



**TRAVERSE CITY FOREST MANAGEMENT UNIT  
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 251 ENTRY YEAR: 2013**

**Compartment Acreage: 1230 GIS calculated      County: Kalkaska**

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**Revision Date:** 4/25/2011, 5/23/2011

**Stand Examiner:** Kelly Standerfer, Forest Management Division ; Steven Griffith Wildlife Division

**Legal Description:** T25N, R7W, Sec.'s 29, 30, 31 & 32

**RMU (if applicable):**

**Management Goals:**

Manage for both vegetative & wildlife diversity while maintaining the high recreation value within this compartment.

**Soil and Topography:**

Terrain is rolling to very hilly especially along the Manistee River. Mostly Rubicon, Emmet north of the river.

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

Mostly block ownership however there are some in holdings along the river.

**Unique, Natural Features (include only non-site specific and non-sensitive information):**

None known at this time within the compartment boundary however this area has the potential to provide habitat for many unique plants and animals.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):**

There are significant Native American sites in this compartment.

**Special Management Designations or Considerations:**

The Manistee River flows through this compartment. Consumers Energy has pine reserves in sections 31 & 32.

**Watershed and Fisheries Considerations:**

The Manistee River, Filer Creek, and Nelson Creek flow through Compartment 251. All three streams are Designated Trout Streams, with populations of brook and brown trout. The Natural Rivers native vegetation buffer for Nelson and Filer Creeks is 50', so no cutting should occur within 50' of either stream and their tributaries. The native vegetation buffer for the Manistee River is 175', so no cutting should occur within 175' of the river. Also, BMPS should be followed when working in wet areas near the streams..

**Wildlife Habitat Considerations:**

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

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum. The nearest gravel pit is two miles to the west. Gravel potential in the compartment is considered good especially the north edge. The abandoned Cannon Creek Field lies three miles to the east. The field produced over 850,000 mcf gas from the Traverse Limestone. Springfield 32 Field lies to the west. It produced from the Traverse Limestone (? gas) and the PdC (>1.9 Bcf gas and > 228,000 BO). All of the State land, with mineral rights, is currently leased for oil and gas development. There may be potential for oil and gas in this area.

**Vehicle Access:**

South Manistee River Rd offers access for the areas south of the river and several county roads offer access to the portions north of the river.

**Survey Needs:**

Existing survey markers should be sufficient for this year of entry treatments.

**Recreational Facilities and Opportunities:**

The old Smithville State Forest Camp Ground is located in Section 29 north of the river. There has not been any maintenance on the access site location to the Manistee River in many years. The Miss-Kal ORV Trail runs through the lower part of section 31.

A canoe livery is located on private land south side of the river in section 32.

**Fire Protection:**

Fire protection for this area is handled out of the Kalkaska DNR field office for initial attack. Additional resources are available from the Manton DNR Office as well as units from the local volunteer fire departments. The compartment has fair road access with available water point areas nearby for fire suppression. Travel time to the area is acceptable due to M-66 being a straight shot from the Kalkaska DNR Office. (Comments made by Rod Rader, MDNR Fire Supervisor, Traverse City Field Office).

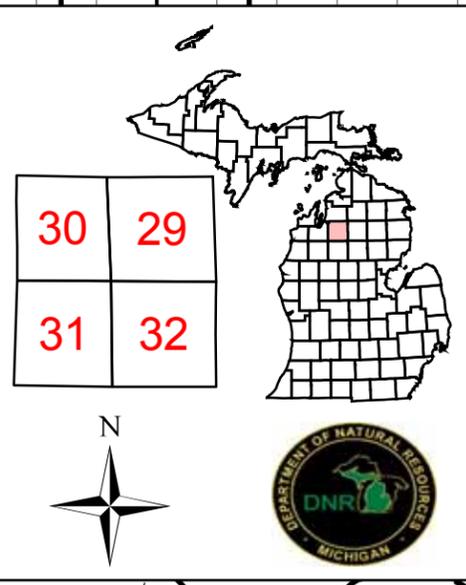
**Additional Compartment Information:**

All of the land in this compartment has been acquired from Consumers Energy.

# Cover Type & Treatment Map

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

Compartment 251  
 T25N, R07W, Sec. 29-32  
 County: Kalkaska  
 Unit: Traverse City  
 YOE: 2013  
 Acres: 1,283 GIS Calculated  
 Stand Examiner: Kelly Standerfer  
 Map Revised: 5/25/2011  
 Map Phase: Pre-Review



**Legend**

- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Boat Access Sites
- Canoe Access Sites
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers
- MCCCT Trails
- ORV Routes
- ORV Trails
- Snowmobile Trails
- MCCCT Trail
- ORV Route
- ORV Trail
- Snowmobile Trail

**Treatments**

- Thinning (Crown, Low, Systematic)
- Shelter Wood (w/Reserves)
- Selection (Group, Single Tree)
- Clearcut (w/Reserves, Patch/Strip)

