



Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 128

Entry Year 2016

Acreage: 1,885

County Emmet

Management Area: Chandler Hills

Revision Date: 03/26/2014

Stand Examiner: Tricia St. Pierre

Legal Description:

T34N R04W

Sec 25: NW, S1/2NE, W1/2SW, N1/2SE, SESE

Sec 26: E1/2, E1/2NW EXCEPT NENENENW (1.5ac), SWNW, E1/2SW

Sec 35: (all)

Sec 36: W1/2NW, SENW, SW

Identified Planning Goals:

Within the Chandler Hills MA, 10-year harvest projections indicate that northern hardwood, aspen, and red pine cover types will be the primary focus for treatments (final and partial harvests), while upland mixed forests and "others" will be of lesser, but still desirable, consideration. More than half of the hardwood acres in this compartment have been treated within the last 10 years, removing them from silvicultural consideration this YOE. Of the hardwood stands that were not recently entered, there are acres are still on contract from the last YOE, and additional acres have been prescribed for a thinning this YOE.

As for aspen, this compartment has a small percentage of total aspen acreage (MA-wide), the majority of which are <40 years old and not quite managerially desirable. Within the MA, few stands are intended for final harvest this YOE given the young age class distribution. However, some acres of aspen within this compartment have been identified for harvest, mostly in stands around 60-years-old.

Pine is not a large component of this MA in this YOE, and is projected to decline even further in the future. Of the small acreage in red pine, nearly half of those are within this compartment. There are nearly 200 acres of red pine in this compartment, some of which have been prescribed for partial harvests.

Soil and topography:

Landtype Associations (LTAs) include Leelanau Loamy-Sand and occasional Blue Lake Loamy-Sand soils. The associated habitat types are AFO and AFOCa, which lend themselves to succession toward Sugar Maple, Beech, and Basswood forests. The compartment was formed by Kamic geomorphology; sand and gravel deposition by running water on stagnant or moving-glacier ice. This formed ice-contact ridges (undulating topography found within the compartment) and a few kettle lakes and bowls. This compartment rests on the highplains of the Vanderbilt Moraines.

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

Compartment 128 has both state- and private-land interfaces on its extremities. There is potential for private development along Hopper Road, while private homes along Heaton are in large blocks of ownership with permanent residence. The compartment is bisected (N-S) by a buried pipeline, doubling as a popular ORV/snowmobile trail. There is also an unidentified utility line running E-W along County Line Road on the south edge of the compartment boundary. This compartment is extensively used by hunters and ATVs (snowmobiles, dirtbikes, quads). Some undesignated trails (i.e. old logging roads) and a couple non-forested stands are being abused by ATVs and POVs. While there are no current RDRs, monitoring/lessening the degradation of forest trails and non-forest stands should be kept in mind.

Unique Natural Features:

Mesic northern forest to the northwest. Potential exists for red-shouldered hawk and goshawk throughout the compartment. MNFI known occurrence to the northeast of the compartment, recorded element sighting also to the east, southeast, west, north, and northeast, though no known established occurrences within the compartment.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

There are quite a few health concerns and issues to address in this compartment. Beech Bark Disease (BBD), Emerald Ash Borer (EAB), White Trunk Rot, and Black Knot are a few of the plights presently affecting the quality and future of these forests. Special management considerations (pruning, dry/winter harvests only, chipping, etc.) should be kept in mind for minimizing the spread of black knot. Spotted Knapweed, honeysuckle, autumn olive, thistle, and raspberries are

abundant in openings and are a threat to native flora. Other stresses on the forest include a forest tent caterpillar outbreak in 2010 over the entire compartment, Gypsy Moth in 2005 (just to the west of the compartment, but a local population regardless), and Oak Wilt detected in Charlevoix County, just to the south. Although oak is not established in this compartment, decisions to plant or encourage oak should be made keeping Oak Wilt hot-spots in mind.

In addition, Michigan State University has established long-term plots in the northeast quarter of this compartment to monitor Beech Bark Disease until the year 2052, in cooperation with the DNR. GPS coordinates and plot specifics are included in the compartment folder (under "Public Correspondence"). These plots do not preclude treatment, but they should be acknowledged and considered in future activities in/around the study area.

Watershed and Fisheries Considerations:

NLHMU.

Fisheries Concerns: None.

Wildlife Habitat Considerations:

Treatments in this compartment will maintain age class diversity in aspen while creating early successional habitat benefiting deer, grouse, and woodcock. Hardwood treatments will provide within stand structural diversity. Openings are prescribed to be maintained in this compartment benefiting deer, turkey, grouse, and woodcock.

Mineral Resource and Development Concerns and/or Restrictions

Sections 25, 26, 35 and 36, T34N-R4W, Emmet County

Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 200 and 600 feet. The Devonian Antrim Shale and Traverse Group subcrop below the glacial drift. The Antrim and Traverse are quarried for stone and cement products. Gravel pits are located 1.5 miles to the east and gravel potential appears to be good. The nearest oil and gas production, the Antrim Shale gas play, is located six miles to the south. The Antrim Shale is either thin or missing in this area. This area is leased for potential Collingwood Formation development.

Vehicle Access:

Vehicle access is good throughout this compartment. In the summer months, all main roads are passable, although the pipeline would be difficult to navigate in spots with a truck/fire engine. There are many two-tracks weaving through stands that would not grant reliable access - there are trees and limbs blocking some of these two-tracks. In the winter, only Heaton Road is plowed by the county (via Newson Road off of Mitchell, but not west of Heaton Rd.) down 3/4 of a mile; the rest of Heaton Road to Wilber Hill Road is plowed out by [private] local residence. CCC Road is also plowed up to County Line Road, giving access from the south end.

Survey Needs:

There currently exist no pressing survey needs. However, surveying the 1.5 ac deeded to the School in section 26 could become necessary if management activities (wildlife opening enhancement, harvesting, decking, etc.) are intended in the area. The north quarter-corner of section 26 has been established, including witness trees.

Recreational Facilities and Opportunities:

The Tomahawk Dirtbike Trail goes through the north and south extremes of this compartment.

This is a very widely used area by recreationists. Dirtbiking, ORVs, snowmobiling, hunting, and general meandering are extremely popular during the appropriate seasons.

Fire Protection:

Fire access is pretty good during snow-off conditions. Most of the terrain undulates, but there aren't too many areas that are inaccessible due to topographical constraints. Dense regeneration in areas would be the biggest obstacle in navigation, while a younger pine component in the south and a couple non-forest stands might be the biggest fire risks. Finding a water source would be a complication for this compartment. Weber Lake is the closest water, but access to the lake itself would be difficult.

