# DNR DNR

# **Compartment Review Presentation**

**Escanaba Forest Management Unit** 

Compartment 33057 Entry Year 2020 Acreage: 1,624

**County Menominee** 

Management Area: Green Bay Lake Plain

Revision Date: 2018-06-21

Stand Examiner: Dan Beaudo

**Legal Description:** 

T35N, R25W Sec. 31, 32, 33,& 34

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

This compartment has a diversity of forest types mixed in with lowland brush areas. The aspen stands contain a higher percentage of red maple than normal with a good age class diversity. No aspen stands have been identified for treatment this cycle but there will be some ready for treatment in upcoming inventory cycles. The M type stands are either northern hardwood with recommended thinning or red maple/ash/conifer stands recommended for final harvest with clearcut due to poorer quality within these stands and to maximize stump sprouting/regeneration. Beech scale was identified this year in the northern hardwood stands during stand visits. Beech bark disease and mortality should be expected within the next 5 years. Removing the majority of beech within these stands has been recommended for treatment. Another prevalent type is the lowland hardwood that has a high concentration of ash in them. These stands have not been managed much in the past. With the onset of Emerald Ash Borer(EAB) and maturity in these stands, some have been identified for treatment of clearcut with retention while others will be held for diversity but may have to be addressed if EAB is identified in the compartment or local area. A minor component of this compartment is the lowland conifer/cedar stand. Spruce budworm was not noticed at this point so most of the spruce and fir areas will be retained because they do not meet silvicultural criteria at this point.

## Soil and topography:

Terrain is level to rolling. The majority of the upland consists of Deford-Woinola-Rousseau complexes. Uplands also include Onaway fine sandy loan, Rousseau fine sand and Woinola fine sand. Lowland areas consist of Deford mucky fine sand. Burleigh mucky fine sand and Tawas-Deford complexes.

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

This compartment is part of a large state ownership that is about 25 miles long by 7 miles wide near the Lake Michigan shoreline. Land use on state owned lands include hunting, camping, ATV use as well as a mix of other opportunities. The east edge of this compartment abuts Wells State Park. This park is closed to hunting and timber management and is used primarily for camping and hiking. Private holdings are used primarily as homes or hunting

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

None known

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

None known sites

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

None known

#### Watershed and Fisheries Considerations:

Expanse of lowland brush and natural drainage areas. Northern and eastern regions of this compartment contain Ruleau Creek. A 100' plus 5' per 1% increase in slope; buffer is recommended to protect Ruleau Creek riparian areas in accordance with Best Management Practices.

#### Wildlife Habitat Considerations:

- Numerous aspen stands provide habitat for wildlife species that utilize early stages of forest succession, including many of the popular game species. WLD will encourage diverse age class.
- The northern and lowland hardwood stands provide habitat for wildlife that prefer closed-canopy forest.
- Historical WLD notes indicate this compartment has been particularly attractive to nesting hawks in the past. These will be monitored to insure timber harvests do not cause negative impacts.
- Several lowland stands in the east portion of the compartment will provide large trees, standing snags, and dead woody

debris that are important to many riparian wildlife species.

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

Compartment 57: Sections 30-34, T35N-R25W, Menominee County

Active sand/gravel pits are located in the area. There is good sand & gravel potential within the compartment, but the water table is shallow. There does not appear to be significant potential for bedrock non-metallic minerals. No economic oil and gas production has been found in the UP. Metallic mineral potential is considered low. There is no history of mineral leasing in this area. The state does not own all of the mineral rights within the compartment.

#### **Vehicle Access:**

The western portion of this compartment has good access off of Jimtown Road and fair access via forest two tracks and the Cherry Ridge Road to the south. Cherry Ridge Road has been improved through timber sales to the south. However the forest two tracks generally are in bad shape. Two tracks

should be repaired when funds are available or through timber sale activity to allow vehicle access and to help with fire suppression efforts. Access to the eastern portion of this stand is poor and is only accessible via private property.

#### **Survey Needs:**

No survey corners will need to be set but possible staking out the property line in section 34 may need to be completed due to property owners encroachment onto State land.

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

No developed facilities are within this compartment, but this compartment provides many recreation opportunities including hunting, camping and hiking. As previously mentioned, the east edge of this compartment is next to the Wells State Park which is primarily used for camping and hiking.

#### **Fire Protection:**

Roads within the area do need some work however no significant control problems are 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:**

