



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61104

Entry Year 2019

Acreage: 1,905

County Kalkaska

Management Area: Grayling Ice Contact

Revision Date: 2017-06-12

Stand Examiner: Kelly Standerfer

Legal Description:

T28N-R05W-Sec. 16,17,18,19 & 20

Identified Planning Goals:

Located in the Grayling Ice Contact Management Area which includes Kalkaska, Crawford and Otsego counties and contains 55,348 acres of state forest. Management in the Grayling Ice Contact management area (MA) will emphasize continuing to balance the age class of aspen on suitable sites and thinning the northern hardwoods, balancing age classes of red pine and jack pine, and regenerating the aging oak resource. Management will strive to sustainably produce various timber products, enhance game and non-game wildlife habitat, protect areas of unique character, such as the historic Deward Tract, and provide for forest-based recreational uses. With about 3% of the MA being lowland, management activities will be minimally constrained. Expected trends within the next decade are increased recreational pressure, managing oil and gas development, introduced pests and diseases and the difficulty in regenerating oak. For this compartment there is a significant portion of the hardwood that needs to have the beech resource addressed as it is nearing the white washed stage of beech bark disease. Maple treatments will likely be staggered by 3-5 years as needed to help with year of entry workload goals and spreading disturbance in the area.

Soil and topography:

Ranges from Blue Lake Loam, Emmet, Rubicon, Kalkaska Sands and Greenwood Peat. Generally rolling terrain with some steeper slopes.

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

Area is mixed blocks of state and private. Residential/vacation home development around lakes.

Unique Natural Features:

This compartment falls within landtype associations (LTAs) 3121, 5149, and 5211 of sub-subsection VII.2.2. LTA 5211, which is found in the northwestern portion of the compartment, is a pitted outwash plain with excessively well drained sand. For a brief description of the vegetation circa 1800, current land cover, and prevalent disturbance of LTA 5211 please refer to the comments for Compartment 42. LTA 3121, which occurs throughout the compartment, is characterized by large irregular ice-contact ridges, few kettle lakes, and well drained loamy sand. Northern hardwood forests of beech and sugar maple occurred on 73% of this LTA circa 1800. Hemlock and white pine probably occurred in low numbers throughout most of these hardwood forests, and these two conifers also co-dominated forests on the remainder of the LTA. Specifically, hemlock, was co-dominant with either beech or white pine on about 19% of the LTA. In addition to its association with hemlock, white pine also occurred in mixed forests with red pine on about 6% of the LTA. Northern hardwood forests remain the dominant cover type on LTA 3121, covering about 70% of its surface. However, most of these second growth forests lack the structural complexity of mature northern hardwoods and, in addition, the conifer component has been greatly reduced or eliminated. Conifer dominated forests, once common on this LTA, have been essentially eliminated, whereas aspen/white birch forests now cover about 19% of the area. LTA 5149, which occurs in the southeastern portion of the compartment, is a broad outwash plain with very poorly drained peat or muck. Circa 1800, almost 70% of the LTA supported conifer-dominated wetlands (7% of this area was bog and muskeg). Forests of white pine with red pine or hemlock collectively covered another 11% of the LTA and occurred on better drained, sandy inclusions often within the extensive peatlands. In addition, both white pine and hemlock were probably also important components of the beech/sugar maple forests that covered another 6% of the LTA. The remainder of the LTA supported small amounts of pure hemlock forests, alder/willow thickets, marshes, and aspen/white birch forests. Lowland-conifer forests, which once covered almost 70% of the LTA, now occur on only 22% of the landtype. Conversely, lowland hardwood swamps and shrub/scrub wetlands, which did not occur here circa 1800, now cover about 16% and 15% of the LTA, respectively. Further, aspen/white birch forests have increased from about 1% to 21% cover today. Pine-dominated forests persist on only about 6% of the LTA and northern hardwoods on another 5%.

Archeological, Historical, and Cultural Features:

None listed

Special Management Designations or Considerations:

There are no special designations for this Compartment.

Watershed and Fisheries Considerations:

Indian Lake is the only large waterbody in this compartment. For treatments near Indian Lake or those near bogs or ponds in the compartment, MDNR BMPs should be adhered to.

Wildlife Habitat Considerations:

The majority of this compartment is underlain by steep, broken ice contact ridges (LTA 3121). The sandy soils found on these ridges have moderately low fertility and low available moisture. Even though much of this area was probably once covered with various northern hardwood communities, the dry soils did allow occasional wildfires on this landscape. Currently, aspen and northern hardwood stands co-dominate the compartment. The western edge of the compartment just begins to level off onto a pitted outwash plain (LTA 5211). This outwash plain consists of sandy, excessively drained soils. Northern hardwood and aspen communities are found on this land formation within compartment 104. A small inclusion of a narrow outwash channel (LTA 5521) is located in the south central part of the compartment. Again this formation consists of sandy, dry soils, but does have occasional patches of poorly drained muck, which in this compartment support small wet meadows.

Aspen harvests should be designed to mimic wildfires of various intensities, when possible. This creates a mosaic of age classes and increases structural diversity within an area. The creation of dead and downed logs should be incorporated into timber prescriptions within to provide habitat for various wildlife including ruffed grouse, white-footed mice, and redbelly snakes. Standing dead timber is usually left during harvest operations unless deemed a safety hazard. Other species benefiting from continued management and age class diversification of aspen include deer, yellow-billed cuckoos, and snowshoe hares. Considerations for northern hardwood stands include maintaining tree species diversity, the protection of den/nesting trees & snags, coarse woody debris (CWD), and maintaining a scattering of mast-producing trees/shrubs. This will insure use by many species of wildlife. Examples of species include scarlet tanager, raccoon, broad-winged hawk, wild turkey, and white-tailed deer.

Many wildlife species rely on small forest openings and upland shrubland. These openings provide grassy nest sites, plentiful seeds and insects, and cover. Examples of species include wild turkeys, northern flicker, eastern chipmunk, and blue racer. Upland shrub stands are important because they contain many berry-producing trees and shrubs. Degraded sites (i.e. abandoned well sites) should be considered for revegetating to herbaceous cover. Other opening maintenance proposed for this compartment includes prescribed fire, hand felling, and mowing.