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**

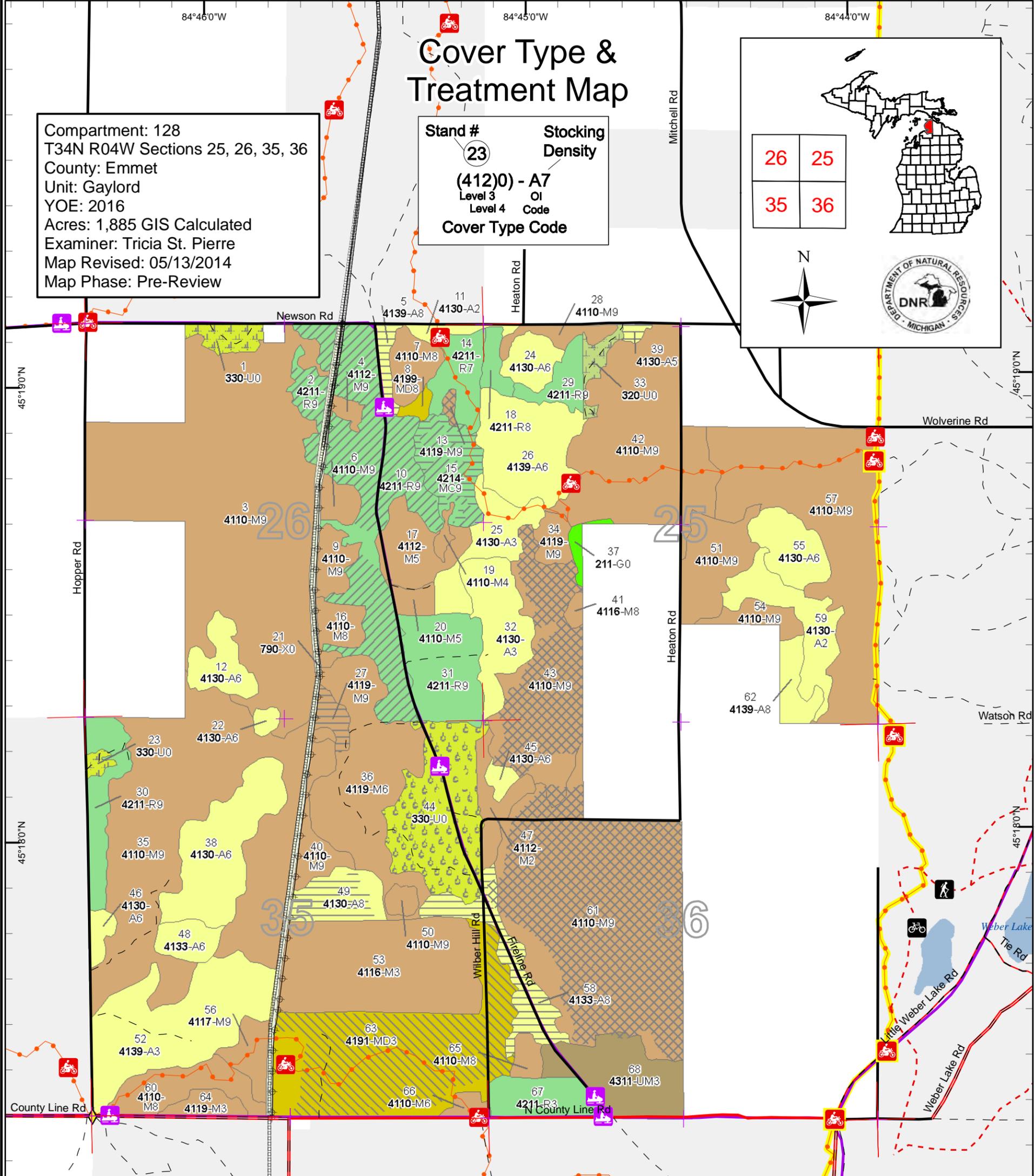
The following information is displayed, where pertinent, on the attached compartment maps:

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

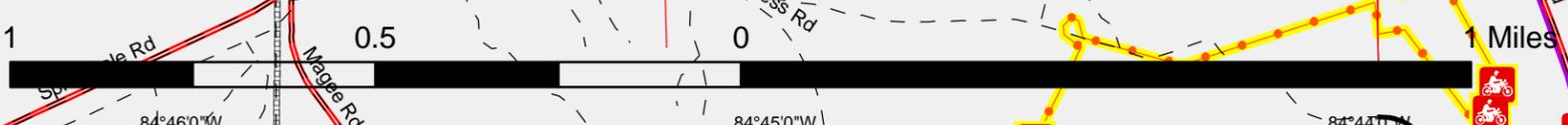
Cover Type & Treatment Map

Compartment: 128
 T34N R04W Sections 25, 26, 35, 36
 County: Emmet
 Unit: Gaylord
 YOE: 2016
 Acres: 1,885 GIS Calculated
 Examiner: Tricia St. Pierre
 Map Revised: 05/13/2014
 Map Phase: Pre-Review

Stand # **23** Stocking Density
(412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



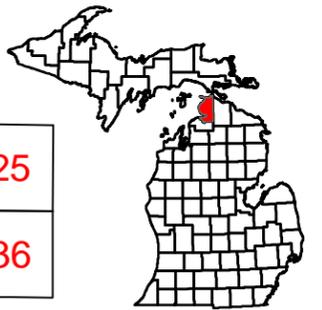
<ul style="list-style-type: none"> Miris Corners Remonumented Section Corners PLSS Corner Hiking Trails Bike Trails Motorcycle Trails (DNR License) MCCCT Trails Snowmobile Trails Highway County Paved Roads Paved Roads County Gravel Roads Gravel Roads Poor Dirt Roads County Poor Dirt Roads Trail (Non-Recreation) 	<ul style="list-style-type: none"> Pipeline Powerline Bike Trail Motorcycle (DNR Sticker) MCCCT Trail Snowmobile Trail Lakes and Rivers State Forest Land 	<p>Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 413 - Aspen Types 419 - Mixed Upland Deciduous 421 - Planted Pines 431 - Upland Mixed Forest <p>Non-Forest Stands</p> <p>Level 3</p> <ul style="list-style-type: none"> 211 - Cropland 320 - Upland Shrub 330 - Low-Density Trees 790 - Other Bare/Sparsely Vegetated
<p>Treatments</p> <ul style="list-style-type: none"> Clearcut (w/Reserves, Patch/Strip) Thinning (Crown, Low, Systematic) Selection (Group, Single Tree) Other Harvest - See Comments Prescribed Burn Other Treatment - See Comments 		



Stand Boundary Map

Compartment: 128
 T34N R04W Sections 25, 26, 35, 36
 County: Emmet
 Unit: Gaylord
 YOE: 2016
 Acres: 1,885 GIS Calculated
 Examiner: Tricia St. Pierre
 Map Revised: 05/13/2014
 Map Phase: Pre-Review

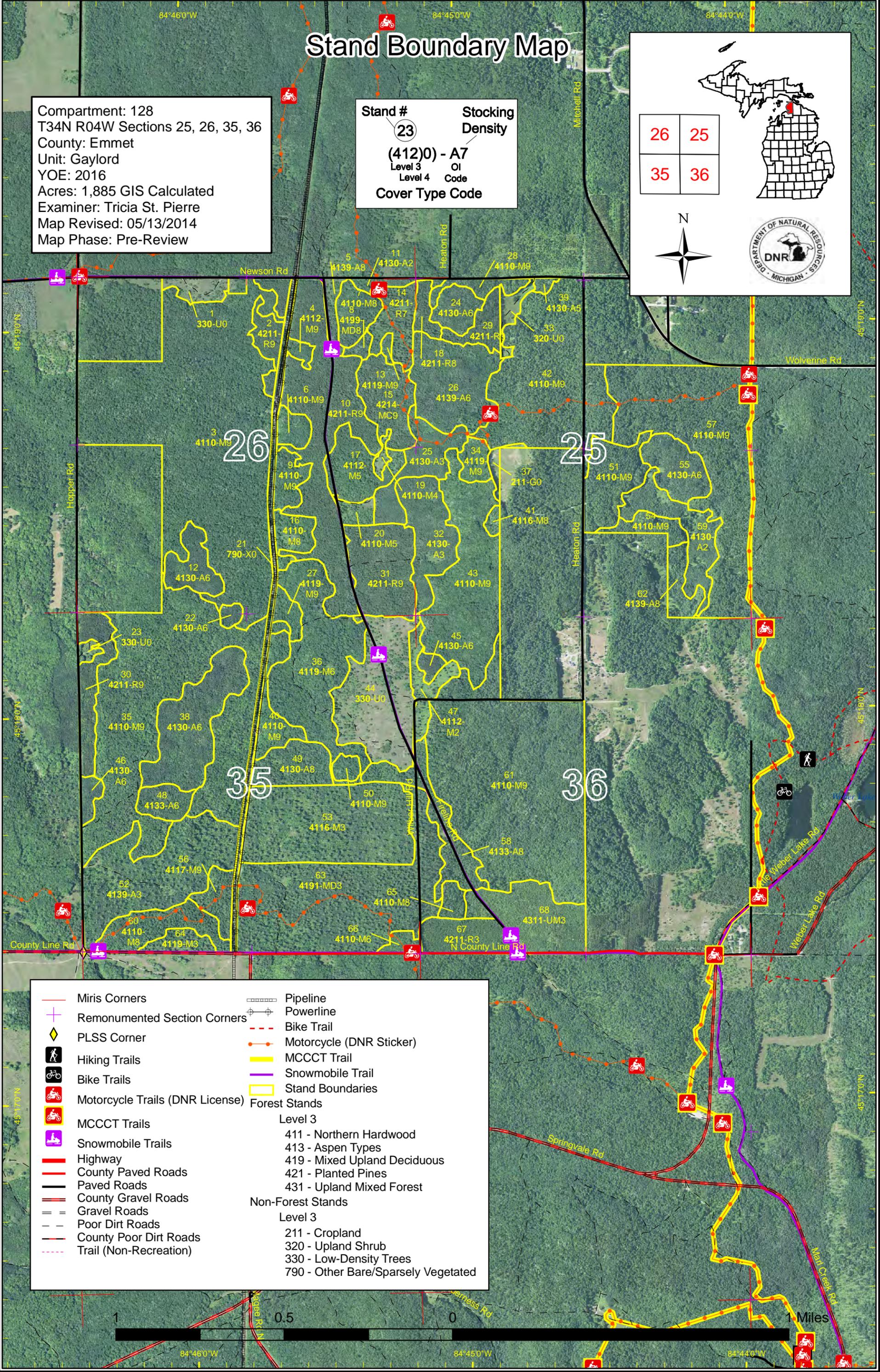
Stand #
23
(412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