**Forest Stands**

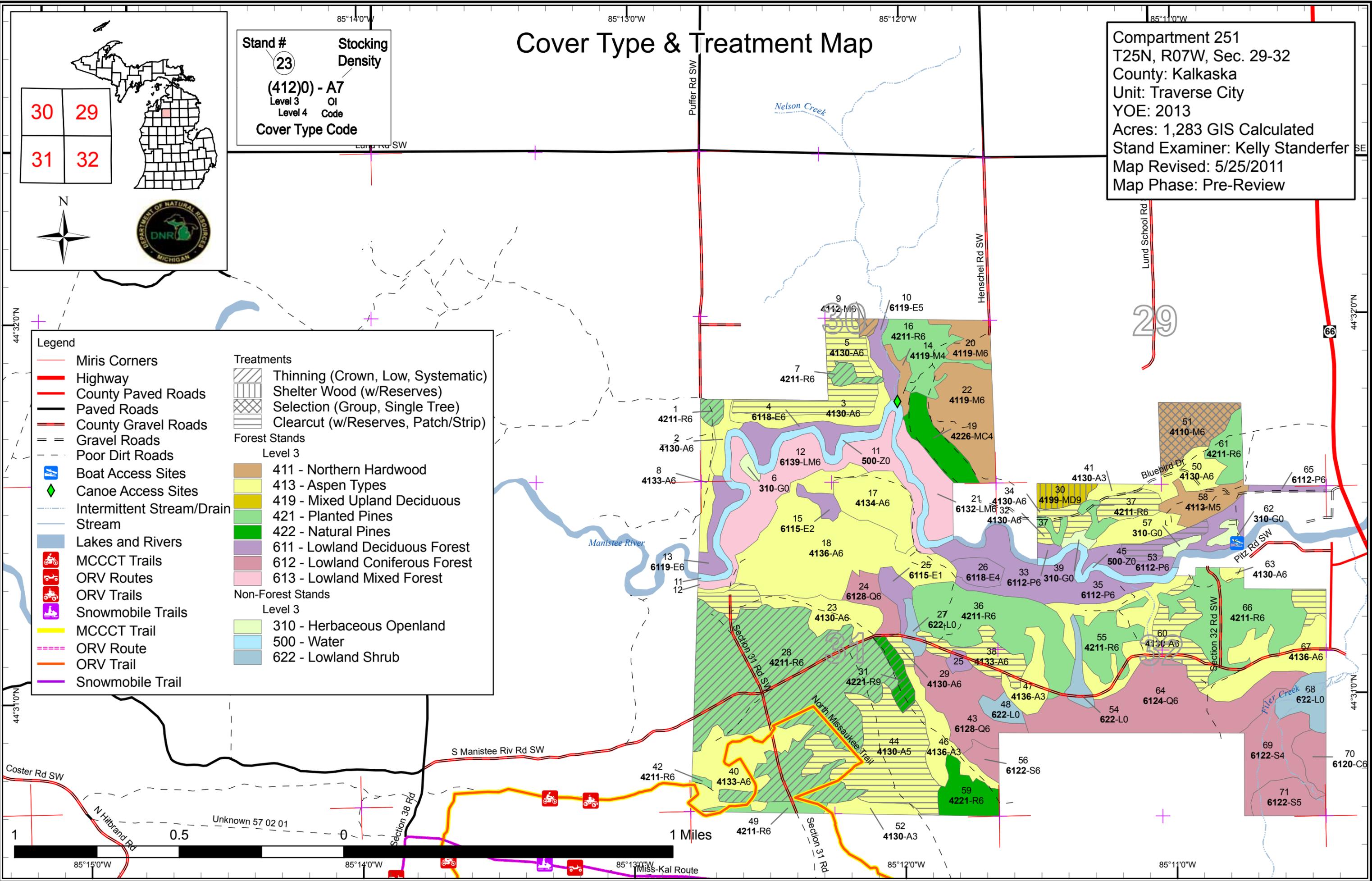
Level 3

- 411 - Northern Hardwood
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

**Non-Forest Stands**

Level 3

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub





# Dedicated & Proposed Special Conservation Area Map

Compartment 251  
 T25N, R07W, Sec. 29-32  
 County: Kalkaska  
 Unit: Traverse City  
 YOE: 2013  
 Acres: 1,283 GIS Calculated  
 Stand Examiner: Kelly Standerfer  
 Map Revised: 5/25/2011  
 Map Phase: Pre-Review

