



# Compartment Review Presentation

Escanaba Forest Management Unit

Compartment 11

Entry Year 2015

Acreage: 1,444

County Menominee

Management Area: Menominee End Moraine

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**Revision Date:** 06/11/2013

**Stand Examiner:** Dustin Salter

**Legal Description:**

T37N R25W Sections 34, 35, and 36

**Identified Planning Goals:**

This compartment contains a large percentage of aspen and upland hardwoods. The aspen is in a wide range of age classes with six of them being over 50 years in age. These six stands are prescribed for a clearcut, managing for aspen. The upland mixed deciduous stands vary from a mix of red oak with sugar maple to a mix of poor quality red maple, sugar maple, and red oak. There are seven upland mixed deciduous stands prescribed for either a clearcut or a seed tree harvest. These stands will be regenerated primarily by stump sprouted red oak and red maple. There will also be a portion of aspen regeneration along with some white pine. There are three mixed coniferous lowland stands prescribed for seed tree harvests. All three of these stands are over 95 years of age. The eastern larch beetle and the spruce budworm are present in the compartment and the surrounding area, so if these stands are not harvested soon we will lose the potential to regenerate these stands. There is one white pine stand that is having a shelterwood cut, to open the stand up to allow adequate sunlight in to regenerate white pine. This stand after harvest will be mechanically scarified to expose bare mineral soil. There is a high quality hardwood stand that is being selectively harvested. This stand has a high percentage of white ash in it, so the primary purpose of this selection cut is to remove a large percentage of the ash before the emerald ash borer enters the stand.

**Soil and topography:**

Topography is level to gently rolling. Soils include well drained loamy fine sand and very poorly drained black muck over gravel and bedrock. Prominent soil series are Pemene-Rubicon, Lupton-Cathro, and Onaway.

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

This compartment is located in the middle of a block of state forest land that is about 20 miles long and 8 miles wide in the southwestern part of Menominee County. The compartment is all blocked together with state land around all sides, with the exception of a few private inholdings on the west and east edge. The primary use of this land is recreation.

**Unique Natural Features:**

No Unique Natural Features known.

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

No Archeological, Historical, or Cultural Features known.

**Special Management Designations or Considerations:**

None known

**Watershed and Fisheries Considerations:**

**Wildlife Habitat Considerations:**

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

Surface sediments consist of a medium-textured glacial till and an end moraine of medium-textured till. The glacial drift thickness varies between 10 and 50 feet. Beneath the glacial drift are the Cambrian Trempealeau and Munising Formations. The Trempealeau could be used for stone and both formations overlap Precambrian aged rocks, which may have metallic and nonmetallic mineral potential. State land was previously leased in the area for metallic exploration. A gravel pit is located in Section 25 and there appears to be gravel potential. No economic oil and gas production has been found in the UP.

**Vehicle Access:**

The main access into sections 34 and 35 is off of the Miscauna Creek road and "2 track" roads branching off of it. County Road 577, Carlson Lane, and Jones Trail provide the primary access into section 36.

**Survey Needs:**

Three registered will potentially need to be set, to prepare some timber sales.

**Recreational Facilities and Opportunities:**

There are no developed recreational facilities within this compartment. The primary uses of this compartment are hunting and four-wheeling.

**Fire Protection:**

The majority of this compartment consists of upland deciduous timber types, with only a few pine stands scattered throughout. Most of the pine stands are mature, with very little fuel, so they pose a very low fire danger. There are some small areas within the compartment where the spruce budworm has killed the majority of the balsam fir and spruce leaving some areas of heavy fuels. There are adequate water resources in and around the compartment.

**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:**

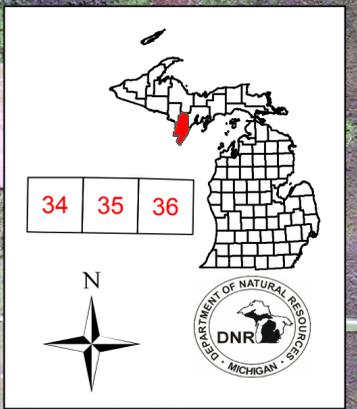
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**



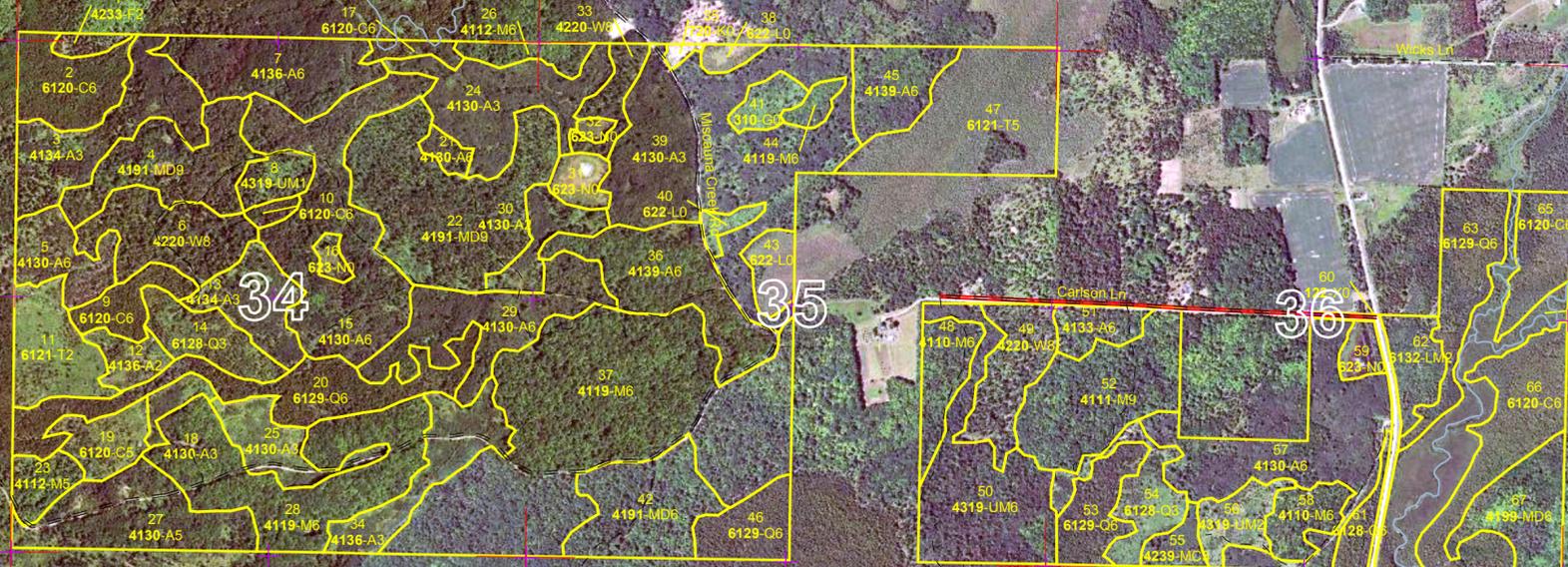
# Stand Boundary Map

Compartment: 011  
 T37N R28W  
 34 35 36  
 County: Menominee  
 Unit: Escanaba  
 YOE: 2015  
 Acres: 1,444 GIS Calculated  
 Examiner: Dustin Salter  
 Map Revised: 07/22/2013  
 Map Phase: Pre-Review