26	25
35	36

N



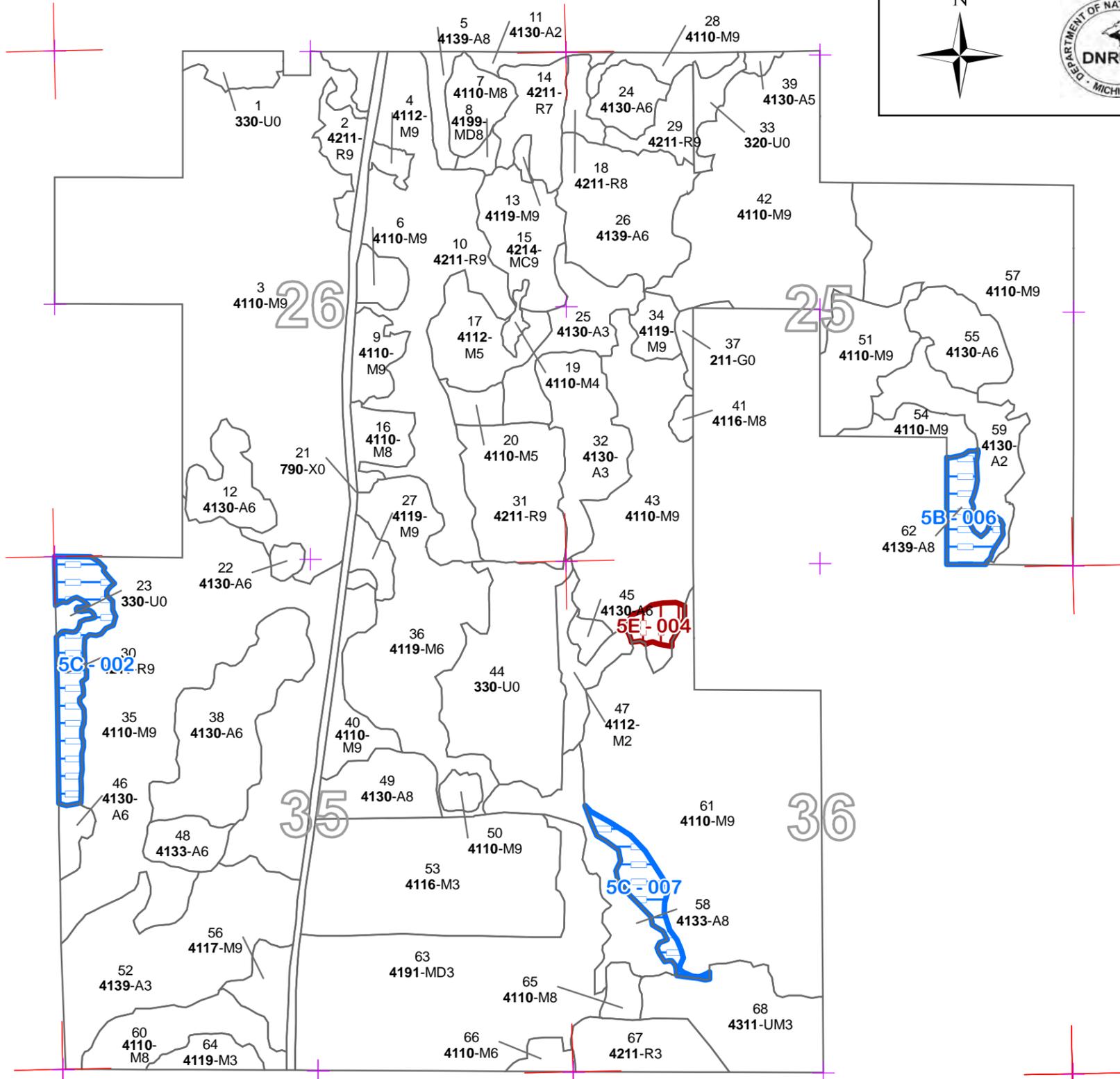
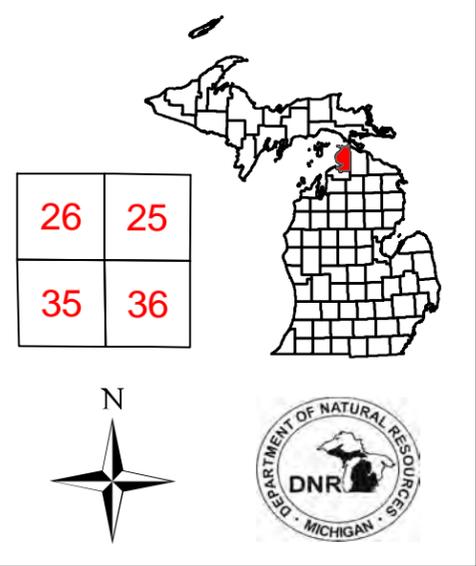


Miris Corners	Pipeline
Remonumented Section Corners	Powerline
PLSS Corner	Bike Trail
Hiking Trails	Motorcycle (DNR Sticker)
Bike Trails	MCCCT Trail
Motorcycle Trails (DNR License)	Snowmobile Trail
MCCCT Trails	Stand Boundaries
Snowmobile Trails	Forest Stands
Highway	Level 3
County Paved Roads	411 - Northern Hardwood
Paved Roads	413 - Aspen Types
County Gravel Roads	419 - Mixed Upland Deciduous
Gravel Roads	421 - Planted Pines
Poor Dirt Roads	431 - Upland Mixed Forest
County Poor Dirt Roads	Non-Forest Stands
Trail (Non-Recreation)	Level 3
	211 - Cropland
	320 - Upland Shrub
	330 - Low-Density Trees
	790 - Other Bare/Sparsely Vegetated

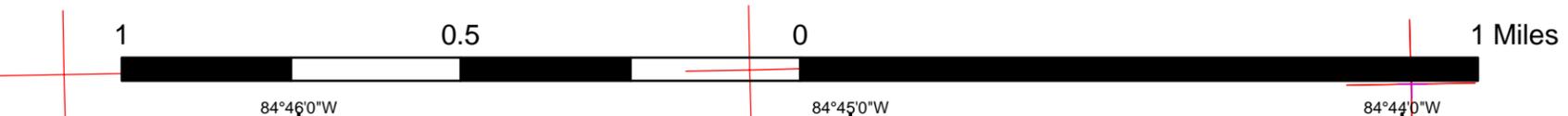
Special Conservation Areas & Site Conditions Map

