



Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 33050

Entry Year 2019

Acreage: 1,759

County Menominee

Management Area: Green Bay Lake Plain

Revision Date: 2017-06-12

Stand Examiner: Dustin Salter

Legal Description:

T35N R25W Sections 13, 14, 15, and 23.

Identified Planning Goals:

This compartment is comprised primarily of lowland ash/hardwood, aspen, red maple, and cedar. The majority of the lowland ash/hardwood stands that have a substantial amount of merchantable ash have been prescribed for harvest. These stands need to be harvested prior to the arrival of the Emerald Ash Borer, which is in Delta County and adjacent Marinette County in Wisconsin. A number of the ash stands prescribed have good quality green ash. Some of the red maple stands that are mature are being held for a decade because of all of the stands containing ash being prescribed for harvest. The mature aspen stands are prescribed for harvest. The spruce budworm and eastern larch beetle are also present within the compartment. The budworm is causing some defoliation and the larch beetle has caused some mortality. The stands containing these species will be harvested where there is sufficient volume to do so.

Soil and topography:

The soils in the upland timber types consist of Posen fine sandy loam, Wainola fine sand, Onaway-Nadeau fine sandy loam, and Solona loam. These soils are deep and somewhat poorly drained to well drained. The lowland areas contain Tawas-Deford, Deford-Wainola-Rousseau, and Loxley-Dawson. These soils are poorly drained to very poorly drained and are level to depressed. Overall the compartment is level with a few ridges running through it.

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

This compartment adjoins state land on the west side. The other sides are primarily private property. Wells State Park and Cedar River Harbor are to the south of the compartment on Lake Michigan. Stand 7 is a parking lot for the Forest Island ORV Trail. The trail runs north and west from the parking lot. The trail runs north along the Townline Road and west on the Camp O Road. The old Cedarville Township dump is located within stand 81, on the east side of the compartment. The private property is a mix of permanent residences and recreational properties. The primary use for this area is recreation.

Unique Natural Features:

The Big Cedar River flows through the center of the compartment.

Archeological, Historical, and Cultural Features:

None Known

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Lake Michigan is very close to the eastern edge of the compartment. The Big Cedar River flows through the central portion of the compartment and the Walton River through the southern portion. The Cedar River Marina/Harbor which is part of Wells State Park offers access to the Big Cedar River and Lake Michigan.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Trenton Formation underlies the glacial drift and is quarried for stone west of Escanaba. This area has not been leased for metallic exploration previously. No economic oil and gas production has been found in the UP. There are some active gravel pits in section 23, north of G-12.

Vehicle Access:

The western half of the compartment is accessed from the Camp O Road and the Indian Springs Road. About 1.5 miles of the Camp O Road is county road, with the remainder being a state system road. The Indian Springs Road is a state system road as well. There are a few two-track roads that branch off of these roads that provide additional access. M-35 runs through the eastern half of the compartment, along with G-12 and Old Mill Road, which are county roads. There are a few two-track roads that branch off of these. Overall access into the compartment is very limited.

Survey Needs:

Approximately 10 registered corners will need to be set.

Recreational Facilities and Opportunities:

The Forest Island Orv Trail runs along the northwestern portion of the compartment, and the trail parking lot is within stand 7. Wells State Park and Cedar River Marina is just south of the compartment. The primary uses in and around the compartment are hunting, fishing, four wheeling and snowmobiling.

Fire Protection:

This compartment is comprised primarily lowland cover types, so there is very little threat of a large fire. The upland stands that are present are surrounded by lowland. Access is very limited. There are numerous water access points.

Additional Compartment Information:

The following reports from the Inventory are attached:

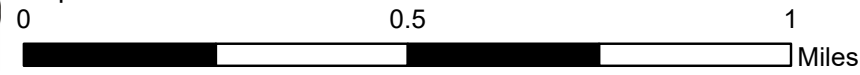
- Total Acres by Cover Type and Age Class
- Cover Type by Harvest Method
- Proposed Treatments – No Limiting Factors
- Proposed Treatments – With Limiting Factors
- Stand Details (Forested and Nonforested)
- Dedicated and Proposed Special Conservation Areas
- Site Condition Details

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

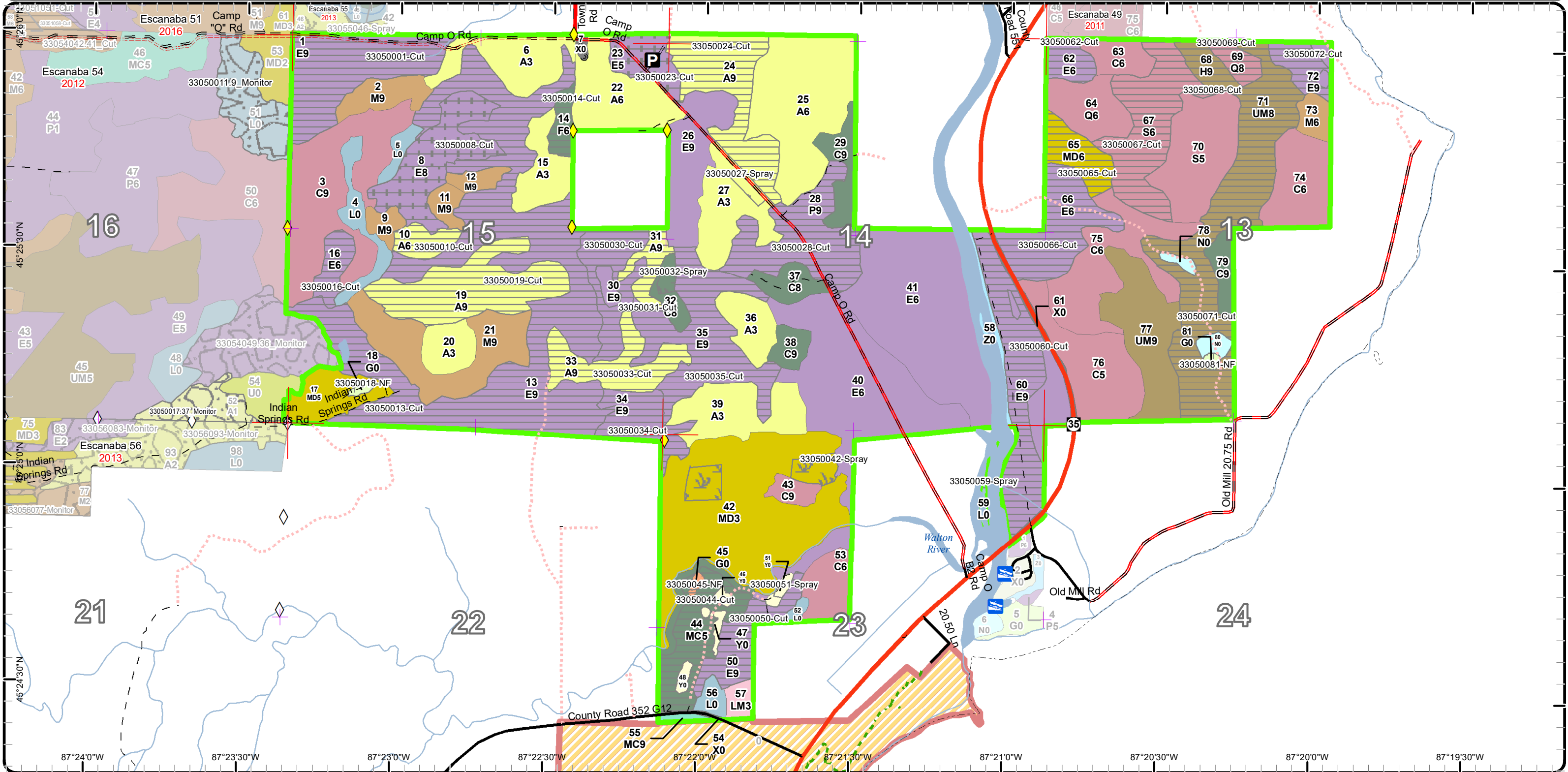
- Base feature information, stand boundaries, cover types, and numbers
- Proposed treatments
- Site condition boundaries
- Details on the road access system

