



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61153

Entry Year 2017

Acreage: 2,908

County Kalkaska

Management Area: Manistee River Valley

Revision Date: 2015-05-14

Stand Examiner: Kelly Standerfer

Legal Description:

T27N, R6W, Sec31. T26N, R6W, Sec. 6. T26N, R7W, Sec. 28. T25N, R7W, Sec. 1, 12, 14, 21 & 22. T25N, R8W, Sec. 3, 4, 8, 9 & 10.

Identified Planning Goals:

Vegetation management in the Manistee River Valley management area (MA) will provide timber products; maintain or enhance wildlife habitat; protect areas of unique character including the Manistee River and its tributaries, a designated natural river; threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period includes continuing aspen management to maintain early successional habitat for hunting and other wildlife-related recreational opportunities; increasing regeneration of oak; focusing on balancing the red pine age class structure through final harvests and re-planting; and on improving red pine quality through partial harvests. Expected trends within this 10-year planning period are increased recreational pressure, especially on the established trails and along the Manistee River and its tributaries; an increased wildland/urban interface and a need to restore barrens communities through prescribed fire; and invasive plant control.

Soil and topography:

Rubicon Sand, Rifle Peat, Emmet Sandy Loam & others. All types of Topography found in the county can be found in this compartment.

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

This compartment is spread out in small blocks in five townships. Needless to say each block has different conditions. The northern block, in Oliver & Excelsior Townships, is very low and wet with some upland aspen & hardwoods. It is surrounded by much the same but much more uplands to the west. There is little development in this area.

The middle block in Oliver Township is a marsh to the north and upland dry with pot holes to the south. A development is going in on the north side of the block next to the marsh. Small semi developed parcels are on all sides of the state land.

The middle east block is in Garfield Township. This block is very low with few upland well drained sites. Little development is now in the area. Two large hunt clubs are to the north.

The southeast block is in Garfield Township and is located just south of the other Garfield Township block. This block has considerable acreage along the Manistee River. The sites run from swampy lowland brush and Q types to nice upland hardwoods. There is little development in this area.

The last block is in Springfield Township. This area has a complete gambit of cover types from low land brush to northern hardwoods, from very flat to rolling hills. Many 10 acre parcels abut state land in this area. Major development is not expected in the foreseeable future.

Unique Natural Features:

This compartment falls within landtype associations (LTAs) 1121, 1222, 5131, 5211, and 5222 of sub-subsection VII.2.2. Sections 5 and 8 and the western half of sections 4 and 9 contain LTA 5211, a pitted outwash plain with excessively drained sand. LTA 1121, found in the southeastern portion of section 9, the southwestern portion of section 10, the eastern half of section 21, the northern portion of section 22, and the northwestern portion of section 14, is characterized by steep broken moraine ridges and well drained sandy loam. Circa 1800 vegetation was almost exclusively northern hardwood forests of American beech and sugar maple. Currently, northern hardwoods, mostly second growth forests with less white pine and hemlock than the original forests, persist on 48% of the LTA. Cropland, concentrated on level portions of the LTA, occurs on another 20% of the area, while abandoned fields (or other open, waste areas of herbaceous vegetation) cover 8%. Pine and aspen/white birch forests, types which did not occur on the LTA circa 1800, now cover 7% and 6%, respectively. LTA 1222, which is characterized by steep moraines, many kettles, and poorly drained sandy loam, occurs in section 3 and the northern portions of sections 4 and 10.. Circa 1800 vegetation was almost exclusively northern hardwood forests of American beech and sugar maple. Wetlands, which covered less than 3% of the landform, were dominated by northern

white-cedar and mixed conifer swamps. Cropland now occupies 31% of the LTA, with another 6% in large Christmas tree plantations. Another 6% is shrub dominated abandoned lands and unmanaged fields. Finally, second-growth hardwood forests occur on 34% of the area, while pine forests (often plantations) occur on another 13%. LTA 5222, a pitted outwash plain with well drained to moderately well drained sandy loam, occurs in section 28. Circa 1800 vegetation was almost exclusively northern hardwood forests of American beech and sugar maple. Forty percent of the LTA has been converted to cropland with second-growth northern hardwoods occurring on another 25%. Red pine plantations now occur on 10%, while aspen/white birch forests, which were not noted here in circa 1800, cover another 7% of the area. Finally, about 5% of the LTA supports unmanaged shrublands. The remainder of the compartment occurs in LTA 5131, which is a broad flat outwash plain with poorly drained sand or loamy sand. The variety of circa 1800 vegetation types which occur reflect the LTAs complexity. Forests of hemlock, usually mixed white pine or American beech, were common on poorly drained sands whereas mixed conifer swamps dominated very poorly drained organic soils. Finally, well drained inclusions supported northern hardwood forests of American beech and sugar maple while forests of mixed red and white pine occurred on excessively drained, fire-prone areas within the LTA. The LTA has become quite fragmented and 23% of its surface area supports cover types with less than 5% individual cover. Hemlock dominated forests have been virtually eliminated whereas aspen/white birch forests, rare circa 1800, have become the predominant cover type. Conifer dominated wetlands, which covered more that one quarter of the LTA circa 1800, have been reduced to about 8% cover, while formerly absent hardwood and shrub/scrub swamps now collectively cover 24% of the area. The remaining northern hardwood forests, which now occur on only about 5% of the LTA, are second growth, often fragmented, woodlots that lack the original white pine or hemlock component. Finally, another 6% of the LTA is in old fields.

MNFI ecologists have mapped a high quality northern wet meadow southeast of the compartment. Northern wet meadow is a sedge and grass dominated wetland located mostly north of the transition zone, typically bordering streams but also found on pond and lake margins and above beaver dams. Soils nearly always consist of muck soil, which is strongly acidic to slightly aci

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

Manistee River

Watershed and Fisheries Considerations:

The Manistee River, Maple Creek, and Twenty Eight Lake are within Compartment 153. The Manistee River is a State-Designated Natural River. Both the Manistee River and Maple Creek are Designated Trout Streams. A 2003 fisheries survey of Maple Creek showed naturally reproducing populations of brook trout and brown trout. Also, Maple Creek provides cold water to the Manistee River, and spawning and rearing habitat for migratory trout from the Manistee River. The proposed aspen clearcuts in stands 74 and 68 have the potential to create ideal beaver habitat directly adjacent to Maple Creek. Maple Creek is vulnerable to damming by beavers, which would result in blocked fish passage, warmer water temperatures, and decreased trout populations. Therefore, Fisheries Division requests that an adequate buffer be left in place in an effort to discourage beaver colonization.

Wildlife Habitat Considerations:

Key wildlife species to manage for include: American bittern, American woodcock, Beaver, Black bear, Eastern massasauga rattlesnake, Golden-winged warbler, Mallard, Pileated woodpecker, Ruffed grouse, Snowshoe hare, White-tailed deer, and Wood duck.

The primary focus of wildlife habitat management in the Manistee River Valley management area will be to address the habitat requirements identified for the listed featured species. Based on the selected featured species, some of the most significant wildlife management issues in the management area are the maintenance of young forest, large open grassland complexes and marsh/grassland complexes; the retention of large, over-mature trees and snags; and the maintenance and expansion of hard mast and mesic conifer components.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Mississippian Marshall Sandstone. The Marshall was previously used as a building stone. Gravel pits are located to the east and potential is considered good on the uplands. The Compartment is south of the prolific Niagaran reef trend. The Compartment is mostly surface rights only and, therefore, there are no current leases of State minerals.

Vehicle Access:

We need legal access to the Twenty Eight Lakes area. Land owners has offered, state has not purchased.

Survey Needs:

Due to the fragmented nature of the compartment, many trespasses have been found. Survey corners will likely be needed.

Recreational Facilities and Opportunities:

There are no designated recreational facilities within this compartment (T.M.N. 12/10/14)

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

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

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

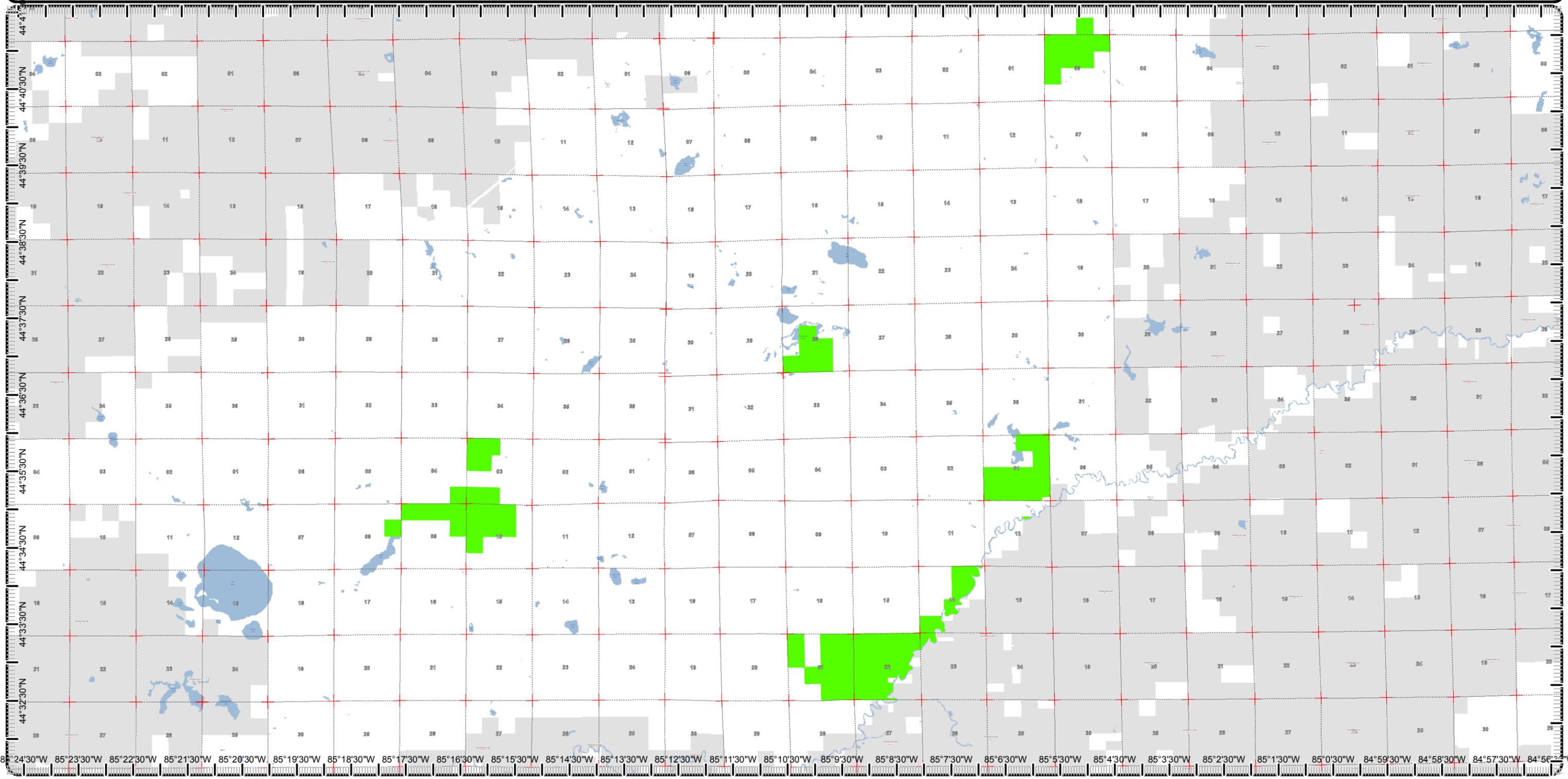
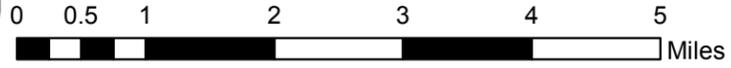
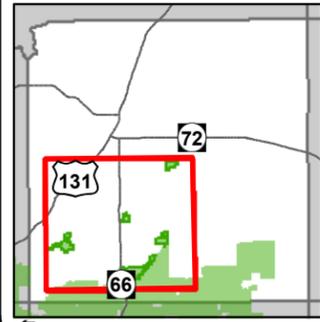
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

153 Overview Map

Compartment: 153

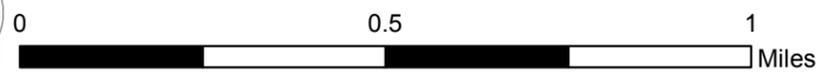
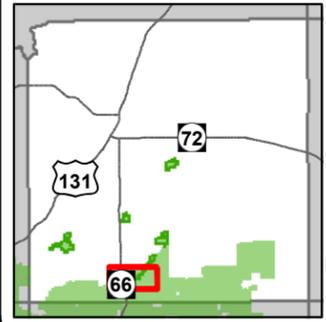
Compartment Boundary

Kalkaska
Unit: Traverse City
Mgmt Area: Manistee River Valley
YOE: 2017
Acres: 2908 GIS Calculated
Examiner: Kelly Standerfer
Map Revised: 6/15/2015
Map Phase: Pre-Review

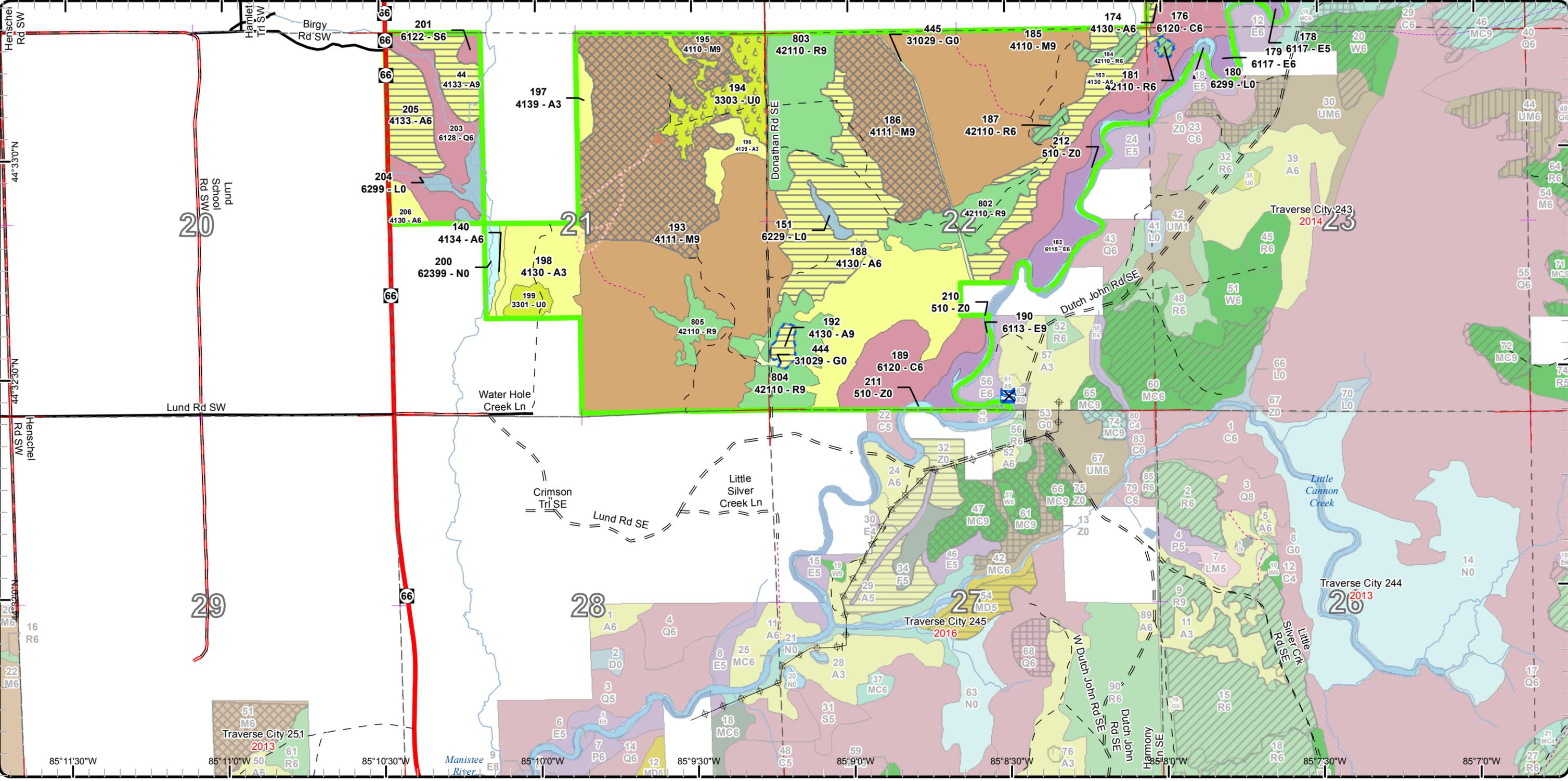


Cover Type & Treatments

Compartment: 153
 T25N R07W 14,21-22
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Manistee River Valley
 YOE: 2017
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 Examiner: Kelly Standerfer
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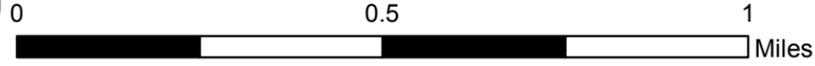
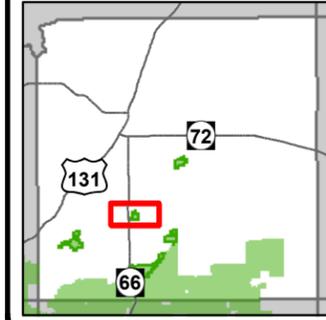
- ✚ Remonumented Section Corners
- Miris Corners
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- ✕ Gate
- ▲ Berms
- 🚤 Boating Access Site
- Rivers
- Lakes
- ⚡ Powerline
- ▨ Treatments with Site Conditions
- ▨ Treatments
- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- 🔥 Prescribed Burn
- ▨ Thinning (Crown, Low, Systematic)
- Forest Covertype**
- 411 - Northern Hardwood
- 413 - Aspen
- 421 - Planted Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Covertype**
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland



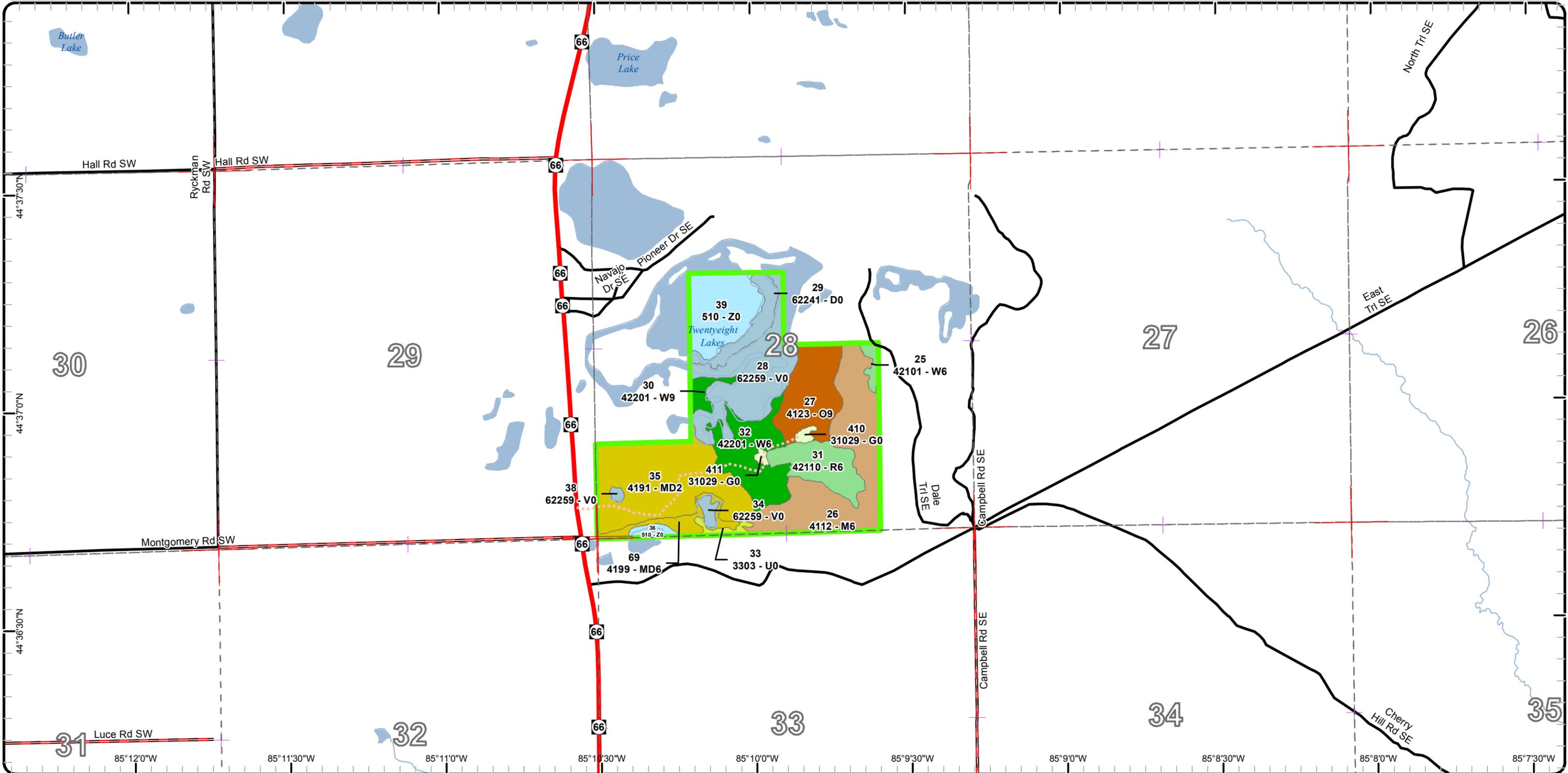
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Cover Type & Treatments

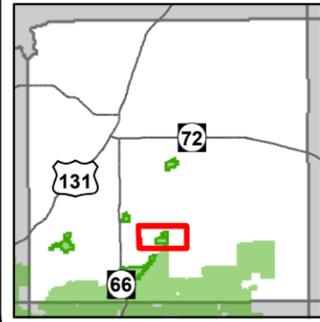
Compartment: 153
 T26N R07W 28
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Manistee River Valley
 YOE: 2017
 Acres: 2908 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 6/15/2015
 Map Phase: Pre-Review



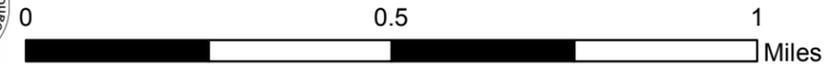
- + Remonumented Section Corners
- Miris Corners
- Highway
- Paved Roads
- County Gravel Roads
- ⋯ Closed Roads
- Rivers
- Lakes
- Forest Covertype
- 411 - Northern Hardwood
- 412 - Oak Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- Non-Forest Covertype
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub



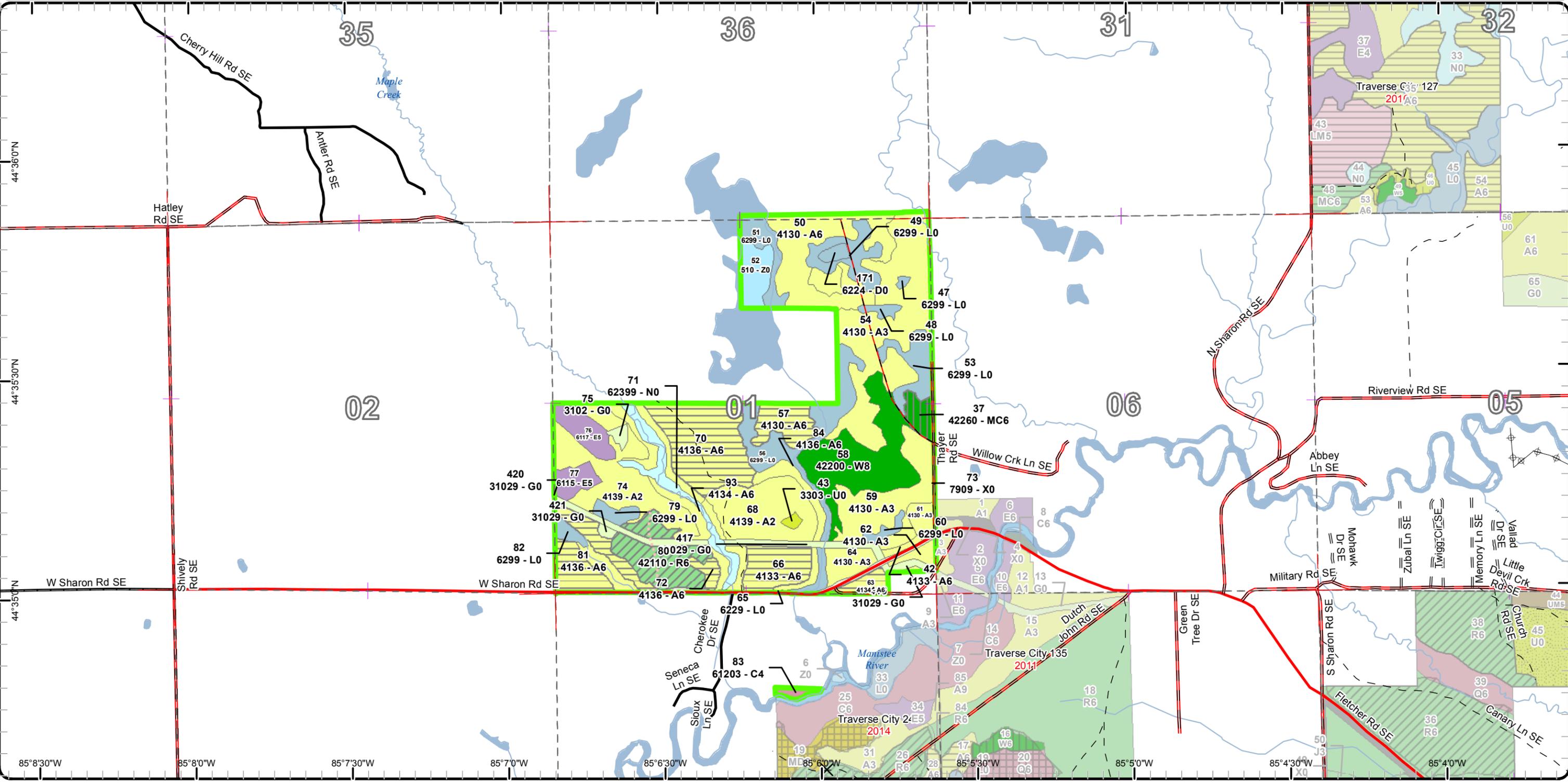
Cover Type & Treatments



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 T25N 07W 01
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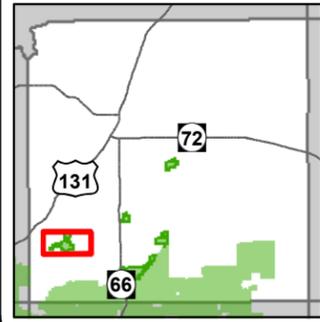


- ✦ Remonumented Section Corners
- ✦ Powerline
- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Closed Roads
- ✕ Gate
- Rivers
- Lakes
- ▭ Clearcut (w/Reserves)
- ▨ Thinning (Crown, Low, Systematic)
- ▩ Shelter Wood (w/Reserves)
- Forest Covertype
- 413 - Aspen
- 421 - Planted Pines
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- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Covertype
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 790 - Other Bare/Sparsely Vegetated

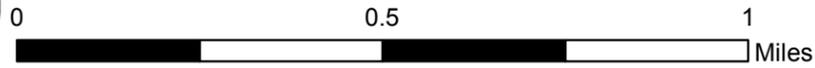


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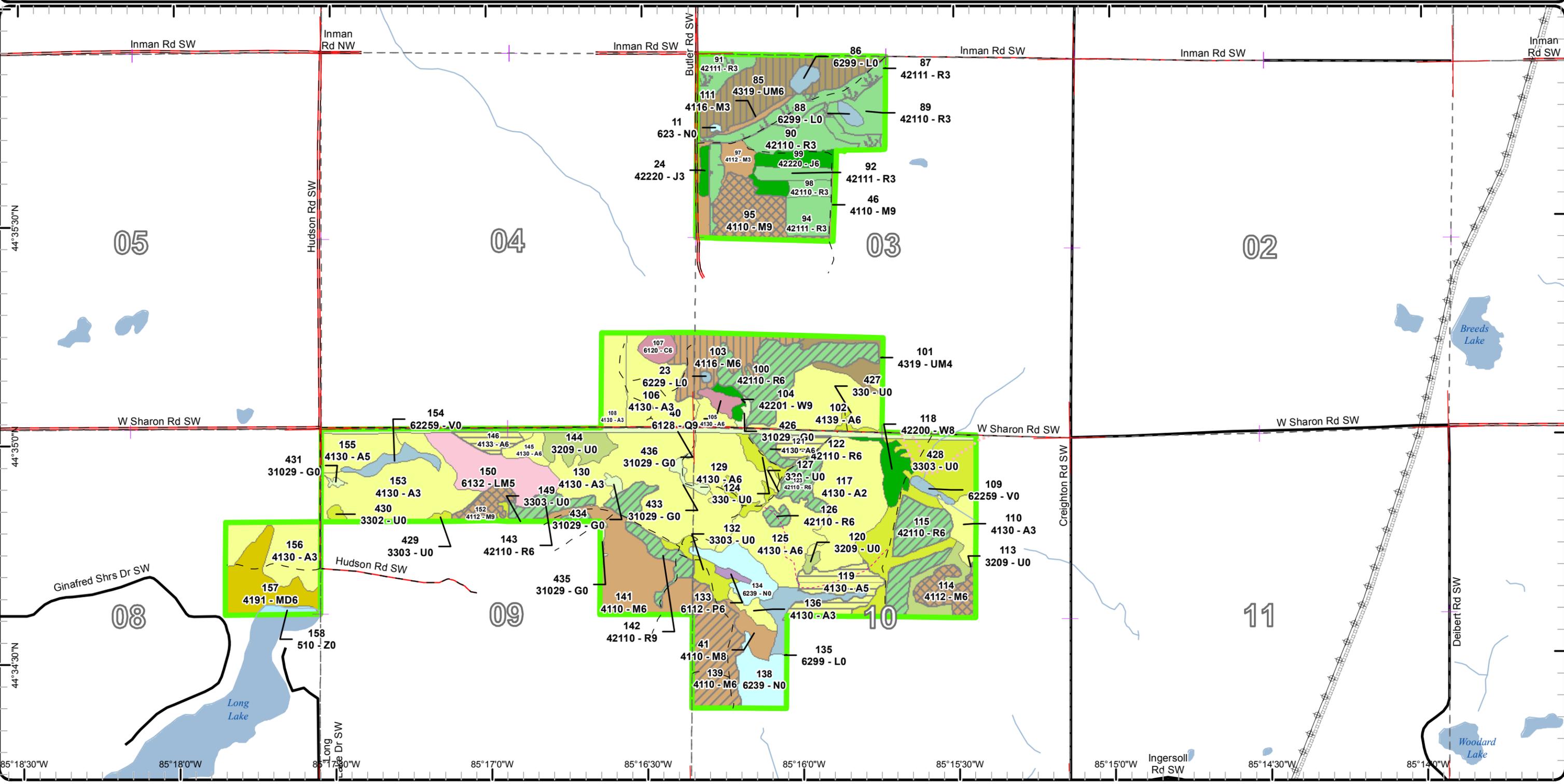
Cover Type & Treatments



Compartment: 153
 T25N R08W 03,04,08-10
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Manistee River Valley
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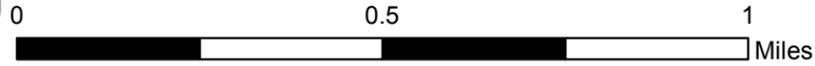
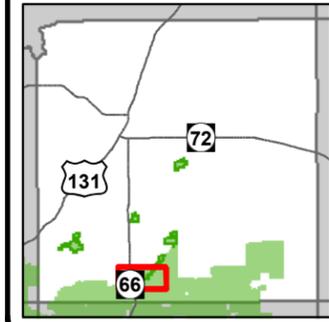


- ✚ Remonumented Section Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- - Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
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- Lakes
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- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- ▨ Pesticide
- ▨ Thinning (Crown, Low, Systematic)
- ▨ Shelter Wood (w/Reserves)
- Forest Cotype
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Fores
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- Non-Forest Cotype
- 310 - Herbaceous Openland
- 320 - Upland Shrub
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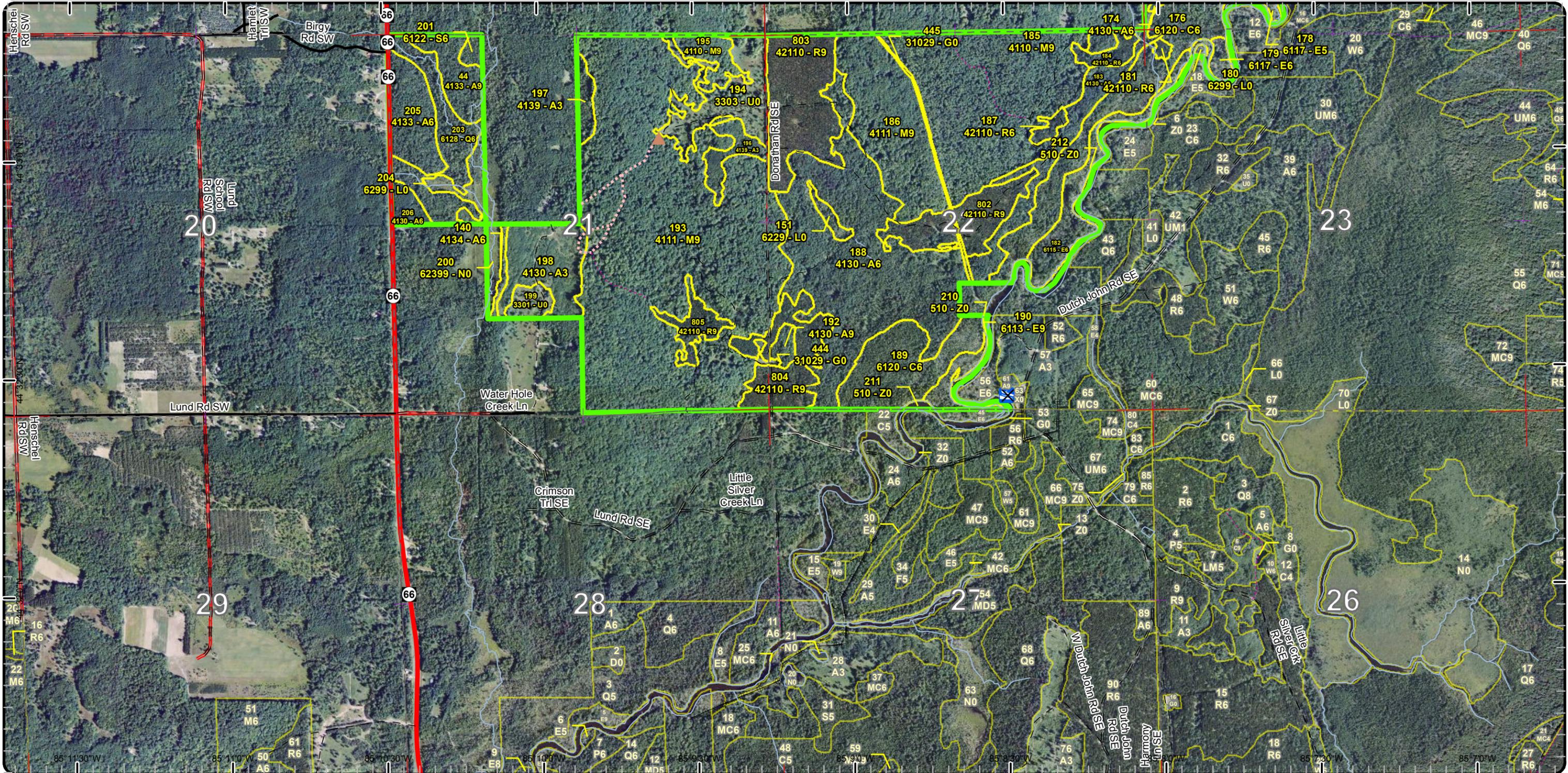