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



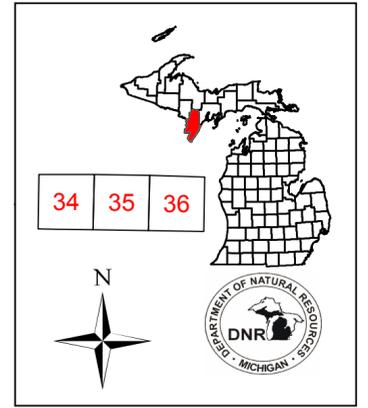
- Legend**
- Miris Corners
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Closed Roads
  - Stream
  - Intermittent Stream
  - Stand Boundaries
- Forest Stands**
- Level 3
- 411 - Northern Hardwood
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 422 - Natural Pines
  - 423 - Other Upland Conifers
  - 431 - Upland Mixed Forest
  - 612 - Lowland Coniferous Forest
  - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - 720 - Exposed Rock



# Special Conservation Areas & Site Conditions Map

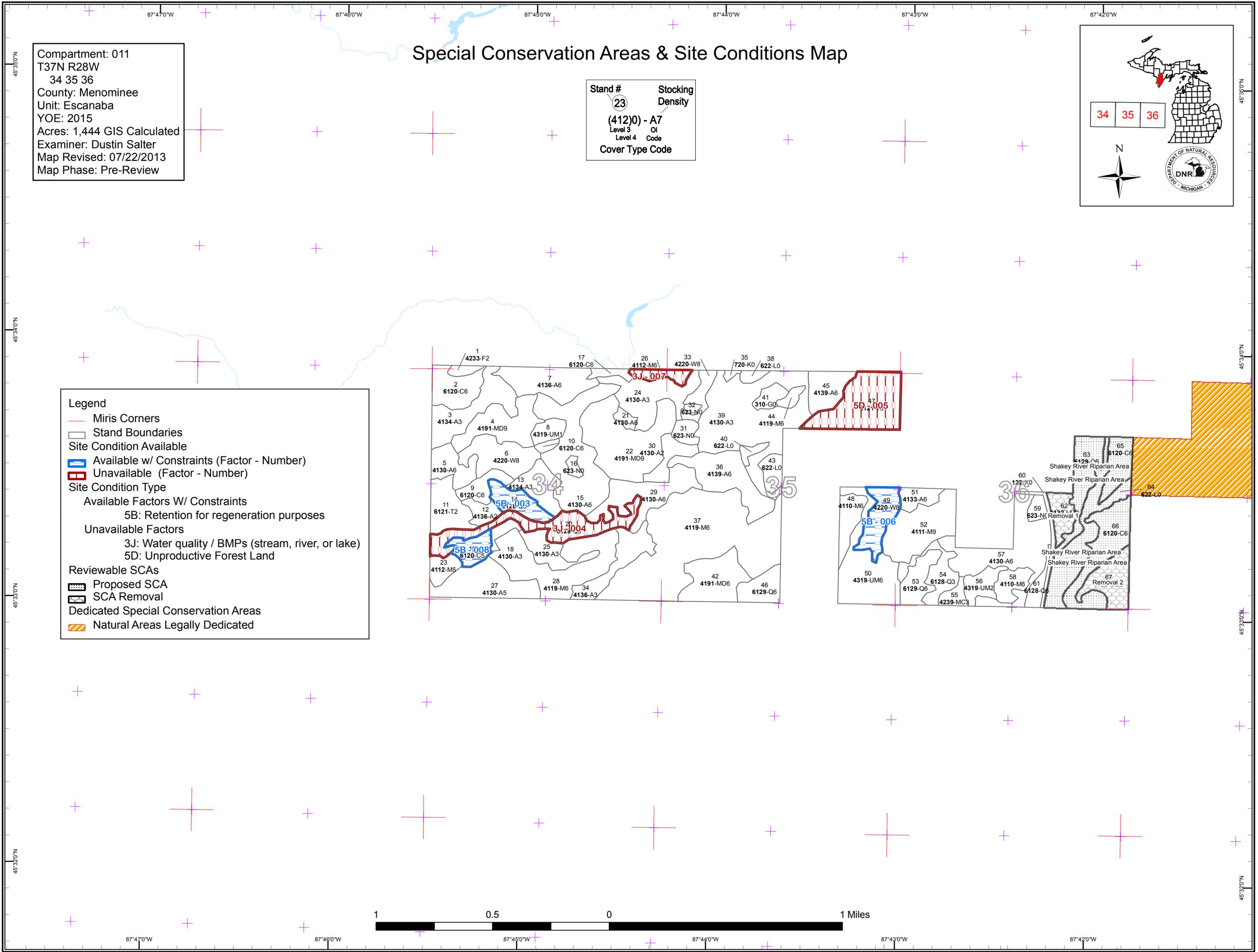
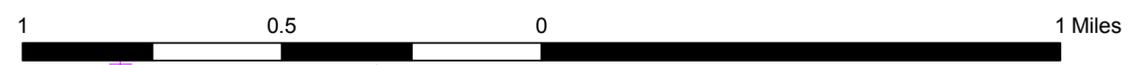
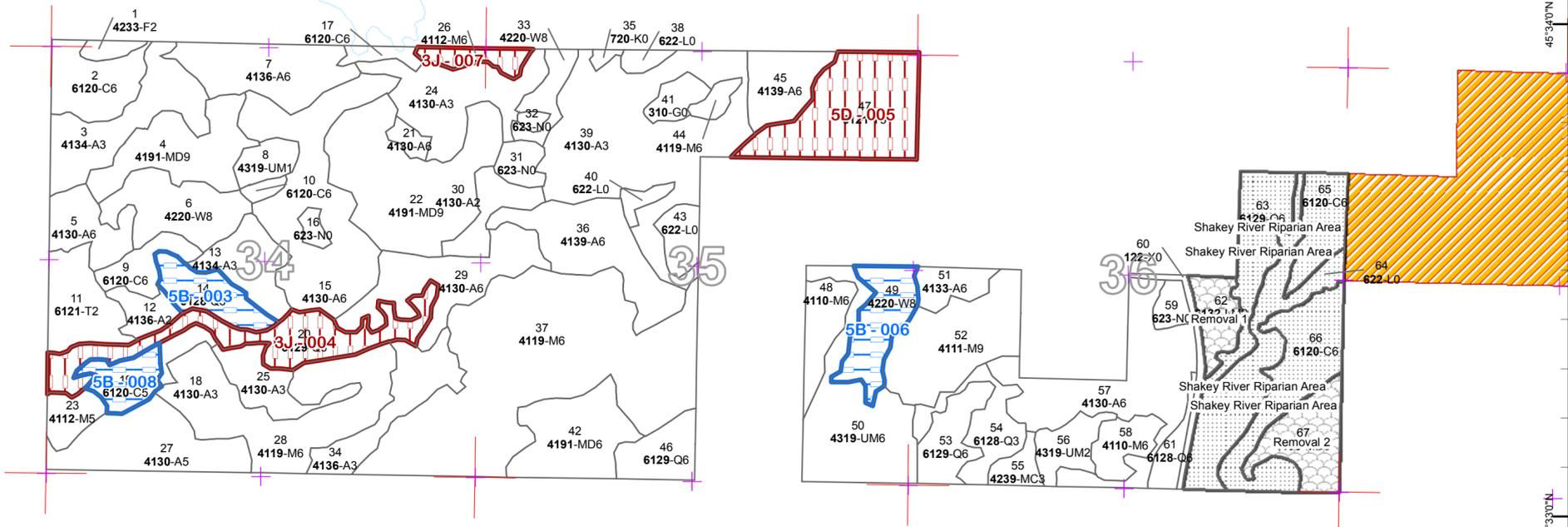
Compartment: 011  
 T37N R28W  
 34 35 36  
 County: Menominee  
 Unit: Escanaba  
 YOE: 2015  
 Acres: 1,444 GIS Calculated  
 Examiner: Dustin Salter  
 Map Revised: 07/22/2013  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Stand Boundaries
- Site Condition Available
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Site Condition Type
- Available Factors W/ Constraints
- 5B: Retention for regeneration purposes
- Unavailable Factors
- 3J: Water quality / BMPs (stream, river, or lake)
- 5D: Unproductive Forest Land
- Reviewable SCAs
- Proposed SCA
- SCA Removal
- Dedicated Special Conservation Areas
- Natural Areas Legally Dedicated