Mineral Resource and Development Concerns and/or Restrictions

There is no known metallic mineral potential in this region. No known active or former sand/gravel pits are located in the area, but there is good potential within the compartment. This compartment is located in the Niagaran reef trend with many producing wells. In addition, three active gas storage fields are located just to the northwest. There is active Antrim Shale gas production to the north and east. Niagaran wells in the area report gas shows in the Antrim, and the Antrim here is at similar depths to producing Antrim wells to the east. Therefore, there does appear to be Antrim potential within the compartment. All State-owned mineral rights are currently leased for oil and gas development.

Vehicle Access:

Many County maintained roads along with forest trail and oil development roads are within this area.

Survey Needs:

Most needed corners look to be already established.

Recreational Facilities and Opportunities:

There are many recreational facilities within this compartment including: Public access site located at Indian Lake, Blue Bear Snowmobile Trail (Trail # 76), Kalkaska 50 inch ORV Trail, which is also designated as the Michigan Cross Country Cycle Trail, ORV Route for 72 inch vehicles, and the North Country trail, which is also shared with the Iron Belle non-motorized trail. Policy and Procedure 32.22-01 (Best Management Practices for Forest and Wildlife Management Adjacent to Recreational Trails) should be considered if proposed forest treatments impact any of these recreational facilities. (T.M.N. 1/11/16).

Fire Protection:

This compartment is protected by the Blue Lake Twp. Fire Dept., and DNR protection is from the Kalkaska Field Office. This area is fairly heavy to recreation, with several lakes in the area which are quite developed. This compartment is mostly hardwood, so the threat of large fire is not too great. While there are lots of structures, most are located directly adjacent to the many lakes, so urban interface is not too much of a threat.

Additional Compartment Information:

The following reports from the Inventory are attached:

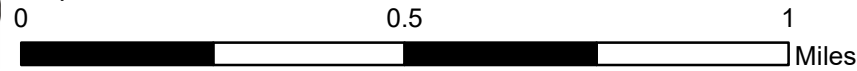
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

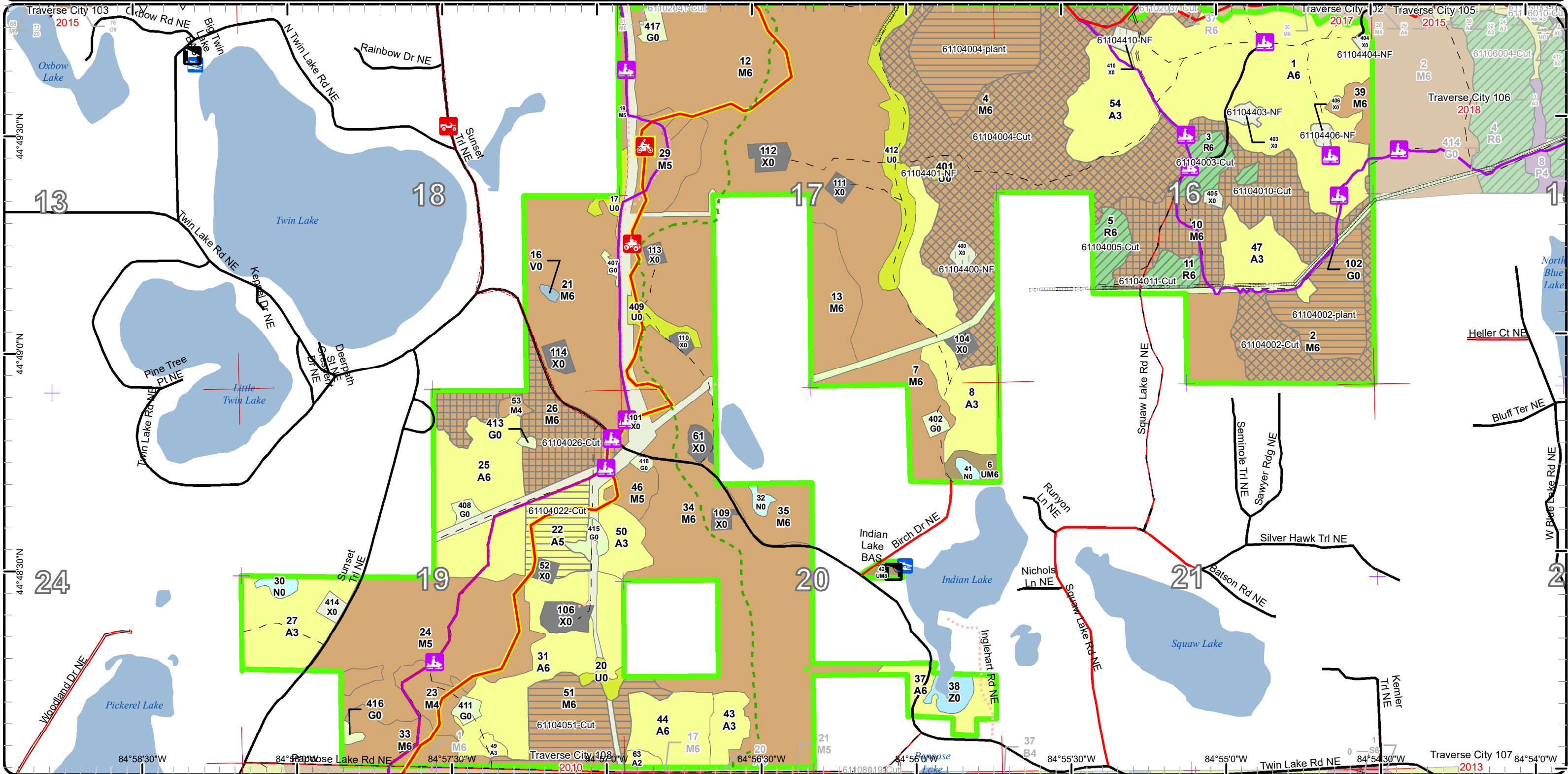
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatment Map

Compartment: 104
 T28N-R05W-Sec. 16,17,18,19 & 20
 County: Kalkaska
 Unit: Traverse City
 Mgmt Area: Grayling Ice Contact
 YOE: 2019
 Acres: 1904.6 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 8/7/2017
 Map Phase: Post-Review