Compartment: 128
 T34N R04W Sections 25, 26, 35, 36
 County: Emmet
 Unit: Gaylord
 YOE: 2016
 Acres: 1,885 GIS Calculated
 Examiner: Tricia St. Pierre
 Map Revised: 05/13/2014
 Map Phase: Pre-Review

Stand #
 23
Stocking Density
 (412)0 - A7
 Level 3 OI
 Level 4 Code
Cover Type Code



— Miris Corners
 + Remonumented Section Corners
 □ Stand Boundaries
 Site Condition Available
 □ Available w/ Constraints (Factor - Number)
 □ Unavailable (Factor - Number)
 Site Condition Type
 Available Factors W/ Constraints
 5B: Retention for regeneration purposes
 5C: Delay treatment for age/size class diversity or exceptional site quality
 Unavailable Factors
 5E: Long Term Retention
 Dedicated Special Conservation Areas
 — Cold Water Streams
 — Cold Water Lakes



Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	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 +	Uneven Age	
Aspen	0	111	27	144	0	27	29	0	0	0	0	0	0	0	338
Bare/Sparsely Vegetated	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Cropland	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Low-Density Trees	62	0	0	0	0	0	0	0	0	0	0	0	0	0	62
Mixed Upland Deciduous	0	104	0	0	0	0	0	2	0	0	0	0	0	0	107
Northern Hardwood	19	74	0	0	65	14	281	514	128	4	0	0	0	5	1103
Planted Mixed Pines	0	0	0	0	0	22	0	0	0	0	0	0	0	0	22
Red Pine	0	18	0	0	0	157	0	16	0	0	0	0	0	0	191
Upland Mixed Forest	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	110	341	27	144	65	220	310	532	128	4	0	0	0	5	1885



Report 2 – Proposed Treatment Summaries

Gaylord Mgt. Unit
Year of Entry 2016

Compartment 128
Total Compartment Acres: 1,885

Acres by Treatment Type

Commercial Harvest - 436 Tree Planting - 0 Other - 50
 Habitat Cut - 0 Opening Maintenance - 15

Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
Aspen Types	43	0	0	0	0	0	43
Mixed Upland Deciduous	0	0	0	0	0	85	85
Northern Hardwood	5	197	0	0	0	0	202
Planted Pines	11	0	0	0	95	0	106
Total	59	197	0	0	95	85	436



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	52128002-Cut	12.2	42110 - Planted Red Pine	High Density Log	54	141-170	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Third row thin. Mark starting rows and/or "confidence trees" in areas where rows are less obvious. Do not cut hardwood within stand unless <u>Specs:</u> necessary for operations - deck separately and scale.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
5	52128005-Cut	5.7	4139 - Aspen, Mixed Deciduous	Medium Density Log	62	51-80	Harvest	Clearcut with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut all aspen, cherry, and jack pine, marking occasional cherry (>10" @ 1-3/ac) to leave for seed source. DO NOT CUT elm, apple, <u>Specs:</u> hawthorn, or red pine. Acceptable regen includes a mix of aspen and mixed deciduous, also any pine volunteers. Grab accessible aspen from hillside to the east.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> Regen survey to determine adequate stocking levels of aspen, cherry, and/or other mixed deciduous and coniferous species. <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
10	52128010-Cut	48.3	42110 - Planted Red Pine	High Density Log	53	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Third row thin. Mark starting rows and/or "confidence trees" in areas where rows are less obvious. Consider using inclusion in southeast for a <u>Specs:</u> landing. Do not cut hardwood within stand unless necessary for operations - deck separately and scale. Clearcut all aspen within sale boundary along Fireline Road - deck separately and scale.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
10	52128010- Cut_south	24.2	42110 - Planted Red Pine	High Density Log	53	171-200	Harvest	Systematic Thinning	42110 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Third row thin. Mark starting rows and/or "confidence trees" in areas where rows are less obvious. Consider using inclusion in southeast for a <u>Specs:</u> landing. Do not cut hardwood within stand unless necessary for operations - deck separately and scale. Clearcut all aspen within sale boundary along Fireline Road - deck separately and scale.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										
13	52128013-Cut	1.5	4119 - Mixed Northern Hardwoods	High Density Log	55	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Cmpt. Review Proposal
<u>Prescription</u> Thin to 60-80 BA, do not cut elm, white pine, or red pine. Release subcanopy where desirable advanced regeneration exists, but otherwise no <u>Specs:</u> canopy gaps. Include aspen in treatment to the south.										
<u>Other</u> <u>Comments:</u>										
<u>Next</u> <u>Steps:</u>										
<u>Proposed</u> <u>Start Date:</u> 10/01/2015										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
15	52128015-Cut	10.5	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	54	111-140	Harvest	Systematic Thinning	42211 - Natural Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> Third row thin red pine, marking "confidence trees" where rows are less obvious. Clearcut all deciduous species (specifically aspen, basswood, red maple, and black cherry) to 2" dbh. Leave approximate 1 chain buffer around opening in the southwest to minimize spread of black knot. Do not deck or haul through opening in the southwest. Minimize impacts to dirtbike trail - do not cut trees with trail markers. Acceptable regeneration of clearcut species includes aspen and mixed deciduous trees.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Regen survey to determine adequate stocking levels in clearcut areas. Acceptable regeneration includes a mix of aspen and hardwood species, also incidental conifers.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
15	52128015- Cut_small	10.9	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	54	111-140	Harvest	Clearcut	4311 - Pine, Aspen Mix	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut all deciduous species (specifically aspen, basswood, red maple, and black cherry) to 2" dbh. Mark through quality red pine clumps, thin out 1/4 to 1/3 BA. Designate retention around sensitive draws, pockets of advanced hardwood regen, or under-represented species. Leave approximate 1 chain buffer around opening in the southwest to minimize spread of black knot. Do not deck or haul through opening in the southwest. Minimize impacts to dirtbike trail - do not cut trees with trail markers. Acceptable regeneration of clearcut species includes aspen and mixed deciduous trees.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Regen survey to determine adequate stocking levels in clearcut areas. Acceptable regeneration includes a mix of aspen and hardwood species, also incidental conifers.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
27	52128027-Cut	5.4	4119 - Mixed Northern Hardwoods	High Density Log	76	81-110	Harvest	Clearcut with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Release elm, restart cherry and aspen: clearcut all trees >2" except for elm, juneberry, and log-sized ironwood. Green mark any trees as necessary to protect elms from damage to the crowns during logging operations. Do not cut XL sugar maple. No retention due to small stand size and management objectives. Acceptable regeneration includes a mix of aspen, cherry, and mixed deciduous.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Regen survey to determine adequate stocking levels of aspen and mixed deciduous species.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										
39	52128039-Cut	1.6	4130 - Aspen	Medium Density Pole	36	51-80	Harvest	Clearcut	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut all trees >2" except elm and juneberry. No retention due to small stand size and health concerns. Extend boundary to grab aspen in adjacent stands. Acceptable regeneration includes a mix of aspen, cherry, and other upland deciduous species.</p> <p><u>Specs:</u></p> <p><u>Other</u> <u>Comments:</u></p> <p><u>Next</u> <u>Steps:</u> Regen survey to determine adequate stocking levels of aspen and mixed deciduous species.</p> <p><u>Proposed</u> <u>Start Date:</u> 10/01/2015</p>										



