



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

**COMPARTMENT # 130 ENTRY YEAR: 2011**

**Compartment Acreage: 1961      County: Kalkaska**

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**Stand Examiner:** Donna Hagan

**Legal Description:** T26N, R5W, Sec. 21, 22, 23 & 24

**Management Goals:** Most of this compartment is on Military Board lands and is used for year round training. Some non-Military Board lands are located in section 22. No board lands are in section 21. Military reserves the right to review timber sale at time of set up and to re-evaluate. Timber sales on board lands will generally need to be total tree harvested and not operated during active troop training. Use & management activities on the State Military Board Land are restricted between June 1 and September 1 of any year or anytime they so designate. Approximately 1000 acres cannot be managed because of military rifle ranges.

**Soil and Topography:** Grayling, Rubicon, & Saugatuck sands, and Newton loamy sand. Swamp to flat upland. Rolling hills to the south of compartment.

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

Primarily state military land with some private property located along the Manistee River and Portage Creek. Heavily hunted area with quality fishing in Portage Creek and Manistee River as they are designated trout streams.

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

Canada rice grass, Hill's thistle, Houghton's goldenrod, Prairie dropseed, Secretive locust and Wood turtle are all present in this compartment.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** There is a concern in section 22.

**Special Management Designations or Considerations:** As noted above, most of compartment 130 is Military Board Land. Timber sales on board lands will generally need to be total tree harvested and not operated during active troop training. Use and management activities on the State Military Board Land are restricted between June 1 and September 1 of any year or anytime they so designate. Also Portage Creek and the Manistee River are designated Natural Rivers. Any management activities within the buffer zones are prohibited. Five Rattlesnake Research Plots are located within the compartment by Portage Creek.

**Watershed and Fisheries Considerations:** The Manistee River and Portage Creek flow through Compartment 130. Portage Creek is a tributary of the Manistee River, and both are Designated Trout Streams. Both are also protected by the Manistee River Natural Rivers Designation. Both the Manistee River and Portage Creek host naturally reproducing populations of brook trout and brown trout. For the aspen clearcut proposed for Stand 26, a reasonable buffer should be left along Portage Creek. This buffer should be sufficient so that beavers do not colonize the stream after the clearcut area begins to regenerate. Beavers can have major negative impacts on a small trout stream like Portage Creek, including

warming the water and blocking fish passage. For other timber operations near the Manistee River and Portage Creek, Natural Rivers buffers should be adhered to.

**Wildlife Habitat Considerations:** Maintain conifer cover in various age classes and types. Maintain a component of browse in and near deer winter cover. Maintain oak/aspens types along Portage Creek valley. Oak shelter-wood harvest should consider long-term need for residuals even after final over-story removal phase, especially within 200-300 feet of creek, for mast production and nesting cover for wood ducks and other riparian associates.

Species associated with low, flat mixed conifer plains, swamps, and intervening creeks and draws should be wildlife priorities. Examples include magnolia warbler, winter wren, snowshoe hare, bobcat, and white-tailed deer in winter. Aspen/oak forests along Portage Creek should be important cover for species such as wood ducks, woodcock, squirrels, and golden-winged warbler.

**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 200 and 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have a current economic use. Gravel pits are not located in the area, but there may be some potential. The Garfield 8 Field is located three miles to the south. The field produces from the Devonian Richfield and the Ordovician Prairie du Chien. There are no leases currently in the Compartment, but active leases are located one-half mile to the west.

**Vehicle Access:** Excellent access throughout compartment.

**Survey Needs:** Possibly NESW of Section 22, private 40.

**Recreational Facilities and Opportunities:** None at this time because of the compartment being mostly board land.

**Fire Protection:** This compartment is protected by the Kalkaska DNR Field Office, however all of it is within Zone 5 Dispatch. A fire reported in this compartment on a high fire danger day or above also includes units from Grayling, Houghton Lake, and Manton. VFD Fire Protection is from the Bear Lake Fire Department. This compartment is mostly state land or military board land with the exception of some private land located along the Manistee River and Portage Creek.

