

Report 1 – Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 24 Entry Year 2015 Acreage: 1,565 County Benzie Management Area: Benzie Outwash

Revision Date: 04/24/2013

Stand Examiner: Craig Allen

Legal Description:

T25N- R14W; Sections 2, 11, 14

Identified Planning Goals:

This compartment is a part of the Benzie Outwash Management Area. Within this compartment there is a high percentage of early successional forest types consisting primarily of aspen, red maple and cherry that will continue to require harvest treatments to balance age class distributions. We will concentrate our harvest efforts on the oldest age classes to regenerate. Most of the proposed treatments are targeting these stands. These cuts will have retention islands as well as various scattered retention trees remaining.

Soil and topography:

The topography is mostly level with some low lying areas. The upland areas consist of the well drained Kalkaska- Rubicon soil association. Lowland areas of wet and semi- wet flats are made up of permeable Roscommon- Augres- Croswell soils.

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

This compartment is part of a large block of State land, which includes some scattered private ownerships. The areas lying to the west, south and east of this compartment are also mostly State owned. The area lying to the north is private, and parceled into various ownerships.

Unique, Natural Features:

The headwaters for Dair Creek start in this compartment.

Archeological, Historical, and Cultural Features:

There are no known sites within the compartment.

Special Management Designations or Considerations:

The forested lowland headwaters of Dair Creek form an important deeryard area.

Watershed and Fisheries Considerations:

Compartment 24 comprises the headwater area for Dair Creek, a significant tributary of the Betsie River. Dair Creek is a Designated Trout Stream, with naturally reproducing populations of brook trout, brown trout, and rainbow trout (steelhead). Dair Creek is critical in that it produces a large percentage of the wild steelhead parr from the Betsie River watershed. Therefore, Dair Creek should receive the utmost protection. For that reason, we recommend managing for species other than aspen in stands near the streams, in order to reduce the potential for major beaver impacts on the headwaters of this important stream. (Comments by Mark Tonello)

Wildlife Habitat Considerations:

This compartment lies entirely within a broad flat outwash plain which typically exhibits excessively drained soils and few lakes or wetlands. Upland areas are normally 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. Several large non-forested stands on the west edge of section 2 will be managed in conjunction with adjacent non-forested stands west of Weldon Road, as a large opening complex. Treatments may include bracken and invasive species control, seeding, mowing, and prescribed fire. This type of treatment regime would benefit species such as American Redstarts, chestnut-sided warblers, ruffed grouse, and white-tailed deer, and amphibians associated with vernal pools occasionally found in this area.

There is an inclusion of poorly drained soils in section 14 which supports lowland hardwoods and lowland conifers. Some low areas could be allowed to succeed to uneven-aged stands of mixed coniferous and deciduous species and treated with selective harvest. Patch cuts can be used to mimic wind events and should be designed to maximize stem densities of the regenerating stand. High stem densities provide cover for wildlife and prevent the water table from rising. Treatments should leave tops unchipped and utilize timber operations to create coarse woody debris to provide horizontal cover for hares and other animals. Cuts should be designed to prevent loss of evapotranspiration, or otherwise altering that natural

hydrologic cycle. This low lying area comprises a moderately sized deer yard that is drained by Dair Creek. The aspen stands in this area have a component of conifer and hardwoods that should be used as leave trees/clumps as the aspen is harvested. An occasional oak is also found and are normally used as leave trees when harvesting surrounding aspen. Tops should be left unchipped for horizontal cover. When harvesting aspen that is adjacent to lowland stands, falling edge trees that occur on the upland/lowland interface provides needed horizontal cover for hares and other animals. The boundary marked trees can be felled into the uncut swamp after harvest is completed.

The southeastern portion of this compartment is slightly hilly and dominated by northern hardwoods. This area more resembles an LTA associated with small ground moraines. Hardwood treatments of any style should be designed to leave snags and coarse woody debris as well as within stand species diversity and vertical structure. Species benefiting from management of this community type include the red-eyed vireo, four-toed salamander, gray fox, and broad-winged hawk. (comments by Steve Griffith).

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. 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. A gravel pit is located two and one-half miles to the east and potential appears to be good especially North Hills. This area is located northwest of the Antrim Shale gas play and a few parcels in section 14 are leased for oil and gas development. The Antrim Shale appears to have potential, with the nearest well located in Section 23. (Comments by Tom Hoane).

Vehicle Access:

There are good gravel county roads on the edges of this compartment, offering good and easy access to State lands. There are also many 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:

Although not needed for prescribed treatments during this entry year, there are several corners adjacent to private lands where currently there are no known registered land survey corners. These may be necessary for future land management needs.

Recreational Facilities and Opportunities:

Snowmobile trail #3 (Platte River Snowmobile Trail) runs along Weldon Rd, and Aylsworth Rd, which are the western and northern boundary lines of this compartment. Snowmobile trails located on straight, county roads tend to invite high speeds, which increases safety concerns. Proposed timber management activities should include trail protection specifications to reduce impacts, increase safety, as well as serve as an example of how silviculturally sound timber harvesting practices can co-exist, and often improve recreation and wildlife experiences for future generations. Non-winter harvests, coupled with a "flush cut" specification adjacent to the trails are suggested considerations. Hunting and dispersed camping are also popular recreational activities throughout the compartment. (Comments by Todd Neiss, 3/13)

Fire Protection:

This area has wildfire protection by DNR and local volunteer Fire Departments.

