



TRAVERSE CITY FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 23 ENTRY YEAR: 2013

Compartment Acreage: 1,604 acres County: Benzie

Stand Examiner: Craig Allen

Legal Description: T25N- R14W; Sections 1, 12, 13

Management Goals: This compartment was previously managed under the Pere Marquette State Forest Management Plan. Under this plan the past emphasis of management was designated as “intensive vegetative management” for timber production.

Much of the aspen in this compartment was harvested and reestablished 30 to 45 years ago. There is now a need to start breaking apart some of these large parcels to make new age classes of aspen to help even out the age class distribution in the area. Also, targeting some of the older aspen stands (50+years) that are in need of reestablishment. This creates a more sustainable and healthy forest resource.

Also, on the subject of forest health, there is a serious component of Beech Bark disease in this compartment. The hardwood forests south of Wallin road are experiencing and will continue to see heavy impacts. Forest harvest treatments in these stands are proposed to remove most of the effected materials and try to regenerate aspen and maple in these stands.

Other scheduled treatments in the compartment include thinning of red pine plantations, and harvesting hardwood areas that have a good aspen component to continue diversifying the aspen/hardwood age class distribution which will create vital wildlife habitat and maintain sustainable forest timber production for the future.

Soil and Topography: The soils in the area are Kalkaska soils comprised of excessively drained deep sands. The terrain is mostly level although the south half is rolling hills. A large wetland complex is located in the southeast quarter of section 1.

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

This compartment is on the eastern end of a large area of state ownership in Weldon Township. The area is very rural and currently not experiencing much new private development. This compartment historically had some areas cleared with attempts towards homestead farming. Due to perhaps, poor soil conditions, along with some drainage issues, these efforts failed and the cleared areas were left barren. Later, some of these areas were either left to re-vegetate naturally or planted creating red pine plantations that are present today. A large stand on the north end of the compartment was left in a semi open condition and never planted.

Unique, Natural Features: There is a large wetland complex that is located in the southeast quarter of section 1, mostly located on private property.

Archeological, Historical, and Cultural Features: There are a few old homestead sites within or near the compartment. There are old and reclaimed railroad grades within or near the compartment that were used during the original logging operations in this area around the turn of the century. These grades have mostly returned to a natural forest condition and can be quite difficult to distinguish.

Special Management Designations or Considerations: No special management designations within this compartment.

Watershed and Fisheries Considerations: The headwaters of Dair Creek are located in Compartment 23. Dair Creek is a high-quality trout stream tributary to the Betsie River, and supports self-sustaining populations of brook trout, brown trout, steelhead, coho salmon, and Chinook salmon. (*Comments by Mark Tonello, DNR Fisheries Biologist, Cadillac, OSC*).

Wildlife Habitat Considerations: This compartment lies entirely within a broad flat outwash plain, with excessively drained soils. However, the northern two sections of this compartment do have several wet inclusions that harbor lowland tree and shrub species, such as blueberry, leatherleaf, willow, wild raisin, and quaking aspen. When necessary, habitat cuts should be used to regenerate these lowland habitat components. Upland areas should continue to be managed for a variety of forest age classes, successional stages, and patch sizes, as well as grass/shrub openings consistent with fire driven dynamics that historically shaped vegetation on this LTA. The aspen stands in this area have a component of white pine and hardwoods that should be used as leave trees/clumps as the aspen is harvested. Red oak is also found occasionally and should be used as leave trees when harvesting surrounding aspen. The incorporation of snags, leave trees, brush piles, and downed logs in these cuts will help to replicate a wildfire-altered forest and increase wildlife use by species like grouse, woodcock, golden-winged warbler, and deer. The southern section of this compartment is slightly hilly and dominated by northern hardwoods. This would be an area to try different methods of hardwood regeneration, such as small patch cuts within the hardwood stands along with the standard thinnings. Patch cuts should be designed to mimic small blow downs that would occur in areas affected by wind, such as windward side of slopes or ridge tops. Hardwood treatments should be designed to incorporate the preservation of tree species diversity, the retention of mature mast producing trees, and the protection of den, cavity, and downed trees. Tops should be left onsite, unchipped, and in scattered piles for habitat. Species benefiting from management of this community type include the red-eyed vireo, four-toed salamander, common gray fox, and broad-winged hawk. (*Comments by Steve Griffith, DNR Wildlife Div. Traverse City F.O.*)