Cover Type & Treatments Map

Compartment: 50
 T36N R26W 13-15, 22-24
 County: Menominee
 Unit: Escanaba
 Mgmt Area: Green Bay Lake Plain
 YOE: 2019
 Acres: 1759 GIS Calculated
 Examiner: Dustin Salter
 Map Revised: 7/5/2017
 Map Phase: Web-Post

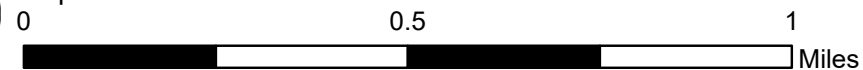
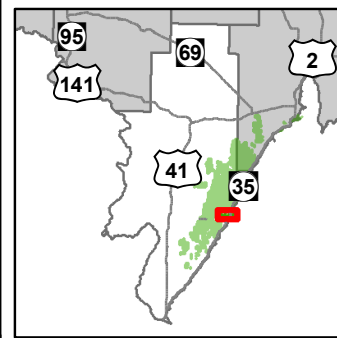


- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Counties
- Boating Access Site
- P Parking Lot
- - - Designated Hiking Trails
- - - Designated Ski Trails
- - - Designated ATV Trails
- - - Designated ORV Route
- Highway
- Paved Roads
- County Gravel Roads
- Gravel Roads
- - - Poor Dirt Roads
- - - Closed
- Streams
- Lakes and Rivers All
- State Boundary
- Compartment Boundary
- Clearcut (w/Reserves)
- Pesticide
- Opening Maintenance
- Regeneration Survey
- Harvest, Overstory Removal
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 429 - Mixed Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 222 - Orchard/Vineyard/Nursery
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- 710 - Sand/Soil
- Lakes

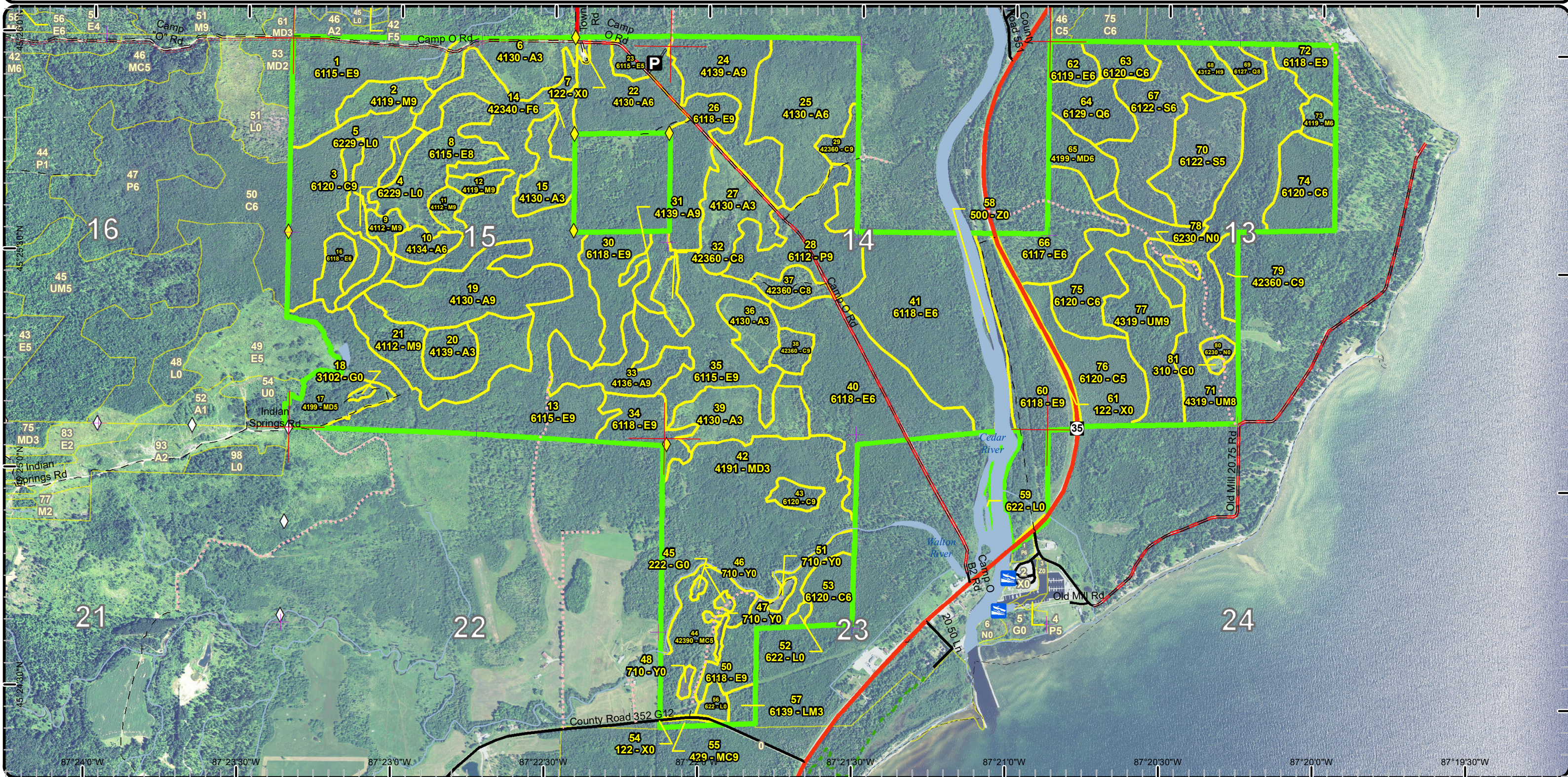


Stand Boundary Map

Compartment: 50
 T36N R26W 13-15, 22-24
 County: Menominee
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 Mgmt Area: Green Bay Lake Plain
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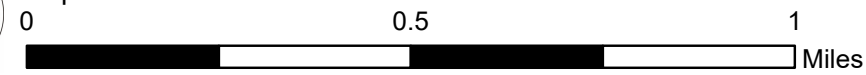
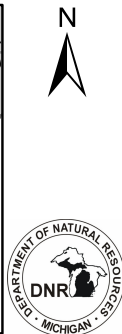
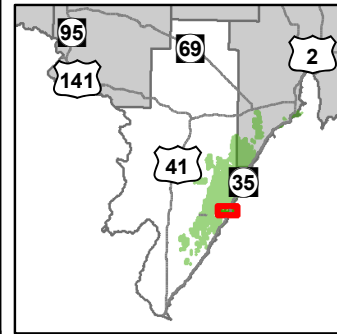