Stand Boundary Map

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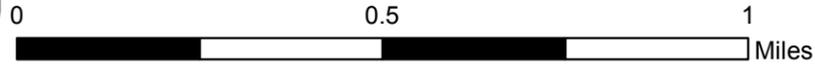
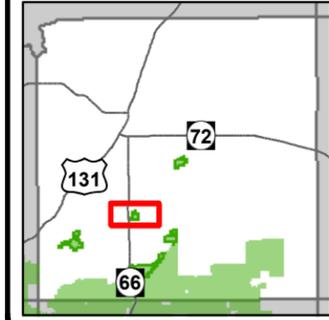


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 - County Poor Dirt Roads
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 - - - Closed Roads
 - X Gate
 - ▲ Berms
 - Boating Access Site
 - Rivers
 - Powerline
 - Stand Boundaries
- Forest Covertypes**
- 411 - Northern Hardwood
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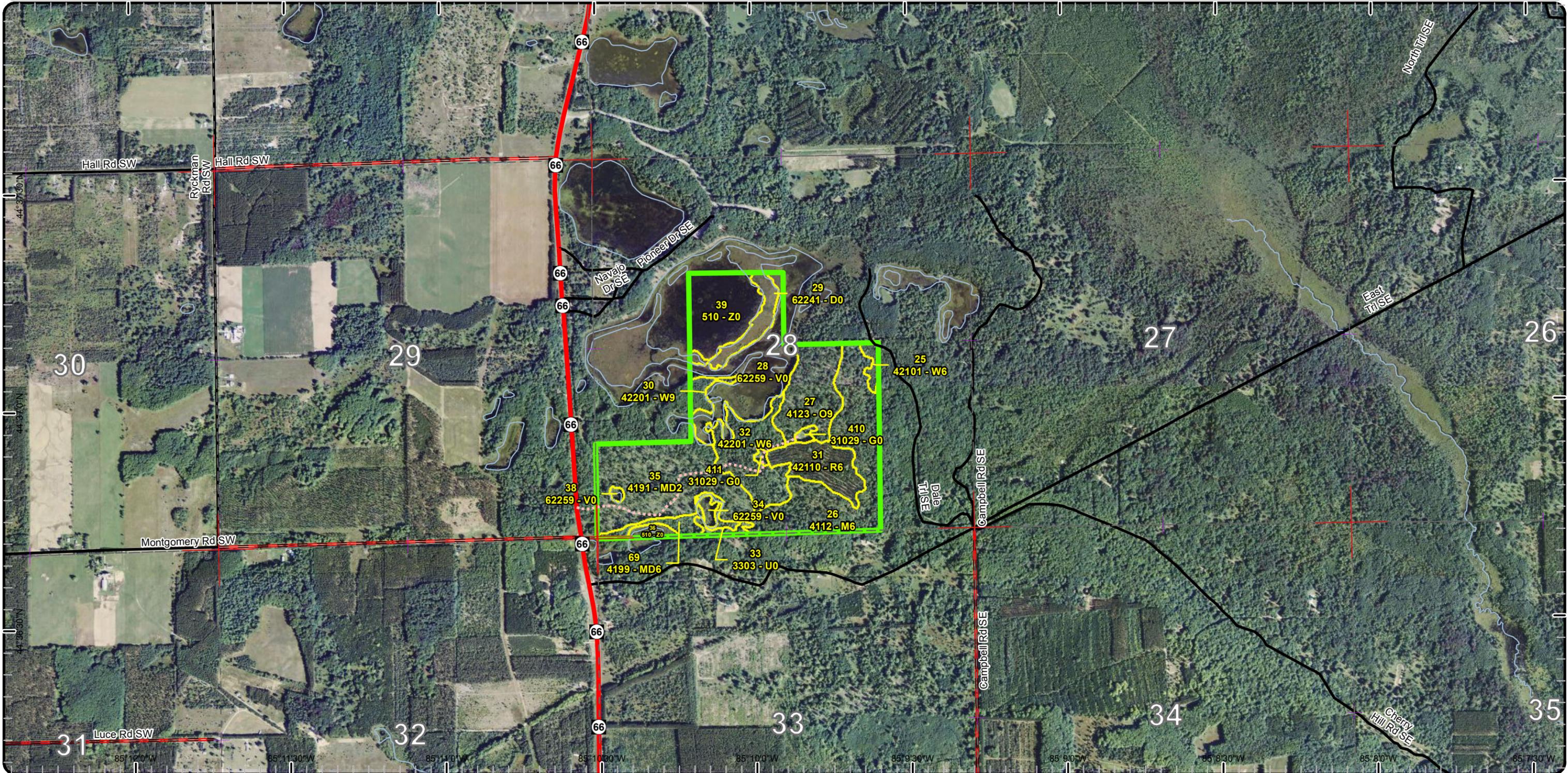


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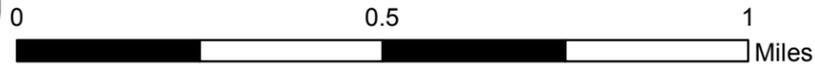
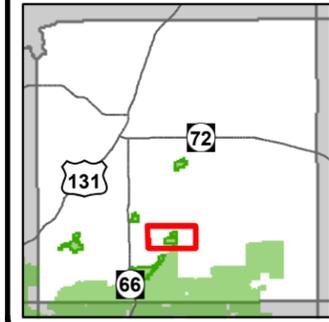


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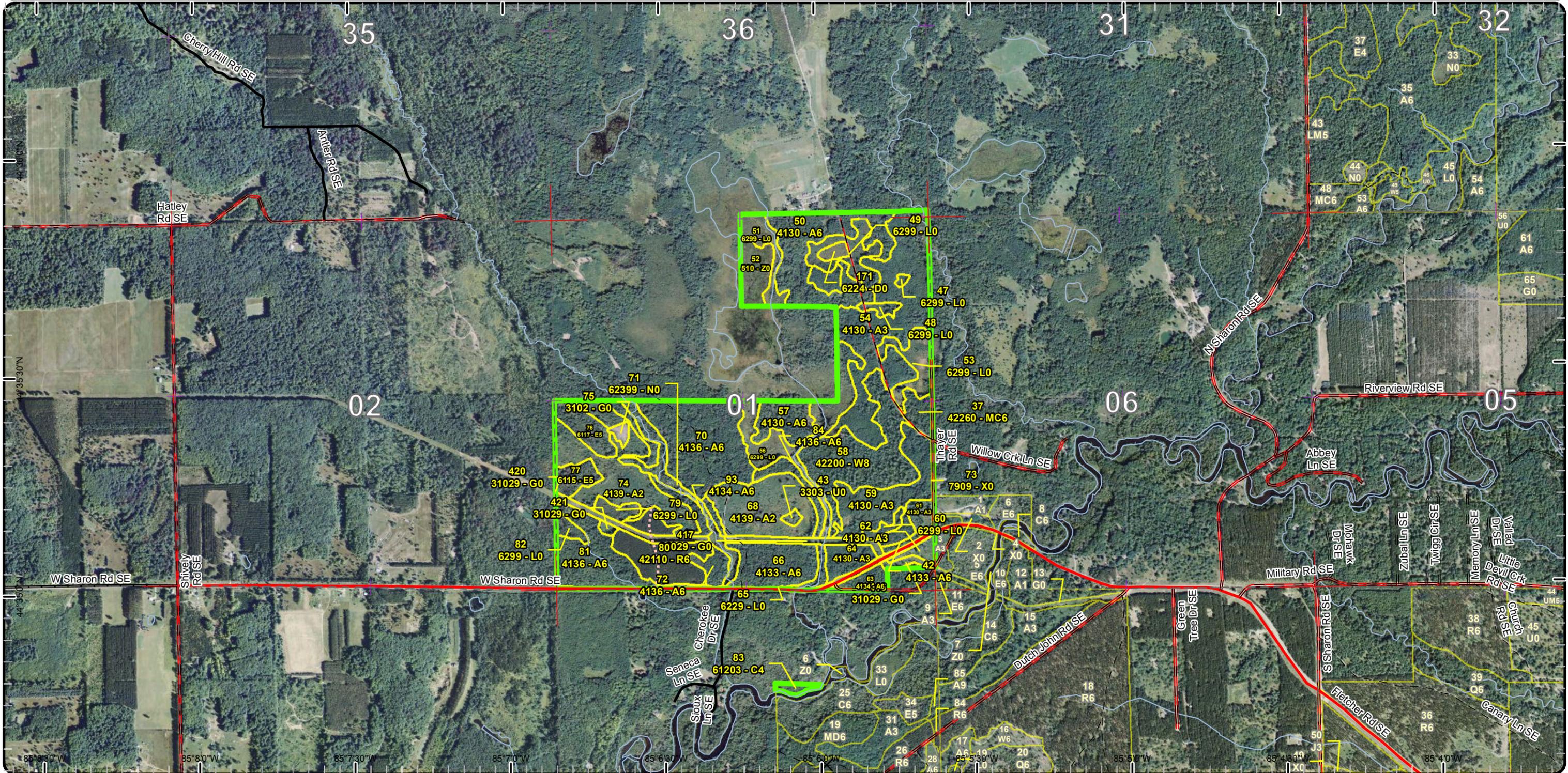


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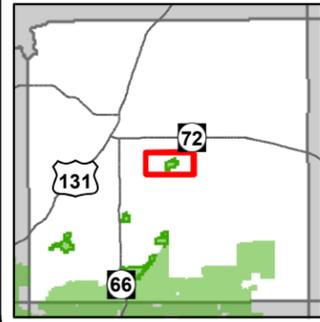
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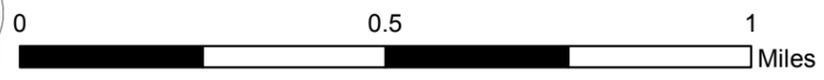
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- Gravel Roads
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- ⋯ Closed Roads
- ✕ Gate
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- ⚡ Powerline
- ▭ Stand Boundaries
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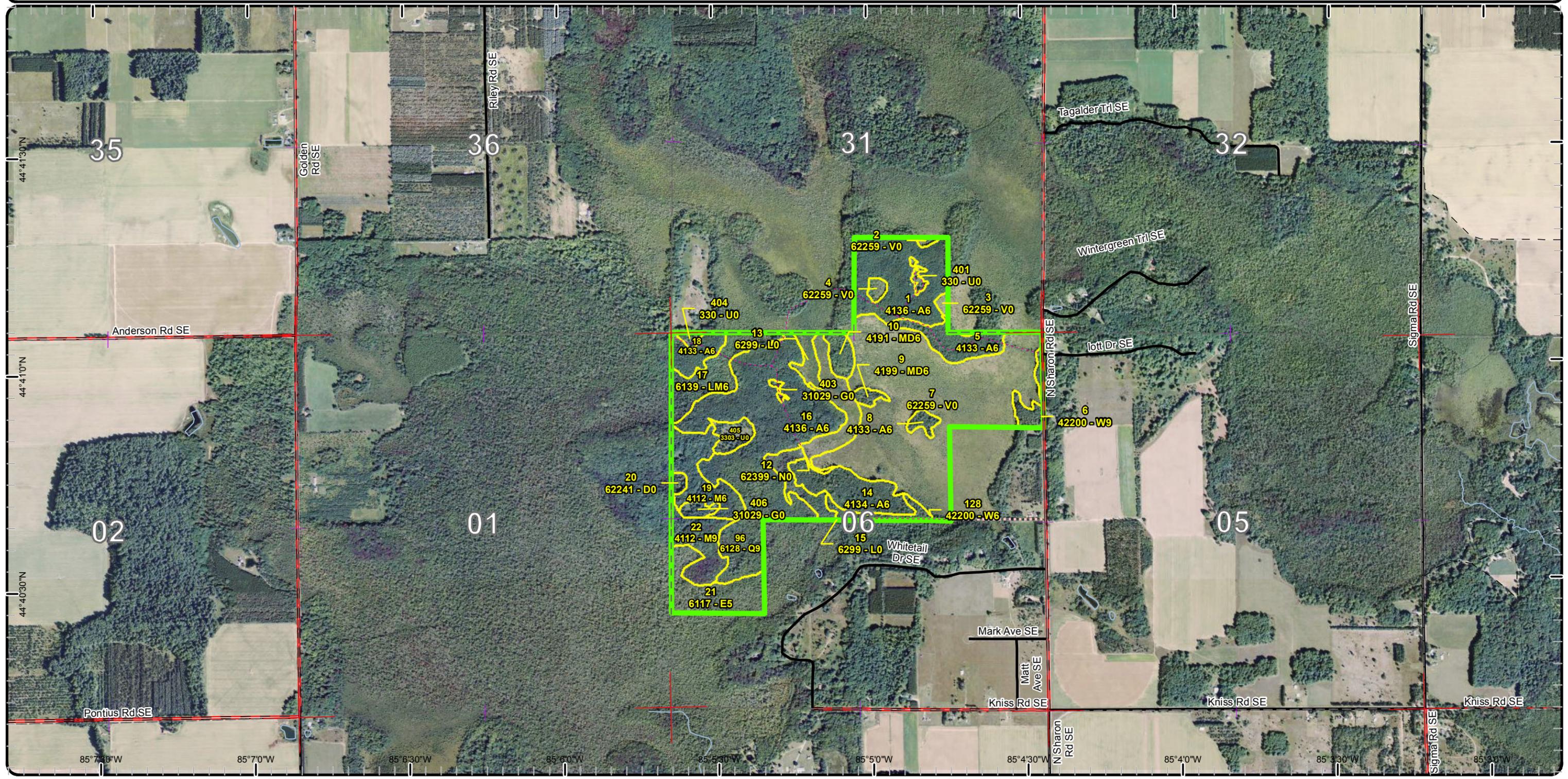
Stand Boundary Map



Compartment: 153
 T26N R06W 06
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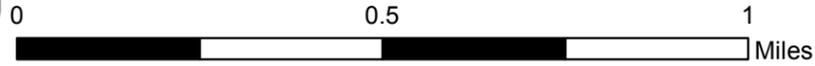
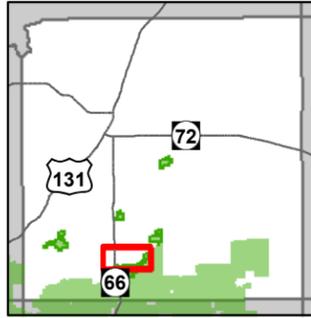


- ✚ Remonumented Section Corners
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 - Paved Roads
 - County Gravel Roads
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 - - County Poor Dirt Roads
 - Trail (Non-Recreation)
 - Closed Roads
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 - ▭ Stand Boundaries
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 - 422 - Natural Pines
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Cotype
- 310 - Herbaceous Openland
 - 330 - Low Density Trees
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland
 - 411 - Northern Hardwood