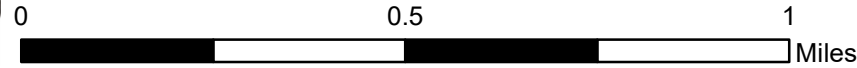
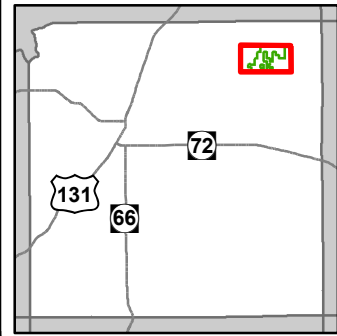


- Miris Corners
- Remonumented Section Corners
- ◇ Field Grade GPS Corners
- ▭ Counties
- ♻ Toilet
- 🚤 Boating Access Site
- 🚲 MCCCT Trails
- 🛵 ORV Trails
- 🛵 ORV Routes
- 🛷 Snowmobile Trails
- Designated Hiking Trails
- Designated ATV
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Closed
- Streams
- Lakes and Rivers All
- Pipeline
- ⚡ Powerline
- ▭ Compartment Boundary
- ▭ Selection (Group, Single Tree)
- ▭ Clearcut (w/Reserves)
- ▭ Opening Maintenance
- ▭ Thinning (Crown, Low, Systematic)
- ▭ Seed Tree (w/Reserves)
- 411 - Northern Hardwood
- 413 - Aspen
- 421 - Planted Pines
- 430 - Upland Mixed Forest
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 330 - Low Density Trees
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 790 - Other Bare/Sparsely Vegetated
- Lakes

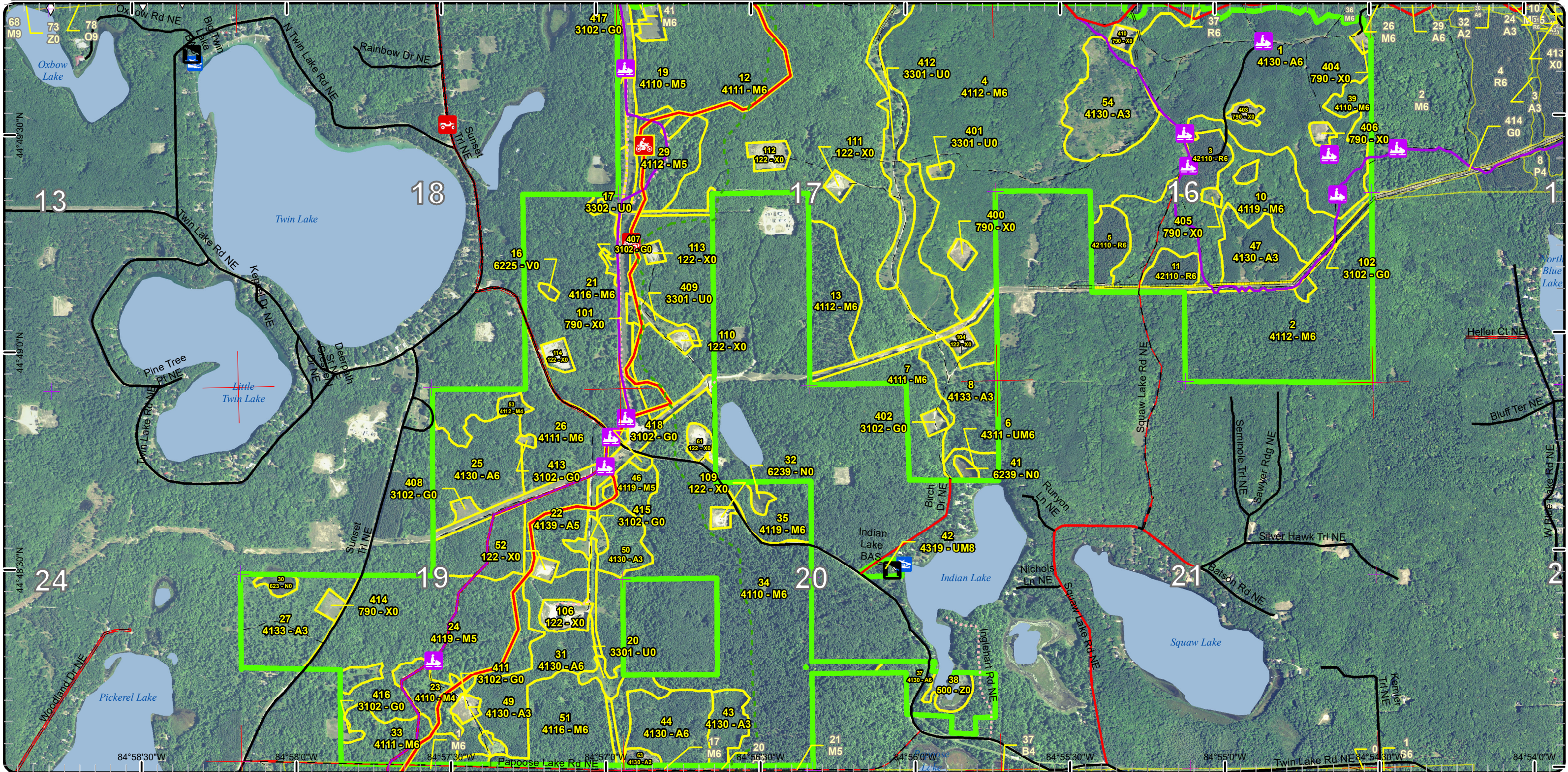


Stand Boundary Map

Compartment: 104
 T28N-R05W-Sec. 16,17,18,19 & 20
 County: Kalkaska
 Unit: Traverse City
 Mgmt Area: Grayling Ice Contact
 YOE: 2019
 Acres: 1904.6 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 8/7/2017
 Map Phase: Post-Review

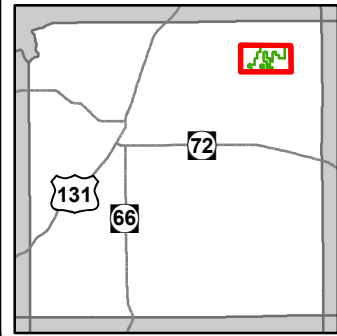
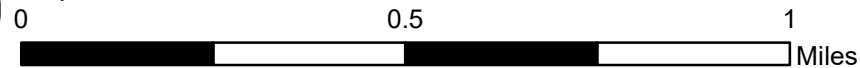


