# DNR DRANGE

#### **Compartment Review Presentation**

**Gaylord Forest Management Unit** 

Compartment 52034 Entry Year 2018 Acreage: 3,483

**County Charlevoix** 

Management Area: Chandler Hills

Revision Date: 2016-05-12 Stand Examiner: Zach Crew

**Legal Description:** 

T33N, R4W Sections 1, 2, 11, 12, 13 & 14

#### **Identified Planning Goals:**

To provide for the protection, integrated management, and responsible use of a healthy, productive, and undiminished forest resource base for the social, recreational, environmental, and economic benefit of the State of Michigan.

#### Soil and topography:

This compartment is a mixture of well drained loamy sands with areas of excessively drained gravelly sand. Moraines included Kalkaska-Leelanau associations, Leelanau-Emmet associations, and Blue Lake-Kalkaska associations. The lake plains/gravel is a Mancelona-East Lake association. It is mostly AFO. There are rolling to steep hills throughout the entire compartment.

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

The south portion of the compartment borders on private property. There are some private holdings within the compartment.

#### **Unique Natural Features:**

Red shouldered hawks have been documented in this compartment.

#### Archeological, Historical, and Cultural Features:

An old CCC camp and the site of the village of Springvale.

#### **Special Management Designations or Considerations:**

None known

#### **Watershed and Fisheries Considerations:**

The boundary between fisheries management units runs through this compartment, with part of the compartment in the Northern Lake Huron Management Unit and part in the Central Lake Michigan Management Unit. The portion in the NLHMU are is within the watershed of the W. Branch Sturgeon River. Best management Practices should be followed.

#### Wildlife Habitat Considerations:

This compartment is within a large complex of northern hardwoods which benefits featured species such as Amreican marten, red-shouldered hawk, wild turkey, and wood thrush. Habitat features that benefit these species include large, downed woody debris and large canopied trees. Forest management practices should account for these features to be retained or enhanced. Openings should be maintained for diversity in the landscape.

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

Surface sediments consist of an end moraine of coarse-textured till, sand and gravel from ice-contact drift and glacial outwash, and postglacial alluvium. The glacial drift thickness varies between 200 and 800 feet. The Antrim Shale is mapped as immediately underlying the glacial drift, but well logs indicate that the Ellsworth Shale may be present above the Antrim. The Antrim is quarried for cement products elsewhere in the state. There are two sand and gravel pits within two miles to the northeast and potential is good within the compartment. Antrim Shale gas production occurs approximately one mile to the south of the compartment. There may be additional Antrim potential in the southern half of the compartment, but the Antrim Shale is thinning and pinching out to the north. There was some Collingwood Shale production three miles to the southeast, and much of this area was previously leased for the Collingwood play. However, the Collingwood is still an unproven play, interest in the formation has waned, and most leases in the area have expired.

#### **Vehicle Access:**

No portion of State owned land exceeds 1/2 a mile from the nearest road.

#### **Survey Needs:**

None needed at this time.

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

MCCCT, ORV, and snowmobile trails are all found throughout the compartment.

#### **Fire Protection:**

#### **Additional Compartment Information:**

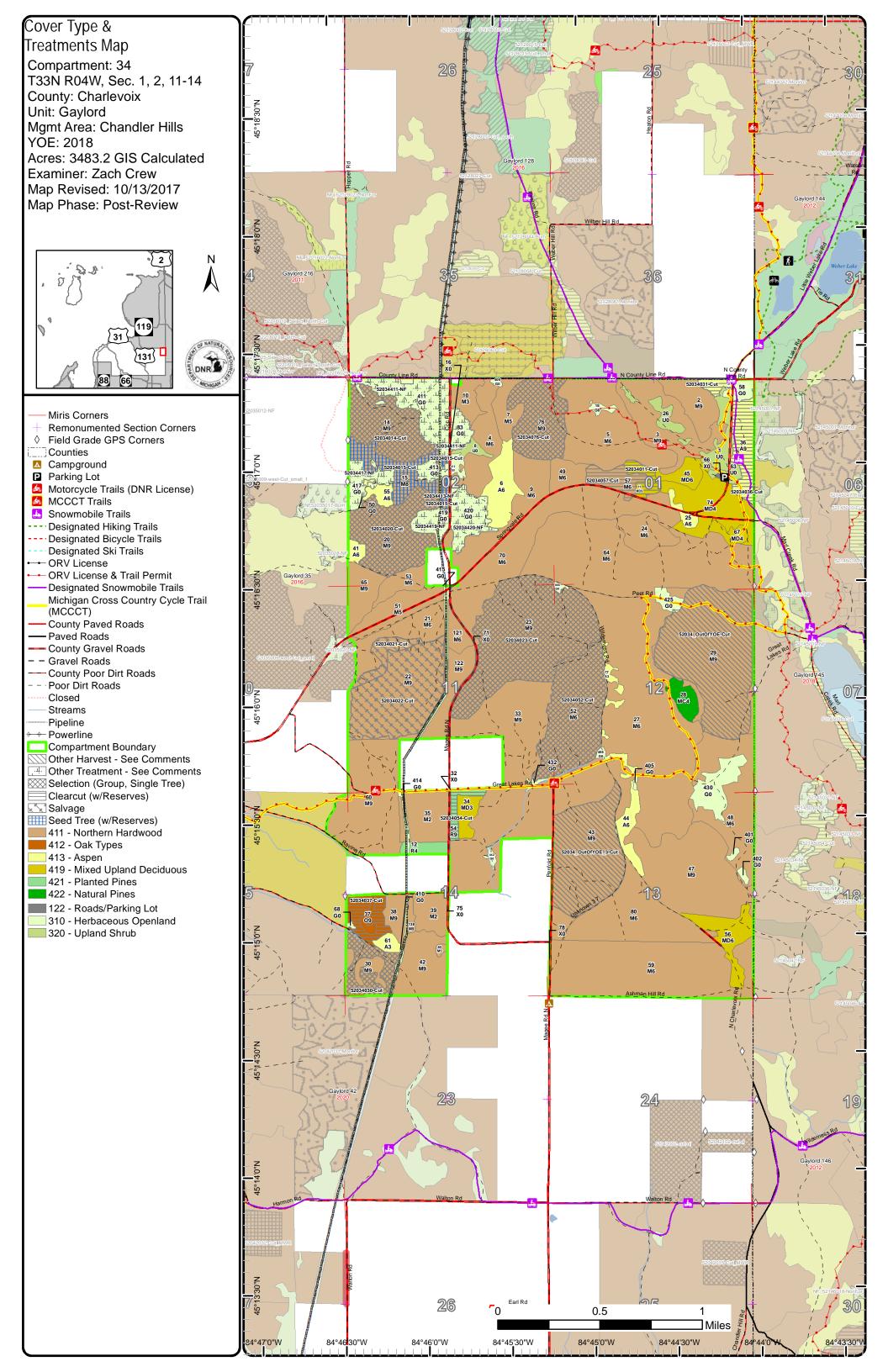
The following reports from the Inventory are attached:

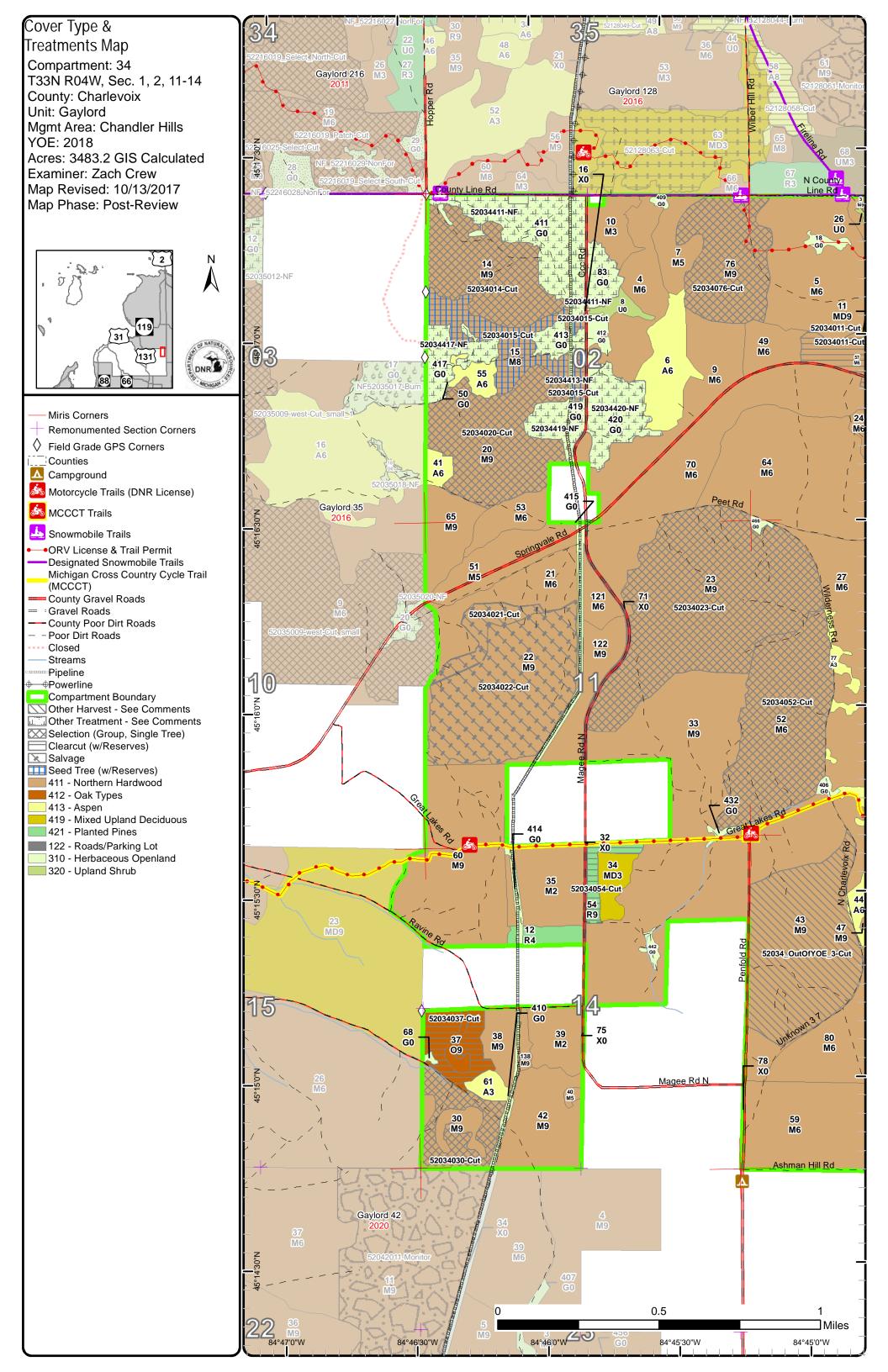
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

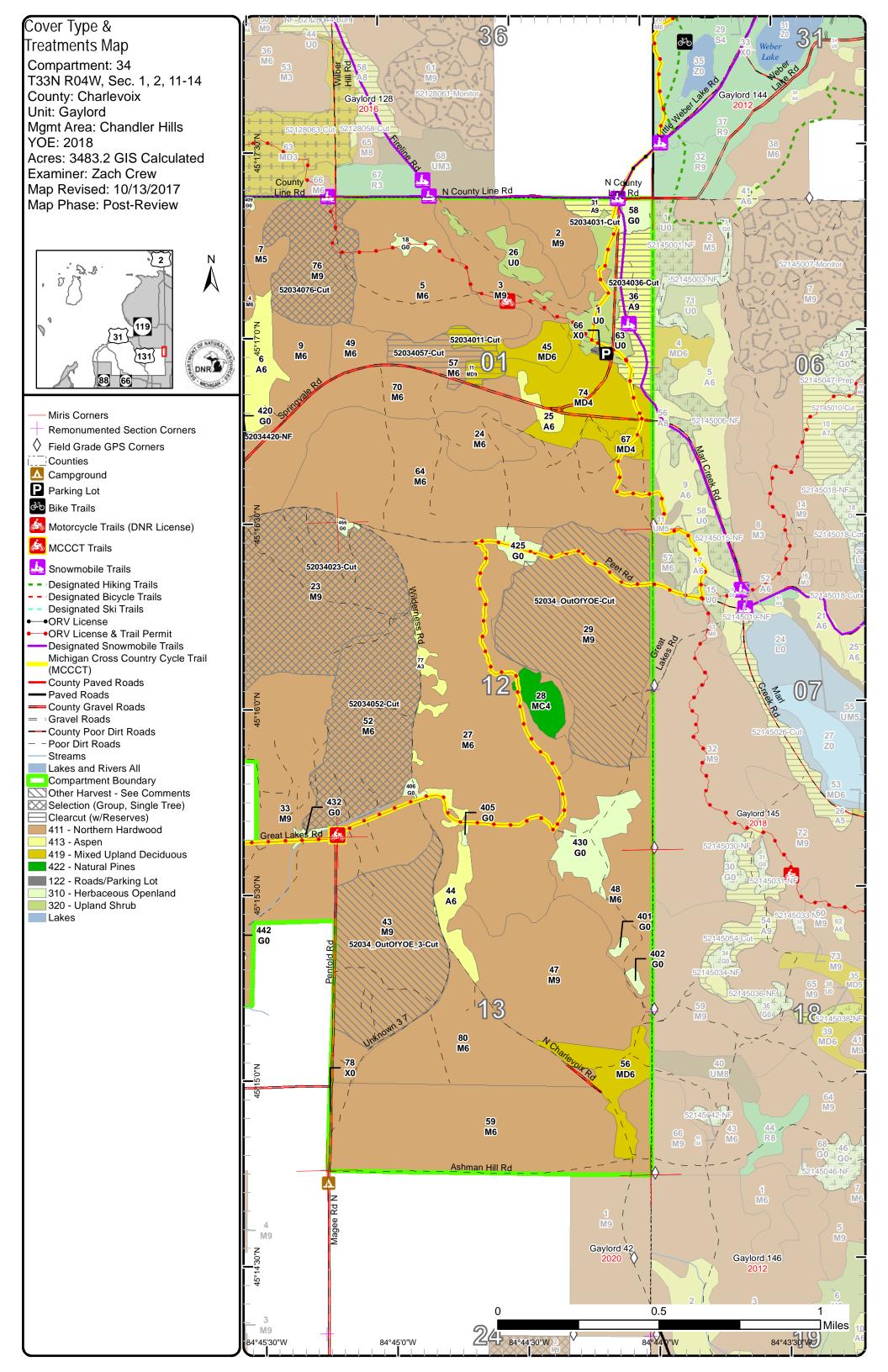
The following information is displayed, where pertinent, on the attached compartment maps:

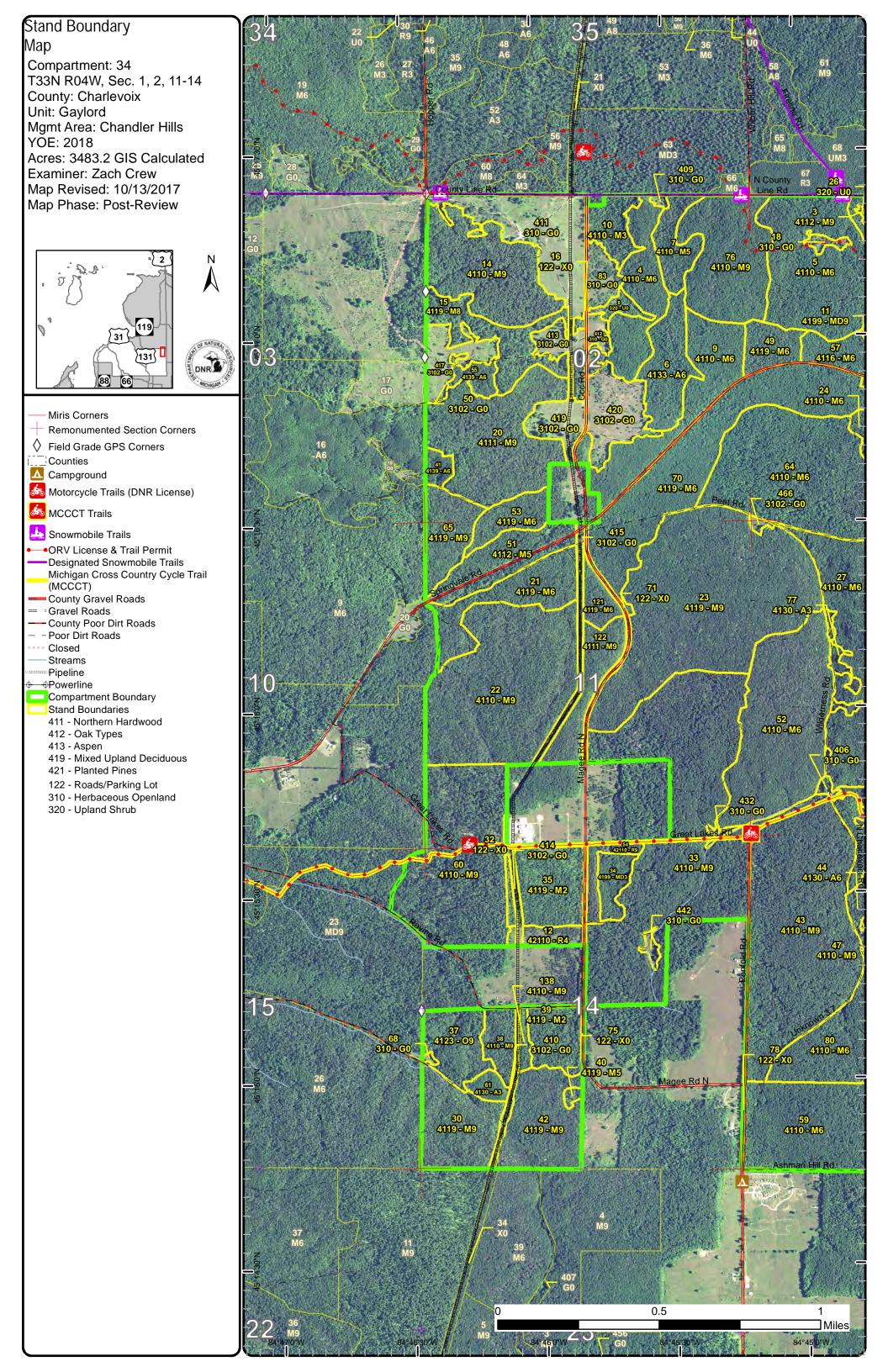
Base feature information, stand boundaries, cover types, and numbers Proposed treatments

