



# Compartment Review Presentation

## Traverse City Forest Management Unit

Compartment 17

Entry Year 2016

Acreage: 1,835

County Benzie

Management Area: Benzie Outwash

**Revision Date:** 02/21/2014

**Stand Examiner:** Craig Allen

### Legal Description:

T26N - R13W; sections 21, 28, 33

### Identified Planning Goals:

This compartment is a part of the Benzie Outwash Management Area. The management plan for this area involves many aspects. Vegetation management in the Benzie Outwash management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character, including the Betsie River which is a designated natural river; and threatened, endangered and special concern species and provide for forest-based recreational uses and Native American non-commercial uses of forest products. Timber management for the next 10 years includes improving the age-class distribution of aspen and red pine. Northern hardwoods management includes continued selective or regeneration harvesting of northern hardwoods to achieve an uneven age-class structure or improve timber quality. Wildlife management objectives include increasing the structural complexity of northern hardwood communities for interior forest species and perpetuating early-successional communities for species adapted to young forests. Expected trends in this 10-year planning period are increased recreational pressure on recreational trails and introduced insect and disease concerns, especially emerald ash borer and beech bark disease.

### Soil and topography:

Soils in this compartment include Kalkaska, Rubicon, and Roscommon-AuGres-Croswell sands. Topography is level to gently rolling, with some low hardwood hills in the southwest and southeast corners of the compartment. There is a shallow valley along Kinney Creek. Some flat areas south of Cinder Road have a high water table with some wetlands.

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

This part of Benzie County is predominantly forested state land. There are a campground and several cottages and homes along Turtle Lake, just west of the compartment. Private land parcels along Cinder and Miller Roads have low density rural homes.

### Unique Natural Features:

Kinney Creek flows underground across most of section 21 and emerges near the west section line. A short stretch of seasonal flowage drains lowland aspen forest on the east side of section 28 into a seasonally wet grassy opening near the center of the section.

### Archeological, Historical, and Cultural Features:

There are known concerns within the compartment. All proposed management activities have taken these concerns into consideration.

### Special Management Designations or Considerations:

A pocket of oak wilt has been confirmed in section 33 and treatment is being prescribed to contain it. Also, see all other attached proposed treatments.

### Watershed and Fisheries Considerations:

Kinney Creek is a designated trout stream that flows through the northern portion of this compartment. Suitable buffers (as outlined in Water Quality Management Practices on Forest Land) should be applied to treatment areas adjacent to Kinney Creek.

### Wildlife Habitat Considerations:

Compartment 17 is located in central Benzie County and is comprised of a broad outwash plain with few lakes and wetlands (LTA 5111). There is a campground nearby and this area receives a fair number of hunters and recreationists. Kinney Creek transects the middle of this compartment, but is mostly underground in this area. There is an old beaver flooding with cedar and tamarack at the northwest corner of Sec. 21.

The sandy soils of this LTA type were often the setting for large wildfires. Hand felling of encroachment may be necessary to maintain the openings. Many wildlife species prefer areas with forest edge. Such animals include white-

tailed deer, white-throated sparrow, and blue racer.

Large areas north of Cinder Road are aspen stands. Presettlement vegetation was mostly upland conifers (white pine) and this area has a natural tendency to revert back to this stage. Since mixed-aged aspen stands are desirable for many wildlife species, management objectives should focus in keeping this area at a mid-successional stage. Timber practices should include a plan for variable age classes within the aspen stands, with the inclusion of large coarse woody debris. Timber harvest practices that would mimic fires of various intensities should be implemented, when applicable. Animals that may be found here include white-tailed deer, ruffed grouse, smooth green snake, and northern flicker. The lowland areas within this compartment are mixed lowland shrubs. These areas provide cover and a food source with its many berries. The oak stands should be managed to try to regenerate these species, while still providing food mast for wildlife. (Wildlife Div. T.C office)

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

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and minor coarse-textured till. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Devonian Ellsworth Shale. The Ellsworth is used for cement products. A gravel pit is located one and one-half miles to the northwest and there should be potential, especially to the south. This area is located in an area of recent Antrim Shale development. The Compartment is leased for oil and gas development and the Antrim Shale appears to have potential. (Tom Hoane)

### **Vehicle Access:**

There is good vehicle access throughout the compartment.

### **Survey Needs:**

There are no known survey needs within this compartment at this time.

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

The Betsie River snowmobile trail crosses section 33. Non-Winter cuts are preferred, however, if a winter cut is silviculturally desirable, then appropriate snowmobile trail protection specifications should be used to accommodate both timber sale, and snowmobiling activities. Additional snowmobile related trail protection specifications should be used if trail is impacted by timber treatments. Dispersed recreational activities in this compartment include hunting, camping, trapping, mushrooming, and berry picking. (T.M.N. 4/14/14)

### **Fire Protection:**

This area has wildfire protection by the Almira Township Fire Department and the Traverse City DNR.

### **Additional Compartment Information:**

The SESE of section 21 is desirable to acquire to block in state ownership, should it come up for sale.

See attached proposed treatments.

### **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**

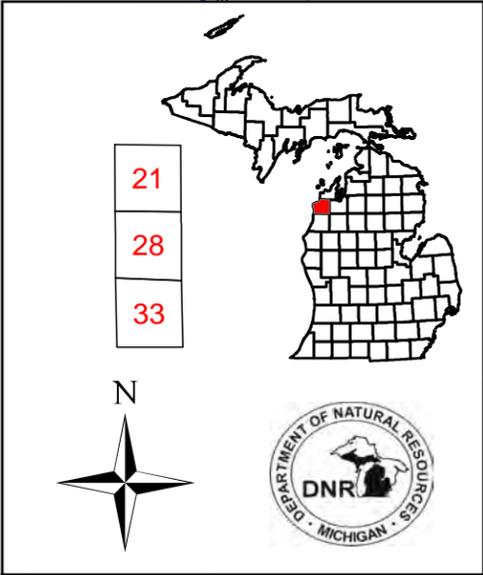
### **The following information is displayed, where pertinent, on the attached compartment maps:**

