



## TRAVERSE CITY FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 49 ENTRY YEAR: 2012

Compartment Acreage: 3939 County: Grand Traverse

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**Stand Examiner:** Scott Lint

**Legal Description:** T26N - R11W - sections 9, 13-15, 23-28

**Management Goals:** Maintain vegetative cover and encourage long lived species along the banks of the Boardman River and tributaries. Maintain and expand aspen cover types where possible while continuing to maintain a balanced age class distribution of aspen cover types. Oak should be managed as a minor species for mast production where it is present in aspen cover types.

**Soil and Topography:** Level to rolling with some steep slopes along the Boardman River Valley.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Residential development continues around the compartment. Several of the private parcels that are intermingled with state ownership have been recently subdivided for residential development. Minor trespass encroachments such as mowing or trimming, dumping of yard debris, underground pet containment systems, fire pits, are common along these shared property lines. Continued development is expected due to the close proximity of this compartment to Traverse City. The northeast part of the compartment, known locally as “Hoosier Valley,” has been an area of historic ORV use and also has an area commonly used as a shooting range. Efforts last entry period to limit/control ORV use have been fairly successful, however dumping of trash associated with the shooting area continues to be a major problem. The users of this area are not cleaning up after themselves and this continues to be a major concern. The amount of use may be a concern with regard to potential hazards of lead accumulation at this site as well.

**Unique, Natural Features:** The Weidenhamer Swamp occupies the southern third of the compartment and is the largest deer yarding area in Grand Traverse County. MNFI records indicate numerous occurrences of Red-shouldered Hawk in and around the compartment. Occurrences of Osprey, Common Loon, and Hill’s Thistle are recorded near, but outside of the compartment. MNFI indicates potential for Goshawk, Massasauga Rattle Snake, Wood Turtle, Blanding’s Turtle, Eagle, Osprey, Great Blue Heron Rookery, Ram’s Head Orchid, Calypso Orchid, Limestone Oak Fern, and Michigan Monkey Flower.

**Archeological, Historical, and Cultural Features:** None known.

**Special Management Designations or Considerations:** The Boardman River is a state designated natural river. This designation also applies to Beitner and Jaxon Creeks. These waters are also designated trout streams.

**Watershed and Fisheries Considerations:** The Boardman River and its tributaries are all designated trout streams. Since these streams are of very high quality, their trout populations are supported by natural reproduction. They are not stocked. To keep them in good condition, it is critical that BMPs and Natural

Rivers buffers are strictly adhered to. Natural Rivers buffers are as follows: tributaries, 50 ft; the Boardman River, 100 ft. Shade, limiting sediment input, and woody debris recruitment are crucial to trout streams. In Stand 45, Mason Creek is also a designated trout stream. Patch or strip clear cut in Stand 45 should be managed for species other than young aspen, in order to avoid problems with beavers. Beavers have the ability to severely degrade small trout streams. Restricting cutting to outside the appropriate buffers will help to maintain the temperatures and habitat required to maintain the health of these streams, and the watershed in general (Heather Seites, MDNRE Fish Division comments).

**Wildlife Habitat Considerations:** Maintain mature conifer cover in the Weidenhamer swamp. Although some small patch cuts or habitat cuts may be appropriate to replicate naturally occurring blowdowns, none are prescribed this period. Stands on the outwash plains should continue to be managed for a variety of successional stages and habitat conditions, including everything from open grass/brush habitat to late successional forest. Some open areas should be converted to native warm season grass mixes to replace bracken fern monocultures. Early successional forest patches created through timber harvest should incorporate snags, scattered and clumped residual live trees, and down logs to more closely represent within-stand habitat structure left in the wake of wildfires. If possible tops should be left unchipped and scattered around the sale area and under 24 inches in height. Maintaining or regenerating oak as a component of these forest stands is very important to local wildlife habitat diversity. The best location for late successional forest would be northeast of the conifer swamp, where there is some natural fire protection. Not coincidentally, active red-shouldered hawk nests have been located in upland deciduous stand just north of the swamp. These stands should be managed per the department guidelines for this threatened raptor. As much as possible, tree species diversity and habitat structure should be incorporated into pine plantations. Incorporating small (2-5 acre) islands that are left relatively un-thinned within mature pine stands would provide winter roosting cover for turkeys. This entire compartment is particularly popular among local residents as an accessible hunting area.

**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 are the Mississippian Coldwater and Devonian Ellsworth Shale. There is no current economic use for the Coldwater or Ellsworth Shales. The nearest gravel pits are within one mile to the north and south. Gravel potential in the compartment is considered good. This area is located in the Silurian Niagaran reef trend. Some of the State land is currently leased for oil and gas development and there may be additional reef potential. Portions of the Compartment have also been nominated for underground gas storage and the May 2010 oil & gas lease auction. The Antrim Shale has not been developed in this area, but may have some future potential.

**Vehicle Access:** None identified at this time.

**Survey Needs:** None identified at this time.

**Recreational Facilities and Opportunities:** There is a Parks & Recreation Division maintained access site on the Boardman River in section 13. The Michigan Riding/Hiking Trail and Boardman Valley Snowmobile run through the compartment.

**Fire Protection:** Local fire protection is provided by Blair Twp. Fire Dept. DNRE fire protection is provided by the Traverse City Field Office. Access to most of this compartment is acceptable; travel time is not a problem. Urban Interface issues are possible with cabins, seasonal residences along sections of the river, and private residences scattered throughout this compartment. There is a fairly large swamp component in the south part of the compartment which would make fires difficult to extinguish at times, but no fire occurrence has taken place in recent years.

**Additional Compartment Information:**

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

**Cover Type by Age Class**

**Cover Type by Management Objective**

**Compartment Volume Summary**

**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**

**Suggested potential old growth**

# Cover Type & Treatment Map

Compartment 49  
 T26N, R11W, Sec. 9, 13-15, 21-28  
 County: Grand Traverse  
 Unit: Traverse City  
 YO: 2012  
 Acres: 3,939 GIS Calculated  
 Stand Examiner: Scott Lint  
 Map Revised: 5/25/2010  
 Map Phase: Pre-Review

Stand #  
**23**  
 Stocking  
 Density  
**(4120) - A7**  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

**Legend**

- Miris Corners
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trails
  - Snowmobile Trails
  - Hiking Trails
  - Horse Trails
- Bridges
- Culverts
- Railroads
- Pipe
- Power
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

**Treatments**

- Clearcut (w/Reserves, Patch/Strip)
- Thinning (Crown, Low, Systematic)
- Planting (tree species)
- Opening Maintenance
- Other Treatment - See Comments