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and coarse-textured glacial till to the south. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Devonian Ellsworth Shale. The Ellsworth is used for cement products. The nearest gravel pit is within one and one-half miles to the east in Section 8. Gravel potential in the compartment is considered good, especially North Hills. This area is located northwest of the Antrim Shale gas play. A few leases for oil and gas development are located in the general area, including Section 12. The Antrim Shale appears to have potential. Two Niagaran wells were drilled in this compartment previously. (*Comments by Tom Hoane, DNR Geologist, FM Division*)

Vehicle Access: There are several gravel and seasonal county roads in and around the compartment offering good access to State lands. Thompsonville road running along the east edge of the compartment is the only paved road in the area. There are also a few forest "2-track" roads in various areas of the compartment that are in good condition and are used for public and DNR land management accessibility.

Survey Needs: There is a need to request a survey along the southwest corner of section section 12 and to survey around the private land in the center of section 13.

Recreational Facilities and Opportunities: The Betsie River snowmobile trail goes along the north edge of the compartment on Aylsworth road. Various types of dispersed forest recreation occur in the compartment. Examples include hunting, trapping, cross-country skiing, hiking, mushroom/berry picking, biking, horseback riding and dispersed camping.

Fire Protection: DNR Wildfire Protection is from the Platte River Field Office. Travel time is acceptable, and access in this compartment is good. There are only a couple residences within this compartment, so urban interface issues are not too much of a concern. Forest cover types in this area tend not to support catastrophic fires. VFD protection is from the Thompsonville Volunteer Fire Dept. (*Comments by Rod Rader, DNR Fire Officer Supervisor, Traverse City F.O.*).

Additional Compartment Information:

* **Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

Cover Type by Age Class

Proposed Treatments – No Limiting Factors

Proposed Treatments – With Limiting Factors

* **The following information is displayed on the attached compartment maps:**

Base feature information, stand numbers, cover types

Proposed treatments

Proposed road access system

Stand Boundary Map

Compartment 23
 T25N, R14W, Sec. 1, 12-13
 County: Benzie
 Unit: Traverse City
 YOE: 2013
 Acres: 1,604 GIS Calculated
 Stand Examiner: Craig Allen
 Map Revised: 5/23/2011
 Map Phase: Pre-Review

1
 12
 13

N

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
- Intermittent Stream/Drain
- Stream
- Snowmobile Trails
- Stand Boundaries