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

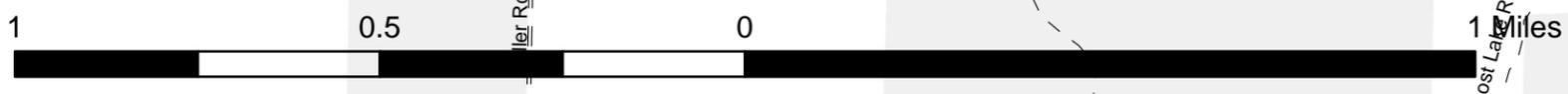
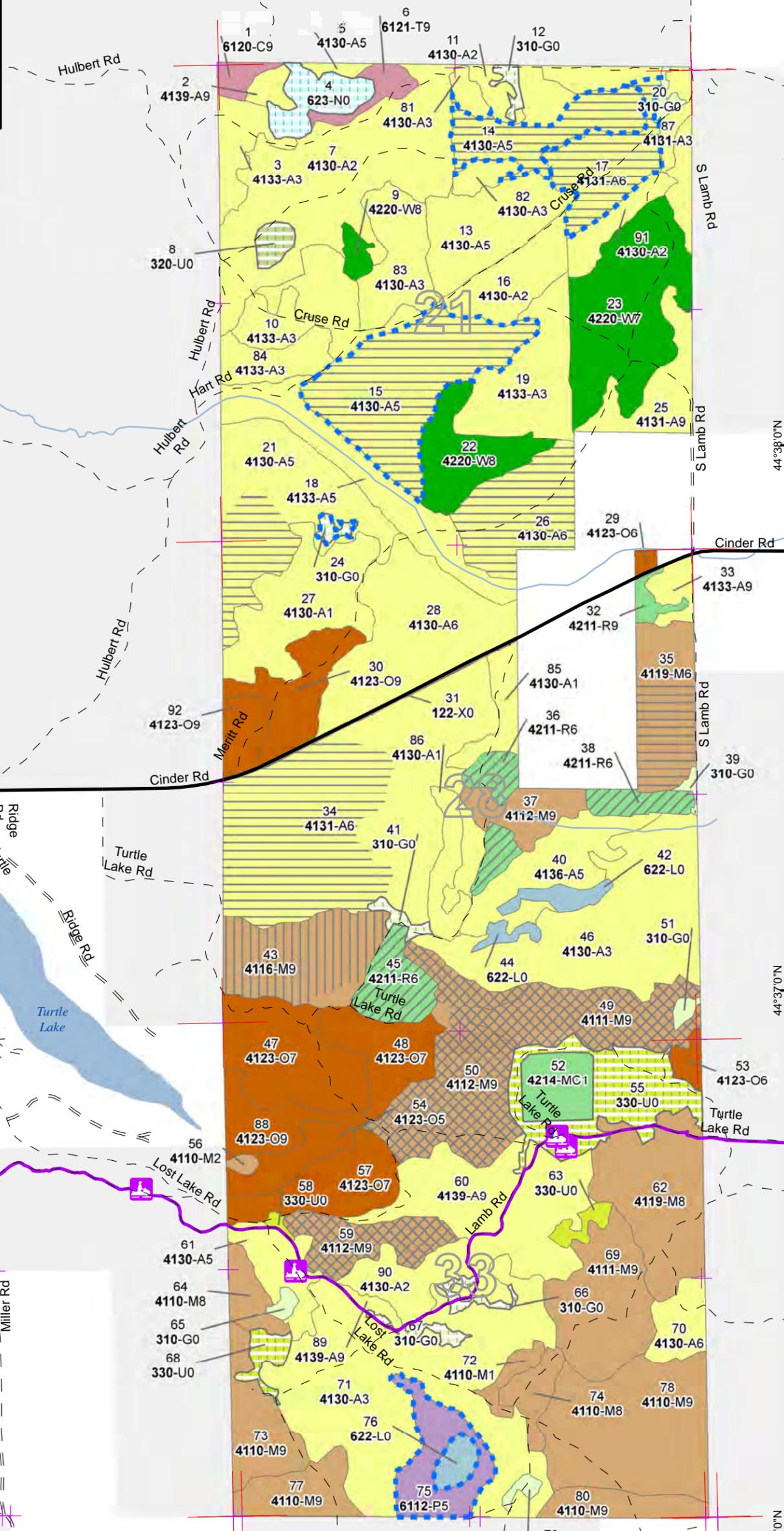
# Cover Type & Treatment Map

Compartment: 017  
 T26N R13W  
 Sections: 21, 28, 33  
 County: Benzie  
 Unit: Traverse City  
 Management Area: Benzie Outwash  
 YOE: 2016  
 Acres: 1,838 GIS Calculated  
 Examiner: Craig Allen  
 Map Revised: 06/18/2014  
 Map Phase: Web Post

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



- Legend**
- Miris Corners
  - + Remonumented Section Corners
  - Paved Roads
  - == Gravel Roads
  - - - Poor Dirt Roads
  - 🛷 Snowmobile Trails
  - 🛷 Snowmobile Trail
  - 🌊 Lakes and Rivers
  - Stream
  - Intermittent Stream
- Planned Regeneration**
- 🌳 Natural
  - 🌲 Planted
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
  - |||| Shelter Wood (w/Reserves)
  - /// Thinning (Crown, Low, Systematic)
  - XXX Selection (Group, Single Tree)
  - 🔥 Prescribed Burn
  - Opening Maintenance
  - 🔵 Treatments w/ Site Condition
- Forest Stands**
- 411 - Northern Hardwood
  - 412 - Oak Types
  - 413 - Aspen Types
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees
  - 622 - Lowland Shrub
  - 623 - Emergent Wetland
  - State Forest Land



