



Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 33059

Entry Year 2019

Acreage: 3,249

County Menominee

Management Area: Green Bay Lake Plain

Revision Date: 2017-06-30

Stand Examiner: Dan Beaudou

Legal Description:

T35N-R26W, Sections 23-26 and 34-36

Identified Planning Goals:

This compartment contains mainly lowland types consisting of cedar, mixed conifers, bogs, marshes and lowland brush along with North Lake and Little Lake. The upland areas are either upland mix, northern hardwoods or early-successional aspen. Treatments are to address invasive species, hardwood thinning and regenerating mature stands.

Soil and topography:

Level to slightly rolling. Soils are poorly drained, somewhat poorly drained, and well drained sands and very poorly drained, extremely acid mucks and peats. Major soil series are Deford, Wainola, Rousseau, Dawson, Greenwood, and Kinross.

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

This compartment is part of a band of state forest land that is about 25 miles long and 7 miles wide between Escanaba and Menominee. Privately owned agriculture lands lie to the west of this compartment. State forest land, intermixed with private in-holdings, are adjacent to this compartment to the north east and west. Additionally two private 40 acre parcels were acquired to better block in this compartment.

Unique Natural Features:

This area has the potential to harbor many rare and endangered species including great blue heron rookery, eagle, osprey, moose, wolf, northern harrier, Blanding's turtle, loon, black tern, least bittern, American bittern, frigga fritillary, freija fritillary, red-disked alpine, ebony boghaunter, wood turtle, goshawk and red-shouldered hawk. In the form of vegetative unique and natural features, this area has the potential for calypso orchid, ram's head lady's-slipper, marsh grass-of-parnassus, sweet coltsfoot, and Wiegand's sedge.

Archeological, Historical, and Cultural Features:

None known to exist.

Special Management Designations or Considerations:

The North Lake ERA is comprised of the muskeg habitat south of County Road 352/G-12. West of the ERA is the Hayward Lake Wetland Complex Strategic Plan that comprises North and Long Lake with the surrounding marsh area.

Watershed and Fisheries Considerations:

This compartment contains North Lake, Little Lake, Weary Creek, Crystal Brook, Big Brook and the Walton River. The Walton River is designated a Type 1 trout stream less than 50' width. A 300' buffer is recommended in riparian areas susceptible to Aspen regeneration. For all other riparian areas, Best Management Practices should be followed to maintain canopy cover and prevent erosion into waterbodies.

Wildlife Habitat Considerations:

Ecological Context: This compartment is within a sand lake plain located between Escanaba and Menominee. This plain historically supported forests of hemlock and white pine on ridges, and extensive swamps of cedar, black spruce, and tamarack in low areas. Broad upland areas sometimes supported northern hardwood forests of beech and sugar maple. Wind throw was the most common natural disturbance regime. During the past 100 years aspen has increased greatly while white pine, red pine, hemlock, and cedar have declined.

Recommendations: This compartment comprises the north half of the Hayward Lake Wetland Complex and contains North Lake and Little Lake. Hayward Lake, the largest lake is in this 3-lake chain, is located in the compartment to the south. All 3 lakes are natural, shallow water basins that were documented in the 1800's by the original land surveyors. Together they form the headwaters of the Walton River. In 1953, a dam was installed on the Walton River about 4 miles

downstream from North Lake, presumably to stabilize water levels in the lakes and expand the existing wetland complex. The dam mainly creates a widening and deepening of the Walter River between the dam and County Road G-12. It appears to be capable of adding about 1 foot of water to the north end of North Lake and some spill over flooding into the vast expanse of marsh and lowland brush between North and Hayward Lakes. However, the dam has progressively less impact on water levels as one moves south from North to Hayward Lakes. This is because the surface water elevation at the south end of Hayward Lake is already higher than the height of the stoplog bays at the dam. Nevertheless, stoplogs are added to the dam late each summer and removed later in the fall due to strong views by local sports persons that the dam actually manages water depths throughout the chain-of-lakes.

Proposed treatments are to address invasive species, hardwood thinning and regenerating mature stands.

Mineral Resource and Development Concerns and/or Restrictions

There may be metallic mineral potential in this area, but at significant depth, and there has been no known exploration or leasing in the area to date. There may be limestone/dolostone potential where bedrock is at or near the surface. No active sand/gravel pits are located within the compartment and the area consists mostly of wetlands, but there may be some minor sand and gravel potential. No economic oil and gas production has been found in the UP.

Vehicle Access:

County road G-12 divides the compartment into a 1/3 northern block and a 2/3 southern block. Other than this the compartment is only accessible via foot or canoe.

Survey Needs:

Four survey corners would be needed for the proposed treatments.

Recreational Facilities and Opportunities:

North Lake provides opportunities to canoe, fish, hunt waterfowl, trap, and view marshland wildlife. An undeveloped boat launch for small watercraft is present at the bridge on G-12 over the Walton River.

Fire Protection:

No significant control problems foreseen due to the lack of explosive fuels and an abundance of natural fuel breaks, such as low wet stands of timber and lowland brush. Low wet areas will impede fire suppression as well as fire spread.