- Miris Corners
- + Remonumented Section Corners
- Field Grade GPS Corners
- Counties
- Toilet
- Boating Access Site
- MCCCT Trails
- ORV Trails
- ORV Routes
- Snowmobile Trails
- Designated Hiking Trails
- Designated ATV
- Designated ORV Route
- Designated Snowmobile Trails
- Michigan Cross Country Cycle Trail (MCCCT)
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- Closed
- Streams
- Lakes and Rivers All
- Pipeline
- Compartment Boundary
- Stand Boundaries
- 411 - Northern Hardwood
- 413 - Aspen
- 421 - Planted Pines
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- 622 - Lowland Shrub
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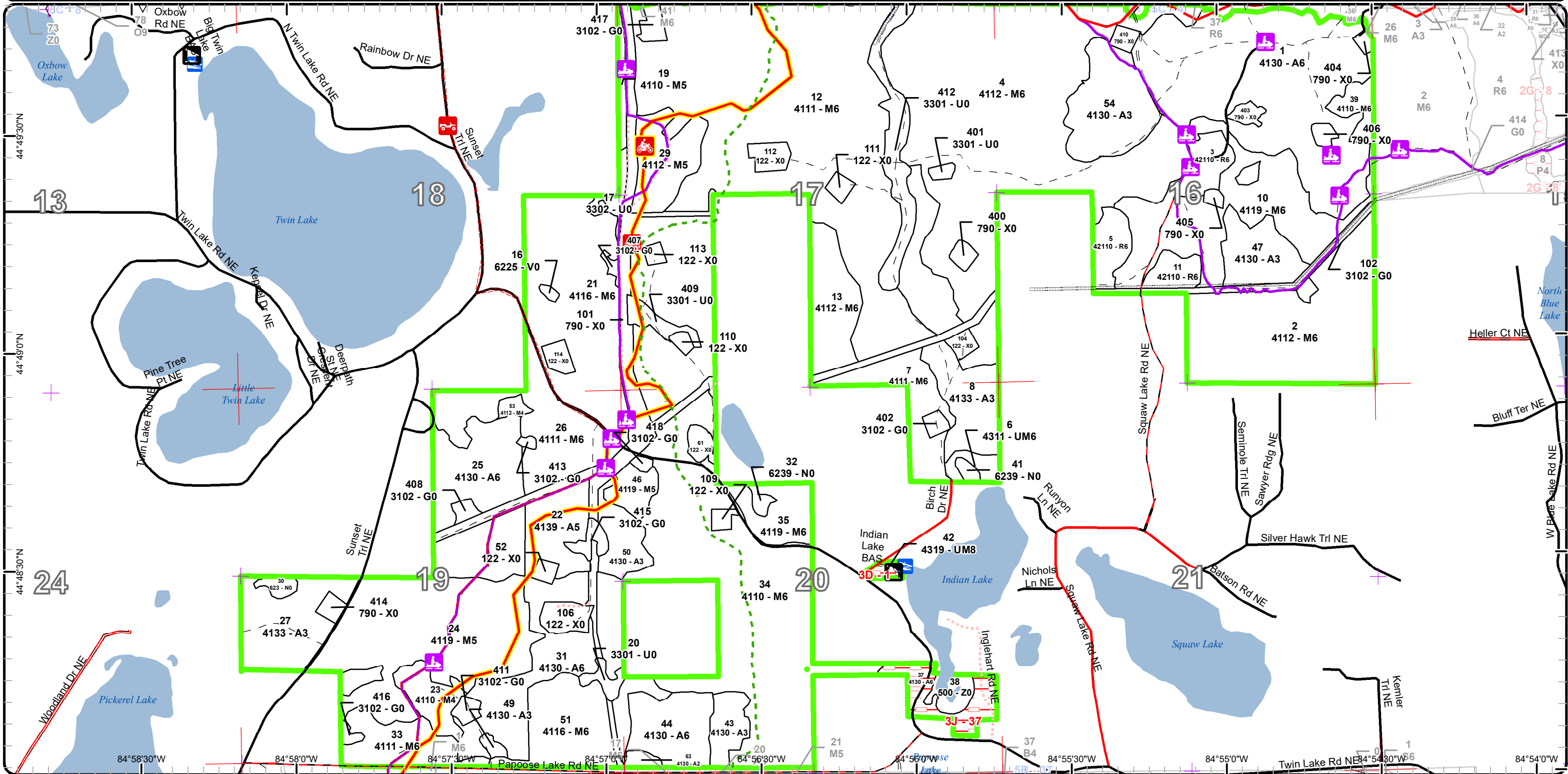


Special Conservation Areas & Site Conditions Map

Compartment: 104
 T28N-R05W-Sec. 16,17,18,19 & 20
 County: Kalkaska
 Unit: Traverse City
 Mgmt Area: Grayling Ice Contact
 YOE: 2019
 Acres: 1904.6 GIS Calculated
 Examiner: Kelly Standerfer
 Map Revised: 8/7/2017
 Map Phase: Post-Review



- Miris Corners
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- Paved Roads
- County Gravel Roads
- Gravel Roads
- County Poor Dirt Roads
- Poor Dirt Roads
- - - Closed
- Streams
- Lakes and Rivers All
- Pipeline
- Compartment Boundary
- Unavailable
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- Stand Boundaries
- Cold Water Streams
- Cold Water Lakes



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	142	0	22	183	80	21	16	0	0	0	0	0	0	0	0	0	0	464
Bare/Sparsely Vegetated	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Herbaceous Openland	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Low-Density Trees	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Marsh	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Northern Hardwood	0	0	0	0	0	17	82	53	798	171	107	0	0	0	0	0	0	0	1226
Red Pine	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	30
Upland Mixed Forest	0	0	0	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	8
Urban	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Water	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Total	177	142	0	22	183	102	134	69	798	174	107	0	0	0	0	0	0	0	1904



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2019

Compartment 104
Total Compartment Acres: 1,905

Acres of Harvest

Commercial Harvest - 495
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	21	0	0	0	0	0	0	0	0	21
Northern Hardwood	121	209	0	114	0	0	0	0	0	444
Red Pine	0	0	0	0	0	31	0	0	0	31
Total	142	209	0	114	0	31	0	0	0	495

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	495	0	0	0	0	0	0	10	0	505
Next Step	0	161	81	0	0	81	479	0	0	802
Total	495	161	81	0	0	81	479	0	10	1307