Additional Compartment Information:

The following reports from the Inventory are attached:

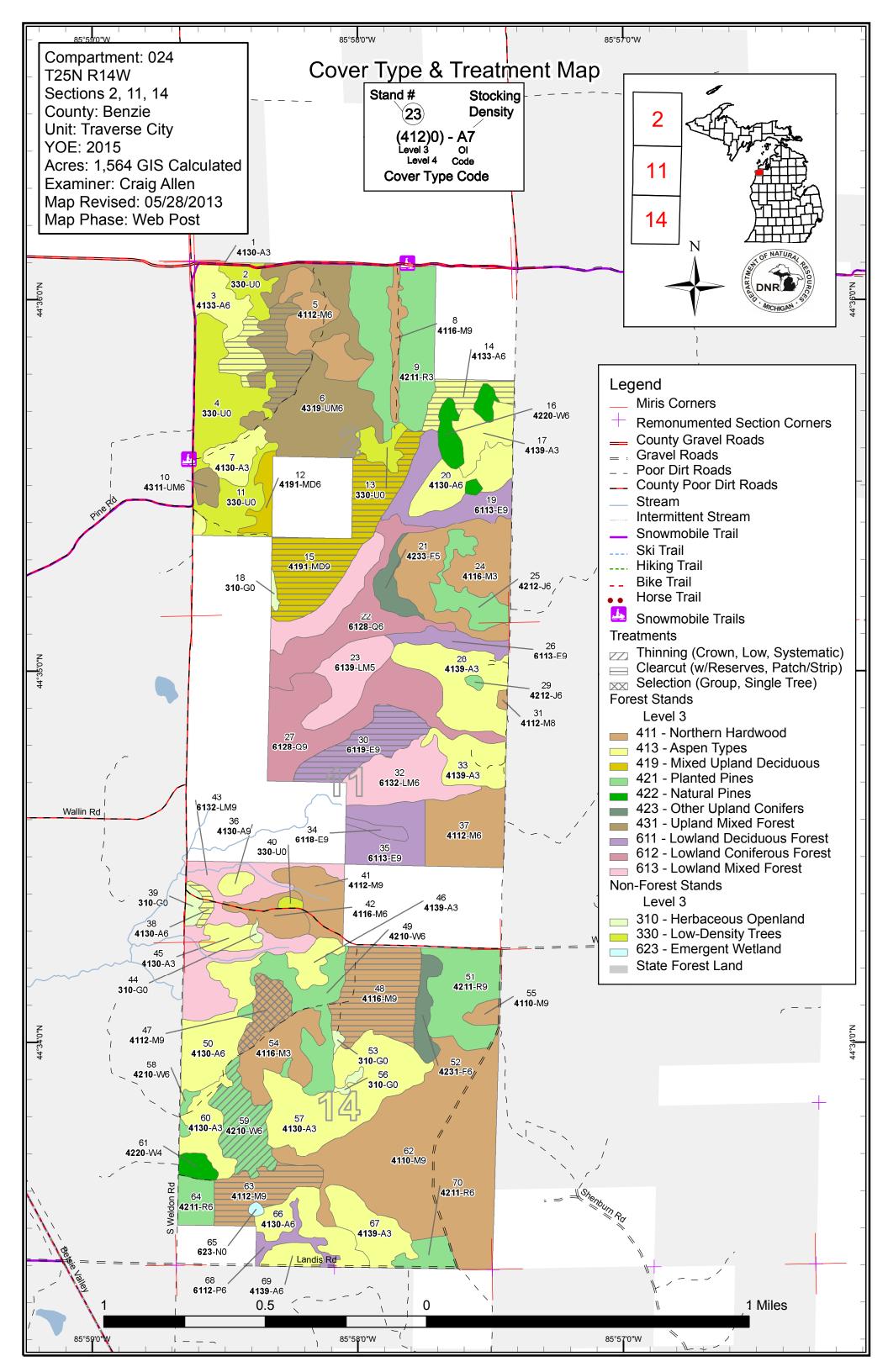
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

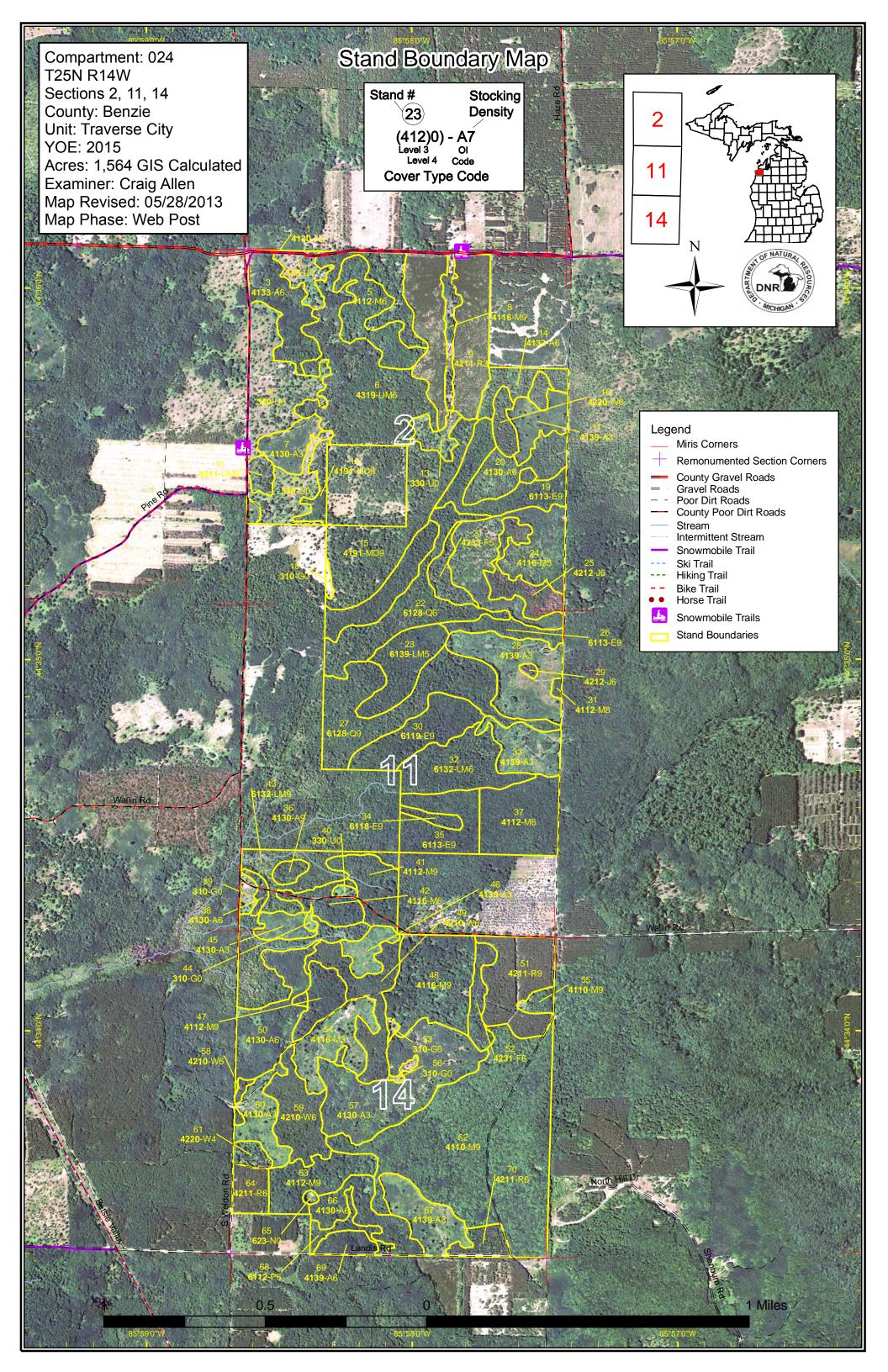
The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers

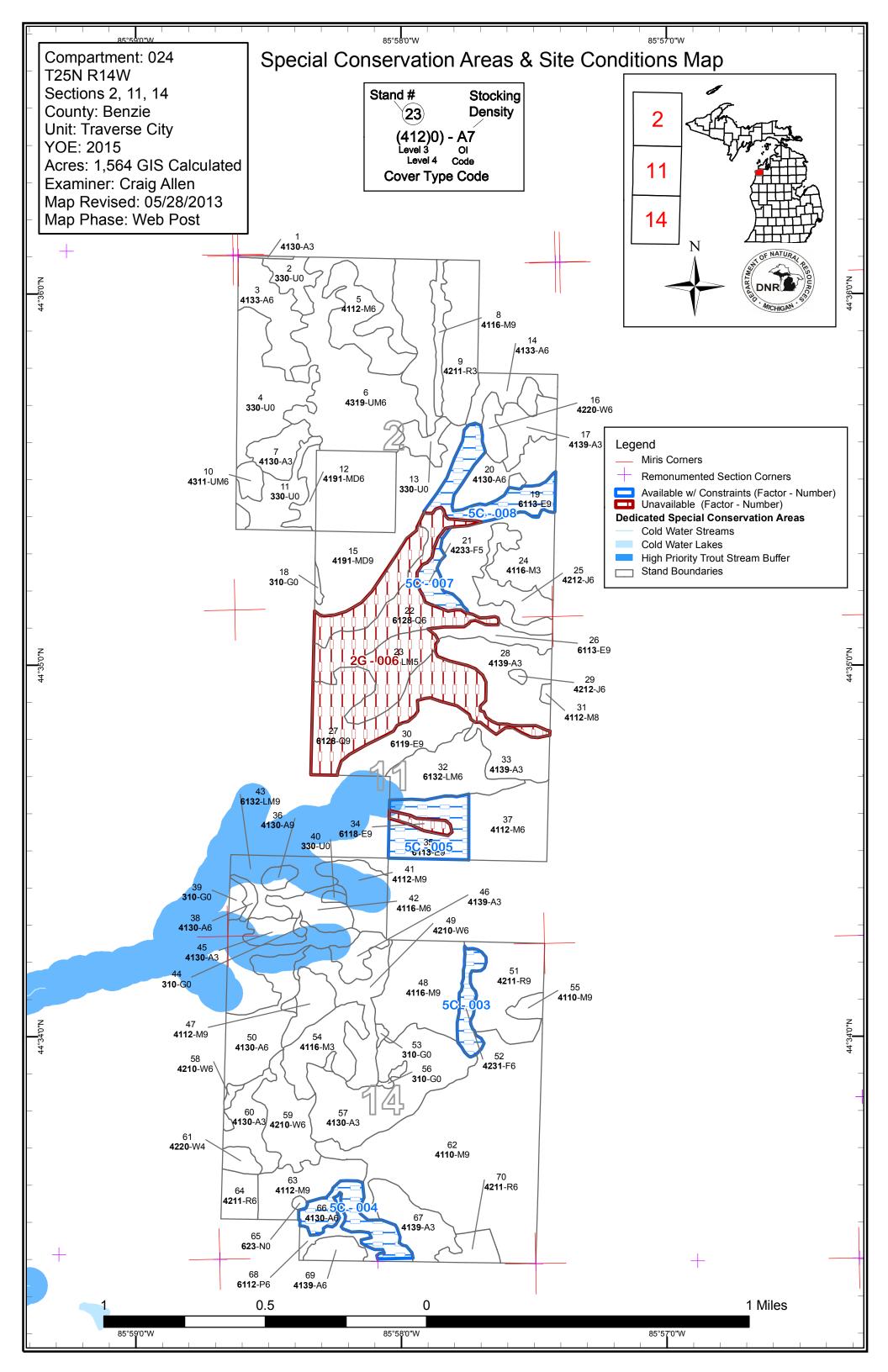
Proposed treatments

Site condition boundaries

Details on the road access system







Report 2 – Total Acres by Cover Type and Age Class

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment 024 Year of Entry 2015



Age Class

| | / | 00 | 72,79 | 103 123 | 30.39 13 | 100 Mar | 30. 30. 10 | 60.00 | and a start | 00 00 00 00 | 66.00 | 100'00' | 120,179 | 178× 156 | AND A | , do ¹⁰ |
|-----------------------------|-----|-----|-------|------------|-------------|---------|------------------|-------|-------------|----------------|-------|---------|---------|----------|-------|--------------------|
| Aspen | 144 | 96 | 0 | 0 | 90 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 337 | ĺ |
| Herbaceous Openland | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| Jack Pine | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 1 |
| Low-Density Trees | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 1 |
| Lowland Aspen/Balsam Poplar | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| Lowland Conifers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 40 | 0 | 0 | 0 | 0 | 99 | |
| Lowland Deciduous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 83 | 0 | 0 | 0 | 0 | 0 | 94 | |
| Lowland Mixed Forest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 127 | 0 | 0 | 0 | 0 | 127 | |
| Marsh | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Mixed Upland Deciduous | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 | 63 | |
| Northern Hardwood | 25 | 0 | 52 | 0 | 35 | 0 | 13 | 50 | 204 | 45 | 0 | 0 | 0 | 0 | 425 | |
| Red Pine | 0 | 63 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 | |
| Upland Mixed Forest | 0 | 0 | 0 | 0 | 5 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | |
| Upland Spruce/Fir | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | |
| White Pine | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | |
| Total | 256 | 159 | 52 | 0 | 145 | 260 | 17 | 61 | 347 | 267 | 0 | 0 | 0 | 0 | 1564 | |