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

30 29  
 31 32

**Legend**

**Special Conservation Areas**

- Boat Access Sites
- Canoe Access Sites

**High Conservation Value Area**

- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams

**Stand Boundaries**

**Forest Stands**

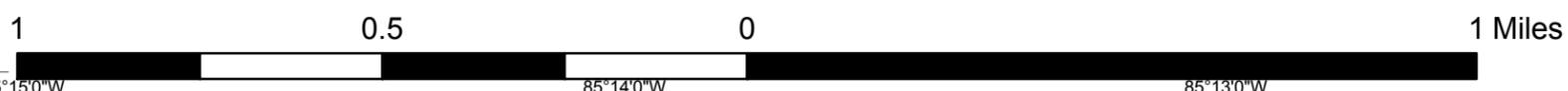
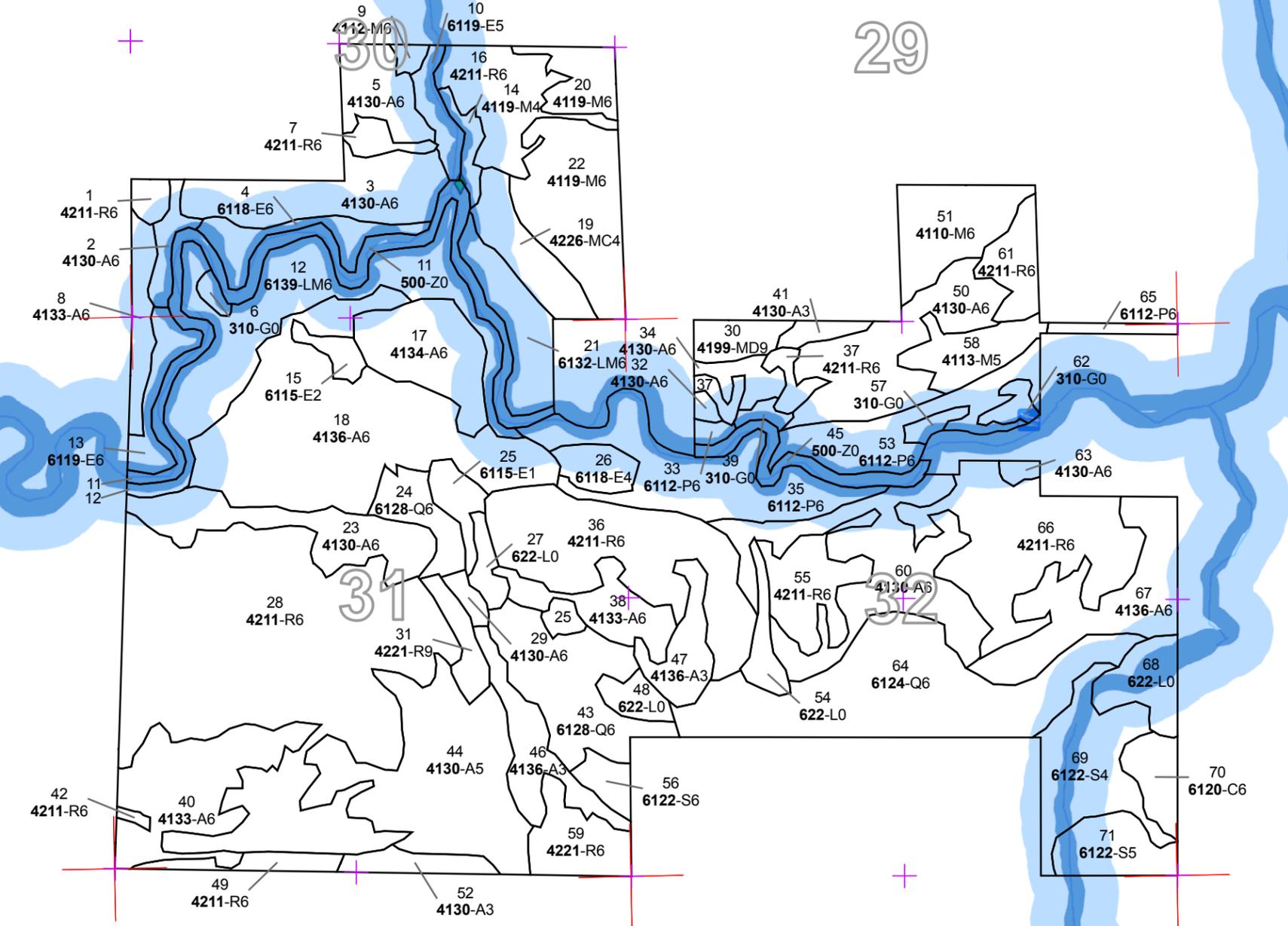
**Level 3**

- 411 - Northern Hardwood
- 413 - Aspen Types
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- 421 - Planted Pines
- 422 - Natural Pines
- 611 - Lowland Deciduous Forest
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- 613 - Lowland Mixed Forest

**Non-Forest Stands**

**Level 3**

- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub



85°15'0"W 85°14'0"W 85°13'0"W 85°12'0"W 85°11'0"W 44°3'0"N 44°3'10"N

**Table 1 – Total Acres by Cover Type and Age Class**



|                             | Age Class    |           |          |          |           |            |            |            |            |          |          |          |          |          | Total    |             |
|-----------------------------|--------------|-----------|----------|----------|-----------|------------|------------|------------|------------|----------|----------|----------|----------|----------|----------|-------------|
|                             | Non-Forested | 1-9       | 10-19    | 20-29    | 30-39     | 40-49      | 50-59      | 60-69      | 70-79      | 80-89    | 90-99    | 100-109  | 110-119  | 120 +    |          | Unretn Age  |
| Aspen                       | 0            | 33        | 0        | 3        | 80        | 215        | 67         | 0          | 41         | 0        | 0        | 0        | 0        | 0        | 0        | 440         |
| Cedar                       | 0            | 0         | 0        | 0        | 0         | 0          | 0          | 8          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 8           |
| Herbaceous Openland         | 9            | 0         | 0        | 0        | 0         | 0          | 0          | 0          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 9           |
| Lowland Aspen/Balsam Poplar | 0            | 0         | 0        | 0        | 0         | 3          | 0          | 61         | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 64          |
| Lowland Conifers            | 0            | 0         | 0        | 0        | 0         | 10         | 0          | 0          | 95         | 0        | 0        | 0        | 0        | 0        | 0        | 105         |
| Lowland Deciduous           | 0            | 0         | 0        | 0        | 0         | 9          | 11         | 26         | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 46          |
| Lowland Mixed Forest        | 0            | 0         | 0        | 0        | 0         | 0          | 0          | 49         | 17         | 0        | 0        | 0        | 0        | 0        | 0        | 66          |
| Lowland Shrub               | 27           | 0         | 0        | 0        | 0         | 0          | 0          | 0          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 27          |
| Lowland Spruce/Fir          | 0            | 0         | 0        | 0        | 0         | 5          | 40         | 0          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 45          |
| Mixed Upland Deciduous      | 0            | 0         | 0        | 0        | 0         | 0          | 0          | 0          | 7          | 0        | 0        | 0        | 0        | 0        | 0        | 7           |
| Natural Mixed Pines         | 0            | 0         | 0        | 0        | 0         | 0          | 0          | 15         | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 15          |
| Northern Hardwood           | 0            | 0         | 0        | 0        | 0         | 6          | 0          | 76         | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 82          |
| Red Pine                    | 0            | 0         | 0        | 0        | 0         | 314        | 14         | 0          | 6          | 0        | 0        | 0        | 0        | 0        | 0        | 335         |
| Water                       | 34           | 0         | 0        | 0        | 0         | 0          | 0          | 0          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 34          |
| <b>Total</b>                | <b>71</b>    | <b>33</b> | <b>0</b> | <b>3</b> | <b>80</b> | <b>562</b> | <b>131</b> | <b>236</b> | <b>166</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1283</b> |