85°55'0"W 85°54'0"W 85°53'0"W

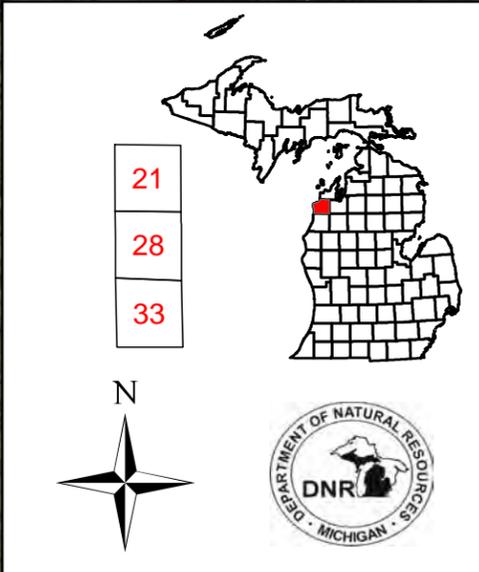
44°39'0"N 44°38'0"N 44°37'0"N 44°36'0"N

85°55'0"W 85°54'0"W 85°53'0"W

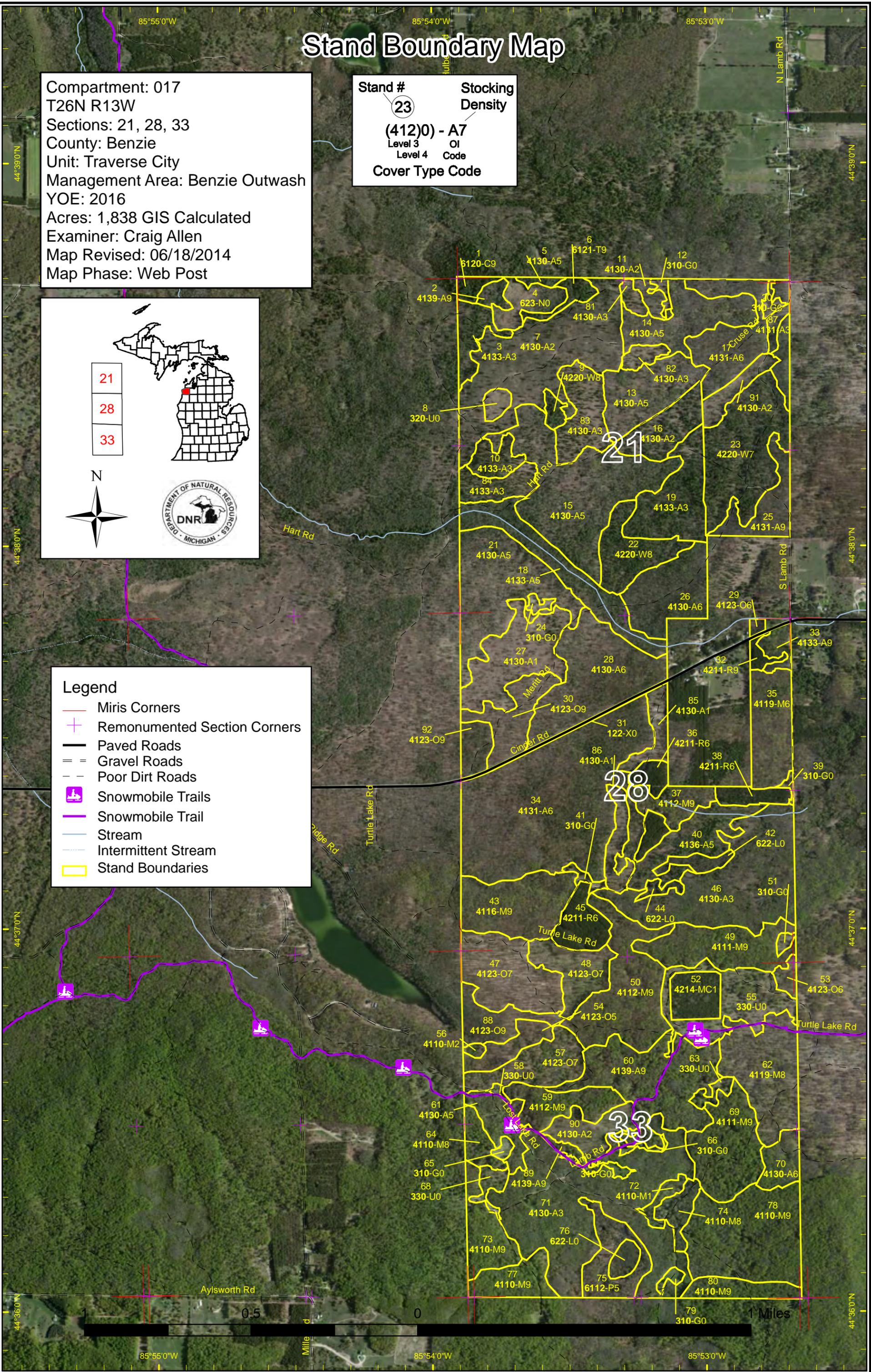
# Stand Boundary Map

Compartment: 017  
 T26N R13W  
 Sections: 21, 28, 33  
 County: Benzie  
 Unit: Traverse City  
 Management Area: Benzie Outwash  
 YOE: 2016  
 Acres: 1,838 GIS Calculated  
 Examiner: Craig Allen  
 Map Revised: 06/18/2014  
 Map Phase: Web Post

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



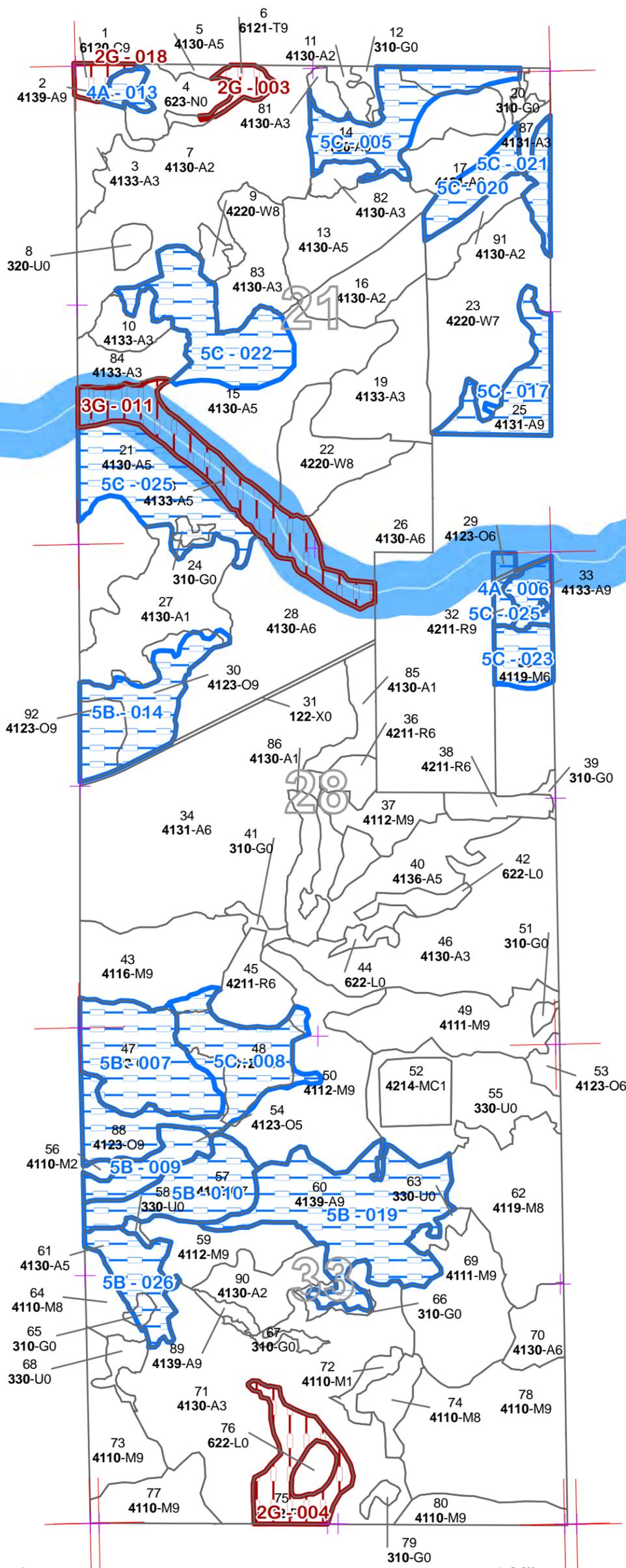
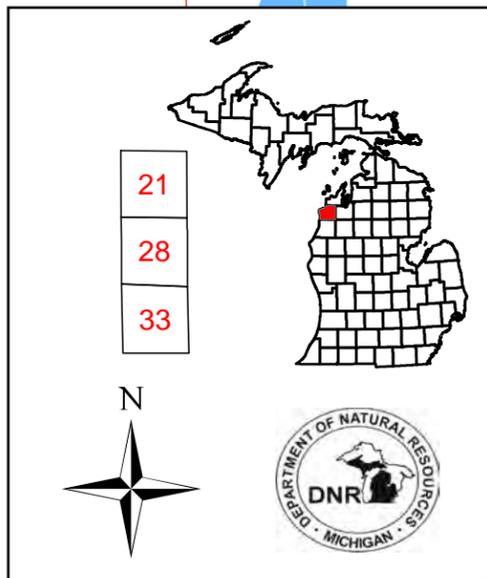
- Legend**
- Miris Corners
  - + Remonumented Section Corners
  - Paved Roads
  - = Gravel Roads
  - - Poor Dirt Roads
  - Snowmobile Trails
  - Snowmobile Trail
  - Stream
  - - Intermittent Stream
  - Stand Boundaries