**Forest Stands**

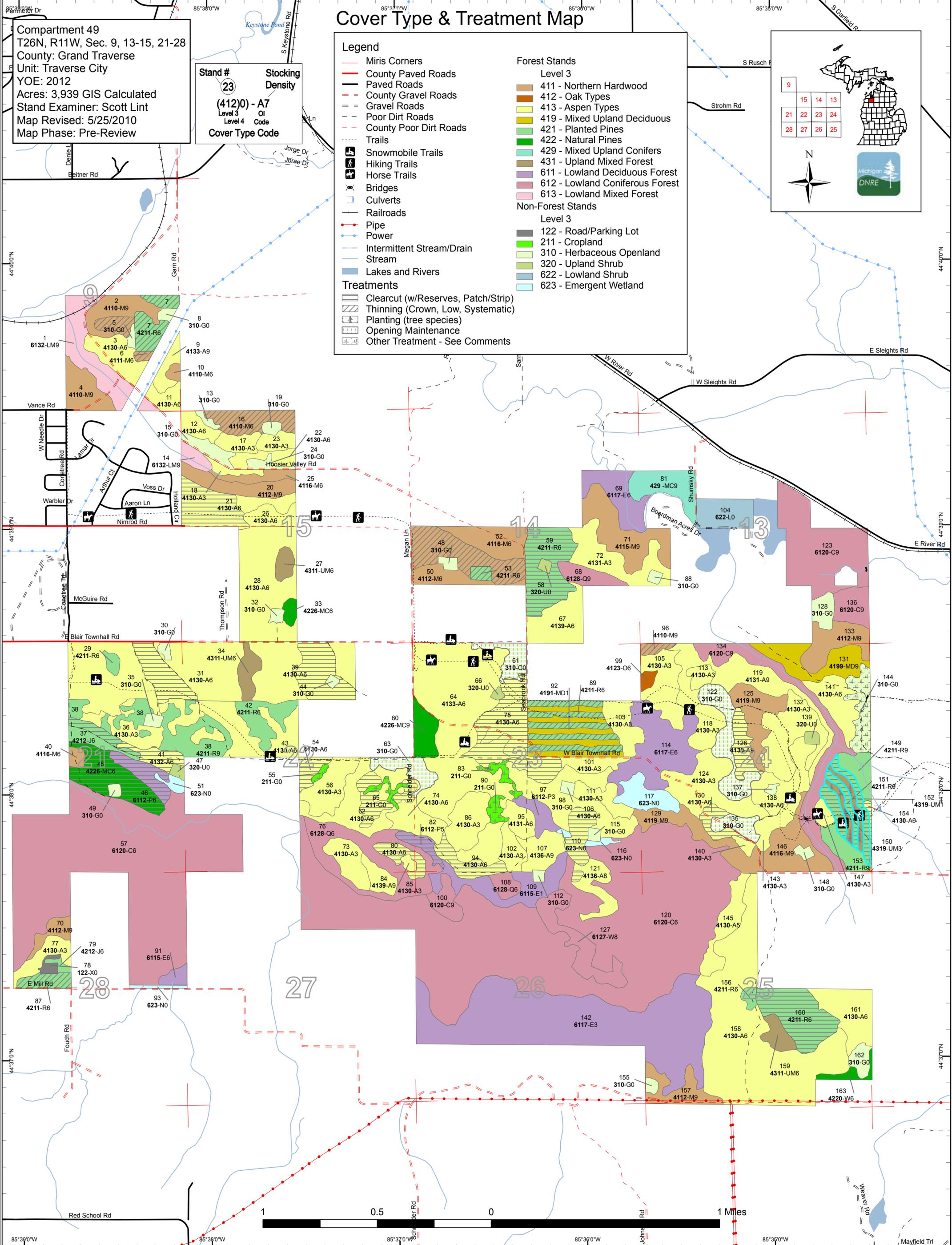
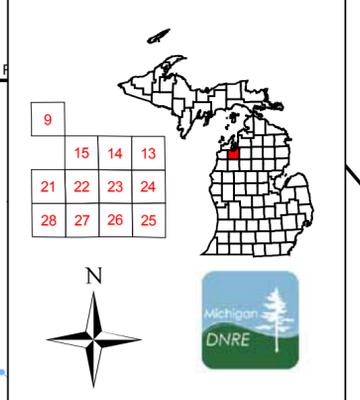
Level 3

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

**Non-Forest Stands**

Level 3

- 122 - Road/Parking Lot
- 211 - Cropland
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 622 - Lowland Shrub
- 623 - Emergent Wetland



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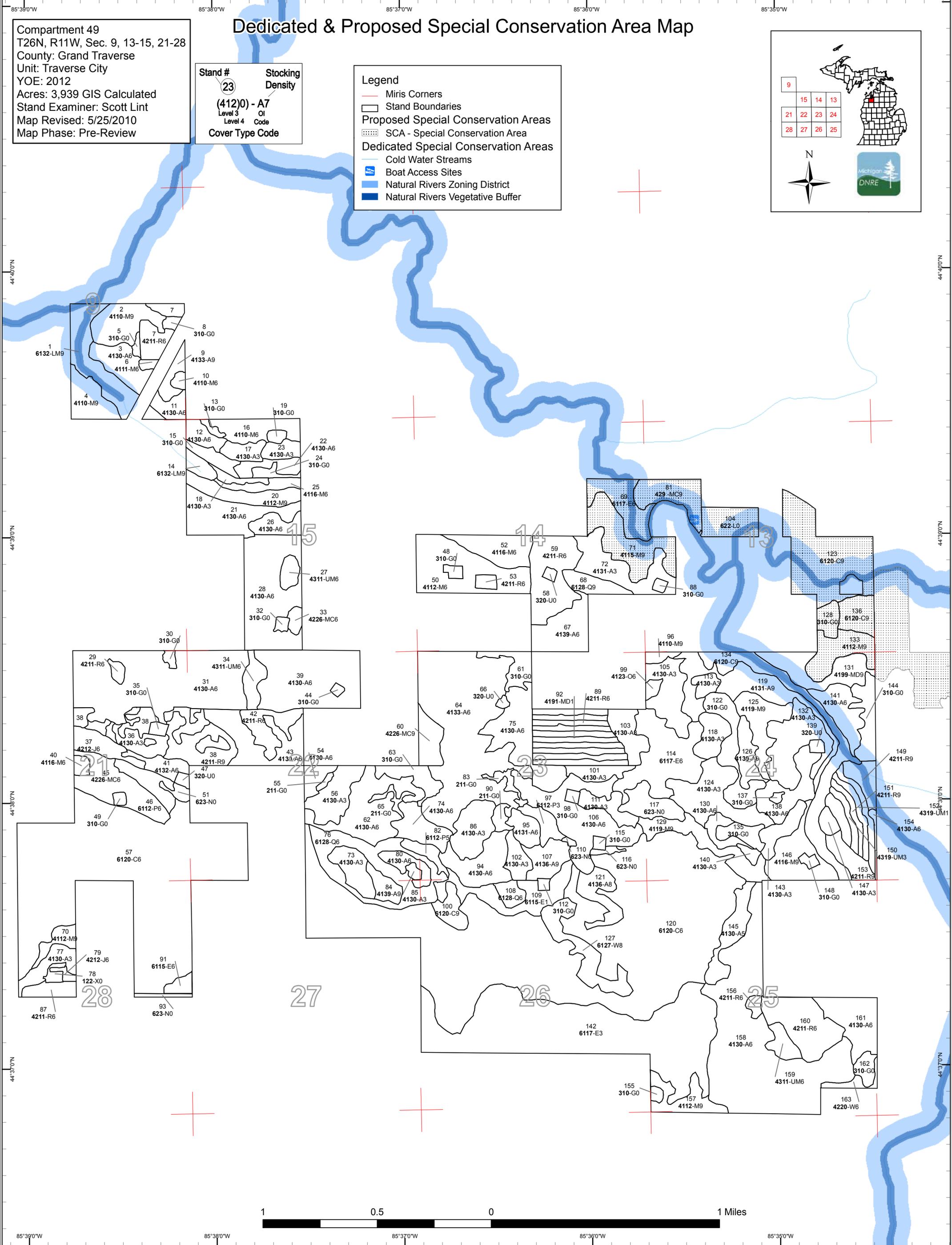
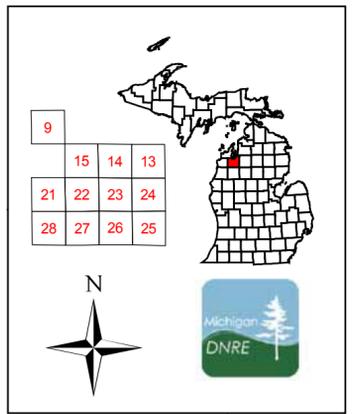