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|---|---|--|
| <ul style="list-style-type: none"> — Miris Corners + Remonumented Section Corners ◆ Survey Grade GPS Corners ◇ Field Grade GPS Corners Counties ■ Boating Access Site P Parking Lot - - - Designated Hiking Trails - - - Designated Ski Trails - - - Designated ATV Trails = = = Designated ORV Route — Highway — Paved Roads | <ul style="list-style-type: none"> — County Gravel Roads — Gravel Roads - - - Poor Dirt Roads · · · Closed — Streams ■ Lakes and Rivers All — State Boundary Compartment Boundary Stand Boundaries 411 - Northern Hardwood 413 - Aspen Types 419 - Mixed Upland Deciduous 423 - Other Upland Conifers 429 - Mixed Upland Conifers 430 - Upland Mixed Forest | <ul style="list-style-type: none"> 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 613 - Lowland Mixed Forest 122 - Roads/Parking Lot 222 - Orchard/Vineyard/Nursery 310 - Herbaceous Openland 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland 710 - Sand/Soil |
|---|---|--|

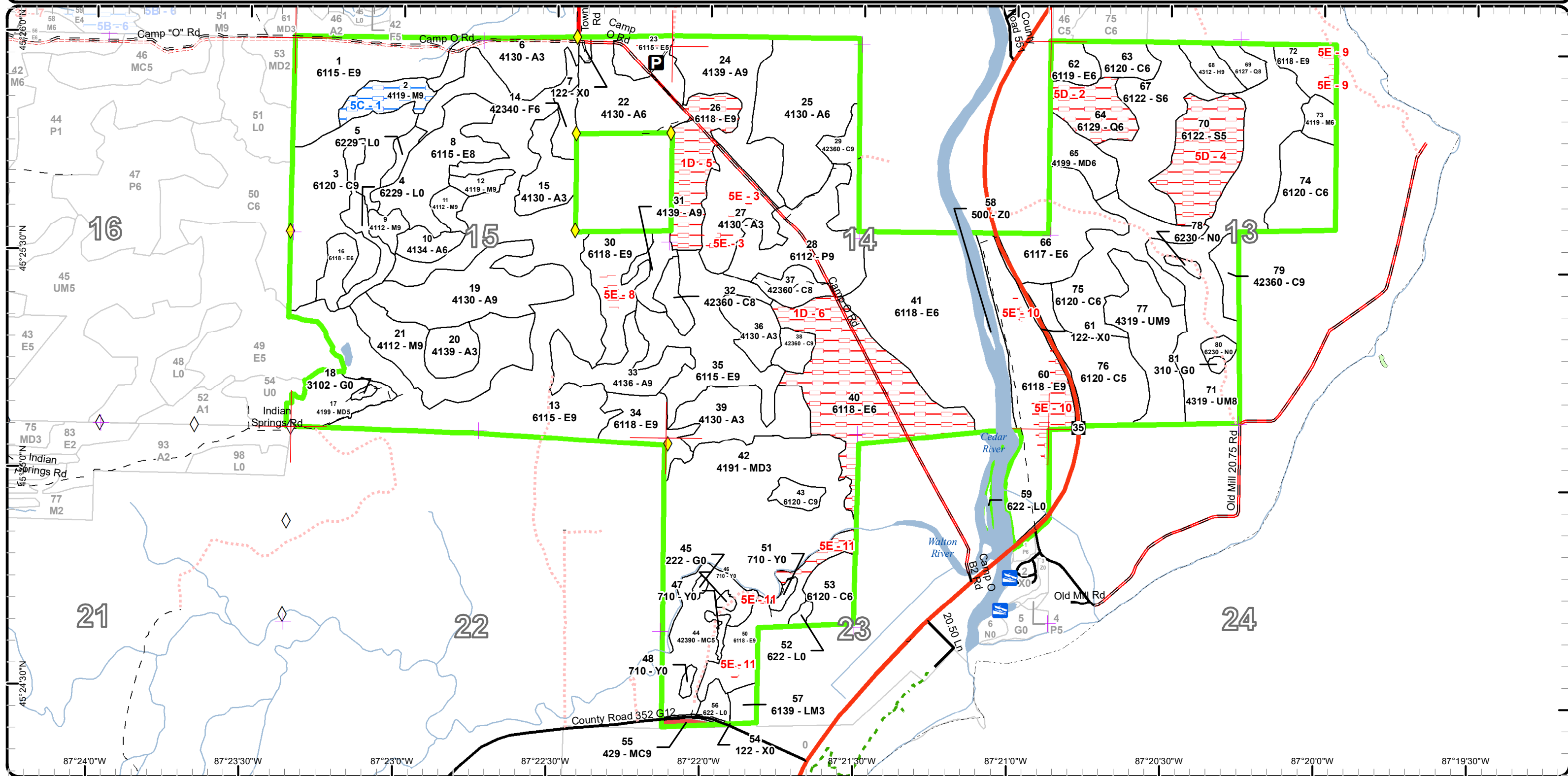


Special Conservation Areas & Site Conditions Map

Compartment: 50
 T36N R26W 13-15, 22-24
 County: Menominee
 Unit: Escanaba
 Mgmt Area: Green Bay Lake Plain
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|---|--|---|
| <ul style="list-style-type: none"> — Miris Corners + Remonumented Section Corners ◆ Survey Grade GPS Corners ◇ Field Grade GPS Corners Counties B Boating Access Site P Parking Lot - - - Designated Hiking Trails - - - Designated Ski Trails - - - Designated ATV Trails - - - Designated ORV Route — Highway — Paved Roads | <ul style="list-style-type: none"> — County Gravel Roads — Gravel Roads - - - Poor Dirt Roads - - - Closed — Streams — Lakes and Rivers All — State Boundary Compartment Boundary — Available w/ Constraints - - - Unavailable | <ul style="list-style-type: none"> Stand Boundaries Ecological Reference Areas Cold Water Streams Cold Water Lakes Great Lakes Islands |
|---|--|---|
- 5C: Delay treatment for age/size class diversity or exceptional site quality
 1D: Interest Group / Neighbor
 5D: Unproductive Forest Land
 5E: Long-Term Retention