**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 130  
 T26N, R05W, Sec. 22-24  
 County: Kalkaska  
 Unit: Traverse City  
 YOE: 2011  
 Acres: 1,961 GIS Calculated  
 Stand Examiner: Donna Hagan  
 Map Revised: 10/06/2009  
 Map Phase: Pre-Review

## Legend

- Miris Corners
- Paved Road
- Gravel Road
- Poor Dirt Road
- Access Sites
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

## Treatments

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

## Forest Stands

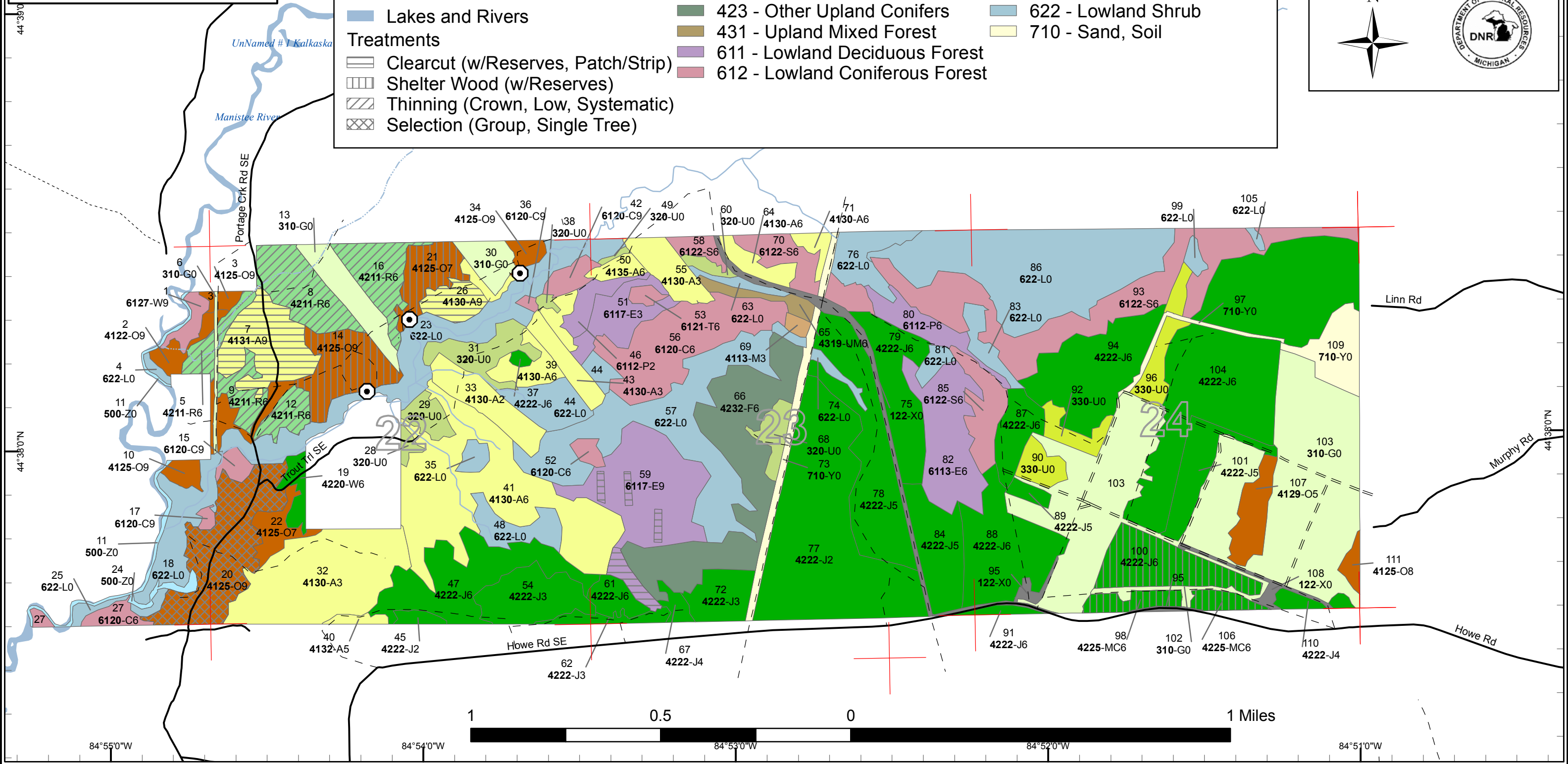
- ### Level 3
- 411 - Northern Hardwood
  - 412 - Oak Types
  - 413 - Aspen Types
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 423 - Other Upland Conifers
  - 431 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest

## Non-Forest Stands

- ### Level 3
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees
  - 500 - Water
  - 622 - Lowland Shrub
  - 710 - Sand, Soil

22 23 24

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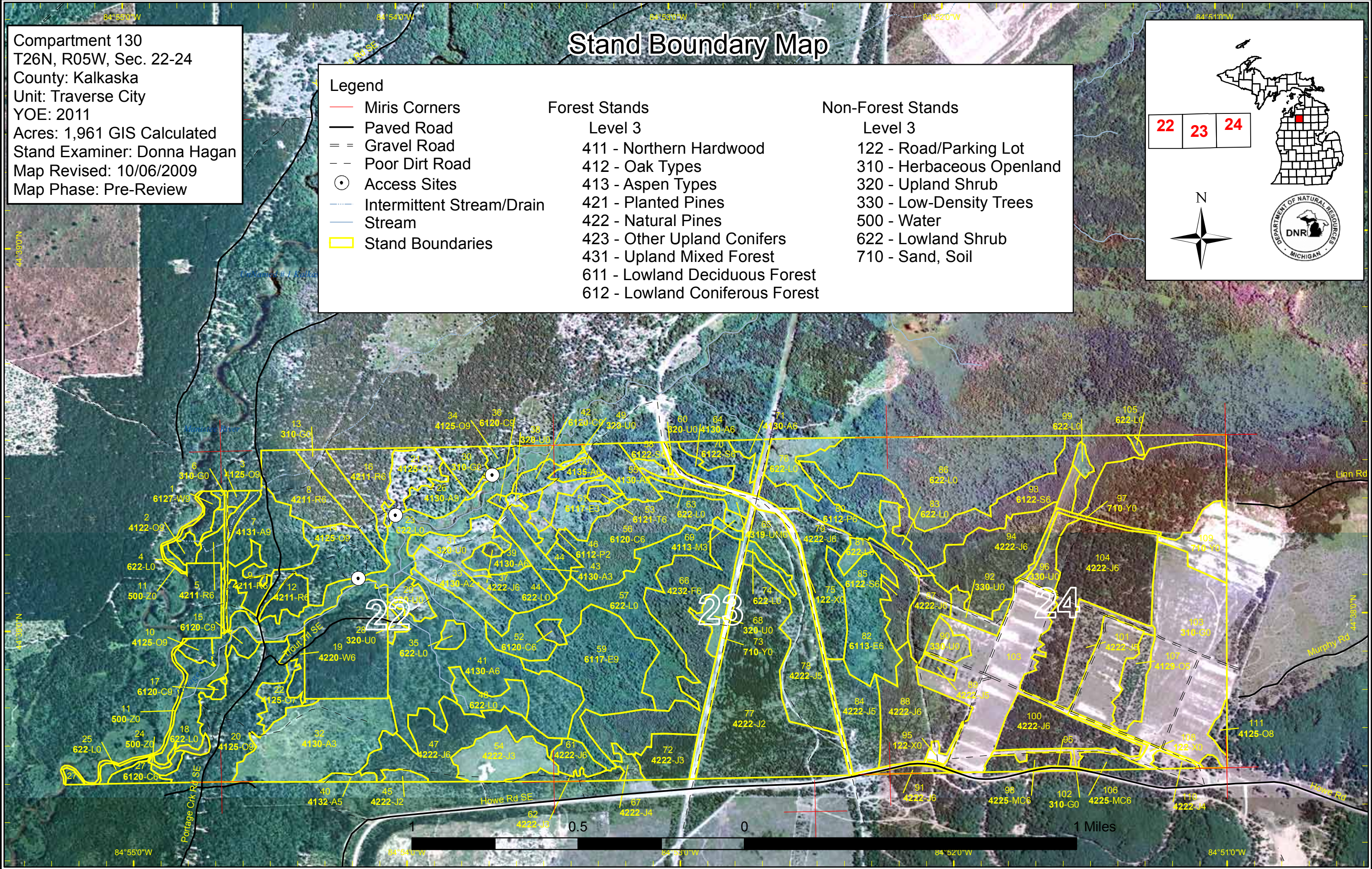
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# Stand Boundary Map