| MICHIGAN . | Traverse City Mgt. Unit Year of Entry 2015 | | | | | | | | Compartment Total Compartment Acres: | |
|------------|---|----------------|--------|--------------|---------------------------|----------|-------------|--|---|--|
| | | | Ac | res by T | reatm | ent Ty | ре | | | |
| | Commercial Harvest - 237 Tre | e Planting - 0 | | Other · | 0 | | | | | |
| | Habitat Cut - 0 Opening Maintenance - 0 | | | | | | | | | |
| | | | c | over Ty | pe by l | larves | t Meth | od | | |
| | | | Clear | Celection of | 2000 111 1000 15 | eternood | tinning 055 | A LAND LAND LAND LAND LAND LAND LAND LAN | | |
| | Aspen Types | | 47 0 | 0 | 0 | 0 | 0 | 47 | | |
| | Lowland Deciduous Forest | | 28 0 | 0 | 0 | 0 | 0 | 28 | | |
| | Mixed Upland Deciduous | | 55 0 | 0 | 0 | 0 | 0 | 55 | | |
| | Northern Hardwood | | 68 13 | 3 0 | 0 | 0 | 0 | 81 | | |
| | Planted Pines | | 0 0 | 0 | 0 | 25 | 0 | 25 | | |
| | | Total | 199 13 | 3 0 | 0 | 25 | 0 | 237 | | |
| | | L | | | | | | | | |

| S t | | Traverse | City Mgt. Unit | Repo | | | ents Prescri ing Factor | bed | Compartment: 024 Year of Entry 2015 | DNR DNR |
|---|--|--|---|---|--|---|---|---|---|--|
| a n d | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
| 3 | 61024003and -Cut | 3 31.5 | 4133 - Aspen, Mixed Pine | High Density Pole | 47 | | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
| Pres Spec | <u>cs:</u> mast. | Leave a cou | | hich should | be a mi | nimum of 3 | % of the total ha | | althy cherry trees (if ava Also, create some CV | |
| <u>Othe</u> Com | er iments: | | | | | | | | | |
| <u>Vext</u> Step: ropc | | | | | | | | | | |
| | Date: 10/01/2 | 014 | | | | | | | | |
| 14 | 61024014-Cu | 12.8 | 4133 - Aspen, Mixed Pine | High Density Pole | 47 | | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal |
| <u>Pres</u> Spec | <u>cs:</u> some s | cattered ch | | nd retention. | Leave | retention is | sland(s) of a min | nimum of 3% of the | rhite pine 6" to 12" DBH e total harvest area. Cr | |
| <u>Othe</u> Com | e <u>r</u> iments: | | | | | | | | | |
| <u>Vext</u> Step | | | | | | | | | | |
| | <u>osed</u> <u>Date:</u> 10/01/2 | 014 | | | | | | | | |
| 15 | 61024015-Cu | 55.3 | 4191 - Mixed Upland Deciduous with Conifer | High Density Log | 90 | | Harvest | Clearcut with Reserves | 4136 - Aspen, Mixed Conifer | Cmpt. Reviev Proposal |
| Pres Spec | cs: leave s | cattered an | d/or groups trees of all | species. Le | eave a fe . Try to s that m | ew retention leave som | n islands, one pa le pockets of sub | articularly around a | DBH white pine. For rea an area along west edge Create some CWD du | e near private |
| | operati | ons and lea | ve any standing dead | | ell some | boundary | | ent lowland stand f | or purposes of creating | hare habitat. |
| <u>)</u> Dthe | operati Per rec <u>er</u> iments: | ons and lea | ve any standing dead | | ell some | boundary | | ent lowland stand f | or purposes of creating | hare habitat. |
| Othe | operati Per rec <u>er</u> iments: | ons and lea | ve any standing dead | | ell some | boundary | | ent lowland stand f | or purposes of creating | hare habitat. |
| <u>Othe</u> Com Next Step: ropc | operati Per rec <u>er</u> iments: | ons and lea juest of Wild | ve any standing dead | | ell some | boundary | | ent lowland stand f | or purposes of creating | hare habitat. |
| <u>Othe</u> Com Next Step: ropc | operati Per rec iments: is: osed | ons and lea juest of Wild | ve any standing dead a dlife Biologist, add spe dlife Biologist, add spe | | 80 | 81-110 | | ent lowland stand f Clearcut with Reserves | or purposes of creating 6119 - Mixed Lowland Deciduous Forest | |
| Dthe Com Next Step: ropc tart | operati Per rec sr_ iments: ss: <u>osed</u> <u>Date:</u> 10/01/2 61024030-Cu cription Manag cs: loggers area. and de | ons and lea juest of Wild 014 t 27.8 ement goal t to work arc Possibly als n trees that | ve any standing dead a dife Biologist, add spe 6119 - Mixed Lowland Deciduous Forest primarily to regenerate bund submerchantable o leave some scattered | High Density Log cherry, but fir as much d retention tr | 80 will also as poss ees as v | 81-110 regenerate ible. Mark well. Creat | Harvest Harvest e red maple and to leave a few re e some CWD du | Clearcut with Reserves aspen. Cut all ch etention islands lea uring harvest opera | 6119 - Mixed Lowland Deciduous | Cmpt. Revie Proposal en. Advise of total harves anding dead |
| Dthe Com <u>Vext</u> Step: ropc tart 30 <u>Pres</u> Spec | operati Per rec iments: ss: <u>osed</u> <u>Date:</u> 10/01/2 61024030-Cu 61024030-Cu scription Manag cs: loggers area. la purpos er iments: | ons and lea juest of Wild 014 t 27.8 ement goal t to work arc Possibly als n trees that | 6119 - Mixed 6119 - Mixed Lowland Deciduous Forest primarily to regenerate ound submerchantable o leave some scattered may be on site. Per re | High Density Log cherry, but fir as much d retention tr | 80 will also as poss ees as v | 81-110 regenerate ible. Mark well. Creat | Harvest Harvest e red maple and to leave a few re e some CWD du | Clearcut with Reserves aspen. Cut all ch etention islands lea uring harvest opera | 6119 - Mixed Lowland Deciduous Forest erry, maple, fir and aspe aving a minimum of 3% ations and leave any sta | Cmpt. Review Proposal en. Advise of total harves anding dead |
| Othe Com Vext Step: ropc tart 30 Press Spec Othe Com Vext Step: | operati Per rec iments: ss: <u>bsed</u> <u>Date:</u> 10/01/2 61024030-Cu 61024030-Cu 61024030-Cu scription loggers area. I and de purpos er iments: | ons and lea juest of Wild 014 t 27.8 ement goal t to work arc Possibly als n trees that | 6119 - Mixed 6119 - Mixed Lowland Deciduous Forest primarily to regenerate ound submerchantable o leave some scattered may be on site. Per re | High Density Log cherry, but fir as much d retention tr | 80 will also as poss ees as v | 81-110 regenerate ible. Mark well. Creat | Harvest Harvest e red maple and to leave a few re e some CWD du | Clearcut with Reserves aspen. Cut all ch etention islands lea uring harvest opera | 6119 - Mixed Lowland Deciduous Forest erry, maple, fir and aspe aving a minimum of 3% ations and leave any sta | Cmpt. Revie Proposal en. Advise of total harves anding dead |