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# Dedicated & Proposed Special Conservation Area Map

Stand # **23** Stocking Density  
**(4120) - A7**  
 Level 3 OI Code  
 Level 4 Code  
 Cover Type Code

- Legend**
- Miris Corners
  - Stand Boundaries
  - ▨ Proposed Special Conservation Areas
  - ▨ SCA - Special Conservation Area
  - ▨ Dedicated Special Conservation Areas
  - Cold Water Streams
  - ⚓ Boat Access Sites
  - Natural Rivers Zoning District
  - Natural Rivers Vegetative Buffer



85°39'0"W 85°38'0"W 85°37'0"W 85°36'0"W 85°35'0"W

**Table 1 – Total Acres by Cover Type and Age Class**  
(Level 3 Cover Type)



	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 +		Uneven Age
Aspen Types	0	207	89	253	117	486	289	0	13	37	16	0	0	0	16	1523
Cropland	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Emergent Wetland	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Herbaceous Openland	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	838	39	135	15	0	0	0	1027
Lowland Deciduous Forest	0	9	0	0	31	19	84	0	200	0	0	0	0	0	0	343
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	43
Lowland Shrub	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Mixed Upland Conifers	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	24
Mixed Upland Deciduous	0	29	0	0	0	0	0	0	0	29	0	0	0	0	0	57
Natural Pines	0	0	0	0	0	0	34	4	19	0	0	0	0	0	0	57
Northern Hardwood	0	0	0	0	0	9	78	95	84	30	30	24	0	0	0	350
Oak Types	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Planted Pines	0	0	0	0	0	64	199	0	0	0	0	0	0	0	0	263
Road/Parking Lot	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Upland Mixed Forest	0	12	0	9	0	0	0	17	0	0	0	0	0	0	0	38
Upland Shrub	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
<b>Total</b>	<b>212</b>	<b>257</b>	<b>89</b>	<b>262</b>	<b>148</b>	<b>577</b>	<b>711</b>	<b>116</b>	<b>1153</b>	<b>136</b>	<b>223</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>3939</b>



## Table 2 – Proposed Treatment Summaries

Traverse City Mgt. Unit  
Year of Entry 2012

Compartment 049  
Total Compartment Acres: 3939

### Acres by Treatment Type

Commercial Harvest - 499	Site Prep - 0	Tree Planting - 12	Prescribed Burn - 0	Other - 0
Habitat Cut - 5	Opening Maintenance - 92	Tree Seeding - 0	Pesticide - 0	

### 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>
<b>Aspen</b>	214	0	0	0	0	0	<b>214</b>
<b>Jack Pine</b>	7	0	0	0	0	0	<b>7</b>
<b>Lowland Aspen/Balsam Poplar</b>	21	0	0	0	0	0	<b>21</b>
<b>Natural Mixed Pines</b>	34	0	0	0	0	0	<b>34</b>
<b>Northern Hardwood</b>	0	0	0	0	70	0	<b>70</b>
<b>Red Pine</b>	100	0	0	0	58	0	<b>158</b>
<b>Total</b>	<b>375</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>0</b>	<b>504</b>



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	61049002-Cut	7.0	4110 - Sugar Maple Association	High Density Log	94	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin to release good quality crop trees in accordance with Chapter II of the "Compleat Marker."  <u>Specs:</u>  <u>Other:</u> Treatment area has been reduced to exclude all steep slopes. Confine treatment to easily accessible areas of the stand (as approximated by the treatment shape). Combine treatment with stand 6.  <u>Comments:</u>  <u>Next Steps:</u> None.</p>									
6	61049006-Cut	2.0	4111 - S.Maple, Hard Mast Association	High Density Pole	85	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin to release good quality crop trees in accordance with Chapter II of the "Compleat Marker."  <u>Specs:</u>  <u>Other:</u> Combine with stand 2 treatment.  <u>Comments:</u>  <u>Next Steps:</u> None.</p>									
7	61049007-Cut	16.1	42110 - Planted Red Pine	High Density Pole	48	Harvest	Crown Thinning	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Emphasis should be on removing poor quality and suppressed trees. In the process, do not reduce total basal area below 100 square feet.  <u>Specs:</u>  <u>Other:</u> Two track roads running through this stand should remain blocked after the sale if they are opened up during sale operations. This is to control ORV activity that in the past was resulting in severe erosion.  <u>Comments:</u>  <u>Next Steps:</u> None.</p>									
16	61049016-Cut	20.2	4110 - Sugar Maple Association	High Density Pole	83	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
<p><u>Prescription:</u> Thin to release good quality crop trees in accordance with Chapter II of the "Compleat Marker."  <u>Specs:</u>  <u>Other:</u> Will need permission for access across private property in order to treat this stand.  <u>Comments:</u>  <u>Next Steps:</u> None.</p>									
21	61049021-Cut	27.8	4130 - Aspen	High Density Pole	55	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> Retain some good quality red oak. Retain most conifer. Create several retention islands or patches for visual management along Nimrod Rd.  <u>Specs:</u> Minimize retention along private boundary to west of stand along subdivision to clearly delineate property line. Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  <u>Other:</u> Encroachment from private owners has been a problem since the subdivision to the west was established. Encroachments include, fire pits, areas of expanded lawn, mowing, dumping of yard debris, invisible dog fencing, paths leading to illegally constructed hunting blinds, etc. Paint and clearcut a "hard line" along property boundary to clearly establish property line.  <u>Comments:</u>  <u>Next Steps:</u> Regeneration survey.</p>									