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: 59

County: Menominee

Unit: Escanaba

Mgmt Area: Green Bay Lake Plain

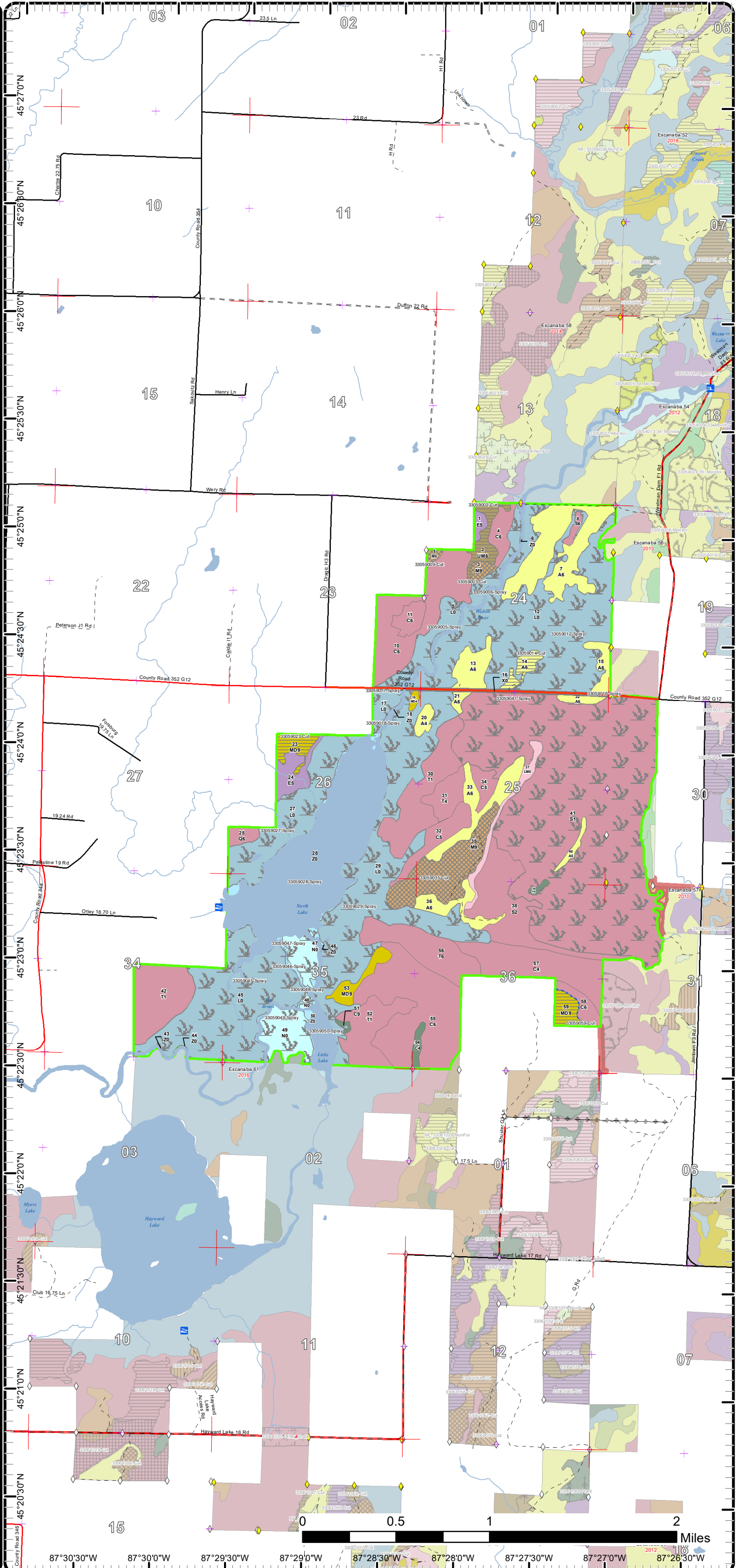
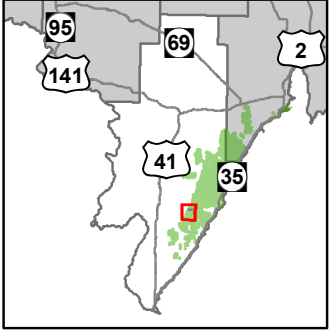
YOE: 2019

Acres: 3249 GIS Calculated

Examiner: Dan Beaudou

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
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- - - Gravel Roads
- - - Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Compartment Boundary
- Treatments with Site Conditions
- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- ▨ Pesticide
- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 423 - Other Upland Conifers
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 122 - Roads/Parking Lot
- 500 - Water
- 622 - Lowland Shrub
- 623 - Emergent Wetland
- Lakes

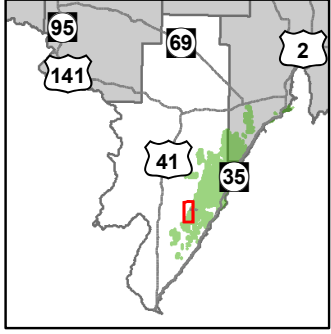
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Miles