<b>Legend</b>		
—	Miris Corners	
—	Paved Road	
==	Gravel Road	
- -	Poor Dirt Road	
⊙	Access Sites	
---	Intermittent Stream/Drain	
—	Stream	
□	Stand Boundaries	
<b>Forest Stands</b>		
Level 3		
411	- Northern Hardwood	
412	- Oak Types	
413	- Aspen Types	
421	- Planted Pines	
422	- Natural Pines	
423	- Other Upland Conifers	
431	- Upland Mixed Forest	
611	- Lowland Deciduous Forest	
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<b>Non-Forest Stands</b>		
Level 3		
122	- Road/Parking Lot	
310	- Herbaceous Openland	
320	- Upland Shrub	
330	- Low-Density Trees	
500	- Water	
622	- Lowland Shrub	
710	- Sand, Soil	

22 23 24

N





Traverse City Mgt. Unit

**Covertime, Acres, and Age summary**  
(Level 3 Cover Type)

Compartment 130 Year of Entry 2011

Report Date: 10/06/2009



	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	38	55	91	13	4	0	39	0	0	0	0	0	0	240	
Herbaceous Openland	205	0	0	0	0	0	0	0	0	0	0	0	0	0	205	
Low-Density Trees	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
Lowland Coniferous Forest	0	0	0	0	0	0	16	85	0	4	6	5	6	47	169	
Lowland Deciduous Forest	0	0	0	23	12	0	0	51	33	0	0	0	0	0	118	
Lowland Shrub	285	0	0	0	0	0	0	0	0	0	0	0	0	0	285	
Natural Pines	0	22	0	59	306	163	0	0	12	0	0	0	0	0	562	
Northern Hardwood	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
Oak Types	0	0	0	0	12	0	0	3	0	0	16	0	97	0	129	
Other Upland Conifers	0	0	0	0	0	0	0	63	0	0	0	0	0	0	63	
Planted Pines	0	0	0	0	23	40	0	0	0	0	0	0	0	0	62	
Road/Parking Lot	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
Sand, Soil	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
Upland Mixed Forest	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	
Upland Shrub	34	0	0	0	0	0	0	0	0	0	0	0	0	0	34	
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
<b>Total</b>	<b>610</b>	<b>60</b>	<b>57</b>	<b>172</b>	<b>366</b>	<b>213</b>	<b>16</b>	<b>241</b>	<b>45</b>	<b>4</b>	<b>23</b>	<b>5</b>	<b>103</b>	<b>47</b>	<b>0</b>	<b>1961</b>