# Special Conservation Areas & Site Conditions Map

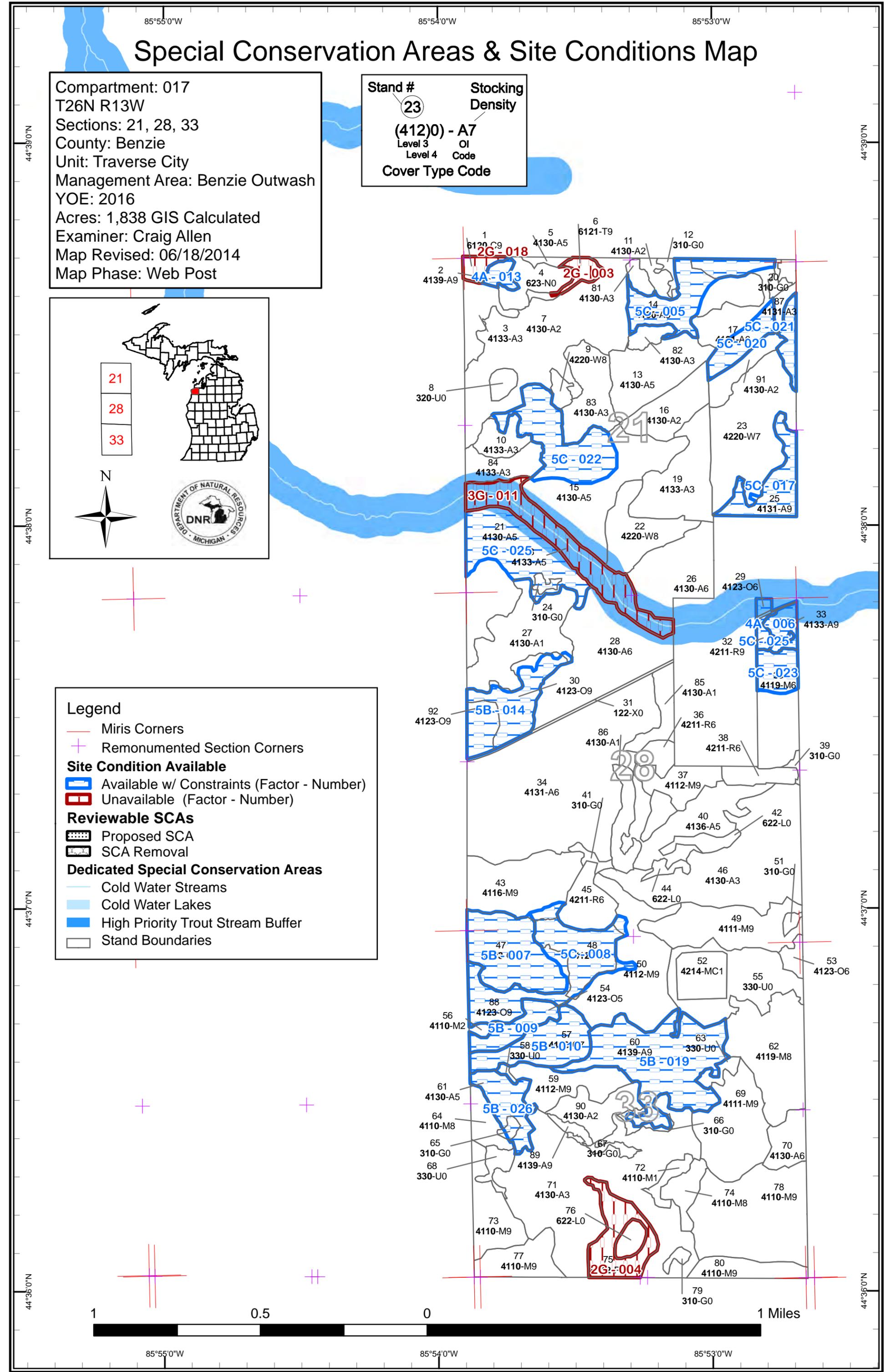
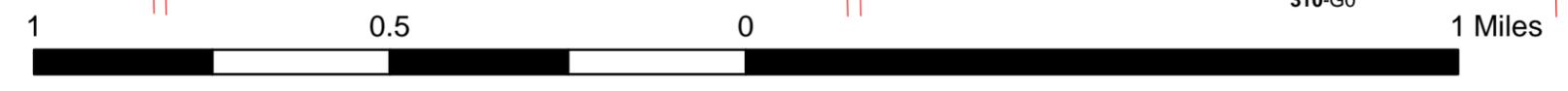
Compartment: 017  
 T26N R13W  
 Sections: 21, 28, 33  
 County: Benzie  
 Unit: Traverse City  
 Management Area: Benzie Outwash  
 YOE: 2016  
 Acres: 1,838 GIS Calculated  
 Examiner: Craig Allen  
 Map Revised: 06/18/2014  
 Map Phase: Web Post

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



**Legend**

- Miris Corners
- Remonumented Section Corners
- Site Condition Available**
- Available w/ Constraints (Factor - Number)
- Unavailable (Factor - Number)
- Reviewable SCAs**
- Proposed SCA
- SCA Removal
- Dedicated Special Conservation Areas**
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- Stand Boundaries



Report 1 – Total Acres by Cover Type and Age Class



	Age Class														Total
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	Uneven Age	
Aspen	120	50	303	53	268	79	174	0	4	0	0	0	0	16	1067
Cedar	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
Herbaceous Openland	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Low-Density Trees	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
Lowland Shrub	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Marsh	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Northern Hardwood	0	1	4	0	0	0	0	62	0	220	0	0	0	92	380
Oak	0	0	0	0	1	0	0	0	0	65	0	36	0	39	140
Planted Mixed Pines	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Red Pine	0	0	0	0	0	36	0	0	0	0	0	0	0	0	36
Tamarack	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
Upland Shrub	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Urban	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
White Pine	0	0	0	0	0	0	26	0	0	0	0	0	0	51	77
<b>Total</b>	<b>213</b>	<b>65</b>	<b>308</b>	<b>53</b>	<b>269</b>	<b>115</b>	<b>200</b>	<b>62</b>	<b>4</b>	<b>291</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>217</b>	<b>1835</b>



## Report 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit  
Year of Entry 2016

Compartment 017  
Total Compartment Acres: 1,835

### Acres by Treatment Type

Commercial Harvest - 358    Tree Planting - 0    Other - 20  
Habitat Cut - 47    Opening Maintenance - 64

### Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
(Habitat Cut)Northern Hardwood	0	47	0	0	0	0	47
Aspen Types	223	0	0	0	0	0	223
Northern Hardwood	17	51	0	34	0	0	103
Planted Pines	0	0	0	0	32	0	32
<b>Total</b>	<b>240</b>	<b>98</b>	<b>0</b>	<b>34</b>	<b>32</b>	<b>0</b>	<b>405</b>



