



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

**COMPARTMENT # 36 ENTRY YEAR: 2011**

**Compartment Acreage: 2658      County: Manistee**

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**Stand Examiner:** Scott Lint

**Legal Description:** T24N, R14W, sections 13, 14, 22, 23, 24

**Management Goals:** Provide timber products; maintain or enhance wildlife habitat; protect areas of unique threatened, endangered and special concern species; and provide for forest-based recreational uses.

**Soil and Topography:** This compartment lies in a lake plain Land Type Association (LTA). The entire compartment is flat and level. Lowland soils are poorly drained peat or muck. The upland soils consist of sands, loamy sands, and sandy loams.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** State Forest ownership is well consolidated in this compartment. Approximately eighty percent of the land in this compartment is State owned. Land use is primarily rural residential and seasonal recreational. There is one new subdivision development on Bear Creek in the southwest corner of section 22. In addition, the private parcel in the northeast part of section 13 has been subdivided and most of these parcels are currently for sale.

**Unique, Natural Features:** MNFI records indicate several occurrences of wood turtle within the compartment.

**Archeological, Historical, and Cultural Features:** none known

**Special Management Designations or Considerations:** none

**Watershed and Fisheries Considerations:**

**Wildlife Habitat Considerations:** This compartment falls into 2 different landtype associations, both being flat lake plains. Maintain a diversity of age classes, species mixes, snags and down logs in upland forests, including some young aspen-dominated stands as well as mature bottomland mixed forest types and later successional aspen-white pine-fir forests. Include a hardwood component in pine stands as much as possible for within-stand diversity. Also, future management of pine stands should incorporate small (2-5 acre) islands that are left relatively un-thinned within mature stands in order to provide winter roosting cover for turkeys. Allow some stands to become old and advance in successional stage, especially along stream valleys. Allow old strip cuts to fill in naturally and eventually become uneven aged stands along with adjacent mature strips. Bottomland forests might thereafter be periodically harvested for large red maple and other species, but on long rotations and at low intensity. Some upland openings may be treated with a bush hog to set back woody encroachment and bracken, then possibly supplemented by seeding additional forage grasses/forbs, and then burned or mowed as needed. Some opportunities exist for local diversification of aspen age classes to enhance ruffed grouse cover through commercial harvest or habitat cuts. Lowland brush types offer a diversity of fruiting shrubs and should be maintained as such, perhaps with future brush mowing if shrubs become rank senescent. Species associated with aspen-fir-pine forest, streams, and

extensive mixed swamp forest, include ruffed grouse, magnolia warbler, wood turtle, brown snake, mink, white-tailed deer, black bear, and pileated woodpecker. Turkeys, bluebirds, badgers, and box turtles, among other species, may be found in the upland shrub and grass communities.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 400 and 800 feet. Beneath the glacial drift is the Devonian Ellsworth Shale, used for cement products. The nearest gravel pit is located one mile to the east and there should be potential on the uplands. This area is located within the Guelph (Niagaran) reef trend, regional up-dip Guelph production and also has Antrim Shale gas production. Most of the State land is currently leased for oil and gas development.

**Vehicle Access:** Establishment of a road along the east edge of the NWNW of section 14 would provide access to large block of state land that can only be accessed by crossing private property. Construction of this road should be a priority for access to timber and recreational opportunities.

**Survey Needs:** The compartment is well surveyed. Additional corners were added last entry period. There are no current survey needs.

**Recreational Facilities and Opportunities:** The Betsie River Snowmobile Trail crosses through section thirteen. There is the possibility of moving the snowmobile onto the railroad grade that passes through sections fourteen and twenty-two, however that will require the construction of a bridge to cross Bear Creek. Numerous opportunities exist for dispersed recreation throughout the compartment. Fishing in Second Creek, Third Creek, Dutchman Creek, and Bear Creek as well as trapping and deer, turkey and small game hunting opportunities are plentiful in this compartment.