Forest Stands

Level 3

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

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland

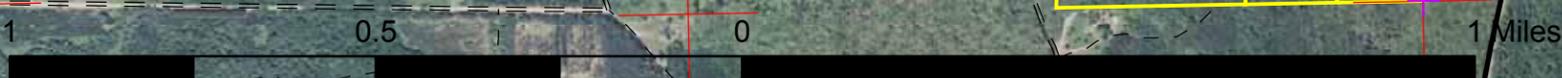
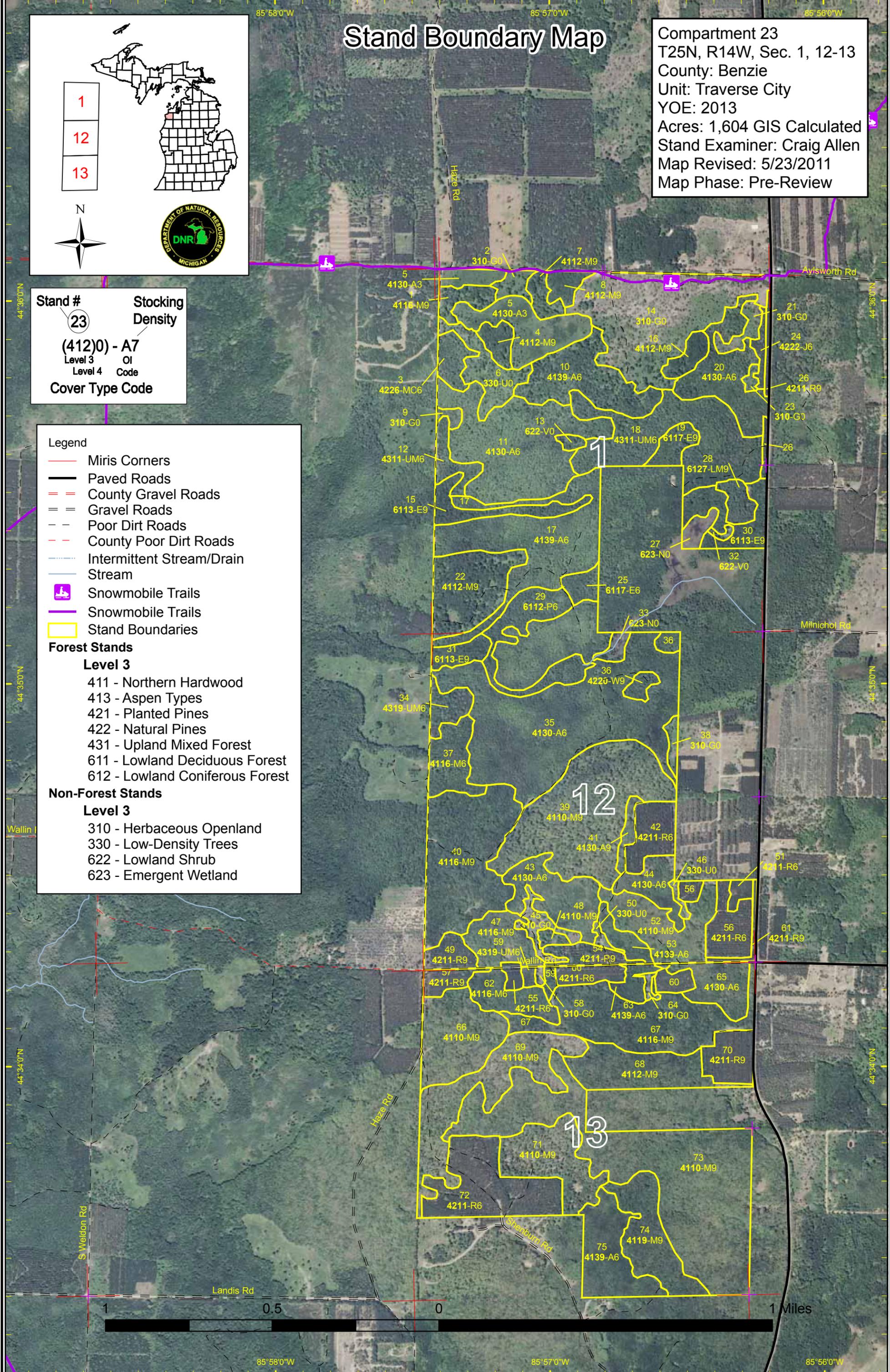


Table 1 – Total Acres by Cover Type and Age Class



| | 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 + | | Uneren Age |
| Aspen | 0 | 32 | 0 | 76 | 237 | 0 | 70 | 0 | 36 | 35 | 0 | 0 | 0 | 0 | 0 | 487 |
| Bog | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Herbaceous Openland | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| Jack Pine | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Low-Density Trees | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Lowland Aspen/Balsam Poplar | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| Lowland Conifers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 |
| Lowland Deciduous | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 53 |
| Marsh | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Natural Mixed Pines | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 16 | 81 | 0 | 18 | 92 | 122 | 141 | 191 | 0 | 0 | 0 | 661 |
| Red Pine | 0 | 0 | 0 | 0 | 3 | 50 | 78 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 138 |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 4 | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| White Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 135 | 32 | 0 | 76 | 290 | 134 | 225 | 33 | 131 | 209 | 141 | 198 | 0 | 0 | 0 | 1604 |