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
21	61017021-Cut	18.8	4130 - Aspen	Medium Density Pole	48		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Harvest portion of stand with adjoining prescribed stand in compartment 16. Cut all hardwoods to regen and expand aspen, except  <u>Specs:</u> leave all oak. Also, mark some scattered retention trees of maple and cherry if available. Leave all pine. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat  <u>Comments:</u> component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2014</p>										
26	61017026-Cut	30.9	4130 - Aspen	High Density Pole	47		Harvest	Clearcut with Reserves	413 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Harvest all aspen, maple and white pine. Mark leave island (s) and/or possibly leave some scattered maple, aspen, white pine trees  <u>Specs:</u> for retention purposes. Leave all or most of the oak. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat  <u>Comments:</u> component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
34	61017034-Cut1	72.1	4131 - Aspen, Oak	High Density Pole	45	81-110	Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Cut portion of stand to regenerate aspen and to diversify age class in the area. Harvest all hardwoods, except leave most oak or  <u>Specs:</u> possibly mark a few to stump sprout. For retention, either mark scattered leave trees of maple and cherry and/or combine with leave islands. May want to cut some of the poor form/health pine if needed. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat  <u>Comments:</u> component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible. dead trees and den trees that may exist.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										
35	61017035-Cut	17.4	4119 - Mixed Northern Hardwoods	High Density Pole	76	111-140	Harvest	Clearcut with Reserves	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Harvest south portion of stand where majority of aspen and beech exist to regenerate and expand aspen. Cut all aspen, maple,  <u>Specs:</u> beech, and ironwood. Leave all oak and pine. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other</u> --Steve Griffith: Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles  <u>Comments:</u> for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p>										



S  
t  
a  
n  
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
61017036-Cut	10.7	42110 - Planted Red Pine	High Density Pole	57	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription --Craig Allen : Thin by select marking to remove approximately 1/3 of volume.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

61017038-Cut	7.4	42110 - Planted Red Pine	High Density Pole	57	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
--------------	-----	--------------------------	-------------------	----	---------	---------	---------------------	-------------------------	-----------------------

Prescription --Craig Allen :

Specs: Thin by select marking to remove approximately 1/3 of the volume.

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

61017043-Cut	33.8	4116 - Mixed N. Hardwood - Aspen	High Density Log	98	81-110	Harvest	Shelter Wood with Reserves	4116 - Mixed N. Hardwood - Aspen	Cmpt. Review Proposal
--------------	------	----------------------------------	------------------	----	--------	---------	----------------------------	----------------------------------	-----------------------

Prescription Variable species stand. Cut all aspen, beech, and ironwood. Lightly, select mark all other tree species removing poor form/health individuals or to open-up areas for aspen regen. Protect pockets of advanced regen of oak saps and poles. Residual BA may be quite variable leaving higher BA's in areas of containing sugar maple and lower in areas to regenerate to aspen. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015

61017045-Cut	14.3	42110 - Planted Red Pine	High Density Pole	57	171-200	Harvest	Systematic Thinning	4211 - Planted Red Pine	Cmpt. Review Proposal
--------------	------	--------------------------	-------------------	----	---------	---------	---------------------	-------------------------	-----------------------

Prescription --Craig Allen: Thin by select marking to remove approximately 1/3 the volume.

Specs:

Other

Comments:

Next

Steps:

Proposed

Start Date: 10/01/2015



S  
t  
a  
n  
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
49 61017049-Cut	32.2	4111 - S.Maple, Hard Mast Association	High Density Log	98	111-140	Harvest	Single Tree Selection	4111 - S.Maple, Hard Mast Association	Cmpt. Review Proposal

Prescription --Craig Allen: Thin entire stand. Most thinning will occur by cutting all beech and ash. However, can then lightly select thin all other species as needed removing the poor form/health trees targeting residual BA near 80. Leave any standing dead trees and den trees that may exist.

Other Comments: --Steve Griffith: Please include CWD in sale. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.

Next Steps:

Proposed Start Date: 10/01/2015

50 61017050-Cut	47.0	4112 - Maple, Beech, Cherry Association	High Density Log	72	81-110	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
-----------------	------	---	------------------	----	--------	---------	-----------------------	---	-----------------------

Prescription --Craig Allen : Stand is quite variable in species, BA and quality/form. Could benefit from a light select thinning to remove majority of beech and poor form/health trees of all species. Protect advanced regen of sugar maple. Could also possibly mark some regen holes where no advanced regen currently exists. Leave any standing dead trees and den trees that may exist.

Other Comments: --Steve Griffith: Please include CWD in sale. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.

Next Steps:

Proposed Start Date: 10/01/2015

59 61017059-Cut	19.1	4112 - Maple, Beech, Cherry Association	High Density Log	97	111-140	Harvest	Single Tree Selection	4112 - Maple, Beech, Cherry Association	Cmpt. Review Proposal
-----------------	------	---	------------------	----	---------	---------	-----------------------	---	-----------------------

Prescription --Craig Allen : Thin by selection. Harvest poor form/health trees and target residual BA around 70 to 80. Leave any standing dead trees and den trees that may exist.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

4 NF_61017004-NonFor	12.4	6233 - Wet Meadow				Non-Forest Management	Brush Cutting	622 - Lowland Shrub	Cmpt. Review Proposal
----------------------	------	-------------------	--	--	--	-----------------------	---------------	---------------------	-----------------------

Prescription Cut declining alder and willow in order to stimulate regeneration of these lowland shrubs. Cut should take place during the dormant season.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015



S  
t  
a  
n  
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
8 NF_61017008-NonFor1	4.0	3204 - Mast Producing Shrub				Non-Forest Management	Brush Cutting	310 - Herbaceous Openland	Cmpt. Review Proposal

Prescription Appears to be an aspen cut that did not grow back well. Maintain as an opening. Spend a day with chainsaws or mow with tractor. Cut most, but not all, cherries. Create an opening with more edge.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

12 NF_61017012-NonFor1	2.1	3103 - Rubus-Fern				Non-Forest Management	Brush Cutting	330 - Low Density Trees	Cmpt. Review Proposal
------------------------	-----	-------------------	--	--	--	-----------------------	---------------	-------------------------	-----------------------

Prescription There is a small opening at the southern portion of this stand. Focus on keeping this opening free from encroachment. Handfell some of the black cherries, a few aspen, and the white pine encroachment.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

41 NF_61017041-NonFor	2.4	3105 - Mixed Upland Herbaceous				Non-Forest Management	Brush Cutting	320 - Upland Shrub	Cmpt. Review Proposal
-----------------------	-----	--------------------------------	--	--	--	-----------------------	---------------	--------------------	-----------------------

Prescription FRD may want to use this stand as a timber landing. If FRD agrees, include this stand in adjacent timber sale and, harvest woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. WLD can mark trees to cut or to leave.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015

55 NF_61017055-NonFor	31.3	3301 - Low Density Deciduous Trees				Non-Forest Management	Brush Cutting	310 - Herbaceous Openland	Cmpt. Review Proposal
-----------------------	------	------------------------------------	--	--	--	-----------------------	---------------	---------------------------	-----------------------

Prescription If FRD agrees, include this stand in adjacent timber sale and, harvest woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. WLD can mark trees to cut or to leave. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Could plant forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry).