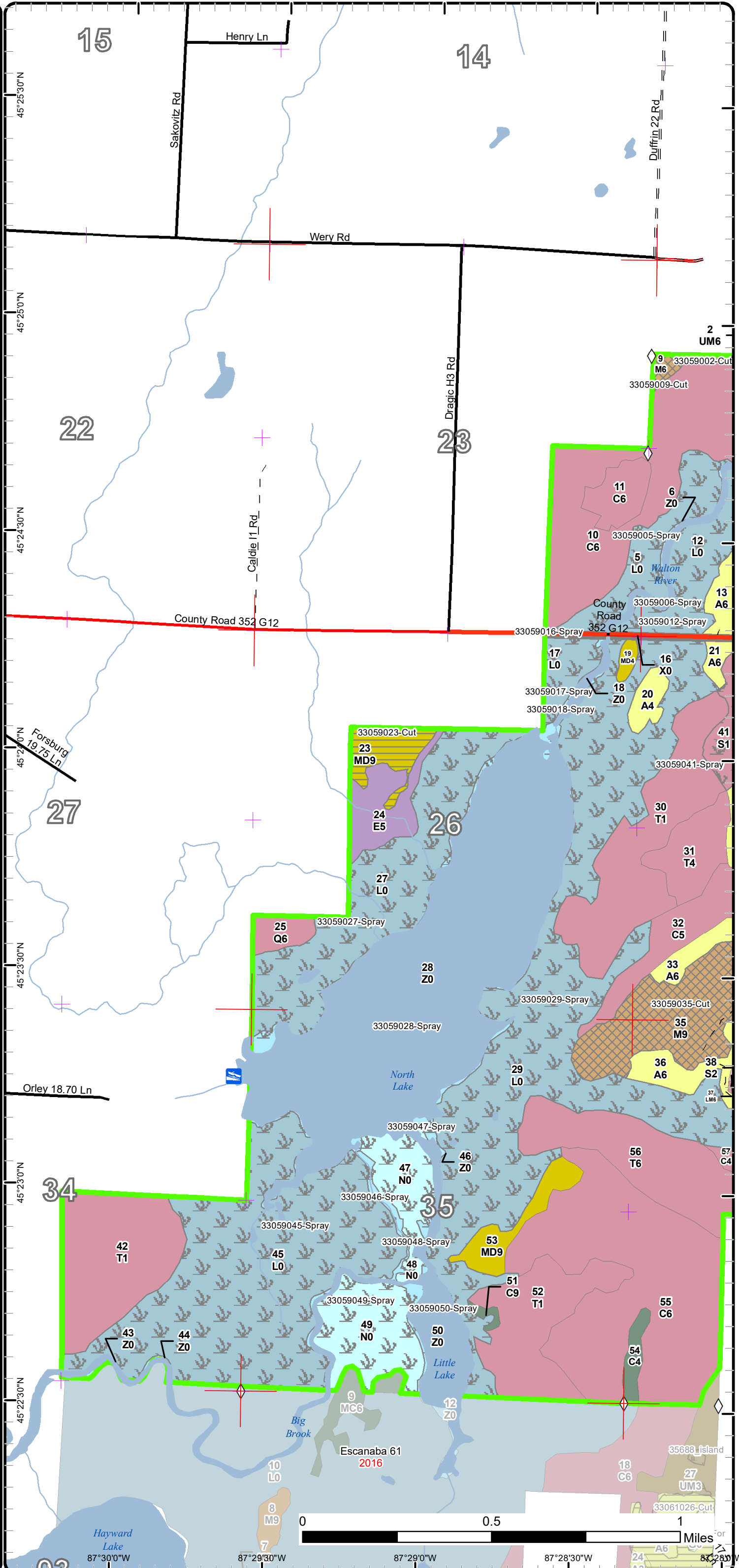
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Stand Boundary Map

Compartment: 59

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Unit: Escanaba

Mgmt Area: Green Bay Lake Plain

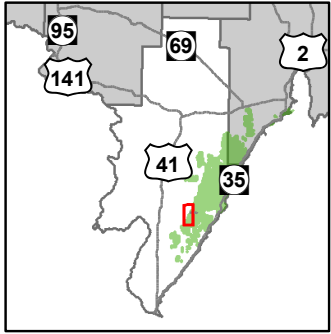
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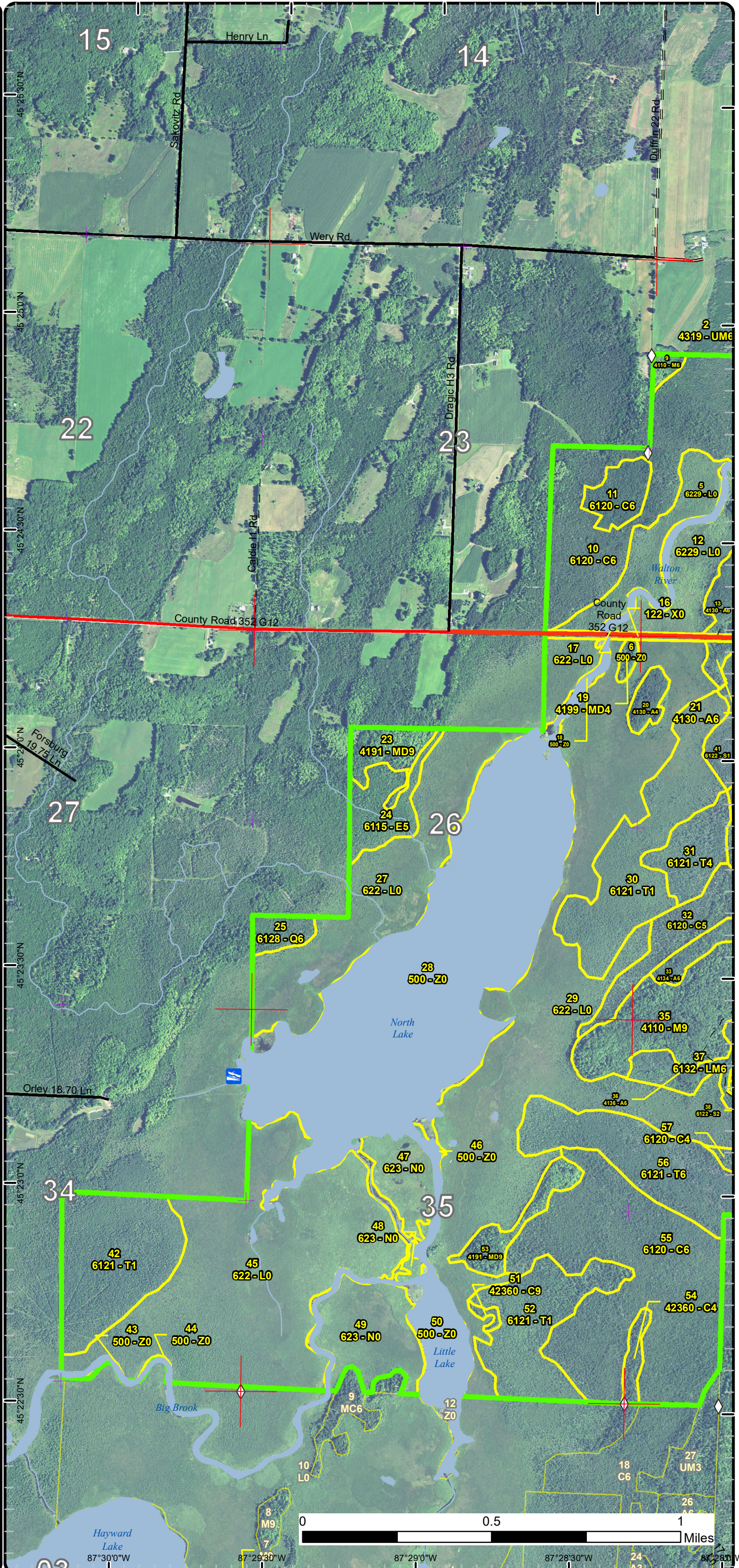
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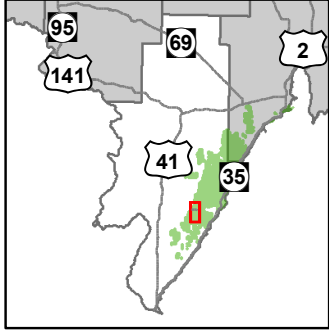
YOE: 2019