Report 1 – Total Acres by Cover Type and Age Class



|                        | Age Class  |            |            |           |           |            |           |           |            |           |            |            |          | Total    |             |
|------------------------|------------|------------|------------|-----------|-----------|------------|-----------|-----------|------------|-----------|------------|------------|----------|----------|-------------|
|                        | 0-9        | 10-19      | 20-29      | 30-39     | 40-49     | 50-59      | 60-69     | 70-79     | 80-89      | 90-99     | 100-109    | 110-119    | 120 +    |          | Uneven Age  |
| Aspen                  | 37         | 74         | 200        | 0         | 46        | 149        | 9         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 516         |
| Cedar                  | 0          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 12         | 4         | 11         | 74         | 0        | 0        | 101         |
| Exposed Rock           | 1          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 1           |
| Herbaceous Openland    | 7          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 7           |
| Lowland Conifers       | 17         | 0          | 0          | 0         | 0         | 0          | 0         | 24        | 0          | 29        | 53         | 6          | 0        | 0        | 129         |
| Lowland Mixed Forest   | 0          | 12         | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 12          |
| Lowland Shrub          | 53         | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 53          |
| Marsh                  | 16         | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 16          |
| Mixed Upland Deciduous | 0          | 0          | 0          | 0         | 0         | 0          | 0         | 30        | 81         | 0         | 30         | 0          | 0        | 0        | 141         |
| Northern Hardwood      | 0          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 232        | 0         | 38         | 0          | 0        | 0        | 270         |
| Tamarack               | 0          | 21         | 0          | 0         | 0         | 0          | 46        | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 67          |
| Upland Conifers        | 0          | 0          | 6          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 6           |
| Upland Mixed Forest    | 11         | 0          | 8          | 43        | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 62          |
| Upland Spruce/Fir      | 0          | 0          | 3          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 3           |
| Urban                  | 5          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 0          | 0          | 0        | 0        | 5           |
| White Pine             | 0          | 0          | 0          | 0         | 0         | 0          | 0         | 0         | 0          | 0         | 35         | 20         | 0        | 0        | 55          |
| <b>Total</b>           | <b>148</b> | <b>107</b> | <b>217</b> | <b>43</b> | <b>46</b> | <b>149</b> | <b>55</b> | <b>54</b> | <b>325</b> | <b>33</b> | <b>167</b> | <b>100</b> | <b>0</b> | <b>0</b> | <b>1444</b> |



## Report 2 – Proposed Treatment Summaries

**Escanaba Mgt. Unit**  
**Year of Entry 2015**

**Compartment 011**  
**Total Compartment Acres: 1,444**

### Acres by Treatment Type

|                          |                         |           |
|--------------------------|-------------------------|-----------|
| Commercial Harvest - 421 | Tree Planting - 0       | Other - 0 |
| Habitat Cut - 0          | Opening Maintenance - 7 |           |

### Cover Type by Harvest Method

|                                  | Clearcut   | Selection | Seed Tree | Shelterwood | Thinning | Other - Specify | Total Acres |
|----------------------------------|------------|-----------|-----------|-------------|----------|-----------------|-------------|
| <b>Aspen Types</b>               | 158        | 0         | 0         | 0           | 0        | 0               | 158         |
| <b>Lowland Coniferous Forest</b> | 6          | 0         | 29        | 0           | 0        | 0               | 35          |
| <b>Mixed Upland Deciduous</b>    | 111        | 0         | 30        | 0           | 0        | 0               | 141         |
| <b>Natural Pines</b>             | 0          | 0         | 0         | 9           | 0        | 0               | 9           |
| <b>Northern Hardwood</b>         | 67         | 11        | 0         | 0           | 0        | 0               | 78          |
| <b>Total</b>                     | <b>342</b> | <b>11</b> | <b>59</b> | <b>9</b>    | <b>0</b> | <b>0</b>        | <b>421</b>  |



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| Treatment Name | Acres | CoverType                                  | Size Density     | Stand Age | BA Range | Treatment Type | Treatment Method        | Cover Type Objective                       | Approval Status       |
|----------------|-------|--|------------------|-----------|----------|----------------|-------------------------|--|-----------------------|
| 4 33011004-Cut | 30.0  | 4191 - Mixed Upland Deciduous with Conifer | High Density Log | 102       | 111-140  | Harvest        | Seed Tree with Reserves | 4191 - Mixed Upland Deciduous with Conifer | Cmpt. Review Proposal |

Prescription Seed Tree with Reserves; cut all species except leave all oak and enough pine to have about 10 basal area of retention. This stand will be managed for a mix of the current overstory species.

Other Comments: White pine stand with a mix of other species. The spruce and balsam fir are dying out of the stand due to the spruce budworm. There are some small marshes within this stand.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |      |              |                   |    |  |         |                        |              |                       |
|-----------------|------|--------------|-------------------|----|--|---------|------------------------|--------------|-----------------------|
| 15 33011015-Cut | 59.9 | 4130 - Aspen | High Density Pole | 51 |  | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
|-----------------|------|--------------|-------------------|----|--|---------|------------------------|--------------|-----------------------|

Prescription Clearcut with reserves - cut all trees greater than 3 inches in diameter. All oak should be retained, if present; along with enough red and white pine and enough retention pockets to have 3% retention. Aspen is the primary management objective, but a mix of the other overstory species is acceptable.

Other Comments: Good quality aspen stand.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |     |              |                   |    |  |         |                        |                               |                       |
|-----------------|-----|--------------|-------------------|----|--|---------|------------------------|-------------------------------|-----------------------|
| 21 33011021-Cut | 3.5 | 4130 - Aspen | High Density Pole | 52 |  | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|-----------------|-----|--------------|-------------------|----|--|---------|------------------------|-------------------------------|-----------------------|

Prescription Clearcut with reserves - cut all species except retain 3% retention. Mark enough red oak and white pine to meet the retention guidelines. Parts of the stand also has quite a bit of advanced white pine regeneration, which will be released following the harvest. This stand will be managed for a mix of aspen, red maple, and white pine.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2014

|                 |      |  |                  |    |       |         |                        |  |                       |
|-----------------|------|--|------------------|----|-------|---------|------------------------|--|-----------------------|
| 22 33011022-Cut | 58.9 | 4191 - Mixed Upland Deciduous with Conifer | High Density Log | 89 | 51-80 | Harvest | Clearcut with Reserves | 4191 - Mixed Upland Deciduous with Conifer | Cmpt. Review Proposal |
|-----------------|------|--|------------------|----|-------|---------|------------------------|--|-----------------------|

Prescription Clearcut with reserves - cut all species greater than 3 inches; except leave enough pine and oak to have 10% retention. The residual stems will be scattered throughout the stand. Acceptable regeneration is red oak/pin oak, pine, maple and aspen.