## Table 2 – Proposed Treatment Summaries

**Traverse City Mgt. Unit**  
**Year of Entry 2013**

**Compartment 251**  
**Total Compartment Acres: 1283**

### Acres by Treatment Type

|                          |                         |                   |                     |           |
|--------------------------|-------------------------|-------------------|---------------------|-----------|
| Commercial Harvest - 340 | Site Prep - 0           | Tree Planting - 0 | Prescribed Burn - 0 | Other - 0 |
| Habitat Cut - 14         | Opening Maintenance - 0 | Tree Seeding - 0  | Pesticide - 0       |           |

### Cover Type by Harvest Method

|                                    |            | Clearcut  | Selection | Seed Tree | Shelterwood | Thinning | Other - Specify | Total Acres |
|------------------------------------|------------|-----------|-----------|-----------|-------------|----------|-----------------|-------------|
| <b>Aspen</b>                       | 148        | 0         | 0         | 0         | 0           | 0        |                 | 148         |
| <b>Lowland Aspen/Balsam Poplar</b> | 7          | 0         | 0         | 0         | 0           | 0        |                 | 7           |
| <b>Mixed Upland Deciduous</b>      | 0          | 0         | 0         | 7         | 0           | 0        |                 | 7           |
| <b>Northern Hardwood</b>           | 0          | 20        | 0         | 0         | 2           | 0        |                 | 22          |
| <b>Red Pine</b>                    | 0          | 0         | 0         | 0         | 170         | 0        |                 | 170         |
| <b>Total</b>                       | <b>155</b> | <b>20</b> | <b>0</b>  | <b>7</b>  | <b>171</b>  | <b>0</b> |                 | <b>354</b>  |



| S<br>t<br>a<br>n<br>d   | Treatment Name | Acres | Stage1 CoverType                        | Size Density      | Stand Age | Treatment Type | Treatment Method       | Cover Type Objective          | Approval Status       |
|---|----------------|-------|---|-------------------|-----------|----------------|------------------------|-------------------------------|-----------------------|
| 1   | 61251001-Cut   | 3.2   | 42110 - Planted Red Pine                | High Density Pole | 48        | Harvest        | Systematic Thinning    | 42110 - Planted Red Pine      | Cmpt. Review Proposal |
| <p><u>Prescription</u> Cut 2 rows leave three. goal is to eventually push the stand to a more natural look due to its proximity to the river. Stand needs thinned bad. tight rows &amp; tall. Chip tops to minimize bark beetle potential</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>  |                |       |   |                   |           |                |                        |                               |                       |
| 3   | 61251003-Cut   | 17.7  | 4130 - Aspen                            | High Density Pole | 75        | Harvest        | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
| <p><u>Prescription</u> Would make a nice habitat improvement cut. Cut out all aspen and mark some mixed hardwoods to open up enough for aspen regen. save some or all oak, beech and conifer. Buffer ridge top by ~50' per natural river guidelines and buffer drain area @ west edge of stand. Access will be from private to the north</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>   |                |       |   |                   |           |                |                        |                               |                       |
| 5   | 61251005-Cut   | 11.8  | 4130 - Aspen                            | High Density Pole | 75        | Harvest        | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
| <p><u>Prescription</u> Big mature aspen mixed with hardwoods. Slopes down to Nelson Creek. Buffer creek by at least 175 likely more. Cut out all aspen and mark some hardwood so that stand is open enough for aspen regen. OK to leave some more pure maple areas thicker. Save all oak, conifer and beech for mast and thermal cover. Brush in skid trails with harvest to minimize erosion potential.</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p> |                |       |   |                   |           |                |                        |                               |                       |
| 7   | 61251007-Cut   | 4.0   | 42110 - Planted Red Pine                | High Density Pole | 48        | Harvest        | Systematic Thinning    | 42110 - Planted Red Pine      | Cmpt. Review Proposal |
| <p><u>Prescription</u> Cut 2 rows leave three. goal is to eventually push the stand to a more natural look due to its proximity to the river. Stand needs thinned bad. tight rows &amp; tall. Chip tops to minimize bark beetle potential</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>  |                |       |   |                   |           |                |                        |                               |                       |
| 9   | 61251009-Cut   | 1.7   | 4112 - Maple, Beech, Cherry Association | High Density Pole | 48        | Harvest        | Systematic Thinning    | 42110 - Planted Red Pine      | Cmpt. Review Proposal |
| <p><u>Prescription</u> Cut 2 rows leave three. goal is to eventually push the stand to a more natural look due to its proximity to the river. Stand needs thinned bad. tight rows &amp; tall. Chip tops to minimize bark beetle potential</p> <p><u>Specs:</u></p> <p><u>Other Comments:</u></p> <p><u>Next Steps:</u></p>  |                |       |   |                   |           |                |                        |                               |                       |



| S<br>t<br>a<br>n<br>d | Treatment<br>Name      | Acres | Stage1<br>CoverType | Size<br>Density   | Stand<br>Age | Treatment<br>Type | Treatment<br>Method       | Cover Type<br>Objective     | Approval<br>Status       |
|-----------------------|------------------------|-------|---------------------|-------------------|--------------|-------------------|---------------------------|-----------------------------|--------------------------|
| 23                    | 61251023_sm<br>all-Cut | 7.6   | 4130 - Aspen        | High Density Pole | 38           | Harvest           | Clearcut with<br>Reserves | 4133 - Aspen, Mixed<br>Pine | Cmpt. Review<br>Proposal |

Prescription Some is nice and some is quaking in rough shape. May want to treat the west ~1/3 of the stand to break up the aspen age of the area. Save all  
Specs: pine and Fir under 4" dbh if treated. East end has a W6 inclusion. Buffer river by at least 175' if cut.