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	116	0	29	56	16	102	0	0	0	0	0	0	0	0	0	0	0	319
Cedar	0	0	0	0	0	0	0	0	0	0	7	112	0	101	0	0	0	0	220
Cropland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hemlock	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	39
Lowland Conifers	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	24
Lowland Deciduous	0	0	0	0	0	0	0	82	53	468	12	23	18	0	0	0	0	0	656
Lowland Mixed Forest	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lowland Shrub	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	75	0	0	0	0	0	0	0	0	0	75
Marsh	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Mixed Upland Deciduous	0	0	0	104	0	16	0	0	0	13	0	0	0	0	0	0	0	0	133
Northern Hardwood	0	0	0	0	0	0	0	0	10	59	0	0	0	0	0	0	0	0	69
Sand, Soil	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Upland Conifers	0	0	0	0	0	0	29	0	2	0	0	0	0	0	0	0	0	0	31
Upland Mixed Forest	0	0	0	0	0	0	0	78	0	0	35	0	0	0	0	0	0	0	113
Upland Spruce/Fir	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Water	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Total	62	116	0	138	56	32	170	88	78	164	547	167	23	119	0	0	0	0	1758



Report 2 – Treatment Summary

Escanaba Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 50

Total Compartment Acres: 1,759

Commercial Harvest - 784
 Harvests with Site Condition - 0
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	118	0	0	0	0	0	0	0	0	118
Hemlock	8	0	0	0	0	0	0	0	0	8
Lowland Aspen/Balsam Poplar	39	0	0	0	0	0	0	0	0	39
Lowland Conifers	6	0	0	0	0	0	0	0	0	6
Lowland Deciduous	405	0	0	0	0	46	0	0	0	451
Lowland Spruce/Fir	40	0	0	0	0	0	0	0	0	40
Mixed Upland Deciduous	13	0	0	0	0	0	0	0	0	13
Upland Conifers	24	0	0	0	0	0	0	0	0	24
Upland Mixed Forest	78	0	0	0	0	0	0	0	0	78
Upland Spruce/Fir	6	0	0	0	0	0	0	0	0	6
Total	738	0	0	0	0	46	0	0	0	784

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	784	0	0	0	0	17	39	0	2	841
Next Step	0	0	0	0	0	96	801	0	0	897
Total	784	0	0	0	0	114	840	0	2	1739



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
1	33050001-Cut	43.2	6115 - Lowland Ash	Sawtimber Well	97	81-110	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all cedar and spruce less than 8" inches.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, aspen/balm, spruce/fir, and ash.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

8	33050008-Cut	32.4	6115 - Lowland Ash	Sawtimber Medium	97	1-50	Harvest	Overstory Removal	6112 - Lowland Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all ash greater than 4" inches. The cedar and advanced regeneration will be the retention.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, balm, maple, spruce/balsam, and ash.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

10	33050010-Cut	7.5	4134 - Aspen, Spruce/Fir	Poletimber Well	47	81-110	Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. No retention will be retained, due to small stand size and forest health reasons.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, maple, balm, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

3	33050011.9_Monitor	25.4	6120 - Lowland Cedar	Sawtimber Well	127	111-140	Monitoring	Natural Regen (Re-Inventory)	6115 - Lowland Ash	Two-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Monitor for regeneration.

Specs:

Next Step

Treatments:

Acceptable Balm, aspen, maple, ash, and spruce/fir.

Regen:

Other

Percent to Treat = 100%

Comment:

Proposed Start Date: 07/10/2015



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
13	33050013-Cut	161.5	6115 - Lowland Ash	Sawtimber Well	97	81-110	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all cedar and spruce less than 8" inches at DBH. Also, buffer the drain along the western edge of the stand.
Specs:

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

Acceptable Maple, ash, aspen, balsam, and spruce/fir.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

14	33050014-Cut	6.2	42340 - Upland Spruce/Fir	Poletimber Well	67	81-110	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all cedar.
Specs:

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

Acceptable Aspen, spruce/fir, maple, and ash.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

16	33050016-Cut	8.3	6118 - Lowland Deciduous with Cedar	Poletimber Well	83	51-80	Harvest	Clearcut with Retention	611 - Lowland Deciduous Forest	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark to retain some clumps of cedar.
Specs:

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

Acceptable Lowland hardwoods and spruce/fir.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

17	33050017.37_Monitor	13.4	4199 - Other Mixed Upland Deciduous	Poletimber Medium	40	1-50	Monitoring	Natural Regen (Re-Inventory)	4130 - Aspen	Even-Aged	Field Boundary
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Habitat Cut: No**Site Condition:**

Prescription Monitor for regeneration.
Specs:

Next Step
Treatments:

Acceptable Aspen, maple, spruce/fir, and pine.
Regen:

Other Percent to Treat = 100%
Comment:

Proposed Start Date: 07/10/2015



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
18	33050018-NF	1.0	3102 - Grass	Nonstocked	0	Unspec ified	NonForestMgt	Herbaceous/Crop/ Grass Planting	310 - Herbaceous Openland		Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal
Specs: of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

19	33050019-Cut	42.3	4130 - Aspen	Sawtimber Well	50	81-110	Harvest	Clearcut with Retention	4139 - Aspen, Mixed Deciduous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain some pockets/clumps of maple and aspen.
Specs:

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

Acceptable Aspen, maple, birch, and spruce/fir.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

23	33050023-Cut	13.2	6115 - Lowland Ash	Poletimber Medium	86	51-80	Harvest	Overstory Removal	6112 - Lowland Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. No retention will be left, due to small stand size and primarily ash overstory.
Specs:

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

Acceptable Aspen, balm, spruce/fir, and ash.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

24	33050024-Cut	36.9	4139 - Aspen, Mixed Deciduous	Sawtimber Well	52	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain 3% of the stand in pockets/clumps, centered around the cedar.
Specs:

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

Acceptable Aspen, balm, maple, and spruce/fir.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
27	33050027-Spray	1.7	4130 - Aspen	Sapling Well	7	Immature	Pesticide	Hand Application	413 - Aspen	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Herbicide with approved chemical to eradicate the invasive phragmites.

Specs:

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

28	33050028-Cut	38.6	6112 - Lowland Aspen	Sawtimber Well	52	81-110	Harvest	Clearcut	6112 - Lowland Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. No retention will be left due to forest health concerns.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Aspen, balm, spruce/fir, and ash.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

30	33050030-Cut	20.4	6118 - Lowland Deciduous with Cedar	Sawtimber Well	117	81-110	Harvest	Clearcut with Retention	6118 - Lowland Deciduous with Cedar	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. The dense area of cedar in the center of the stand will be retained, this area has already been delineated out from the harvest.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Ash, spruce/fir, and cedar.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

31	33050031-Cut	8.2	4139 - Aspen, Mixed Deciduous	Sawtimber Well	48	81-110	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. No retention will be left due to small stand size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Aspen, balm, maple, birch, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
32	33050032-Spray	1.6	42360 - Upland Cedar	Sawtimber Medium	97	1-50	Pesticide	Hand Application	413 - Aspen	Two-Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Herbicide to eradicate the invasive phragmites.