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
31	61049031-Cut	21.1	4130 - Aspen	High Density Pole	41	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.</p> <p><u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.</p> <p><u>Other Comments:</u> The forest road on the east edge of this stand is used to access private property/residence to the south. Keep logging equipment off this road during sale operations.</p> <p><u>Next Steps:</u> Regeneration survey.</p>									
37	61049037-Cut	7.1	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	55	Harvest	Clearcut	Aspen, Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> No retention. Retain individual trees for visual management where possible, however there may not be many good candidates for this and retention may be less than the 3% required by retention guidelines, hence the no retention prescription. Select trees for retention based on visual quality along snowmobile trail. Do not retain jack pine and aspen along trail.</p> <p><u>Other Comments:</u> Restrict sale operations during the period of December 1st through March 31st to minimize impact to the snowmobile trail.</p> <p><u>Next Steps:</u> Regeneration survey.</p>									
39	61049039-Cut	28.0	4130 - Aspen	High Density Pole	41	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.</p> <p><u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.</p> <p><u>Other Comments:</u> Consider closing road along east side of stand. This is an old remnant oil well service road that leads to an abandoned well pad. Verify to make sure that the well pad on private property to the east is also no longer in service before closing road.</p> <p><u>Next Steps:</u> Regeneration survey.</p>									
41	61049041-Cut	10.0	4132 - Aspen, Jack Pine	High Density Pole	44	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription:</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance. Use individual tree retention along snowmobile trail.</p> <p><u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.</p> <p><u>Other Comments:</u> Restrict sale operations during the period of December 1st through March 31st to minimize impact to the snowmobile trail.</p> <p><u>Next Steps:</u> Regeneration survey.</p>									
45	61049045-Cut	33.8	42260 - Natural Pine, Mixed Deciduous	High Density Pole	54	Harvest	Patch or Strip Clearcut	Aspen, Mixed Pine	Cmpt. Review Proposal
<p><u>Prescription:</u> Good vigorous bigtooth aspen. Regenerate aspen in patches where possible. Cut most red maple to create browse. Retain pockets of good quality white pine for thermal cover. Also retain scattered good quality individual white pine.</p> <p><u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.</p> <p><u>Other Comments:</u> Attempt to replicate results from Blair Pine Project sale (last entry period) located just north of this stand (stands 36 and 38).</p> <p><u>Next Steps:</u> Regeneration survey.</p>									



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<b>46 61049046-Cut</b>	13.7	6112 - Lowland Aspen	High Density Pole	49	Harvest	Clearcut with Reserves	Lowland Aspen	Cmpt. Review Proposal

Prescription: Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  
Specs: Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet of its stump.  
Other Comments: Stand is seasonally wet, but operable. Use rutting retrictions rather than seasonal restrictions on sale proposal to give us flexibility in getting this stand treated when conditions are favorable.  
Next Steps: Regeneration survey.

<b>50 61049050-Cut</b>	37.6	4112 - Maple, Beech, Cherry Association	High Density Pole	59	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
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Prescription: Release good quality sugar maple poles/small logs using standard techniques outlined in the "Compleat Marker", Chapter II. Stand contains  
Specs: Beech Bark Disease Monitoring & Impact Plots. OK to proceed with treatment as long as marked trees are left (per Roger Mech). See compartment file for plot design and location.  
Other Comments: Two stick nests were observed in this stand during field inventory. These nests were both inactive during the spring of 2010. Monitor for possible reoccupation during sale preparation.  
Next Steps: None.

<b>53 61049053-Cut</b>	3.5	42110 - Planted Red Pine	High Density Pole	49	Harvest	Crown Thinning	Planted Red Pine	Cmpt. Review Proposal
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Prescription: Thin to remove poor quality and suppressed trees. Reduce basal area to approximately 110-130 square feet.  
Specs:  
Other Comments: Try to maintain higher density where possible. There will be very little plantation pine remaining in this compartment after the completion of the Phase II Red Pine Project cuts. This stand may serve as winter turkey roosting cover.  
Next Steps: None.

<b>54 61049054-Cut</b>	7.6	4130 - Aspen	High Density Pole	55	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription: Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  
Specs:  
Other Comments: Consider the possibility of leaving a retention island around the two track that accesses the maintained rye field next to this stand.  
Next Steps: Regeneration survey.

<b>59 61049059-Cut</b>	40.8	42110 - Planted Red Pine	High Density Pole	49	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
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Prescription: No retention.  
Specs:  
Other Comments: Stand is under contract (61-041-09-01) for Phase II of the Red Pine Project. This treatment has already been approved at the Red Pine Project Phase II Compartment Review.  
Next Steps: Stand is also under prescription for replanting to red pine as a part of the Red Pine Project.



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
	<b>61049062-Cut</b>	16.2	4130 - Aspen	High Density Pole	54	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  <u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  <u>Other</u> Remove most of the white pine in the east unit.  <u>Comments:</u>  <u>Next Steps:</u> Regeneration survey.</p>									
	<b>75 61049075-Cut</b>	40.6	4130 - Aspen	High Density Pole	47	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  <u>Specs:</u> Emphasis/consideration should be made with regard to visual management along Blair Townhall Rd when implementing retention guidance. Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  <u>Other</u> Treat stand 61 (opening maintenance) along with this stand. For regeneration purposes it would be beneficial to have this stand cutting during the dormant season. Potential conflicts with the snowmobile trail can be adequately managed through the use of sale specifications and the design of sale payment units. Seasonal restriction prohibiting winter cutting should not be necessary.  <u>Comments:</u>  <u>Next Steps:</u> Regeneration survey.</p>									
	<b>80 61049080-Cut</b>	9.6	4130 - Aspen	High Density Pole	54	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  <u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  <u>Other</u> Raod into stand is seasonally flooded. Limit sale activity during spring break up to minimize impact to road.  <u>Comments:</u>  <u>Next Steps:</u> Regeneration survey.</p>									
	<b>82 61049082-Cut</b>	7.0	6112 - Lowland Aspen	Medium Density Pole	54	Harvest	Clearcut	Lowland Aspen	Cmpt. Review Proposal
<p><u>Prescription</u> No retention.  <u>Specs:</u> Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  <u>Other</u> Aspen degenerating quickly. Pooly stocked in spots. This stand has the look of a lowland shrub type with a quaking aspen overstory. Attempt to regenerate aspen.  <u>Comments:</u>  <u>Next Steps:</u> Regeneration survey. If regeneration fails, it will serve to release lowland shrub type. Lowland shrub is an acceptable cover type outcome for this treatment.</p>									
	<b>87 61049087-Cut</b>	9.1	42110 - Planted Red Pine	High Density Pole	50	Harvest	Crown Thinning	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Emphasis should be on removing poor quality and supressed trees. In the process, do not reduce total basal area below 100 square feet.  <u>Specs:</u>  <u>Other</u> Stand is in front of the Grawn Field Office. Consult with local staff at time of sale preparation to address any specific concerns they may have.  <u>Comments:</u>  <u>Next Steps:</u> None.</p>									



