forest	Sapling Poor	9.2	30		Lowland stand, lots of dead standing timber, more flooded than surrounding stands, thick alder under story in places.
89	4130 - Aspen	Sapling Well	8.2	17		Small amount of recent beaver activity in the northeast part of stand.
90	6113 - Lowland Maple	Sapling Medium	9.5	28	Immature	Small acreage, wet stand with standing water throughout. Stand dominated by red maple saps and stump sprouts, some tag alder in more open areas.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
91	6112 - Lowland Aspen	Poletimber Medium	58.6	30	Unspecified	Lowland stand with significant variability in stocking and species composition in places. Standing water throughout much of stand, scattered access routes that are somewhat deteriorated. Many shrubs, many pockets of standing water at time of inventory. Typed as pole but sapling component is significant in the 3-4" range.
93	6113 - Lowland Maple	Sapling Well	16.1	40		Wet stand with red maple dominant, some pockets of cedar and balsam along with scattered aspen. Fair amount of standing ash, appears to be all dead. Balsam l much more concentrated in eastern portions of stand, creek, seeps also present in this area of stand.
95	4130 - Aspen	Sapling Well	26.5	26		
98	4130 - Aspen	Poletimber Well	9.6	49	Unspecified	no/very difficult access for future management - currently stand is small diameter, moderately stocked. Consider access/treatment next YOE or the following when volume warrants treatment.
102	413 - Aspen	Sawtimber Well	0.0	50	Unspecified	
103	4130 - Aspen	Poletimber Well	9.6	49	Unspecified	Aspen stand majority upland with central area being more wet. Operable in drier periods or in frozen conditions. Consider final harvest leaving majority of conifer component.
104	42220 - Natural Jack Pine	Sapling Well	8.1	17		
105	4130 - Aspen	Poletimber Well	7.2	32	Unspecified	Small diameter stand of aspen and red maple, some scattered pockets of aspen that are still in sapling size class. Difficult access, not certain how access was achieved to cut this stand, potentially from stand 108 to the east but this would have required a small bridge or culvert work as there is a creek between the maintained opening and this small upland aspen stand.
106	6112 - Lowland Aspen	Poletimber Well	200.7	32		Lowland stand of aspen, red maple and some bc. Standing water in many areas of stand with some narrow channels present with seasonal flow. Ash is alive in some areas but significant decline and mortality is present. A few built up trails access sand that were created for oil and gas exploration, many now deteriorated and have been backed. Sub-canopy is spotty in distribution. Several areas of high tag alser were observed in south part of stand.
109	6113 - Lowland Maple	Sawtimber Well	33.5	99	Unspecified	This stand was "strip cut" by wildlife in 1988. Stand consists of strips of log sized red maple (dominant feature) and strips of sapling size regeneration. Size class difference (texture) not real evident on imagery. Regen. strips are pole/sap dominated by red maple with a few black ash, no understory. Uncut strips are log/pole size, dominated by red maple with a few black ash. There may be some silver maple present in these strips as well. Red maple canopy consists of sap, pole and log sized trees, single canopy code represents all size classes.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
112	4130 - Aspen	Sapling Well	29.6	5	Unspecified	Stand growing well, some areas with slightly lower stocking than the average but overall good stocking in terms of stems/acre. Stand contains scattered black cherry and red maple that were left as residual. Balsam fir concentrated along western edge and in northern portion of stand.
115	4130 - Aspen	Poletimber Well	13.5	43		Mixed stand of aspen with red maple, bc and scattered white pine with trace yellow birch. Some lowland pockets along south end of stand and near eastern edge. There are a few vernal pond in this stand.
117	4139 - Aspen, Mixed Deciduous	Poletimber Well	7.5	43		Mixed stand with red maple and aspen dominant, and bc common as well. White pine make up a small part of canopy as well. Paper birch is scattered throughout. Perched high water table in stand, standing water in places.
118	6112 - Lowland Aspen	Poletimber Well	6.0	43	Unspecified	Originally part of stand 115 but this stand lies about 5-10 vertical feet lower than stand 115 and contains a slightly different species mixture containing slightly more red maple with cedar, hemlock and some white pine also present. Lots of variability in terms of size throughout stand.