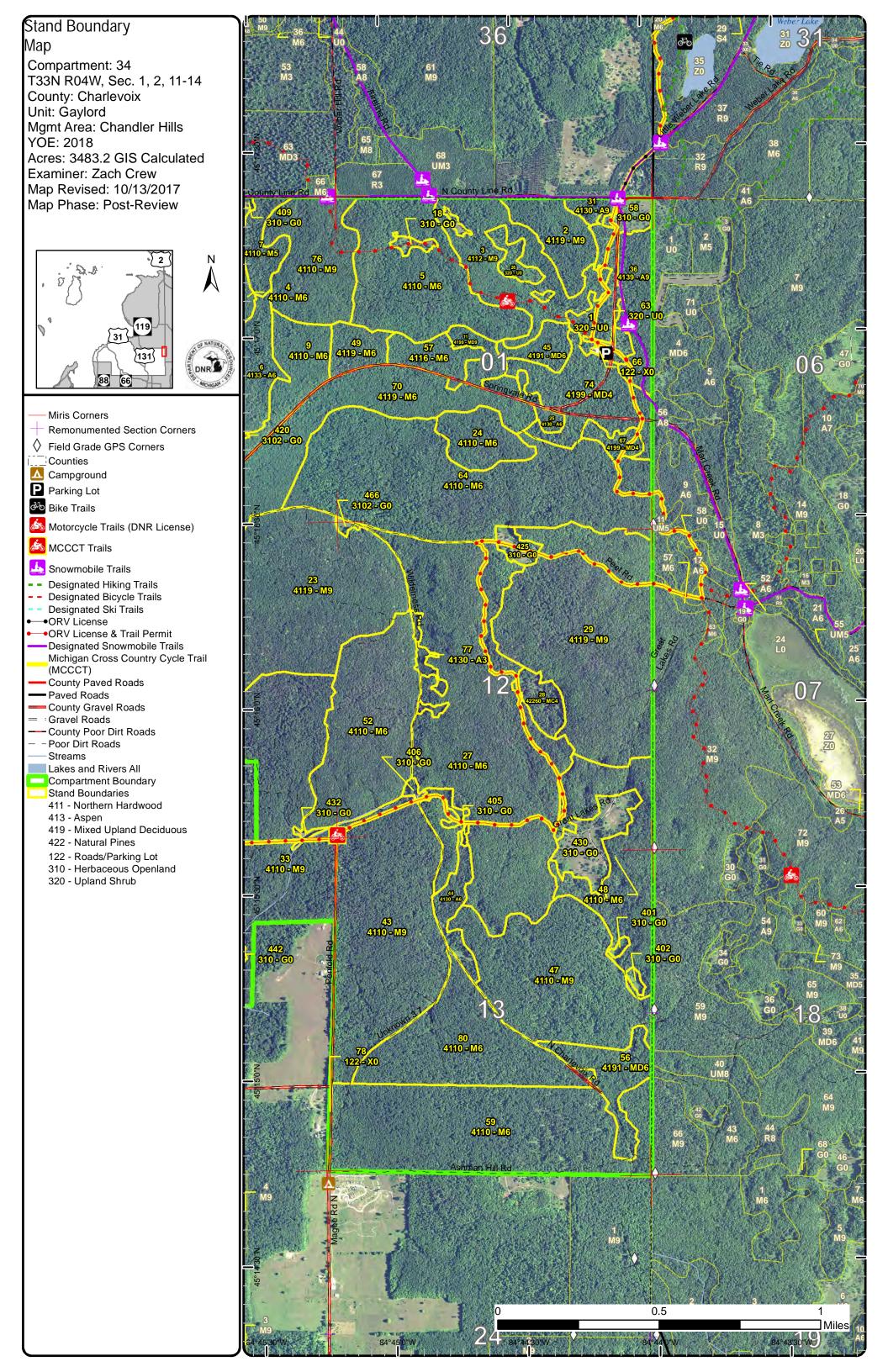
Site condition boundaries
Details on the road access system