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
<b>89 61049089-Cut</b>	29.3	42110 - Planted Red Pine	High Density Pole	55	Harvest	Crown Thinning	Planted Red Pine	Cmpt. Review Proposal

Prescription Reduce basal area by one third to approximately 110-130 square feet.

Specs:

Other If roads/skid trails through stand are opened to facilitate harvest, they should be closed at the end of sale operations.

Comments:

Next None.

Steps:

<b>94 61049094-Cut</b>	13.9	4130 - Aspen	High Density Pole	47	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.

Specs: Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.

Other One of the objectives of this sale is to enhance woodcock habitat through the creation of early successional cover along a wet, lowland edge.

Comments: Push cut boundary as close to lowland type as possible without incurring the risk of excessive rutting.

Next Regeneration survey.

Steps:

<b>96 61049096-Cut</b>	3.6	4110 - Sugar Maple Association	High Density Log	97	Harvest	Crown Thinning	Sugar Maple Association	Cmpt. Review Proposal
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Prescription Remove poor quality and multi-stemmed trees. Retain large mast producing trees and thin from below.

Specs:

Other Small stand that could be set up individually as a small firewood sale.

Comments:

Next None.

Steps:

<b>106 61049106-Cut</b>	14.5	4130 - Aspen	High Density Pole	56	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.

Specs: Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.

Other Block road after completion of sale. Road leads to an abandoned well site that is seasonally flooded and has been the site of excessive ORV

Comments: abuse.

Next Regeneration survey.

Steps:

<b>121 61049121-Cut</b>	1.3	4136 - Aspen, Mixed Conifer	Medium Density Log	84	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
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Prescription Clearcut for habitat management.

Specs:

Other This prescription will be carried out by local WLD staff. It is most likely not commercially accessible.

Comments:

Next None.

Steps:



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
126	61049126-Cut	13.3	4130 - Aspen	High Density Log	79	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal

Prescription Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  
Specs: Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  
Other Treat adjacent opening along with this stand.  
Comments:  
Next Steps: Regeneration survey.

130	61049130-Cut	7.7	4130 - Aspen	High Density Pole	54	Harvest	Clearcut with Reserves	Aspen	Cmpt. Review Proposal
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Prescription Retention to be applied as outlined in DNR document "Within-Stand Retention Guidance" Chapter 5; Retention Guidance.  
Specs: Create some (approximately 1 tree per 2 acres) coarse woody debris (CWD) during harvest operations, preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.  
Other Treat adjacent opening along with this stand. May need to remove some balsam fir and white pine during harvest to insure good aspen regeneration.  
Comments:  
Next Steps: Regeneration survey.

151	61049151-Cut	21.0	42110 - Planted Red Pine	High Density Log	54	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
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Prescription No retention.  
Specs:  
Other Stand is under contract (61-041-09-01) for phase II of the Red Pine Project. This treatment has already been approved at the Red Pine Project  
Comments: Phase II Compartment Review.  
Next Steps: Stand is also under prescription for replanting to red pine as a part of the Red Pine Project.

154	61049154-Cut	2.3	4130 - Aspen	High Density Pole	42	Harvest	Clearcut	Aspen	Cmpt. Review Proposal
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Prescription See stand 56, compartment 61050.  
Specs:  
Other Stand is under contract for phase II of the Red Pine Project and is under contract 61-041-09-01. This stand is being treated along with adjacent stand in compartment 50 as a part of RPP sale to avoid potential green up conflict.  
Comments:  
Next Steps: Regeneration survey.

160	61049160-Cut	37.8	42110 - Planted Red Pine	High Density Pole	53	Harvest	Clearcut	Planted Red Pine	Cmpt. Review Proposal
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Prescription No retention.  
Specs:  
Other Stand is under contract (61-041-09-01) for phase II of the Red Pine Project. This treatment has already been approved at the Red Pine Project  
Comments: Phase II Compartment Review.  
Next Steps: Stand is also under prescription for re-planting to red pine as a part of the Red Pine Project.



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
150	61049150-Plant	5.5	4319 - Mixed Upland Forest	High Density Sapling	7	Tree Planting	Hand Plant	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Plant red pine.  <u>Specs:</u>  <u>Other</u> Stand is prescribed for replanting to red pine along with adjacent red pine strips after they are harvested. This prescription is from phase II of the  <u>Comments:</u> Red Pine Project.  <u>Next</u> Regeneration survey.  <u>Steps:</u></p>									
152	61049152-Plant	6.9	4319 - Mixed Upland Forest	Low Density Sapling	7	Tree Planting	Hand Plant	Planted Red Pine	Cmpt. Review Proposal
<p><u>Prescription</u> Plant red pine.  <u>Specs:</u>  <u>Other</u> Stand is prescribed for replanting to red pine along with adjacent red pine strips after they are harvested. This prescription is from phase II of the  <u>Comments:</u> Red Pine Project.  <u>Next</u> Regeneration survey.  <u>Steps:</u></p>									
55	NF_61049055-Forage	1.5	Unspecified		0	Non-Forest Management	Other - Specify	Mixed Upland Herbaceous	Cmpt. Review Proposal
<p><u>Prescription</u> This opening is a traditional wildlife planting. Disk is crab/quack grass, plant to annual rye for several years and then convert back to a pasture  <u>Specs:</u> mix (i.e. clover/alfalfa).Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.  <u>Other</u>  <u>Comments:</u>  <u>Next</u>  <u>Steps:</u></p>									
61	NF_61049061-NonFor	11.8	Unspecified		0	Non-Forest Management	Brush Cutting	Warm Season Grass	Cmpt. Review Proposal
<p><u>Prescription</u> Treat in conjunction with stand 75 if possible. Mark a few few trees to be retained for mast and visual management.  <u>Specs:</u>  <u>Other</u>  <u>Comments:</u>  <u>Next</u>  <u>Steps:</u></p>									
63	NF_61049063-NonFor	12.9	Unspecified		0	Non-Forest Management	Brush Cutting	Warm Season Grass	Cmpt. Review Proposal
<p><u>Prescription</u> Treat in conjunction with commercial treatments of stand 62 and 74 if possible.  <u>Specs:</u>  <u>Other</u> Remove open grown poor form white pine, mark a few black cherry trees for retention, try to regenerate aspen in clones and along edges of this  <u>Comments:</u> opening where possible.  <u>Next</u> None.  <u>Steps:</u></p>									
65	NF_61049065-Forage	3.4	Unspecified		0	Non-Forest Management	Other - Specify	Mixed Upland Herbaceous	Cmpt. Review Proposal
<p><u>Prescription</u> This opening is a traditional wildlife planting. Disk is crab/quack grass, plant to annual rye for several years and then convert back to a pasture  <u>Specs:</u> mix (i.e. clover/alfalfa).Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.  <u>Other</u>  <u>Comments:</u>  <u>Next</u>  <u>Steps:</u></p>									