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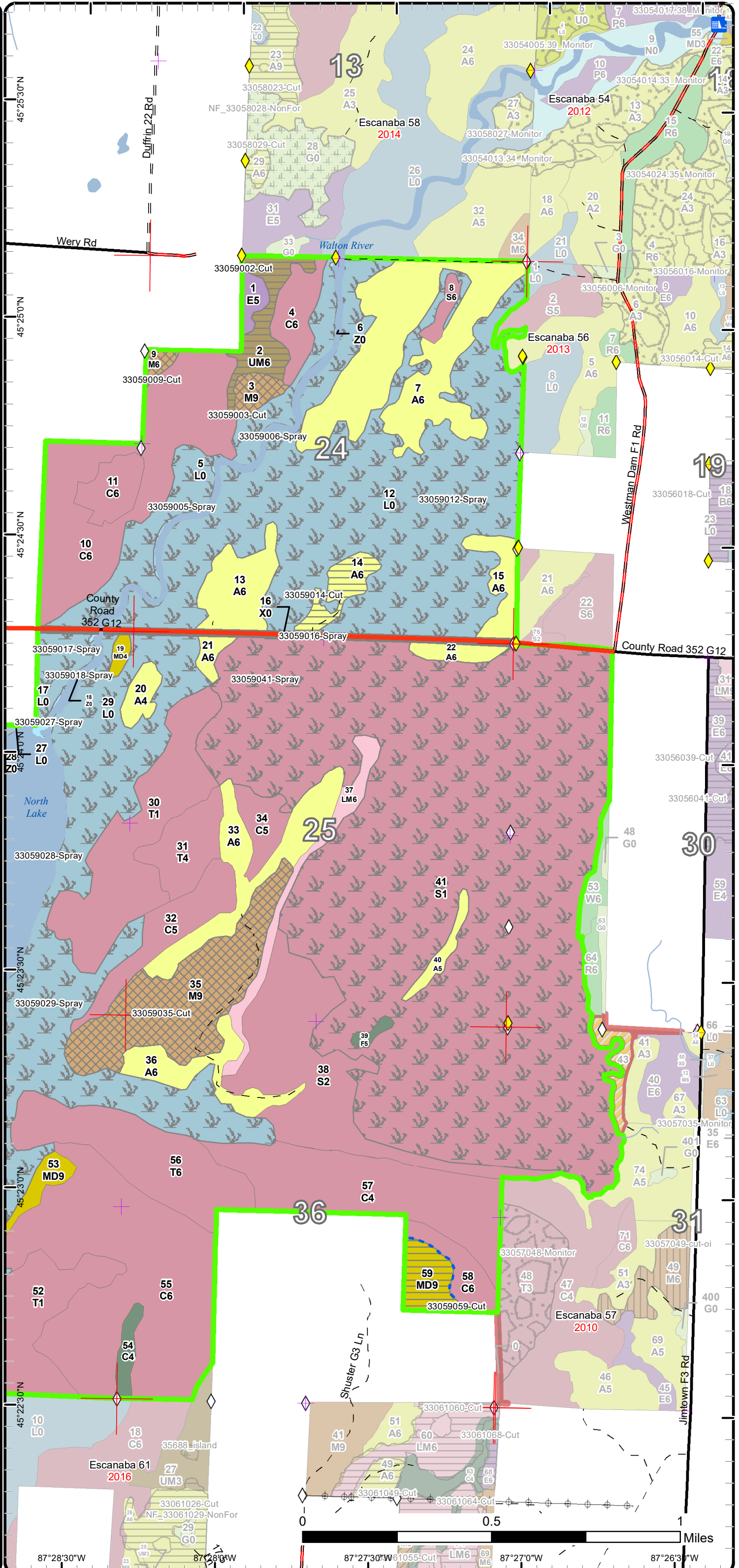
Examiner: Dan Beaudou

Map Revised: 7/5/2017

Map Phase: Web-Post



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Mgmt Area: Green Bay Lake Plain