Other  
Comments:

Next  
Steps:

|    |              |       |                             |                   |    |         |                     |                             |                          |
|----|--------------|-------|-----------------------------|-------------------|----|---------|---------------------|-----------------------------|--------------------------|
| 28 | 61251028-Cut | 149.5 | 42110 - Planted<br>Red Pine | High Density Pole | 43 | Harvest | Systematic Thinning | 42110 - Planted Red<br>Pine | Cmpt. Review<br>Proposal |
|----|--------------|-------|-----------------------------|-------------------|----|---------|---------------------|-----------------------------|--------------------------|

Prescription Per last YOE comments, stand is set up to be row thinned under "Big FLat Add On". All aspen is being taken out over 4" and maple in the take  
Specs: rows is to be cut. Oak and cherry are being saved for diversity. Add Stand 42 to this sale if Lutke is interested in a few more cords of red pine @  
contract price.

Other  
Comments:

Next  
Steps:

|    |              |     |              |                   |    |         |                           |                             |                          |
|----|--------------|-----|--------------|-------------------|----|---------|---------------------------|-----------------------------|--------------------------|
| 29 | 61251029-Cut | 2.6 | 4130 - Aspen | High Density Pole | 45 | Harvest | Clearcut with<br>Reserves | 4133 - Aspen, Mixed<br>Pine | Cmpt. Review<br>Proposal |
|----|--------------|-----|--------------|-------------------|----|---------|---------------------------|-----------------------------|--------------------------|

Prescription South end has some smaller diameter maple. Cut out all aspen, maple, birch and fir over 4" dbh. Save all pine for retention and buffer LO @ east  
Specs: end slightly for retention adn future snags as well.

Other  
Comments:

Next  
Steps:

|    |              |     |  |                  |    |         |             |                   |                          |
|----|--------------|-----|--|------------------|----|---------|-------------|-------------------|--------------------------|
| 30 | 61251030-Cut | 7.2 | 4199 - Other Mixed<br>Upland Deciduous | High Density Log | 75 | Harvest | Shelterwood | 4121 - Oak, Aspen | Cmpt. Review<br>Proposal |
|----|--------------|-----|--|------------------|----|---------|-------------|-------------------|--------------------------|

Prescription Big oak mixed with red maple and aspen. thick understory of ironwood in spots. Cut all maple and aspen and cut some oak to try to stump  
Specs: sprout. Save all conifer.

Other  
Comments:

Next  
Steps:

|    |              |     |                             |                  |    |         |                |                             |                          |
|----|--------------|-----|-----------------------------|------------------|----|---------|----------------|-----------------------------|--------------------------|
| 31 | 61251031-Cut | 6.5 | 42210 - Natural<br>Red Pine | High Density Log | 75 | Harvest | Crown Thinning | 42210 - Natural Red<br>Pine | Cmpt. Review<br>Proposal |
|----|--------------|-----|-----------------------------|------------------|----|---------|----------------|-----------------------------|--------------------------|

Prescription Nice natural pine stand. overdue for a thinning. Cut out all aspen, jack and maple and thin from below taking out the trees that are overtopped.  
Specs: OK to mark some nice log and pole trees as well but overall try to cut the suppressed trees releassing the dominant and co-dom trees.

Other  
Comments:

Next  
Steps:



| S<br>t<br>a<br>n<br>d | Treatment<br>Name | Acres | Stage1<br>CoverType | Size<br>Density   | Stand<br>Age | Treatment<br>Type | Treatment<br>Method    | Cover Type<br>Objective  | Approval<br>Status    |
|-----------------------|-------------------|-------|---------------------|-------------------|--------------|-------------------|------------------------|--------------------------|-----------------------|
| 32                    | 61251032-Cut      | 1.3   | 4130 - Aspen        | High Density Pole | 55           | Harvest           | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |

Prescription: Sparse to good aspen. Cut now for age class diversity + habitat improvement of the area. 175' buffer on river, save all conifer and oak for diversity and retention. stand is to small to leave a pocket of retention.

Other Comments:

Next Steps:

|    |              |     |              |                   |    |         |                        |                               |                       |
|----|--------------|-----|--------------|-------------------|----|---------|------------------------|-------------------------------|-----------------------|
| 34 | 61251034-Cut | 5.5 | 4130 - Aspen | High Density Pole | 55 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|----|--------------|-----|--------------|-------------------|----|---------|------------------------|-------------------------------|-----------------------|

Prescription: Sparse to good aspen. Cut now for age class diversity + habitat improvement of the area. 175' buffer on river, save all conifer and oak for diversity and retention. Bulk of retention will be @ south end of stand to buffer opening and natural river.