**Fire Protection:** Local fire coverage is provided by the Copemish-Cleon Volunteer Fire Department. DNR coverage is from the Platte River Field Office. Access is not a problem, and urban interface is not a problem. Travel time from Platte River office can be a concern on high and above fire days.

#### **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**

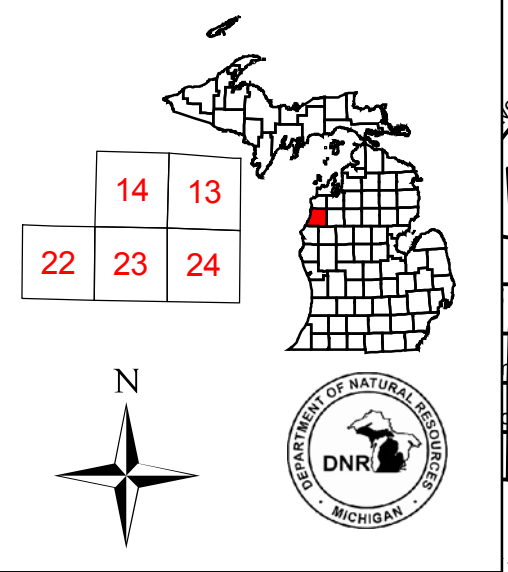
**\*\*\*\* The following information is displayed on the attached compartment maps:**

- Base feature information, stand numbers, cover types**
- Proposed treatments**
- Proposed road access system**
- Suggested potential old growth**

# Cover Type & Treatment Map

Compartment 36  
 T24N, R14W, Sec. 13, 14, 22, 23, 24  
 County: Manistee  
 Unit: Traverse City  
 YOE: 2011  
 Acres: 2,658 GIS Calculated  
 Stand Examiner: Scott Lint  
 Map Revised: 5/27/2009  
 Map Phase: Pre-Review

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



**Legend**

- Miris Corners
- Highways
- County Paved Road
- Paved Road
- County Gravel Road
- County Poor Dirt Road
- Poor Dirt Road
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers All