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
83	NF_61049083- Forage	4.8	Unspecified		0	Non-Forest Management	Other - Specify	Mixed Upland Herbaceous	Cmpt. Review Proposal

Prescription This opening is a traditional wildlife planting. Disk is crab/quack grass, plant to annual rye for several years and then convert back to a pasture  
Specs: mix (i.e. clover/alfalfa).Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.

Other  
Comments:

Next  
Steps:

90	NF_61049090- Forage	4.5	Unspecified		0	Non-Forest Management	Other - Specify	Mixed Upland Herbaceous	Cmpt. Review Proposal
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Prescription This opening is a traditional wildlife planting. Disk is crab/quack grass, plant to annual rye for several years and then convert back to a pasture  
Specs: mix (i.e. clover/alfalfa).Periodic maintenance such as mowing, fertilization, reseeding, and/or removal of woody encroachment.

Other  
Comments:

Next  
Steps:

122	NF_61049122- NonFor	26.2	Unspecified		0	Non-Forest Management	Brush Cutting	Warm Season Grass	Cmpt. Review Proposal
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Prescription Treat in conjunction with stand 126 if possible.  
Specs:

Other Mark some individual trees for retention.  
Comments:

Next None.  
Steps:

135	NF_61049135- NonFor	9.4	Unspecified		0	Non-Forest Management	Brush Cutting	Warm Season Grass	Cmpt. Review Proposal
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Prescription Mark a few trees to be retained for mast and visual management along Blair Townhall Road. Remove most of the large, open grown, poor form  
Specs: white pine.

Other Treat with stand 130 if possible.  
Comments:

Next None.  
Steps:

144	NF_61049144- Brush	17.5	Unspecified		0	Non-Forest Management	Other - Specify	Mixed Upland Herbaceous	Cmpt. Review Proposal
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Prescription Reduce woody encroachment.  
Specs:

Other  
Comments:

Next  
Steps:

**Total Treatment  
Acreage Proposed: 608.2**



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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

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**Total Treatment  
Acreage Proposed:        0**

Stand	Traverse City Mgt. Unit			5 – Forested Stands		Compartment: 049	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
1	6132 - Mixed Lowland Forest with Cedar	High Density Log	36.2	94			Stand occupies riparian area along Bietner Creek. Numerous springs and seeps.
2	4110 - Sugar Maple Association	High Density Log	26.0	94	171-200		
3	4130 - Aspen	High Density Pole	20.1	82			
4	4110 - Sugar Maple Association	High Density Log	19.7	69	111-140		
6	4111 - S.Maple, Hard Mast Association	High Density Pole	2.0	85	81-110		New stand added.
7	42110 - Planted Red Pine	High Density Pole	16.1	48	141-170		
9	4133 - Aspen, Mixed Pine	High Density Log	8.1	59			
10	4110 - Sugar Maple Association	High Density Pole	2.5	71	81-110		
11	4130 - Aspen	High Density Pole	8.6	59			
12	4130 - Aspen	High Density Pole	8.7	52			
14	6132 - Mixed Lowland Forest with Cedar	High Density Log	6.5	94			Stand is upper most reaches of Bietner Creek riparian area.
16	4110 - Sugar Maple Association	High Density Pole	20.2	83	141-170		Traces of white ash in canopy. Traces of hemlock in sub canopy.
17	4130 - Aspen	High Density Sapling	8.8	4			
18	4130 - Aspen	High Density Sapling	4.7	4			Trace amounts of white pine, red maple, black cherry, hemlock, and balsam fir present (retained from previous harvest).
20	4112 - Maple, Beech, Cherry Association	High Density Log	20.2	69	1-50		
21	4130 - Aspen	High Density Pole	36.9	55			
22	4130 - Aspen	High Density Pole	9.6	57			
23	4130 - Aspen	High Density Sapling	7.8	24			Stand is from fire origin.



S t a n d	Traverse City Mgt. Unit		5 – Forested Stands			Compartment: 049	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
25	4116 - Mixed N. Hardwood - Aspen	High Density Pole	8.9	49			Traces of hemlock and elm in canopy.
26	4130 - Aspen	High Density Pole	11.0	46			
27	4311 - Pine, Aspen Mix	High Density Pole	6.4	67	81-110		
28	4130 - Aspen	High Density Pole	67.4	34	51-80		
29	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	3.3	48	141-170		Retain for thermal cover.
31	4130 - Aspen	High Density Pole	123.6	41			See management comments.
33	42260 - Natural Pine, Mixed Deciduous	High Density Pole	4.0	67	51-80		
34	4311 - Pine, Aspen Mix	High Density Pole	10.4	60			Natural white pine, several clusters of log sized trees with natural regeneration of various sizes and ages throughout. Age is for some of the larer white pine/
36	4130 - Aspen	High Density Sapling	28.9	5			
37	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	14.6	55			Portions of this stand are marginally lowland. Stand occupies a drainage and margins.
38	42110 - Planted Red Pine	High Density Log	38.8	54	141-170		
39	4130 - Aspen	High Density Pole	70.1	41			
40	4116 - Mixed N. Hardwood - Aspen	High Density Pole	3.5	54	1-50		
41	4132 - Aspen, Jack Pine	High Density Pole	10.0	44			
42	42111 - Planted Red Pine, Mixed Deciduous	High Density Pole	18.3	54	141-170		
43	4130 - Aspen	High Density Pole	35.3	43			
45	42260 - Natural Pine, Mixed Deciduous	High Density Pole	33.8	54			
46	6112 - Lowland Aspen	High Density Pole	13.7	49			