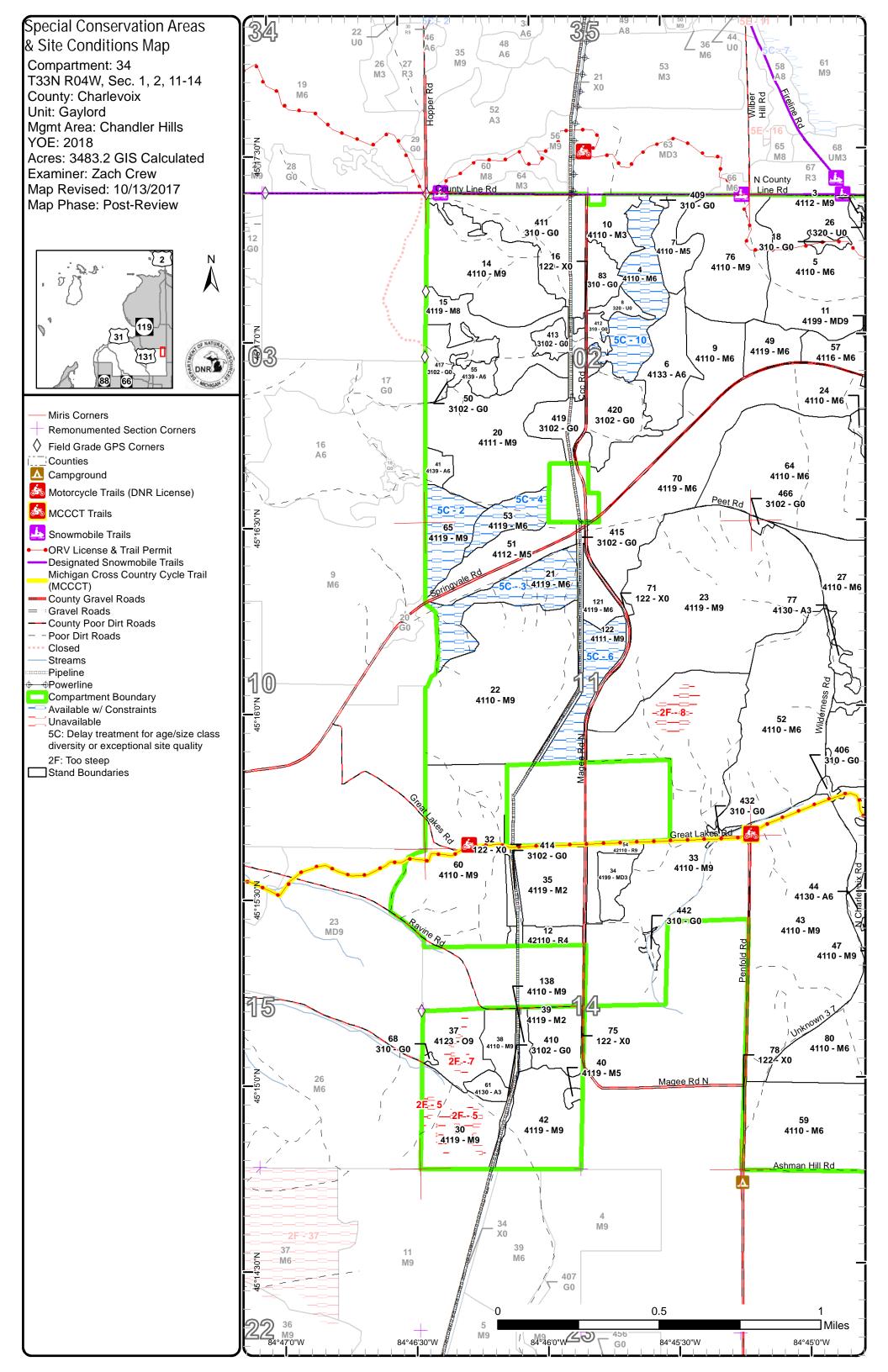


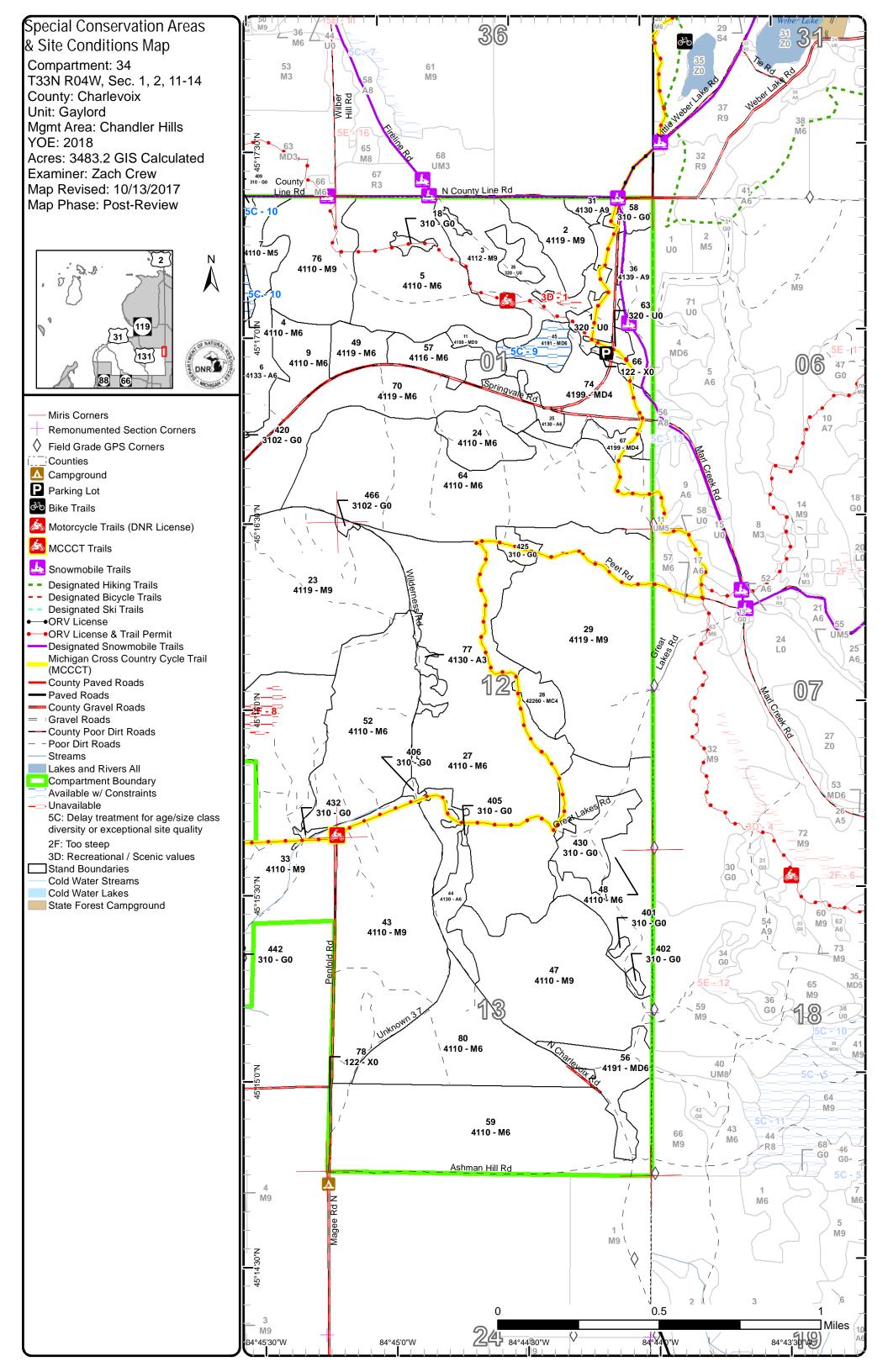












Gaylord Mgt. Unit Zach Crew: Examiner

Compartment 34 Year of Entry 2018



Age Class

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Aspen	0	0	16	5	43	16	6	31	0	0	0	0	0	0	0	0	0	0	117
Herbaceous Openland	213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213
Mixed Upland Deciduous	0	0	0	41	0	8	53	11	0	12	0	0	0	0	0	0	0	0	125
Natural Mixed Pines	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Northern Hardwood	0	35	0	35	0	0	19	482	1295	453	397	13	0	0	0	0	0	190	2919
Oak	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	25
Red Pine	0	0	8	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	17
Upland Shrub	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Urban	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	268	35	24	94	43	24	78	524	1295	474	397	38	0	0	0	0	0	190	3484



#### **Report 2 – Treatment Summary**

# Gaylord Mgt. Unit Year of Entry: 2018

#### **Acres of Harvest**

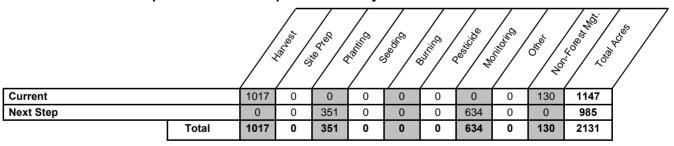
Compartment 34
Total Compartment Acres: 3,483

Commercial Harvest - 1016 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

#### **Cover Type by Harvest Method**

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		/ (	# 15 m	16 15 15 15 15 15 15 15 15 15 15 15 15 15			Some Some	and a second	To the state of th	80 July 1		
Aspen		36	0	0	0	0	0	0	0	0	36	
Mixed Upland Deciduous		11	0	0	0	0	0	0	0	0	11	
Northern Hardwood		18	501	0	37	0	0	0	116	267	939	
Oak		21	0	0	0	0	0	0	0	0	21	
Red Pine		9	0	0	0	0	0	0	0	0	9	
	Total	95	501	0	37	0	0	0	116	267	1017	

#### **Proposed and Next Step Treatments by Method**



Well

Compartment: 34 Year of Entry: 2018

Hardwood



а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure Status d 52034 OutOfY 106.8 4110 - Sugar Maple Sawtimber 411 - Northern Unspecified Field Boundary 83 81-110 Harvest Other - Specify

Association OE 3-Cut **Habitat Cut: No** Site Condition:

Prescription Cut all Ash and Beech inside the sale boundary except those beech that exhibit resistance to BBD, they are to be marked to leave.

Specs:

t

Next Step **Treatments:** 

<u>Acceptable</u>

Regen:

Old next step comments: Monitor regeneration and the growth of residual stems

Comment:

Other

Proposed Start Date: 10/01/2012

29 52034 OutOfY 159.9 4119 - Mixed Sawtimber 93 81-110 411 - Northern Unspecified Field Boundary Harvest Other - Specify Hardwood

Northern Hardwoods **OE-Cut** Well

Site Condition:

Prescription Remove all ash and beech from sale area. Mark a few beech to leave if they show resistance too BBD.

Specs:

Next Step Treatments:

**Habitat Cut: No** 

<u>Acceptable</u> Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2012

52034011-Cut 10.9 4199 - Other Mixed Sawtimber 63 111-Harvest Clearcut with 4199 - Other Even-Aged Draft Field **Upland Deciduous** Well 140 Retention Mixed Upland Boundary

Deciduous

**Habitat Cut: No Site Condition:** 

Prescription Final harvest all trees 2 inches and up. Focus retention around well developed pockets of white pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of species that is similar in composition to the parent stand that meets minimum stocking requirements.

Regen:

Protect hawthorne during harvest operations. Other

Comment:

Proposed Start Date: 10/01/2017

52034014-Cut 63.1 4110 - Sugar Maple Sawtimber 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Association Well 140 Selection Hardwood Aged Boundary

**Site Condition: Habitat Cut: No** 

Prescription Single tree selection with ash and beech removal. Thin down to 80 BA according to Compleat Marker. Create large, clean regeneration gaps 100 feet in size, where stand dictates, approximately 2 per 5 acres. Leave about 1 beech per 3 - 5 acres that appear BBD resistant or would Specs:

make good den trees.

Next Step Monitoring, Natural Regen (Intermediate); Planting, Interplant

**Treatments:** 

Acceptable Mixed northern hardwoods such as sugar maple, basswood, black cherry, white ash, red maple, beech, and ironwood. Stand should not be

overly dominated by beech and ironwood.