Other Comments:

Next Steps: Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Proposed Start Date: 10/01/2015

66 NF_61017066-NonFor	2.6	3105 - Mixed Upland Herbaceous				Non-Forest Management	Brush Cutting	320 - Upland Shrub	Cmpt. Review Proposal
-----------------------	-----	--------------------------------	--	--	--	-----------------------	---------------	--------------------	-----------------------

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover.

Other Comments:

Next Steps:

Proposed Start Date: 10/01/2015



S  
t  
a  
n  
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
67 NF_61017067-NonFor	2.7	3104 - Degraded				Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal

Prescription Remove exotics as needed by herbiciding, or other methods. Seed in forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2015

68 NF_61017068-NonFor	4.7	3301 - Low Density Deciduous Trees				Non-Forest Management	Brush Cutting	320 - Upland Shrub	Cmpt. Review Proposal
-----------------------	-----	------------------------------------	--	--	--	-----------------------	---------------	--------------------	-----------------------

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Could plant forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.

Other  
Comments:

Next  
Steps:

Proposed  
Start Date: 10/01/2015

**Total Treatment  
Acreage Proposed: 365.9**



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
17	61017014-Cut	23.4	4131 - Aspen, Oak	High Density Pole	63		Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen :</p> <p><u>Specs:</u> Harvest all aspen, maple, and cherry to regenerate these species. Also, possibly mark some oak of poor form/health to cut for stump sprout regen purposes. Leave any pine on site. Mark leave island(s) for retention purposes. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other Comment:</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p> <p><u>Limiting Factor</u> 5C: Delay treatment for age/size class diversity or exceptional site quality</p>										
15	61017015-Cut1	54.5	4130 - Aspen	Medium Density Pole	61		Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Harvest all hardwoods to regenerate and expand aspen. Leave all pine. Mark leave island (s) and possibly some scattered trees for retention purposes. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other Comment:</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p> <p><u>Limiting Factor</u> 5C: Delay treatment for age/size class diversity or exceptional site quality</p>										
17	61017017-Cut	23.4	4131 - Aspen, Oak	High Density Pole	63		Harvest	Clearcut with Reserves	4131 - Aspen, Oak	Cmpt. Review Proposal
<p><u>Prescription</u> --Craig Allen : Harvest all aspen, maple, and cherry to regenerate these species. Also, possibly mark some oak of poor form/health to cut for stump sprout regen purposes. Leave any pine on site. Mark leave island(s) for retention purposes. Create some CWD during harvest operations and leave any standing dead trees and den trees that may exist.</p> <p><u>Other Comment:</u> --Steve Griffith: Please include CWD (drumming log spec) in sale. Leave tops unchipped as much as possible to provide horizontal habitat component for wildlife. Please leave tops in scattered piles for wildlife habitat as much as possible.</p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p> <p><u>Limiting Factor</u> 5C: Delay treatment for age/size class diversity or exceptional site quality</p>										
24	NF_61017024-NonFor	1.7	3101 - Poverty Grass, Cladonia				Non-Forest Management	Brush Cutting	320 - Upland Shrub	Cmpt. Review Proposal
<p><u>Prescription</u> FRD may want to use this stand as a timber landing. Selectively hand fell woody encroachment to maintain upland brush/grassland community.</p> <p><u>Specs:</u> Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Could plant site appropriate native shrubs and/or mast producing trees for wildlife food and cover. Could plant forage crop appropriate for site location and seasonal (i.e. summer vs. winter forage) wildlife uses. May want/need to work around existing beneficial vegetation (i.e. blackberry). Maintain as needed with mowing, seeding of native grasses and forbs, fertilizing, burning, or removal of woody encroachment.</p> <p><u>Other Comment:</u></p> <p><u>Next Steps:</u></p> <p><u>Proposed Start Date:</u> 10/01/2015</p> <p><u>Limiting Factor</u> 5C: Delay treatment for age/size class diversity or exceptional site quality</p>										



S  
t  
a  
n  
d

Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
75 61017075-Other	19.6	6112 - Lowland Aspen	Medium Density Pole	61		Other	Unspecified	6112 - Lowland Aspen	Cmpt. Review Proposal

Prescription Specs: If FRD agrees, Potential winter habitat cut of aspen in part of the stand. Hand fell some of the deciduous component (aspen, maple, etc) in to produce horizontal cover in the form of coarse woody debris, promote vertical cover and future browse in the form of regenerating deciduous species, and woody browse from downed tree tops that will be available to a variety of herbivores during winter.

Other Comment:

Next Steps:

Proposed Start Date: 10/01/2015

Limiting Factor 2G: Too wet (sensitive soils, does not include access issues)

**Total Treatment Acreage Proposed: 122.7**

## Report 5 – Site Conditions

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment 017

Year of Entry 2016

### Availability for Management

Total Acres	Acres		Dominant Site Conditions	Dominant Site Conditions					
	Available	Not Available		No	5C	5B	4A	3G	2G
1066	1028	38	Aspen	821	126	71	10	38	
4		4	Cedar						4
20		20	Lowland Aspen/Balsam Poplar						20
379	379		Northern Hardwood	365	14				
140	140		Oak	6	39	95			
13	13		Planted Mixed Pines	13					
36	36		Red Pine	32	3				
6	1	5	Tamarack	1					5
77	77		White Pine	77	0				
1,740	1,674	66	Total Forested Acres	1,316	182	166	10	38	28
	96%	4%	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	Not Available	2G: Too wet (sensitive soils, does not include access issues)	5				
<b>Comments:</b>							
004	Not Available	2G: Too wet (sensitive soils, does not include access issues)	20				
<b>Comments:</b>							
005	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	26				
<b>Comments:</b>							

**Report 5 – Site Conditions**

Traverse City Mgt. Unit

Compartment 017

Craig Allen : Examiner

Year of Entry 2016

006	Available	4A: No merchantable products (see product standards)	6	
<b>Comments:</b>				
007	Available	5B: Maintain for regeneration purposes	33	
<b>Comments:</b> Regeneration				
008	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	42	
<b>Comments:</b>				
009	Available	5B: Maintain for regeneration purposes	12	
<b>Comments:</b> Regeneration				
010	Available	5B: Maintain for regeneration purposes	23	
<b>Comments:</b> regeneration				
011	Not Available	3G: Other Influence zones - See comments	33	
<b>Comments:</b>				

Report 5 – Site Conditions

Traverse City Mgt. Unit

Craig Allen : Examiner

Compartment 017

Year of Entry 2016

013	Available	4A: No merchantable products (see product standards)	4
<b>Comments:</b>			
014	Available	5B: Maintain for regeneration purposes	27
<b>Comments:</b>			
017	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	18
<b>Comments:</b>			
018	Not Available	2G: Too wet (sensitive soils, does not include access issues)	4
<b>Comments:</b>			
019	Available	5B: Maintain for regeneration purposes	56
<b>Comments:</b> let aspen fall out of stand allowing hardwood regen in understory to take over the stand in time.			
020	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11
<b>Comments:</b>			

**Report 5 – Site Conditions**

Traverse City Mgt. Unit

Compartment 017

Craig Allen : Examiner

Year of Entry 2016

021	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	6	
<b>Comments:</b>				
022	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	31	
<b>Comments:</b>				
023	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	
<b>Comments:</b>				
024	Available	5B: Maintain for regeneration purposes	0	
<b>Comments:</b>				
024	Not Available	Unspecified	0	
<b>Comments:</b>				
025	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	41	
<b>Comments:</b>				

026	Available	5B: Maintain for regeneration purposes	16
-----	-----------	---	----

**Comments:**

Let off-site aspen fall out of stand allowing sapling understory of sugar maple to take over the stand.