Table 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit
Year of Entry 2013

Compartment 023
Total Compartment Acres: 1604

Acres by Treatment Type

| | | | | |
|--------------------------|-------------------------|-------------------|---------------------|-----------|
| Commercial Harvest - 244 | Site Prep - 0 | Tree Planting - 0 | Prescribed Burn - 0 | Other - 0 |
| Habitat Cut - 0 | Opening Maintenance - 0 | Tree Seeding - 0 | Pesticide - 0 | |

Cover Type by Harvest Method

| | Clearcut | Selection | Seed Tree | Shelterwood | Thinning | Other - Specify | Total Acres |
|----------------------------|------------|-----------|-----------|-------------|----------|-----------------|-------------|
| Aspen | 54 | 0 | 0 | 0 | 0 | 0 | 54 |
| Northern Hardwood | 113 | 42 | 0 | 0 | 0 | 0 | 155 |
| Red Pine | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| Upland Mixed Forest | 32 | 0 | 0 | 0 | 0 | 0 | 32 |
| Total | 199 | 42 | 0 | 0 | 3 | 0 | 244 |



| S t a n d | Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|-----------------------|-------------------|-------|---|------------------|--------------|-------------------|-----------------------|-----------------------------------|--------------------------|
| 8 | 61023008-Cut | 6.0 | 4112 - Maple, Beech, Cherry Association | High Density Log | 100 | Harvest | Single Tree Selection | 4110 - Sugar Maple Association | Cmpt. Review Proposal |

Prescription --Craig Allen comments: Select mark to thin stand following complete marker guidelines. Reduce stand residual volume to approx.80 BA.
Specs:

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|----------------------------------|-------------------|----|---------|---------------------------|----------------------------------|--------------------------|
| 10 | 61023010-Cut | 35.3 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 80 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|----|--------------|------|----------------------------------|-------------------|----|---------|---------------------------|----------------------------------|--------------------------|

Prescription C. Allen--Clearcut all hardwoods to regenerate and expand aspen,. Could mark individual leave trees and/or leave island(s). Leave all pine.
Specs:

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|-----|---|------------------|----|---------|-----------------------|---|--------------------------|
| 16 | 61023016-Cut | 6.6 | 4112 - Maple, Beech, Cherry Association | High Density Log | 80 | Harvest | Single Tree Selection | 4112 - Maple, Beech, Cherry Association | Cmpt. Review Proposal |
|----|--------------|-----|---|------------------|----|---------|-----------------------|---|--------------------------|

Prescription --Craig Allen comments: Select mark following complete marker guidelines and reduce residual BA to approx.80 .
Specs:

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|---------------------------|-------------------|----|---------|---------------------------|-----------------------------|--------------------------|
| 18 | 61023018-Cut | 32.0 | 4311 - Pine, Aspen Mix | High Density Pole | 51 | Harvest | Clearcut with Reserves | 4133 - Aspen, Mixed Pine | Cmpt. Review Proposal |
|----|--------------|------|---------------------------|-------------------|----|---------|---------------------------|-----------------------------|--------------------------|

Prescription --Craig Allen comments: Clearcut aspen, maple and white pine under 12 inch DBH to regenerate and expand aspen component. Possibly
Specs: create some leave islands and/or leave trees of aspen, maple.

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|--------------|-------------------|----|---------|---------------------------|--------------|--------------------------|
| 20 | 61023020-Cut | 19.0 | 4130 - Aspen | High Density Pole | 75 | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
|----|--------------|------|--------------|-------------------|----|---------|---------------------------|--------------|--------------------------|

Prescription --Craig Allen comments: Clearcut aspen, maple and white pine under 12 inch DBH to regenerate and expand aspen component. Possibly
Specs: create some leave islands and/or leave trees of aspen, maple.