Other Only cut elm or hemlock if necessary. Leave higher density around hemlock pockets. Plant some oak in gaps post harvest.

Comment:

Regen:

Proposed Start Date: 10/01/2017 Size

Density

Compartment: 34 Year of Entry: 2018

**Cover Type** Age **Approval** Objective Structure Status

52034015-Cut 15

**Treatment** 

Name

4119 - Mixed 37.2 Northern Hardwoods

Stand

CoverType

Sawtimber 71 81-110 Medium

Stand

Age

Harvest

**Treatment** 

Type

Seed Tree

**Treatment** 

Method

411 - Northern Hardwood

Even-Aged

**Draft Field** Boundary

**Habitat Cut: No** Site Condition:

Acres

Prescription Seedtree - Mark to leave about 20-30 BA of "good" quality seed producers of mixed species, but focus on wind stable sugar maple and basswood. Cut all other trees 2" DBH and greater to encourage sugar maple, basswood, aspen, and other desirable hardwood recruitment. Specs:

BA

Range

Monitoring, Natural Regen (Intermediate); Planting, Interplant Next Step

**Treatments:** 

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n

d

Acceptable Mixed northern hardwoods such as sugar maple, basswood, black cherry, white ash, red maple, beech, and ironwood. Some areas will be

dominated by aspen. Stand should not be overly dominated by beech and ironwood. Regen:

Other Allow to harvest during summer for some scarification and to setback the beech and ironwood regeneration. Plant some oak in gaps post

Comment: harvest.

**Habitat Cut: No** 

Old barbed wire fence runs along road.

10/01/2017 **Proposed Start Date:** 

78.2 4111 - S.Maple, 96 Single Tree 411 - Northern Draft Field 52034020-Cut Sawtimber 111-Harvest Uneven-Hard Mast Well 140 Selection Hardwood Aged Boundary

> Association **Site Condition:**

Prescription Single tree selection with ash and beech removal. Thin down to 70-80 BA according to Compleat Marker. Harvest most economically mature Specs: trees 22-24" DBH and greater where appropriate. Create large regeneration gaps 100 feet in size, where stand dictates, approximately 2 per 5

acres. Leave about 1 beech per 3 - 5 acres that appear BBD resistant or would make good den trees.

Next Step Monitoring, Natural Regen (Intermediate); Planting, Interplant

**Treatments:** 

Regen:

Acceptable Mixed northern hardwoods such as sugar maple, basswood, black cherry, white ash, red maple, beech, and ironwood. Stand should not be

overly dominated by beech and ironwood.

Other 70 BA is acceptable to account for salvage species and also to encourage maple and basswood regeneration. Only cut hemlock if necessary

and leave higher density around hemlock pockets. Stick nest in southeast, unknown if occupied. Plant some oak in gaps post harvest. Comment:

10/01/2017 **Proposed Start Date:** 

52034021-Cut Salvage 10.2 4119 - Mixed Poletimber 80 111-Harvest 411 - Northern Even-Aged Field Boundary Northern Hardwoods Well 140 Hardwood

**Site Condition: Habitat Cut: No** 

Prescription Cut all ash, cut all beech except target to leave 1-2 per acre.

Specs:

Next Step

Treatments:

Acceptable Since this is a salvage harvest, regeneration is not a main concern.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2007

106.1 4110 - Sugar Maple Sawtimber 79 81-110 411 - Northern Even-Aged Field Boundary 52034022-Cut Harvest Salvage Hardwood

Association

**Habitat Cut:** No **Site Condition:** 

Prescription Cut all Ash. Cut all beech, except target to leave 1-2 per acre for mast production. Some slopes may be to steep to harvest.

Specs:

Next Step

**Treatments:** 

Acceptable A Salvage sale does not have a purpose of regeneration therefore there is no regeneration concern.

Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2007

Compartment: 34
Year of Entry: 2018

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**Treatment** Stand BA **Treatment Treatment Cover Type** Acres Stand Size Age **Approval** n Name CoverType Density Age Range Type Method Objective Structure Status d Single Tree 52034023-Cut 4119 - Mixed 81-110 411 - Northern Draft Field 23 172.5 Sawtimber 72 Harvest Uneven-Northern Hardwoods Well Selection Hardwood Aged Boundary

Habitat Cut: No Site Condition:

Prescription Salvage all beech and ash, then thin remaining timber to 80 BA. Leave a few scattered beech for mast. Protect hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory); Planting, Interplant

**Treatments:** 

Acceptable Sugar maple, red maple, basswood

Regen:

Other Plant oak in gaps post harvest.

Comment:

Proposed Start Date: 10/01/2017

52034030-Cut 28.3 4119 - Mixed Sawtimber 94 141-Harvest Single Tree 411 - Northern Uneven-Draft Field Northern Hardwoods Well Selection Hardwood 170 Aged Boundary

Habitat Cut: No Site Condition:

<u>Prescription</u> Single tree selection with ash and beech removal. Thin down to 80 BA according to Compleat Marker. Areas that are too steep are approximate <u>Specs:</u> and must be determined during setup. Mark these areas out of the sale. Mark a few beech to leave that may be BBD resistance, or would make

good den trees, about 1 per 2-5 acres.

Next Step Monitoring, Natural Regen (Intermediate)

**Treatments:** 

Acceptable Mixed hardwoods such as sugar maple, basswood, red maple, white ash, beech, and ironwood. Stand should not be overly dominated by beech

Regen: and ironwood regeneration.

Other Severely eroded trail on west cuts through the stand and may need some rehabilitation before and after harvesting.

Comment:

Proposed Start Date: 10/01/2017

31 52034031-Cut 5.7 4130 - Aspen Sawtimber 59 81-110 Harvest Clearcut 413 - Aspen Even-Aged Draft Field Well Boundary

Habitat Cut: No Site Condition:

Prescription Final harvest all trees 2 inches and up. No retention due to small stand size. Utilize appropriate sale specs to ensure protection of rec trails.

Specs: Run the sale boundary using the rec trail in the east as the edge of the sale area.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of species that results in an aspen dominated stand that meets minimum stocking requirements.

Regen:

Other Protect wildlife shrubs.

Comment:

Proposed Start Date: 10/01/2017

36 52034036-Cut 30.7 4139 - Aspen, Sawtimber 62 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Draft Field Retention Boundary

a Deciauous vveii Retention

Habitat Cut: No Site Condition:

Prescription Final harvest all trees 2 inches and up. Focus retention along snowmobile trail and around pockets of better quality hardwood. Utilize trail specs

Specs: to ensure protection of rec trails.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of species dominated by aspen that meets minimum stocking requirements.

Regen:

Other Protect wildlife shrubs.

Comment:

Proposed Start Date: 10/01/2017

S

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
37	52034037-Cut	21.1	4123 - Red Oak	Sawtimber Well	100	81-110	Harvest	Clearcut	4123 - Red Oak	Even-Aged	Draft Field

**Habitat Cut: No Site Condition:** 

Prescription Harvest all trees 2" DBH and greater. Leave 3-10% retention on steeper slopes and wet seep areas. Site must be scarified well during harvest, Specs:

but do not create areas vulnerable to erosion.

Monitoring, Natural Regen (Intermediate) Next Step

**Treatments:** 

Acceptable The goal should be to regenerate a significant amount of oak, associated with other mixed hardwoods such as sugar maple, basswood, red

maple, white ash, ironwood and beech. Stand should not become overly dominated by beech and ironwood regeneration. Regen:

Other Harvest during snow off conditions for proper scarification, but also outside of oak wilt restriction.

Comment:

**Proposed Start Date:** 10/01/2017

52 52034052-Cut 99.3 4110 - Sugar Maple Poletimber 111-Harvest Single Tree 411 - Northern Uneven-Draft Field Association Well 140 Selection Hardwood Aged Boundary

**Habitat Cut: No** Site Condition:

Prescription Mark the thin stand down to a target BA of 70-90 square feet. Mark out 100 foot diameter regen gaps where appropriate. At a minimum this

should be 1 per 5 acres. Protect under represented species. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable A mix of northern hardwood species dominated by sugar maple that meets minimum stocking requirements.

Regen:

Make sure during operations to protect the integrity of the Rec Trail on the south end of stand 52 if it is utilized during harvest operations. Other

Comment:

Proposed Start Date: 10/01/2017

52034054-Cut Draft Field 42110 - Planted Sawtimber 80 411 - Northern 8.9 111-Harvest Clearcut Two-Aged Red Pine Well 140 Hardwood Boundary

**Habitat Cut: No Site Condition:** 

Prescription Final harvest all red pine logs.

Specs:

Monitoring, Natural Regen (Re-Inventory) Next Step

**Treatments:** 

Acceptable Red pine, red oak, red maple, aspen.