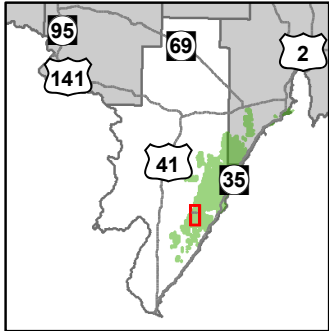
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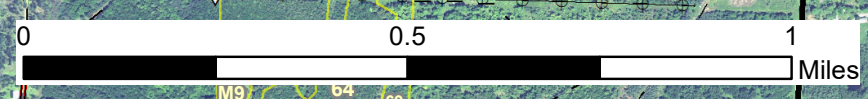
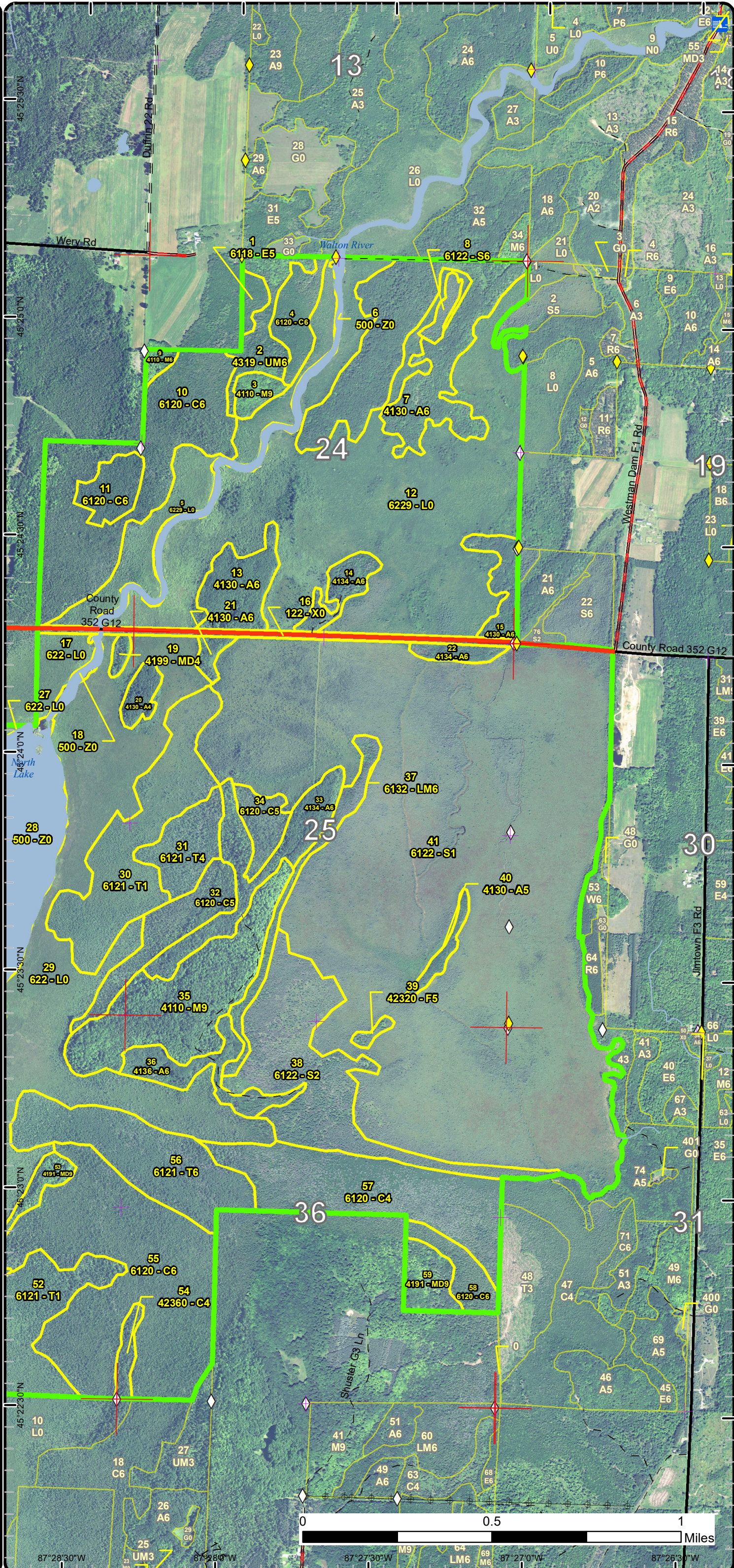
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87°28'30"W 87°28'00"W 87°27'30"W 87°27'00"W 87°26'30"W

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	0	22	13	176	0	0	0	0	12	0	0	0	0	0	0	0	0	223
Cedar	0	0	0	0	0	0	0	0	0	133	0	125	0	154	0	0	0	0	411
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9
Lowland Deciduous	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	5	28
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	18
Lowland Shrub	939	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	939
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	788	0	0	0	0	0	0	0	0	788
Marsh	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
Mixed Upland Deciduous	0	0	0	0	3	0	0	0	0	30	15	0	0	0	0	0	0	0	48
Northern Hardwood	0	0	0	0	0	0	0	0	0	83	0	0	0	0	0	0	0	0	83
Tamarack	0	0	0	0	72	65	51	62	0	23	0	0	0	0	0	0	0	0	273
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	20
Upland Spruce/Fir	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Urban	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Water	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	324
Total	1347	0	22	13	251	65	51	62	23	1091	24	143	0	154	0	0	0	5	3250



Report 2 – Treatment Summary

Escanaba Mgt. Unit

Year of Entry: 2019

Acres of Harvest

Compartment 59
Total Compartment Acres: 3,249

Commercial Harvest - 129
Harvests with Site Condition - 14
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	12	0	0	0	0	0	0	0	0	12
Mixed Upland Deciduous	30	0	0	0	0	0	0	0	0	30
Northern Hardwood	0	83	0	0	0	0	0	0	0	83
Upland Mixed Forest	20	0	0	0	0	0	0	0	0	20
Total	61	83	0	0	0	0	0	0	0	144

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	144	0	0	0	0	2042	0	0	0	2185
Next Step	0	0	0	0	0	0	2185	0	0	2185
Total	144	0	0	0	0	2042	2185	0	0	4370



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
2	33059002-Cut	19.5	4319 - Mixed Upland Forest	Poletimber Well	88	141-170	Harvest	Clearcut with Retention	4319 - Mixed Upland Forest	Even-Aged	Proposal

Habitat Cut: No **Site Condition:**

Prescription Cut all trees greater than 3" dbh except pine and hemlock.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: Acceptable regeneration will produce a mixed stand of conifer and deciduous tree species that are currently on site.

Other Comment:

Long narrow stand with cedar on both sides. Giving full sunlight will benefit seed germination of all species.

Proposed Start Date: 10/01/2018

3	33059003-Cut	7.2	4110 - Sugar Maple Association	Sawtimber Well	88	111-140	Harvest	Single Tree Selection	4319 - Mixed Upland Forest	Uneven-Aged	Proposal
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Habitat Cut: No **Site Condition:**

Prescription Selection thin stand to 60-80 basal area removing low quality trees and promote good deciduous crop trees. Promote mature hardwood along edge

Specs: of stand for wood duck nesting cavities.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: Produce an upland mixed stand containing conifer and deciduous species currently on site.

Other Comment:

Proposed Start Date:

10/01/2018

5	33059005-Spray	51.5	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: Restore native species.