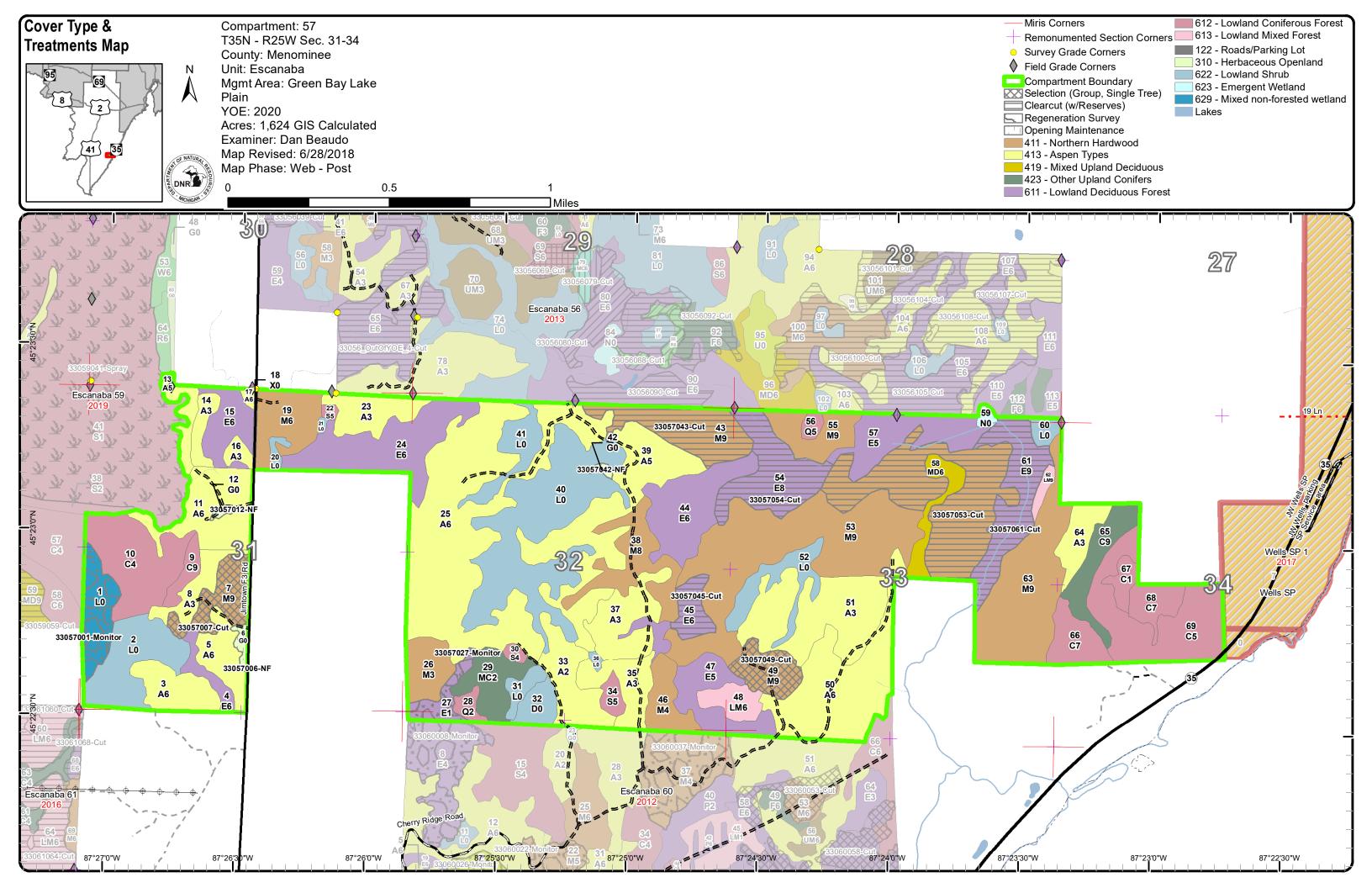
North Lake Muskeg ERA enters upland stands on west side of compartment therefore "ERA boundaries are derived from the underling Natural Community EO boundary which are mapped using NatureServe standards. EO Boundaries are informed by vegetation and other site characteristics including soils, landform, and/or historic aerial imagery. As a result, it is not uncommon for EO/ERA boundaries to differ from forest inventory stand boundaries. If these difference result in potential conflicts with proposed forest activities, consult with the Forest Conservation and Certification Specialist to request a boundary evaluation by Michigan Natural Features Inventory."

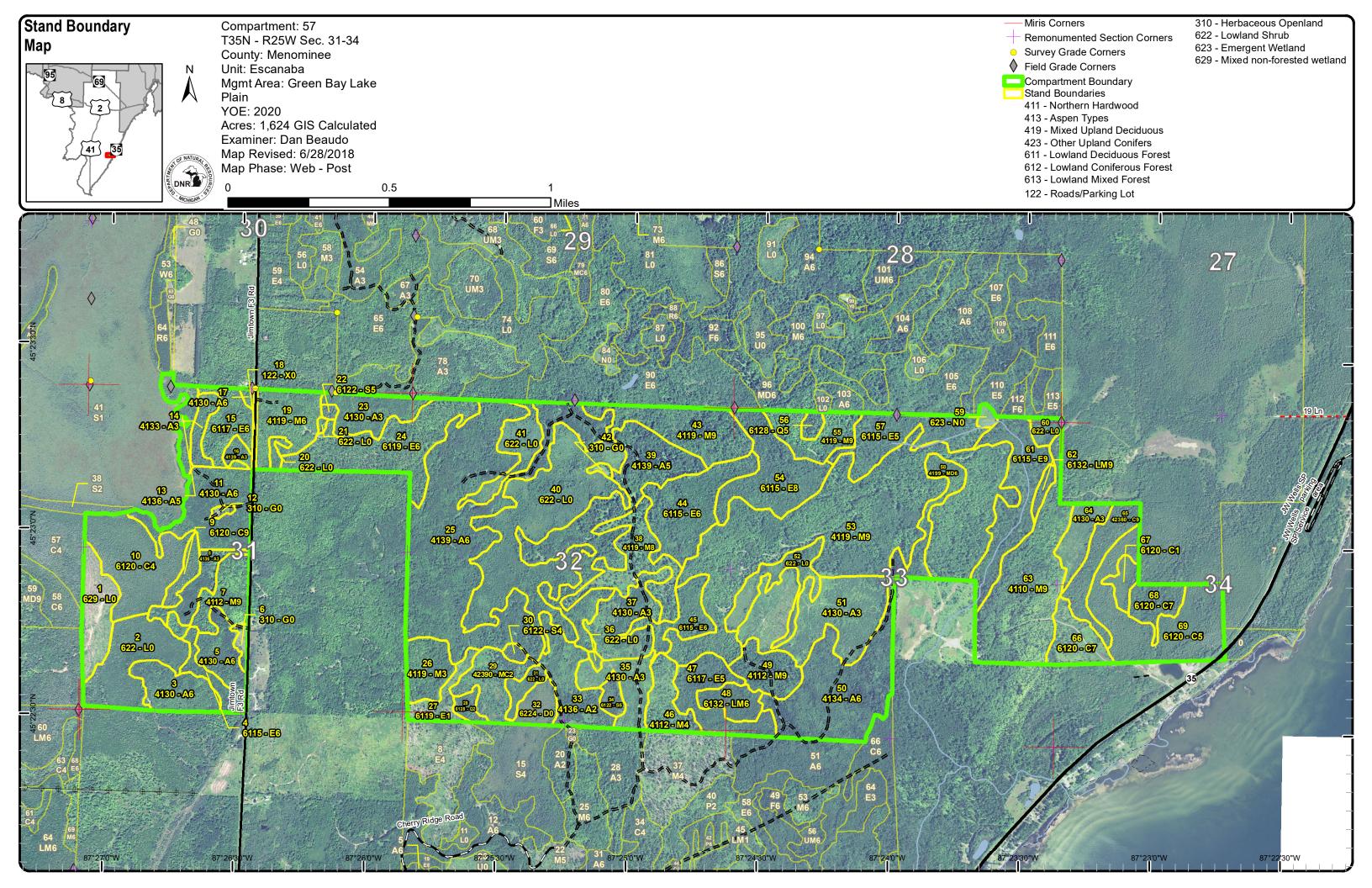
#### The following reports from the Inventory are attached:

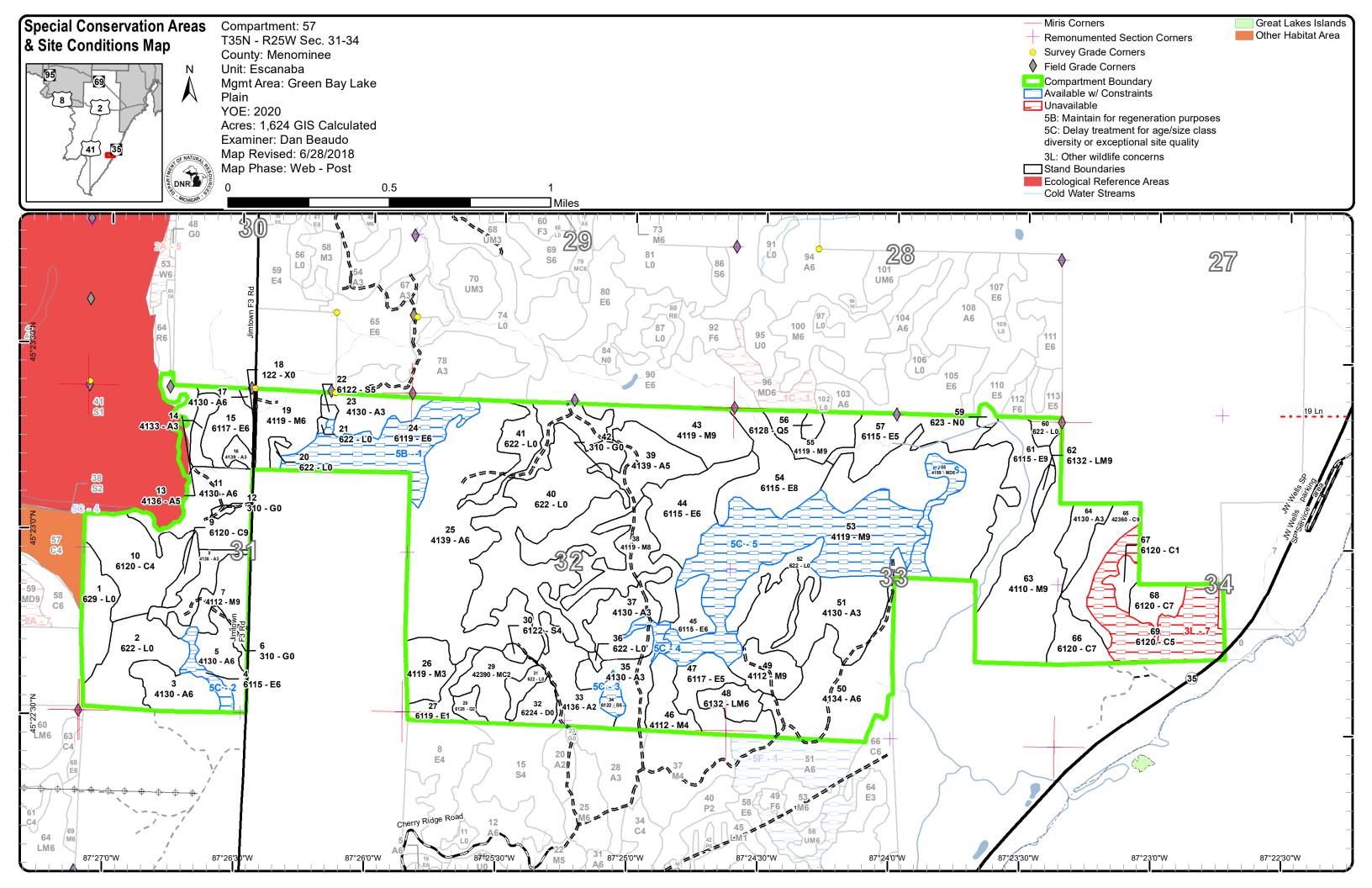
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 57 Year of Entry 2020

Escanaba Mgt. Unit Dan Beaudo : Examiner



### Age Class

|                        |            |      |         |    |                                       | _    |  |            |             |  |     |       |     |    |  |   |      |        |         |
|------------------------|------------|------|---------|----|---------------------------------------|------|--|------------|-------------|--|-----|-------|-----|----|--|---|------|--------|---------|
|                        | <b>₹</b> 0 | KO S | 0° / 0° |    | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 8 /4 | 84. S. | ,<br>3 / % | /<br>S / 15 | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 800 | 8 /6/ | 70, |    | \$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |   | OK X | g* Jug | No. No. |
| Aspen                  | 0          | 89   | 37      | 55 | 234                                   | 110  | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 524     |
| Cedar                  | 0          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 6           | 0                                      | 77  | 0     | 0   | 19 | 0  | 0 | 52   | 0      | 153     |
| Herbaceous Openland    | 6          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 6       |
| Lowland Conifers       | 0          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 3           | 0                                      | 0   | 0     | 0   | 4  | 0  | 0 | 0    | 0      | 7       |
| Lowland Deciduous      | 0          | 10   | 0       | 0  | 0                                     | 24   | 17   | 0          | 66          | 0                                      | 54  | 74    | 15  | 0  | 0  | 0 | 0    | 0      | 259     |
| Lowland Mixed Forest   | 0          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 14                                       | 0 | 0    | 0      | 14      |
| Lowland Shrub          | 190        | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 190     |
| Lowland Spruce/Fir     | 0          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 1   | 0     | 0   | 7  | 0  | 0 | 0    | 0      | 8       |
| Marsh                  | 2          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 2       |
| Mixed Upland Deciduous | 0          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 12          | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 12      |
| Northern Hardwood      | 0          | 0    | 0       | 0  | 0                                     | 31   | 0  | 0          | 0           | 245                                    | 62  | 16    | 0   | 0  | 0  | 0 | 0    | 64     | 418     |
| Treed Bog              | 9          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 9       |
| Upland Conifers        | 0          | 0    | 0       | 19 | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 19      |
| Urban                  | 2          | 0    | 0       | 0  | 0                                     | 0    | 0  | 0          | 0           | 0                                      | 0   | 0     | 0   | 0  | 0  | 0 | 0    | 0      | 2       |
| Total                  | 209        | 99   | 37      | 74 | 234                                   | 165  | 17   | 0          | 87          | 245                                    | 194 | 90    | 15  | 30 | 14                                       | 0 | 52   | 64     | 1623    |