Other Comments:

Next Steps:

|    |              |      |                          |                   |    |         |                        |                          |                       |
|----|--------------|------|--------------------------|-------------------|----|---------|------------------------|--------------------------|-----------------------|
| 38 | 61251038-Cut | 14.2 | 4133 - Aspen, Mixed Pine | High Density Pole | 42 | Harvest | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |
|----|--------------|------|--------------------------|-------------------|----|---------|------------------------|--------------------------|-----------------------|

Prescription: Could cut or hold as needed. Cut all A, Maple, and fir over 4" dbh. OK to mark some pine to cut as well but save the majority for species diversity. Retention will be pine, small fir a few oak and the edges of stand. Save some cherry as well.

Other Comments:

Next Steps:

|    |              |      |              |                     |    |         |                        |                          |                       |
|----|--------------|------|--------------|---------------------|----|---------|------------------------|--------------------------|-----------------------|
| 44 | 61251044-Cut | 54.1 | 4130 - Aspen | Medium Density Pole | 40 | Harvest | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |
|----|--------------|------|--------------|---------------------|----|---------|------------------------|--------------------------|-----------------------|

Prescription: Poor quality aspen, ~ 3 stick stuff. aspen is in rough shape. Final harvest but save all oak and pine for diversity and retention.

Other Comments:

Next Steps:

|    |                     |     |              |                   |    |         |                        |                          |                       |
|----|---------------------|-----|--------------|-------------------|----|---------|------------------------|--------------------------|-----------------------|
| 50 | 61251050_sm all-Cut | 8.8 | 4130 - Aspen | High Density Pole | 45 | Harvest | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |
|----|---------------------|-----|--------------|-------------------|----|---------|------------------------|--------------------------|-----------------------|

Prescription: variable stand some is ready to be cut and some is pretty small yet. Cut the middle ~1/3 of the stand to break up the aspen age class. Rest should hold 10 yrs good. Save all conifer and oak, final harvest the rest.

Other Comments:

Next Steps:

**Table 3 -- Treatments Prescribed  
with No Limiting Factor**



S  
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a  
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d

| Treatment Name         | Acres | Stage1 CoverType               | Size Density      | Stand Age | Treatment Type | Treatment Method      | Cover Type Objective           | Approval Status       |
|------------------------|-------|--------------------------------|-------------------|-----------|----------------|-----------------------|--------------------------------|-----------------------|
| <b>51 61251051-Cut</b> | 20.3  | 4110 - Sugar Maple Association | High Density Pole | 68        | Harvest        | Single Tree Selection | 4110 - Sugar Maple Association | Cmpt. Review Proposal |

Prescription: Thinned last YOE but looks liek alot of the smaller stuff was left. Could do another light thinning, will likely be pretty low volumes but should sell  
Specs: as a small firewood or pulp sale. Cut out most or all ash as it is being hit by EAB :-)

Other Comments:

Next Steps:

|                               |     |                      |                   |    |         |          |                      |                       |
|-------------------------------|-----|----------------------|-------------------|----|---------|----------|----------------------|-----------------------|
| <b>53 61251053_sm all-Cut</b> | 7.0 | 6112 - Lowland Aspen | High Density Pole | 65 | Harvest | Clearcut | 6112 - Lowland Aspen | Cmpt. Review Proposal |
|-------------------------------|-----|----------------------|-------------------|----|---------|----------|----------------------|-----------------------|

Prescription: Nice aspen, most is lowland but some is pretty dry. could possibly do a small commercial habitat cut. Should regenerate nicely. Or just hold for  
Specs: river vegetative buffer. minimum 175' river buffer if cut.

Other Comments:

Next Steps:

|                               |      |              |                   |    |         |                        |                               |                       |
|-------------------------------|------|--------------|-------------------|----|---------|------------------------|-------------------------------|-----------------------|
| <b>60 61251060_sm all-Cut</b> | 17.5 | 4130 - Aspen | High Density Pole | 50 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|-------------------------------|------|--------------|-------------------|----|---------|------------------------|-------------------------------|-----------------------|

Prescription: Nice aspen for the most part. Buffer drain area in middle of stand and leave a 175' buffer on river, these areas will serve as retention. save all  
Specs: balsam under 4" dbh, all oak and any pine. Should regenerate nicely. Save west half of stand for age diversity

Other Comments:

Next Steps:

|                               |     |                             |                   |    |         |                        |                             |                       |
|-------------------------------|-----|-----------------------------|-------------------|----|---------|------------------------|-----------------------------|-----------------------|
| <b>67 61251067_sm all-Cut</b> | 5.2 | 4136 - Aspen, Mixed Conifer | High Density Pole | 45 | Harvest | Clearcut with Reserves | 4136 - Aspen, Mixed Conifer | Cmpt. Review Proposal |
|-------------------------------|-----|-----------------------------|-------------------|----|---------|------------------------|-----------------------------|-----------------------|

Prescription: Seems to have 2 or 3 ages of aspen. oldest looks to be about 45 and some looks to be 35ish, Far northeast seems to be older stuff for the most  
Specs: part. Clearcut this portion but save small buffer around vernal pond and save some or all pine and oak. look to do a diameter limit on fir, cut all over 4" dbh? This will help establish property line as well. Needed corners are already in.