**Treatments**

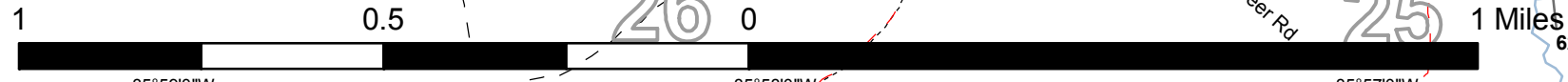
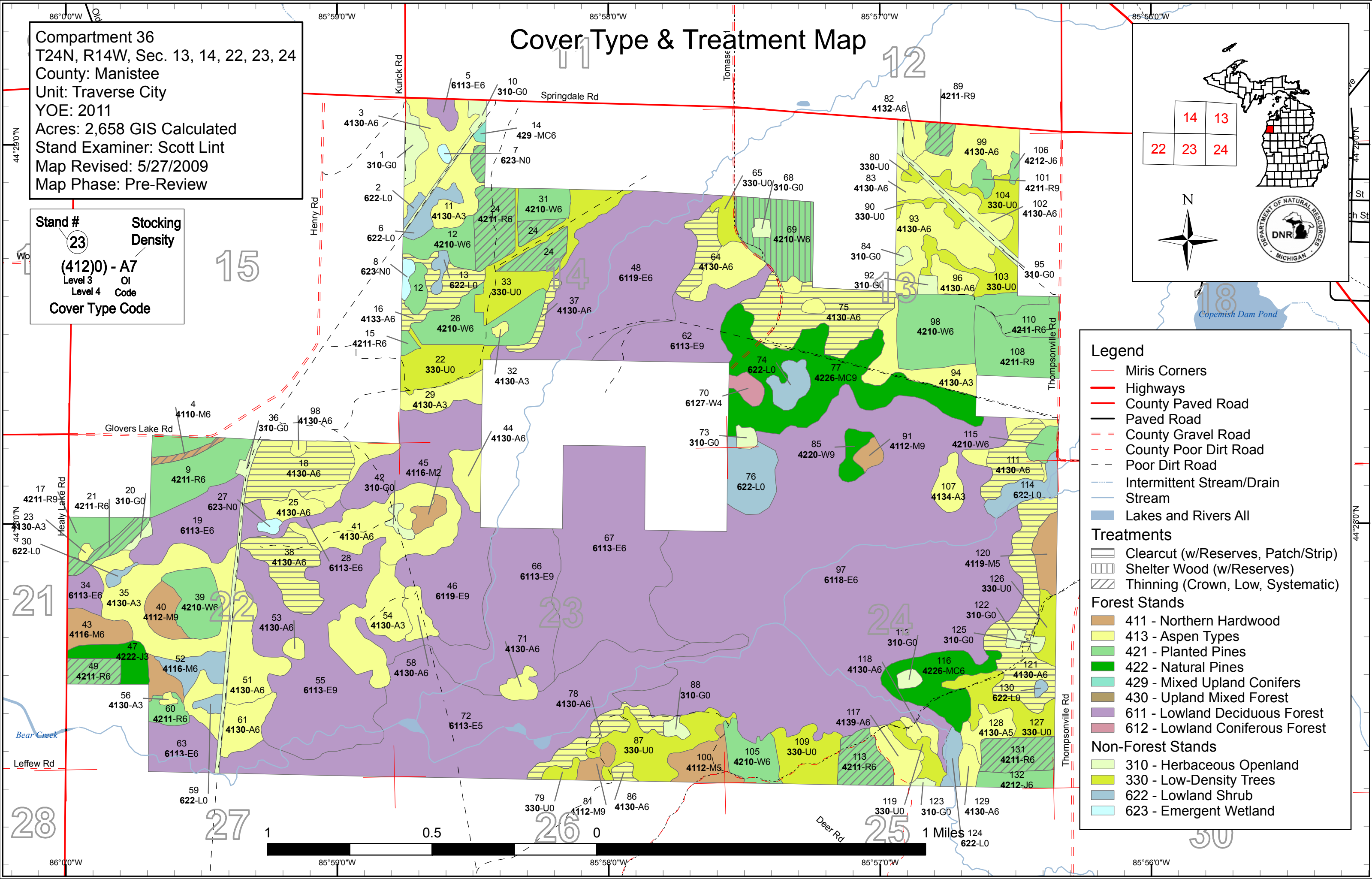
- Clearcut (w/Reserves, Patch/Strip)
- Shelter Wood (w/Reserves)
- Thinning (Crown, Low, Systematic)