119	4130 - Aspen	Sapling Well	81.1	8	Immature	
120	4139 - Aspen, Mixed Deciduous	Sapling Well	19.1	7		regenerating stand with aspen dominant, trace over story hardwood and white pine retained. sale 61-059-10-01 cut in the fall of 2011
123	4116 - Mixed N. Hardwood - Aspen	Sawtimber Well	40.8	61	111-140	Mixed stand with aspen dominant overall, mediocre quality hardwoods make up remainder of canopy. Some pockets where red maple and beech are dominant, also some pockets where quality is better. Beech sub canopy is dense in spots, mainly around edges. Red maple and beech saps scattered throughout remainder of stand. Recently transitioned to log size overall.
124	4130 - Aspen	Sapling Well	56.0	6	Unspecified	Stand was clearcut in summer 2012, includes 5 retention islands of pole aspen with some hardwoods. Scattered log sized cherry also retained throughout.
125	4112 - Maple, Beech, Cherry Association	Sawtimber Well	12.1	95	51-80	Treated last YOY, BA/stocking hovers in the 60-80 sq ft/ac range. Beech was not spec'd to remove, remains in fair shape but subsequent treatments should remove all beech. Understory consists mainly of beech and some red maple. Occasional black cherry sprouts present as well. Stand was thinned summer 2012.
126	4112 - Maple, Beech, Cherry Association	Sawtimber Well	28.9	95	81-110	Decent quality hardwoods, specifically red and sugar maple and some black cherry. Under story is very heavy to beech sprouts, very little other regen aside from cherry stump sprouts. Hemlock poles are also prevalent in under story. Ba hovers in the 110 range. Good quality black cherry.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
127	4130 - Aspen	Sapling Well	28.3	6	Unspecified	Fully stocked, growing well. Made up of a mixture of aspen, red maple, black cherry and scattered white pine - white cedar scattered around perimeter. Some lowland/high water table areas exist within stand area, seasonally wet, heavy soils. Stand was final harvested with some leave trees scattered throughout stand area in spring of 2013 under tsale contract 023-10. In eastern part of stand, a small area of otherwise upland aspen was left as a buffer along branch of Greens Creek - this area has been covered with a long term retention SC. Stand is a multi part polygon, may want to explode next inventory cycle.
128	4112 - Maple, Beech, Cherry Association	Sawtimber Well	36.1	95	111-140	Steep slopes throughout stand, some blow down in north and west portions of stand. BA ranges from 70-130 sq ft/ac throughout with an average around 110. Decent quality throughout stand, some defect specifically in beech, fair amount of porcupine damage in pockets. Many of the slopes are most likely inoperable.
129	42110 - Planted Red Pine	Sawtimber Well	24.6	62	81-110	Red pine stand with BA averaging approximately 100-110 sq ft/ac, some pockets high and others lower. under story regen is variable in terms of stocking but thicker areas consist mainly of beech with some red maple and cherry. Trace white pine present in understory as well. a few small inclusions of white pine present within stand, most notably in southern most long strips, just north of stand 10. Thinned spring 2012.
130	42110 - Planted Red Pine	Sawtimber Well	19.4	64	141-170	BA is variable but overall in the mid range around 160 sq ft/ac. Some bark beetle damage in central row, minimal mortality but some thin tops. Red pine, norway spruce, beech, and black cherry are all present in small quantities in the sub-canopy, average 5- 15 feet tall. Distribution is spotty.
131	4130 - Aspen	Poletimber Well	3.8	41	81-110	Continuation of stand 132 but with a much higher concentration of aspen present. Steeper topography as well. Aspen is decent quality as is sugar maple and black cherry poles. Consider treating this small stand to create aspen pocket next YOY.
132	4110 - Sugar Maple Association	Poletimber Medium	3.6	56	51-80	Low density, variable hardwood stand that was originally part of stand 41/136 to the west but is significantly smaller in size with more variable stocking. This stand is occupied by pole sized sugar maple with scattered aspen. Black cherry poles make up a significant portion of canopy. BA and stocking is variable, as is size in places. decent quality sugar maple and black cherry.
136	4112 - Maple, Beech, Cherry Association	Sawtimber Well	14.9	95	111-140	Hardwood stand, steep slopes in finger extending to the west and some steeper slopes in the east as well - thinking the stand will be operable throughout but may need to avoid some areas. Stand contains a general mixture of hardwood species with beech for prevalent in the south facing slope of the western finger. Sugar maple is more common throughout the remainder of the stand and is of good quality. black cherry is also well formed. Red maple is spotty but present throughout stand. Aspen is more common in east as is a small size class of sugar maple.