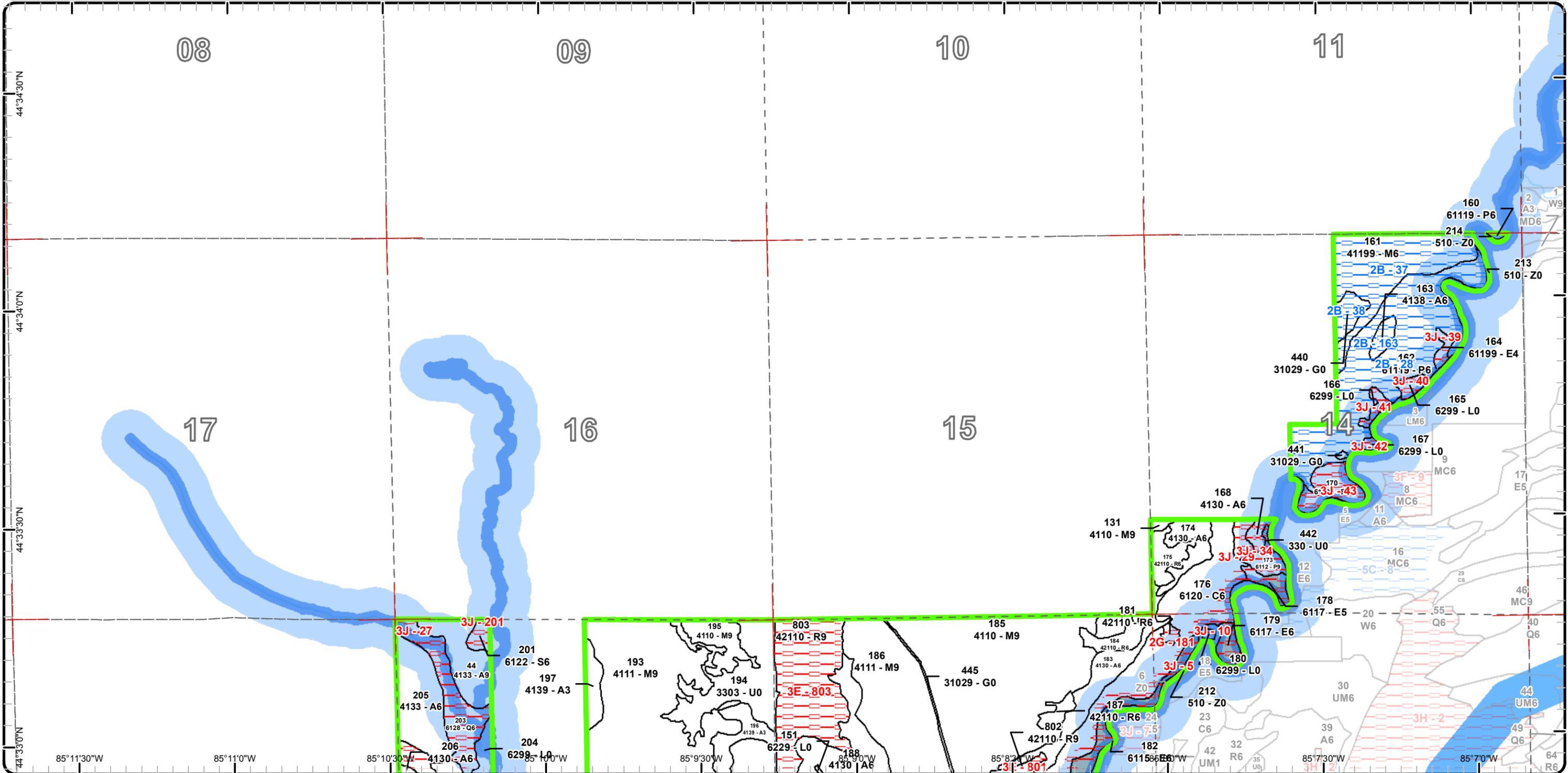


Special Conservation Areas & Site Conditions Map

Compartment: 153
 T25N R07W 14,21-22
 Kalkaska
 Unit: Traverse City
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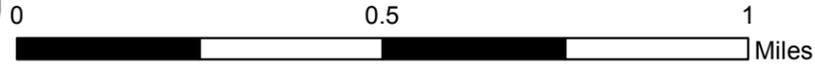
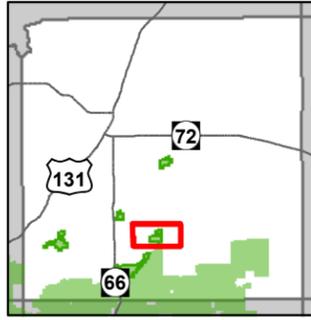


- Miris Corners
- Stand Boundaries
- Site Condition
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints
 - 2B: Unknown if access through adjacent landowner(s) is possible
- Unavailable Factors
 - 2G: Too wet (sensitive soils, does not include access issues)
- 3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)
- 3J: Water quality / BMPs (stream, river, or lake)
- Special Conservation Areas
 - Natural Rivers Vegetative Buffer
 - Natural Rivers Zoning District
 - Cold Water Streams
 - Cold Water Lakes
 - High Priority Trout Stream Buffer
 - Potential Old Growth

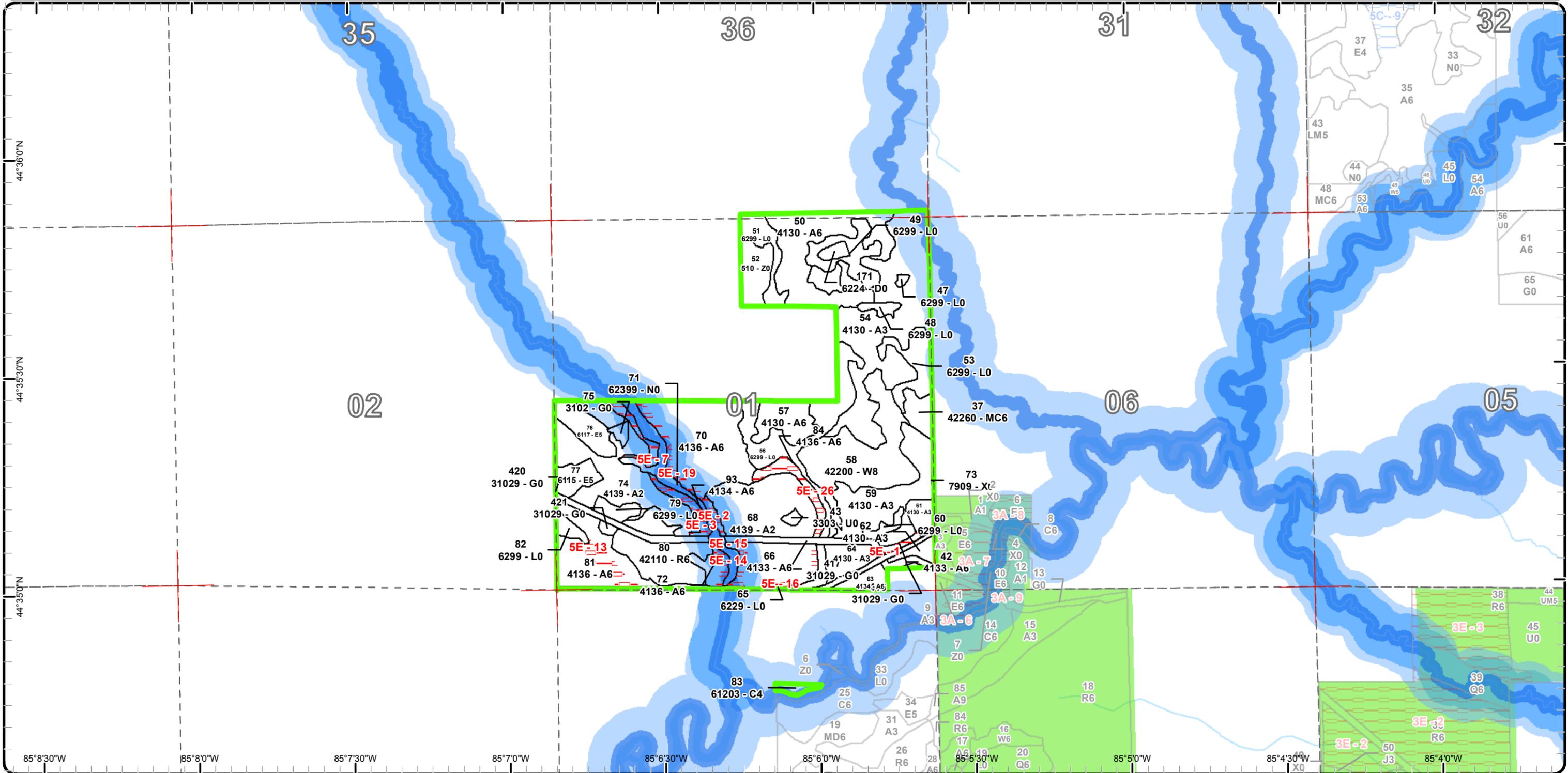


Special Conservation Areas & Site Conditions Map

Compartment: 153
 T25N 07W 01
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Manistee River Valley
 YOE: 2017
 Acres: 2908 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 6/15/2015
 Map Phase: Pre-Review

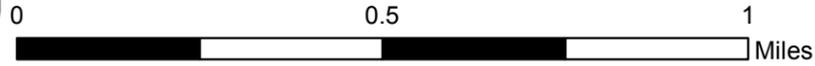
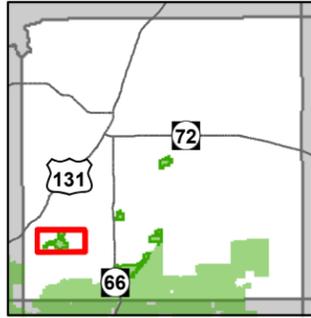


- Miris Corners
- Stand Boundaries
- Site Condition
- Unavailable
- Unavailable Factors
 - 5E: Long-Term Retention Special Conservation Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Kirtland Warbler Habitat
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer

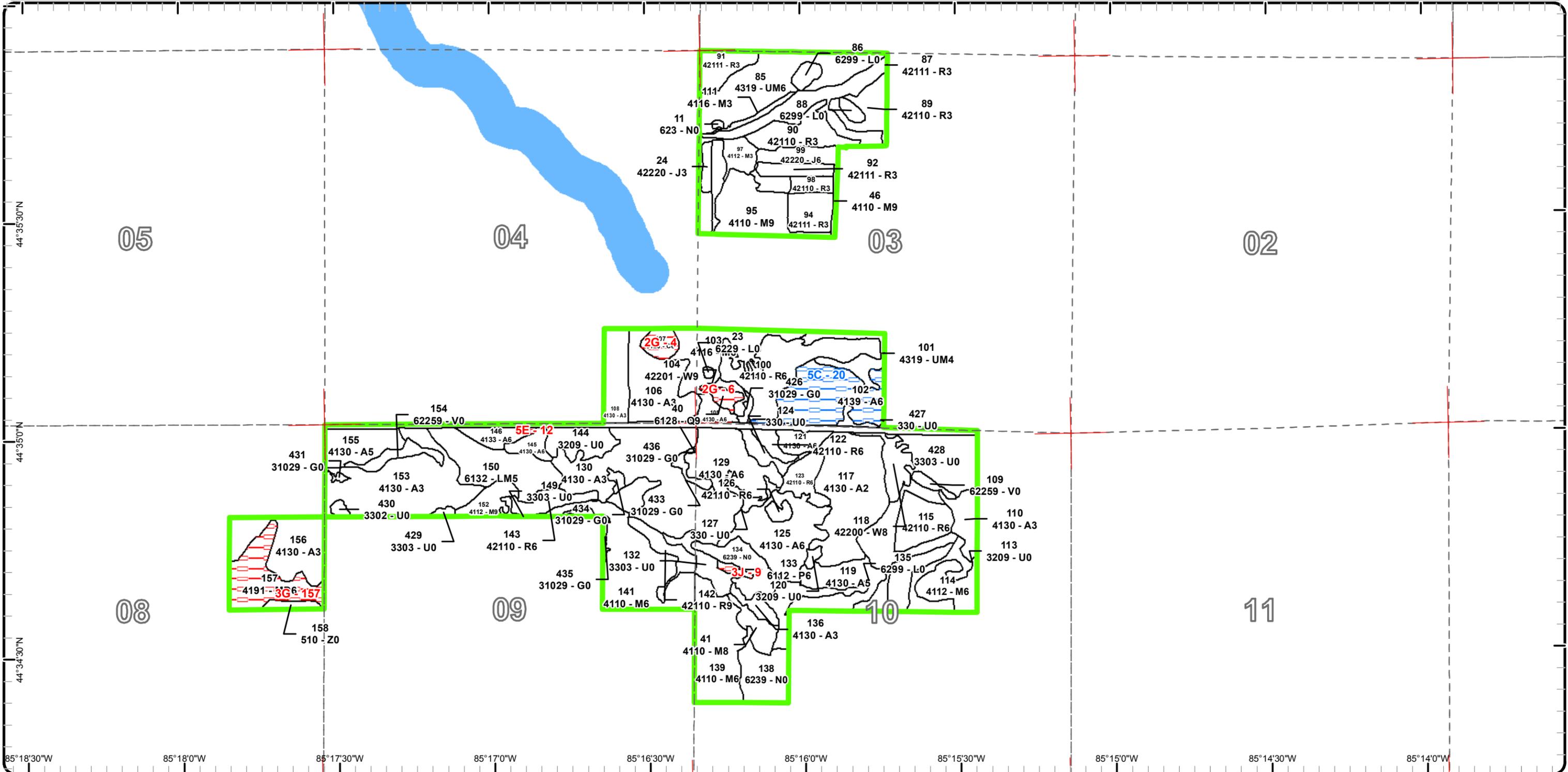


Special Conservation Areas & Site Conditions Map

Compartment: 153
 T25N R08W 03,04,08-10
 Kalkaska
 Unit: Traverse City
 Mgmt Area: Manistee River Valley
 YOE: 2017
 Acres: 2908 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 6/15/2015
 Map Phase: Pre-Review



- Miris Corners
- Stand Boundaries
- Site Condition
- Available w/ Constraints
- Unavailable
- Available Factors W/ Constraints
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- Unavailable Factors
- 2G: Too wet (sensitive soils, does not include access issues)
- 3G: Other Influence zones - See comments
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Special Conservation Areas
- High Priority Trout Stream Buffer



44°35'30"N 44°35'0"N 44°34'30"N
 85°18'30"W 85°18'0"W 85°17'30"W 85°17'0"W 85°16'30"W 85°16'0"W 85°15'30"W 85°15'0"W 85°14'30"W 85°14'0"W

Report 1 – Total Acres by Cover Type and Age Class

Traverse City Mgt. Unit

Compartment 153 Year of Entry 2017

Kelly Standerfer : Examiner



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	151	113	14	162	369	82	18	14	0	0	0	0	0	0	0	0	0	923
Bare/Sparsely Vegetated	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Bog	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
Cedar	0	0	0	0	0	0	0	2	0	4	90	0	0	0	0	0	0	0	96
Herbaceous Openland	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Jack Pine	0	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Low-Density Trees	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	68	1	0	0	0	0	0	0	0	0	0	0	69
Lowland Conifers	0	0	0	0	0	0	0	0	28	3	0	0	0	11	0	0	0	0	42
Lowland Deciduous	0	0	0	0	0	0	13	27	0	0	0	0	0	0	0	0	0	34	74
Lowland Mixed Forest	0	0	0	0	0	0	15	0	20	0	0	0	0	0	0	0	0	0	35
Lowland Shrub	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Marsh	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Mixed Upland Deciduous	0	45	0	0	5	0	2	7	0	0	0	0	0	0	0	0	0	18	77
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Northern Hardwood	0	2	8	0	16	0	0	30	38	0	0	0	0	0	0	0	0	547	641
Oak	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21
Red Pine	0	39	23	0	0	41	161	15	0	0	0	0	0	0	0	0	0	0	279
Treed Bog	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Upland Mixed Forest	0	0	0	0	7	28	0	0	0	0	0	0	0	0	0	0	0	0	35
Upland Shrub	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
White Pine	0	0	0	0	0	22	2	5	0	5	0	0	0	5	0	0	0	37	76
Total	521	237	146	14	198	460	343	105	100	12	111	0	0	16	0	0	0	644	2907



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2017

Acres of Harvest

Compartment 153
Total Compartment Acres: 2,908

Commercial Harvest - 0
Harvests with Site Condition - 81
Next Step Harvest - 0
Habitat Cut - 65

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	284	0	0	0	0	0	0	0	0	284
Natural Mixed Pines	0	0	0	0	5	0	0	0	0	5
Northern Hardwood	0	212	0	0	17	23	0	0	0	252
Red Pine	0	0	0	0	0	104	0	0	0	104
Upland Mixed Forest	0	0	0	0	28	0	0	0	0	28
Total	284	212	0	0	50	127	0	0	0	673

Proposed and Next Step Treatments by Harvest Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	673	0	0	0	25	31	0	0	0	737
Next Step	0	0	0	0	25	0	587	0	0	612
Total	673	0	0	0	51	31	587	0	0	1349



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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
16 61153016-Cut	63.7	4136 - Aspen, Mixed Conifer	Poletimber Well	47	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

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

Prescription Final harvest if we can get to it... access will have to be from the northeast or possibly the south. leave retention pockets along east LO/ZO areas
Specs: and ok to paint out some areas if it is to wet. save fir under 4" dbh and save some or all pine but try not to leave too much to hinder stem density.

Next Step
Treatments:

Acceptable any mix of aspen, maple, mixed hardwood, or mixed conifer is good to go. expect mainly aspen regen.
Regen:

Other soft factored for access... leg work will need to be done to gain access... Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

22 61153022	12.2	4112 - Maple, Beech, Cherry Association	Sawtimber Well	115	141-170	Harvest	Group Selection	41199 - Northern Hardwood (OI)	Even-Aged	Draft Field Boundary
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Habitat Cut: No **Site Condition: Unknown Access**

Prescription nicer areas can be left a bit thicker, red maple and fir areas can be cut a bit harder. access is very tricky (if even allowed) so try to make some
Specs: larger openings to encourage regen. Don't be afraid to take some of the large log trees out and save the smaller poles as we likely won't be back in for 20-30 yrs. OPIC - FMD: 3/3/2005 This stand is in need of a selection cut but access is land locked. Some big trees here. More to sugar maple in the NW side of stand. Red maple in the south & east. (Grieve)

Next Step
Treatments:

Acceptable any mix of aspen, mixed hardwoods and mixed conifer is acceptable. south half will likely fill in with red maple, cherry, fir and white pine, hope to
Regen: get some sugar maple regen at the north where the sugar maple is.

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

37 61153037-Cut	4.8	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	105	141-170	Harvest	Shelterwood	4220 - Natural White Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription remove most of the short lived species and shelterwood/thin the pine enough to shelter some mixed conifer along. some areas may fill in with
Specs: aspen and maple but it should fill in with mixed white pine and balsam fir. save fir and pine under ~4" where possible.