**Forest Stands**

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

**Non-Forest Stands**

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





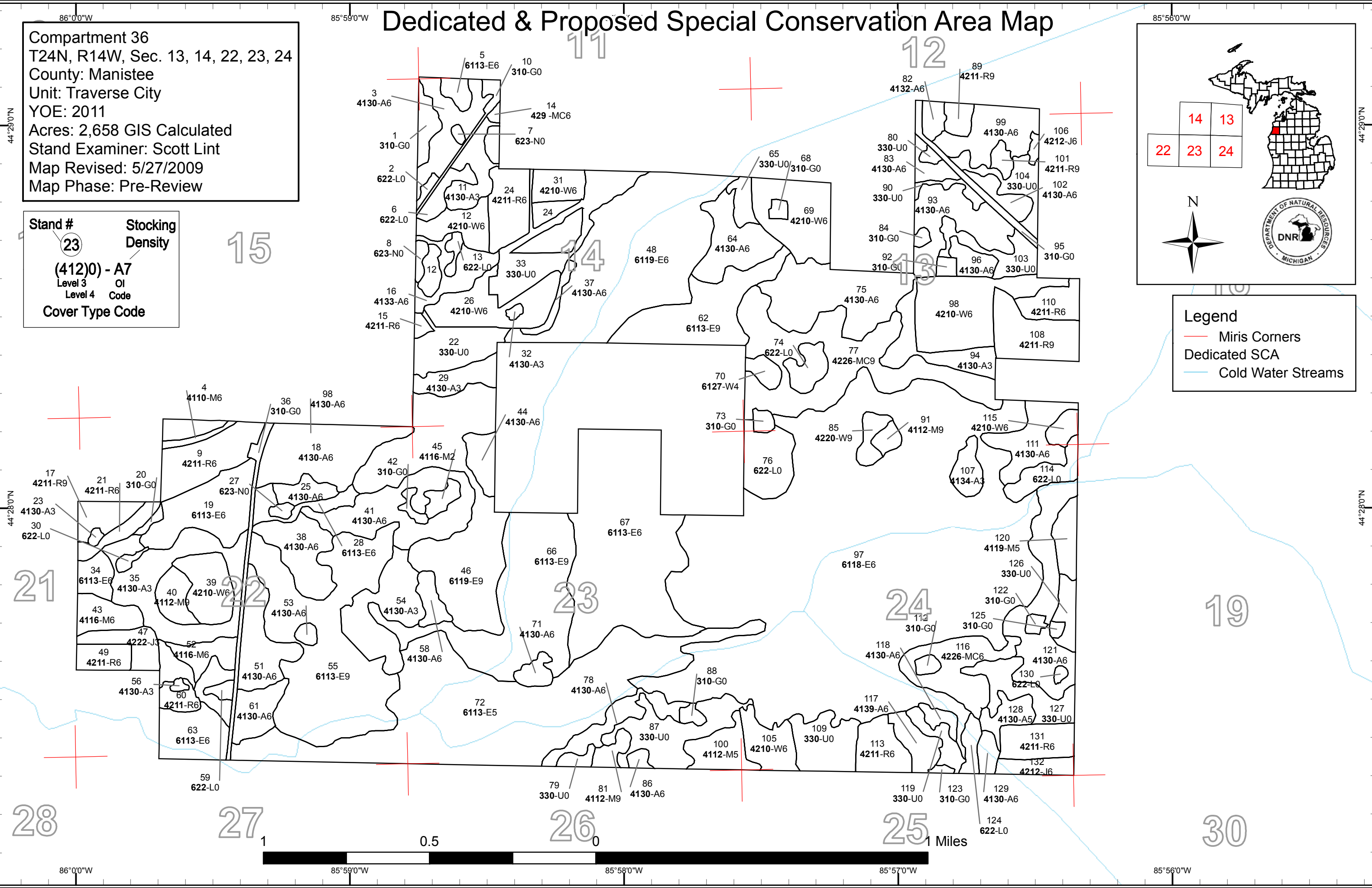
# Dedicated & Proposed Special Conservation Area Map

Compartment 36  
 T24N, R14W, Sec. 13, 14, 22, 23, 24  
 County: Manistee  
 Unit: Traverse City  
 YOE: 2011  
 Acres: 2,658 GIS Calculated  
 Stand Examiner: Scott Lint  
 Map Revised: 5/27/2009  
 Map Phase: Pre-Review