Regen:

**Other** Caution when working by powerlines along Magee Rd.

Comment:

**Proposed Start Date:** 10/01/2017

4116 - Mixed N. 52034057-Cut 17.9 Poletimber 65 81-110 Clearcut with 4199 - Other Draft Field Harvest Even-Aged Hardwood - Aspen Well Retention Mixed Upland Boundary Deciduous

**Habitat Cut: No Site Condition:** 

Prescription Harvest all trees 2 inches and up, utilize retention to try and save pockets of well developed white pine.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Any mix of species with aspen and red maple dominating, that meets minimum stocking requirements.

Regen:

Other Protect hawthorne and juneberry during harvesting operations.

Comment:

Proposed Start Date: 10/01/2017 Next Step

Acceptable A mix of northern hardwood species that meets minimum stocking requirements

Regen:

Other

Sale still has old paint showing up pretty well, so consider marking the stand with a different color than orange.

Comment:

**Proposed Start Date:** 10/01/2017

52034411-NF 60.8 310 - Herbaceous Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field Openland ified Herbaceous Boundary Openland

**Habitat Cut: No Site Condition:** 

Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2017

413 52034413-NF 10.0 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 310 -Draft Field ified Herbaceous Boundary

Openland

**Site Condition: Habitat Cut: No** 

Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast

Specs:

Next Step

**Treatments:** 

Acceptable Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2017

417 52034417-NF 17.7 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 3102 - Grass Draft Field Boundary

ified

**Site Condition: Habitat Cut: No** 

Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast

Specs:

Next Step

**Treatments:** 

<u>Acceptable</u> Regen:

**Other** Leave out hawthorn around the edges.

Comment:

10/01/2017 **Proposed Start Date:** 

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 34 s Year of Entry: 2018 t а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type Approval** Age n Method Objective d Name CoverType Density Age Range Type Structure **Status** Draft Field 52034419-NF Unspec NonForestMgt 419 14.3 3102 - Grass Nonstocked Other - Specify 3102 - Grass ified Boundary **Habitat Cut:** No **Site Condition:** Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast Specs: Next Step Treatments: <u>Acceptable</u> Regen: Other Leave out patch in center of giant basswood, white pine poles, and some hawthorn. Comment: 10/01/2017 **Proposed Start Date:** 420 52034420-NF Draft Field 27.2 3102 - Grass Nonstocked Unspec NonForestMgt Other - Specify 3102 - Grass ified Boundary **Habitat Cut: No Site Condition:** Prescription Brush, mow, plant, burn and/or herbicide to maintain opening. Planting of hard and soft mast Specs: Next Step **Treatments:** 

Proposed Start Date:

Total Treatment
Acreage Proposed:

Acceptable
Regen:
Other
Comment:

10/01/2017 **1146.5**  Gaylord Mgt. Unit

Zach Crew : Examiner

Year of Entry: 2018

Compartment: 34

Availa	ability for	Managemer	nt					
Total	Acres	Acres Avail	Acres		Domina	nt Site	e Cond	dition
Acres	Available	With Condition	Not Available		5C	2F	3D	
117	117	0	0	Aspen				
213	213	0	0	Herbaceous Openland				
124	112	12	0	Mixed Upland Deciduous	12			
13	13	0	0	Natural Mixed Pines				
2919	2757	140	22	Northern Hardwood	140	20	2	
25	21	0	4	Oak		4		
17	17	0	0	Red Pine				
40	40	0	0	Upland Shrub				
15	15	0	0	Urban				
3,483	3,305	152	26	Total Forested Acres	152	24	2	
	95%	4%	1%	Relative Percent				•

<sup>\*</sup>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	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Pocket of large, nat	ural white pine along trail. Lea	ve for ae	sthetics.			
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	24	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	36	Unspecified	Unspecified	Unspecified	Unspecified
(	Comments:						

# Report 4 – Site Conditions

Gaylord Mgt. Unit Zach Crew : Examiner

Available	5C: Delay treatment for age/size class diversity or exceptional site quality	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2F: Too steep	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Boundaries are ap	proximate					
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	25	Unspecified	Unspecified	Unspecified	Unspecified
Comments:						
Unavailable	2F: Too steep	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Boundaries are ap	proximate					
Unavailable	2F: Too steep	10	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Steep hills and val	leys.					
Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	4A: No Markets Available for these Forest Products	Unspecified	Unspecified	Unspecified
Comments:						
	Comments:  Unavailable Comments: Boundaries are ap  Available Comments: Boundaries are ap  Unavailable Comments: Steep hills and val  Available	age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep  Comments: Boundaries are approximate  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep  Comments: Boundaries are approximate  Unavailable 2F: Too steep  Comments: Steep hills and valleys.  Available 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 11  Comments:  Boundaries are approximate  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 4  Comments:  Boundaries are approximate  Unavailable 2F: Too steep 10  Comments: Steep hills and valleys.  Available 5C: Delay treatment for age/size class diversity or exceptional site quality	age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 11 Unspecified  Comments:  Boundaries are approximate  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 4 Unspecified  Comments:  Boundaries are approximate  Unavailable 2F: Too steep 10 Unspecified  Comments:  Steep hills and valleys.  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  12 4A: No Markets Available for these Forest Products	Comments:  Unavailable 2F: Too steep 11 Unspecified Unspecified  Comments:  Boundaries are approximate  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 4 Unspecified Unspecified  Comments:  Boundaries are approximate  Unavailable 2F: Too steep 4 Unspecified Unspecified  Comments:  Boundaries are approximate  Unavailable 2F: Too steep 10 Unspecified Unspecified  Comments:  Steep hills and valleys.  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  To Steep hills and valleys.  Unspecified Unspecified  Unspecified Unspecified  Unspecified Unspecified  Forest Products  Unspecified	Comments:  Unavailable 2F: Too steep 11 Unspecified Unspecified Unspecified  Comments:  Boundaries are approximate  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Comments:  Unavailable 2F: Too steep 4 Unspecified Unspecified Unspecified  Comments:  Unavailable 2F: Too steep 4 Unspecified Unspecified Unspecified  Comments:  Boundaries are approximate  Unavailable 2F: Too steep 10 Unspecified Unspecified Unspecified  Comments: Steep hills and valleys.  Available 5C: Delay treatment for age/size class diversity or exceptional site quality  Dispecified Unspecified Unspecifi

# **Report 4 – Site Conditions**

Gaylord Mgt. Unit Zach Crew : Examiner

10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	38	Unspecified	Unspecified	Unspecified	Unspecified
Co	omments:						

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
Comments				

Mgt. Unit Compartment:
Year of Entry

### 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.

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

s t	Gaylord	d Mgt. Unit		Report 7	- Forested	Stands Compartment: 34 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	4119 - Mixed Northern Hardwoods	Sawtimber Well	28.6	93	51-80	Pretty typical northern hardwoods stand. Areas of thick pricker bushes from harvest completed in 2012(?). A few marked trees left.
3	4112 - Maple, Beech, Cherry Association	Sawtimber Well	59.0	88	81-110	Nice hardwood poles transitioning to logs. Rolling hills. ORV trail runs through it.
4	4110 - Sugar Maple Association	Poletimber Well	38.3	63	111-140	Some clumps and limbiness. Cherry is poorly formed. Central area has some big white pine and hemlock. M9 in places.  Erratic stocking.
5	4110 - Sugar Maple Association	Poletimber Well	95.9	75	81-110	Stand thinned 2004. West side of stand wasn't harvested so that was split out as a separate stand 76.
6	4133 - Aspen, Mixed Pine	Poletimber Well	29.9	38	51-80	MIXED BAG, LOTS OF THORNAPPLE 2006: Young stand of hardwood. Some large bam. Bigger, poorly formed stuff over more nicely formed small poles. Some white pine logs. Patch of merchantable fir in the east half. Lots of sub merchantable hard maple. Age is a guess on the aspen since no cutting records could be found and coring the trees proved ineffectual.
7	4110 - Sugar Maple Association	Poletimber Medium	17.5	58	51-80	Some aspen clones in the north, old field developing into a young hardwood stand.
9	4110 - Sugar Maple Association	Poletimber Well	52.4	66	81-110	Hawthorne and some thorn apple mixed throughout. Small diameter pole stand though stocking seems to be improving compared to previous inventory.
10	4110 - Sugar Maple Association	Sapling Well	15.3	9	Immature	Private inholding in nw corner of stand.
11	4199 - Other Mixed Upland Deciduous	Sawtimber Well	10.9	63	111-140	Aspen is mature, some signs of it declining.
12	42110 - Planted Red Pine	Poletimber Poor	8.0	19	1-50	Appears to have been planted with poor survival, but also had some seeding in from adjacent stand to the north. Similar to private parcel to south. Pipeline splits stand - 2 polygons.
14	4110 - Sugar Maple Association	Sawtimber Well	63.1	93	111-140	Stand is decent quality overall. Similar to stand 20, but density and quality are slightly less. Some decent sugar maple regen in places, but otherwise medium to heavy beech and ironwood saplings throughout. Scattered hemlock. Rolling topography.
15	4119 - Mixed Northern Hardwoods	Sawtimber Medium	37.2	71	81-110	Generally lower density and poorer quality than surrounding hardwood stands. Lots of clumps, multiples, and open grown trees. Medium to heavy ironwood saplings/poles and beech saplings in understory. Some areas are mostly pole sized, but stand is log size overall. Some wind damage because of adjacent opening. Multi-polygon stand separated by pipeline - 3 polygons total. Includes some aspen pockets too.