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

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

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

Comments				
----------	--	--	--	--



**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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

Conservation Area	Type	Description
SCA	Archaeological Site	An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available.
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	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	6120 - Lowland Cedar	High Density Log	4.1	115	111-140	Small part of larger type in adjacent compartment(s). Nice quality cedar. Not too wet. Large diameter white pine of 26" or more. A few hemlock.
2	4139 - Aspen, Mixed Deciduous	High Density Log	3.9	88	81-110	
3	4133 - Aspen, Mixed Pine	High Density Sapling	11.8	27	1-50	Aspen regen with many remnant white pine. RM, BC, WP, RO seedlings.
5	4130 - Aspen	Medium Density Pole	1.9	44		
6	6121 - Tamarack	High Density Log	5.8	96	111-140	
7	4130 - Aspen	Medium Density	76.9	27		Aspen saplings appear poor, slow growing. BC, WP seedlings. Dry site.
9	42200 - Natural White Pine	Medium Density Log	3.4	67	81-110	Aspen saplings in north part of stand, was cut with stand to north but this stand has denser WP residual. South part of this stand was not cut at that time, has pole aspen along with WP.
10	4133 - Aspen, Mixed Pine	High Density Sapling	8.8	6		
11	4130 - Aspen	Medium Density	4.5	27		
13	4130 - Aspen	Medium Density Pole	29.5	45		Scattered small openings with cherry saplings. A few remnant red oak sawlog trees.
14	4130 - Aspen	Medium Density Pole	29.9	61		
15	4130 - Aspen	Medium Density Pole	72.7	61		
16	4130 - Aspen	Medium Density	18.7	17		Was clearcut with marked residuals.
17	4131 - Aspen, Oak	High Density Pole	38.3	63		Much better growth than aspen stands to west. Fairly open understory, a few juneberry & witch hazel. Some variation in size/age aspen  RM, RO, BC seedlings.
18	4133 - Aspen, Mixed Pine	Medium Density Pole	33.2	63		Quaking aspen along draw, in contrast to bigtooth in adjacent types. Some blueberry on slopes; wetland shrubs along lower part of flowage west end of stand, including nannyberry. Variable ages on aspen (2 cores: one 36 rings, another 52 rings), poor form. Scattered older white pine sawlog trees.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
19	4133 - Aspen, Mixed Pine	High Density Sapling	31.1	17		Aspen regen w/residual WP, RM, A. RM, BC seedlings.
21	4130 - Aspen	Medium Density Pole	52.9	48		Parklike, sparse stand. Very poor quality trees. Possible pine planting site?
22	42200 - Natural White Pine	Medium Density Log	22.3	69	51-80	Nice stand of natural WP. WP age is on a 10" tree; some older remnant WP trees also present, plus younger saps/poles.
23	42201 - Natural White Pine, Mixed Deciduous	Low Density Log	51.4	Uneven Age	51-80	
25	4131 - Aspen, Oak	High Density Log	17.5	49		RM seedlings
26	4130 - Aspen	High Density Pole	30.9	47		aspen height, density declines from NE to SW
27	4130 - Aspen	Low Density Sapling	36.7	7		Aspen regen from fall 2006 cut, with residual mature oak and sapling white pine. Small amount of residual red pine, black cherry, white oak, and witch hazel.
28	4130 - Aspen	High Density Pole	52.5	37		
29	4123 - Red Oak	High Density Pole	1.3	43	51-80	Possible dispose of this parcel: isolated lot. Seedlings: SM, BC, IW, WP. Jack pine rows along road.
30	4123 - Red Oak	High Density Log	20.5	96	51-80	
32	42110 - Planted Red Pine	High Density Log	3.2	57	111-140	RO, SM, AB, IW seedlings.
33	4133 - Aspen, Mixed Pine	High Density Log	6.1	56	51-80	
34	4131 - Aspen, Oak	High Density Pole	124.5	45	81-110	Pole aspen from a cut 30-40 years ago with residual older RO, WP. WP now all sizes/ages. RM, RO, WP seedlings throughout. Lots of maple-leaved viburnum. A few white oak, sugar maple.
35	4119 - Mixed Northern Hardwoods	High Density Pole	27.3	Uneven Age	111-140	Veteran white pine in patches. Old WP stumps. AB, IW seedlings, plus some WP and BC. 75 years per OI, may reflect some of the older beech oak, pine.
36	42110 - Planted Red Pine	High Density Pole	10.7	57	171-200	Was 3rd-row thinned. Mixed deciduous seedlings through much of stand.

S  
t  
a  
n  
d

## Traverse City Mgt. Unit

## Report 8 – Forested Stands

Compartment: 017  
Year of Entry: 2016

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
37	4112 - Maple, Beech, Cherry Association	High Density Log	13.3	78	81-110	Mixed seedlings: SM, RM, BW, BC, IW.
38	42110 - Planted Red Pine	High Density Pole	7.4	57	171-200	A few b. cherry and aspen poles. AB, RO, RM, SM seedlings throughout. Some witch hazel.
40	4136 - Aspen, Mixed Conifer	Medium Density Pole	31.3	27	1-50	Mosaic of aspen sapling patches, oak/hardwood/aspen poles, and patches of white pine and white spruce plantation - very diverse.
43	4116 - Mixed N. Hardwood - Aspen	High Density Log	35.7	98	81-110	seedlings. Trace of WA, BC, IW in canopy. Age is on a larger maple. Old RR grade toward N end.
45	42110 - Planted Red Pine	High Density Pole	14.3	57	171-200	
46	4130 - Aspen	High Density Sapling	71.1	27		A few remnant sawlog white pine. Low wet areas.
47	4123 - Red Oak	Low Density Log	35.6	118	1-50	RM, RO seedlings
48	4123 - Red Oak	Low Density Log	20.2	98	1-50	
49	4111 - S.Maple, Hard Mast Association	High Density Log	32.3	Uneven Age	111-140	East 1/2 thinned in 1998, has a flush of ironwood, beech, s. maple seedlings.
50	4112 - Maple, Beech, Cherry Association	High Density Log	48.3	72	81-110	Many maple are multi-stemmed. Variable sized oak around small openings from seedling to pole.
52	42140 - Planted Mixed Pine	Low Density Sapling	13.4	19		JP volunteers overtopping 1/3 of RP. RP avg. 6', range 3-10'.
53	4123 - Red Oak	High Density Pole	3.7	Uneven Age	1-50	Small stand, but connects to stand in adjacent compartment. Mixed size/age oak. Age is from one of the larger sawlog oaks.
54	4123 - Red Oak	Medium Density Pole	11.5	Uneven Age	51-80	Thick seedlings in gaps: BC, RM, SM, AB, a few RO.
56	4110 - Sugar Maple Association	Medium Density	1.4	17		Small clearcut, probably attempt at oak regen. Very few oak seedlings, most browsed. Several large, fallen oak.
57	4123 - Red Oak	Low Density Log	23.4	Uneven Age	1-50	Mixed seedling/sapling regen: RM, BC, SM, IW, RO, WP; RM stump sprouts.
59	4112 - Maple, Beech, Cherry Association	High Density Log	19.1	97	111-140	Good quality red maple. Fairly open understory except some ironwood.



Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4139 - Aspen, Mixed Deciduous	High Density Log	56.1	50	51-80	Various aged quaking aspen clones in a mosaic with northern hardwood. Q. aspen poor quality, succeeding to hardwood. May be best to write off aspen and let go to hardwood mix, as stand is well stocked with maple poles & saplings. Numerous small openings. Year of origin 1954 per OI.
4130 - Aspen	Medium Density Pole	14.4	55		Small openings within stand.
4119 - Mixed Northern Hardwoods	Medium Density Log	41.9	97	51-80	A few black cherry present.
4110 - Sugar Maple Association	Medium Density Log	8.4	Uneven Age	81-110	
4111 - S.Maple, Hard Mast Association	High Density Log	34.9	96	81-110	Good regen after thinning. Few cavity trees or CWD. Was thinned in 2000-2001
4130 - Aspen	High Density Pole	10.8	47	81-110	
4130 - Aspen	High Density Sapling	107.8	21		Scattered residual oak & other hardwoods. Seasonally wet in places.
4110 - Sugar Maple Association	Low Density Sapling	4.5	21		
4110 - Sugar Maple Association	High Density Log	18.8	99	81-110	
4110 - Sugar Maple Association	Medium Density Log	8.6	Uneven Age	51-80	Almost pure basswood. Lots of mixed hardwood seedlings.
6112 - Lowland Aspen	Medium Density Pole	19.6	Uneven Age		Some of stand on low dry ridges, but mostly wetland. A few red oak, white pine on ridges.
4110 - Sugar Maple Association	High Density Log	15.5	Uneven Age	81-110	Little CWD. Ring count on aspen is shaky. Year of origin per OI is 1915.
4110 - Sugar Maple Association	High Density Log	57.5	92	51-80	
4110 - Sugar Maple Association	High Density Log	12.0	92	81-110	
4130 - Aspen	High Density Sapling	3.6	6		
4130 - Aspen	High Density Sapling	4.6	6		
4130 - Aspen	High Density Sapling	21.8	6		

S  
t  
a  
n  
d

## Traverse City Mgt. Unit

## Report 8 – Forested Stands

Compartment: 017  
Year of Entry: 2016

Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
4133 - Aspen, Mixed Pine	High Density Sapling	12.4	6		natural regeneration of aspen is anticipated and will keep this stand on an aspen cover type
4130 - Aspen	Low Density Sapling	9.7	5	1-50	
4130 - Aspen	Low Density Sapling	10.4	5	1-50	
4131 - Aspen, Oak	High Density Sapling	3.1	4		
4123 - Red Oak	High Density Log	15.2	98	81-110	W. pine regen mostly west end.
4139 - Aspen, Mixed Deciduous	High Density Log	2.5	50	51-80	
4130 - Aspen	Medium Density	15.6	Uneven Age	1-50	
4130 - Aspen	Medium Density	9.4	5		
4123 - Red Oak	High Density Log	9.0	96	51-80	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	6233 - Wet Meadow	12.4	No	Low	Old beaver flooding. The east part is dominated with tamarack and dead wood. As you move west, the tamarack gives way to just dead wood. The majority of this lowland (60%) is a wet meadow located in the center. The western part has dead wood and shrubs such as willow/tag alder.
8	3204 - Mast Producing Shrub	4.0	No	Medium	An aspen cut that never grew back? This opening is growing in with shrubby cherries.
12	3103 - Rubus-Fern	2.0	No	Medium	The north part looks like an old aspen cut that didn't grow back. Looks like they left large pine and oak in the sale. The north part is closing in. May want to cut a little bit of the encroach with chainsaws.
20	3103 - Rubus-Fern	2.2	No	Low	Nice, large cherries along perimeter. All bracken fern groundcover. One ironwood tree in field.
24	3101 - Poverty Grass, Cladonia	1.7	No	Low	Where is Kinney Creek located? This stream must be seasonal. Pretty nice opening, a rarity to see such an open field with no bracken fern. Large oaks/cherries/red maple along perimeter. Some pole aspen in spots.
31	122 - Road/Parking Lot	3.7			
39	3105 - Mixed Upland Herbaceous	1.1	No	Medium	Spotted knapweed in center. Immediately SE is a bracken fern opening. A trace of mullein.
41	3105 - Mixed Upland Herbaceous	2.4	No	Low	A few log cherries. 1/2 bracken fern, 1/2 poverty grass. A few seedling/sapling pine mixed. Spotted knapweed mixed in with poverty grass. Patch of cool summer grasses with ragweed along east edge.
42	6229 - Mixed lowland shrub	5.3	No	Low	All shrubs, mountain holly, buttonbush, and willow. Some leatherleaf, sedges, and fern. Unlisted species is ostrich fern.
44	6229 - Mixed lowland shrub	2.7	No	Low	A little more open, less shrubs, then mixed lowland shrub that is immediately NE. Unlisted species is ostrich fern.
51	3103 - Rubus-Fern	1.6	No	Low	Nice, little opening. Unlisted ground species is hawkweed.
55	3301 - Low Density Deciduous Trees	31.1	No	Medium	May want to divide into two stands. East portion is low-density trees while the south, west, and part of north opens up a little more into poverty grass/cladonia. East portion is dominated by bracken fern as groundcover.
58	3301 - Low Density Deciduous Trees	1.0	No	Low	



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
63	3301 - Low Density Deciduous Trees	3.5	No	Medium	Mainly sugar maple, oak, and some basswood. Open areas are dominated by poverty grass/cladonia, with some sheep's sorrow in between trees. Bracken fern/rubus underneath trees. An old two-track that is growing in leads to this opening. Unlisted specie is hawkweed.
65	31021 - Cool Season Grass	1.7	No	Low	New active oil/gas. There are pipes and a storage tank present. Reseaded with grasses. Some slash along perimeter. Unlisted specie is clover.
66	3105 - Mixed Upland Herbaceous	2.6	No	Low	Thin opening. Main specie of groundcover is poverty grass. Lots of other things mixed in.
67	3104 - Degraded	2.7	No	Medium	Gate with no lock restricting west part. West part possibly an old timber landing. Farthest east portion mainly spurge, with hawkweed and some strawberry. Unlisted one is mullein. Unlisted two is hawkweed. Unlisted three is bull thistle. Also, wild bugemot and pigweed present.
68	3301 - Low Density Deciduous Trees	4.7	No	Low	Allot of poverty grass, cladonia, hawkweed, rubus. Bracken fern located along perimeter and the NE portion. Seedling red maples underneath large black cherries.
76	6221 - Fen	4.9	No	Low	
79	31021 - Cool Season Grass	1.8	No	Low	Pipe head located here. New well pad with planted grass. Some slash located SW portion. Unlisted specie is clover.