# Report 2 - Treatment Summary

# Escanaba Mgt. Unit Year of Entry: 2020

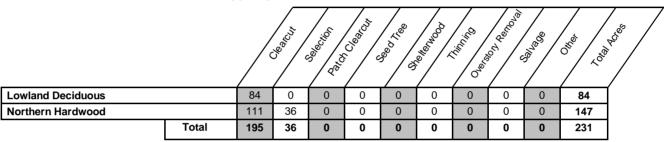
#### **Acres of Harvest**

Compartment 57
Total Compartment Acres: 1,624

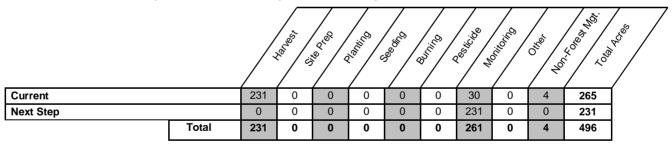
**POLEYN** 

Commercial Harvest - 231 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

# **Cover Type by Harvest Method**



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



Escanaba Mgt. Unit Report 3 -- Treatments Compartment: 57 s Year of Entry: 2020 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Approval n Age Method Objective Name Age Range Structure **Status** d CoverType Density **Type** 1 33057001-20.3 629 - Mixed non-Nonstocked 0 Monitoring Natural Regen 612 - Lowland Even-Aged Proposal Unspec Monitor forested wetland ified (Re-Inventory) Coniferous Forest **Habitat Cut: No Site Condition:** Prescription Regeneration survey next year of entry according to work instructions. Specs: Next Step Treatments: Acceptable Tamarack, black spruce, balsam, aspen, white pine, cedar, red maple Other Comment: Proposed Start Date: 10/01/2028 33057006-NF 2.9 310 - Herbaceous Nonstocked NonForestMgt Herbaceous/Crop/ 310 -Proposal Unspec Openland ified **Grass Planting** Herbaceous Openland **Habitat Cut: No Site Condition:** Prescription Prescribed fire, farming (dozing, disking, raking, herbiciding, seeding (native or naturalized species only)), fertilizing and liming, brushhod/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: <u>Acceptable</u> Regen: Other Comment: 10/01/2019 **Proposed Start Date:** 33057007-Cut 194 4112 - Maple, 81 111-Single Tree 411 - Northern Sawtimber Harvest Uneven-Proposal Beech, Cherry Well 140 Selection Hardwood Aged Association **Habitat Cut: No Site Condition:** Prescription Selection thin the stand to an average of 70 basal area according to the compleat marker. Target beech trees to utilize before beech bark disease infects the stand, beech scale is present. There is a high concentration of beech so won't be removing all beech to maintain the 70 basal area but try Specs: to leave mast producing beech with bear claw marks as much as possible. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: <u>Acceptable</u> Sugar maple, birch, basswood, beech, ash Regen: Other Hawk nest in middle of stand does not look like it has been occupied for a while. No activity this year in the nest as walked around the beech trees Comment: containing beech scale. **Proposed Start Date:** 10/01/2019 33057012-NF 1.3 310 - Herbaceous Nonstocked NonForestMgt Herbaceous/Crop/ 310 -Unspec Proposal Openland **Grass Planting** ified Herbaceous Openland **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:** 

10/01/2019

Next Step

Acceptable Red maple, balsam, ash, birch, spruce, balm, aspen

Regen:

Other

Comment:

**Proposed Start Date:** 10/01/2019

33057045-Cut 10.8 6115 - Lowland Ash Poletimber Clearcut with 6113 - Lowland Unspec Harvest Even-Aged Proposal

> ified Retention

Maple

**Habitat Cut: No** Site Condition:

Prescription Cut all trees greater than 3" in the east block except cedar/hemlock and leave the west finger as retention.

Well

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red maple, balsam, spruce, ash, cedar

Regen:

Other Treat due to forest health concerns with EAB but leave retention patch for large tree diversity. No hawk nest seen during inventory as noted in MNFI,

but if active hawk nest found buffer accordingly. Comment:

**Proposed Start Date:** 10/01/2019 s

Compartment: 57

Year of Entry: 2020

| a<br>n<br>d | Treatment<br>Name | Acres | Stand<br>CoverType                            | Size<br>Density   | Stand<br>Age | BA<br>Range | Treatment<br>Type | Treatment<br>Method      | Cover Type<br>Objective    | Age<br>Structure | Approval<br>Status |
|-------------|-------------------|-------|---|-------------------|--------------|-------------|-------------------|--------------------------|----------------------------|------------------|--------------------|
| 49          | 33057049-Cut      | 16.3  | 4112 - Maple,<br>Beech, Cherry<br>Association | Sawtimber<br>Well | 105          | 51-80       | Harvest           | Single Tree<br>Selection | 411 - Northern<br>Hardwood | Uneven-<br>Aged  | Proposal           |

**Habitat Cut: No Site Condition:** 

<u>Prescription</u> Remove about 95% of the beech due to scale presence indicating mortality within 5 years due to beech bark disease. Retain about 5% beech that Specs:

have bear claw mark or contain cavities already.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Sugar maple, basswood, ash, birch

Regen:

Other Comment:

Proposed Start Date: 10/01/2019

33057053-Cut 78.4 4119 - Mixed Sawtimber 87 111-Harvest Clearcut with 4113 - R.Maple, Even-Aged Proposal

Northern Hardwoods Well 140 Retention Conifer

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

**Prescription** Treat the east block and north section above the aspen regeneration gaps west to the road intersection. Cut all trees greater than 3" except cedar, hemlock, and some large scattered trees. The south west half of the stand will be retention. This will break up the large stand to offset the age class Specs:

harvesting in 10 or 20 years.