Stand	Cover Type	Acres	Managed Site	General Comments:
1	122 - Road/Parking Lot	2.2	No	Road and corresponding ROW, includes grassy area that was used as landing for adjacent pine stands in the past.
11	310 - Herbaceous Openland	1.0	No	Some sedge under the bracken. One junberry on perimeter.
14	500 - Water	1.8	No	Small pond with lowland shrubs/tag alder around perimeter.
17	3301 - Low Density Deciduous Tree	3.8	No	Hoary alyssum, St. John's wort, strawberry, sheep sorrel, hawkweed, golden rod, timothy, moss. Some slash.
30	3104 - Degraded	1.1	No	Moss, bracken.
37	3103 - Rubus-Fern	3.0	No	
44	3303 - Mixed Low Density Trees	4.6	No	Upland opening with white pine, red maple and aspen present throughout in low density. Trail leads northerly through stand from Swanson rd, sandy/eroding, should consider blocking this trail and the east/west trail at the north edge of the stand leads to the same location at the northern edge of this stand.
45	3301 - Low Density Deciduous Tree	15.3	No	Degraded area within this stand is a well pad with equipment still present. Private property adjacent to the west. Goldenrod.
47	110 - Low Intensity Urban	1.0	Yes	
51	3104 - Degraded	1.7	No	
52	3301 - Low Density Deciduous Tree	10.6	No	Old homestead with nice clump of lilacs and several apple trees. ORV access off private from the north. Hill climb with minor erosion.
57	3105 - Mixed Upland Herbaceous	1.3	No	Moss.
63	6229 - Mixed lowland shrub	9.5	No	Part of a timber harvest that did not regenerate to lowland hardwoods or aspen.
66	3303 - Mixed Low Density Trees	12.0	No	
67	3104 - Degraded	1.1	No	
72	3104 - Degraded	2.7	No	
74	3104 - Degraded	1.3	No	



Stand	Cover Type	Acres	Managed Site	General Comments:
75	3301 - Low Density Deciduous Tree	6.4	No	This stand borders private property to the north.
76	3105 - Mixed Upland Herbaceous	3.5	No	
81	6239 - Mixed Emergent Wetland	47.2	No	
92	6229 - Mixed lowland shrub	120.9	No	Scattered tree species including red maple, cedar, tamarack, white pine, paper birch and aspen distributed throughout with alder and other lowland shrubs making up majority of vegetative cover. Creek flows through stand in north/south direction with culvert at Norconk Rd, in good condition. Remainder of stand is wet. Scattered cattails and willow shrubs. Scattered tamarack. Sedge and panicum grass.
94	3104 - Degraded	2.0	No	
96	3105 - Mixed Upland Herbaceous	1.1	No	Goldenrod, hairgrass(?). Wildlife shrubs planted along the perimeter.
97	6220 - Alder/willow	1.7	No	Tag alder, aspen, muscle wood, occassional viburnum and white cedar. Some balsam fir, paper birch, willow shrubs. Tag alder is declining.
99	3301 - Low Density Deciduous Tree	1.9	No	
100	3104 - Degraded	1.1	No	
101	3104 - Degraded	1.0	No	
107	3301 - Low Density Deciduous Tree	1.0	No	Willow shrubs, tag alder, paper birch.
108	3105 - Mixed Upland Herbaceous	2.6	No	One small clump of quaking aspen. One small clump of white pine. Queen Ann' Lace, spotted knapweed, St. John's wort, mullin.
110	3105 - Mixed Upland Herbaceous	1.9	No	About 16 surviving autumn olives planted here with some hawthorn planted on the north and east edges. Wild grape and some quaking aspen.
111	3104 - Degraded	1.6	No	
113	3105 - Mixed Upland Herbaceous	1.1	No	Appears to be timber landing from former aspen harvest.
114	110 - Low Intensity Urban	8.8	Yes	Big Four Rd.
116	3301 - Low Density Deciduous Tree	9.5	No	Two track accessing Bear Creek. Adjacent to Big Four Rd.



Stand	Cover Type	Acres	Managed Site	General Comments:
122	122 - Road/Parking Lot	9.5	No	Road and open right of way through plantation stand 21.
133	310 - Herbaceous Openland	3.4	No	linear non forested areas within boundary of stand 21.