| Traverse City Mgt. Unit S t | | | | Repo | | | nents Prescri ting Factor | ibed | Compartment: 024 Year of Entry 2015 | 19 A 18 | |
|--|--|--|---|---|--|---|--|--|--|---|--|
| a n d | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status | |
| 38 | 61024038-Cut | 3.0 | 4130 - Aspen | High Density Pole | 55 | | Harvest | Clearcut with Reserves | 4130 - Aspen | Cmpt. Review Proposal | |
| <u>Prese</u> Spec | s: Due to s | small size o | | no other rete | ntion ne | eds other t | han the species | | e, cedar and submerch Create some CWD dur | | |
| <u>Othe</u> Com | <u>r</u> ments: | | | | | | | | | | |
| Next Steps | | | | | | | | | | | |
| Propo Start I | | 14 | | | | | | | | | |
| 47 | 61024047-Cut | 13.1 | 4112 - Maple, Beech, Cherry Association | High Density Log | 90 9 | 111-140 | Harvest | Single Tree Selection | 4112 - Maple, Beech, Cherry Association | Cmpt. Review Proposal | |
| Prese Spec | | nin following | g compleat marker gi | uidelines mar | naging fo | or best tree | in place. Thin E | 3A down to approxi | mately 80-90 BA residu | ual. | |
| <u>Othe</u> | _ | | | | | | | | | | |
| | ments: | | | | | | | | | | |
| Next | | | | | | | | | | | |
| Steps | 5. | | | | | | | | | | |
| Propo | sed | 14 | | | | | | | | | |
| - Propo | sed | 14 44.3 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 88 | 51-80 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal | |
| Propo Start I 48 | <u>sed</u> Date: 10/01/20 61024048-Cut cription Cut to re s: Leave a | 44.3 egenerate a ny conifers | Hardwood - Aspen and expand aspen an | Density Log d cherry. Als ary greatly fr | g so cut re om 0 to | d maple bu 50 BA dep | it leave most sug ending on where | Reserves gar maple possibly the aspen is located | • • | Proposal poor form. | |
| Preso Spec | <u>sed</u> Date: 10/01/20 61024048-Cut cription Cut to re s: Leave a standing | 44.3 egenerate a ny conifers | Hardwood - Aspen and expand aspen an . Residual BA may v | Density Log d cherry. Als ary greatly fr | g so cut re om 0 to | d maple bu 50 BA dep | it leave most sug ending on where | Reserves gar maple possibly the aspen is located | Mixed Deciduous cutting only those with | poor form. | |
| Propo Start I 48 Preso Spec | <u>sed</u> Date: 10/01/20 61024048-Cut cription Cut to re s: Leave a standing L ments: | 44.3 egenerate a ny conifers | Hardwood - Aspen and expand aspen an . Residual BA may v | Density Log d cherry. Als ary greatly fr | g so cut re om 0 to | d maple bu 50 BA dep | it leave most sug ending on where | Reserves gar maple possibly the aspen is located | Mixed Deciduous cutting only those with | Proposal poor form. | |
| 48 Prese Spec Othe Com Next Steps Propo | <u>sed</u> Date: 10/01/20 61024048-Cut cription Cut to re s: Leave a standing r ments: S: sed | 44.3 egenerate a ny conifers dead and | Hardwood - Aspen and expand aspen an . Residual BA may v | Density Log d cherry. Als ary greatly fr | g so cut re om 0 to | d maple bu 50 BA dep | it leave most sug ending on where | Reserves gar maple possibly the aspen is located | Mixed Deciduous cutting only those with | Proposal poor form. | |
| 48 Prese Spec Othe Com Next Steps Propo | <u>sed</u> Date: 10/01/20 61024048-Cut cription Cut to re s: Leave a standing r ments: S: sed | 44.3 egenerate a ny conifers dead and | Hardwood - Aspen and expand aspen an . Residual BA may v | Density Log d cherry. Als ary greatly fr | g so cut re om 0 to eate sor | d maple bu 50 BA dep | it leave most sug ending on where | Reserves gar maple possibly the aspen is located | Mixed Deciduous cutting only those with ed (more open there). | Proposal poor form. Leave any | |
| 48 Presso 48 Presso Spec Othe Com Next Steps Propo Start I 59 | sed Date: 10/01/20 61024048-Cut cription Cut to restrict to restrestrict to restrict to restrict to restrestrict to restring to res | 44.3 egenerate a ny conifers dead and 14 25.3 nark trees to a minimum | Hardwood - Aspen and expand aspen an . Residual BA may v den trees that may b 42101 - Planted White Pine, Mixed Deciduous o remove poor-forme | Density Log d cherry. Als vary greatly fr e on site. Cr High Density Pole ed white pine ith higher BA | 3 so cut re om 0 to eate sor 50 that has more de | d maple bu 50 BA dep ne CWD d 141-170 been dam esirable if p | ut leave most sug ending on where uring harvest op Harvest daged from weev possible dependi | Reserves gar maple possibly the aspen is locate erations. Crown Thinning il (green mark leaving on amount and | Mixed Deciduous cutting only those with ed (more open there). 42100 - Planted | Proposal poor form. Leave any Cmpt. Review Proposal | |
| 48 Press Spec Othe Com Next Step: Propo Start I 59 Press Spec Othe | sed 10/01/20 61024048-Cut cription cription Cut to restrict to restresto restrict to restrestrict to restrict to r | 44.3 egenerate a ny conifers dead and 14 25.3 nark trees to a minimum | Hardwood - Aspen and expand aspen an . Residual BA may v den trees that may b 42101 - Planted White Pine, Mixed Deciduous o remove poor-forme n of 50 BA residual w | Density Log d cherry. Als vary greatly fr e on site. Cr High Density Pole ed white pine ith higher BA | 3 so cut re om 0 to eate sor 50 that has more de | d maple bu 50 BA dep ne CWD d 141-170 been dam esirable if p | ut leave most sug ending on where uring harvest op Harvest daged from weev possible dependi | Reserves gar maple possibly the aspen is locate erations. Crown Thinning il (green mark leaving on amount and | Mixed Deciduous cutting only those with ed (more open there). 42100 - Planted White Pine ve trees will likely be mo | Proposal poor form. Leave any Cmpt. Review Proposal | |
| Area of the second seco | sed 10/01/20 61024048-Cut cription Cut to resserve a standing Leave a standing r standing ments: 10/01/20 61024059-Cut 61024059-Cut cription Select n ss: to leave cut all a: r to leave cut all a: | 44.3 egenerate a ny conifers dead and 14 25.3 nark trees to a minimum | Hardwood - Aspen and expand aspen an . Residual BA may v den trees that may b 42101 - Planted White Pine, Mixed Deciduous o remove poor-forme n of 50 BA residual w | Density Log d cherry. Als vary greatly fr e on site. Cr High Density Pole ed white pine ith higher BA | 3 so cut re om 0 to eate sor 50 that has more de | d maple bu 50 BA dep ne CWD d 141-170 been dam esirable if p | ut leave most sug ending on where uring harvest op Harvest daged from weev possible dependi | Reserves gar maple possibly the aspen is locate erations. Crown Thinning il (green mark leaving on amount and | Mixed Deciduous cutting only those with ed (more open there). 42100 - Planted White Pine ve trees will likely be mo | Proposal poor form. Leave any Cmpt. Review Proposal | |