Other Comments:

Next Steps:

**Total Treatment  
Acreage Proposed: 345.8**

**Table 4 -- Treatments Prescribed with a Limiting Factor**



S  
t  
a  
n  
d

| Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|
|----------------|-------|------------------|--------------|-----------|----------------|------------------|----------------------|-----------------|

#Error

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

**Total Treatment Acreage Proposed: 0**

| S<br>t<br>a<br>n<br>d | Traverse City Mgt. Unit                   |                     | 5 – Forested Stands |              |             | Compartment: 251  | General<br>Comments: |
|-----------------------|---|---------------------|---------------------|--------------|-------------|---|----------------------|
|                       | Level 4<br>Cover Type                     | Size<br>Density     | Acres               | Stand<br>Age | BA<br>Range | Year of Entry: 2013   |                      |
| 1                     | 42110 - Planted Red Pine                  | High Density Pole   | 3.2                 | 48           | 200+        | Stand is very thick and very tall. Cut two rows leave three rows due to tight spacing. Push towards more of a natural stand due to proximity to the river. Chip tops to minimize bark beetle potential. |                      |
| 2                     | 4130 - Aspen                              | High Density Pole   | 5.2                 | 55           | 81-110      |   |                      |
| 3                     | 4130 - Aspen                              | High Density Pole   | 28.0                | 75           | 141-170     |   |                      |
| 4                     | 6118 - Lowland Deciduous with Cedar       | High Density Pole   | 10.9                | 65           | 111-140     |   |                      |
| 5                     | 4130 - Aspen                              | High Density Pole   | 12.9                | 75           | 111-140     |   |                      |
| 7                     | 42110 - Planted Red Pine                  | High Density Pole   | 4.0                 | 48           | 200+        |   |                      |
| 8                     | 4133 - Aspen, Mixed Pine                  | High Density Pole   | 8.9                 | 55           | 81-110      |   |                      |
| 9                     | 4112 - Maple, Beech, Cherry Association   | High Density Pole   | 1.7                 | 48           | 141-170     |   |                      |
| 10                    | 6119 - Mixed Lowland Deciduous Forest     | Medium Density Pole | 6.5                 | 65           | 51-80       |   |                      |
| 12                    | 6139 - Mixed Lowland Forest               | High Density Pole   | 49.2                | 65           | 111-140     |   |                      |
| 13                    | 6119 - Mixed Lowland Deciduous Forest     | High Density Pole   | 8.9                 | 65           | 111-140     |   |                      |
| 14                    | 4119 - Mixed Northern Hardwoods           | Low Density Pole    | 4.1                 | 45           | 1-50        |   |                      |
| 15                    | 6115 - Lowland Ash                        | Medium Density      | 4.0                 | 55           | 1-50        |   |                      |
| 16                    | 42111 - Planted Red Pine, Mixed Deciduous | High Density Pole   | 21.6                | 48           | 111-140     |   |                      |
| 17                    | 4134 - Aspen, Spruce/Fir                  | High Density Pole   | 22.7                | 38           | 51-80       |   |                      |
| 18                    | 4136 - Aspen, Mixed Conifer               | High Density Pole   | 80.8                | 45           | 111-140     |   |                      |
| 19                    | 42260 - Natural Pine, Mixed Deciduous     | Low Density Pole    | 14.5                | 60           | 141-170     |   |                      |
| 20                    | 4119 - Mixed Northern Hardwoods           | High Density Pole   | 10.0                | 60           | 51-80       |   |                      |





| Stand | Traverse City Mgt. Unit                    |                     |       | 5 – Forested Stands |             | Compartment: 251<br>Year of Entry: 2013   |
|-------|--|---------------------|-------|---------------------|-------------|---|
|       | Level 4<br>Cover Type                      | Size<br>Density     | Acres | Stand<br>Age        | BA<br>Range | General<br>Comments:  |
| 21    | 6132 - Mixed Lowland Forest with Cedar     | High Density Pole   | 16.8  | 71                  | 171-200     |   |
| 22    | 4119 - Mixed Northern Hardwoods            | High Density Pole   | 33.0  | 65                  | 51-80       |   |
| 23    | 4130 - Aspen                               | High Density Pole   | 25.2  | 38                  | 81-110      |   |
| 24    | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Pole   | 10.2  | 45                  | 81-110      |   |
| 25    | 6115 - Lowland Ash                         | Low Density Sapling | 8.7   | 45                  | 1-50        |   |
| 26    | 6118 - Lowland Deciduous with Cedar        | Low Density Pole    | 6.8   | 56                  | 1-50        |   |
| 28    | 42110 - Planted Red Pine                   | High Density Pole   | 149.5 | 43                  | 171-200     | Per last YOE comments, stand is set up to be row thinned under "Big FLat Add On". All aspen is being taken out over 4" and maple in the take rows is to be cut. Oak and cherry are being saved for diversity. |
| 29    | 4130 - Aspen                               | High Density Pole   | 2.6   | 45                  | 81-110      |   |
| 30    | 4199 - Other Mixed Upland Deciduous        | High Density Log    | 7.2   | 75                  | 111-140     |   |
| 31    | 42210 - Natural Red Pine                   | High Density Log    | 6.5   | 75                  | 171-200     |   |
| 32    | 4130 - Aspen                               | High Density Pole   | 1.3   | 55                  | 81-110      |   |
| 33    | 6112 - Lowland Aspen                       | High Density Pole   | 1.7   | 65                  | 111-140     |   |
| 34    | 4130 - Aspen                               | High Density Pole   | 5.5   | 55                  | 81-110      |   |
| 35    | 6112 - Lowland Aspen                       | High Density Pole   | 36.9  | 60                  | 111-140     |   |
| 36    | 42110 - Planted Red Pine                   | High Density Pole   | 49.5  | 48                  | 111-140     |   |
| 37    | 42110 - Planted Red Pine                   | High Density Pole   | 6.2   | 45                  | 111-140     |   |
| 38    | 4133 - Aspen, Mixed Pine                   | High Density Pole   | 14.2  | 42                  | 111-140     |   |