Next Step
Treatments:

Acceptable mixed aspen, mixed hardwood and mixed conifer is ok post harvest
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

44 61153044-Cut	14.5	4133 - Aspen, Mixed Pine	Sawtimber Well	72	111-140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription looks like we should be able to skid the wood across the small creek between stand 205 and this stand. likely will need DEQ permit. minimize soil
Specs: disturbance. survey likely needed as I couldn't find anything that looked official :-/ final harvest but buffer creek by 100' and save scattered pine maple and oak if there is any. may need to paint some of the SE end out of the sale as it gets wet... creek buffer and scattered trees will be retention

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

Acceptable mixed aspen, hardwoods and conifers...
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /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
50 61153050-Cut	0.0	4130 - Aspen	Poletimber Well	57	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Mostly aspen with scattered other species mixed in. West central section has some pockets of mostly pine canopy. Far eastern part of stand is also mostly pine. Heavy white pine understory in a few spots. Some low spots along edges. Low area connects 49 and 51 so it might be necessary to skid north and south halves in different directions. looks like we can paint some of the very wet portions out of the stand for retention & diversity.

Next Step
Treatments:

Acceptable any mix of aspen, red maple, oak or conifers is acceptable, expect the site to regenerate mainly to aspen.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

57 61153057-Cut	9.4	4130 - Aspen	Poletimber Well	60	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest, save some fringes along edges and understory white pine and balsam fir for retention and species diversity.
Specs:

Next Step
Treatments:

Acceptable aspen maple and mixed conifer is acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

63 61153063-Cut	4.1	4134 - Aspen, Spruce/Fir	Poletimber Well	45	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest except save fir under 4" dbh and white pine... ok to cut some pine if needed but save the most. save oak if found. retention will likely be under 3%, stand is to small to save 3-10%.

Next Step
Treatments:

Acceptable mainly aspen but any mix of aspen, maple oak or mixed conifer is ok post harvest
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

66 61153066-Cut	11.7	4133 - Aspen, Mixed Pine	Poletimber Well	56	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest.. either mark some pine to save or mark some to take which ever is easier. save fir under ~4" dbh.
Specs:

Next Step
Treatments:

Acceptable aspen mixed with maple and conifer
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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70	61153070-Cut	29.7	4136 - Aspen, Mixed Conifer	Poletimber Well	40	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest but leve ~150 buffer along creek to the west which will function as retention for the stand. save some or all white pine and some or
Specs: all oak.

Next Step
Treatments:

Acceptable mixed aspen, maple, oak and mixed conifer is acceptable.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

72	61153072-Cut	2.5	4136 - Aspen, Mixed Conifer	Poletimber Well	45	51-80	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest but buffer out creek to the east. buffer will function as retention
Specs:

Next Step
Treatments:

Acceptable aspen, maple and mixed conifer
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

80	61153080-Cut	18.7	42110 - Planted Red Pine	Poletimber Well	50	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Thick and tall... very tight rows... think we will have to thin every third row again which will release all trees and minimize further damage for
Specs: future entries. very little understory competition. if possible mark to thin but think rows will be to tight for most of stand... especially next entry

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

81	61153081-Cut	15.6	4136 - Aspen, Mixed Conifer	Poletimber Well	50	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest, save area along drain in stand. this will function as retention. ok to save some pine but some likely should come out to increase
Specs: stem density of aspen regen.

Next Step
Treatments:

Acceptable aspen, maple, oak and mixed conifer is ok post harvest.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /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
85 61153085-Cut	28.2	4319 - Mixed Upland Forest	Poletimber Well	49	81-110	Harvest	Shelterwood	4319 - Mixed Upland Forest	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription Shelterwood/seed tree style of cut. Mark to leave ~ 20 square feet of mixed pine and maple. Focus retention along the nonforest types. Leave the cedar and hemlock alone.

Next Step
Treatments:

Acceptable any mix of current coverytype is acceptable. expect good regen here
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

87 61153087-Spray	19.6	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	6	Immatu re	Pesticide	Aerial	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription red pine blocks in the area are getting pretty stiff deciduous competition. release spray via ground or from helicopter as needed and as determined by TMS.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

91 61153091-Spray	7.1	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	6	Immatu re	Pesticide	Aerial	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: Yes

Site Condition:

Prescription red pine blocks in the area are getting pretty stiff deciduous competition. release spray via ground or from helicopter as needed and as determined by TMS.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

92 61153092-Spray	4.5	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	6	Immatu re	Pesticide	Aerial	4211 - Planted Red Pine	Even-Aged	Incomplete Proposal
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Habitat Cut: Yes

Site Condition:

Prescription red pine blocks in the area are getting pretty stiff deciduous competition. release spray via ground or from helicopter as needed and as determined by TMS.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /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
94 61153094-44-New	7.9	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	6	Immature		ERROR	Unspecified		Incomplete Proposal

Habitat Cut: Yes

Site Condition:

Prescription
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

95 61153095-Cut	17.8	4110 - Sugar Maple Association	Sawtimber Well	78	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Select cut stand. Should just be a light thinning to promote the existing crop trees. Need to verify the property corners and lines. There is an old fence line along the south line.
Specs:

Next Step
Treatments:

Acceptable any mix of current overstory. eventually will need to try to poke in some larger holes to promote mixed species regen.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

100 61153100-Cut	24.0	42110 - Planted Red Pine	Poletimber Well	49	201+	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription take a row out and maybe some smaller diameter trees in adjacent leave rows to minimize arch trees post harvest...
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

103 61153103-Cut	17.1	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	72	81-110	Harvest	Shelterwood	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Variable stand that alternates between A and M. Patchy areas of open canopy. Would be nice to thin some of the hardwood pockets if we can find something to go with it. Would be nice to establish the private property boundary. cut out most or all aspen and thin the maple pockets. will help to establish property line and should regenerate to mixed aspen and maple.
Specs:

Next Step
Treatments:

Acceptable any mix of current overstory, aspen areas will likely regen to aspen and heavily thinned maple areas should fill in with maple, aspen and hopefully some mixed pine as well.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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114	61153114-Cut	9.7	4112 - Maple, Beech, Cherry Association	Poletimber Well	95	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Thin while we are in the area. mark down to 50-100BA depending on stem quality and spacing. open areas should fill in with red maple and
Specs: mixed hardwoods & pine

Next Step
Treatments:

Acceptable any mix of current overstory, expect mainly ironwood and beech but hoping to get some maple and maybe oak or pine started in the more open
Regen: areas post harvest.

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

115	61153115-Cut	17.8	42110 - Planted Red Pine	Poletimber Well	51	171-200	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription likely need to be marked. take 1/3- 1/4 of the volume out focusing on poor formed and smaller trees first and then down to desired density
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

119	61153119-Cut	13.9	4130 - Aspen	Poletimber Medium	47	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Clear cut stand. Create a few brush piles/2 acres. Leave some retention along the L0. I Don't know about the private boundary.
Specs:

Next Step
Treatments:

Acceptable any mix of aspen, maple, oak and pine mix is ok. expect mainly aspen
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

121	61153121-Cut	4.4	4130 - Aspen	Poletimber Well	48	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription stand to small for retention, final harvest but green tree some longer lived species as well as most or all white pine. will have some retention but
Specs: likely under the 3-10%.

Next Step
Treatments:

Acceptable any mix of aspen, oak, maple or conifer. expect phenomenal aspen regen.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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122	61153122-Cut	2.9	42110 - Planted Red Pine	Poletimber Well	49	201+	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription row thin, may want to take small diam out of adjacent rows as well to minimize arch trees
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

123	61153123-Cut	6.7	42110 - Planted Red Pine	Poletimber Well	49	201+	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription row thin, may want to take out small diam trees in adjacent rows as well
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

126	61153126-Cut	1.8	42110 - Planted Red Pine	Poletimber Well	49	201+	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription row thin and possibly take out small diam in leave rows
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

131	61153131-Cut	1.0	4110 - Sugar Maple Association	Sawtimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription thin through stand. target removal of beech and mark rest down to 80ish. ok to poke some holes in as well to encourage mixed species regen.
Specs:

Next Step
Treatments:

Acceptable any mixed hardwood or mixed softwood
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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139	61153139-Cut	23.3	4110 - Sugar Maple Association	Poletimber Well	76	141-170	Harvest	Crown Thinning	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Select cut stand. Target the ash, beech, and popple. more of a crop tree release as opposed to a regen harvest
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

142	61153142-Cut	5.8	42110 - Planted Red Pine	Sawtimber Well	49	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription lightly thin taking smaller diam and poor formed trees firs and then down to desired red pine mgmt. BA.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

143	61153143-Cut	10.7	42110 - Planted Red Pine	Poletimber Well	51	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription give a light thin while we are here. focus on taking out smaller diameter and poor formed trees.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

146	61153146-Cut	4.3	4133 - Aspen, Mixed Pine	Poletimber Well	48	141-170	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription final harvest but save finger at east end along steeper slope with larger oak and pine. mixed pine and aspen regen is the. where nicest aspen is
Specs: final harvest where more white pine mixed in ok to save quite a bit of white pine. green tree white pine and oak to save.

Next Step
Treatments:

Acceptable any mix of aspem, maple, oak & pine. I expect the site to fully regenerate
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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152	61153152-Cut	5.8	4112 - Maple, Beech, Cherry Association	Sawtimber Well	105	171-200	Harvest	Group Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription thin the nice pole and log areas, areas with poor formed and poor quality stems can be cut a bit harder to promote mixed maple and cherry regen.
Specs:

Next Step
Treatments:

Acceptable any mix of current overstory is acceptable. expect more red maple and cherry than sugar
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

175	61153175-Cut	6.1	42110 - Planted Red Pine	Poletimber Well	54	201+	Harvest	Systematic Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription take ~1/3 of the rows out and all trees under 4" dbh in adjacent rows to minimize "arch" trees post harvest. OK to cut some of the mixed in other species but try to save some for species diversity.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

181	61153181-Cut	1.2	42110 - Planted Red Pine	Poletimber Well	54	201+	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No

Site Condition: Too Wet

Prescription thin if possible but will need to scope out more to see if its doable to make it up and down the bluff... more likely, probably take two rows out
Specs: leave two and take all trees under 4" dbh to minimize "arch trees)

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

183	61153183-Cut	27.7	4130 - Aspen	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No

Site Condition:

Prescription Clear cut stand. Make a brush pile or 2/ac for rabbitat. Maybe leave all the oak or pine or possibly save some of them via green tree spec.
Specs:

Next Step
Treatments:

Acceptable any mix of aspen, hardwood or conifer
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
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184	61153184-Cut	5.3	42110 - Planted Red Pine	Poletimber Well	54	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Thin stand to try and develop the diameters more. Set up with adjacent thinnings. North line looks to be established from previous hardwood
Specs: thinning in stand 185.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

186	61153186-Cut	51.3	4111 - S.Maple, Hard Mast Association	Sawtimber Well	98	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription target removal of beech and mark rest down to 80ish BA. OK to poke some holes in as well to encourage mixed species regen around residual
Specs: cherry or other less represented species. pole areas will likely be a bit thicker and when logs are removed may be a bit lighter residual BA to encourage regen

Next Step
Treatments:

Acceptable any mixed hardwood or mixed conifer is acceptable,
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

187	61153187-Cut	2.8	42110 - Planted Red Pine	Poletimber Well	54	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Thin stand down to ~120sqft/ac.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

188	61153188-40-New	57.0	4130 - Aspen	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Clear cut part of or all of stand. Focus retention along the vernal ponds. Extend treatment into the transition ground along stand 189 to harvest
Specs: what black spruce we can. It would be good to mark a few clumps of seed trees in these areas. Also should mark some scattered white pine and cherry to leave. Brush pile for wildlife habitat.

Next Step
Treatments:

Acceptable any mix of aspen, mixed hardwood and mixed conifer,
Regen:

Other likely will want to scale back treatment at pre-review after aspen acres are examined for the MU. Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
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192	61153192-Cut	3.7	4130 - Aspen	Sawtimber Well	62	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:** Non-Military Lease/Easement

Prescription final harvest if the wood is indeed ours. meeting with consumers week of 5/18/2015 to discuss. factor limited for now
Specs:

Next Step
Treatments:

Acceptable any mix of aspen, mixed deciduous or mixed conifer, expect excellent aspen regen
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

193	61153193-Cut	104.9	4111 - S.Maple, Hard Mast Association	Sawtimber Well	82	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription treating northern portion of this stand this YOY as there is more beech here and densities seem to be a bit higher here. stand BA varies some
Specs: thick some not so much. target removal of most beech and all ash, thin nice pole areas, ok to poke some holes in where larger log sized trees come out to encourage mixed regen.

Next Step
Treatments:

Acceptable Mixed hardwoods or mixed conifer
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

194	61153194-Burn	25.5	3303 - Mixed Low Density Trees	Nonstocked		Unspecified	Burn	Opening	310 - Herbaceous Openland		Proposal
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Habitat Cut: Yes **Site Condition:**

Prescription @ pre-review wildlife said they would like to burn this field area to maintain as grassy opening. nice grass opening with scattered maple. I
Specs: assume the fingery areas will be taken out of the burn, burn as much as possible.

Next Step
Treatments:

Acceptable
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016

195	61153195-Cut	9.2	4110 - Sugar Maple Association	Sawtimber Well	78	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Even-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Select cut stand. Target the beech and then thin the rest down to ~80sqft/ac. try to encourage cherry and maple where possible by some group
Specs: openings where the opportunities are present

Next Step
Treatments:

Acceptable any mixed hardwood or mixed conifer.
Regen:

Other Old next step comments:
Comment:

Proposed Start Date: 10/1 /2016



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
205	61153205-Cut	21.3	4133 - Aspen, Mixed Pine	Poletimber Well	45	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal

Habitat Cut: No

Site Condition:

Prescription final harvest, buffer creek by ~100' buffer will act as retention. safe pine under 4" dbhand ok to green tree save some larger stuff but open up
Specs: enough for good aspen regen.

Next Step
Treatments:

Acceptable mixed aspen, maple and conifer is acceptable. expect mainly aspen and white pine.
Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

**Total Treatment
 Acreage Proposed: 737.0**

Report 5 – Site Conditions

Traverse City Mgt. Unit
Kelly Standerfer : Examiner

Compartment: 153
Year of Entry: 2017

Dominant Site Conditions

	2G	2H	3E	3G	3H	3J	4A	5B	5C	5E
Aspen		2	5			2			95	30
Bare/Sparsely Vegetated										
Bog										
Cedar	4					16				
Herbaceous Openland										
Jack Pine										
Low-Density Trees						1				
Lowland Aspen/Balsam Poplar						7				
Lowland Conifers	3				11	28				
Lowland Deciduous						42				
Lowland Mixed Forest										
Lowland Shrub						6				
Lowland Spruce/Fir						3				
Marsh										
Mixed Upland Deciduous				18						
Natural Mixed Pines										
Northern Hardwood							0			
Oak								21		
Red Pine	1		98							
Treed Bog										
Upland Mixed Forest										
Upland Shrub										
Water										
White Pine		3					2		5	
Total Forested Acres	8	6	103	18	11	105	2	21	100	30
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	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: retention for stands 61, 62 & 67							

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2	Unavailable	5E: Long-Term Retention	1	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
3	Unavailable	5E: Long-Term Retention	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
5	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	44	1A: Federal/State/Local Law	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
Comments: Mostly within Natural Rivers buffer.							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Unavailable	5E: Long-Term Retention	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

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8	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	3D: Recreational / Scenic values	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	5E: Long-Term Retention	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
12	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
13	Unavailable	5E: Long-Term Retention	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

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14	Unavailable	5E: Long-Term Retention	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
15	Unavailable	5E: Long-Term Retention	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
16	Unavailable	5E: Long-Term Retention	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
17	Available	2B: Unknown if access through adjacent landowner(s) is possible	64	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	2B: Unknown if access through adjacent landowner(s) is possible	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Unavailable	5E: Long-Term Retention	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							

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20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments: might cut... need to look at figures at pre-review							
21	Available	5B: Maintain for regeneration purposes	21	Unspecified	Unspecified	Unspecified	Unspecified
Comments: just cut two years ago, shelterwoodish so leave overstory for a bit until regen fills in							
22	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
23	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: lightly thin when aspen to north is cut							
24	Unavailable	3H: Deer Wintering Areas	12	3H: Deer Wintering Areas	Unspecified	Unspecified	Unspecified
Comments: thick nice deer yarding area with hemlock							
25	Available	4A: No Markets Available for these Forest Products	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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26	Unavailable	5E: Long-Term Retention	5	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments:							
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	28	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
28	Available	2B: Unknown if access through adjacent landowner(s) is possible	61	Unspecified	Unspecified	Unspecified	Unspecified
Comments: river will need to have natural river buffer if treated							
29	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	5	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	Unspecified	Unspecified	Unspecified
Comments: need to explore to see if access is possible and if ground is maneagable							
30	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	4	3D: Recreational / Scenic values	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified
Comments:							
31	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: not sure if its our wood or not. meeting with Lynn Newel week of 5/18/2015 to check out in the field							

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32	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments: think its consumers wood as its in the original footprint of the plantaion.							
33	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	61	Unspecified	Unspecified	Unspecified	Unspecified
Comments: decided to hold this area at pre-review in may 2015 to better line up with the MA goals. this area of the stand is smaller diameter aspen with lower densities so if we do see some mortality the volume loss will be less. stand does need cut but holding this YOE to better line up with plan goals.							
34	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
35	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	26	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
36	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
37	Available	2B: Unknown if access through adjacent landowner(s) is possible	34	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