Other Comments: Stand was shelterwood cut in 2007. The stand was cut to regenerate pine and oak. This stand is currently a two-aged stand with an overstory of pine, red oak, and maple over red maple and aspen regeneration, with a minor amount of white pine. The current overstory is too dense to allow oak harvested to stump sprout and if we don't harvest soon the aspen and red maple regeneration will be too tall and dense to allow the oak stumps to sprout in the future.

Next Steps:

Proposed Start Date: 10/01/2014



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| Treatment Name  | Acres | CoverType                               | Size Density        | Stand Age | BA Range | Treatment Type | Treatment Method       | Cover Type Objective    | Approval Status       |
|-----------------|-------|---|---------------------|-----------|----------|----------------|------------------------|-------------------------|-----------------------|
| 23 33011023-Cut | 8.5   | 4112 - Maple, Beech, Cherry Association | Medium Density Pole | 82        | 51-80    | Harvest        | Clearcut with Reserves | 4113 - R.Maple, Conifer | Cmpt. Review Proposal |

Prescription Clearcut with reserves - cut all species; except retain all red oak, white pine, and possibly mark some spruce or balsam fir if more retention is needed or as a seed source. This stand will be managed for a mix of the current overstory species, with red maple, spruce, white pine and balsam fir being the primary species. The red maple will be regenerated via stump sprouts. Any combination is acceptable. Some aspen regen will also come in after the adjacent aspen stand is harvested.

Other Comments: Stand was thinned in 1997. Overall a poor quality red maple stand with very little regeneration.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |      |              |                     |    |  |         |                        |              |                       |
|-----------------|------|--------------|---------------------|----|--|---------|------------------------|--------------|-----------------------|
| 27 33011027-Cut | 32.9 | 4130 - Aspen | Medium Density Pole | 50 |  | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
|-----------------|------|--------------|---------------------|----|--|---------|------------------------|--------------|-----------------------|

Prescription Clearcut with reserves- cut all species greater than 3 inches; except retain all red oak and white pine and any cedar if present. This stand will be managed for aspen, but there will also be some red maple, black cherry, spruce, and balsam fir regenerating.

Other Comments: Stand is poor quality aspen with spruce and balsam fir which are dying out due to the spruce budworm. There is about an acre in size lowland brush pocket within this stand. No harvesting activities will take place within this area.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |      |                                 |                   |    |         |         |                        |                                  |                       |
|-----------------|------|---------------------------------|-------------------|----|---------|---------|------------------------|----------------------------------|-----------------------|
| 28 33011028-Cut | 54.4 | 4119 - Mixed Northern Hardwoods | High Density Pole | 84 | 111-140 | Harvest | Clearcut with Reserves | 4116 - Mixed N. Hardwood - Aspen | Cmpt. Review Proposal |
|-----------------|------|---------------------------------|-------------------|----|---------|---------|------------------------|----------------------------------|-----------------------|

Prescription Clearcut with reserves - cut all species greater than 3 inches; except leave enough white pine, red pine, and red oak to have 10% retention. Specs: Leave the residual trees in clumps/pockets and also some scattered ones. Acceptable regeneration is any mix of the current overstory, but it will be primarily red maple, aspen, red oak, and a mix of conifers.

Other Comments: Overall poor quality red maple stand with a mix of species. There are some dense pockets of red oak also scattered throughout the stand.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |     |                            |                    |     |       |         |             |   |                       |
|-----------------|-----|----------------------------|--------------------|-----|-------|---------|-------------|---|-----------------------|
| 33 33011033-Cut | 8.9 | 42200 - Natural White Pine | Medium Density Log | 102 | 51-80 | Harvest | Shelterwood | 42201 - Natural White Pine, Mixed Deciduous | Cmpt. Review Proposal |
|-----------------|-----|----------------------------|--------------------|-----|-------|---------|-------------|---|-----------------------|

Prescription Shelterwood Cut - Cut all species; except leave all oak and mark enough pine to leave 20 basal area overall to provide partial shade and a seed source to regenerate the stand to a mix of pine and oak. This stand will be managed primarily for white pine and oak, but some maple and aspen regeneration is acceptable.

Other Comments: Mature white pine stand with cherry and hazel brush filling in the understory.

Next Steps: After harvest, mechanically scarify the site to expose bare mineral soil to promote pine regeneration.

Proposed Start Date: 10/01/2014



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| Treatment Name  | Acres | CoverType                     | Size Density      | Stand Age | BA Range | Treatment Type | Treatment Method       | Cover Type Objective          | Approval Status       |
|-----------------|-------|-------------------------------|-------------------|-----------|----------|----------------|------------------------|-------------------------------|-----------------------|
| 36 33011036-Cut | 35.1  | 4139 - Aspen, Mixed Deciduous | High Density Pole | 54        | 111-140  | Harvest        | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |

Prescription Clearcut with Reserves - Cut all species greater than 3 inches; except mark enough oak and pine to retain to have 7% retention. Leave a higher percentage of oak and release any oak seedlings that exist. Leave the better mast producing oak.

Other Older aspen stand with denser areas of red maple and red oak mixed in.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

|                 |      |  |                   |    |  |         |                        |  |                       |
|-----------------|------|--|-------------------|----|--|---------|------------------------|--|-----------------------|
| 42 33011042-Cut | 29.9 | 4191 - Mixed Upland Deciduous with Conifer | High Density Pole | 70 |  | Harvest | Clearcut with Reserves | 4191 - Mixed Upland Deciduous with Conifer | Cmpt. Review Proposal |
|-----------------|------|--|-------------------|----|--|---------|------------------------|--|-----------------------|

Prescription Clearcut with Reserves - cut all species; except balsam fir, spruce, and white pine less than 5 inches and also mark to retain some scattered white pine, red pine, and red oak for seed and mast. Leave 10% retention. Acceptable regeneration for this stand will be any mix of the current overstory species.

Other Stand was shelterwood cut around 1996 to manage for white pine, spruce, and fir. Where the stand was opened sufficiently there is advanced regeneration. This regeneration needs to be released now.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

|                 |     |                                 |                   |    |        |         |          |                                  |                       |
|-----------------|-----|---------------------------------|-------------------|----|--------|---------|----------|----------------------------------|-----------------------|
| 44 33011044-Cut | 3.9 | 4119 - Mixed Northern Hardwoods | High Density Pole | 84 | 81-110 | Harvest | Clearcut | 4116 - Mixed N. Hardwood - Aspen | Cmpt. Review Proposal |
|-----------------|-----|---------------------------------|-------------------|----|--------|---------|----------|----------------------------------|-----------------------|

Prescription Clearcut - cut all species greater than 3 inches. No retention is being left, because of the small size of the stand. This stand will be managed for a mix of red maple, aspen, and red oak. The red maple and red oak will regenerate via stump sprouting.

Other Poor quality red maple stand with aspen and oak mixed in.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014

|                 |      |                               |                   |    |  |         |                        |                               |                       |
|-----------------|------|-------------------------------|-------------------|----|--|---------|------------------------|-------------------------------|-----------------------|
| 45 33011045-Cut | 17.3 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 51 |  | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|-----------------|------|-------------------------------|-------------------|----|--|---------|------------------------|-------------------------------|-----------------------|

Prescription Clearcut with Reserves - cut all trees greater than 3 inches; except retain all oak and white pine and any cedar if present. This stand will be managed for a mix of aspen and red maple.