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
43	52128043-Cut	50.7	4110 - Sugar Maple Association	High Density Log	75	111-140	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription</u> Thin down to 80 BA and include 1/4 to 1/2 ac canopy gaps (one per two to three acres) around higher concentrations of basswood and adjacent to yellow birch if possible, leaving yellow birch intact. Leave steep draws intact as much as possible. Cut all beech EXCEPT a few (1-3/ac, if available) specially marked for wildlife. Southern acres with pine and western edge (transition zone) are to be left out of the sale. DO NOT CUT CHESTNUT (located near the east boundary) OR ELM.</p> <p><u>Specs:</u></p> <p><u>Other</u> See "128-field notes" shape file for location of chestnut.</p> <p><u>Comments:</u> Stand becomes increasingly hilly as you progress north, also has lower BA. Consider treating south half this entry, establishing access and a landing for use next entry to get north half. Hills in north might pose operational challenges.</p> <p><u>Next</u> Regen survey to determine adequate stocking levels in gaps. Acceptable regeneration includes a representation of the residual species.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
49	52128049-Cut	13.2	4130 - Aspen	Medium Density Log	59	51-80	Harvest	Clearcut with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Treat west 3/4 of stand, around aspen. Clearcut down to 2" dbh, be sure to protect pockets around elm (green ring trees as necessary). Do not cut elm, hawthorn, serviceberry, or pine. Leave any trees >18" dbh for wildlife value.</p> <p><u>Specs:</u></p> <p><u>Other</u></p> <p><u>Comments:</u></p> <p><u>Next</u> Regen survey to determine adequate stocking levels of aspen and mixed deciduous species.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
58	52128058-Cut	22.6	4133 - Aspen, Mixed Pine	Medium Density Log	61	81-110	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> Clearcut, leave red pine >18", all white pine, all elm. Avoid damage to hawthorn. Extend boundary into adjacent stand to the east for any merchantable aspen. Be careful not to overlap sale boundary with hardwood thinning.</p> <p><u>Specs:</u></p> <p><u>Other</u> **WITNESS TREE(S) along road - protect and DO NOT CUT.</p> <p><u>Comments:</u></p> <p><u>Next</u> Regen survey to determine adequate stocking levels. Acceptable regeneration includes a mix of aspen and mixed deciduous and coniferous trees, namely aspen, maple, cherry, and/or jack/red/white pine.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 10/01/2015</p>										
61	52128061-Cut	144.6	4110 - Sugar Maple Association	High Density Log	75	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Fld. Tr. Bdy. - Incomplete
<p><u>Prescription</u> Thin to 70-80 BA.</p> <p><u>Specs:</u></p> <p><u>Other</u> Sale was not completed by original purchaser before contract expiration date. Uncut portion was resold and is currently under contract.</p> <p><u>Comments:</u> Prescription is being carried forward into treatments layer.</p> <p><u>Next</u> Natural Regen Survey, mix of current species is acceptable.</p> <p><u>Steps:</u></p> <p><u>Proposed</u></p> <p><u>Start Date:</u> 02/28/2013</p>										



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63 52128063-Cut	84.7	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	17		Harvest	Other - Specify in Comments	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal

Prescription Overstory removal of red pine. Focus retention along sale edges and around pockets with lower densities of red pine to protect advanced regeneration.

Specs: Consider flagging or painting skid trails for equipment to minimize damage to regeneration.

Other Comments: Overstory removal of red pine from fully stocked aspen/mixed hardwood sapling stand.

Next Steps: Regen survey to determine adequate stocking of aspen and mixed deciduous species.

Proposed Start Date: 10/01/2015

44 NF_52128044-Burn	50.4	3303 - Mixed Low Density Trees				Prescribed Burn	Unspecified	3303 - Mixed Low Density Trees	Cmpt. Review Proposal
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Prescription Wildlife opening maintenance. Rx burn to control establishment of pioneer species. PROTECT (do not burn) pocket of white pine along Fireline Road, especially XL white pine. Continue to maintain the nonforested condition of this stand either through prescribed burning, herbicide, or mechanical means.

Other Comments:

Next Steps:

Proposed Start Date: Unspecified

1 NF_52128001-NonFor	7.5	3303 - Mixed Low Density Trees				Non-Forest Management	Other - Specify	3303 - Mixed Low Density Trees	Cmpt. Review Proposal
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Prescription Maintain the nonforested condition of this stand either through prescribed burning, herbicide, or mechanical means. Prune any apple trees present.

Other Comments:

Next Steps:

Proposed Start Date: Unspecified

23 NF_52128023-NonFor	2.2	3303 - Mixed Low Density Trees				Non-Forest Management	Other - Specify	3303 - Mixed Low Density Trees	Cmpt. Review Proposal
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Prescription Maintain the nonforested condition of this stand either through prescribed burning, herbicide, or mechanical means. Prune apple trees if necessary.

Other Comments:

Next Steps:

Proposed Start Date: Unspecified



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
33 NF_52128033-NonFor	5.4	3202 - Autumn Olive/Honeysuckle				Non-Forest Management	Other - Specify	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal

Prescription Maintain the nonforested condition of this stand either through prescribed burning, herbicide, or mechanical means.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: Unspecified

**Total Treatment
Acreage Proposed: 501.5**



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Type! #Type!

Prescription
Specs:

Other
Comment:

Next
Steps:

Proposed
Start Date: #Type!

Limiting Factor

Total Treatment
Acreage Proposed: 0.0

Report 5 – Site Conditions

Gaylord Mgt. Unit

Tricia St. Pierre : Examiner

Compartment 128

Year of Entry 2016

Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5E	5C	5B
	Available	Not Available					
338	338		Aspen	328			10
107	107		Mixed Upland Deciduous	107			
1103	1098	5	Northern Hardwood	1,088	5	10	
22	22		Planted Mixed Pines	22			
191	191		Red Pine	172		19	
34	34		Upland Mixed Forest	34			
1,793	1,789	5	Total Forested Acres	1,750	5	29	10
	100%	0%	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
002	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19				
Comments: Good quality red pine with 80% canopy closure; good growth rings. Wait until next entry to thin.							
004	Not Available	5E: Long Term Retention	5				
Comments:							
006	Available	5B: Maintain for regeneration purposes	10	2F: Too steep			
Comments:							

Report 5 – Site Conditions

Gaylord Mgt. Unit

Compartment 128

Tricia St. Pierre : Examiner

Year of Entry 2016

007	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10
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Comments:



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 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42110 - Planted Red Pine	High Density Log	12.8	54	141-170	Highly variable diameters and densities for a plantation. Porcupine damage especially bad after this winter to a few trees in the northwest. The northern half of the stand has lower quality pine - many forked tops, crooks. Some pockets of decline/mortality (clumps of two or three trees) throughout stand. Planted in 1960. North edge along Newson Road is mixed hardwood, .5-1 chain deep (<1/2 ac in size). BA swings = 140, 220, 130, 150, 110, 120, 190, 120, 190, 150 + average of 10BA Black cherry.
3	4110 - Sugar Maple Association	High Density Log	211.7	65	51-80	EAB, BBD, and Black Knot present. Yellow birch falling out. Some XL ash. Understory dominated by beech; sugar maple regen is advanced, 20'+. Beech scale localized to one pocket in the south. Cherry fades out in the middle of the stand but reappears in the northern and southern quarters. Ironwood (8-10") present in the canopy in the south and east. Smaller diameter stock in the northern-most quarter of the stand. Yellow birch is found in small pockets in the southeast, some are deteriorating. Beech is found in larger pockets dispersed throughout the southern/southeastern half of the stand. Came across a couple red maple and one bigtooth aspen. Greater species diversity along pipeline; quality is not as high as the interior timber. (BA Swings: 100, 80, 90, 100, 80, 80, 60, 60.)
4	4112 - Maple, Beech, Cherry Association	High Density Log	2.9	54	81-110	Red and sugar maple are declining slightly. This was a retention pocket within the planted red pine, left unplanted, on top of a hill. A good example of hardwood potential for some of the surrounding sites.
5	4139 - Aspen, Mixed Deciduous	Medium Density Log	5.7	62	51-80	Quaking aspen and red pine along road. Occasional elm along road in disturbed soil. Occasional sugar maple. Less productive site. Pockets of bigtooth aspen clones with sugar maple regenerating underneath.
6	4110 - Sugar Maple Association	High Density Log	6.3	75	81-110	Elm present in south end of stand. Wait until next entry to treat with stand to south.
7	4110 - Sugar Maple Association	Medium Density Log	11.4	73	81-110	Hardwood thinning in 2007. Note variable diameters of pines. Abundant raspberry and knapweed in skid trails and any canopy gaps. Occasional elm (pole), <2%. Smaller diameters towards the southern end of the stand. West slope on the west edge dropping into the adjacent stand.
8	4199 - Other Mixed Upland Deciduous	Medium Density Log	2.5	78	81-110	High volume of sugar maple regeneration. Occasional jack pine declining in the canopy; dead jack pine and aspen still standing. The aspen is low quality and deteriorating; very little vigor for regenerating. Sugar maple seems to be of higher quality than the black cherry, and in consideration of the adjacent hardwood stand to the north, sugar maple appears to be best suited for the site.
9	4110 - Sugar Maple Association	High Density Log	9.0	65	81-110	Variable diameters between log and pole sized trees. Classified as a log stand, but high prevalence of larger pole-sized trees. Two yellow birch (1 log, 1 pole). BA swings: 80, 90, 120, 120, 110 = 104 average.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
10	42110 - Planted Red Pine	High Density Log	78.0	53	171-200	Occasional basswood in subcanopy, especially in canopy gaps. 1960 year of origin. BA swings include significant amounts of black cherry, (0,30,40 BA = 23 BA average of black cherry). There is an approximate 1.5 acre inclusion of aspen, cherry, basswood, elm, and sugar maple in the southeast, along the road that could be clearcut and used as a landing. Acreage to the east of the road has 2% JP (log) in the canopy with a lot of mortality.
11	4130 - Aspen	Medium Density	4.1	18		Bigtooth aspen along the road mixed with jack pine. The occasional red pine, white pine, beech, paper birch, yellow birch, and balsam fir are nearer the road and not represented in the stand. "Black cherry" includes mix of pin and black. Black knot in cherry. 1 apple tree along road. Pole sized BTA = 42 years old. Majority of sapling densities are in the west half of the stand; greater diversity in diameter in the east half. Couple of log-sized trees scattered in road in the far east. Less canopy closure in east and west extremes.
12	4130 - Aspen	High Density Pole	13.9	38	111-140	Occasional black cherry, white ash. 1976 year of origin.
13	4119 - Mixed Northern Hardwoods	High Density Log	1.5	55	111-140	Canopy closure on the low side of 75%. Red/white pine planted in 1940 - since thinned (<10BA) and left to convert. Smaller diameter sugar maple and basswood in the southern portion of the stand with heavier RP canopy. Pocket of bigtooth aspen and white pine included in the southwest.
14	42110 - Planted Red Pine	Low Density Log	15.9	73	51-80	Majority of canopy red pine are schoolmarms (forked boles and tops). Dirtbike trail runs through this stand. (1 paper birch in the understory.) Stand is converting to a mixed deciduous-pine; red pine and jack pine are seeding in within the canopy gaps. 1940 planting record. Multiple BA swings ranging from 30-90. FTP from 1997 indicates red pine - direct seed at 1/2 lb/ac, spread in late winter. Logged in 1996.
15	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Log	22.2	54	111-140	Highly variable plantation, planted in 1960. Could easily be considered uneven aged. Standing dead (and nearly dead) jack pine in deciduous gaps and mixed occasionally in red pine. Aspen declining but in good condition; occasional conk (white trunk rot). Mixed deciduous of various size classes: red maple, elm, basswood. Black knot present. Porcupine damage.
16	4110 - Sugar Maple Association	Medium Density Log	9.4	57	51-80	Black knot on some of the cherry. Heavy browsing on sugar maple regen. A couple red pine have seeded in but in insignificant volume. Nice quality hardwood in the north and east regions of the stand; close to 100% closure in these forested areas. Abundant knapweed in the openings. (Age on basswood was a 9" tree.)
17	4112 - Maple, Beech, Cherry Association	Medium Density Pole	19.8	65	51-80	Slight red pine inclusion in the north but dominated by deciduous overstory. Variable densities of hardwood and small pockets of 100% cherry. Lesser quality stand.
18	42110 - Planted Red Pine	Medium Density Log	5.5	53	81-110	Planting record from 1960. Let grow until next entry. Third row thinned two entries ago.
19	4110 - Sugar Maple Association	Low Density Pole	2.2	40	1-50	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4110 - Sugar Maple Association	Medium Density Pole	5.0	Uneven Age	1-50	Gooseberries noted in understory are possibly Pasture Gooseberries (<i>Ribes cynosbati</i>), not Northern Gooseberries. This stand is regenerating well on its own. Consider clearcut/"seed tree" harvest next entry.
22	4130 - Aspen	High Density Pole	2.5	38		Log aspen on edge, rare.
24	4130 - Aspen	High Density Pole	10.0	36	81-110	Small hole with hardwood in the south; band of pole and log hardwood along the southeast edge (about .5ac). Occasional white ash (pole); increased presence of sugar maple in the south. Pockets of log-sized aspen; some larger diameter aspen deteriorating. Multi-stemmed hardwood from clearcut. Average BA = 103.
25	4130 - Aspen	High Density Sapling	20.8	15		Some cankers, especially on edges of gaps. Quaking aspen transitions to bigtooth aspen on south-facing slope in north, then back to quaking aspen. Occasional white ash and pin cherry.
26	4139 - Aspen, Mixed Deciduous	High Density Pole	39.0	37	81-110	Includes approx 3.5 acres in the southeast of the parent stand left uncut, possibly for retention. Clearcut in 1977. Black knot present. Evidence of leaf roller damage from 2013. Occasional white ash, red maple. Stand is quite variable in composition. Northern 1/3 is dominated by aspen with pockets of hardwood. The southern 2/3 is dominated by hardwood with smaller but more frequent pockets of aspen.
27	4119 - Mixed Northern Hardwoods	High Density Log	5.4	76	81-110	Healthy elm; over-mature cherry. Good quality sugar maple regeneration coming up - could compete with elm. Occasional red maple (pole).
28	4110 - Sugar Maple Association	High Density Log	6.6	85	81-110	Black knot in cherry; bigtooth aspen in small pockets; overmature and falling out. Two white ash on road, 22". Red Pine in the east half (former plantation). Nice quality hardwood in the west half. A small inclusion of pole sized sugar maple, basswood in the far west.