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38	Available	2B: Unknown if access through adjacent landowner(s) is possible	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
39	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
40	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
41	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
42	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
43	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 5 – Site Conditions

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157	Unavailable	3G: Other Influence zones - See comments	18	3J: Water quality / BMPs (stream, river, or lake)	3D: Recreational / Scenic values	Unspecified	Unspecified
Comments:							
163	Available	2B: Unknown if access through adjacent landowner(s) is possible	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
181	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
Comments:							
190	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	3A: Potential old growth / biodiversity	1C: Other dept or div proc/practices	2G: Too wet (sensitive soils, does not include access issues)	Unspecified
Comments:							
201	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
801	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: consumers timber reserve area							

Report 5 – Site Conditions

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802	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: consumers timber reserve							
803	Unavailable	3E: Easement / lease, non-military (e.g.- Consumers Power red pine, etc)	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments: consumers timber reserve area							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 6 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				



Report 7 – 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	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.
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.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4136 - Aspen, Mixed Conifer	Poletimber Well	30.2	40	51-80	Still a lot of sapling-sized trees but good stocking. Scattered overstory white pines. Wet along edges.
5	4133 - Aspen, Mixed Pine	Poletimber Well	10.3	48	51-80	Wet along edges. Small patch of jack pine, black spruce, and white pine adjacent to bog along southwestern edge of stand. More clumpy and variable than stand 1.
6	42200 - Natural White Pine	Sawtimber Well	4.7	65	81-110	South end more solid white pine. north finger along road mixed maple, aspen and pine. OPIC - FMD: 2/16/2005 White pine stand between road & swamp. Not a real good management area. (Grieve)
8	4133 - Aspen, Mixed Pine	Poletimber Well	2.3	65	81-110	small island in large VO. OPIC - FMD: 2/15/2005 This is a small island in the middle of a large swamp. Not the place to have a cut. (Grieve)
9	4199 - Other Mixed Upland Deciduous	Poletimber Well	1.8	55	51-80	Small red maple, aspen, fire n pine island. not manageable OPIC - FMD: 2/15/2005 Birch is dying out. Island is surrounded by swamp. No access. (Grieve)
10	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	4.5	35	81-110	South end more aspen, north end mixed conifer with maple and aspen. only access is from ridge on private to the north. OPIC - FMD: 2/15/2005 Very nice looking stand. Just moving from A3 to A6. Will be A6 next time. (Grieve)
14	4134 - Aspen, Spruce/Fir	Poletimber Well	15.8	38	81-110	nice mixed stand. should hold good 10-20 yrs. very tricky access, old grade to the east across private would work or maybe from the south but there looks to be no logging access across state land. OPIC - FMD: 2/15/2005 Same as main aspen stand, but is wetter and has a balsam fir part to the understory. Some small beech in stand. (Grieve)
16	4136 - Aspen, Mixed Conifer	Poletimber Well	63.7	47	81-110	Wetter at south end. some areas more maple and cherry mixed in but all pretty low quality and can be managed via even age.
17	6139 - Mixed Lowland Forest	Poletimber Well	14.9	50	81-110	Highly variable stand with patchy canopy. Fairly wet throughout with several areas of open water. Some dead trees in wetter sections. Ribbon of tag alder through south central section, possibly dammed up by road on private property at western end of stand. Transitions into bog at northern end.
18	4133 - Aspen, Mixed Pine	Poletimber Well	6.8	47	81-110	Some low spots (especially at edges) but seems relatively dry. Parts are still mostly saplings. Pocket of hardwoods at northwest corner. Hold 10 years, depending on access. [BA 1: QA 50, RM 50; BA 2: QA 30, RM 30, WP 30, BF 10]
19	4112 - Maple, Beech, Cherry Association	Poletimber Well	15.5	38	81-110	this area thicker to maple and cherry than the stand to the east. OPIC - FMD: 2/15/2005 Was cut with aspen stand to the east. Is coming back as red maple. (Grieve)



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	17.0	69	1-50	E type, more or less. Some spots are solid L-type (SE end) and some areas of Q type. looks to be unmanageable ground for the most part.
22	4112 - Maple, Beech, Cherry Association	Sawtimber Well	12.2	115	141-170	Nice mixed stand. north west end more pure sugar maple, south end is mixed maple, hemlock, fir, birch mixed bag stand. OPIC - FMD: 3/3/2005 This stand is in need of a selection cut but access is land locked. Some big trees here. More to sugar maple in the NW side of stand. Red maple in the south & east. middle and south end of stand has thick fir understory with some hemlock mixed in as well.
24	42220 - Natural Jack Pine	Sapling Well	2.2	19	Immature	Trees about 15' tall.
25	42101 - Planted White Pine, Mixed Deciduous	Poletimber Well	2.5	56	141-170	Narrow finger of white pine. all stands in this area were thinned last YOE but were only cut a year ago as we gained access across the private to the SW. this stand was left thick for good conifer cover in the area and to help shelter along mixed hardwoods. poor quality white pine OPIC - FMD: 2/2/2005 1/2 of this plantation in on private land. Needs a 3rd row thinning but volumes are to low. (Grieve)
26	4112 - Maple, Beech, Cherry Association	Poletimber Well	44.6	75	51-80	Chapter 7 done to treat this stand with the adjacent oak stand to salvage beech in the area (Heavy beech at south end as well as salvage some over mature aspen. thinned the rest of the stand while we had access. beech and aspen areas are a bit more open and some open areas where red maple clumps were taken out. likely wont have to re-enter stand for 20-30 yrs or as desired for regen. Stand should regen to a nice mix of maple aspen and beech. OPIC - FMD: 2/2/2005 Red maple clumps. Look at in ten years, stocking is not as high as recorded because of RM clumps, 15% crown openings. (Grieve)
27	4123 - Red Oak	Sawtimber Well	21.3	90	111-140	Stand thinned last year. some oak areas left a bit thick but should shelter pine along nicely. looks like it will fill in very nicely to a mix of maple, oak and pine OPIC - FMD: 2/2/2005 Needs to be treated. Next to lake (bog). Shelterwood & release WP. (Grieve)
30	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	3.5	85	171-200	Nothing has changed, not a manageable stand due to BMP's OPIC - FMD: 2/2/2005 Old pine stumps, Large white & red pine stand next to lake. Oak in cluster on south end. No access. White pine growing well, Red pine with rounded tops. To close to lake for harvest. Water on 3 sides. (Grieve)
31	42110 - Planted Red Pine	Poletimber Well	15.0	60	111-140	Tight rows so we took two left two last YOE. will likely fill in with maple and oak over the years. long term this will likely be a good spot to push towards mixed hardwoods as access is limited. OPIC - FMD: 2/2/2005 Stagnating, needs 3rd row thinning bad. (Grieve)