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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
2 61104002-Cut	35.9	4112 - Maple, Beech, Cherry Association	Poletimber Well	94	51-80	Harvest	Group Selection	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription remove the bulk of the beech... ok to save some.. have not seen any without BBD :-/ ok to take out some high risk maple as well.
Specs:

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

Acceptable mixed deciduous and mixed conifer, expect to push to ironwood and beech but some maple here and there.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

2 61104002-plant	33.3	4112 - Maple, Beech, Cherry Association	Poletimber Well	94	51-80	Harvest	Clearcut	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription highly variable stand. some solid beech and some nicer pole areas. advanced beech and ironwood regen in much of stand. beech is in rough shape with BBD. stand to north had most of the beech removed. remove most beech and aspen from this stand as well. likely spec them out and mark some with orange X to save. thin the rest. areas with decent stem quality leave a bit thicker and gnarly areas ok to cut a bit harder. OK to poke a few holes in around aspen as well. save most or all pine and oak. for the planting area final harvest and chip all trees over 2" and herbicide if needed, roller chop if needed and trench and plant to red pine.
Specs:

Next Step Pesticide, Skidder/Mechanical; SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant
Treatments:

Acceptable mixed deciduous and mixed conifer, expect to push to ironwood and beech but some maple here and there.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

3 61104003-Cut	12.1	42110 - Planted Red Pine	Poletimber Well	56	141-170	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription take out poor formed trees and work on crown spacing.
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



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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
4 61104004-Cut	172.8	4112 - Maple, Beech, Cherry Association	Poletimber Well	76	111-140	Harvest	Group Selection	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription highly variable stand. some solid beech and some nicer pole areas. advanced beech and ironwood regen in much of stand. beech is in rough shape with BBD. stand to north had most of the beech removed. remove most beech and aspen from this stand as well. likely spec them out and mark some with orange X to save. thin the rest. areas with decent stem quality leave a bit thicker and gnarly areas ok to cut a bit harder. OK to poke a few holes in around aspen as well. save most or all pine and oak.

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

Acceptable mixed aspen, deciduous and conifer
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

4 61104004-plant	47.4	4112 - Maple, Beech, Cherry Association	Poletimber Well	76	111-140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription highly variable stand. some solid beech and some nicer pole areas. advanced beech and ironwood regen in much of stand. beech is in rough shape with BBD. stand to north had most of the beech removed. remove most beech and aspen from this stand as well. likely spec them out and mark some with orange X to save. thin the rest. areas with decent stem quality leave a bit thicker and gnarly areas ok to cut a bit harder. OK to poke a few holes in around aspen as well. save most or all pine and oak. for the planting area final harvest and chip all trees over 2" and herbicide if needed, roller chop if needed and trench and plant to red pine.

Next Step Pesticide, Skidder/Mechanical; SitePrep, Roller Chopping; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr);
Treatments: Monitoring, Artificial Regen(3yr)

Acceptable due to amount of beech mortality and beech regen will clearcut and replant to red pine and hopefully nurse along mixed hardwoods over the next 30-50 years as the red pine in managed.

Other
Comment:

Proposed Start Date: 10/01/2018

5 61104005-Cut	10.8	42110 - Planted Red Pine	Poletimber Well	56	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription row thinned last YOY, lightly mark again this year targeting poor formed trees and for desired BA to keep trees growing, row thin was late :-/
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



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
10	61104010-Cut	69.4	4119 - Mixed Northern Hardwoods	Poletimber Well	76	81-110	Harvest	Seed Tree with Retention	4119 - Mixed Northern Hardwoods	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription variable stand, some areas that are very thick with beech and some nice pole areas... the bulk is clumpy/wolfy not great stem quality. some maple regen areas, try to expand openings around them. OK to poke some holes in where aspen present as well. green tree leave variable densities... cut most or all beech, aspen and ironwood, green tree down to 0-50 BA. pole areas can be left a bit thicker but they are few and far between. save most or all white pine and uncommon species.

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

Acceptable mixed deciduous and mixed conifer
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

11	61104011-Cut	7.6	42110 - Planted Red Pine	Poletimber Well	56	111-140	Harvest	Crown Thinning	4211 - Planted Red Pine	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription take out poor formed trees, some pretty thick yet and some wont have much coming out... more of a poor form removal but work on crown spacing as well.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

22	61104022-Cut	21.0	4139 - Aspen, Mixed Deciduous	Poletimber Medium	50	51-80	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription some areas more M3/M4... some aspen falling over and some basswood and maple over mixed regen. cut all trees over 3" dbh now trying to protect advanced regen where present. should be a mixed maple and aspen post harvest

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

Acceptable expect soem to push to aspen and some understory maple to be released, will be mixed aspen, mixed deciduous and mixed conifer.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

26	61104026-Cut	45.0	4111 - S.Maple, Hard Mast Association	Poletimber Well	70	81-110	Harvest	Seed Tree with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription scattered to clumpy to thick... variable stand. quite a bit of beech in areas. green tree variable residual, not very nice quality. save most or all pine and oak.

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

Acceptable west end will push to aspen, east will likely be a mixed aspen, deciduous and mixed conifer.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



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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
51 61104051-Cut	39.9	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	67	111-140	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription some areas pretty thick with aspen, some blow down as well. might be a good hardwood/aspen area to final harvest to restart all species mixed together. most hardwood in the area has been select cut with mixed results. OK to green tree leave some scattered trees or mark some islands where more sugar maple for retention. small VO within stand that would also be a good retention island area. Save some or all pine and save some or all oak, only saw a few stems.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen with mixed deciduous and mixed conifer.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

400 61104400-NF	2.4	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/ Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

401 61104401-NF	1.6	3301 - Low Density Deciduous Trees	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/ Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



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
403	61104403-NF	2.6	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

404	61104404-NF	1.4	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

406	61104406-NF	2.1	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary
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Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



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
410	61104410-NF	2.4	790 - Other Bare/Sparsely Vegetated	Nonstocked		Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	3105 - Mixed Upland Herbaceous		Draft Field Boundary

Habitat Cut: No

Site Condition:

Prescription Degraded old well site. Remove exotics either with herbicide or mechanically. Seed to site appropriate native grasses for wildlife food and cover, or Forest Cert. approved annuals/perennials. Consider also seeding in native forbs.
Specs: Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Fertilize plantings and protect with wire cages or tubex.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 507.7