| S<br>t<br>a<br>n<br>d | Traverse City Mgt. Unit                          |                         | 5 – Forested Stands |              |             | Compartment: 251<br>Year of Entry: 2013 | General<br>Comments: |
|-----------------------|--|-------------------------|---------------------|--------------|-------------|---|----------------------|
|                       | Level 4<br>Cover Type                            | Size<br>Density         | Acres               | Stand<br>Age | BA<br>Range |   |                      |
| 40                    | 4133 - Aspen, Mixed<br>Pine                      | High Density<br>Pole    | 32.4                | 37           | 51-80       |   |                      |
| 41                    | 4130 - Aspen                                     | High Density<br>Sapling | 3.3                 | 25           |             |   |                      |
| 42                    | 42110 - Planted Red<br>Pine                      | High Density<br>Pole    | 0.8                 | 45           | 141-170     |   |                      |
| 43                    | 6128 - Lowland<br>Coniferous, Mixed<br>Deciduous | High Density<br>Pole    | 30.7                | 75           | 81-110      |   |                      |
| 44                    | 4130 - Aspen                                     | Medium<br>Density Pole  | 54.1                | 40           | 51-80       |   |                      |
| 46                    | 4136 - Aspen, Mixed<br>Conifer                   | High Density<br>Sapling | 15.4                | 7            |             |   |                      |
| 47                    | 4136 - Aspen, Mixed<br>Conifer                   | High Density<br>Sapling | 11.4                | 5            |             |   |                      |
| 49                    | 42110 - Planted Red<br>Pine                      | High Density<br>Pole    | 5.7                 | 43           | 141-170     |   |                      |
| 50                    | 4130 - Aspen                                     | High Density<br>Pole    | 32.4                | 45           | 81-110      |   |                      |
| 51                    | 4110 - Sugar Maple<br>Association                | High Density<br>Pole    | 20.3                | 68           | 141-170     |   |                      |
| 52                    | 4130 - Aspen                                     | High Density<br>Sapling | 6.4                 | 5            |             |   |                      |
| 53                    | 6112 - Lowland Aspen                             | High Density<br>Pole    | 22.7                | 65           | 111-140     |   |                      |
| 55                    | 42110 - Planted Red<br>Pine                      | High Density<br>Pole    | 16.9                | 48           | 111-140     |   |                      |
| 56                    | 6122 - Black Spruce                              | High Density<br>Pole    | 5.0                 | 45           | 81-110      |   |                      |
| 58                    | 4113 - R.Maple, Conifer                          | Medium<br>Density Pole  | 12.8                | 61           | 1-50        |   |                      |
| 59                    | 42210 - Natural Red<br>Pine                      | High Density<br>Pole    | 13.8                | 52           | 81-110      |   |                      |
| 60                    | 4130 - Aspen                                     | High Density<br>Pole    | 44.0                | 50           | 141-170     |   |                      |
| 61                    | 42110 - Planted Red<br>Pine                      | High Density<br>Pole    | 10.0                | 48           | 111-140     |   |                      |



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## Traverse City Mgt. Unit

## 5 – Forested Stands

Compartment: 251  
Year of Entry: 2013

|    | Level 4<br>Cover Type          | Size<br>Density        | Acres | Stand<br>Age | BA<br>Range | General<br>Comments: |
|----|--------------------------------|------------------------|-------|--------------|-------------|----------------------|
| 63 | 4130 - Aspen                   | High Density<br>Pole   | 1.7   | 55           | 111-140     |                      |
| 64 | 6124 - Lowland Spruce-<br>Fir  | High Density<br>Pole   | 64.5  | 75           | 111-140     |                      |
| 65 | 6112 - Lowland Aspen           | High Density<br>Pole   | 2.9   | 45           | 51-80       |                      |
| 66 | 42110 - Planted Red<br>Pine    | High Density<br>Pole   | 46.9  | 48           | 111-140     |                      |
| 67 | 4136 - Aspen, Mixed<br>Conifer | High Density<br>Pole   | 31.3  | 45           | 81-110      |                      |
| 69 | 6122 - Black Spruce            | Low Density<br>Pole    | 26.7  | 55           | 1-50        |                      |
| 70 | 6120 - Lowland Cedar           | High Density<br>Pole   | 8.4   | 65           | 81-110      |                      |
| 71 | 6122 - Black Spruce            | Medium<br>Density Pole | 13.0  | 55           | 1-50        |                      |



| Stand | Cover Type                | Acres | Managed Site | Management Priority (Objective) | General Comments:             |
|-------|---------------------------|-------|--------------|---------------------------------|-------------------------------|
| 6     | 310 - Herbaceous Openland | 1.8   | No           | Unspecified                     |                               |
| 11    | 50 - Water                | 26.0  | No           | Unspecified                     |                               |
| 27    | 622 - Lowland Shrub       | 4.3   | No           | Unspecified                     |                               |
| 39    | 310 - Herbaceous Openland | 2.0   | No           | Unspecified                     |                               |
| 45    | 50 - Water                | 8.5   | No           | Unspecified                     | manistee river                |
| 48    | 622 - Lowland Shrub       | 5.2   | No           | Unspecified                     |                               |
| 54    | 622 - Lowland Shrub       | 6.0   | No           | Unspecified                     |                               |
| 57    | 310 - Herbaceous Openland | 2.3   | No           | Unspecified                     |                               |
| 62    | 310 - Herbaceous Openland | 3.2   | Yes          | Unspecified                     | boat launch on Manistee river |
| 68    | 622 - Lowland Shrub       | 11.5  | No           | Unspecified                     |                               |



### 7 – 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.

| Stand | SCA Type | SCA Name | Acres | Comments |
|-------|----------|----------|-------|----------|
|       |          |          |       |          |



**8 – 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 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               | Concentrated Recreation Area | Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.  |
| HCVA              | Natural Rivers               | There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.   |