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Red maple, birch, balsam, spruce, aspen, balm, cedar, hemlock

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2019

33057054-Cut 36.5 6115 - Lowland Ash Sawtimber 108 51-80 Harvest Clearcut with 6117 - Lowland Two-Aged Proposal Medium Retention Deciduous,

Mixed Coniferous

**Habitat Cut: No Site Condition:** 

Prescription Cut all trees greater than 3" dbh except leave cedar, hemlock and buffer to creek. The buffer will provide large mature trees for retention. The stand meets silvicultural criteria, mortality in the ash and maple, and forest health recommendations to treat ash before onset of EAB. Specs:

Next Step

Monitoring, Natural Regen (Re-Inventory) **Treatments:** 

Acceptable Red maple, balsam, birch, spruce, cedar, ash

Regen:

Other Comment:

**Proposed Start Date:** 10/01/2019

33057061-Cut 36.7 6115 - Lowland Ash Sawtimber 102 81-110 Clearcut with 6119 - Mixed Two-Aged Harvest Proposal Retention Lowland

> Deciduous Forest

**Habitat Cut: No Site Condition:** 

<u>Prescription</u> Cut all trees greater than 3" except leave cedar, hemlock and buffer to creek. Buffer to creek will provide mature retention. Stand meets silvicultural criteria, has mortality present and forest health concern with Emerald Ash Borer.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Red maple, ash, cedar, hemlock, balm

Regen: Other

Comment:

**Proposed Start Date:** 

10/01/2019

**Total Treatment** 266.2 **Acreage Proposed:** 

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Escanaba Mgt. Unit

Dan Beaudo : Examiner

**Total Forested Acres** 

Relative Percent

Compartment: 57
Year of Entry: 2020

#### **Availability for Management** Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available Acres 5B 5C 3L Aspen Cedar Herbaceous Openland **Lowland Conifers Lowland Deciduous Lowland Mixed Forest** Lowland Shrub Lowland Spruce/Fir Marsh Mixed Upland Deciduous Northern Hardwood **Treed Bog Upland Conifers** Urban

| Site<br>No. | Dominant Site<br>Cond Availability        | Dominant Site Condition   | Acres          | Other Site Condition                                      | Other Site Condition        | Other Site Condition                    | Other Site Condition            |
|-------------|---|---|----------------|---|-----------------------------|---|---------------------------------|
| 1           | Available                                 | 5B: Maintain for regeneration purposes  | 47             | 5T: Contigency<br>Treatment for Forest<br>Health Concerns | Unspecified                 | Unspecified                             | Unspecified                     |
|             |   |   |                |   |                             |   |                                 |
| 5           | Comments:<br>Stand was recently<br>Sorer. | thinned so delay treatment for  | r oversto      | ry removal possibly next y                                | ear of entry. Stand contai  | ns ash that will be suscept             | ible to Emerald Ash             |
| 5           | Stand was recently                        | thinned so delay treatment for 5C: Delay treatment for age/size class diversity or exceptional site quality | r oversto<br>7 | ry removal possibly next y<br>Unspecified                 | ear of entry. Stand contain | ns ash that will be suscept Unspecified | ible to Emerald Ash Unspecified |

1,624

1,390

86%

11%

3%

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

# Report 4 – Site Conditions

Compartment: 57 Escanaba Mgt. Unit Year of Entry: 2020 Dan Beaudo: Examiner

| 3 | Available                       | 5C: Delay treatment for<br>age/size class diversity or<br>exceptional site quality | 5         | Unspecified   | Unspecified                | Unspecified                    | Unspecified  |
|---|---------------------------------|--|-----------|---|----------------------------|--------------------------------|--------------|
|   | Comments:<br>Small black spruce | e bog with merchantable trees a  | round t   | he transition edge but maint                              | ain for mature black spr   | uce forest type diversity in o | compartment. |
| 4 | Available                       | 5C: Delay treatment for<br>age/size class diversity or<br>exceptional site quality | 5         | Unspecified   | Unspecified                | Unspecified                    | Unspecified  |
|   | Comments:<br>Retention of matur | re ash lowland for diversity.  |           |   |                            |                                |              |
| 5 | Available                       | 5C: Delay treatment for age/size class diversity or exceptional site quality       | 106       | Unspecified   | Unspecified                | Unspecified                    | Unspecified  |
|   | Comments: Delay treatment to    | create age class diversity within  | n large   | stand.  |                            |                                |              |
| 6 | Available                       | 5C: Delay treatment for age/size class diversity or exceptional site quality       | 12        | 5T: Contigency<br>Treatment for Forest<br>Health Concerns | Unspecified                | Unspecified                    | Unspecified  |
|   | Comments:<br>Long narrow small  | er diameter ash stand with ceda  | ır delay  | mature lowland ash stand c                                | liversity. Treat if EAB be | comes present before next      | YOE.         |
| 7 | Unavailable                     | 3L: Other wildlife concerns  | 51        | Unspecified   | Unspecified                | Unspecified                    | Unspecified  |
|   | Comments:<br>Large percentage   | of cedar therefore not allowed to  | o treat p | per Wildlife Division and dee                             | er wintering guidelines.   |                                |              |

06/28/2018 7:13:38 AM - Page 2 of 2 **POLEYN**  Mgt. Unit

Compartment: #Type! Year of Entry:



# Report 5 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

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

| SCA Name | SCA Category | Detail Type | Recommendation | Acres |
|----------|--------------|-------------|----------------|-------|
| Comments |              |             |                |       |

Escanaba Mgt. Unit Compartment: 57
Year of Entry 2020



# 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 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 | Conservati<br>Area | on Type | Description   | ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area   |
|--|--------------------|---------|---|---|
| submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.  | ERA                | 0       | identified as Element Occurrences (EOs) by the context of their natural community classification (Excellent) or B (Good) and a Global (G) or Stathreatened (2), or rare (3) serve as an initial bathe State. The system is comprised of individual managed for restoration and maintenance of n | e Michigan Natural Features Inventory (MNFI) within the n system. Element Occurrences with viability ranks of A ate (S) element (rarity) ranking of endangered (1), ase of ERAs. They may be located upon any ownership in all or associations of natural community types that are atural ecological processes and values. The public may |