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

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 DEPARTMENT OF NATURAL RESOURCES  
 DNR  
 MICHIGAN

**Legend**  
 — Miris Corners  
 — Dedicated SCA  
 — Cold Water Streams



Traverse City Mgt. Unit

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

Compartment 036 Year of Entry 2011

Report Date: 05/28/2009



	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	41.5	41.2	179.3	107.6	117.0	36.7	0	50.3	0	0	0	0	0	0	573.6
Emergent Wetland	5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0
Herbaceous Openland	47.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47.5
Low-Density Trees	165.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165.6
Lowland Coniferous Forest	0	0	0	4.6	0	0	0	0	0	0	0	0	0	0	0	4.6
Lowland Deciduous Forest	0	0	0	0	186.1	13.4	7.8	0	118.9	700.5	148.2	105.7	0	0	0	1280.6
Lowland Shrub	67.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67.3
Mixed Upland Conifers	0	0	0	0	1.0	0	0	0	0	0	0	0	0	0	0	1.0
Natural Pines	0	0	10.7	0	0	0	0	0	0	5.8	72.5	0	0	0	26.3	115.3
Northern Hardwood	0	0	0	13.3	30.2	0	0	2.5	4.8	12.8	0	0	0	0	0	63.7
Planted Pines	0	0	0	0	0	210.6	89.4	0	33.3	0	0	0	0	0	0	333.4
<b>Total</b>	<b>285.3</b>	<b>41.5</b>	<b>51.9</b>	<b>197.2</b>	<b>324.9</b>	<b>341.0</b>	<b>134.0</b>	<b>2.5</b>	<b>207.5</b>	<b>719.1</b>	<b>220.7</b>	<b>105.7</b>	<b>0</b>	<b>0</b>	<b>26.3</b>	<b>2657.6</b>

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
4 61036004-Cut	2.5	4110 - Sugar Maple Association	High Density Pole	60	Harvest	Crown Thinning	Sugar Maple Association

Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Thin to remove poor quality and mutiple stemmed trees. Advertise as a small sale. Recently demand for these type  
Spec: of small firewood sales has been strong in this area.

Next  
Steps:

16 61036016-Cut	13.7	4133 - Aspen, Mixed Pine	High Density Pole	48	Harvest	Clearcut with Reserves	Aspen
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Retain some clumps or small patches of white pine as well as scattered individuals.

Spec:

Next  
Steps:

18 61036018-Cut	29.9	4130 - Aspen	High Density Pole	42	Harvest	Clearcut with Reserves	Aspen
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Stand contains a few lowland areas/vernal ponds, use these areas for locating any retention islands if desired.  
Spec: Stand extends into adjacent compartment for a couple of acres (compartment 233 stand 98). Include this with treatment.

Next  
Steps:

21 61036021-Cut	7.1	42110 - Planted Red Pine	High Density Pole	51	Harvest	Crown Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Mark to remove poor quality and suppressed trees. Mark to release additional trees as needed to reduce the basal  
Spec: area to 110-130.

Next  
Steps:

24 61036024-Cut	33.0	42110 - Planted Red Pine	High Density Pole	49	Harvest	Crown Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Mark to remove poor quality and suppressed trees. Mark to release additional trees as needed to reduce the basal  
Spec: area to 110-130.

Next  
Steps:

37 61036037-Cut	3.9	4130 - Aspen	High Density Pole	35	Harvest	Clearcut	Aspen
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: No retention.

Spec:

Next  
Steps:

**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 4
49	61036049-Cut	8.2	42110 - Planted Red Pine	High Density Pole	51	Harvest	Crown Thinning	Aspen, Oak	

Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Mark to remove poor quality and suppressed trees. Mark to release additional trees as needed to reduce basal area  
Spec: to 110-130.

Next  
Steps:

64	61036064-Cut	10.3	4130 - Aspen	High Density Pole	38	Harvest	Clearcut with Reserves	Aspen	
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Retain all balsam fir when applying retention guidelines.

Spec:

Next  
Steps:

69	61036069-Cut	28.1	42101 - Planted White Pine, Mixed Deciduous	High Density Pole	49	Harvest	Shelter Wood with Reserves	Planted White Pine, Mixed Deciduous	
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Snowmobile trail cuts through west edge of stand. Create retention island between trail and Tomasek Road. Retain  
Spec: some clumps of pine and individual black cherry. Regenerate aspen in patches where possible, leave tree mark white pine to promote aspen/hardwood  
regeneration, retain a few small areas of dense white pine to serve as winter thermal cover.

Next  
Steps:

75	61036075-Cut	42.1	4130 - Aspen	High Density Pole	70	Harvest	Clearcut with Reserves	Aspen	
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Use hardwood patches and low spots for retention islands (these areas have been removed from treatment shape  
Spec: and acreage) and retain most white pine.