Traverse City Mgt. Unit

Report 4 -- Treatments Prescribed with No Limiting Factor

Compartment: 024 Year of Entry 2015

| t a n d | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|------------------|-------------------|-------|---|---------------------|--------------|-------------|-------------------|---------------------------|----------------------------------|--------------------------|
| 63 | 61024063-Cut | 24.1 | 4112 - Maple, Beech, Cherry Association | High Density Log | 70 9 | 51-80 | Harvest | Clearcut with Reserves | 4139 - Aspen, Mixed Deciduous | Cmpt. Review Proposal |

 Prescription
 Cut all aspen and maple in areas of where aspen is more prevelant. Other parts of the stand have pockets of sugar maple and better formed red

 Specs:
 maple...in these areas individually mark poor formed trees to thin these pockets. Majority of stand will regenerate to aspen. Retention may consist of one or two small leave islands in addition to the maple trees that will be left in the maple pocket areas. Leave any standing dead and den trees that may be on site. Also, create some CWD during the harvest operation.

 Other

Comments:

Next

S

Steps:

Proposed Start Date: 10/01/2014

Total Treatment

Acreage Proposed: 237.1

| S t | | Traverse City | Mgt. Unit | Report \$ | | eatment imiting | ts Prescribed Factor | l with | Compartment: 024 Year of Entry 2015 | DNR DNR |
|---------------------------------|--------------------------------|---------------|-----------|-----------------|--------------|--------------------|-------------------------|---------------------|--|--------------------|
| a n d | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
| | | | #Type! | | | | | | | |
| Presc Spec: Other Comr | : | | | | | | | | | |
| <u>Next</u> <u>Steps</u> | <u>.</u> | | | | | | | | | |
| <u>Propo</u> <u>Start</u> | | | | | | | | | | |
| <u>Limiti</u> | ng Factor | | | | | | | | | |
| Ac | Total Treatme creage Propos | | | | | | | | | |

Report 6 – Out of YOE – Treatments Prescribed with No Limiting Factor Year of Entry: 2015



| | Treatment Name | Acres | CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Approval Status |
|---------------------------------|------------------------|--------------|----------------------|-----------------|--------------|-------------|-------------------|--------------------------------|-------------------------|--|
| | 28218 | 5.9 | Unspecified | | | | Harvest | Other - Specify in Comments | Unspecified | Cmpt. Review Proposal |
| <u>Prescri</u> Specs: | | | | | | | | | | |
| <u>Other</u> Comme | ents: | | | | | | | | | |
| <u>Next</u> Steps: | | | | | | | | | | |
| <u>Propos</u> <u>Start D</u> | | | | | | | | | | |
| | 28219 | 7.2 | Unspecified | | | | Harvest | Other - Specify in Comments | Unspecified | Cmpt. Review Proposal - Incomplete |
| <u>Prescri</u> Specs: | | | | | | | | | | |
| <u>Other</u> Comme | ents: | | | | | | | | | |
| <u>Next</u> Steps: | | | | | | | | | | |
| <u>Propos</u> <u>Start D</u> | | | | | | | | | | |
| 6 | 01043_OutOfY OE-Cut | 2.1 | | | | | Harvest | Clearcut with Reserves | 4131 - Aspen, Oak | Cmpt. Review Proposal - Incomplete |
| <u>Prescri</u> Specs: | | ome pine an | d osk for mast and s | eed product | ion, Follle | ow WLD gi | uidance for CWI | O creation. Harvest | all stems that are not | retained. |
| <u>Other</u> Comme | | and should h | ave mix of oak, pine | , aspen and | maple. | | | | | |
| <u>Next</u> <u>Steps:</u> | | | | | | | | | | |
| <u>Propos</u> Start D | | 009 | | | | | | | | |
| 1 | Total Treatme | nt | • | | | | | | | |