| S<br>t      | Escanaba   | a Mgt. Unit          |       | Report 7     | – Forested  | Stands Compartment: 57 Year of Entry: 2020   |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a<br>n<br>d | Level 4<br>Cover Type                            | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
| 3           | 4130 - Aspen                                     | Poletimber<br>Well   | 19.0  | 43           | Unspecified | Mixed regeneration of aspen and maple. Ash along the adjacent lowland areas. Trace of white pine, cedar, balsam, beech and spruce.   |
| 4           | 6115 - Lowland Ash                               | Poletimber<br>Well   | 7.1   | 91           | Unspecified | Narrow ash drainage extending out into lowland brush area.<br>Healthy with variable diameter.  |
| 5           | 4130 - Aspen                                     | Poletimber<br>Well   | 16.5  | 43           | Unspecified | Aspen stand with a mix of species. Ash and balsam along the west half of the stand. Red maple has a variance in size.  |
| 7           | 4112 - Maple, Beech,<br>Cherry Association       | Sawtimber<br>Well    | 19.4  | 81           | 111-140     | Main portion of the stand is mostly beech and sugar maple, south portion is more red maple, most all has a thick understory of beech and ironwood and some soft maple stems. Small amount of beech scale on bark of some trees. Stand was not treated last YOE due to finding an active hawk nest. The hawk nest looks like it has been vacant for a while. Walking around the tree saw no hatchlings and no adults. With the presence of beech scale, thin the stand by removing more of the beech, but leave a mast producing presence. High percentage of beech sapling advanced regeneration already in place. |
| 8           | 4136 - Aspen, Mixed<br>Conifer                   | Sapling Well         | 12.3  | 26           | Immature    | Stand was cut in 1992 under contract 33-032-90-01. North end of stand has more conifer component to it and probably 75% canopy. Trace of beech, tamarack, hemlock and spruce.  |
| 9           | 6120 - Lowland Cedar                             | Sawtimber<br>Well    | 6.5   | 120          | 111-140     | Larger diameter cedar growing on the transition of slight upland but crooked, poor quality. Trace amount of black spruce and birch.  |
| 10          | 6120 - Lowland Cedar                             | Poletimber<br>Poor   | 41.6  | 99           | 1-50        | As move west in stand more open canopy and smaller diameter while increasing in shrubs and water.  |
| 11          | 4130 - Aspen                                     | Poletimber<br>Well   | 35.1  | 39           | Unspecified | Aspen closer to same diameter but maple has a wide range of diameter. Good stocking levels of aspen and maple with some conifer understory. Trace amounts of cherry, beech, cedar, hemlock and pine.   |
| 13          | 4136 - Aspen, Mixed<br>Conifer                   | Poletimber<br>Medium | 9.7   | 45           | Unspecified | Stand boarders large spruce bog called the North Lake Muskeg ERA. Sandy soild produce poor quality aspen with nicer red pine on upland and black spruce on transition. Trace of hemlock, birch and white pine.   |
| 14          | 4133 - Aspen, Mixed<br>Pine                      | Sapling Well         | 7.2   | 19           | Immature    | Stand was cut in 1999 under contract 33-032-96-01. Thick regeneration of maple stump sprouting. Aspen regen mixed throughout. Large red pine mostly in southern part of the stand with some scattered large white pine and hemlock. Trace amounts of hemlock, beech and cherry   |
| 15          | 6117 - Lowland<br>Deciduous, Mixed<br>Coniferous | Poletimber<br>Well   | 17.2  | 55           | 51-80       | Stand was thinned in 1999 under contract 33-032-96-01. Beech saplings on upland sites. Red maple and conifer also sprouting up. Cedar and hemlock are along the drainage/standing water  |

| S<br>t      | Escanaba   | a Mgt. Unit          |       | Report 7     | - Forested  | Stands Compartment: 57 Year of Entry: 2020   |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a<br>n<br>d | Level 4<br>Cover Type                            | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
| 16          | 4139 - Aspen, Mixed<br>Deciduous                 | Sapling Well         | 3.6   | 19           | Immature    | Stand was cut in 1999 under contract 33-032-96-01. Canopy is closer to 80% right now but filling in. Rest is from thick sprouting.  Trace of spruce, tamarack, and cherry.   |
| 17          | 4130 - Aspen                                     | Poletimber<br>Well   | 1.3   | 41           | Unspecified | Small upland stand boarded by lowland to south and west, private to north and road on east side. This stand also served as a buffer during previous harvests for the house close to the property line on the north.  |
| 19          | 4119 - Mixed Northern<br>Hardwoods               | Poletimber<br>Well   | 23.5  | 81           | 81-110      | Red maple has a variable diameter with some just into log size. There is an ash drainage area through the northern part of the stand. A winter access road was installed off Jimtown Road close to the north line and traversed east then south east when the treatment occurred in an adjacent stand to the east. |
| 22          | 6122 - Black Spruce                              | Poletimber<br>Medium | 1.3   | 96           | 51-80       | Small black spruce stand converting to white pine. Black spruce showing mortality. Pine and spruce seedling filling in the open areas.   |
| 23          | 4130 - Aspen                                     | Sapling Well         | 18.7  | 21           | Immature    | Stand was cut in 1997 under contract 33-010-96-01. Good regeneration took place with some small lowland brush patches scattered throughout the stand.  |
| 24          | 6119 - Mixed Lowland<br>Deciduous Forest         | Poletimber<br>Well   | 47.2  | 96           | 51-80       | Stand was thinned in 2015 under contract 33-008-10-01. Stand is a mix of ash drainages and red maple on the slight upland areas. Thinning produced a better quality stand of pole sized with some trees in the log size. Some larger ash in the drainages. Stump sprouting on the maple and ash.                   |
| 25          | 4139 - Aspen, Mixed<br>Deciduous                 | Poletimber<br>Well   | 136.1 | 36           | Unspecified | The upland areas are sandy with narrow ash drainages. There is a high concentration of small diameter maple saplings. Trace of cherry, spruce, and balsam.   |
| 26          | 4119 - Mixed Northern<br>Hardwoods               | Sapling Well         | 15.9  | 47           | 51-80       | Stand had been cut in 1971. Trace of birch, cherry, spruce, sugar maple, cedar and fir.  |
| 27          | 6119 - Mixed Lowland<br>Deciduous Forest         | Sapling Poor         | 9.6   | 2            | Immature    | Stand was recently cut to address ash forest health issue with EAB. This was part of stand 29 prior to harvest. Ash and maple stump sprouting with some patches of red maple advanced regeneration.  |
| 28          | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | Sapling<br>Medium    | 4.2   | 120          | Unspecified | Variable stand with mixed species, wet and brushy. Trace of cherry.  |
| 29          | 42390 - Mixed Non-Pine<br>Upland Conifers        | Sapling<br>Medium    | 19.0  | 26           | Immature    | Stand was cut in 1992 under contract 33-031-90-01. Grassy open stand filling in with a mix of species. Trace of beech and ash.   |
| 30          | 6122 - Black Spruce                              | Poletimber<br>Poor   | 2.1   | 120          | Unspecified | Small spruce bog with variable diameter, smaller as you go farther toward the center of the stand. The perimeter is pole sized, taller and location of other species.  |