Other Comment:

Proposed Start Date:

10/01/2018

6	33059006-Spray	11.9	500 - Water	Nonstocked	0	Unspecified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
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Habitat Cut: No **Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Regen: Restore native species.

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
9	33059009-Cut	3.3	4110 - Sugar Maple Association	Poletimber Well	88	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Selection thin stand to 60-80 basal area. Remove low quality trees to promote high quality sugar maple crop trees.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Maple, basswood and some fir/spruce.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
12	33059012-Spray	303.2	6229 - Mixed lowland shrub	Nonstocked	0	Unspecified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u> Most of the phragmites appear along the Walton River and G-12 Road. Some small patches interior.											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
14	33059014-Cut	11.7	4134 - Aspen, Spruce/Fir	Poletimber Well	82	Unspecified	Harvest	Clearcut with Retention	4136 - Aspen, Mixed Conifer	Even-Aged	Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Cut all trees greater than 3 inch dbh except leave the dense cedar patch at north end of the stand for retention.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Aspen, maple, balsam fir, spruce and/or cedar.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
16	33059016-Spray	15.5	122 - Road/Parking Lot	Nonstocked	0	Unspecified	Pesticide	Hand Application	122 - Road/Parking Lot		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u> Phragmites in ditch of roadway.											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 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
17	33059017- Spray	14.1	622 - Lowland Shrub	Nonstocked	0	Unspec ified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal

Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

18	33059018- Spray	3.3	500 - Water	Nonstocked	0	Unspec ified	Pesticide	Aerial	500 - Water		Proposal
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Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

23	33059023-Cut	15.3	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	95	111- 140	Harvest	Clearcut with Retention	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Cut all trees greater than 3 inch dbh except leave hemlock and about a 1 acre retention patch of dense cedar that is located in the central west part
Specs: of the stand. Also leave a mixed selection of seed trees.

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

Acceptable Aspen, maple, basswood, hemlock, cedar, birch and/or balsam fir.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

27	33059027- Spray	100.5	622 - Lowland Shrub	Nonstocked	0	Unspec ified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
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Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
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
28	33059028-Spray	270.1	500 - Water	Nonstocked	0	Unspecified	Pesticide	Aerial	500 - Water		Proposal

Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

29	33059029-Spray	269.6	622 - Lowland Shrub	Nonstocked	0	Unspecified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
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Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

35	33059035-Cut	72.3	4110 - Sugar Maple Association	Sawtimber Well	80	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Selection thin stand to 60-80 basal area. Remove low quality trees to promote high quality crop trees. Due to potential forest health issues, reduce the number of ash and beech trees within the stand.
Specs:

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

Acceptable Maple, basswood, aspen, birch
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

41	33059041-Spray	697.8	6122 - Black Spruce	Sapling Poor	85	Unspecified	Pesticide	Aerial	6122 - Black Spruce	Uneven-Aged	Proposal
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Habitat Cut: No**Site Condition:**

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
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
45	33059045-Spray	199.7	622 - Lowland Shrub	Nonstocked	0	Unspecified	Pesticide	Aerial	6229 - Mixed lowland shrub		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
46	33059046-Spray	11.4	500 - Water	Nonstocked	0	Unspecified	Pesticide	Aerial	500 - Water		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
47	33059047-Spray	25.1	623 - Emergent Wetland	Nonstocked	0	Unspecified	Pesticide	Aerial	6239 - Mixed Emergent Wetland		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/01/2018											
48	33059048-Spray	2.8	623 - Emergent Wetland	Nonstocked	0	Unspecified	Pesticide	Aerial	6239 - Mixed Emergent Wetland		Proposal
Habitat Cut: No			Site Condition:								
<u>Prescription</u> Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.											
<u>Specs:</u>											
<u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)											
<u>Treatments:</u>											
<u>Acceptable</u> Restore native species.											
<u>Regen:</u>											
<u>Other</u>											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 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
49	33059049-Spray	40.4	623 - Emergent Wetland	Nonstocked	0	Unspecified	Pesticide	Aerial	6239 - Mixed Emergent Wetland		Proposal

Habitat Cut: No

Site Condition:

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

50	33059050-Spray	24.7	500 - Water	Nonstocked	0	Unspecified	Pesticide	Aerial	500 - Water		Proposal
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Habitat Cut: No

Site Condition:

Prescription Treat with herbicide to remove invasive plants such as phragmites by use of hand or aerial application as funding becomes available.
Specs:

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

Acceptable Restore native species.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

59	33059059-Cut	14.3	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	80	111-140	Harvest	Clearcut	4191 - Mixed Upland Deciduous with Conifer	Even-Aged	Proposal
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Habitat Cut: No

Site Condition: Denied Access

Prescription Cut all trees greater than 3 inch dbh. Small stand that will regenerate from root/stump sprouts and surrounding seed source.
Specs:

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

Acceptable Maple, aspen, balsam fir, spruce, cedar and/or birch.
Regen:

Other
Comment:

Proposed Start Date: 10/01/2018

Total Treatment Acreage Proposed: 2185.2

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dan Beaudou : Examiner

Compartment: 59
Year of Entry: 2019

Availability for Management

Total Acres	Acres Available	Acres Avail		Dominant Site Conditions	4A	5C	2A	2G	2H
		With Condition	Not Available						
222	222	0	0	Aspen					
412	412	0	0	Cedar					
9	0	9	0	Lowland Conifers		9			
28	28	0	0	Lowland Deciduous					
18	18	0	0	Lowland Mixed Forest					
939	939	0	0	Lowland Shrub					
787	698	90	0	Lowland Spruce/Fir		90			
68	68	0	0	Marsh					
48	18	0	30	Mixed Upland Deciduous			14		16
83	83	0	0	Northern Hardwood					
274	189	23	62	Tamarack	23			62	
19	19	0	0	Upland Mixed Forest					
2	2	0	0	Upland Spruce/Fir					
16	16	0	0	Urban					
324	324	0	0	Water					
3,249	3,035	122	92	Total Forested Acres	23	99	14	62	16
	93%	4%	3%	Relative Percent					

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Evaluate next year of entry to feasibly treat with stand 7.							
2	Available	4A: No Markets Available for these Forest Products	23	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Poor quality, old, stubby, small diameter and low density.							