Other Stand is a mix of aspen and red maple primarily.  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2014



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| Treatment Name  | Acres | CoverType                              | Size Density      | Stand Age | BA Range | Treatment Type | Treatment Method        | Cover Type Objective                   | Approval Status       |
|-----------------|-------|--|-------------------|-----------|----------|----------------|-------------------------|--|-----------------------|
| 46 33011046-Cut | 14.0  | 6129 - Mixed Coniferous Lowland Forest | High Density Pole | 95        | 111-140  | Harvest        | Seed Tree with Reserves | 6129 - Mixed Coniferous Lowland Forest | Cmpt. Review Proposal |

Prescription Seed Tree Harvest with Reserves - Cut all species; except retain the transition strip along the upland on the north and west edges of the stand.  
Specs: This transition strip is about 100' foot in width. Also retain some seed tree clumps throughout the rest of the stand. These clumps should consist of tamarack, spruce, cedar, and white pine. Any mix of the current overstory species is acceptable regeneration.  
Other This stand is a mix of cedar, tamarack, black spruce, and white pine. Overall the stand has a low site index, but the tamarack is the most  
Comments: productive species. The spruce and tamarack average 4 sticks and the cedar averages 1.5 sticks.  
Next Steps:  
Proposed Start Date: 10/01/2014

|                 |     |                          |                   |    |  |         |                        |                          |                       |
|-----------------|-----|--------------------------|-------------------|----|--|---------|------------------------|--------------------------|-----------------------|
| 51 33011051-Cut | 9.0 | 4133 - Aspen, Mixed Pine | High Density Pole | 69 |  | Harvest | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |
|-----------------|-----|--------------------------|-------------------|----|--|---------|------------------------|--------------------------|-----------------------|

Prescription Clearcut with Reserves - Cut all trees greater than 4 inches; except mark enough pine and oak to retain to have 5% retention. The primary  
Specs: objective of this stand is white pine, but there will also be some aspen and red maple sprouts as well.  
Other This stand was thinned in 2000 to increase the white pine component within it. This has worked there is an abundance of advanced white pine  
Comments: regeneration throughout it. The overstory needs to be removed to release the regen before it becomes stunted.  
Next Steps:  
Proposed Start Date: 10/01/2014

|                 |      |  |                   |    |  |         |                         |  |                       |
|-----------------|------|--|-------------------|----|--|---------|-------------------------|--|-----------------------|
| 53 33011053-Cut | 15.1 | 6129 - Mixed Coniferous Lowland Forest | High Density Pole | 97 |  | Harvest | Seed Tree with Reserves | 6129 - Mixed Coniferous Lowland Forest | Cmpt. Review Proposal |
|-----------------|------|--|-------------------|----|--|---------|-------------------------|--|-----------------------|

Prescription Seed Tree harvest with Reserves - Cut all trees greater than 3 inches; except leave enough seed tree clumps to provide an adequate seed  
Specs: source and retention. The clumps should consist of tamarack, cedar, and spruce. This stand will be managed for a mix of the current overstory species, any combination is acceptable.  
Other Lowland conifer stand which has a higher density of tamarack.  
Comments:  
Next Steps:  
Proposed Start Date: 10/01/2014

|                 |      |                                |                   |    |         |         |                       |                                |                       |
|-----------------|------|--------------------------------|-------------------|----|---------|---------|-----------------------|--------------------------------|-----------------------|
| 58 33011058-Cut | 10.8 | 4110 - Sugar Maple Association | High Density Pole | 86 | 111-140 | Harvest | Single Tree Selection | 4110 - Sugar Maple Association | Cmpt. Review Proposal |
|-----------------|------|--------------------------------|-------------------|----|---------|---------|-----------------------|--------------------------------|-----------------------|

Prescription Selection Harvest - Lower the basal area to 80, focusing on harvesting the majority of the white ash.  
Specs:  
Other This stand was thinned in 2009. Overall this is a good quality hardwood stand. The stand was recently thinned, but the basal area remains high  
Comments: and with the higher percentage of white ash in the stand we should remove the majority of the ash before EAB arrives. With removing the ash the residual basal area will still be in an acceptable range.  
Next Steps:  
Proposed Start Date: 10/01/2014



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| Treatment Name  | Acres | CoverType                                  | Size Density      | Stand Age | BA Range | Treatment Type | Treatment Method       | Cover Type Objective                       | Approval Status       |
|-----------------|-------|--|-------------------|-----------|----------|----------------|------------------------|--|-----------------------|
| 61 33011061-Cut | 6.4   | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Pole | 110       |          | Harvest        | Clearcut with Reserves | 6128 - Lowland Coniferous, Mixed Deciduous | Cmpt. Review Proposal |

Prescription Clearcut with Reserves - Cut all species greater than 3 inches; except leave enough seed tree clumps and pockets of dense cedar to have 10% retention. Any mix of the current overstory species is acceptable for regeneration.

Other Comments: This is a mixed lowland stand. The shorter lived species are dying out(birch, spruce, balm, and balsam fir) and the cedar is very low quality.

Next Steps:

Proposed Start Date: 10/01/2014

|                 |      |                                     |                   |    |        |         |                        |  |                       |
|-----------------|------|-------------------------------------|-------------------|----|--------|---------|------------------------|--|-----------------------|
| 67 33011067-Cut | 22.0 | 4199 - Other Mixed Upland Deciduous | High Density Pole | 87 | 81-110 | Harvest | Clearcut with Reserves | 4191 - Mixed Upland Deciduous with Conifer | Cmpt. Review Proposal |
|-----------------|------|-------------------------------------|-------------------|----|--------|---------|------------------------|--|-----------------------|

Prescription Clearcut with Reserves - Cut all species greater than 3 inches; except retain enough oak, cedar, hemlock, and pine to have 10% retention. Leave the cedar in clumps to prevent windthrow. This stand will be managed for a mix of aspen, hardwood, and F; any combination will be acceptable. This stand will have to be Limited Factored because of access. The only access is through private property.

Other Comments: SCA - Removal, this stand was listed as potential old growth last decade. But this stand does not have any unique values that need to be protected or enhanced. Overall poor quality hardwood stand with a basal area of aspen and some pockets/areas of cedar. Some parts of the stand along the west and north edges have lower ground and will have to be harvested in the summer or winter. The shorter lived species are dying out of the stand (aspen, balm, birch, and balsam fir). There is also minor amounts of white pine, white spruce, and hemlock; but none of them represent 2%.

Next Steps:

Proposed Start Date: 10/01/2014

|                       |     |                                |  |  |  |                       |                 |                           |                       |
|-----------------------|-----|--------------------------------|--|--|--|-----------------------|-----------------|---------------------------|-----------------------|
| 41 NF_33011041-NonFor | 6.7 | 3105 - Mixed Upland Herbaceous |  |  |  | Non-Forest Management | Other - Specify | 310 - Herbaceous Openland | Cmpt. Review Proposal |
|-----------------------|-----|--------------------------------|--|--|--|-----------------------|-----------------|---------------------------|-----------------------|

Prescription Enhance and perpetuate opening. Cut brush and trees, mow, till, plant, and/or fertilize. Burn and/or herbicide if need and funding present. Hard or soft mast plants, shrubs, and trees may be planted if available. Herbaceous plantings will be to provide forage, brood rearing, and recreational opportunities.

Other Comments:

Next Steps:

Proposed Start Date: Unspecified

**Total Treatment Acreage Proposed: 427.3**



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

#Type!

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Proposed  
Start Date: #Type!