S t a n d	Traverse City Mgt. Unit			5 – Forested Stands		Compartment: 049	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
50	4112 - Maple, Beech, Cherry Association	High Density Pole	51.3	59	111-140		
52	4116 - Mixed N. Hardwood - Aspen	High Density Pole	23.4	55			See management comments.
53	42110 - Planted Red Pine	High Density Pole	3.5	49	171-200		
54	4130 - Aspen	High Density Pole	7.6	55			
56	4130 - Aspen	High Density Sapling	22.4	6			
57	6120 - Lowland Cedar	High Density Pole	305.0	70			
59	42110 - Planted Red Pine	High Density Pole	40.8	49			Stand is under prescription for clearcut and replant to red pine as a part of Red Pine Project phase II.
60	42260 - Natural Pine, Mixed Deciduous	High Density Log	13.8	79	51-80		
62	4130 - Aspen	High Density Pole	46.4	54			Stand has traces of red oak sawlogs in canopy.
64	4133 - Aspen, Mixed Pine	High Density Pole	146.2	49	81-110		
67	4139 - Aspen, Mixed Deciduous	High Density Pole	27.9	31			
68	6128 - Lowland Coniferous, Mixed Deciduous	High Density Log	11.8	95			Traces of spruce, fir, tamarack, and yellow birch present in canopy.
69	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	24.7	57			Traces of cedar, tamarack, red maple in canopy. Medium to high sub canopy shrub layer present. Some species not identified.
70	4112 - Maple, Beech, Cherry Association	High Density Log	8.2	85	141-170		Upland red maple stand that also occupies the transition zone between upland and lowland. Size decreases as you move toward adjacent stand to the north.
71	4115 - Y. Birch, Hemlock NH	High Density Log	38.8	75			Stand is on steep slopes along Boardman River. Numerous springs and seeps.
72	4131 - Aspen, Oak	High Density Sapling	33.3	24			
73	4130 - Aspen	High Density Sapling	16.0	17			



Stand	Traverse City Mgt. Unit			5 – Forested Stands		Compartment: 049	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012	
74	4130 - Aspen	High Density Pole	18.8	47			Heavy white pine sub-canopy.
75	4130 - Aspen	High Density Pole	40.6	47	81-110		
76	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	45.9	75			
77	4130 - Aspen	High Density Sapling	13.1	17			
79	42120 - Planted Jack Pine	High Density Pole	2.2	50			See management comments.
80	4130 - Aspen	High Density Pole	9.6	54			
81	429 - Mixed Upland Conifers	High Density Log	23.9	57	141-170		Canopy also contains traces of silver maple, elm, tamarack, black cherry, paper birch.
82	6112 - Lowland Aspen	Medium Density Pole	7.0	54			
84	4139 - Aspen, Mixed Deciduous	High Density Log	9.2	55			
85	4130 - Aspen	High Density Sapling	2.2	17			
86	4130 - Aspen	High Density Sapling	22.8	3			
87	42110 - Planted Red Pine	High Density Pole	9.1	50	171-200		
89	42110 - Planted Red Pine	High Density Pole	29.3	55	171-200		
91	6115 - Lowland Ash	High Density Pole	4.9	45	81-110		
92	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	28.5	7			Traces of white pine, balsam fir, and oak present.
94	4130 - Aspen	High Density Pole	27.7	47			
95	4131 - Aspen, Oak	High Density Pole	10.5	54			
96	4110 - Sugar Maple Association	High Density Log	3.6	97	111-140		



Stand	Traverse City Mgt. Unit			5 – Forested Stands		Compartment: 049
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2012
						General Comments:
97	6112 - Lowland Aspen	High Density Sapling	9.4	6		Stand contains traces of bur or swamp white oak retained from last harvest.
99	4123 - Red Oak	High Density Pole	2.9	57		
100	6120 - Lowland Cedar	High Density Log	10.9	85		
101	4130 - Aspen	High Density Sapling	9.9	6		Traces of white pine, red maple, sugar maple, black cherry, and red oak present (retained from previous harvest).
102	4130 - Aspen	High Density Sapling	10.1	17		
103	4130 - Aspen	High Density Sapling	16.1	Uneven Age		Traces of white pine poles and s few logs present in canopy.
105	4130 - Aspen	High Density Sapling	26.6	4		Bigtooth mainly in the north, quaking mainly in the southern two thids of stand. White pine heavier in southern part of stand.
106	4130 - Aspen	High Density Pole	57.8	56		Traces of red oak, sugar maple, and paper birch present in canopy.
107	4136 - Aspen, Mixed Conifer	High Density Log	16.0	94		
108	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	7.0	75		
109	6115 - Lowland Ash	Low Density Sapling	30.7	34		
111	4130 - Aspen	High Density Sapling	11.9	6		A few white pine and oaks were retained after last harvest.
113	4130 - Aspen	High Density Sapling	6.0	4		Traces of red oak and white pine poles retained from harvest.
114	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	52.5	54		
118	4130 - Aspen	High Density Sapling	14.0	4		
119	4131 - Aspen, Oak	High Density Log	43.9	58		Stand provides a good source of acorns in proximity to adjacent aspen clearcuts. Traces of paper birch in canopy.
120	6120 - Lowland Cedar	High Density Pole	480.0	70		