Acreage Proposed: 15.3

Traverse City Mgt. Unit

Compartment 024 Year of Entry 2015

Craig Allen : Examiner

Availability for Management

| | - | - | | | | | |
|-------|-----------|---------------|-----------------------------|-------|---------|--------|--------|
| Total | Acres | Acres | D | omina | nt Site | e Conc | lition |
| Acres | Available | Not Available | | No | 5C | 2G | |
| 336 | 336 | | Aspen | 315 | 21 | | |
| 18 | 18 | | Jack Pine | 18 | | | |
| 7 | 7 | | Lowland Aspen/Balsam Poplar | 7 | | | |
| 99 | | 99 | Lowland Conifers | | | 99 | |
| 93 | 89 | 4 | Lowland Deciduous | 38 | 51 | 4 | |
| 127 | 82 | 45 | Lowland Mixed Forest | 82 | | 45 | |
| 63 | 63 | | Mixed Upland Deciduous | 63 | | | |
| 424 | 424 | | Northern Hardwood | 424 | | | |
| 118 | 118 | | Red Pine | 118 | | | |
| 96 | 96 | | Upland Mixed Forest | 96 | | | |
| 19 | 19 | | Upland Spruce/Fir | | 19 | | |
| 75 | 75 | | White Pine | 75 | | | |
| 1,474 | 1,327 | 147 | Total Forested Acres | 1,236 | 91 | 147 | |
| | 90% | 10% | 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 | 5C: Delay treatment for age/size class diversity or exceptional site quality | 10 | | | | |
| (| Comments: | | | | | | |
| 004 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 21 | | | | |
| (| Comments: | | | | | | |
| | | | | | | | |
| | | | | | | | |

| | Traverse City Mgt. Unit Craig Allen : Examiner | | | Report 7 – Site Conditions | Compartment 024 Year of Entry 2015 |
|-----|---|--|-----|----------------------------|---------------------------------------|
| 005 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 26 | | |
| Co | omments: | | | | |
| 006 | Not Available | 2G: Too wet (sensitive soils, does not include access issues) | 148 | | |
| Co | omments: | | | | |
| 007 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 9 | | |
| Co | omments: | | | | |
| 008 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 25 | | |
| Co | omments: | | | | |
| | | | | | |



Report 8 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

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

SCA Name SCA Category Detail Type Recommendation Acres

Comments



Report 9 – 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.

| Conservation Area | n Type | Description | ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area |
|----------------------|---------------|---|--|
| SCA | Riparian Area | A transitional area between aquatic and terrestrial ecosystems influences the aquatic ecosystem and vice-versa. Because of streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their ef as aesthetics, habitat, bank stability, timber production, and the | the unique conditions adjacent to lakes, n diversity of plants and wildlife. Riparian fects on water quality and quantity, as well |

| S t | Traverse City | / Mgt. Unit | | Report 10 | – Forestec | d Stands Compartment: 024 Year of Entry: 2015 |
|-------------|--|-------------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 1 | 4130 - Aspen | High Density Sapling | 0.7 | 8 | | |
| 3 | 4133 - Aspen, Mixed Pine | High Density Pole | 26.2 | 47 | | |
| 5 | 4112 - Maple, Beech, Cherry Association | High Density Pole | 26.3 | 75 | 81-110 | |
| 6 | 4319 - Mixed Upland Forest | High Density Pole | 90.5 | 58 | 81-110 | |
| 7 | 4130 - Aspen | High Density Sapling | 14.4 | 6 | | |
| 8 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 8.8 | 90 | 51-80 | |
| 9 | 42110 - Planted Red Pine | High Density Sapling | 63.1 | 14 | | Stand was clearcut in 1994, Trenched in 1999then handplanted to 2-0 red pine bare root stock in April of 2000. |
| 10 | 4311 - Pine, Aspen Mix | High Density Pole | 5.2 | 47 | | |
| 12 | 4191 - Mixed Upland Deciduous with Conifer | High Density Pole | 7.7 | 47 | | |
| 14 | 4133 - Aspen, Mixed Pine | High Density Pole | 12.8 | 47 | | |
| 15 | 4191 - Mixed Upland Deciduous with Conifer | High Density Log | 55.3 | 90 | | cut all merchantable trees. leave some large white pine and protect young understory as much as possible |
| 16 | 42200 - Natural White Pine | High Density Pole | 12.4 | 55 | 81-110 | |
| 17 | 4139 - Aspen, Mixed Deciduous | High Density Sapling | 14.9 | 7 | | Also contains many scattered mature leave trees, |
| 19 | 6113 - Lowland Maple | High Density Log | 25.5 | 85 | 81-110 | |
| 20 | 4130 - Aspen | High Density Pole | 21.4 | 45 | | |
| 21 | 42330 - Upland Fir | Medium Density Pole | 8.9 | 55 | 51-80 | |
| 22 | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Pole | 39.9 | 90 | 51-80 | |
| 23 | 6139 - Mixed Lowland Forest | Medium Density Pole | 44.8 | 91 | 1-50 | Part of drainage system formulating headwaters for Dair Creek. water year round |