Next  
Steps:

78	61036078-Cut	14.7	4130 - Aspen	High Density Pole	50	Harvest	Clearcut with Reserves	Aspen	
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Stand is narrow, use individual tree retention. Retain all conifers. Maintain 100' vegetative buffer from Bear Creek as  
Spec: agreed to in "Riparian Draft Rules-Manistee and Pine Rivers" memo from January 2000 (Perez, McMillan, Rozich).

Next  
Steps:

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
86 61036086-Cut	2.1	4130 - Aspen	High Density Pole	50	Harvest	Clearcut with Reserves	Aspen

Rev --Scott Lint : 05/26/2009 comments: Stand is being treated along with adjacent stand in compartment 38. Sale number 61-015-08-01. No retention in  
Cmnt: this stand (small area).

Rev  
Spec:

Next  
Steps:

89 61036089-Cut	5.0	42110 - Planted Red Pine	High Density Log	55	Harvest	Crown Thinning	Planted Red Pine
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Stand contains some utility poles. Harvest some mature poles and thin to release good future poles. Basal areas  
Spec: should be maintained at a higher than normal level where possible to promote good utility pole development. Tree length harvest must be accommodated when marking this stand.

Next  
Steps:

111 61036111-Cut	15.4	4130 - Aspen	High Density Pole	55	Harvest	Clearcut with Reserves	Aspen
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Retain conifers. In addition, an area of the stand along the northwestern boundary was intentionally omitted from  
Spec: the treatment boundary for purposes of retention. Maintain 100' vegetative buffer from Bear Creek as agreed to in "Riparian Draft Rules-Manistee and Pine Rivers" memo from January 2000 (Perez, McMillan, Rozich).

Next  
Steps:

113 61036113-Cut	14.1	42110 - Planted Red Pine	High Density Pole	48	Harvest	Crown Thinning	Planted Red Pine
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Rev --Scott Lint : 05/26/2009 comments: This stand is being treated along with adjacent stand in compartment 38. Stand is already marked and under  
Cmnt: contrat. Sale number 61-062-08-1.

Rev --Scott Lint : 05/26/2009 comments: Future treatments to this stand should be conducted in conjunction with treatments to stand 110 in compartment 38  
Spec: and should be prescribed at the time compartment 38 is inventoried/reviewed.

Next  
Steps:

121 61036121-Cut	38.1	4130 - Aspen	High Density Pole	49	Harvest	Clearcut with Reserves	Aspen
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Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Retain some clumps of white pine and some scattered individual white pine. Retain all balsam fir. Maintain 100'  
Spec: vegetative buffer from Bear Creek as agreed to in "Riparian Draft Rules-Manistee and Pine Rivers" memo from January 2000 (Perez, McMillan, Rozich).

Next  
Steps:

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
131 61036131-Cut	14.6	42110 - Planted Red Pine	High Density Pole	48	Harvest	Crown Thinning	Planted Red Pine

Rev Cmnt: --Scott Lint : 05/26/2009 comments: Treat adjacent stand 15 in compartment 37, across Thompsonville Rd to the east, along with this stand. That stand was prescribed for treatment along with this one.

Rev Spec: --Scott Lint : 05/26/2009 comments: Mark to remove poor quality and suppressed trees. Mark to release additional trees as needed to reduce the basal area to 110-130.

Next Steps:

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**Total Treatment  
Acreage Proposed: 282.9**

**PROPOSED TREATMENTS  
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
38 61036038-Cut	22.0	4130 - Aspen	High Density Pole	33	Harvest	Clearcut with Reserves	Aspen

Limiting Factor 2D: Road needed

and Comment: There is an existing road that was used to access this stand when it was cut in 1975. The road will need improvements including culverts and fill in order to facilitate harvest of this stand.

Rev  
Cmnt:

Rev --Scott Lint : 05/26/2009 comments: Retain black cherry.

Spec:

Next  
Steps:

No Treatment Reason There is an existing road that was used to access this stand when it was cut in 1975. The road will need improvements including culverts and fill in order to facilitate harvest of this stand.

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**Total Treatment  
Acreage Proposed:      22.0**



### 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
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	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.