Other
Comments:

Next
Steps:



| S t a n d | Treatment Name | Acres | Stage1 CoverType | Size Density | Stand Age | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|-----------------------|-------------------|-------|-------------------------------------|------------------|--------------|-------------------|---------------------------|----------------------------------|--------------------------|
| 40 | 61023040-Cut | 38.5 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 48 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |

Prescription --Craig Allen comments: Clearcut all hardwoods to regenerate and expand aspen component. Mark some leave islands and/or scattered leave
Specs: trees of hardwoods.

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|-------------------------------------|------------------|----|---------|---------------------------|----------------------------------|--------------------------|
| 47 | 61023047-Cut | 18.0 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 65 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|----|--------------|------|-------------------------------------|------------------|----|---------|---------------------------|----------------------------------|--------------------------|

Prescription --Craig Allen comments: Cut all aspen, basswood, ironwood and select mark maple and ash. Objective of cut to regenerate and expand aspen
Specs: component of the stand and possibly get some sugar maple regen as well. Mark a few leave trees of aspen.

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|-----|-----------------------------|-------------------|----|---------|---------------------|-----------------------------|--------------------------|
| 55 | 61023055-Cut | 2.8 | 42110 - Planted Red Pine | High Density Pole | 55 | Harvest | Systematic Thinning | 42110 - Planted Red Pine | Cmpt. Review Proposal |
|----|--------------|-----|-----------------------------|-------------------|----|---------|---------------------|-----------------------------|--------------------------|

Prescription C. Allen--thin stand by removal of approx. 1/3 volume.
Specs:

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|-------------------------------------|------------------|----|---------|---------------------------|----------------------------------|--------------------------|
| 67 | 61023067-Cut | 56.6 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 70 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |
|----|--------------|------|-------------------------------------|------------------|----|---------|---------------------------|----------------------------------|--------------------------|

Prescription --Craig Allen comments: Beech bark scale and disease is throughout this area. Clearcut aspen, ironwood, beech. Select mark maple to cut.
Specs: Objective to regenerate and expand aspen component as much as possible before beech begins dying and sprouting choking out stand with beech sprouts. May get some maple to regenerate too.

Other
Comments:

Next
Steps:

| | | | | | | | | | |
|----|--------------|------|---|------------------|----|---------|-----------------|------------------------------------|--------------------------|
| 68 | 61023068-Cut | 29.5 | 4112 - Maple, Beech, Cherry Association | High Density Log | 70 | Harvest | Group Selection | 4119 - Mixed Northern Hardwoods | Cmpt. Review Proposal |
|----|--------------|------|---|------------------|----|---------|-----------------|------------------------------------|--------------------------|

Prescription --Craig Allen comments: Beech bark scale and disease is throughout this area. Cut all ironwood, beech. Possibly select mark some of the
Specs: lower quality maple to cut. Objective to eliminate as much diseased beech as possible. Hope for regen of some sugar maple and red maple before stand gets choked out with beech sprouts.

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 244.4**

Table 4 -- Treatments Prescribed with a Limiting Factor



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

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Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: 0



| Stand | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|-------|--|----------------------|-------|-----------|----------|--|
| 1 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 7.9 | 85 | | |
| 3 | 42260 - Natural Pine, Mixed Deciduous | High Density Pole | 8.5 | 60 | 51-80 | |
| 4 | 4112 - Maple, Beech, Cherry Association | High Density Log | 6.6 | 85 | 51-80 | decent quality |
| 5 | 4130 - Aspen | High Density Sapling | 32.3 | 6 | | |
| 7 | 4112 - Maple, Beech, Cherry Association | High Density Log | 6.0 | 100 | 1-50 | lots of multi stemmed |
| 8 | 4112 - Maple, Beech, Cherry Association | High Density Log | 6.0 | 100 | 111-140 | good form and quality |
| 10 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 35.3 | 80 | | cc expand aspen |
| 11 | 4130 - Aspen | High Density Pole | 69.6 | 51 | | some areas sparse stocking and stunted growth. |
| 12 | 4311 - Pine, Aspen Mix | High Density Pole | 8.6 | 51 | 1-50 | |
| 15 | 6113 - Lowland Maple | High Density Log | 13.2 | 80 | 1-50 | |
| 16 | 4112 - Maple, Beech, Cherry Association | High Density Log | 6.6 | 80 | 111-140 | good quality |
| 17 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 63.5 | 35 | | |
| 18 | 4311 - Pine, Aspen Mix | High Density Pole | 59.7 | 51 | | occasional oak tree |
| 19 | 6117 - Lowland Deciduous, Mixed Coniferous | High Density Log | 7.6 | 80 | 51-80 | |
| 20 | 4130 - Aspen | High Density Pole | 31.7 | 75 | | |
| 22 | 4112 - Maple, Beech, Cherry Association | High Density Log | 33.1 | 80 | 1-50 | lots of multi stemmed open park like understory occasional sugar maple |
| 24 | 42220 - Natural Jack Pine | High Density Pole | 3.7 | 35 | | natural, seed in from adjacent stand. |
| 25 | 6117 - Lowland Deciduous, Mixed Coniferous | High Density Pole | 5.8 | 35 | 1-50 | |