Specs:

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

33	33050033-Cut	23.2	4136 - Aspen, Mixed Conifer	Sawtimber Well	53	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except mark some retention pockets/clumps to retain. Place the retention areas where there is good quality cedar.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Aspen, balm, maple, birch, and spruce/fir.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

34	33050034-Cut	17.5	6118 - Lowland Deciduous with Cedar	Sawtimber Well	129	111-140	Harvest	Clearcut with Retention	6118 - Lowland Deciduous with Cedar	Two-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all cedar.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Aspen/balm, spruce/fir, birch, and ash.

Regen:

Other

This stand will be two-aged, again after the harvest.

Comment:

Proposed Start Date: 10/01/2018

35	33050035-Cut	47.4	6115 - Lowland Ash	Sawtimber Well	97	81-110	Harvest	Clearcut with Retention	6115 - Lowland Ash	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all cedar and spruce less than 8" inches.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventry)

Treatments:

Acceptable Balm/aspen, maple, ash, and cedar.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
42	33050042-Spray	10.4	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	22	Immature	Pesticide	Hand Application	413 - Aspen	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No

Site Condition:

Prescription Herbicide to eradicate the invasive phragmites within the stand.

Specs:

Next Step Monitoring, Herbicide Use

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

44	33050044-Cut	24.3	42390 - Mixed Non-Pine Upland Conifers	Poletimber Medium	55	51-80	Harvest	Clearcut with Retention	42340 - Upland Spruce/Fir	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Cut all trees greater than 3" inches; except retain all cedar and hemlock. Also, leave a 100' buffer along the Walton River. Mark some white pine to retain. Also, leave the appropriate buffer around the eagle's nest.

Specs:

Next Step Pesticide, Hand Application; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen, balsam, spruce/fir, maple, birch, pine, cedar, and hemlock.

Regen:

Other Follow the guidelines for the timing of the harvest around the eagles nest.

Comment:

Proposed Start Date: 10/01/2018

45	33050045-NF	0.9	222 - Orchards/Vineyards/Nursery	Nonstocked	Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland			Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

50	33050050-Cut	17.0	6118 - Lowland Deciduous with Cedar	Sawtimber Well	87	81-110	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Cut all trees greater than 3" inches; except retain the three retention areas that have been delineated out. If more patches of dense cedar and hemlock are identified during sale prep, delineate them from harvest as well.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, birch, spruce/fir, ash, cedar, and hemlock.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
51	33050051-Spray	0.7	710 - Sand, Soil	Nonstocked		Unspecified	Pesticide	Hand Application	710 - Sand, Soil		Proposal - Approval Pending Edits

Habitat Cut: No

Site Condition:

Prescription Herbicide to eradicate the invasive phragmites.
Specs:

Next Step Monitoring, Herbicide Use
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

59	33050059-Spray	2.7	622 - Lowland Shrub	Nonstocked		Unspecified	Pesticide	Hand Application	622 - Lowland Shrub		Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Herbicide the phragmites to eradicate it.
Specs:

Next Step Monitoring, Herbicide Use
Treatments:

Acceptable Regen:

Other Comment:

Proposed Start Date: 10/01/2018

60	33050060-Cut	40.8	6118 - Lowland Deciduous with Cedar	Sawtimber Well	97	81-110	Harvest	Clearcut with Retention	6119 - Mixed Lowland Deciduous Forest	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Cut all trees greater than 3" inches. The dense cedar areas that have been delineated out of the harvest will be the retention, along with the strip of timber between the road running north-south through the stand and the river.
Specs:

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

Acceptable Regen: Balm, birch, spruce/fir, ash, and cedar.

Other Comment: Herbicide the phragmites within the stand.

Proposed Start Date: 10/01/2018

62	33050062-Cut	8.2	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	87	81-110	Harvest	Clearcut	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No

Site Condition:

Prescription Cut all trees greater 3" inches. No retention will be left, due to the small stand size and the threat of the emerald ash borer.
Specs:

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

Acceptable Regen: Maple, birch, spruce/fir, white pine, and ash.

Other Comment:

Proposed Start Date: 10/01/2018



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
65	33050065-Cut	13.3	4199 - Other Mixed Upland Deciduous	Poletimber Well	97	81-110	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches. No retention will be left due to small stand size and threat of the emerald ash borer.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, spruce/fir, birch, ash, and cedar.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

66	33050066-Cut	31.3	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	97	51-80	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all hemlock and white pine. Also, retain the dense clumps/pockets of cedar.

Specs:

Next Step Pesticide, Hand Application; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, balm, spruce/fir, and ash.

Regen:

Other

Herbicide the phragmites within the stand.

Comment:

Proposed Start Date: 10/01/2018

67	33050067-Cut	40.2	6122 - Black Spruce	Poletimber Well	83	51-80	Harvest	Clearcut	6129 - Mixed Coniferous Lowland Forest	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all merchantable trees. No retention will be left, due to poor quality and susceptibility to windthrow and the threat of the eastern larch beetle causing tamarack mortality.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Spruce, tamarack, and pine.

Regen:

Other

The stand boundary might be adjusted to include all of the merchantable timber from the adjacent non-merchantable stands(64 & 70). This only applies to areas that have merchantable spruce and tamarack. Do not include areas with cedar.

Proposed Start Date: 10/01/2018

68	33050068-Cut	7.9	4312 - Hemlock, Mixed Deciduous	Sawtimber Well	102	111-140	Harvest	Clearcut with Retention	4312 - Hemlock, Mixed Deciduous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3" inches; except retain all hemlock. Also, mark to leave some mature hardwood, pine, and spruce within the dense area of hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Hemlock, maple, birch, spruce/fir, and white pine.

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
69	33050069-Cut	6.2	6127 - Lowland Pine	Sawtimber Medium	87	51-80	Harvest	Clearcut with Retention	6129 - Mixed Coniferous Lowland Forest	Even-Aged	Proposal - Approval Pending Edits

Habitat Cut: No Site Condition:

Prescription Cut all trees greater than 3" inches; except retain some mature conifer seed trees.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Pine, spruce, tamarack, hemlock, and maple.

Regen:

Other Encourage and promote the hemlock regeneration that is present.

Comment:

Proposed Start Date: 10/01/2018

71	33050071-Cut	78.3	4319 - Mixed Upland Forest	Sawtimber Medium	73	51-80	Harvest	Clearcut with Retention	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No Site Condition:

Prescription Cut all trees greater than 3" inches; except retain the dense cedar pockets and mark some hemlock and pine to retain.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Aspen/balm, spruce/fir, maple, birch, hemlock, and cedar.

Regen:

Other Most of the dense cedar pockets are in the north half, along the west edge.

Comment:

Proposed Start Date: 10/01/2018

72	33050072-Cut	9.3	6118 - Lowland Deciduous with Cedar	Sawtimber Well	102	81-110	Harvest	Clearcut with Retention	6117 - Lowland Deciduous, Mixed Coniferous	Even-Aged	Proposal - Approval Pending Edits
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Habitat Cut: No Site Condition:

Prescription Cut all trees greater than 3" inches; except retain all hemlock. Also, retain the two dense patches of cedar that have been delineated out of the treatment.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Maple, birch, spruce/fir, ash, cedar, and hemlock.