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 3
5	61130005-Thin	7.2	42110 - Planted Red Pine	High Density Pole	39	Harvest	Systematic Thinning	Planted Red Pine	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Third row thin. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									
7	61130007- Final	27.4	4131 - Aspen, Oak	High Density Log	65	Harvest	Clearcut with Reserves	Aspen, Oak	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Final harvest with reserves. Put reserves near Portage Creek Road. Also mark some oak to leave. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									
8	61130008-Thin	22.5	42110 - Planted Red Pine	High Density Pole	43	Harvest	Systematic Thinning	Planted Red Pine	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Third row thin. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									
9	61130009-Thin	7.8	42110 - Planted Red Pine	High Density Pole	38	Harvest	Systematic Thinning	Planted Red Pine	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Third row thin. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									
12	61130012-Thin	7.6	42110 - Planted Red Pine	High Density Pole	38	Harvest	Systematic Thinning	Planted Red Pine	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Third row thin. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									
14	61130014-Cut	23.5	4125 - Black, N. Pin Oak	High Density Log	110	Harvest	Shelter Wood with Reserves	Black, N. Pin Oak	
<p><u>Rev</u> <u>Cmnt:</u></p> <p><u>Rev</u> Leave stand west of Portage Creek Road uncut and concentrate east of road. Shelterwood leaving, along with oak, some red and white pine. <u>Spec:</u></p> <p><u>Next</u> <u>Steps:</u></p>									

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



S t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 2 of 3
16	61130016-Thin	17.1	42110 - Planted Red Pine	High Density Pole	43	Harvest	Systematic Thinning	Planted Red Pine	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Third row thin. <u>Spec:</u> <u>Next</u> <u>Steps:</u>									
20	61130020-Cut	43.7	4125 - Black, N. Pin Oak	High Density Log	110	Harvest	Single Tree Selection	Black, N. Pin Oak	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Take out aspen. <u>Spec:</u> <u>Next</u> <u>Steps:</u>									
21	61130021-Cut	14.2	4125 - Black, N. Pin Oak	Low Density Log	110	Harvest	Shelter Wood with Reserves	Black, N. Pin Oak	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Shelterwood with reserves. Reserve areas should be along Rattlesnake cut and along Portage Creel. <u>Spec:</u> <u>Next</u> <u>Steps:</u>									
26	61130026- Final	8.8	4130 - Aspen	High Density Log	60	Harvest	Clearcut	Aspen	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Final harvest - reserves have already been left along rattlesnake cut. Leave some oak. <u>Spec:</u> <u>Next</u> <u>Steps:</u>									
59	61130059-Hab Cut_small	7.8	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	64	Harvest	Clearcut with Reserves	Aspen	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Hand fell some of the deciduous component (aspen, maple, etc) in an effort to produce horizontal cover in the form of coarse woody debris, promote <u>Spec:</u> vertical cover in the form of regenerating deciduous species, and produce woody browse that will be available to a variety of herbivores during winter. <u>Next</u> <u>Steps:</u>									
98	61130098-Cut	7.2	42250 - Pine, Oak	High Density Pole	72	Harvest	Shelter Wood with Reserves	Black, N. Pin Oak	
<u>Rev</u> <u>Cmnt:</u> <u>Rev</u> Take out jack pine, leave oak. <u>Spec:</u> <u>Next</u> <u>Steps:</u>									

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Traverse City Mgt. Unit  
Inventory Method: IFMAP

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**

Compartment: 130

Entry Yr: 2011

Date 10/06/2009



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
100 61130100-Cut	25.9	42220 - Natural Jack Pine	High Density Pole	45	Harvest	Shelter Wood with Reserves	Oak, Pine

Rev  
Cmnt:

Rev Take out jack pine and leave oak. Hoping to regenerate oak back to site as there is oak regeneration in the understory. Will need to verify with Military  
Spec: as this stand borders their ranges.

Next  
Steps:

106 61130106-Cut	5.0	42250 - Pine, Oak	High Density Pole	72	Harvest	Shelter Wood with Reserves	Black, N. Pin Oak
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Rev  
Cmnt:

Rev Take out jack pine, leave oak.  
Spec:

Next  
Steps:

**Total Treatment  
Acreage Proposed: 225.8**

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Traverse City Mgt. Unit  
Inventory Method: IFMAP

### PROPOSED TREATMENTS WITH LIMITING FACTORS

Compartment: 130

Entry Yr: 2011

Date 10/06/2009



Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 1
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Limiting Factor  
and Comment:

Rev  
Cmnt:

Rev  
Spec:

Next  
Steps:

No Treatment  
Reason

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**Total Treatment  
Acreage Proposed: 0**



### 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 Name	Acres	Comments



**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
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	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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.