| S t | Traverse City Mgt. Unit | | | Report 10 | – Forested | Stands Compartment: 024 Year of Entry: 2015 | |
|-------------|--|-------------------------|-------|--------------|-------------|---|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | |
| 24 | 4116 - Mixed N. Hardwood - Aspen | High Density Sapling | 51.8 | 21 | | | |
| 25 | 42120 - Planted Jack Pine | High Density Pole | 17.2 | 55 | 81-110 | | |
| 26 | 6113 - Lowland Maple | High Density Log | 10.4 | 77 | 51-80 | | |
| 27 | 6128 - Lowland Coniferous, Mixed Deciduous | High Density Log | 59.6 | 85 | 51-80 | | |
| 28 | 4139 - Aspen, Mixed Deciduous | High Density Sapling | 37.8 | 7 | | Contains scattered mature leave trees and islands for diversity that were left uncut during the harvest in 2006. | |
| 29 | 42120 - Planted Jack Pine | High Density Pole | 1.2 | 57 | 81-110 | Small island that was left out in harvest area to provide wildlife cover and diversity | |
| 30 | 6119 - Mixed Lowland Deciduous Forest | High Density Log | 27.8 | 80 | 81-110 | east 1/3 of stand much higher quality and diameter compared to rest of stand. | |
| 31 | 4112 - Maple, Beech, Cherry Association | Medium Density Log | 1.2 | 85 | 51-80 | Small island of mix tree species that was left as a save island for wildlife and species diversity as well as visual purposes along road. | |
| 32 | 6132 - Mixed Lowland Forest with Cedar | High Density Pole | 32.7 | 90 | 51-80 | | |
| 33 | 4139 - Aspen, Mixed Deciduous | High Density Sapling | 19.5 | 7 | | Contains scattered leave trees and islands | |
| 34 | 6118 - Lowland Deciduous with Cedar | High Density Log | 4.0 | 85 | 51-80 | winter cover | |
| 35 | 6113 - Lowland Maple | High Density Log | 25.9 | 85 | 81-110 | | |
| 36 | 4130 - Aspen | High Density Log | 4.0 | 60 | | | |
| 37 | 4112 - Maple, Beech, Cherry Association | High Density Pole | 35.3 | 47 | 81-110 | | |
| 38 | 4130 - Aspen | High Density Pole | 3.0 | 55 | | | |
| 41 | 4112 - Maple, Beech, Cherry Association | High Density Log | 19.1 | 90 | 81-110 | | |
| 42 | 4116 - Mixed N. Hardwood - Aspen | High Density Pole | 13.1 | 60 | | | |

| S t | Traverse City Mgt. Unit | | | Report 10 | – Forestec | Stands Compartment: 024 Year of Entry: 2015 | |
|-------------|--|-------------------------|-------|--------------|-------------|--|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | |
| 43 | 6132 - Mixed Lowland Forest with Cedar | High Density Log | 49.5 | 95 | 81-110 | | |
| 45 | 4130 - Aspen | High Density Sapling | 8.1 | 7 | | | |
| 46 | 4139 - Aspen, Mixed Deciduous | High Density Sapling | 9.7 | 7 | | | |
| 47 | 4112 - Maple, Beech, Cherry Association | High Density Log | 13.1 | 90 | 111-140 | select thin | |
| 48 | 4116 - Mixed N. Hardwood - Aspen | High Density Log | 44.3 | 88 | 51-80 | clearcut to regenerate and expand aspen and cherry. leave all sugar or possibly mark lower quality ones to harvest. leave any conifers. aspen is getting old | |
| 49 | 42101 - Planted White Pine, Mixed Deciduous | High Density Pole | 29.8 | 50 | 141-170 | | |
| 50 | 4130 - Aspen | High Density Pole | 33.0 | 19 | | | |
| 51 | 42110 - Planted Red Pine | High Density Log | 35.3 | 55 | 111-140 | | |
| 52 | 42311 - Planted Spruce, Mixed Deciduous | High Density Pole | 10.3 | 52 | 81-110 | | |
| 54 | 4116 - Mixed N. Hardwood - Aspen | High Density Sapling | 25.0 | 7 | | | |
| 55 | 4110 - Sugar Maple Association | High Density Log | 4.3 | 90 | 81-110 | | |
| 57 | 4130 - Aspen | High Density Sapling | 62.7 | 18 | | | |
| 58 | 42101 - Planted White Pine, Mixed Deciduous | High Density Pole | 2.2 | 50 | 141-170 | | |
| 59 | 42101 - Planted White Pine, Mixed Deciduous | High Density Pole | 25.3 | 50 | 141-170 | select mark | |
| 60 | 4130 - Aspen | High Density Sapling | 16.9 | 7 | | | |
| 61 | 42200 - Natural White Pine | Low Density Pole | 5.2 | 50 | 1-50 | | |
| 62 | 4110 - Sugar Maple Association | High Density Log | 158.3 | 85 | 81-110 | | |
| 63 | 4112 - Maple, Beech, Cherry Association | High Density Log | 24.1 | 70 | 51-80 | clearcut to regen and expand aspen. mark to leave better quality sugar maple. | |

| S t | Traverse City Mgt. Unit | | | Report 10 | Forested Stands | Compartment: 024 Year of Entry: 2015 | |
|-------------|----------------------------------|-------------------------|-------|--------------|-------------------------------------|---|---------------|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | P. MICHIGAN . |
| 64 | 42110 - Planted Red Pine | High Density Pole | 10.5 | 50 | 141-170 | | |
| 66 | 4130 - Aspen | High Density Pole | 22.0 | 48 | | | |
| 67 | 4139 - Aspen, Mixed Deciduous | High Density Sapling | 22.3 | 7 | | | |
| 68 | 6112 - Lowland Aspen | High Density Pole | 7.3 | 47 | | drainagewet most of year | |
| 69 | 4139 - Aspen, Mixed Deciduous | High Density Pole | 7.6 | 47 | | | |
| 70 | 42110 - Planted Red Pine | High Density Pole | 8.8 | 50 | 111-140 | | |

Traverse City Mgt. Unit

Compartment: 024

Year of Entry: 2015

NATURA

| Stand | Cover Type | Acres | Managed Site | Management Priority (Objective) | General Comments: |
|-------|---------------------------|-------|-----------------|------------------------------------|-------------------|
| 2 | 330 - Low-Density Trees | 10.5 | N\A | Unspecified | |
| 4 | 330 - Low-Density Trees | 38.6 | N\A | Unspecified | |
| 11 | 330 - Low-Density Trees | 18.6 | N\A | Unspecified | |
| 13 | 330 - Low-Density Trees | 8.0 | N\A | Unspecified | |
| 18 | 310 - Herbaceous Openland | 1.2 | N\A | Unspecified | |
| 39 | 310 - Herbaceous Openland | 3.4 | N\A | Unspecified | |
| 40 | 330 - Low-Density Trees | 1.5 | N\A | Unspecified | |
| 44 | 310 - Herbaceous Openland | 1.0 | N\A | Unspecified | |
| 53 | 310 - Herbaceous Openland | 1.1 | N\A | Unspecified | |
| 56 | 310 - Herbaceous Openland | 1.6 | N\A | Unspecified | |
| 65 | 623 - Emergent Wetland | 1.0 | N\A | Unspecified | |