Regen:

Other The retention patch in the northeast corner of the stand has a drain that runs through it.

Comment:

Proposed Start Date: 10/01/2018

81	33050081-NF	1.0	310 - Herbaceous Openland	Nonstocked	Unspecified	NonForestMgt	Herbaceous/Crop/Grass Planting	310 - Herbaceous Openland			Proposal - Approval Pending Edits
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Habitat Cut: No Site Condition:

Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhog/saw removal of competing trees and establishment of native hard and soft mast producers such as red oak, crabapple or others.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other

Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 842.4

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dustin Salter : Examiner

Compartment: 50
Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	5C	1D	5D	5E
		With Condition	Not Available					
319	316	0	3	Aspen				3
219	219	0	0	Cedar				
1	1	0	0	Cropland				
8	8	0	0	Hemlock				
2	2	0	0	Herbaceous Openland				
39	39	0	0	Lowland Aspen/Balsam Poplar				
24	6	0	18	Lowland Conifers			18	
656	532	0	124	Lowland Deciduous		100		24
4	4	0	0	Lowland Mixed Forest				
24	24	0	0	Lowland Shrub				
75	40	0	35	Lowland Spruce/Fir			35	
5	5	0	0	Marsh				
133	133	0	0	Mixed Upland Deciduous				
69	58	12	0	Northern Hardwood	12			
6	6	0	0	Sand, Soil				
31	31	0	0	Upland Conifers				
113	113	0	0	Upland Mixed Forest				
6	6	0	0	Upland Spruce/Fir				
9	9	0	0	Urban				
15	15	0	0	Water				
1,759	1,568	12	180	Total Forested Acres	12	100	53	27
	89%	1%	10%	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	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
This stand is mature, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer hold this stand until next entry. This will break up the hardwood age classes in this area.							

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dustin Salter : Examiner

Compartment: 50
Year of Entry: 2019

2	Unavailable	5D: Unproductive Forest Land	18	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Unproductive forest land, with only scattered pockets of merchantable trees.</p>							
3	Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Two retention patches from the last harvest.</p>							
4	Unavailable	5D: Unproductive Forest Land	35	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments: Unproductive forest land, with only scattered pockets of merchantable trees.</p>							
5	Unavailable	1D: Interest Group / Neighbor	28	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<p>Comments: This stand was prescribed for harvest, but due to the concern of cutting in this township by one of its supervisors and wildlife's concern with the amount of cedar in the stand. The treatment was removed.</p>							
6	Unavailable	1D: Interest Group / Neighbor	72	3L: Other wildlife concerns	Unspecified	Unspecified	Unspecified
<p>Comments: This stand was prescribed for harvest, but due to the concern of cutting in this township by one of its supervisors and wildlife's concern with the amount of cedar in the stand. The treatment was removed.</p>							
8	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							
9	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
<p>Comments:</p>							

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dustin Salter : Examiner

Compartment: 50
Year of Entry: 2019

10	Unavailable	5E: Long-Term Retention	12	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	5E: Long-Term Retention	7	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
Comments: Long term retention and parts of it will provide shade along the Walton River.							



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
	Potential Old Growth		SCA Removal	2
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	3
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	8
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	39
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	52
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	79
Comments Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	135
Comments Does not meet SCA criteria.				