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	42201 - Natural White Pine, Mixed Deciduous	Poletimber Well	21.5	49	81-110	Some scattered nice pockets of aspen and some pretty gnarly. push towards longer lived white pine. Treat when red pine to the east is thinned again, likely 20 yrs. OPIC - FMD: 2/2/2005 Mixed but some solid WP. Look at in 20 years. (Grieve)
35	4191 - Mixed Upland Deciduous with Conifer	Sapling Medium	45.5	2	81-110	Stand cut last year Via Seed tree/ Selection. almost all pine left and the majority of the oak but we did thin some of the thicker oak areas. already sprouting good, should be a nice mix of pine, maple, aspen and hopefully some birch and oak as well. SW end of stand was a separate stand last YOE but decided to do a chapter 7 to salvage to over mature aspen in this area. treated similar to the NE end of the stand so merged it all together as it will likely all be managed together and result in a mixed aspen, oak, maple, birch, pine coverytype. OPIC - FMD: 2/2/2005 If we cut it will come back to W1 & sprout RM. Little chance of birch coming back. Some scattered oak, mark some of this. White birch is dying in some parts of stand. Lots of deer tracks. (Grieve)
37	42260 - Natural Pine, Mixed Deciduous	Poletimber Well	4.8	105	141-170	This is the area north of the road that didn't have any short lived species removed with the sale in 1997. OPIC - FMD: 2/4/2005 Aspen & red maple have been removed from this stand. So far only aspen & red maple are in the understory. Look at in twenty years. Open crowns. Small block on north side of road did not have anything removed. Some red pine in stand, did not show up in enough numbers in plot to record. (Grieve) 2/4/1999 Timber Sale # 61-183-97-01
40	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	2.7	80	Unspecified	Small, wetland pocket. Very dense cedar at NW end. Aspen is in rough shape. Active porcupines.
41	4110 - Sugar Maple Association	Sawtimber Medium	5.1	75	51-80	Beaver activity on the edges. Scattered aspen too. Stand looks like it was thinned recently.
42	4133 - Aspen, Mixed Pine	Poletimber Well	1.1	45	51-80	long term retention for stands 61 & 62. along road. will likely convert to mixed conifer as aspen falls out.
44	4133 - Aspen, Mixed Pine	Sawtimber Well	14.5	72	111-140	looks like we should be able to skid the wood across the small creek between stand 205 and this stand. likely will need DEQ permit. minimize soil disturbance. survey likely needed as I couldn't find anything that looked official :-/
46	4110 - Sugar Maple Association	Sawtimber Well	1.2	78	81-110	
50	4130 - Aspen	Poletimber Well	29.3	57	81-110	Mostly aspen with scattered other species mixed in. West central section has some pockets of mostly pine canopy. Far eastern part of stand is also mostly pine. Heavy white pine understory in a few spots. Some low spots along edges. Low area connects 49 and 51 so it might be necessary to skid north and south halves in different directions.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4130 - Aspen	Sapling Well	51.1	30	Immature	Nice looking stand for the most part. at the self thinning stage so messy with good cover for birds. some conifer pockets throughout and along edges. look at breaking age class up in 10-20 yrs. OPIC - FMD: 2/4/2005 High water table. (Grieve)
57	4130 - Aspen	Poletimber Well	9.4	60	81-110	Most of stand is upland aspen with scattered pine and thicker pine in southeast corner. Should be a relatively easy skid across tag alder in narrow part of 56.
58	42200 - Natural White Pine	Sawtimber Medium	30.9	105	1-50	Nice aspen and red maple regen for the most part. some thick pockets of pine but overall pretty scattered. likely treat stand when understory is merchantable. OPIC - FMD: 2/4/2005 Aspen & red maple have been removed from this stand. So far only aspen & red maple are in the understory. Look at in twenty years. Open crowns. Small block on north side of road did not have anything removed. Some red pine in stand, did not show up in enough numbers in plot to record. (Grieve) 2/4/1999 Timber Sale # 61-183-97-01
59	4130 - Aspen	Sapling Well	22.9	30	Immature	Nice A3 converting to A ⁺ , some might be ready to go next YOE. OPIC - FMD: 2/4/2005 High water table. (Grieve)
61	4130 - Aspen	Sapling Well	3.5	5	1-50	stand cut with comp to the east. (Puzzle piece popple) scattered pine and oak left over nice aspen and red maple regen.
62	4130 - Aspen	Sapling Well	3.1	5	1-50	Stand cut with comp to the east (puzzle piece popple). oak and white pine left as well as small island around a pot hole wet area. nice aspen and maple regen with some fir mixed in. OPIC - FMD: 2/8/2005 Look at in ten years. Nice looking stand. (Grieve)
63	4134 - Aspen, Spruce/Fir	Poletimber Well	4.1	45	81-110	Nice mixed stand. high visibility area right on a curve of Sharon rd. OPIC - FMD: 2/8/2005 Look at in ten years. Mixed stand, high water table. (Grieve)
64	4130 - Aspen	Sapling Well	6.0	30	1-50	Nice mixed stand, some fir and pine mixed in with aspen and maple. OPIC - FMD: 2/4/2005 High water table. (Grieve)
66	4133 - Aspen, Mixed Pine	Poletimber Well	15.8	56	81-110	Diverse stand. More pine in west end and far eastern edge. Some low ground throughout, seasonally wet. Balsam fir understory is thick in places. Heavy blowdown in southeast corner. Heavy browse on red maple seedlings.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
68	4139 - Aspen, Mixed Deciduous	Sapling Medium	23.6	2	Immature	Stand fully regenerated to mixed maple and aspen with some fir and pine as well. OPIC - FMD: 12/19/2005 From compartment review. Leave 100 ft buffer along Maple Creek. 2/8/2005 Very low stand. 20% could be called a "P" type with a "L" understory. Aspen is starting to go. Needs a cut now. Conversion to a P, E or L type would be acceptable. (Grieve) Stand was cut with Maple Creek Aspen 610440701. Small uncut island by wet spot on west end and scattered pine left. Turned out super!
69	4199 - Other Mixed Upland Deciduous	Poletimber Well	6.5	61	81-110	buffer left for retention for cut to the north and BMP along ZO areas. leave for rotation of stand to the north.
70	4136 - Aspen, Mixed Conifer	Poletimber Well	33.5	40	81-110	some a bit older looking and some just coming to merchantable size. like jerry said must have been a messy cut last time around. will hold fine 10 years or could cut now as needed for age class diversity. OPIC - FMD: 2/8/2005 A3 turning to A6. Can not find old timber sale report. Was not a clean cut last time. (Grieve)
72	4136 - Aspen, Mixed Conifer	Poletimber Well	4.1	45	51-80	Nice mixed stand. final harvest the area that doesn't fall within stream buffer. small area and may get hit pretty hard by deer browse but cut to the east will help as well. OPIC - FMD: 2/8/2005 Look at in ten years. Mixed stand, high water table. (Grieve)
74	4139 - Aspen, Mixed Deciduous	Sapling Medium	29.0	2	Immature	Regenerated nicely to mixed aspen maple and cherry. dirty clear cut with scattered residual and drumming log trees, looks great, heavy deer browse. but already pushing past. Far north end has a lot of fir mixed in as well as white pine, south 2/3 more deciduous. OPIC - FMD: 12/19/2005 From compartment review. Leave 100 ft buffer along Maple Creek. Stand final harvested with Maple Creek Aspen. There was a drainage painted out of the center stand. Drumming trees were left. Sale turned out good! (KS)
76	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	7.7	52	51-80	East edge has some thicker white pine and fir areas but most is very wet ash maple mix. forwarded wood through SE end of this stand to access the north portion of stand 74, worked good. OPIC - FMD: 2/8/2005 High water table, was all ice when I was here. (Grieve)
77	6115 - Lowland Ash	Poletimber Medium	5.1	52	51-80	poor stocked maple and ash over LO. Doesn't look to be manageable ground. OPIC - FMD: 2/8/2005 High water table, was all ice when I was here. (Grieve)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
80	42110 - Planted Red Pine	Poletimber Well	18.7	50	171-200	<p>Thick and tall... very tight rows... think we will have to thin every third row again which will release all trees and minimize further damage for future entries. very little understory competition.</p> <p>OPIC - FMD: 2/8/2005 Hold for ten years. When first I walked into stand I thought I would cut, but plots & crown closure say otherwise. A great deal of damage was done on the first cut. (Grieve) THIN STAND EVERY THIRD ROW. Thinning completed in 1999 Yellow Cap Red Pine (Contract # 111-97-01). Removed every third row. Planting was very closely spaced therefore some extra trees were removed from some rows to facilitate logging equipment. Row spacing will be a concern with future harvests in this stand. Cutting took place in spring. An error was discovered in the calculations for the volume of the sale. Data was entered as a 10 factor cruise when in fact the cruise was done with a 20 factor. Thus a 100% over-run was realized by the producer.</p>
81	4136 - Aspen, Mixed Conifer	Poletimber Well	19.7	50	81-110	<p>mixed bag stand, some tag alder understory areas which may be tough to harvest. most of the pine is @ sw end of stand</p> <p>OPIC - FMD: 2/8/2005 This stand is a mix of age & species. Hold for ten years or 20 if possible. This is for visual reasons! I would like to see the back side of this 80 be 20 years old before the stand is cut. It would be best if we cut this stand first before we cut the back stand. But the condition of the back stand is such as to not want to be held any longer for treatment. (Grieve)</p>
83	61203 - Cedar (OI)	Poletimber Poor	1.6	66	1-50	<p>entire stand falls in natural river corridor. didn't make it to stand</p> <p>OPIC - FMD: 3/15/2005 Along Manistee River, Low land brush, scattered trees. (Grieve)</p>
84	4136 - Aspen, Mixed Conifer	Poletimber Well	4.9	50	111-140	<p>uncut portion of stand 68, left out for BMP buffer. add to retention layer</p> <p>OPIC - FMD: 12/19/2005 From compartment review. Leave 100 ft buffer along Maple Creek. 2/8/2005 Very low stand. 20% could be called a "P" type with a "L" understory. Aspen is starting to go. Needs a cut now. Conversion to a P, E or L type would be acceptable. (Grieve) Stand was cut with Maple Creek Aspen 610440701. Small uncut island by wet spot on west end and scattered pine left. Turned out super!</p>
85	4319 - Mixed Upland Forest	Poletimber Well	28.2	49	81-110	<p>Western part of stand looks to be on low ground. Some hemlock around the wetter areas. North west part of the stand is more of jack pine ridge with some scattered red pine. Some larger white pine scattered throughout.</p>
87	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	19.6	6	Immature	<p>Okay quality planation. Quite a bit of hardwood competition. Some scattered oak. Trees in the open are growing a 1'/yr.</p>
89	42110 - Planted Red Pine	Sapling Well	8.2	16	Immature	<p>Trees are about 10-15' tall. Quite a bit of jack pine volunteers especially along the edges. Some scattered oak.</p>
90	42110 - Planted Red Pine	Sapling Well	11.5	16	Immature	<p>Trees are about 10-15' tall. Quite a bit of jack pine volunteers especially along the edges. Some scattered oak.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
91	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	7.2	6	Immature	Okay quality planation. Quite a bit of hardwood competition. Some scattered oak. Trees in the open are growing a 1/yr. Trees are about 2-3' tall.
92	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	4.5	6	Immature	Okay quality planation. Quite a bit of hardwood competition. Some scattered oak. Trees in the open are growing a 1/yr. Trees are about 2-3' tall.
93	4134 - Aspen, Spruce/Fir	Poletimber Well	7.9	50	111-140	area that was painted out of the adjacent clear cut area. left for BMP add to retention layer. OPIC - FMD: 12/19/2005 From compartment review. Leave 100 ft buffer along Maple Creek. 2/8/2005 High Risk in aspen, cut. This stand will need a temporary bridge to reach the top ¼ of the sale. At the same time this sale is being cut the red pine should be cut also. Conversion to a P, E or M type would be acceptable. (Grieve). Stand final harvested with Maple Creek Aspen. There was a drainage painted out of the center stand. Drumming trees were left. Sale turned out good! (KS)
94	42111 - Planted Red Pine, Mixed Deciduous	Sapling Well	7.9	6	Immature	Okay quality planation. Quite a bit of hardwood competition. Some scattered oak. Trees in the open are growing a 1/yr. Trees are about 2-3' tall.
95	4110 - Sugar Maple Association	Sawtimber Well	17.8	78	111-140	Stand was thinned before. Very nice quality. Lots of trees with 4-5 clear logs should be a decent run of veneer. Some scattered ash.
96	6128 - Lowland Coniferous, Mixed Deciduous	Sawtimber Well	11.5	125	141-170	nice mixed stand of larger diameter hemlock, maple fir and pine. leave for deer cover
97	4112 - Maple, Beech, Cherry Association	Sapling Well	8.1	19	Immature	A few scattered oak.
98	42110 - Planted Red Pine	Sapling Well	3.1	16	Immature	Trees are about 10-15' tall. Quite a bit of jack pine volunteers especially along the edges. Some scattered oak.
99	42220 - Natural Jack Pine	Poletimber Well	8.4	30	Immature	Pretty poor quality stand. Converting from saplings to poles. Trees about 25' tall.
100	42110 - Planted Red Pine	Poletimber Well	24.0	49	201+	Never been thinned but definitely needs it. Rows should be relatively easy to follow. Slight hills. 4-5 stick trees with some logs. Fair to good quality.
101	4319 - Mixed Upland Forest	Poletimber Poor	6.9	30	1-50	Opening that is filling in and maturing. Boundary/corner is unclear. Barbed wire fence on east side. Two-track along north edge.
102	4139 - Aspen, Mixed Deciduous	Poletimber Well	24.6	42	111-140	Fair to good quality. 5-6 stick aspen. Scattered pockets have more hardwood. Probably hold 10 years.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
103	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	17.1	72	81-110	Variable stand that alternates between A and M. Patchy areas of open canopy. Would be nice to thin some of the hardwood pockets if we can find something to go with it. Would be nice to establish the private property boundary.
104	42201 - Natural White Pine, Mixed Deciduous	Sawtimber Well	1.9	82	141-170	Small, variable stand. Larger white pine is relatively limby. Aspen is in poor shape. Wet along south and west edges.
105	4130 - Aspen	Poletimber Well	3.4	38	111-140	Wet area runs along western edge, connects wet stand 40 to drain in 130. Fair amount of almost-poles in the understory.
106	4130 - Aspen	Sapling Well	19.4	18	Immature	
107	6120 - Lowland Cedar	Poletimber Well	4.0	86	51-80	Quite a bit of blow downs, those areas are filling in with balsam fir. Some scattered red maple and aspen along the edge of stand. Cedar looks unhealthy.
108	4130 - Aspen	Sapling Well	10.4	6	Immature	Clearcut, was missed due to trespass last time around. 11/8/1995 LEAVE THE SCATTERED OAK TREES (Byers) sale # 07-01 West Sharon Aspen completed 4-21-2009 dkj Trees are about 10-15' tall, some scattered cherry and oak pole timber.
110	4130 - Aspen	Sapling Well	6.9	6	Immature	regenerated very nicely.. wet area painted out of sale @ north end, to small to map out. maple and aspen over water. OPIC - FMD: 3/16/2005 High Risk. Some parts High water table. Clearcut. Conversion to a P, E or L type would be acceptable. (Grieve) sale # 07-01 West Sharon Aspen completed 4-21-2009 dkj
111	4116 - Mixed N. Hardwood - Aspen	Sapling Well	1.8	8	Immature	
114	4112 - Maple, Beech, Cherry Association	Poletimber Well	9.7	95	111-140	West edge has some decent sugar maple but overall pretty poor quality, some thicker and some more open. OPIC - FMD: 3/16/2005 Mostly sprout red maple. (Grieve)
115	42110 - Planted Red Pine	Poletimber Well	17.8	51	171-200	Row thinned in 2007. Canopies are tight. Nice plantation full of good quality timber, 6 sticks +
117	4130 - Aspen	Sapling Medium	32.2	18	Immature	Variable stand. Mostly immature aspen or mixed deciduous trees with scattered overstory white pine. Stocking looks fine.
118	42200 - Natural White Pine	Sawtimber Medium	6.5	65	1-50	some more open and some very thick with regenerated white pine. should hold fine 10-20. mostly big wooly trees with variable quality white pine pole and seedling areas. OPIC - FMD: 3/16/2005 Heavy weevil, Natural stand. (Grieve)
119	4130 - Aspen	Poletimber Medium	13.9	47	81-110	Nice looking stand of aspen. lots of 7 stick trees. Lots of beaver activity on the west end of the stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
121	4130 - Aspen	Poletimber Well	4.4	48	81-110	6-stick aspen. Older than stand 102.
122	42110 - Planted Red Pine	Poletimber Well	2.9	49	201+	5-6 stick red pine, fair to good quality. Very little understory, good rows. Gentle slopes. Small pocket of QA along powerline.
123	42110 - Planted Red Pine	Poletimber Well	6.7	49	201+	Overdue for a 3rd row thin. 5-6 stick trees. Deciduous understory is thick in a few places. Gentle hills and good rows.
125	4130 - Aspen	Poletimber Well	22.1	33	Immature	On the small end of the pole size class. Wet along southern edge and vernal pond-type wet area southeast of stand 126.
126	42110 - Planted Red Pine	Poletimber Well	1.8	49	201+	Overdue for third row thinning. Flat terrain, good rows. Heavier understory than other nearby red pine stands. Some porcupine damage.
128	42200 - Natural White Pine	Poletimber Well	4.7	125	111-140	narrow stand of nice large white pine and other mixed species along the old railroad grade and swamp edge.
129	4130 - Aspen	Poletimber Well	18.3	38	81-110	Variable stand. More hardwood than other nearby aspen stands. Decent amount of sugar maple (sapling and small pole) in the understory. Some windthrow pockets? Contains scattered small (1/4-acre) openings.
130	4130 - Aspen	Sapling Well	47.1	6	Immature	Stand was harvested in 2009 (sale # 07-01 West Sharon Aspen). Scattered oak and cherry pole timber was left. There is a vain of low ground in the northern part of the stand. There is some muscle wood out there.
131	4110 - Sugar Maple Association	Sawtimber Well	1.0	80	141-170	Small pocket of hardwoods with private property on west and north sides. Many wolfy trees at the edge but also has some nice poles.
133	6112 - Lowland Aspen	Poletimber Well	1.2	62	81-110	Most is flooded with beaver activity. upland area is just a small sliver. leave for good OPIC - FMD: 3/16/2005 Beech in understory, sugar maple in stand, nice growth. Cut Conversion to a M type would be acceptable. (Grieve)
136	4130 - Aspen	Sapling Well	3.1	18	Immature	Scattered hardwoods logs trees scattered throughout. Aspen is about 30' tall and is starting to convert to a pole stand.
139	4110 - Sugar Maple Association	Poletimber Well	23.3	76	141-170	Decent quality hardwoods. Stand has some rolling terrain. Some scattered aspen along the east edge. Found witness trees to the northwest corner.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
140	4134 - Aspen, Spruce/Fir	Poletimber Well	2.5	55	111-140	strip left along wetland edge. leave for long term retention, cover and BMP. OPIC - FMD: 3/4/2005 Lots of deer use. Saw one oak- leave all oak. Needs a cut. Best route is from south across pvt. Road is being maintained over state with no permit. Can bring timber out to east if Pvt will not allow access. Conversion to a M or O type would be acceptable. (Grieve) Stand final harvested 6/2008 under Taffletown Aspen 078-07-01. KJS
141	4110 - Sugar Maple Association	Poletimber Well	30.1	60	81-110	Rolling terrain. Looks like hardwoods were thinned ~ 20 years ago. Some good hard maple regen in holes but unfortunately a good amount of ironwood too. Some scattered aspen.
142	42110 - Planted Red Pine	Sawtimber Well	5.8	49	141-170	Stand was harvested about 20 years ago using a cut 1 row leave 1. Mostly 6 stick trees. quite a bit of hardwood understory, some scattered oak. BA data (140, 160, 140)
143	42110 - Planted Red Pine	Poletimber Well	10.7	51	111-140	Good diameter development mostly 5-6 stick trees. Dense hardwood understory.
145	4130 - Aspen	Poletimber Well	3.8	30	1-50	A3 converting to A6 OPIC - FMD: 3/17/2005 Looks good. (Grieve)
146	4133 - Aspen, Mixed Pine	Poletimber Well	4.6	48	141-170	nice aspen, thicker white pine in areas.south and east facing aspect has more white pine than up on top of the hill.
150	6132 - Mixed Lowland Forest with Cedar	Poletimber Medium	19.8	76	51-80	Most is pretty sparse, creek/drain through stand. SE end and South end have some merchantable aspen and other mixed deciduous and conifer. OK to dip into this stand a bit to restart some of these areas but 90% of the stand looks to be unmanageable. OPIC - FMD: 3/17/2005 Not that full of a swamp. (Grieve)
152	4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.8	105	171-200	Nice tall thick red maple logs and poles. OPIC - FMD: 3/17/2005 Aspen dying out. Look at in ten years. (Grieve)
153	4130 - Aspen	Sapling Well	34.1	19	Immature	Nice aspen for the most part. East half has quite a bit oak scattered throughout, some almost O8 ish but red maple and aspen taken out through entire stand. manage for understory, oak should last until rotation age of understory. north end of VO has quite a bit of white pine. OPIC - FMD: 3/17/2005 Good looking stand. (Grieve)
155	4130 - Aspen	Poletimber Medium	10.7	36	111-140	Nice aspen in the self thinning stage. Most is nicer A6 but some still almost A3. could be cut now as needed for age class diversity or should hold good 10 years as well. OPIC - FMD: 3/17/2005 Looks 25 years old, check records. Turning from A3 to A6. (Grieve)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
156	4130 - Aspen	Sapling Well	19.4	19	Immature	Nice Aspen regen mixed with maple. scattered larger trees left OPIC - FMD: 3/17/2005 Nice looking stand.. (Grieve) 11/8/1995 CUT STAND LEAVE BUFFER ON SOUTH BY LAKE&LEAVE CLUMPS OF GOOD MAPLE (Byres)
157	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	17.6	105	171-200	south end touches lake, north end has drain through it. nice mixed stand with cedar and hemlock. leav for good due to BMP issues on bed and banky drain and lake. OPIC - FMD: 3/17/2005 Very little of this stand is on flat ground. Most is in a ravine leading to the lake or on a steep hill leading down to the lake. Best not to cut this stand. Lots of beaver activity. (Grieve)
160	61119 - Lowland Aspen/Balsam Poplar (OI)	Poletimber Well	0.3	50	81-110	OPIC - FMD: 3/15/2005 I will call this a P-type but that's about as far as I will go. Next to Manistee River so no treatment because of Natural Rivers Act. (Grieve)
161	41199 - Northern Hardwood (OI)	Poletimber Well	33.7	178	81-110	No legal access going off jerry s notes. thin if we can get access, thin down to 50-70. buffer river. OPIC - FMD: 3/14/2005 Junk! NW corner has good maple. Look at for cut in 10 years. South part of stand is real trash, lots of IW. (Grieve)
162	61119 - Lowland Aspen/Balsam Poplar (OI)	Poletimber Well	61.2	50	81-110	No access. if we get access in to thin stand 161 ok to dip into this stand and do some cutting to regenerate aspen and mixed deciduous and conifer. OPIC - FMD: 3/15/2005 I will call this a P-type but that's about as far as I will go. Next to Manistee River so no treatment because of Natural Rivers Act. (Grieve)
163	4138 - Aspen (OI)	Poletimber Well	3.0	65	81-110	no legal access, going off jerrys notes. OPIC - FMD: 3/15/2005 Aspen is dying out. This is an upland island in a swamp. No good access, to close to the river. No treatment (Grieve)
164	61199 - Lowland Hardwood (OI)	Poletimber Poor	1.9	60	1-50	OPIC - FMD: 3/15/2005 E-type. Flooded at time of inventory. Next to river. (Grieve)
168	4130 - Aspen	Poletimber Well	2.1	58	81-110	Stand is upland but has limited access due to topography and adjacent swamp. Balsam in understory increasing towards west, wetter edge.
170	61199 - Lowland Hardwood (OI)	Poletimber Poor	8.6	60	1-50	OPIC - FMD: 3/15/2005 E-type. Flooded at time of inventory. Next to river. (Grieve)
173	6112 - Lowland Aspen	Sawtimber Well	6.2	58	81-110	Greater than average mortality and windthrow. Some old, cut, and burned pine stumps so NOT old growth.
174	4130 - Aspen	Poletimber Well	8.0	30	Immature	More CWD than average. Stand covers the flat on top of the bluff and the slope.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
175	42110 - Planted Red Pine	Poletimber Well	6.1	54	201+	Red pine has never been row-thinned. Some mortality from self-thinning. Little to no understory. Some wolfy red maple and sugar maple in the gaps. Plantation extends on both sides of private property line. Access road to camp on west side of stand. Property boundary needs to be verified. OPIC - FMD: 12/19/2005 From compartment review. Consider supplement to stand 185 as final harvest/or thinned. (Grieve). 3/8/2005 Old Consumers Energy planting. Was thought at last inventory to be a pine reserve but is not. Needs to be worked on. (Grieve)
176	6120 - Lowland Cedar	Poletimber Well	55.1	95	111-140	Stand is mostly a very dense cedar stand, with good diameters. Some scattered red maple and birch. Stand has a few upland pockets with balsam fir and red maple. Northern 1/4 of stand is more of a mixed stand (Q9) with some scattered large white pine and pockets of P6. There are also several drains that run through the stand.
178	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Medium	3.2	65	51-80	Wet and/or seasonally flooded. Ash is mostly or all dead. Perennial stream enters river at west end.
179	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	3.4	65	51-80	In a bend of the Manistee River. Bottomland hardwoods but ash is mostly or all dead. Some areas of complete tag alder.
181	42110 - Planted Red Pine	Poletimber Well	1.2	54	201+	OPIC - FMD: 12/19/2005 From compartment review. Consider supplement to stand 185 as final harvest/or thinned. (Grieve). 3/8/2005 Old Consumers Energy planting. Stand has never been thinned. Access looks tough, up a great big slope to the west. Lots of 6-7 stick trees.
182	6115 - Lowland Ash	Poletimber Well	20.4	78	81-110	Bottom land Hardwoods. In the flood plain next to the Manistee River. Old Growth & Natural River Act area etc.
183	4130 - Aspen	Poletimber Well	27.7	45	81-110	Stand is on a ridge, mostly 5-6 stick aspen. Some scattered oak. Stand is mature.
184	42110 - Planted Red Pine	Poletimber Well	5.3	54	141-170	Has been row thinned, a decent amount of windthrow. Good height development but diameter is a bit small.
185	4110 - Sugar Maple Association	Sawtimber Well	96.8	98	81-110	Thinned in October 2008 as Snowy Hills, 61-015-07-01. Heavy Rubus in understory so did not look at whole stand. Has BBD. Scattered individual tree mortality. Rolling hills.
186	4111 - S.Maple, Hard Mast Association	Sawtimber Well	51.3	98	141-170	Some good quality sugar maple. Quality is better in north end. Parts are mostly still poles but it's worth chasing the beech. Has BBD but scale is not all that thick. Trace of aspen in the canopy but in rough shape. Beech and aspen in understory could lead to regeneration problems. Rolling hills.
187	42110 - Planted Red Pine	Poletimber Well	2.8	54	141-170	Has been row thinned last YOY. Lots of 6 stick trees with pretty small crowns. Doesn't look like it responded to well to first thinning.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
188	4130 - Aspen	Poletimber Well	118.6	45	81-110	Decent popple quite a bit of 7 + stick trees. Starting to see some mortality. Some low ground areas mostly south east of 151 along a perennial drain. There are a couple of other small L0 and V0 in the southern part of the stand. Stand line has been dropped into the south into stand 189 (spruce area) for treatment purposes. Stand has more of a balsam fir and red maple component in the southeast.
189	6120 - Lowland Cedar	Poletimber Well	35.0	90	81-110	Dense cedar stand with more black spruce along the edges. Some pockets of blow down that are filling in with balsam fir and spruce.
190	6113 - Lowland Maple	Sawtimber Well	7.0	105	81-110	OPIC - FMD: 3/10/2005 Bottom land Hardwoods. In the flood plain next to the Manistee River. Old Growth & Natural River Act area etc. Sometimes low-land brush. (Grieve)
192	4130 - Aspen	Sawtimber Well	3.7	62	81-110	Nice clone of bigtooth aspen. A few scattered red pine and ash.
193	4111 - S.Maple, Hard Mast Association	Sawtimber Well	255.6	82	81-110	Thinned in 1987 as Donathon Rd HD, 61-164-97-01. South part does not seem ready for another thinning. Northern 1/3 had an average BA of 130 (HM 79%, B 13%, IW 3% RM 5%) Noticed some BBD some trees were whitewashed but that seemed to be just one pocket. BA is variable. Beech stocking is patchy. Also noticed a few scattered ash.
195	4110 - Sugar Maple Association	Sawtimber Well	9.2	78	111-140	Stand is on some rolling terrain. Noticed some BBD.
196	4139 - Aspen, Mixed Deciduous	Sapling Well	8.8	27	Immature	Just reaching pole size. Variable stand. Some parts are more like a young HW stand than aspen.
197	4139 - Aspen, Mixed Deciduous	Sapling Well	5.5	18	Immature	aspen area that was cut when hardwoods were thinned. mixed bag stand, mostly aspen regen but lots of mixed deciduous regen as well OPIC - FMD: 3/4/2005 Cut ten years ago. Not a clean cut. Some residual. Black berry. (Grieve)
198	4130 - Aspen	Sapling Well	27.2	7	Immature	Stand regenerated nicely to mixed aspen and maple. OPIC - FMD: 3/4/2005 Lots of deer use. Saw one oak- leave all oak. Needs a cut. Best route is from south across pvt. Road is being maintained over state with no permit. Can bring timber out to east if Pvt will not allow access. Conversion to a M or O type would be acceptable. (Grieve) Stand final harvested 6/2008 under Taffletown Aspen 078-07-01. KJS
201	6122 - Black Spruce	Poletimber Well	2.7	85	81-110	spruce & cedar swamp with a creek running through it. very wet
203	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	27.7	79	81-110	Some big white pine at north end, creek and flooding influence on entire stand, not manageable OPIC - FMD: 3/4/2005 Creek in stand. (Grieve)