Report 4 – Site Conditions

Escanaba Mgt. Unit
Dan Beaudou : Examiner

Compartment: 59
Year of Entry: 2019

3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Delay to increase age and size of regeneration from contracts in 1979 and 1988. Residual cedar has age of 93.							
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	85	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Delay to improve size class.							
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	16	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	62	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified
Comments: Low productivity site.							
7	Unavailable	2A: Adjacent landowner denied access	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Current adjacent landowner has denied timber sale access in the past.							



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	1
Comments				
Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	208
Comments				
Does not meet SCA criteria.				
	Potential Old Growth		SCA Removal	302
Comments				
Does not meet SCA criteria.				
Hayward Lake Management Area	Habitat Areas or Corridors	Other Habitat Area	Proposed SCA	2025
Comments				
Wetland complex habitat area				



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	6118 - Lowland Deciduous with Cedar	Poletimber Medium	5.2	25	Immature	Previously typed out as L0. This stand is filling in with ash creating an uneven aged stand. Small pocket of dense cedar on edge.
2	4319 - Mixed Upland Forest	Poletimber Well	19.5	88	141-170	Mixed stand due to slight changes in elevation. There is a trace amount of large white pine trees with a pocket of hemlock. Cedar is scattered throughout the stand with some dense patches.
3	4110 - Sugar Maple Association	Sawtimber Well	7.2	88	111-140	Stand was thinned in 1964 under contract 134-62. No deciduous tree regeneration apparent. Stand is mostly large hardwood trees ready for a thinning.
4	6120 - Lowland Cedar	Poletimber Well	16.9	101	171-200	Majority of stand is cedar with other species mixed in or some ash patches. The more upland species are located where there is a slight rise in terrain.
7	4130 - Aspen	Poletimber Well	90.3	36	Unspecified	Clearcut under contract number 18-79A in 1980. Self thinning process creating dead aspen on ground. Area's of the stand have a smaller diameter indicating less dense patches have filled in better then what last YOE indicated. Should be ready to treat next YOE.
8	6122 - Black Spruce	Poletimber Well	4.6	89	111-140	Black Spruce stand with some minor species mixed in.
9	4110 - Sugar Maple Association	Poletimber Well	3.3	88	111-140	Stand was thinned in 1964 under contract 134-62. Smaller diameter stand but in need of releasing.
10	6120 - Lowland Cedar	Poletimber Well	93.7	101	171-200	Majority of stand is fair quality cedar with slight rises in topography where aspen, balm and balsam are present.
11	6120 - Lowland Cedar	Poletimber Well	14.3	101	171-200	This stand has a higher density of tamarack that shows up on the imagery. The tamarack sticks up above the dense cedar canopy creating the appearance of a tamarack stand. The cedar and tamarack are of small diameter but high density.
13	4130 - Aspen	Poletimber Well	24.0	32	Immature	Stand was clear cut in 1985 under contract 025-84-01. Dense aspen stand with some larger sugar maple that must have been left when stand was cut.
14	4134 - Aspen, Spruce/Fir	Poletimber Well	11.7	82	Unspecified	The south part of this stand was clearcut in 1987 under contract 25-84-01. The north part of the stand does not appear to have been cut. There is over mature aspen, balsam, spruce, red maple and birch with the higher age. There is a trace amount of cedar in the north end of the stand.
15	4130 - Aspen	Poletimber Well	13.3	29	Immature	Stand was treated in 1988 under contract 33-012-88-01. Good stocking with natural thinning in the aspen. Ash filling in lower areas of stand.
19	4199 - Other Mixed Upland Deciduous	Poletimber Poor	2.8	35	51-80	Clearcut in 1982 under contract number 11-77A. This stand was typed as A3 last inventory. Saplings have grown larger and resemble green ash.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	4130 - Aspen	Poletimber Poor	7.5	35	Unspecified	Clearcut in 1982 under contract number 11-77A. Balsam within canopy and no SBW noticed.
21	4130 - Aspen	Poletimber Well	4.3	35	Unspecified	Clearcut in 1982 under contract number 11-77A. South part of stand is smaller diameter with a higher concentration of green ash and red maple.
22	4134 - Aspen, Spruce/Fir	Poletimber Well	6.5	35	Unspecified	Stand was clear cut in 1982 under contract 11-77A. Some low ground in the stand with trace of tamarack, cedar and black spruce. There is also a couple beech saplings in the upland portion. Decent regeneration and growth.
23	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	15.3	95	111-140	This stand has no record of any logging activity. Trace amount of hemlock, birch and beech. The sugar maple is of poor quality. Most of the cedar is along the southern boarder with some being wind thrown.
24	6115 - Lowland Ash	Poletimber Medium	22.6	73	1-50	The trees in this stand are small, short, and low quality. A small creek flows NW to SE through this stand.
25	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	9.1	93	Unspecified	East part of stand was cut in 1979 under contract 24-78. West part of stand was cut in 1988 under contract 006-88-02. Good mix of species regenerating.
30	6121 - Tamarack	Sapling Poor	72.4	35	Unspecified	Scrubby stand just enough canopy to take it out of lowland brush.
31	6121 - Tamarack	Poletimber Poor	22.9	80	Unspecified	Thin, short, small diameter, "scrubby" looking stand.
32	6120 - Lowland Cedar	Poletimber Medium	27.1	80	Unspecified	About half of the stand is lowland brush looking with denser areas of canopy trees. Good quality, dense patch of cedar in the north east. Tamarack mortality in this stand.
33	4134 - Aspen, Spruce/Fir	Poletimber Well	37.0	35	Unspecified	Stand was cut in 1982 under contract 11-77A. No SBW noticed in the fir. Nice mixed stand with aspen being dominant.
34	6120 - Lowland Cedar	Poletimber Medium	12.7	80	Unspecified	Poor quality stand close to 50% canopy. Mortality in tamarack with a large percentage dead.
35	4110 - Sugar Maple Association	Sawtimber Well	72.3	80	141-170	Stand was thinned in 1975 under contract 65-75 then in 1998/1999 under contract 025-91-01. There is a trace of bigtooth aspen, quaking aspen, balsam, cedar, paper and yellow birch. This is a nice hardwood stand in need of a thinning. The south west end of the stand was privately owned during the last thinning and has a basal area over 200.
36	4136 - Aspen, Mixed Conifer	Poletimber Well	21.7	18	Immature	Stand was cut in 1999 under contract 025-91-01. There is a trace of green ash and cedar.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	6132 - Mixed Lowland Forest with Cedar	Poletimber Well	18.1	105	Unspecified	This is the transition zone from the upland to the lowland. This stand produces a buffer between the upland ridge and ERA designated area.
38	6122 - Black Spruce	Sapling Medium	84.9	80	Unspecified	Part of this stand is within the ERA. While the rest produces a buffer to the ERA.
39	42320 - Upland Spruce	Poletimber Medium	2.3	85	Unspecified	This stand is two small upland island that were cut in 1982 under contract 11-77A. It appears that the conifers were left and the aspen was cut.
40	4130 - Aspen	Poletimber Medium	5.8	35	Unspecified	This stand was cut in 1982 under contract 11-77A.
41	6122 - Black Spruce	Sapling Poor	697.8	85	Unspecified	The North Lake Muskeg ERA is primarily within this stand. During the drought of 1976, a wildfire started in the north east section of this stand. Fire lines to control the wildfire are evident still today, working their way down from the road G-12 to the south east end of the stand. Later, the west fire line was used to access the ridge in the center of the stand for a timber harvest. Another winter access road was created from G-12 straight south down to the large northern hardwood ridge for multiple thinning treatments of the northern hardwood and a clearcut of the aspen stand. This stand has been called a spruce bog in the past. The stunted black spruce, along with minor densities of jack pine and tamarack, appear to provide a canopy of 25-50% thus creating a S1 (small diameter, poorly stocked black spruce) stand. Historical accounts of when the wild fire control lines were established, there was a thick layer of root/shrub material that rolled up like a carpet exposing a sand subsoil and not a thick peat muck like a bog would be indicative of.
42	6121 - Tamarack	Sapling Poor	65.3	45	Unspecified	Short, scrubby looking tamarack with "shooting lanes" in south west part of stand.
51	42360 - Upland Cedar	Sawtimber Well	1.8	125	Unspecified	1-3 foot change in elevation produced this stand. Thick cedar stand with an old cast iron wood cook stove in it.
52	6121 - Tamarack	Sapling Poor	51.2	52	Unspecified	This stand resembles a lowland brush type but the tamarack appears to have a canopy greater than 25%. The tamarack is also at different heights and diameter. Very poor quality stand.
53	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	16.0	84	111-140	Mature hardwood stand surrounded by very poor access. Trace of beech and yellow birch.
54	42360 - Upland Cedar	Poletimber Poor	6.3	125	Unspecified	Upland ridge created by elevation change of around 5 feet.
55	6120 - Lowland Cedar	Poletimber Well	146.5	125	Unspecified	Old cedar stand in nice condition. Old winter road in SE section of stand leading from private property line to stand 54.
56	6121 - Tamarack	Poletimber Well	62.1	63	51-80	Poor Tamarack stand with short cedar in both canopies.