| S<br>t      | Escanaba   | a Mgt. Unit          |       | Report 7     | - Forested  | Stands Compartment: 57 Year of Entry: 2020  |
|-------------|--|----------------------|-------|--------------|-------------|---|
| a<br>n<br>d | Level 4<br>Cover Type                            | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
| 33          | 4136 - Aspen, Mixed<br>Conifer                   | Sapling<br>Medium    | 24.3  | 27           | Immature    | Stand was cut in 1991 under contract 33-031-90-01. Mixed stand with upland having aspen, red maple and lowland containing ash, red maple, willow and tag alder.   |
| 34          | 6122 - Black Spruce                              | Poletimber<br>Medium | 4.6   | 120          | Unspecified | This is a spruce bog interior with better quality trees around the perimeter in the transition from lowland to upland. Old stand with variance of height and density in the spruce as move to center of the stand.  |
| 35          | 4130 - Aspen                                     | Sapling Well         | 18.7  | 7            | Immature    | Stand was cut in 2011 under contract 33-009-10-01. Good regeneration with trace of spruce, birch and beech.   |
| 37          | 4130 - Aspen                                     | Sapling Well         | 25.7  | 16           | Immature    | Stand was clear cut in 2002 under contract 33=038-00-01. Good regeneration of aspen, maple and balsam. Some small patches of lowland with water present. Regen about 30' tall.  |
| 38          | 4119 - Mixed Northern<br>Hardwoods               | Sawtimber<br>Medium  | 29.2  | 98           | 51-80       | This stand was cut in 2011 under contract 33-009-10-01. Mixed canopy closure with average somewhere in the 50-75%. Stand was thinned and majority of trees are just in the log category. Some stump sprouting and smaller conifers emerging.  |
| 39          | 4139 - Aspen, Mixed<br>Deciduous                 | Poletimber<br>Medium | 63.4  | 44           | Unspecified | Variable stand diameter especially in red maple from sapling size up to log. There is patches of smaller diameter aspen and red maple. More open parts of the stand has larger diameter. There were some retention patches left during the harvest that are large diameter mature pockets. Stand will be ready to treat next cycle when stand has age of 54. Trace of birch, spruce, ash and cedar. |
| 43          | 4119 - Mixed Northern<br>Hardwoods               | Sawtimber<br>Well    | 32.7  | 90           | 111-140     | Previously typed as E but more upland with red maple and E around the perimeter. Trace of cedar and spruce.   |
| 44          | 6115 - Lowland Ash                               | Poletimber<br>Well   | 36.1  | 75           | Unspecified | This stand was called a lowland brush stand in the past but walking through it proved differently. There is some small areas of lowland brush but overall this is a typical black ash stand. Wet stand with water and not necessarily a drainage area. Trace of balsam and spruce.  |
| 45          | 6115 - Lowland Ash                               | Poletimber<br>Well   | 15.4  | 111          | Unspecified | Stand has high concentration of ash. Variable diameter with some xlog sized trees. So far stand looks healthy but with forest health recommendation with EAB, treat east block and leave west finger for retention. Trace of cedar, spruce, balsam, beech and birch.  |
| 46          | 4112 - Maple, Beech,<br>Cherry Association       | Poletimber<br>Poor   | 15.0  | 45           | 1-50        | Stand was cut in 2011 under contract 33-009-10-01. Shelterwood leaving pole sized maple and ash. Regeneration is moderate with aspen, maple, ash, balsam and spruce. Trace of beech.  |
| 47          | 6117 - Lowland<br>Deciduous, Mixed<br>Coniferous | Poletimber<br>Medium | 23.6  | 43           | 1-50        | Younger ash stand with diverse mix of conifers. Trace of birch, cedar, ash and aspen.   |
| 48          | 6132 - Mixed Lowland<br>Forest with Cedar        | Poletimber<br>Well   | 10.6  | 132          | 171-200     | North part of stand is more like a good quality cedar stand on slight upland. South part is wetter with less cedar and is more like an ash drainage. Trace of hemlock and yellow birch.   |