Limiting Factor

**Total Treatment  
Acreage Proposed: 0**

## Report 5 – Site Conditions

Escanaba Mgt. Unit  
Dustin Salter : Examiner

Compartment 011  
Year of Entry 2015

### Availability for Management

| Total Acres | Acres     |               | Dominant Site Conditions | Dominant Site Conditions |    |    |    |
|-------------|-----------|---------------|--------------------------|--------------------------|----|----|----|
|             | Available | Not Available |                          | No                       | 5D | 5B | 3J |
| 515         | 515       |               | Aspen                    | 515                      |    |    |    |
| 101         | 101       |               | Cedar                    | 89                       |    | 12 |    |
| 129         | 92        | 37            | Lowland Conifers         | 76                       |    | 15 | 37 |
| 12          | 12        |               | Lowland Mixed Forest     | 12                       |    |    |    |
| 141         | 141       |               | Mixed Upland Deciduous   | 141                      |    |    |    |
| 270         | 263       | 7             | Northern Hardwood        | 263                      |    |    | 7  |
| 67          | 21        | 46            | Tamarack                 | 21                       | 46 |    |    |
| 6           | 6         |               | Upland Conifers          | 6                        |    |    |    |
| 62          | 62        |               | Upland Mixed Forest      | 62                       |    |    |    |
| 3           | 3         |               | Upland Spruce/Fir        | 3                        |    |    |    |
| 55          | 55        |               | White Pine               | 35                       |    | 20 |    |
| 1,361       | 1,271     | 90            | Total Forested Acres     | 1,224                    | 46 | 47 | 44 |
|             | 93%       | 7%            | 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 |
|---|---------------------------------|---|-------|----------------------|----------------------|----------------------|----------------------|
| 003   | Available                       | 5B: Retention for regeneration purposes           | 15    |                      |                      |                      |                      |
| <b>Comments:</b><br>Stand was clearcut in 2001, but all cedar was retained along with some scattered seed trees.        |                                 |   |       |                      |                      |                      |                      |
| 004   | Not Available                   | 3J: Water quality / BMPs (stream, river, or lake) | 37    |                      |                      |                      |                      |
| <b>Comments:</b><br>This stand acts as a buffer to Goodman Brook and provides mature forest conditions along the brook. |                                 |   |       |                      |                      |                      |                      |
| 005   | Not Available                   | 5D: Unproductive Forest Land                      | 46    |                      |                      |                      |                      |
| <b>Comments:</b><br>There is very little merchantable stems in this stand, more of a treed bog - heavy to tamarack.     |                                 |   |       |                      |                      |                      |                      |

## Report 5 – Site Conditions

Escanaba Mgt. Unit  
Dustin Salter : Examiner

Compartment 011  
Year of Entry 2015

|     |           |  |    |
|-----|-----------|--|----|
| 006 | Available | 5B: Retention for<br>regeneration purposes | 20 |
|-----|-----------|--|----|

**Comments:**

This stand was shelterwood harvested last entry period, with the intent for managing for pine. The residual stems are providing partial shade, but once the regeneration is advanced enough the overstory will be removed.

|     |               |  |   |
|-----|---------------|--|---|
| 007 | Not Available | 3J: Water quality / BMPs<br>(stream, river, or lake) | 7 |
|-----|---------------|--|---|

**Comments:**

This stand is a buffer to a small creek that flows into the Miscauna Creek.

|     |           |  |    |
|-----|-----------|--|----|
| 008 | Available | 5B: Retention for<br>regeneration purposes | 12 |
|-----|-----------|--|----|

**Comments:**



**Report 6 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS**

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

| SCA Name  | SCA Category                 | Detail Type   | Recommendation     | Acres |
|---|------------------------------|---------------|--------------------|-------|
| <b>Shakey River Riparian Area</b>   | Spring-Seeps, Riparian Areas | Riparian Area | <b>SCA</b>         | 15.7  |
| <b>Comments</b><br>SCA - This stand provides mature forest conditions along the Shakey River. Decent quality cedar except along the edges.  |                              |               |                    |       |
| <b>Shakey River Riparian Area</b>   | Spring-Seeps, Riparian Areas | Riparian Area | <b>SCA</b>         | 23.8  |
| <b>Comments</b><br>SCA - This stand provides mature forest conditions along the Shakey River.   |                              |               |                    |       |
| <b>Shakey River Riparian Area</b>   | Spring-Seeps, Riparian Areas | Riparian Area | <b>SCA</b>         | 35.2  |
| <b>Comments</b><br>SCA - This stand provides mature forest conditions along the Shakey River. Good quality cedar; except near the river. The short lived species are dying out, but they make up a small portion of the stand and it is not worth trying to harvest them. |                              |               |                    |       |
| <b>Shakey River Riparian Area</b>   | Spring-Seeps, Riparian Areas | Riparian Area | <b>SCA</b>         | 38.6  |
| <b>Comments</b><br>Shakey River flows through this stand.   |                              |               |                    |       |
| <b>Removal 1</b>  | Potential Old Growth         |               | <b>SCA Removal</b> | 11.7  |
| <b>Comments</b><br>SCA Removal - this stand was clearcut 19 years ago and it doesn't provide any unique forested conditions.  |                              |               |                    |       |
| <b>Removal 2</b>  | Potential Old Growth         |               | <b>SCA Removal</b> | 22.0  |
| <b>Comments</b><br>SCA - Removal this stand was listed as potential old growth last decade. but this stand does not have any unique values that need to be protected or enhanced.   |                              |               |                    |       |



## Report 7 – DEDICATED CONSERVATION AREA DETAILS

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

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

| Conservation Area | Type   | Description  |
|-------------------|--|--|
| SCA               | 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.  |
| SCA               | Non-Dedicated Natural Areas and National Natural Landmarks | This category is comprised of those Natural, Wilderness and Wild Areas that have been nominated or proposed for legal dedication, but for which legal dedication by legislature has not occurred. The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action. |
| HCVA              | Legally dedicated Natural Areas, Wilderness or Wild Areas  | The nomination process is defined by Part 351, Wilderness and Natural Areas, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The program is administered by the DNR. Nominations require the submittal of a Natural Areas Nomination Packet to the DNR. This is an active program, with proposed sites in various stages of review. Final dedication of nominated Natural, Wilderness and Wild Areas is accomplished through legislative action.   |