Report 4 – Site Conditions

Traverse City Mgt. Unit
Kelly Standerfer : Examiner

Compartment: 104
Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	3D		3J	
		With Condition	Not Available					
463	448	0	16	Aspen				16
61	61	0	0	Bare/Sparsely Vegetated				
1	1	0	0	Bog				
34	34	0	0	Herbaceous Openland				
37	37	0	0	Low-Density Trees				
7	7	0	0	Marsh				
1227	1227	0	0	Northern Hardwood				
31	31	0	0	Red Pine				
8	5	0	3	Upland Mixed Forest	3			
30	30	0	0	Urban				
6	6	0	0	Water				
1,905	1,886		18	Total Forested Acres	3			16
	99%		1%	Relative Percent				

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3D: Recreational / Scenic values	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
37	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

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



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	Poletimber Well	130.3	35	51-80	likely break stand size up next YOE. to early this YOE. OPIC - FMD: soon to convert to A6 A4A2M2
2	4112 - Maple, Beech, Cherry Association	Poletimber Well	90.5	94	51-80	quite a bit of beech left post harvest (some areas 80% beech and some none, variable) beech is in rough shape and i think there is enough left to justify another entry. likely best to use skid trail to north again as opposed to using snow trail as its is super sandy :-/ spec beech out of stand and leave the bulk of the rest, ok to cut some other species as well if needed for access. OPIC - FMD: Rolling to steep terrain may limit parts of stand to harvet. Snowmobile trail only good access. Stand was select cut in 2012 'Deer Shack Hwds'. Built a road in through stand 47 for access, has been temporarily blocked (sc).
3	42110 - Planted Red Pine	Poletimber Well	12.1	56	141-170	row thinned last YOE... thin again focusing on poor formed trees and crown spacing.
4	4112 - Maple, Beech, Cherry Association	Poletimber Well	220.3	76	111-140	highly variable stand. some solid beech and some nicer pole areas. advanced beech and ironwood regen in much of stand. beech is in rough shape with BBD. stand to north had most of the beech removed. remove most beech and aspen from this stand as well. likely spec them out and mark some with orange X to save. thin the rest. areas with decent stem quality leave a bit thicker and gnarly areas ok to cut a bit harder. OK to poke a few holes in around aspen as well.
5	42110 - Planted Red Pine	Poletimber Well	10.8	56	111-140	thin with nearby red pine stands. OPIC - FMD: 12/14/2010 stand was thinned with 'Handle Bar Pine.' Every 3rd tree was designated for cutting (Crugier).
6	4311 - Pine, Aspen Mix	Poletimber Well	5.1	45	81-110	pretty thick with pine in areas especially area south of pipeline. filling back in with maple and aspen and some beech and ironwood. thick W6 area at south end around flooded area. OPIC - FMD: Stand was clearcut 'Indian Lake Aspen' 61-063-09-01. Stand is regenerating ok some areas are more spars where there was more of a maple component (10/2/12sc). A5M4M7- buffer marsh aea in southern part of stand. Stand should regenerate to Aspen Mixed Hdwd, any combination of Aspen and Mixed Hdwd will be acceptable. A3-A2 -M3-M2-M1. Retention can be scattered trees or pockets. Dkj 12/2007
7	4111 - S.Maple, Hard Mast Association	Poletimber Well	25.0	75	111-140	south end has some pretty thick beech n aspen, some pretty sparse along pipeline to north. remove bulk of the aspen and beech and mark rest down to 50-90BA depending on stem quality. mostly east facing slope few areas are pretty steep. OPIC - FMD: Stand is variable with pockets of higher basal area



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
8	4133 - Aspen, Mixed Pine	Sapling Well	45.4	5	Immature	<p>pretty thick with pine in areas especially area south of pipeline. filling back in with maple and aspen and some beech and ironwood. thick W6 area at south end around flooded area.</p> <p>OPIIC - FMD: Stand was clearcut 'Indian Lake Aspen' 61-063-09-01. Stand is regenerating ok some areas are more spars where there was more of a maple component (10/2/12sc). A5M4M7- buffer marsh aea in southern part of stand. Stand should regenerate to Aspen Mixed Hdwd, any combination of Aspen and Mixed Hdwd will be acceptable. A3-A2 -M3-M2-M1. Retention can be scattered trees or pockets. Dkj 12/2007</p>
10	4119 - Mixed Northern Hardwoods	Poletimber Well	69.4	76	81-110	<p>variable stand, some areas that are very thick with beech and some nice pole areas... the bulk is clumpy/wolffy not great stem quality. some maple regen areas, try to expand openings around them. OK to poke some holes in where aspen present as well.</p> <p>OPIIC - FMD: SGG 11/13/2007-Treatment period for M6 stand is 1 (10-19 years).</p>
11	42110 - Planted Red Pine	Poletimber Well	7.6	56	111-140	<p>right at the edge of needing a thin. give light hair cut now with near by red pine to remove defect and to keep trees growing.</p> <p>OPIIC - FMD: 12/14/2010 stand was thinned with 'Handle Bar Pine.' Every 3rd tree was designated for cutting (Crigier).</p>
12	4111 - S.Maple, Hard Mast Association	Poletimber Well	284.7	75	111-140	<p>some nicer pole areas and some wolffy beech areas. Most of the stand is ready for a light thin however holding 3-7 years to treat stand as needed to spread the disturbance out in this area. Most should hold good 3-7 years, may loose some beech but stand to east is higher priority. mark stand down to 90-120 BA, cut most of the beech, ok to mark a few to save but remove the bulk so we dont get beech thickets.</p>
13	4112 - Maple, Beech, Cherry Association	Poletimber Well	26.6	75	51-80	<p>stand pretty open for the most part, not much wind damage. fair amount of beech left post harvest in areas.</p> <p>OPIIC - FMD: Stand may have access problems with pipeline and rolling terrain.</p> <p>Stand was select cut in the fall of 2014 (Last Push Hwds 61-107-09-01). Cutting and skidding went well. They built a temporary road into the northeast part of the stand, has been closed. Moderate to poor quality hardwood stand. Check for wind damage after 8/2/2015 storm.</p>
19	4110 - Sugar Maple Association	Poletimber Medium	4.5	67	51-80	<p>narrow strip between pipeline and private... some white pine, mostly clumpy maple. likely leave for good as the amount of time to run the blue line would barely be worth the timber value.</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	80.2	57	51-80	<p>scattered big clumpy maple and beech intermixed with big aspen, over M3 areas of nice sugar maple, some beech and ironwood as well. some areas with decent stems and a bit thicker. looks to be a pretty well established walking trail/ ORV trail through stand from property to the north and west. would likely hold ok 10 years but may be best to seed tree now leaving a few nicer maples, cut all aspen, protect as much of the advanced regen as possible. green tree leave ~10BA or less in well established regeneration areas and in aspen area so the maple and regenerating aspen are free to grow and we will not have to re enter the stand until understory is merchantable. nicer areas without regen or aspen can be left a bit thicker to help break it up visually and structurally. Buffer on small VO and scattered to clumpy trees will be retention.</p> <p>OPIC - FMD: Variable stand with spots of higher and lower ba - rolling terrain. SGG 11/13/2007-Treatment period for A5 stand is 2 (20-29 years).</p>
22	4139 - Aspen, Mixed Deciduous	Poletimber Medium	21.0	50	51-80	<p>some areas more M3/M4... some aspen falling over and some basswood and maple over mixed regen. cut all trees over 3" dbh now trying to protect advanced regen where present. should be a mixed maple and aspen post harvest</p> <p>OPIC - FMD: SGG 11/13/2007-Treatment period for A5 stand is 2 (20-29 years).</p>
23	4110 - Sugar Maple Association	Poletimber Poor	16.5	45	1-50	<p>south end filling in pretty thick, might be a good stand to try to maintain as a more open complex as this area does not have many opening except for low quality industrious openings. Some large maple here as well</p> <p>OPIC - FMD: M4W4M2W1</p>
24	4119 - Mixed Northern Hardwoods	Poletimber Medium	94.9	74	51-80	<p>highly variable stand, some decent maple areas, some regen areas, some aspen areas, some oak. looks like stand has had some different treatments in the past that have made it a mix bag of ages and species. some aspen mature, some pretty young yet. probably enough beech in this stand that an entry would be justified. bulk of the stand quality and stocking doesn't warrant individual tree marking. Possibly green tree 10-30 BA to leave post harvest, remove most or all beech and aspen and try to protect advanced regen areas. or stand could likely hold OK 10 years, beech will likely fall out of the stand by next YOE.</p> <p>OPIC - FMD: M5A4M2</p>
25	4130 - Aspen	Poletimber Well	55.5	41	1-50	<p>due west of U type are some red pine fingers mixed in. likely paint a few to save when the stand is treated and cut the rest. will hold good 10 years, diameters are still small yet, stump sprouted trees are only 4ish inch DBH so hold for sure.</p> <p>OPIC - FMD: Soon to be converting to an A6 stand</p>
26	4111 - S.Maple, Hard Mast Association	Poletimber Well	45.0	70	81-110	<p>scattered to clumpy to thick... variable stand. quite a bit of beech in areas. green tree variable residual, not very nice quality.</p> <p>OPIC - FMD: OI Stand Year Origin was 1947</p>