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
205	4133 - Aspen, Mixed Pine	Poletimber Well	21.3	45	81-110	could hold 10 yrs but treat now as the stand in the back is ready to go asap. OPIC - FMD: 3/4/2005 Along M-66. Cut in 20 years. (Grieve)
206	4130 - Aspen	Poletimber Well	5.5	27	Immature	A3 just converting to A5ish a6ish. OPIC - FMD: 3/19/2005 Nice looking stand off of M-66. Will be an A6 in a few years. (Grieve)
802	42110 - Planted Red Pine	Sawtimber Well	24.1	58	141-170	OPIC - FMD: 3/10/2005 Consumers Energy pine reserve (Grieve) Nice plantation. 6-7 stick trees, just recently thinned.
803	42110 - Planted Red Pine	Sawtimber Well	39.8	58	141-170	OPIC - FMD: 3/10/2005 Consumers Energy pine reserve (Grieve) Nice plantation. 6-7 stick trees, just recently thinned.
804	42110 - Planted Red Pine	Sawtimber Well	26.0	58	141-170	OPIC - FMD: 3/10/2005 Consumers Energy pine reserve (Grieve) Nice plantation. 6-7 stick trees, just recently thinned.
805	42110 - Planted Red Pine	Sawtimber Well	9.1	58	141-170	OPIC - FMD: 3/10/2005 Consumers Energy pine reserve (Grieve) Nice plantation. 6-7 stick trees, just recently thinned.



Stand	Cover Type	Acres	Managed Site	General Comments:
2	62259 - Bog (OI)	0.6	No	OPIC - FMD: 2/14/2005 Leatherleaf bog. (Grieve)
3	62259 - Bog (OI)	1.2	No	OPIC - FMD: 2/14/2005 Leatherleaf bog. (Grieve)
4	62259 - Bog (OI)	1.6	No	VO/LO OPIC - FMD: 2/14/2005 Leatherleaf bog. (Grieve)
7	62259 - Bog (OI)	100.4	No	VO with some thicker areas of tamarack and white pine. OPIC - FMD: 2/14/2005 Leatherleaf bog, with scattered 10 ft high white pine through out. Some of the growth on the white pine is very good! If the pine lives through the next high ground water table period, this will end up a treed bog or a white pine stand. (Grieve)
11	623 - Emergent Wetland	0.4	No	
12	62399 - Marsh (OI)	12.5	No	Seasonal ZO, LO, VO, NO mix. OPIC - FMD: 2/15/2005 Old beaver flooding marsh grass. Looks like the beaver have been gone for sometime. Marsh grass, leatherleaf & a tree now and then, along with some water. (Grieve)
13	6299 - Lowland Shrub (OI)	4.1	No	OPIC - FMD: 2/15/2005 Short low-land brush. Lots of beaver activity in this stand. (Grieve)
15	6299 - Lowland Shrub (OI)	6.7	No	South end more E type Q type, not manageable ground. OPIC - FMD: 2/15/2005 More or less a L-type. More L at the north end than at the south end. (Grieve)
20	62241 - Treed Bog (OI)	1.3	No	treed bog, filling in with white pine.
23	6229 - Mixed lowland shrub	0.4	No	Small wet depression.
28	62259 - Bog (OI)	30.5	No	OPIC - FMD: 2/2/2005 Marsh grass & leatherleaf. (Grieve)
29	62241 - Treed Bog (OI)	8.3	No	High water a few years in a row now so will likely turn back to a Treeless bog OPIC - FMD: 2/2/2005 Poor color on WP. Some not alive. And not very many of them. (Grieve)
33	3303 - Mixed Low Density Trees	2.1	No	OPIC - FMD: 2/2/2005 white pine moving in (Grieve)
34	62259 - Bog (OI)	1.8	No	OPIC - FMD: 2/2/2005 Marsh grass & leatherleaf. (Grieve)



Stand	Cover Type	Acres	Managed Site	General Comments:
36	510- Water (OI)	2.5	No	OPIC - FMD: 2/2/2005 Cattails, Marsh & pond. (Grieve)
38	62259 - Bog (OI)	0.7	No	OPIC - FMD: 2/2/2005 Small pot hole pond with marsh grass around it, & leatherleaf around the marsh grass. (Grieve)
39	510- Water (OI)	21.7	No	OPIC - FMD: 2/2/2005 28 Lakes (Grieve)
43	3303 - Mixed Low Density Trees	0.9	No	GO filling in with trees, will likely totally fill in now that aspen around it has been cut. OPIC - FMD: 2/4/2005 Grass, but will be a U-type next time around. White red & jack pine are scattered in the stand. Lots & lots of thornapple coming in. Only about 3 ft high right now. (Grieve)
47	6299 - Lowland Shrub (OI)	0.5	No	OPIC - FMD: OI Stand Year Origin was
48	6299 - Lowland Shrub (OI)	1.8	No	LO brush few trees throughout.
49	6299 - Lowland Shrub (OI)	9.5	No	OPIC - FMD: 2/4/2005 Low land brush with leatherleaf in the center of the stand in places. Road transects stand. (Grieve)
51	6299 - Lowland Shrub (OI)	7.0	No	
52	510- Water (OI)	8.0	No	Shallow pond with patches of emergent vegetation. Deeper at south end.
53	6299 - Lowland Shrub (OI)	9.0	No	OPIC - FMD: OI Stand Year Origin was
56	6299 - Lowland Shrub (OI)	19.5	No	grassy marshy for the most part with some LO and ZO floodings from the beaver. will freeze a skid trail through west side to access stand 57 for a commercial timber sale and habitat management.
60	6299 - Lowland Shrub (OI)	1.9	No	OPIC - FMD: 2/8/2005 Low land brush young aspen on both sides. (Grieve)
65	6229 - Mixed lowland shrub	2.3	No	Lowland shrub and scattered trees along creek. A shallow bluff separates the lowland stand from the adjacent uplands. White pines, balsam fir, and aspen buffer the creek.
71	62399 - Marsh (OI)	10.1	No	Some tag areas as well OPIC - FMD: 2/8/2005 Marsh area along stream. (Grieve)
73	7909 - Nonstocked (OI)	6.7	No	OPIC - FMD: 2/8/2005 County Roads with grass shoulders. (Grieve)



Stand	Cover Type	Acres	Managed Site	General Comments:
75	3102 - Grass	1.3	No	Stand is still very open, let fill in slowly on its own, pine and fir will likely fill in from the west with some aspen along the edge. will function as an opening for a few years. OPIC - FMD: 2/8/2005 We will not be back for 40 or 50 years when the aspen is cut again. This stand was not done last time around because of access. Conversion to a A, or M type would be acceptable. (Grieve). Stand final harvested with Maple Creek Aspen. Left to regenerate naturally low stocking acceptable. (KS)
79	6299 - Lowland Shrub (OI)	2.9	No	OPIC - FMD: 2/8/2005 Low land brush along pipeline. (Grieve)
82	6299 - Lowland Shrub (OI)	2.3	No	OPIC - FMD: 2/8/2005 Low land brush near pipeline. (Grieve)
86	6299 - Lowland Shrub (OI)	2.5	No	
88	6299 - Lowland Shrub (OI)	1.7	No	
109	62259 - Bog (OI)	1.7	No	some ZO some Bog. planted trees around area to try to stabilize things and minimize runoff...so far trees look great around this small wetland. OPIC - FMD: 3/17/2005 Mud bog ORV problem. (Grieve)
113	3209 - Upland Shrub (OI)	6.8	No	OPIC - FMD: 3/16/2005 Scattered cherry (Grieve)
120	3209 - Upland Shrub (OI)	1.0	No	OPIC - FMD: 3/16/2005 Scattered cherry (Grieve)
124	330 - Low-Density Trees	3.6	No	Scattered cherry (2-6" dbh) and a few red pine and white pine seedlings.
127	330 - Low-Density Trees	2.5	No	Filling in, mostly with cherry (4-6" dbh), a 22" elm and Rubus. Contains spotted knapweed.
132	3303 - Mixed Low Density Trees	5.8	No	Scattered maple, cherry and aspen. OPIC - FMD: 3/15/2005 Old apple trees. NW part of stand looks like it may have been an old camp or other historical site. Check old photo's This may be the site of the Jam 1 logging camp. I will look into it further. (Grieve) 11/8/1995 POSSIBLE PRESCRIBED BURN (Byers)
134	6239 - Mixed Emergent Wetland	9.8	No	Beaver flooding.
135	6299 - Lowland Shrub (OI)	7.7	No	Beavers have this area all messed up.
138	6239 - Mixed Emergent Wetland	12.0	No	beaver dam. Very old, but looks like it may still have been active in the past 5 to 10 years. Take that back. Still active. Lodge is occupied, but water is not level with dam.



Stand	Cover Type	Acres	Managed Site	General Comments:
144	3209 - Upland Shrub (OI)	8.2	No	open area filling in with white pine and cherry. OPIC - FMD: 3/16/2005 Scattered cherry. (Grieve) 11/8/1995 POSSIBLE PRESCRIBED BURN (Byers)
149	3303 - Mixed Low Density Trees	0.8	No	OPIC - FMD: 3/16/2005 (Grieve)
151	6229 - Mixed lowland shrub	3.0	No	
154	62259 - Bog (OI)	4.2	No	OPIC - FMD: 3/17/2005 Leatherleaf bog (Grieve)
158	510- Water (OI)	2.2	No	OPIC - FMD: PART OF LONG LAKE
165	6299 - Lowland Shrub (OI)	2.1	No	OPIC - FMD: 3/15/2005 L-type along river (Grieve)
166	6299 - Lowland Shrub (OI)	2.0	No	OPIC - FMD: 3/15/2005 L-type along river (Grieve)
167	6299 - Lowland Shrub (OI)	1.0	No	OPIC - FMD: 3/15/2005 L-type along river (Grieve)
171	6224 - Treed Bog	1.7	No	Scattered white pine seeding in.
180	6299 - Lowland Shrub (OI)	0.5	No	OPIC - FMD: 3/10/2005 Some E-type logs, but mostly L. Island in the Manistee. I believe this is in state ownership as we own both sides of the river at this point. (Grieve)
194	3303 - Mixed Low Density Trees	28.1	No	Some pockets of big wolfy sugar maple, mostly open but filling in. OK to burn if wildlife wants to keep open OPIC - FMD: 3/10/2005 Big open field & scattered sugar maple & cherry. (Grieve)
199	3301 - Low Density Deciduous Tree	5.9	No	OPIC - FMD: 3/4/2005 Scattered maple logs & cherry poles. (Grieve)
200	62399 - Marsh (OI)	4.6	No	OPIC - FMD: 3/4/2005 Old beaver flooding, now is marsh grass & old snags. Good property line through marsh. (Grieve)
204	6299 - Lowland Shrub (OI)	8.3	No	half LO and half NO. OPIC - FMD: 3/4/2005 Old beaver flooding, now is marsh grass & old snags. Good property line through marsh. (Grieve)
210	510- Water (OI)	3.0	No	OPIC - FMD: 3/8/2005 Manistee River (Grieve)



Stand	Cover Type	Acres	Managed Site	General Comments:
211	510- Water (OI)	1.0	No	OPIC - FMD: 3/8/2005 Manistee River (Grieve)
212	510- Water (OI)	13.1	No	OPIC - FMD: 3/8/2005 Manistee River (Grieve)
213	510- Water (OI)	8.3	No	OPIC - FMD: 3/8/2005 Manistee River (Grieve)
214	510- Water (OI)	0.3	No	OPIC - FMD: 3/8/2005 Manistee River (Grieve)
401	330 - Low-Density Trees	1.2	No	Opening that is filling in with open-grown white pine and black cherry.
403	31029 - Grass (OI)	0.6	No	OPIC - FMD: 2/15/2005 Looks like old blind. Very well built hunting blind in this stand. Will turn over to CO's (Grieve)
404	330 - Low-Density Trees	1.0	No	Scattered open-grown white pine, black cherry, red maple poles with bracken fern underneath.
405	3303 - Mixed Low Density Trees	4.7	No	OPIC - FMD: 2/16/2005 Looks like old landing. Some Balsam fir moving in. Lots of blackberries. New very well built hunting blind on east end of stand. Left note telling owners to remove. Also gave information to C.O. (Grieve)
406	31029 - Grass (OI)	2.2	No	OPIC - FMD: 3/3/2005 Grass opening with lots of scattered maple in clumps. (Grieve)
410	31029 - Grass (OI)	1.0	No	Used as landing for surrounding sale OPIC - FMD: 2/2/2005 Grass with scattered white pine & old stumps. (Grieve)
411	31029 - Grass (OI)	0.7	No	OPIC - FMD: 2/2/2005 Grass with scattered white pine & old stumps. (Grieve)
416	31029 - Grass (OI)	1.8	No	OPIC - FMD: 2/8/2005 Pipeline. (Grieve)
417	31029 - Grass (OI)	4.7	No	OPIC - FMD: 2/8/2005 Pipeline. Sometimes grass, sometimes L-type (Grieve)
420	31029 - Grass (OI)	4.5	No	OPIC - FMD: 2/8/2005 Pipeline. Sometimes grass, sometimes L-type (Grieve)
421	31029 - Grass (OI)	0.8	No	OPIC - FMD: 2/8/2005 Starting to fill in. (Grieve)
426	31029 - Grass (OI)	1.0	No	OPIC - FMD: 3/16/2005 Almost a U-type. (Grieve)
427	330 - Low-Density Trees	1.3	No	Scattered white pines and some cherry trees. Grass and ferns underneath.



Stand	Cover Type	Acres	Managed Site	General Comments:
428	3303 - Mixed Low Density Trees	31.2	No	small restoration project done around the VO/ZO at ne end. planted red pine, looks to be working. OPIC - FMD: 3/16/2005 Very bad ORV problem in NE part of stand. (Grieve)
429	3303 - Mixed Low Density Trees	0.9	No	OPIC - FMD: 3/16/2005 Next to open privet & A3 aspen (Grieve)
430	3302 - Low Density Conifer Trees	1.1	No	OPIC - FMD: 3/17/2005 With scattered white pine. (Grieve)
431	31029 - Grass (OI)	0.5	No	OPIC - FMD: 3/17/2005 Looks like old landing. (Grieve)
433	31029 - Grass (OI)	1.9	No	Contains spotted knapweed.
434	31029 - Grass (OI)	1.1	No	OPIC - FMD: 3/16/2005 Almost a U-type. (Grieve)
435	31029 - Grass (OI)	0.8	No	OPIC - FMD: 3/16/2005 Grass turning to U-type. (Grieve)
436	31029 - Grass (OI)	14.8	No	OPIC - FMD: 4/26/2005 Power line (Grieve)
440	31029 - Grass (OI)	4.5	No	OPIC - FMD: 3/8/2005 Scattered cherry, elm, aspen clones & lots of knapweed. (Grieve)
441	31029 - Grass (OI)	0.3	No	OPIC - FMD: 3/8/2005 On banks of Manistee River. Some spotted knapweed. (Grieve)
442	330 - Low-Density Trees	0.7	No	Isolated upland next to the river. Scattered white pines seeding in with a few beech along the river.
444	31029 - Grass (OI)	1.1	No	OPIC - FMD: 3/10/2005 Old Landing. (Grieve)
445	31029 - Grass (OI)	2.6	No	OPIC - FMD: 3/8/2005 Power line R/W (Grieve)