	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
121	4136 - Aspen, Mixed Conifer	Medium Density Log	17.4	84		
123	6120 - Lowland Cedar	High Density Log	76.7	93		
124	4130 - Aspen	High Density Sapling	39.3	17		Traces of balsam fir poles present in canopy.
125	4119 - Mixed Northern Hardwoods	High Density Log	24.2	79	111-140	There are a few log size hemlocks in the stand.
126	4130 - Aspen	High Density Log	13.3	79		keep
127	6127 - Lowland Pine	Medium Density Log	28.4	85		Stand occupies an upland sandy ridge surrounded by lowland types.
129	4119 - Mixed Northern Hardwoods	High Density Log	26.8	64		Canopy also contains traces of tamarack, spruce, and balsam fir.
130	4130 - Aspen	High Density Pole	7.7	54		
131	4199 - Other Mixed Upland Deciduous	High Density Log	28.5	83		
132	4130 - Aspen	High Density Sapling	38.4	4		Traces of red oak, red maple, white pine, black cherry poles and logs (retained from previous harvest). Traces of white pine saplings present in canopy.
133	4112 - Maple, Beech, Cherry Association	High Density Log	24.0	106	111-140	Traces of black cherry and yellow birch present in canopy.
134	6120 - Lowland Cedar	High Density Log	46.7	99		Canopy also contains traces of red oak, hemlock, paper birch, and balsam fir. Jaxon Creek runs through stand.
136	6120 - Lowland Cedar	High Density Log	15.0	101		Observed one canopy gap where balsam fir regeneration was extremely dense, but this was not typical of the rest of the stand.
138	4130 - Aspen	High Density Pole	24.1	58		Traces of red oak in canopy. Traces of red oak and beech in sub-canopy.
140	4130 - Aspen	High Density Sapling	2.9	17		
141	4130 - Aspen	High Density Pole	21.5	37		Canopy also contains traces of red oak sawlogs and some paper birch.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
142	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	199.7	75		There are a few log sized red maple and black ash trees scattered through the stand. Also some large snags. Lots of CWD, blow down. No reportable sub-canopy, because significant portions of the stand are sapling sized and are actually part of the canopy.
143	4130 - Aspen	High Density Sapling	12.3	4		Traces of red oak sawlogs, red maple and white pine poles in canopy.
145	4130 - Aspen	Medium Density Pole	20.0	27		
146	4116 - Mixed N. Hardwood - Aspen	High Density Log	28.5	61		
147	4130 - Aspen	High Density Sapling	4.9	17		
149	42110 - Planted Red Pine	High Density Log	11.7	54	51-80	Area retained at time of RPP clearcut of adjacent stand to the west to provide some buffering of Jaxon Creek.
150	4319 - Mixed Upland Forest	High Density Sapling	5.5	7		Stand swapped from Non-Forested to Forested.
151	42110 - Planted Red Pine	High Density Log	21.0	54		
152	4319 - Mixed Upland Forest	Low Density Sapling	6.9	7		Stand swapped from Non-Forested to Forested.
153	42110 - Planted Red Pine	High Density Log	13.0	54	111-140	
154	4130 - Aspen	High Density Pole	2.3	42		
156	42110 - Planted Red Pine	High Density Pole	3.3	52	141-170	
157	4112 - Maple, Beech, Cherry Association	High Density Log	18.1	75	111-140	Stand occupies transition zone between upland and lowland.
158	4130 - Aspen	High Density Pole	163.0	27		
159	4311 - Pine, Aspen Mix	High Density Pole	9.0	27		Traces of hemlock in sub canopy.
160	42110 - Planted Red Pine	High Density Pole	37.8	53		See management comments.
161	4130 - Aspen	High Density Pole	29.1	27		

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Traverse City Mgt. Unit

5 – Forested Stands

Compartment: 049

Inventory Method: IFMAP

Year of Entry: 2012



Level 4  
Cover Type

Size  
Density

Acres

Stand  
Age

BA  
Range

General  
Comments:

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163

42200 - Natural White  
Pine

High Density  
Pole

5.0

74

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Stand	Cover Type	Acres	Gen Cmts:
5	310 - Herbaceous Openland	1.7	
8	310 - Herbaceous Openland	2.3	Area of chronic dumping of both household and yard debris.
13	310 - Herbaceous Openland	2.1	
15	310 - Herbaceous Openland	8.7	Stand contains area historically used as a shooting range and hill climb. Efforts last entry period to control use were partially successful. Installation of fence has stopped ORV activity. Area remains a problem from a garbage/trash area. Users continue to leave large quantities of shooting related debris on site.
19	310 - Herbaceous Openland	2.7	
24	310 - Herbaceous Openland	4.2	Shooting range area. Same as PI stand number 14.
30	310 - Herbaceous Openland	2.2	
32	3104 - Degraded	2.2	
35	3104 - Degraded	2.6	
44	310 - Herbaceous Openland	1.4	
47	3202 - Autumn Olive/Honeysuckle	2.1	
48	310 - Herbaceous Openland	2.6	
49	310 - Herbaceous Openland	1.9	
51	623 - Emergent Wetland	3.5	Standing dead jack pine snags. Area appears to be seasonally flooded, but unsure of level 3 call.
55	2113 - Forage Crops	1.5	Formerly maintained rye planting.
58	320 - Upland Shrub	1.7	
61	310 - Herbaceous Openland	11.8	several aspen clones located in opening



Stand	Cover Type	Acres	Gen Cmts:
63	310 - Herbaceous Openland	13.0	
65	2113 - Forage Crops	3.7	
66	320 - Upland Shrub	1.4	umn olive
78	122 - Road/Parking Lot	3.1	
83	2113 - Forage Crops	4.8	
88	310 - Herbaceous Openland	1.8	
90	2113 - Forage Crops	4.5	
93	623 - Emergent Wetland	2.4	
98	310 - Herbaceous Openland	2.0	
104	622 - Lowland Shrub	20.3	
110	623 - Emergent Wetland	1.0	
112	310 - Herbaceous Openland	1.6	
115	310 - Herbaceous Openland	1.9	
116	623 - Emergent Wetland	2.2	
117	623 - Emergent Wetland	16.9	
122	310 - Herbaceous Openland	26.2	
128	310 - Herbaceous Openland	8.2	
135	310 - Herbaceous Openland	9.4	



Stand	Cover Type	Acres	Gen Cmts:
137	310 - Herbaceous Openland	1.3	
139	3202 - Autumn Olive/Honeysuckle	2.3	Old well site planted to autumn olive.
144	3105 - Mixed Upland Herbaceous	17.5	
148	310 - Herbaceous Openland	2.3	
155	310 - Herbaceous Openland	2.1	
162	310 - Herbaceous Openland	6.6	



**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.

Inventory Method: IFMAP

Stand	SCA Type	SCA Name	Acres	Comments
69	Unique Site - SCA	61049069	24.7	
71	Unique Site - SCA	61049071	38.8	
81	Unique Site - SCA	61049081	23.9	
123	Unique Site - SCA	61049123	72.2	
133	Unique Site - SCA	61049133	24.0	
136	Unique Site - SCA	61049136	15.0	
104	Unique Site - SCA	NF_61049104	20.3	
128	Unique Site - SCA	NF_61049128	8.2	BSA



**8 – DEDICATED CONSERVATION AREA DETAILS**

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

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

Conservation Area	Type	Description
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
SCA	Potential Old Growth Areas	This category contains stands were identified for a broad range of reasons and were coded in the OI database as stand condition 8 as potential old growth (POG). Approximately 310,000 acres have been identified through the Operations Inventory (OI)/Compartment Review process. For stands in Year of Entry 2008 and forward, potential old growth is managed for the identified objective until it is: 1) vetted through the Biodiversity Conservation Planning Process (BCPP) and given a specific designation and objective (as an ERA, HCVA, or other type of SCA) and is released from the potential old growth designation; or 2) it is released from the potential old growth designation via the Compartment Review process.