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Escanaba Mgt. Unit

Report 7 – Forested Stands

Compartment: 59
Year of Entry: 2019

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
57	6120 - Lowland Cedar	Poletimber Poor	78.5	80	Unspecified	The majority of this stand is comprised of standing dead tamarack that is not accounted for in the canopy. These trees had a diameter of 8-10 inches. They are characterized by white shelf mushrooms, beetle exit holes and woodpecker activity. Mortality appears to have set in within the last 5 years.
58	6120 - Lowland Cedar	Poletimber Well	13.9	80	Unspecified	Poor cedar stand.
59	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	14.3	80	111-140	East side of stand is lower ground with several wind thrown trees that occurred in last 10 years. There are also flat stumps present but no cutting record has been found.



Stand	Cover Type	Acres	Managed Site	General Comments:
5	6229 - Mixed lowland shrub	51.5	No	Lowland brush area on west side of Walton River.
6	500 - Water	11.9	No	The Walton River with some scattered shrub islands.
12	6229 - Mixed lowland shrub	303.2	No	Lowland brush area with some small upland islands mixed in. Some areas also resemble treed bog.
16	122 - Road/Parking Lot	15.5	No	County Road 352/G-12 blacktop with ditch/approximate right of way. Ditch containing phragmites.
17	622 - Lowland Shrub	14.1	No	Lowland brush stand with phragmites along the Walton River.
18	500 - Water	3.3	No	The Walton River flowing out of North Lake with some phragmites and cattails.
27	622 - Lowland Shrub	100.5	No	Lowland brush stand with phragmites thick along North Lake. Some duck blinds and trails from adjacent landowners going to the lake.
28	500 - Water	270.1	No	North Lake with phragmites and cattails around shoreline.
29	622 - Lowland Shrub	269.6	No	Lowland shrub with a trace of cedar and tamarack.
43	500 - Water	1.3	No	Part of Big Brook
44	500 - Water	1.0	No	Part of Big Brook
45	622 - Lowland Shrub	199.7	No	Lowland brush/marsh stand with phragmites along the lake and river.
46	500 - Water	11.4	No	Water course between North, Little and Hayward Lake with unknown name.
47	623 - Emergent Wetland	25.1	No	Large marshy area surrounded by open waterways.
48	623 - Emergent Wetland	2.8	No	Marshy area with some shrubs.
49	623 - Emergent Wetland	40.4	No	More of a marshy area with some shrubs.
50	500 - Water	24.7	No	Little Lake