| Stand | Traverse City Mgt. Unit | | 5 – Forested Stands | | | Compartment: 023 | General Comments: |
|-------|----------------------------------|-------------------|---------------------|-----------|----------|---------------------|--|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | Year of Entry: 2013 | |
| 26 | 42110 - Planted Red Pine | High Density Log | 4.6 | 85 | | | Thin strip of pine planted along edge of Thompsonville road for wind break and erosion control. Retain |
| 28 | 6127 - Lowland Pine | High Density Log | 6.7 | 100 | 1-50 | | |
| 29 | 6112 - Lowland Aspen | High Density Pole | 24.3 | 35 | | | drainage |
| 30 | 6113 - Lowland Maple | High Density Log | 18.7 | 81 | 1-50 | | also contains some tamarack |
| 31 | 6113 - Lowland Maple | High Density Log | 7.4 | 80 | 81-110 | | drainage |
| 34 | 4319 - Mixed Upland Forest | High Density Pole | 8.8 | 57 | | | |
| 35 | 4130 - Aspen | High Density Pole | 150.7 | 35 | | | |
| 36 | 42200 - Natural White Pine | High Density Log | 6.2 | 66 | 1-50 | | aspen was cut when adjoining stand was cut. |
| 37 | 4116 - Mixed N. Hardwood - Aspen | High Density Pole | 17.0 | 48 | | | |
| 39 | 4110 - Sugar Maple Association | High Density Log | 80.9 | 97 | 51-80 | | thinned in |
| 40 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 64.1 | 48 | | | |
| 41 | 4130 - Aspen | High Density Log | 4.4 | 70 | | | |
| 42 | 42110 - Planted Red Pine | High Density Pole | 15.1 | 48 | 141-170 | | was thinned in |
| 43 | 4130 - Aspen | High Density Pole | 26.6 | 27 | | | |
| 44 | 4130 - Aspen | High Density Pole | 13.4 | 27 | | | |
| 47 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 18.0 | 65 | | | convert to aspen . cut all aspen, bass, iron. and select cut all other species |
| 48 | 4110 - Sugar Maple Association | High Density Log | 2.4 | 77 | 1-50 | | |
| 49 | 42110 - Planted Red Pine | High Density Log | 8.2 | 48 | 111-140 | | Thinned in 2004 |



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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 023