29	42110 - Planted Red Pine	High Density Log	9.5	53	111-140	Dense sugar maple regen <1". Occasional pole sugar maple. Rare pole black cherry. Planting record for 1960. Black cherry regen is prominent on the eastern edge; basswood occurs most frequently in thinned rows. Third row thinned two entries ago.
30	42110 - Planted Red Pine	High Density Log	18.8	53	171-200	Canopy closure at 80%+. Occasional hardwood in overstory (black cherry, white ash, basswood, sugar maple); occasional pole in understory. Some damage to cambium from previous thinning. Planted in 1960, thinned in __?__. White pine seeding in in the southwest corner of the stand from seedsource across the road. Terrain is variable, sort of hilly but operable. There are a few pockets of lower densities, and the occasional hardwood in the canopy. Trace amounts of striped maple in the understory.
31	42110 - Planted Red Pine	High Density Log	32.7	53	81-110	Browsing on sugar maple. Lesser quality pine, but not poor. Not optimal growth. Larger diameter south of the road. Pockets and rows of aspen throughout stand. E-W road bisecting stand, allowing for access to aspen to the east. Two clumps, about 15 acres total, of solid pine. The rest of the stand is variable clumps of aspen and pine.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
32	4130 - Aspen	High Density Sapling	26.9	28		Verging on pole-sized stand; couple of log (10") aspen. Black knot in cherry. Some snow damage from years past. Couple of red pine seedlings in opening in south. Opening contains black cherry and honeysuckle. Clearcut in 1986.
34	4119 - Mixed Northern Hardwoods	High Density Log	6.6	67	81-110	130BA was biased. Aspen deteriorating, many dead in canopy. Black cherry present, <2%.
35	4110 - Sugar Maple Association	High Density Log	145.7	75	51-80	Canopy closure on the low end of 75%. Canopy aspen falling out. Marked trees left on ridge in east, a couple throughout the stand too. Occasional yellow birch (east edge), paper birch, XL sugar maple. Lots of multi-stemmed trees of lesser quality. Diameters decrease to the northeast; stand becomes predominately pole-sized. Dead elm. Significant snow, best estimation on subcanopy densities based on conditions. Occasional red pine in the extreme south leg of the west half of the stand. Some hawthorn on the edge of powerline. Occasional elm, white ash, black cherry. Few XL sugar maple and basswood, mostly on perimeters. Pockets of pole, lower quality, some multi-stemmed logs, in east. Most elm and black cherry represented in the canopy are on the east half of the stand.
36	4119 - Mixed Northern Hardwoods	High Density Pole	62.6	47	51-80	Highly variable stand: structurally, compositionally. Some dead elm. Two-tracks throughout the stand, some passable. Pockets of mature (log) timber among dense poles. Two yellow birch and a couple 14-16" ironwood scattered throughout the stand. Red pine seeding in along the road (northwest), sapling. BA Swings = 70, 100, 60, 90 = 80 average. Heavy browsing on basswood seedlings/saplings. Cherry drops out as you head south throughout the stand (becoming mostly sugar maple) but picks back up in the southern tip. Predominately log sugar maple of better quality in the southern- and northern-most acres. Pockets of aspen (pole and sap, some log), also occasional spots of elm, ironwood, and black cherry prevalence. Noted log and XL white pine in the eastern quarter of the stand. This is overall a lesser quality pole-sized stand converging on log (and dominated by log, especially sugar maple, in some areas) of marginal productivity. Sugar maple and cherry are of better quality.
38	4130 - Aspen	High Density Pole	41.8	36	111-140	This is a good stand to consider if there is a need for aspen. Otherwise, it's healthy and productive and would be much more desirable to cut next entry. There is some snow/ice damage in a couple pockets, but not affecting the whole stand. Heavier hardwood regen (particularly ironwood, white ash, sugar maple) in areas with lower aspen basal area, some log sized trees (sugar maple, in particular) were likely left uncut in the last harvest. A pocket of quaking aspen in the south. Larger diameter (log-pole) aspen in the south, becoming smaller (pole dominated) in the north. Two-tracks through stand are impassable by traffic.
39	4130 - Aspen	Medium Density Pole	1.6	36	51-80	Moderately stocked, quickly declining. Not the best site for aspen, but better than the ironwood subcanopy. Consider habitat typing in the spring. Subcanopy fully stocked at 30', canopy (aspen) 50-75% closed. Some white trunk rot in aspen, a few cankers, black knot in cherry.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	4110 - Sugar Maple Association	High Density Log	13.1	73	81-110	Variable stand. Quaking aspen, black cherry, and beech are picked up on the edges of the stand (QA and BC along eastern edge, BE along western edge). Understory sugar maple is more advanced than other regenerating species. White ash seedlings along edge of powerline. Lower quality stump sprouts (multi-stemmed) in the south giving way to much higher quality timber as you progress north. Undulating hills. North facing slope of steep hill in south portion of stand has some nice white ash and yellow birch. Occasional 14-18" sugar maple. Transition into mostly sugar maple, lower BA, in the north. Presence of conifer (balsam fir, red pine) in the understory on west edge along powerline.
41	4116 - Mixed N. Hardwood - Aspen	Medium Density Log	2.0	65	81-110	Stand sits in a bowl, future management would be difficult but possible. Aspen is in poor condition and much is declining; aspen management is not recommended (poor quality, difficult terrain).
42	4110 - Sugar Maple Association	High Density Log	89.1	75	51-80	BBD, EAB, and Black Knot present. Trace amounts of black cherry, <2%. Bigtooth aspen is present in the north and northwestern half of the stand; white ash is primarily contained within the southern half; beech becomes more evenly distributed in the southern third of the stand. There's a small (<1ac) inclusion of smaller diameter hardwood amongst a pocket of aspen just north of the center of the stand. Beech and sugar maple pole-sized regeneration is 40'+. BA swings varied from 60 to 110 BA. Understory should be looked at more closely in the spring.
43	4110 - Sugar Maple Association	High Density Log	63.6	75	111-140	Band of pine in the south: L/XL red pine (20"), white pine (24"). High quality basswood and sugar maple. Hilly but manageable; accessible from Fireline Road (to the west). Sugar maple understory needs to be released. Most beech is in the north half of the stand. 3 elm and some red maple (<2%). There's a pocket of red maple, white and red pine, black cherry, and basswood in the southwest. The stand transitions gently into the more beech/red maple/yellow birch/basswood dominated stand to the north. Occasional aspen (XL, L) throughout stand, higher prevalence along western edge; aspen clone inclusion in the northwest along boundary. Beech Bark Disease.
45	4130 - Aspen	High Density Pole	3.2	38	111-140	Clearcut in 1976. Peripheral elm. American hazelnut on edge nearest clearcut. Treat in 10-20 years. Hardwood inclusion (.4ac) in southern tip. Retention from adjacent clearcut?
46	4130 - Aspen	High Density Pole	4.6	38	81-110	BA Swings picked up primarily pole-sized timber and very few logs. Clearcut in 1975. Great looking stand. Highly productive and good quality aspen. Red and white pine are present in the super-canopy; sugar maple is barely competing with the aspen and could be considered mostly understory. Some pole-sized trees in the understory (occasional beech, white ash, sugar maple) not making the canopy. Occasional white pine supercanopy in south only.
47	4112 - Maple, Beech, Cherry Association	Medium Density	11.5	6		Sale closed in 2007 (Mammoth Red Pine). Formerly red pine plantation, clearcut with 10 - 20 BA of residual red pine. There are a few residual black cherry, elm, basswood, white ash, and ironwood along the road. Inventory is best estimation with current snow levels.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
48	4133 - Aspen, Mixed Pine	High Density Pole	9.2	36	111-140	Presence of elm in the northeast. A few log-sized white ash. There's a pocket of red pine in the center of the stand with a mixed subcanopy.
49	4130 - Aspen	Medium Density Log	17.3	59	51-80	Lesser quality, poor(er) stocking. Fully stocked sugar maple understory. Dead elm (of good form), converted to poorly stocked aspen. There are a couple openings in the stand with trace amounts of red and jack pine. Trace amounts of hawthorn in the understory; raspberry is clumpy - in areas with minimal canopy cover. Aspen is 85% canopy cover in west, falling out towards the east. Treatment boundary should concentrate around aspen. White trunk rot in some bigger aspen; black knot in the cherry.