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## Escanaba Mgt. Unit

## Report 8 – Forested Stands

Compartment: 011  
Year of Entry: 2015

|    | Level 4<br>Cover Type                            | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
|----|--|-------------------------|-------|--------------|-------------|--|
| 1  | 42330 - Upland Fir                               | Medium<br>Density       | 3.4   | 27           | 81-110      | Spruce Budworm is present in the stand.  |
| 2  | 6120 - Lowland Cedar                             | High Density<br>Pole    | 20.3  | 115          |             | Decent quality cedar stand with some other species mixed in.   |
| 3  | 4134 - Aspen,<br>Spruce/Fir                      | High Density<br>Sapling | 30.8  | 24           |             | Spruce Budworm is present in the stand, but not much mortality. The southwestern corner of the stand has a higher percentage of balsam and spruce, some which is of an older age.  |
| 4  | 4191 - Mixed Upland<br>Deciduous with Conifer    | High Density<br>Log     | 30.0  | 102          | 111-140     | White pine stand with a mix of other species. The spruce and balsam fir are dying out of the stand due to the spruce budworm. There are some small marshes within this stand.  |
| 5  | 4130 - Aspen                                     | High Density<br>Pole    | 15.8  | 41           |             | Poor quality aspen stand. The stand was about half balsam fir and spruce, but the majority of that has died out due to the spruce budworm.   |
| 6  | 42200 - Natural White<br>Pine                    | Medium<br>Density Log   | 26.1  | 102          | 51-80       | Two aged stand, mature white and red pine with an understory of aspen, balsam fir, and spruce. Harvest this stand when the aspen, spruce and fir are mature.   |
| 7  | 4136 - Aspen, Mixed<br>Conifer                   | High Density<br>Pole    | 30.2  | 40           |             | Very good quality aspen stand, with the north end having a higher percentage of balsam fir and spruce. The spruce budworm has killed a large amount of balsam fir throughout the stand.  |
| 8  | 4319 - Mixed Upland<br>Forest                    | Low Density<br>Sapling  | 7.7   | 26           |             | Stand is a mix of upland species, but at least half of the stand is more of an upland brush type.  |
| 9  | 6120 - Lowland Cedar                             | High Density<br>Pole    | 10.8  | 104          |             | Decent quality cedar with good quality tamarack and spruce.  |
| 10 | 6120 - Lowland Cedar                             | High Density<br>Pole    | 2.5   | 115          |             | Small area of cedar. The adjacent uplands drain down into this stand and where the water settles out.  |
| 11 | 6121 - Tamarack                                  | Medium<br>Density       | 20.9  | 11           |             | Stand was cut on contract 33-00-01 in the winter of 2000-01. Stand was clearcut except for the cedar and seed tree clumps. The majority of the seed tree clumps are still standing. There is less regen where there is a higher residual density of cedar, but overall the stand has successfully regenerated to a mix of tamarack, black spruce and balsam primarily. |
| 12 | 4136 - Aspen, Mixed<br>Conifer                   | Medium<br>Density       | 7.8   | 11           |             | Stand was clearcut in 2000-01 on contract 33-00-01. Stand is a mix of aspen and upland conifer species, but is not fully stocked.  |
| 13 | 4134 - Aspen,<br>Spruce/Fir                      | High Density<br>Sapling | 17.7  | 11           |             | Stand was clearcut in 2001 on contract 33-00-01. There was some pine left along with some advanced balsam fir regen.   |
| 14 | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | High Density<br>Sapling | 15.3  | 101          |             | Stand was clearcut in 2001 on contract 33-00-01. All species were cut except cedar and some spruce and tamarack seed trees. The stand has fully regenerated to a mix of tamarack, spruce, balsam, and balsam fir.  |



|    | Level 4<br>Cover Type                         | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
|----|---|-------------------------|-------|--------------|-------------|---|
| 15 | 4130 - Aspen                                  | High Density<br>Pole    | 59.9  | 51           |             | Good quality aspen stand.   |
| 17 | 6120 - Lowland Cedar                          | High Density<br>Pole    | 4.3   | 99           |             | This stand had been marked in the past for a thinning, but it was never cut. This stand is a buffer to the Miscauna Creek.  |
| 18 | 4130 - Aspen                                  | High Density<br>Sapling | 4.9   | 11           |             | Stand was clearcut in 2001 on contract 33-00-01.  |
| 19 | 6120 - Lowland Cedar                          | Medium<br>Density Pole  | 11.8  | 88           |             | Stand was cut on contract 33-00-01 in 2001. Stand was clearcut except for the cedar and white pine, red pine, and spruce seed trees. There is less regen where there is a higher residual density of cedar, but overall the stand has successfully regenerated to a mix of tamarack, black spruce and balsam primarily.   |
| 20 | 6129 - Mixed<br>Coniferous Lowland<br>Forest  | High Density<br>Pole    | 37.4  | 101          |             | Stand is a buffer/riparian corridor along Goodman Brook, which flows through the stand.   |
| 21 | 4130 - Aspen                                  | High Density<br>Pole    | 3.5   | 52           |             |   |
| 22 | 4191 - Mixed Upland<br>Deciduous with Conifer | High Density<br>Log     | 58.9  | 89           | 51-80       | Stand was shelterwood cut in 2007. The stand was cut to regenerate pine and oak. This stand is currently a two-aged stand with an overstory of pine, red oak, and maple over red maple and aspen regeneration, with a minor amount of white pine. The current overstory is too dense to allow oak harvested to stump sprout and if we don't harvest soon the aspen and red maple regeneration will be too tall and dense to allow the oak stumps to sprout in the future. |
| 23 | 4112 - Maple, Beech,<br>Cherry Association    | Medium<br>Density Pole  | 8.5   | 82           | 51-80       | Stand was thinned in 1997. Overall a poor quality red maple stand with very little regeneration.  |
| 24 | 4130 - Aspen                                  | High Density<br>Sapling | 32.5  | 17           |             | Thick good quality aspen regeneration.  |
| 25 | 4130 - Aspen                                  | High Density<br>Sapling | 15.2  | 5            |             | Stand was clearcut in 2007.   |
| 26 | 4112 - Maple, Beech,<br>Cherry Association    | High Density<br>Pole    | 7.1   | 87           | 111-140     | The larger part of this stand is within comp 10, treat this stand when the larger part of the stand is treated in comp 10.  |
| 27 | 4130 - Aspen                                  | Medium<br>Density Pole  | 32.9  | 50           |             | Stand is poor quality aspen with spruce and balsam fir which are dying out due to the spruce budworm. There is about an acre in size lowland brush pocket within this stand. No harvesting activities will take place within this area.   |
| 28 | 4119 - Mixed Northern<br>Hardwoods            | High Density<br>Pole    | 54.4  | 84           | 111-140     | Overall poor quality red maple stand with a mix of species. There are some dense pockets of red oak also scattered throughout the stand.  |
| 29 | 4130 - Aspen                                  | High Density<br>Pole    | 34.0  | 26           |             | Fairly thick aspen stand with some mature red oak and pine mixed in.  |



|    | Level 4<br>Cover Type                         | Size<br>Density         | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
|----|---|-------------------------|-------|--------------|-------------|---|
| 30 | 4130 - Aspen                                  | Medium<br>Density       | 11.7  | 17           |             | This stand is not fully stocked, but the more open areas are filling in with white pine and cherry.   |
| 33 | 42200 - Natural White<br>Pine                 | Medium<br>Density Log   | 8.9   | 102          | 51-80       | Mature white pine stand with cherry and hazel brush filling in the understory.  |
| 34 | 4136 - Aspen, Mixed<br>Conifer                | High Density<br>Sapling | 22.0  | 4            |             | Stand was clearcut in 2008. Fully stocked aspen stand with some residual mature white pine.   |
| 36 | 4139 - Aspen, Mixed<br>Deciduous              | High Density<br>Pole    | 35.1  | 54           | 111-140     | Older aspen stand with denser areas of red maple and red oak mixed in.  |
| 37 | 4119 - Mixed Northern<br>Hardwoods            | High Density<br>Pole    | 134.1 | 84           | 51-80       | Stand was thinned between 2006 and 2009. The understory is filling in with white pine, aspen, and red maple sprouts. This stand will need to be opened up more next decade to release the advanced regeneration and also to allow some oak to stump sprout before the existing regeneration gets too tall or dense. |
| 39 | 4130 - Aspen                                  | High Density<br>Sapling | 83.8  | 22           |             | Fairly thick aspen regeneration with some residual mature white pine and red oak. There are some small openings within the stand boundaries that have cherry and upland brush.  |
| 42 | 4191 - Mixed Upland<br>Deciduous with Conifer | High Density<br>Pole    | 29.9  | 70           |             | Stand was shelterwood cut around 1996 to manage for white pine, spruce, and fir. Where the stand was opened sufficiently there is advanced regeneration. This regeneration needs to be released now.  |
| 44 | 4119 - Mixed Northern<br>Hardwoods            | High Density<br>Pole    | 3.9   | 84           | 81-110      | Poor quality red maple stand with aspen and oak mixed in.   |
| 45 | 4139 - Aspen, Mixed<br>Deciduous              | High Density<br>Pole    | 17.3  | 51           |             | Stand is a mix of aspen and red maple primarily.  |
| 46 | 6129 - Mixed<br>Coniferous Lowland<br>Forest  | High Density<br>Pole    | 14.0  | 95           | 111-140     | This stand is a mix of cedar, tamarack, black spruce, and white pine. Overall the stand has a low site index, but the tamarack is the most productive species. The spruce and tamarack average 4 sticks and the cedar averages 1.5 sticks.  |
| 47 | 6121 - Tamarack                               | Medium<br>Density Pole  | 45.9  | 69           |             | Very poor quality stand, the stand is just slightly better quality than a treed bog. There are some merchantable stems in the transition zone, but overall the majority of the stand does not have merchantable stems.  |
| 48 | 4110 - Sugar Maple<br>Association             | High Density<br>Pole    | 13.1  | 84           | 81-110      | Stand was thinned in 2009. There is some scattered white ash within the stand, but not enough to go back through and remove at this time for EAB.   |
| 49 | 42200 - Natural White<br>Pine                 | Medium<br>Density Log   | 20.1  | 110          | 51-80       | Stand was shelterwood cut in 2009. This stand will need to be opened up next decade to release the advanced regeneration. Some areas of the stand are still too dense to provide enough sunlight for regeneration.  |