Year of Entry: 2013



| Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|---|-------------------|-------|--------------|-------------|---|
| 42110 - Planted Red Pine | High Density Pole | 3.2 | 38 | 51-80 | Trees were planted in a sand blow eroded area. Growth slow and poor quality, many multi stemmed trees |
| 4110 - Sugar Maple Association | High Density Log | 29.7 | 97 | 81-110 | good quality |
| 4139 - Aspen, Mixed Deciduous | High Density Pole | 7.4 | 27 | | |
| 42110 - Planted Red Pine | High Density Log | 8.7 | 48 | 111-140 | thinned 2004 |
| 42110 - Planted Red Pine | High Density Pole | 2.8 | 55 | 200+ | |
| 42110 - Planted Red Pine | High Density Pole | 17.8 | 48 | 111-140 | Thinned in 2004 |
| 42110 - Planted Red Pine | High Density Log | 6.5 | 55 | 111-140 | Thinned 2004 |
| 4319 - Mixed Upland Forest | High Density Pole | 3.6 | 45 | 1-50 | wildlife cover |
| 42110 - Planted Red Pine | High Density Pole | 12.2 | 55 | 111-140 | Thinned in 2004 |
| 42110 - Planted Red Pine | High Density Log | 3.0 | 75 | | Thin strip of pine planted along edge of Thompsonville road as a windbreak and erosion control. Retain for visual aesthetic |
| 4116 - Mixed N. Hardwood - Aspen | High Density Pole | 15.5 | 36 | | |
| 4139 - Aspen, Mixed Deciduous | High Density Pole | 6.1 | 36 | | |
| 4130 - Aspen | High Density Pole | 17.0 | 36 | | |
| 4110 - Sugar Maple Association | High Density Log | 35.6 | 80 | 81-110 | Aspen was cut out of stand in 1984 lots of multi stemmed |
| 4116 - Mixed N. Hardwood - Aspen | High Density Log | 59.3 | 70 | 1-50 | lots of beech bark disease |
| 4112 - Maple, Beech, Cherry Association | High Density Log | 30.3 | 70 | 81-110 | beech bark disease very heavy in stand may need to cut all beech |
| 4110 - Sugar Maple Association | High Density Log | 46.7 | 104 | 81-110 | Was select thinned in 2005 |
| 42110 - Planted Red Pine | High Density Log | 14.1 | 55 | 141-170 | Was thinned 2004 |

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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 023
Year of Entry: 2013

| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
|----|------------------------------------|----------------------|-------|--------------|-------------|---|
| 71 | 4110 - Sugar Maple Association | High Density Log | 32.4 | 85 | 51-80 | Was select thinned 2005 |
| 72 | 42110 - Planted Red Pine | High Density Pole | 42.1 | 55 | 111-140 | Thinned twiced.... in 1994 and 2005 |
| 73 | 4110 - Sugar Maple Association | High Density Log | 132.3 | 104 | 111-140 | Extremely hilly terrain. very difficult (machinery) access. |
| 74 | 4119 - Mixed Northern Hardwoods | High Density Log | 30.1 | 90 | 141-170 | lots of beech scale. aspen will be on its way out soon. |
| 75 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 29.1 | 27 | | just starting transition into pole |



| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
|-------|---------------------------|-------|--------------|---------------------------------|-------------------|
| 2 | 310 - Herbaceous Openland | 4.9 | N/A | Unspecified | |
| 6 | 330 - Low-Density Trees | 17.0 | N/A | Unspecified | |
| 9 | 310 - Herbaceous Openland | 2.1 | N/A | Unspecified | |
| 13 | 6225 - Bog | 2.0 | N/A | Unspecified | |
| 14 | 310 - Herbaceous Openland | 76.0 | N/A | Unspecified | |
| 21 | 310 - Herbaceous Openland | 5.7 | N/A | Unspecified | |
| 23 | 310 - Herbaceous Openland | 1.7 | N/A | Unspecified | |
| 27 | 623 - Emergent Wetland | 4.7 | N/A | Unspecified | |
| 32 | 6225 - Bog | 1.1 | N/A | Unspecified | |
| 33 | 623 - Emergent Wetland | 3.4 | N/A | Unspecified | |
| 38 | 310 - Herbaceous Openland | 3.2 | N/A | Unspecified | |
| 45 | 310 - Herbaceous Openland | 7.9 | N/A | Unspecified | |
| 46 | 330 - Low-Density Trees | 1.6 | N/A | Unspecified | |
| 50 | 330 - Low-Density Trees | 1.6 | N/A | Unspecified | |
| 58 | 310 - Herbaceous Openland | 1.0 | N/A | Unspecified | |
| 64 | 310 - Herbaceous Openland | 1.5 | N/A | 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 |
|-------------------|------|-------------|
|-------------------|------|-------------|