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

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

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6115 - Lowland Ash	Sawtimber Well	43.5	97	81-110	Good quality mature green ash stand. The stand should be harvested prior to the arrival of the emerald ash borer.
2	4119 - Mixed Northern Hardwoods	Sawtimber Well	11.6	97	81-110	Mature lower quality red maple stand. This stand is ready to be regenerated, but due to all the ash cutting in the compartment, hold this stand until next entry.
3	6120 - Lowland Cedar	Sawtimber Well	55.5	127	111-140	Overall low quality cedar stand with some scattered lowland hardwood species mixed in. The stand has a dense understory of holly, throughout it.
6	4130 - Aspen	Sapling Well	24.1	7	Immature	Stand was clearcut in 2010 on contract 014-08-01. The cedar, ash, and hemlock were retained. Fully stocked aspen stand with some residual ash and cedar. There isn't enough ash to try and salvage it.
8	6115 - Lowland Ash	Sawtimber Medium	32.4	97	1-50	This stand was cut in 2011 on contract 014-08-01. The ash, cedar, and hemlock was retained. This stand has mature ash over young aspen and balm regeneration. The ash should be harvested prior to the arrival of the emerald ash borer and the regeneration will be released.
9	4112 - Maple, Beech, Cherry Association	Sawtimber Well	4.9	83	81-110	The stand was thinned in 2001 on contract 030-99-01. Mature red maple stand. This stand is mature, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer hold this stand until next entry. This will break up the hardwood age classes in this area.
10	4134 - Aspen, Spruce/Fir	Poletimber Well	7.5	47	81-110	Mature aspen stand with a significant components of spruce/fir and ash. Due to forest health reasons this stand should be harvested, along with age of the aspen. The stand has a dense understory of spruce/fir. There is also residual hardwood from the last harvest.
11	4112 - Maple, Beech, Cherry Association	Sawtimber Well	5.2	83	51-80	Stand was thinned in 2011 on contract 014-08-01. Mature good quality red maple stand, that should be harvested next entry.
12	4119 - Mixed Northern Hardwoods	Sawtimber Well	4.7	90	81-110	Mature low quality red maple stand. This stand is mature, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer hold this stand until next entry. This will break up the hardwood age classes in this area.
13	6115 - Lowland Ash	Sawtimber Well	161.6	97	81-110	Good quality green ash stand with some small upland knobs of red maple and spruce/fir mixed in. There is a small drain that flows along the western edge of the stand.
14	42340 - Upland Spruce/Fir	Poletimber Well	6.2	67	81-110	Dense spruce/fir stand, that is not mature yet. But, the spruce budworm is in the area, so this stand should be harvested, before the budworm arrives.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
15	4130 - Aspen	Sapling Well	15.6	7	Immature	Stand was clearcut in 2010 on contract 014-08-01. The cedar, ash, and hemlock was retained. Dense aspen/balm regeneration with some mature ash and cedar scattered throughout. There isn't enough ash volume to try and salvage it, prior to the arrival of the emerald ash borer.
16	6118 - Lowland Deciduous with Cedar	Poletimber Well	8.3	83	51-80	Low quality lowland hardwood stand.
17	4199 - Other Mixed Upland Deciduous	Poletimber Medium	16.3	40	1-50	Stand was cut in 2000 on contract 030-99-01. This stand has a lot of residual maple, birch, cherry, and spruce/fir from the last harvest.
19	4130 - Aspen	Sawtimber Well	42.3	50	81-110	Mature good quality aspen stand. In parts of the stand quite a bit of the aspen has already died, probably due to the high water table.
20	4139 - Aspen, Mixed Deciduous	Sapling Well	11.1	7	Immature	Stand was clearcut in 2010 on contract 014-08-01. Fully stocked aspen and red maple stand. About half of the red maple present, is advanced regeneration that was retained from the last harvest.
21	4112 - Maple, Beech, Cherry Association	Sawtimber Well	37.0	92	51-80	Stand was thinned in 2010 on contract 014-08-01. Low quality red maple stand. This stand is mature, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer. Hold this stand until next entry. This will break up the hardwood age classes in this area.
22	4130 - Aspen	Poletimber Well	29.4	29	1-50	Dense good quality aspen with some residual mature ash and cedar.
23	6115 - Lowland Ash	Poletimber Medium	13.2	86	51-80	This stand was cut in 2010 on contract 013-08-01. All of the ash, cedar, and hemlock was retained. This stand has mature ash over young aspen/balm. The ah should be harvested prior to the arrival of the emerald ash borer.
24	4139 - Aspen, Mixed Deciduous	Sawtimber Well	36.9	52	81-110	Mature aspen and balm stand, with some pockets of ash.
25	4130 - Aspen	Poletimber Well	55.8	38	81-110	Overall moderate quality aspen stand, with some lower quality areas, where the soils are shallow due to ledge being close to the surface. There is some scattered mature species scattered throughout the stand. Autumn olive is present along the west side of the stand.
26	6118 - Lowland Deciduous with Cedar	Sawtimber Well	28.2	97	111-140	Mature ash stand with cedar. The majority of the cedar is low quality.
27	4130 - Aspen	Sapling Well	25.4	7	Immature	Stand was clearcut in 2010 on contract 013-08-01. The cedar, ash, and hemlock was retained along with 2 retention pockets. Very good quality and density of aspen regeneration.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
28	6112 - Lowland Aspen	Sawtimber Well	38.6	52	81-110	Mature aspen, balm, and ash stand. Some of the aspen/balm has already died out, probably due to the high water table. This stand should be harvested prior to the arrival of the emerald ash borer, after harvesting the stand will fill in with mostly aspen and
29	42360 - Upland Cedar	Sawtimber Well	11.6	127	111-140	Very high quality upland cedar stand with pockets of other mature species.
30	6118 - Lowland Deciduous with Cedar	Sawtimber Well	23.2	117	81-110	Mature ash and cedar stand. The majority of the cedar is low quality, with a high percentage that has or is blowing over. Harvest this stand prior to the arrival of the emerald ash borer.
31	4139 - Aspen, Mixed Deciduous	Sawtimber Well	8.2	48	81-110	Good quality aspen stand, with some older mature hardwoods mixed in.
32	42360 - Upland Cedar	Sawtimber Medium	6.7	97	1-50	Stand was cut in 2010 on contract 013-08-01. The aspen/balm, maple, and birch were cut, along with all spruce/fir with three or more sticks. The cedar and ash was also retained. Stand is mature cedar and ash over young aspen/balm regeneration. Some of the cedar has blown over, since the harvest.
33	4136 - Aspen, Mixed Conifer	Sawtimber Well	23.2	53	81-110	Mature aspen and spruce/fir stand. In parts of the stand a considerable amount of the aspen has already died, probably due to the high water table. This stand is primarily upland, with some ash drains running through it.
34	6118 - Lowland Deciduous with Cedar	Sawtimber Well	17.5	129	111-140	This stand had three east-west strips cut out of this stand in the 1960's. It looks the cedar and ash was retained. The majority of the cedar is high quality. In the strips that were cut, they filled in with aspen/balm, balsam fir, and birch primarily. These species are now mature. This stand should be harvested, prior to the arrival of the emerald ash borer. This stand can be converted to a cedar and aspen/balm type.
35	6115 - Lowland Ash	Sawtimber Well	47.4	97	81-110	Mature good quality green ash stand.
36	4130 - Aspen	Sapling Well	12.8	8	Immature	Stand was clearcut in 2009 on contract 013-08-01. The cedar, ash, and hemlock was retained. Good quality aspen regeneration.
37	42360 - Upland Cedar	Sawtimber Medium	8.7	127	51-80	Stand was cut in 2009 on contract 013-08-01. The cedar, ash, and hemlock was retained. The stand is now mature cedar and ash over young aspen/balm. The regeneration varies in density, based on the density of the residual cedar.
38	42360 - Upland Cedar	Sawtimber Well	6.2	127	111-140	Stand was cut in 2009 on contract 013-08-01. The cedar, ash, and hemlock was retained. This stand is a dense upland stand of cedar. The cedar is too dense to allow very little of the harvested species to regenerate.
39	4130 - Aspen	Sapling Well	27.0	7	Immature	This stand was clearcut in 2010 on contract 013-08-01. The cedar, ash, and hemlock was retained. Good quality aspen regeneration with some mature cedar and ash scattered throughout.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	6118 - Lowland Deciduous with Cedar	Poletimber Well	71.7	97	51-80	Mature lower quality ash stand with some pockets of cedar. This stand should be harvested prior to the arrival of the emerald ash borer.
41	6118 - Lowland Deciduous with Cedar	Poletimber Well	81.7	63	51-80	Younger lowland hardwood stand, with some small upland knobs containing mostly red maple. This stand contains a fair amount of ash, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer. Hold this stand until next entry. This will break up the hardwood age classes in this area.
42	4191 - Mixed Upland Deciduous with Conifer	Sapling Well	103.7	22	Immature	This stand was clearcut between 1993 and 1996 on contract 011-88-01. The cedar, hemlock, white pine, and beech were retained. This stand is a mix of upland, which contains mostly aspen and lowland, which contains primarily balm and ash. There are some dense clumps of cedar, along with some scattered ones. Quite a bit of the residual cedar has blown over, since the stand was cut. There are a couple of pockets of phragmites within the stand.
43	6120 - Lowland Cedar	Sawtimber Well	5.1	127	81-110	Lowland cedar and ash stand. There isn't enough volume to try and salvage this stand prior to the arrival of the emerald ash borer.
44	42390 - Mixed Non-Pine Upland Conifers	Poletimber Medium	29.2	55	51-80	Stand was cut in 1993 on contract 011-88-01. The cedar, hemlock, white pine, and beech was retained. There was a lot of residual spruce/fir retained after the harvest, most of which is about 50 years old. The stand is primarily older spruce/fir, with some older cedar, pine, and hardwoods, with some pockets of younger regeneration. With the threat of the spruce budworm this stand should be harvested. There is an active bald eagle nest in the stand, apply the proper retention area and time guidelines to the treatment of this stand. There is autumn olive throughout the stand.
50	6118 - Lowland Deciduous with Cedar	Sawtimber Well	23.5	87	81-110	Mature lowland hardwood stand with some ridges of higher ground. The higher ground has more red maple.
53	6120 - Lowland Cedar	Poletimber Well	13.6	127	81-110	Moderate to low quality cedar stand. There are very few other species mixed in, but most of the stand has a dense understory of brush.
55	429 - Mixed Upland Conifers	Sawtimber Well	1.5	87	81-110	Very diverse and small stand, that is between County Road G-12 and the Wells State Park boundary. Upland conifer stand, with some lowland hardwood pockets.
57	6139 - Mixed Lowland Forest	Sapling Well	4.5	24	1-50	Stand was cut in 1993 on contract 011-88-01. The cedar, hemlock, white pine, and beech were retained. The stand has fully regenerated, with primarily spruce/fir and balm. There is still a fair amount of residual cedar, but about half of the cedar that was originally retained has blown over. There are some cedar seedlings present.
60	6118 - Lowland Deciduous with Cedar	Sawtimber Well	52.5	97	81-110	Mature ash stand with cedar. There is a north-south utility line running through this stand. There are a number of pockets of phragmites in this stand. There is a large one on the south end and a number of them on the west side of the stand along the Big Cedar River.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
62	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	8.2	87	81-110	Mature lower quality lowland hardwood stand. Stand should be harvested prior to the arrival of the emerald ash borer, but access will be difficult.
63	6120 - Lowland Cedar	Poletimber Well	9.9	109	111-140	Dense small diameter cedar stand with some pockets of hardwood. About half of the stand is upland.
64	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	18.0	83	1-50	Very low quality lowland conifer stand.
65	4199 - Other Mixed Upland Deciduous	Poletimber Well	13.3	97	81-110	Mature red maple and ash stand. The stand is about half upland and half lowland. Harvest this stand prior to the arrival of the emerald ash borer.
66	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	31.3	97	51-80	Stand was cut in 2011 & 12 on contract 012-08-01. The aspen, balm, and birch were cut. The ash greater than 14" inches, yellow birch greater than 12" inches, and maple greater than 9" inches were cut. And the spruce/fir with three or more sticks were cut. The stand is a mix of ash and red maple with pockets of hemlock and cedar. The stand still has about 75% canopy cover, which was too dense to allow any of the hardwood to stump sprout following the harvest. A high percentage of the cedar that was retained has blown over. There is a pocket of phragmites within the center of the stand.
67	6122 - Black Spruce	Poletimber Well	40.2	83	51-80	Very low quality lowland conifer stand. There are some pockets of blow down within the stand, these areas have seeded in well and the seedlings are growing well. This stand has a sphagnum moss understory.
68	4312 - Hemlock, Mixed Deciduous	Sawtimber Well	7.9	102	111-140	Mature hemlock and lower quality upland hardwood stand. The hemlock is dense in the northwestern part of the stand, but there isn't much in the southern part.
69	6127 - Lowland Pine	Sawtimber Medium	6.2	87	51-80	Mature low quality white pine and black spruce stand. The stand is a mix of ridges of pine and swales with black spruce. Quite a bit of the spruce has already blown over. On the ridges there is hemlock regeneration present.
70	6122 - Black Spruce	Poletimber Medium	34.8	83	1-50	Very low quality, with some pockets of merchantable trees. But, overall the stand is mostly black spruce saplings and small poles. This stand is slightly better than a treed bog.
71	4319 - Mixed Upland Forest	Sawtimber Medium	78.3	73	51-80	Very variable stand. The stand is primarily aspen and spruce/fir with pockets of mature hardwood and cedar. The aspen and spruce/fir has variable ages and densities. This stand has a high density of spruce/fir, so the stand needs to be harvested before the spruce budworm causes defoliation and mortality.
72	6118 - Lowland Deciduous with Cedar	Sawtimber Well	11.6	102	81-110	Stand is a mix of mature lowland and upland hardwoods. There are some drains that flow through the northeast corner of the stand out into Lake Michigan.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
73	4119 - Mixed Northern Hardwoods	Poletimber Well	6.0	96	81-110	Mature red maple stand, that is ready to be harvested. But, with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer. Hold this stand until next entry. This will break up the hardwood age classes in this area.
74	6120 - Lowland Cedar	Poletimber Well	24.8	107	111-140	Dense moderate quality cedar stand, with very few other species mixed in.
75	6120 - Lowland Cedar	Poletimber Well	37.3	109	111-140	Decent quality cedar stand with pockets of other species mixed in. A high percentage of the spruce/fir has already died out of the stand.
76	6120 - Lowland Cedar	Poletimber Medium	32.6	109	51-80	Very poor quality cedar and ash stand. Overall the stand is unproductive forest with pockets of merchantable trees.
77	4319 - Mixed Upland Forest	Sawtimber Well	34.8	102	81-110	Mature upland hardwood stand with pockets of dense cedar. A substantial amount of the spruce/fir has blown over or snapped off. This stand is mature, but with all of the ash stands prescribed for treatment, due to the proximity of the emerald ash borer. Hold this stand until next entry. This will break up the hardwood age classes in this area.
79	42360 - Upland Cedar	Sawtimber Well	7.3	109	81-110	Upland high quality cedar stand, which had most of the other species cut out 24 years ago. Overall the canopy was too dense to allow much to regenerate, but in the open areas spruce/fir has regenerated.