S t	Gaylord	d Mgt. Unit		Report 7	– Forested	Stands Compartment: 34 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4111 - S.Maple, Hard Mast Association	Sawtimber Well	78.2	96	111-140	Overall stand is good quality hardwoods, although many trees with risky forks. Fair amount of quality trees near economic maturity. Rolling topography, but not too steep. Some pockets and scattered hemlock. Also some scattered large white pine. Density of sub-canopy varies greatly, some areas quite thick. Some old orange marked trees. Stick nest found in southeast, unknown if occupied. Most of stand was thinned in 1989.
21	4119 - Mixed Northern Hardwoods	Poletimber Well	35.6	80	111-140	Transitioning to log sized, maybe 20-25% logs. Larger on south end. Stand has good quality potential, with many straight stems. However, the black cherry has many cankers and the white ash is in rough shape. Some rolling topography with steeper areas in southwest.
22	4110 - Sugar Maple Association	Sawtimber Well	122.2	79	81-110	Salvage sale currently on open contract with Northwoods Logging. Rolling topography, steep in some areas.
23	4119 - Mixed Northern Hardwoods	Sawtimber Well	172.5	72	81-110	Mostly pole sized timber in the south with heavy beech component. Ash and beech are both deteriorating. Steep ridge along north (Peet Rd) and rest is rolling hills. Yellow birch in two separate pockets.
24	4110 - Sugar Maple Association	Poletimber Well	25.0	75	81-110	SELECT LOG HARVEST IN 1998. Stand doesn't seem to be responding quickly to previous selection harvest.
25	4130 - Aspen	Poletimber Well	5.7	33	51-80	Small pocket of aspen clones, hardwood understory
27	4110 - Sugar Maple Association	Poletimber Well	248.6	69	81-110	Rolling to severe with some high, steep slopes, especially on the west and north side of the stand. Heavy to beech on the slope on the far west side of the stand. East half holds better wood. Young stand with very few of anything over 12". MCCCT trail runs through. White pine in the south and west edges of stand. Aspen found along wilderness road.
28	42260 - Natural Pine, Mixed Deciduous	Poletimber Poor	12.8	23	1-50	An old grassy opening that somehow seeded in to jack pine, cherry, and aspen.
29	4119 - Mixed Northern Hardwoods	Sawtimber Well	174.0	93	81-110	Occasional localized patches of white pine logs. Red maple in the north. Large ridge along northern stand boundary and the rest is rolling hills. MCCCT trail and sled trail run through.
30	4119 - Mixed Northern Hardwoods	Sawtimber Well	38.9	94	141-170	Very hilly terrain, some areas probably unworkable. Average size varies greatly. Some areas dominated by poles, others dominated by logs. Beech is mostly in pockets. Ash is in bad shape. Probably cannot haul up the pipeline to Ravine road. Check access from two-track on north part of stand. Scattered hemlock and red oak.
31	4130 - Aspen	Sawtimber Well	5.7	59	81-110	Pocket of decent quality aspen clones.

S t	Gaylord	Gaylord Mgt. Unit			– Forested	Stands Compartment: 34 Year of Entry: 2018	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
33	4110 - Sugar Maple Association	Sawtimber Well	190.2	92	51-80	Skid trails and many open pockets have filled in with sugar maple seedlings 4-8" tall. Many pockets with over 5000/acre. Pockets of Hemlock, a few elm and aspen also in canopy. Rolling topo in south. Steep ridge in north with a N-NW facing aspect. Pockets of advanced ash and beech regen, many areas of fairly open understory.	
34	4199 - Other Mixed Upland Deciduous	Sapling Well	11.5	29	51-80	Young, small hardwoods. Quite the variety. Harvested in 1988.	
35	4119 - Mixed Northern Hardwoods	Sapling Medium	34.7	26	1-50	Stocking density varies. Nearly a small pole stand. Some areas fairly open with heavy rubus. Red pine was thinned in 1991 and then clearcut in 2011 (Castaway Red Pine), and then allowed to convert to hardwoods. Resulted in two-age stand, with mixture of species. Currently lower quality, somewhat unproductive stand though. Pipeline splits stand - 2 polygons.	
36	4139 - Aspen, Mixed Deciduous	Sawtimber Well	30.7	62	81-110	Ski trail runs through stand. Large pockets of well developed Quaking Aspen, pole sized black cherry, elm, and sugar maple clumps throughout.	
37	4123 - Red Oak	Sawtimber Well	25.1	100	81-110	Fairly good quality, large red oak with other mixed hardwoods. Little to no oak regeneration. Sub-canopy in some areas is medium to heavy saplings - beech, ironwood, ash, red maple. Hilly topography, but mostly workable. Some areas fairly steep. Some seeps in the south. Some old orange marked trees. Lots of grouse flushed. Stick nest located on west and hawk hanging around the stand. Thinned in winter 2008/2009, Repercussion Hardwoods. Old notes indicate evidence of grazing: barbed wire and cattle water tank.	
38	4110 - Sugar Maple Association	Sawtimber Well	12.9	100	81-110	TSI in 1976. Stand thinned winter 2008/2009, Repercussion Hardwoods. Manage with stand 138. Still a fair amount of poles. White ash are in bad shape, but probably not enough volume for a feasible salvage. Hilly topography, fairly steep in areas. Some scattered red oak. Maybe a little smaller overall on south end.	
39	4119 - Mixed Northern Hardwoods	Sapling Medium	20.4	6	1-50	Harvest completed in 2011. Mostly beech brush with pricker bushes now. A few scattered red pine were left. Apple tree and walnut trees along Magee Road.	
40	4119 - Mixed Northern Hardwoods	Poletimber Medium	1.7	59	51-80	Used to be grassy opening, but now has a variety of species.  Quite a few deteriorating ash poles.	
41	4139 - Aspen, Mixed Deciduous	Poletimber Well	5.3	28	1-50	Aspen is somewhat patchy, with intermixed hardwood and patches of hardwood. Barely makes a pole size stand. Includes small opening. Good cover for wildlife. Manage with stand 16 in adjacent compartment 35.	
42	4119 - Mixed Northern Hardwoods	Sawtimber Well	43.7	88	81-110	Rolling hills. Ash is deteriorating, most likely dead.	
43	4110 - Sugar Maple Association	Sawtimber Well	149.7	83	81-110	2009: Stand was thinned. Patches of thick beech saplings. Very thick with pricker bushes.	

S t	Gaylord Mgt. Unit			Report 7	– Forested	Stands Compartment: 34 Year of Entry: 2018
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4130 - Aspen	Poletimber Well	15.5	42	51-80	poles of aspen, elm and ironwood. Scattered overtopping white pine.
45	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	12.4	82	51-80	All elm and cherry are of very poor form. Strange mix of lowland species, but didn't see any wet spots.
47	4110 - Sugar Maple Association	Sawtimber Well	117.5	75	51-80	Harvested as part of Four Seasons Hardwood 10/2012 Ash Salvage completed 10/15.
48	4110 - Sugar Maple Association	Poletimber Well	77.0	68	81-110	Logs are small. Sled trail runs through. Mostly poor quality, some pockets are fair.
49	4119 - Mixed Northern Hardwoods	Poletimber Well	15.2	72	81-110	Poor quality hardwood stand, scattered quaking aspen clones throughout, scattered large diameter trees.
51	4112 - Maple, Beech, Cherry Association	Poletimber Medium	31.8	62	81-110	Variable stand, generally poor quality but transitions into nicer timber towards the north. Stocking is sporadic. Lots of multiples. Cherry is very poor quality. Scattered white pine and hemlock logs. Almost two-aged stand - some areas have fairly thick sapling understory of sugar maple, red maple, ironwood, beech, and ash. Some aspen pockets and small openings included. Springvale road bisects the stand.
52	4110 - Sugar Maple Association	Poletimber Well	99.3	73	111-140	2013: Ash salvaged in stand as part of sale #5201301. Majority of ash removed. Ash left in areas with low ash volume and high residual, also in areas with steep topo. Whole tree operation, pockets with damaged residual. Only the west side of the stand was salvaged, that portion was split out and added to the adjacent stand 33.
53	4119 - Mixed Northern Hardwoods	Poletimber Well	16.2	62	111-140	Generally flat ground. Similar composition of 65 to west, but smaller and poorer quality overall. Still fair quality though.  Transitioning to log size.
54	42110 - Planted Red Pine	Sawtimber Well	8.9	80	111-140	Sub-canopy is the second age class from when the stand was thinned in the late 80's. Very nice, large logs that are ready to be harvested.
55	4139 - Aspen, Mixed Deciduous	Poletimber Well	7.8	33	1-50	Mixed species hodge-podge, but predominantly aspen. Some areas dominated by hardwoods. Fair amount of scattered hawthorn and patches, especially along edges.
56	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	29.3	26	Immature	Over story of open grown white and red pine. Pockets of aspen clones w/ sugar maple distributed throughout.
57	4116 - Mixed N. Hardwood - Aspen	Poletimber Well	17.9	65	81-110	Highly variable stand. Mostly low quality red maple, some sugar maple, black cherry, and clones of quaking aspen, overtopping white pine scattered throughout
59	4110 - Sugar Maple Association	Poletimber Well	165.9	78	81-110	Cut 2000. Some scattered poles were left uncut. A small portion of this stand is included in Four Seasons Hardwood to be auctioned off in 2010. Ash salvage completed 06/15.