|    | Level 4<br>Cover Type                      | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:  |
|----|--|----------------------|-------|--------------|-------------|---|
| 50 | 4319 - Mixed Upland Forest                 | High Density Pole    | 43.5  | 35           |             | This stand is a mix of aspen and balsam fir primarily with some mature oak and pine mixed in.   |
| 51 | 4133 - Aspen, Mixed Pine                   | High Density Pole    | 9.0   | 69           |             | This stand was thinned in 2000 to increase the white pine component within it. This has worked there is abundance of advanced white pine regeneration throughout it. The overstory needs to be removed to release the regen before it becomes stunted.  |
| 52 | 4111 - S.Maple, Hard Mast Association      | High Density Log     | 38.2  | 100          | 81-110      | Stand was last thinned in 2001-02. There is not enough white ash present to warrant going back through the stand to harvest it for EAB. There is also some beech present, but very little and there is no sign of beech bark disease.   |
| 53 | 6129 - Mixed Coniferous Lowland Forest     | High Density Pole    | 15.1  | 97           |             | Lowland conifer stand which has a higher density of tamarack.   |
| 54 | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Sapling | 17.0  | 6            |             | Stand was seed tree cut in 2005. All of the cedar was retained, along with some seed tree clumps of tamarack and spruce. Some of the smaller diameter stems were also left. The stand is fully stocked with tamarack, balm, and black spruce regeneration. Where there is a higher residual basal area of cedar there is less regeneration.   |
| 55 | 42390 - Mixed Non-Pine Upland Conifers     | High Density Sapling | 5.9   | 21           |             | Stand was clearcut 21 years ago and is now a fully stocked stand of tamarack regeneration. This stand is a mix of upland and lowland.   |
| 56 | 4319 - Mixed Upland Forest                 | Medium Density       | 11.1  | 3            |             | Stand was clearcut in 2009. There was some mature residual white pine retained along with some advanced spruce and balsam fir regeneration. The stand is not fully stocked with aspen, but the open areas are seeding in with balsam fir, spruce, and white pine.   |
| 57 | 4130 - Aspen                               | High Density Pole    | 51.6  | 23           |             | Good quality aspen stand with some residual mature oak, pine, and hardwood stems.   |
| 58 | 4110 - Sugar Maple Association             | High Density Pole    | 10.8  | 86           | 111-140     | This stand was thinned in 2009. Overall this is a good quality hardwood stand. The stand was recently thinned, but the basal area remains high and with the higher percentage of white ash in the stand we should remove the majority of the ash before EAB arrives. With removing the ash the residual basal area will still be in an acceptable range.  |
| 61 | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Pole    | 6.4   | 110          |             | This is a mixed lowland stand. The shorter lived species are dying out (birch, spruce, balm, and balsam fir) and the cedar is very low quality.   |
| 62 | 6132 - Mixed Lowland Forest with Cedar     | Medium Density       | 11.7  | 19           |             | SCA Removal - this stand was clearcut 19 years ago and it doesn't provide any unique forested conditions. Stand has regenerated to a mix of tamarack and aspen with some residual cedar and white pine stems. There are some pockets of thick tagalder, but overall the stand is nearly fully stocked. This stand is a mix of lowland and upland, but there is not much elevation difference between the two. |



|    | Level 4<br>Cover Type                        | Size<br>Density      | Acres | Stand<br>Age | BA<br>Range | General<br>Comments:   |
|----|--|----------------------|-------|--------------|-------------|--|
| 63 | 6129 - Mixed<br>Coniferous Lowland<br>Forest | High Density<br>Pole | 23.8  | 75           |             | SCA - This stand provides mature forest conditions along the Shakey River. About a third of this stand on the North and West sides was cut about 25 to 30 years ago. Most of this area has regenerated well to black spruce and tamarack. The other two-thirds of the stand not previously harvested is in need of it.   |
| 65 | 6120 - Lowland Cedar                         | High Density<br>Pole | 15.7  | 110          |             | SCA - This stand provides mature forest conditions along the Shakey River. Decent quality cedar except along the edges.  |
| 66 | 6120 - Lowland Cedar                         | High Density<br>Pole | 35.2  | 110          |             | SCA - This stand provides mature forest conditions along the Shakey River. Good quality cedar; except near the river. The short lived species are dying out, but they make up a small portion of the stand and it is not worth trying to harvest them.   |
| 67 | 4199 - Other Mixed<br>Upland Deciduous       | High Density<br>Pole | 22.0  | 87           | 81-110      | SCA - Removal this stand was listed as potential old growth last decade. but this stand does not have any unique values that need to be protected or enhanced. Overall poor quality hardwood stand with a basal area of aspen and some pockets/areas of cedar. Some parts of the stand along the west and north edges have lower ground and will have to be harvested in the summer or winter. The shorter lived species are dying out of the stand (aspen, balsam, birch, and balsam fir). There is also minor amounts of white pine, white spruce, and hemlock; but none of them represent 2%. |



| Stand | Cover Type                     | Acres | Managed Site | Management Priority (Objective) | General Comments:                                 |
|-------|--------------------------------|-------|--------------|---------------------------------|---|
| 16    | 6230 - Cattail                 | 2.8   | No           | Unspecified                     |   |
| 31    | 6239 - Mixed Emergent Wetland  | 6.5   | No           | Unspecified                     |   |
| 32    | 6239 - Mixed Emergent Wetland  | 1.7   | No           | Unspecified                     |   |
| 35    | 720 - Exposed Rock             | 1.4   | No           | Unspecified                     | Active gravel pit.                                |
| 38    | 6220 - Alder/willow            | 3.2   | No           | Unspecified                     |   |
| 40    | 6229 - Mixed lowland shrub     | 3.5   | No           | Unspecified                     |   |
| 41    | 3105 - Mixed Upland Herbaceous | 6.7   | No           | Unspecified                     |   |
| 43    | 6229 - Mixed lowland shrub     | 8.2   | No           | Unspecified                     |   |
| 59    | 6230 - Cattail                 | 4.9   | No           | Unspecified                     |   |
| 60    | 122 - Road/Parking Lot         | 5.5   | No           | Unspecified                     | County Road 577 and Carlson Lane and their ROW's. |
| 64    | 6220 - Alder/willow            | 38.6  | No           | Unspecified                     | Shakey River flows through this stand.            |