Stand	Cover Type	Acres	Managed Site	General Comments:
4	6229 - Mixed lowland shrub	11.3	No	Thick lowland brush, primarily holly.
5	6229 - Mixed lowland shrub	4.1	No	Lowland brush stand, that is a mix of holly and tagalder, with some pockets of marsh grass.
7	122 - Road/Parking Lot	1.3	Yes	Forest Island ORV parking lot/trail head.
18	3102 - Grass	1.0	No	Sedge/grass stand with bracken fern.
45	222 - Orchards/Vineyards/Nursery	1.0	Yes	Grass/sedge opening with about 15 apples trees planted in it. The apple trees are small, they look like they were planted about 15 to 20 years ago. They could be pruned.
46	710 - Sand, Soil	1.2	No	Old borrow pit, part of which was dug out and now has water and cattails in it.
47	710 - Sand, Soil	1.8	No	Gravel pit in the northwest part of the stand, that has been only slightly used. The knob of gravel has already been cleared. The rest of the stand is an old borrow pit, that had some depressions dug out. These areas now hold water, with cattails growing in them.
48	710 - Sand, Soil	1.5	No	Old borrow pit, part of which was dug out and now has water and cattails in it.
51	710 - Sand, Soil	1.9	No	Old borrow pit, part of which was dug out and now has water and cattails in it.
52	622 - Lowland Shrub	1.7	No	Lowland shrub, primarily tagalder with some holly and willow mixed in.
54	122 - Road/Parking Lot	1.1	No	County Road G-12 and its R.O.W.
56	622 - Lowland Shrub	4.0	No	Lowland shrub, with pockets of cattails.
58	500 - Water	15.0	No	The Big Cedar River.
59	622 - Lowland Shrub	2.7	No	Islands within the Big Cedar River. They are primarily lowland brush, with some mature ash. Invasive phragmites is present on both of the islands.
61	122 - Road/Parking Lot	6.2	No	Highway M-35 and its R.O.W.
78	6230 - Cattail	1.6	No	Old borrow pit, that was dug out. It now holds water with cattails, some lowland brush, and marsh grass growing in it.
80	6230 - Cattail	2.9	No	Cattail marsh with some lowland brush and marsh grass.



Stand	Cover Type	Acres	Managed Site	General Comments:
81	310 - Herbaceous Openland	1.0	No	Old CEDARVILLE TWP DUMP that was closed in the early 1980's. In the past year, all of the seedlings and saplings were cut down.