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
27	4133 - Aspen, Mixed Pine	Sapling Well	33.7	6	Immature	lots of residual left in areas. nice mix of oak along road and young white pine with some larger white pine as well. nice diverse stand. some A3 area but the bulk is mixed species. OPIC - FMD: 9/6/11 Stand harvested in 2011 'Back Ache Aspen'. Stand to be final harvested, will regenerate to Aspen/Mixed Hdwd - any combination will be acceptable A3-A2 -M3-M2. Retention can be scattered trees or pockets. Dkj. 12/2007
29	4112 - Maple, Beech, Cherry Association	Poletimber Medium	23.4	75	51-80	some open areas in stand and some with decent stocking... has sheltered along some areas of decent maple regen, scattered aspen throughout in pockets. OPIC - FMD: M5M2A4
31	4130 - Aspen	Poletimber Well	52.7	35	Unspecified	some areas pretty thick to maple understory and pole sized maple. small blow down pocket at south end that was salvage after the august 2015 wind storm. stand self thinning, should hold good 10 years OPIC - FMD: SGG 11/13/2007-Treatment period for A5 stand is 2 (20-29 years).
33	4111 - S.Maple, Hard Mast Association	Poletimber Well	23.0	85	81-110	some areas of thicker beech, treat with stand to the south as it is really a continuation of it.
34	4110 - Sugar Maple Association	Poletimber Well	147.9	80	51-80	some scattered storm damage here and there but not worth chasing. some very nice pole and small log areas some not so much... so far regen hasn't done much.. looks to be mostly beech and ironwood regen but some cherry and maple mixed in here and there trace amounts of yellow birch and paper birch, cherry and beech that was marked to save during the last entry. beech has a lot of scale. few pockets of hemlock at north east end. OPIC - FMD: Stand was a selective harvest in the Leafless Hardwoods in 2011. (SC)
35	4119 - Mixed Northern Hardwoods	Poletimber Well	16.9	93	81-110	aspen on west edge most sloping down to lowland, likely wont be able to cut the steep slopes going down to lowland type. will hold 10 years good. OPIC - FMD: LOWER QUALITY MAPLE, BASSWOOD, ASPEN MIX.SOME HEMLOCK.BRUSHY . M5M7A4
37	4130 - Aspen	Poletimber Well	15.5	63	81-110	some very nice aspen along twin lake rd on west side. tricky access with private road and indian lake. may be able to remove some aspen. OPIC - FMD: Stand surrounds south end of Indian Lake A6A7M4
39	4110 - Sugar Maple Association	Poletimber Well	7.7	67	81-110	mostly small sugar maple poles with some beech and basswood mixed in. treat with stand to east in 20ish years.
42	4319 - Mixed Upland Forest	Sawtimber Medium	2.7	85	111-140	OPIC - FMD: WATERWAYS FISHING ACCESS - Indian Lake Boat Ramp, 1/3 is boat launch parkign lot and the west end is nice big red pine mixed with maple and aspen. likely no management due to recreation use and very small stand.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	4130 - Aspen	Sapling Well	10.6	4	Immature	OPIC - FMD: Stand was final harvest in 2011. Regeneration is going well. (SC) Final harvest stand - should regenerate to Aspen with minor Mixed Hdwd. A3-A2 -M1 , medium stocked aspen will be acceptable. Retention can be scattered trees or pockets. Dkj 12/2007
44	4130 - Aspen	Poletimber Well	24.8	43	51-80	OPIC - FMD: OI Stand Year Origin was 1974
46	4119 - Mixed Northern Hardwoods	Poletimber Medium	8.4	78	51-80	clumpy and wolfy maple basswood and beech over mixed regen, some areas of maple regen present. mark 10-30 BA residual to leave for seed, diversity and retention. ok to clearcut aspen areas and remove the canopy where maple regen present. mark heavier with green along rec trail. OPIC - FMD: M5M7
47	4130 - Aspen	Sapling Well	21.7	23	Immature	OPIC - FMD: OI Stand Year Origin was 1994
49	4130 - Aspen	Sapling Well	1.7	3	Immature	some scattered 3-4" maple left post harvest, should be a well stocked A3. OPIC - FMD: SGG 11/13/2007-Treatment period for A5 stand is 2 (20-29 years).
50	4130 - Aspen	Sapling Well	13.4	6	Immature	scattered trees throughout, bulk has regenerated to aspen but there is quite a bit of mixed hardwood and conifer throughout at well. OPIC - FMD: 9/6/11 Stand was cut 'Back Ache Aspen'. Stand to be final harvested, will regenerate to Aspen with a minor hardwood mix. Retention ca be scattered trees or pockets. Dkj. 12/2007
51	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	39.9	67	111-140	some areas pretty thick with aspen, some blow down as well. might be a good hardwood/aspen area to final harvest to restart all species mixed together. most hardwood in the area has been select cut with mixed results. OK to green tree leave some scattered trees or mark some islands where more sugar maple for retention. small VO within stand that would also be a good retention island area. OPIC - FMD: M5M7A4
53	4112 - Maple, Beech, Cherry Association	Poletimber Poor	2.3	58	1-50	OPIC - FMD: Partial frost pocket. Illegal ORV use. Scattered black cherry, white ash, paper birch, juneberry. Bracken, goldenrod, spotted knapweed, timothy, poverty grass, leafy spurge, cladonia, strawberry, blueberry, red oak, red maple, red pine, milkweed, little bluestem, and quite abit of Blazing Star. Could do some selective hand felling but would be good to burn if feasible. OI Stand Year Origin was 1959