| S                | Escanaba   | Mgt. Unit            |       | Report 7     | - Forested  | Stands Compartment: 57 Year of Entry: 2020  |
|------------------|--|----------------------|-------|--------------|-------------|---|
| t<br>a<br>n<br>d | Level 4<br>Cover Type                            | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
| 49               | 4112 - Maple, Beech,<br>Cherry Association       | Sawtimber<br>Well    | 16.3  | 105          | 51-80       | Stand was thinned in 2011 under contract 33-009-10-01. Most of the beech has beech scale on them covering about 20% of barks surface. Leaves are popping out so minimal mortality currently present. With treatment of another stand nearby, recommendation to remove 95% of beech while still alive.               |
| 50               | 4134 - Aspen, Spruce/Fir                         | Poletimber<br>Well   | 62.6  | 34           | Immature    | Southern part of stand was cut in 1982 and the rest was cut in 1984 under contract 33-062-83-02. Mixed aspen/fir stand with some balm and ash. Larger diameter of balsam as enter the stand from south. No presence of spruce budworm noticed.  |
| 51               | 4130 - Aspen                                     | Sapling Well         | 56.6  | 7            | Immature    | Stand was cut in 2011 under contract 33-009-10-01. Good regeneration in the upland with a more conifer component in the low areas. Small patch of cedar and large red maple might have been a retention area. Some large maple scattered through out the stand. Trace of balsam, spruce, white pine, cedar and ash. |
| 53               | 4119 - Mixed Northern<br>Hardwoods               | Sawtimber<br>Well    | 184.4 | 87           | 111-140     | Stand was thinned under contract 037-98-01, fall of 00-01'. All aspen, balm, birch and balsam fir were cut along with spruce over 10" dbh, remaining hardwoods were thinned.  |
| 54               | 6115 - Lowland Ash                               | Sawtimber<br>Medium  | 36.5  | 108          | 51-80       | Ash stand with sugar creek flowing through. Mortality in ash and maple creating a more open canopy.   |
| 55               | 4119 - Mixed Northern<br>Hardwoods               | Sawtimber<br>Well    | 18.1  | 87           | 81-110      | Stand was cut under contract 026-02-02 in the winter-spring of 2003. All birch, aspen and balsam were cut leaving all maple and ash.  |
| 56               | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | Poletimber<br>Medium | 3.1   | 77           | Unspecified | Stand was shelterwood in 2003. Good regeneration of black spruce, tamarack and white pine. Check next entry if overstory removal would be applicable.   |
| 57               | 6115 - Lowland Ash                               | Poletimber<br>Medium | 30.0  | 77           | 51-80       | Mostly ash in this stand and more open than the stand to the west. Sugar creek flows through the stand.   |
| 58               | 4199 - Other Mixed<br>Upland Deciduous           | Poletimber<br>Well   | 12.3  | 79           | 51-80       | Long narrow ash stand containing some cedar mostly in the north end.  |
| 61               | 6115 - Lowland Ash                               | Sawtimber<br>Well    | 36.7  | 102          | 81-110      | Large diameter ash stand with mortality. Sugar creek flows through about the center of stand.   |
| 62               | 6132 - Mixed Lowland<br>Forest with Cedar        | Sawtimber<br>Well    | 3.3   | 132          | 111-140     | Narrow strip of large trees with higher concentration of cedar.  Mortality taking place with short lived species resulting in trees criss crossed on the ground with quite a bit of paper birch being on the ground.  |
| 63               | 4110 - Sugar Maple<br>Association                | Sawtimber<br>Well    | 63.7  | 93           | 81-110      | Stand was thinned in 1998 under contract 33-030-96-01. Nice northern hardwood stand containing mostly sugar maple.  Subcanopy contains ironwood, balsam and some beech. Trace amounts of aspen, cedar and hemlock. Land use issues Law Division is handling.  |

| S<br>t      | Escanaba              | a Mgt. Unit          |       | Report 7     | - Forested  | Stands               | Compartment: 57<br>Year of Entry: 2020  | OF NATURAL PLANS |
|-------------|-----------------------|----------------------|-------|--------------|-------------|----------------------|---|------------------|
| a<br>n<br>d | Level 4<br>Cover Type | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range |                      | General<br>Comments:  | MICHIGAN . 6     |
| 64          | 4130 - Aspen          | Sapling Well         | 13.3  | 5            | Immature    | regeneration that is | under contract 33-007-10-01<br>about 10' tall. There is a high<br>seedlings in the subcanopy. |                  |
| 65          | 42360 - Upland Cedar  | Sawtimber<br>Well    | 19.4  | 96           | 141-170     |                      | r on upland transition. Most of<br>species have dyed out.                                     | short lived      |
| 66          | 6120 - Lowland Cedar  | Sawtimber<br>Poor    | 15.9  | 96           | 1-50        | and some ash and r   | der contract 33-007-10-01 reinaple. Regeneration is starting of birch, hemlock and white      | g to fill in the |
| 67          | 6120 - Lowland Cedar  | Sapling Poor         | 6.4   | 76           | Unspecified | Sparse ced           | ar, water, tag alder and tall gr  | ass.             |
| 68          | 6120 - Lowland Cedar  | Sawtimber<br>Poor    | 11.8  | 121          | 1-50        |                      | ed species are dying out now liameter cedar stand on slight                                   | •                |
| 69          | 6120 - Lowland Cedar  | Poletimber<br>Medium | 52.0  | 158          | Unspecified | Poor quality s       | tand with variable size and de  | ensity.          |

Compartment: 57 Year of Entry: 2020



| Stand | Cover Type                       | Acres | Managed<br>Site | General Comments:   |
|-------|----------------------------------|-------|-----------------|---|
| 1     | 629 - Mixed non-forested wetland | 20.3  |                 | Stand was cut in 2016 under contract 33-008-10-01. Aspen, red maple and balsam regeneration on a narrow ridge that traverses the stand onto private property. Some small conifer seedlings just starting to pop up. |
| 2     | 622 - Lowland Shrub              | 34.1  | No              | This stand was split out from parent stand to north because this area has less than 25% canopy and is more representative of lowland brush. There is few scattered cedar, ash and tamarack pole sized trees.        |
| 6     | 310 - Herbaceous Openland        | 2.9   | No              | Grass opening that is filling in with red pine, white pine, scotch pine, jack pine, aspen, birch, beech and maple. Next YOE will be a canopy greater than 25% if no removal treatment is completed.                 |
| 12    | 310 - Herbaceous Openland        | 1.3   | No              | Grass opening with bracken fern. Some red, white pine, spruce and aspen growing in the opening.   |
| 18    | 122 - Road/Parking Lot           | 1.7   | No              | Jimtown Road  |
| 20    | 622 - Lowland Shrub              | 2.4   | No              | Lowland brush stand holding water with some ash and red maple within.   |
| 21    | 622 - Lowland Shrub              | 0.8   | No              | Lowland brush with few ash trees.   |
| 31    | 622 - Lowland Shrub              | 5.7   | No              | Lowland brush area between bog and upland.  |
| 32    | 6224 - Treed Bog                 | 9.0   | No              | Spruce bog with canopy less than or close to 25%. Small diameter and variable height.   |
| 36    | 622 - Lowland Shrub              | 1.1   | No              | Lowland brush surrounded by aspen regeneration.   |
| 40    | 622 - Lowland Shrub              | 88.8  | No              | Lowland brush that fingers around between sandy ridges with some trees out in the stand.  |
| 41    | 622 - Lowland Shrub              | 14.8  | No              | Wet lowland brush area between sandy slight upland areas. Some trees dispersed out in stand.  |
| 42    | 310 - Herbaceous Openland        | 1.3   | No              | Two hills covered with grass and some clumps of sand cherry.  |
| 52    | 622 - Lowland Shrub              | 17.4  | No              | Lowland brush with some scattered trees.  |
| 59    | 623 - Emergent Wetland           | 2.2   | No              | Small open lowland with intermittent water. Sugar creek flows through but not a defined channel.  |
| 60    | 622 - Lowland Shrub              | 4.5   | No              | Area of lowland brush with tree species starting to fill in.  |