50	4110 - Sugar Maple Association	High Density Log	3.6	96	51-80	High quality hardwood, all sugar maple except for a few basswood <2%.
51	4110 - Sugar Maple Association	High Density Log	23.7	65	81-110	Select cut in 2007. There was some damage to the standing timber from the harvest. There is an east-facing slope in the middle of the stand; operable. There are a lot of pole-sized sugar maple throughout the stand. Declining (log) bigtooth aspen on the easternmost edge, adjacent to clearcut, <2% canopy presence. Elm present. BA swings = 70, 80, 90, 100 = 85 average BA. 2007 sale boundary excludes southern 2.5 ac of similar composition.
52	4139 - Aspen, Mixed Deciduous	High Density Sapling	62.1	17		Planted in 1931, seed tree cut in 1996. Ironwood was uncut in the seed tree Rx and has a larger diameter. This is a sapling stand verging on pole; highly variable diameters, densities, and species distributions. Basswood regeneration should be in the canopy but has been heavily browsed by deer. Red pine is regenerating along skid trails and in landing openings.
53	4116 - Mixed N. Hardwood - Aspen	High Density Sapling	74.2	17		Super canopy red pine (formerly red pine plantation). Beech regeneration is in poor condition. Heavy browsing on basswood and sugar maple in the subcanopy. There are a couple pockets of pole-sized quaking aspen, bigtooth aspen, basswood, elm, and sugar maple - likely advanced regeneration from before the clearcut. There are a few pockets that were affected by heavy snow in the past couple years; leaning, arched, most likely wont recover. Variable diameters within stand. 20-30 BA residual red pine. Knapweed in openings.
54	4110 - Sugar Maple Association	High Density Log	8.0	67	81-110	Larger diameter, better quality hardwood. Not much diversity, but a healthy, vigorous stand.
55	4130 - Aspen	High Density Pole	17.7	38	51-80	Stand was cut in 1976. Some white trunk rot, not affecting whole stand. Sugar maple pole in the subcanopy is the same age as the aspen, just out-competed. White ash and elm in canopy, <2%. Mortality in some elm.
56	4117 - Mixed N. Hardwood - Pine	High Density Log	9.7	82	81-110	Mix of bigtooth and quaking aspen falling out. <2% of total canopy coverage on the interior, but dominant species along road along with white pine and red pine. "BTA" canopy includes small amounts of quaking aspen as well. Trace amounts of ironwood and elm in the canopy. Predominately pole sized timber in the south-southeast. Difficult to inventory subcanopy <3' under snow.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	4110 - Sugar Maple Association	High Density Log	103.3	83	51-80	Sub-canopy species and densities are based on observations with >3' of snow. Beech bark disease is present, not prolific. Beech increases in presence as you travel south along the southeast leg of the stand, Variable, undulating terrain. 75% canopy cover, nice gaps. Came across one ash with EAB. BA swings: 70, 100, 100, 100, 40, 60 = 78 ave.
58	4133 - Aspen, Mixed Pine	Medium Density Log	23.5	61	81-110	This stand is multi-storied, although DISCO wont let me acknowledge that. Trace amounts of elm, some log sized. Increased red pine to the north. Deteriorating timber (especially overmature aspen and jack pine) creating slash. Variability of diameters, ages, and stratification create a multi-storied stand.
59	4130 - Aspen	Medium Density	24.0	16		1998 Year of Origin. Some black knot it cherry.
60	4110 - Sugar Maple Association	Medium Density Log	20.8	76	81-110	Select cut in 2006. There are healthy log sized elm; pockets of heavy beech regeneration; one log bigtooth aspen. Basswood stump sprouts have been browsed to nothing, Occasional black cherry, <2% in the canopy. Occasional red pine along edges. BA Swings = 120, 90, 110, 70, 60, 100, 100 = 93 average. Canopy closure is on the high end of 75%, could be considered 75-100% closed. Two questionable cores - ages is best estimation.
61	4110 - Sugar Maple Association	High Density Log	158.6	75	111-140	Currently under contract. Inventory includes trees marked to cut. Southwest corner includes red maple, basswood, bigtooth aspen, quaking aspen, ironwood, and black cherry, <2% canopy. Evidence of bear on beech. EAB present but not affecting all ash. No BBD signs. Very snowy - difficult to aptly inventory subcanopy <3'.
62	4139 - Aspen, Mixed Deciduous	Medium Density Log	9.6	57		Steep hills, especially the southeast up to the adjacent clearcut. Black knot on understory cherry. Little knoll with black cherry in the southwest corner. Aspen deteriorating, becoming a well stocked, decent quality hardwood stand. Three fairly distinct age classes: aspen - maple - cherry/beech/maple.
63	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	104.2	17		Seed tree harvest in 1996, 20-50 BA red pine (super-canopy) left. Stand originally planted to red pine in the early 1930s. Trace amounts of balsam fir (pole, log). Beech becomes increasingly abundant in the east; beech scale present. Larger overall diameter as you progress southbound through the stand. Some pockets (<1/4 ac each) of snow/ice damage from previous year(s) where trees are bowed and haven't sprung back. Very heavy browsing on basswood (*noted in understory). Pole-sized timber represented in the inventory were left uncut (likely due to unmerchantability) during the seed tree harvest.
64	4119 - Mixed Northern Hardwoods	High Density Sapling	7.2	7		Formerly a red pine plantation, cut in 2006, leaving 20-40BA red pine supercanopy. Knapweed and raspberry are abundant in skid trails and openings. Occasional sugar maple, black cherry, and ironwood (log- and pole-sized) left from original pine stand. Occasional basswood and bigtooth aspen pole-sized trees along the north edge of the stand. Little regenerating in landing along County Line Rd. Red pine planted in 1931.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
65	4110 - Sugar Maple Association	Medium Density Log	4.8	85	81-110	One yellow birch in the southwest, occasional black cherry (<2%), elm. Subcanopy is fully stocked and if included with canopy would be 100% coverage. High quality basswood, large diameter. Unique stand.
66	4110 - Sugar Maple Association	High Density Pole	4.0	87	111-140	Former plantation; red pine on edges (possibly <2%). North facing slope on the northern half of the stand. Hemlock seeding in from adjacent compartment to the south. Good potential for hemlock throughout this and similar stands. The stand is small and would benefit from growing another cycle. Consider treating with the stand to the south (when it's ready) in compartment 34 for additional acreage. **Due to small acreage (4ac) and presence of dirtbike trail, this is a low priority stand to treat. Sensitivity to hemlock and elm further reduces treatable acreage.
67	42110 - Planted Red Pine	High Density Sapling	17.8	13	81-110	Planted in 2000. Trace amounts of paper birch, basswood, beech, and balsam fir in the subcanopy. 20BA+/- (large sap/pole) hardwood in the understory.
68	4311 - Pine, Aspen Mix	High Density Sapling	33.7	13		Old landing in the south (approx. 1 ac), dominated by aspen/hardwood mix. Without a planting record, I can't tell if this was a failed plantation or not. It will be a mixed pine-aspen stand with an inclusion of black cherry and other hardwood. Beech regen along the perimeter; clumps of red pine 100% then variable rp/jk/aspen/cherry mix; clumps of all cherry/aspen/ a few openings. Black knot and brooming in some cherry. Occasional paper birch; came across one oak and a couple hawthorn. Couple bigtooth aspen in the west and northwest. Heavy browsing on the sugar maple.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	3303 - Mixed Low Density Trees	7.5	No	Low	Return in spring/summer to evaluate groundcover.
21	790 - Other Bare/Sparsely Vegetate	20.3	No	Low	Pipeline. Encroaching trees (deciduous and coniferous),
23	3303 - Mixed Low Density Trees	2.2	No	Low	Dense trees along road. Cleared area, utilized by vehicles now. Sugar maple, white ash along slope to road and in eastern pocket. Sporadic seedling/sapling sugar maple. Dense raspberries, knapweed, queen ann's lace; mixed hardwood regenerating.
33	3202 - Autumn Olive/Honeysuckle	5.4	No	Low	Thistle too. Come back in spring to observe ground cover.
37	2114 - Other Cropland	2.8	No	Low	Mowing and planting by adjacent landowner. Corner is set and identifiable.
44	3303 - Mixed Low Density Trees	52.7	No	Low	Either jack pine bud worm or another terminal miner in pine regen. Pine diameters are varied, from sapling to log to XL. Historically a maintained opening, created/widened many years ago. Encroaching timber on all sides.