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
54	4130 - Aspen	Sapling Well	34.8	5	Immature	OPIC - FMD: Create some (from 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. These dead and downed logs provide habitat for many wildlife species including ruffed grouse, white-footed mice, and redbelly snakes. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet of its stump. OI Stand Year Origin was 2012
63	4130 - Aspen	Sapling Medium	2.4	2	1-50	storm salvage area that blew over August 2015. contract supplement and added this small area to 4 corner hardwood as producer was moving equipment right by the stand to another sale.



Stand	Cover Type	Acres	Managed Site	General Comments:
16	6225 - Bog	0.9	No	OPIC - FMD: OI Stand Year Origin was
17	3302 - Low Density Conifer Trees	4.5	No	OPIC - FMD: U4- grass
20	3301 - Low Density Deciduous Trees	3.6	Yes	
30	623 - Emergent Wetland	2.9	No	OPIC - FMD: marsh grass - low water
32	6239 - Mixed Emergent Wetland	2.0	No	
38	500 - Water	6.5	No	OPIC - FMD: INDIAN LAKE
41	6239 - Mixed Emergent Wetland	1.7	No	OPIC - FMD: SWAMP AREA OF INDIAN LAKE
52	122 - Road/Parking Lot	2.1	No	active well pad
61	122 - Road/Parking Lot	3.6	No	
101	790 - Other Bare/Sparsely Vegetate	46.5	No	pipeline and powerlines in some of the areas OPIC - FMD: well site facility - pumping station
102	3102 - Grass	15.4	No	OPIC - FMD: pipeline
104	122 - Road/Parking Lot	2.6	No	OPIC - FMD: wellsite - active
106	122 - Road/Parking Lot	6.2	No	OPIC - FMD: active well site
109	122 - Road/Parking Lot	2.0	No	OPIC - FMD: active well site
110	122 - Road/Parking Lot	1.6	No	OPIC - FMD: active well site
111	122 - Road/Parking Lot	2.3	No	OPIC - FMD: active well site
112	122 - Road/Parking Lot	4.7	No	OPIC - FMD: active well site
113	122 - Road/Parking Lot	1.7	No	OPIC - FMD: active well site



Stand	Cover Type	Acres	Managed Site	General Comments:
114	122 - Road/Parking Lot	3.3	No	OPIC - FMD: active well site - pump station
400	790 - Other Bare/Sparsely Vegetate	2.4	Yes	OPIC - FMD: old wellsite
401	3301 - Low Density Deciduous Trees	1.6	No	scattered cherry OPIC - FMD: frost pocket
402	3102 - Grass	2.1	Yes	OPIC - FMD: old wellsite
403	790 - Other Bare/Sparsely Vegetate	2.6	Yes	OPIC - FMD: old wellsite
404	790 - Other Bare/Sparsely Vegetate	1.4	Yes	OPIC - FMD: old wellsite
405	790 - Other Bare/Sparsely Vegetate	1.3	Yes	OPIC - FMD: old wellsite with autumn olive
406	790 - Other Bare/Sparsely Vegetate	2.1	Yes	OPIC - FMD: old wellsite
407	3102 - Grass	1.3	Yes	
408	3102 - Grass	2.0	Yes	OPIC - FMD: old well site
409	3301 - Low Density Deciduous Trees	5.4	Yes	OPIC - FMD: scattered aspen and maple
410	790 - Other Bare/Sparsely Vegetate	2.4	No	OPIC - FMD: old well site
411	3102 - Grass	2.5	Yes	OPIC - FMD: old well site
412	3301 - Low Density Deciduous Trees	21.7	No	could likely treat some of this stand commercially with adjacent stand if desired by wildlife division. OPIC - FMD: grassy valley with scattered maple and aspen and cherry
413	3102 - Grass	0.8	Yes	OPIC - FMD: frost pocket
414	790 - Other Bare/Sparsely Vegetate	2.4	Yes	OPIC - FMD: old well site
415	3102 - Grass	3.7	Yes	OPIC - FMD: scattered aspen - cherry - maple



Stand	Cover Type	Acres	Managed Site	General Comments:
416	3102 - Grass	1.5	Yes	OPIC - FMD: old well site
417	3102 - Grass	3.6	Yes	OPIC - FMD: old well site - good grass
418	3102 - Grass	1.1	No	OPIC - FMD: Scattered hardwoods within stand