S t	Gaylord Mgt. Unit			Report 7	<ul><li>Forested</li></ul>	Stands Compartment: 34 Year of Entry: 2018	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
60	4110 - Sugar Maple Association	Sawtimber Well	102.9	77	81-110	SELECT LOG HARVEST IN 1998 2006: Beech is generally of low quality. Ash and beech salvage complete 05/2016. Some Ash unable to be utilized on steep slopes, beach marked to leave at a rate of ~1 per acre	
61	4130 - Aspen	Sapling Well	5.8	16	Immature	Was harvested in 2001. Good aspen regeneration with mixed hardwoods. Rolling topography.	
64	4110 - Sugar Maple Association	Poletimber Well	195.7	72	81-110	Heavy beech on south facing slope in the south part of stand.  Lots of blowdown along southernmost hilltop.	
65	4119 - Mixed Northern Hardwoods	Sawtimber Well	24.4	87	111-140	Stand has pretty good quality potential. Many straight, fairly tall stems. Log size overall, but mostly small logs and still lots of poles, larger on the northwest end. More beech and ash on the northwest too. Some rolling topography but not too steep.  Some scattered hemlock and yellow birch.	
67	4199 - Other Mixed Upland Deciduous	Poletimber Poor	7.9	41	1-50	Opening filling in with black cherry and elm, a few scattered quaking aspen.	
70	4119 - Mixed Northern Hardwoods	Poletimber Well	115.0	80	51-80	Significant fir in places. Cherry is poor quality. Lots of submerchantable maple and a few clones of aspen. Found timber trespass on 3/30/2016. Trace elm.	
74	4199 - Other Mixed Upland Deciduous	Poletimber Poor	52.6	52	1-50	Black Cherry and American Elm dominate with basswood, thickets of hawthorne and chokecherry.	
76	4110 - Sugar Maple Association	Sawtimber Well	59.7	76	111-140	Stand was originally part of adjacent stand 5 and marked to cut in 2004, however this portion of the stand wasn't treated so it was split out as its own stand.	
77	4130 - Aspen	Sapling Well	10.4	17	Immature	Starting to see small poles of aspen, elm and ironwood. Scattered overtopping white pine.	
80	4110 - Sugar Maple Association	Poletimber Well	85.9	72	51-80	Cut 12/13 'Hendrix Hardwoods" 520400801 Ash and beech salvaged during harvest.	
121	4119 - Mixed Northern Hardwoods	Poletimber Well	9.8	90	81-110	Scattered hemlock and white pine logs. Cherry is poorly formed.	
122	4111 - S.Maple, Hard Mast Association	Sawtimber Well	25.3	89	111-140	Occasional oak on ridgetops. Some hemlock logs. Rolling to steep terrain. Lower ash and beech components. Logs are on the smaller end so hold one more cycle.	
138	4110 - Sugar Maple Association	Sawtimber Well	4.0	92	81-110	Ash is most likely dead. Small stick nest in large beech, but didn't see any activity. TSI'ed in 1976. Manage with Stand 38. Stand thinned winter 8/09	



Stand	Cover Type	Acres	Managed Site	General Comments:
1	320 - Upland Shrub	19.6	No	Aspen and hardwood encroaching. ORV trail and snowmobile trail run through.  Hawthorn and choke cherry throughout
8	320 - Upland Shrub	5.1	No	Upland brush with scattered unmerchantable cherry and occasional aspen.
16	122 - Road/Parking Lot	3.0	No	CCC Road
18	310 - Herbaceous Openland	2.9	No	Grass opening, filling in with some black cherry brush and a few scattered sugar maple.
26	320 - Upland Shrub	10.4	No	Mix of unmerchantable cherry and aspen. Probably old frost pockets seeding in.
32	122 - Road/Parking Lot	2.9	No	Part of Magee Rd and Great Lakes Rd.
50	3102 - Grass	0.0	Yes	OPIC - FMD: OI Stand Year Origin was
58	310 - Herbaceous Openland	8.2	No	Grassy opening, pockets of choke cherry with sugar maple and ironwood saps, some hawthorn also.
63	320 - Upland Shrub	5.3	No	Aspen and hardwood encroaching. ORV trail and snowmobile trail run through.
66	122 - Road/Parking Lot	0.7	No	Tomahawk Motorcycle Trail Parking Lot
68	310 - Herbaceous Openland	0.7	No	Grass, knapweed, rubus. Some oak, beech, and cherry seedlings and saplings along edges. General opening, maybe an old landing area. Some fire pits and
71	122 - Road/Parking Lot	6.0	No	Magee Road.
75	122 - Road/Parking Lot	0.9	No	Magee Road.
78	122 - Road/Parking Lot	1.3	No	Magee Road.
83	310 - Herbaceous Openland	10.9	Yes	Grass, knapweed, some rubus. Significant amount of black cherry scattered throughout. Also a small patch of jack pine.
401	310 - Herbaceous Openland	1.3	No	Frost pocket, some cherry brush and maple saplings
402	310 - Herbaceous Openland	1.6	No	Frost pocket, cherry brush and sugar maple saplings.



Stand	Cover Type	Acres	Managed Site	General Comments:
405	310 - Herbaceous Openland	0.7	No	Grassy opening, cherry brush and some maple and ironwood saps filling in
406	310 - Herbaceous Openland	1.9	No	OPIC - FMD: OI Stand Year Origin was
409	310 - Herbaceous Openland	1.1	No	Unofficial campsite, knapweed present
410	3102 - Grass	4.8	No	Pipeline.
411	310 - Herbaceous Openland	52.3	Yes	Grass, knapweed, rubus patches. Some scattered hawthorn. Stand has a significant amount of red pine saplings/poles mostly on the west end. Also some dead/dying ash logs. Some rolling topography. ORV are causing some rutting and erosion on the hill. Pipeline runs through the stand on the east side, parallels the road. RX Burn completed 4/28/2016.
412	310 - Herbaceous Openland	6.0	No	HISTORICAL SITE CCC CAMP
413	3102 - Grass	10.0	No	Grass, knapweed, rubus patches. Some hawthorn and service berry along edges. Scattered overstory.
414	3102 - Grass	4.4	No	Pipeline
415	3102 - Grass	9.2	No	Pipeline.
417	3102 - Grass	17.7	Yes	Grass, knapweed, some rubus. Cherry brush scattered throughout. Some hawthorn, mostly along the edges.
419	3102 - Grass	14.3	Yes	Open grassland with rolling topography. Scattered trees and patches of trees/saplings especially on west side.
420	3102 - Grass	27.2	Yes	Grassy opening, scattered white pine, sugar maple, and black cherry, knapweed present, ORV damage around some the hills. Informal camping area.
425	310 - Herbaceous Openland	6.8	No	MCCCT trail runs through. Informal campgrounds
430	310 - Herbaceous Openland	25.8	No	Site of ORV restoration project. Sled trail runs through. Rolling topography.
432	310 - Herbaceous Openland	1.5	No	Unofficial camping area
442	310 - Herbaceous Openland	2.2	No	Small opening used as a landing during salvage operations.

Report 8 - Nonforested Stands

Gaylord Mgt. Unit



Stand	Cover Type	Acres	Managed Site	General Comments:
466	3102 - Grass	1.5	No	