



**ESCANABA FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 012 ENTRY YEAR: 2011

Compartment Acreage: 681 County: Menominee

Revision Date: July 31, 2009

Stand Examiner: Dustin Salter, Forester, FMFM; Bill Rollo and Craig Albright, Wildlife Division

Legal Description: T37N R28W Sections 28, 32, and 33

Management Goals: This compartment is comprised of a large percentage of aspen stands between 10 to 35 years of age. This decade we will be treating one mature aspen stand. In addition, there will be two poor quality northern hardwood stands that will be treated. Both of these stands will be managed for other species in the future. There is also a small oak stand that will be treated. All of the oak in this compartment is the same age, and these treatments are an attempt to improve the age class distribution of the oak in this compartment. In all of the aspen stands that have been harvested in the past little to no oak has been harvested. There will also be three lowland conifer stands that will be final harvested, leaving some seed trees. Also, a small white pine stand will be thinned, lowering the basal area to begin to establish some white pine regeneration.

Soil and Topography: Topography is nearly level to moderately steep. Soils include well drained sand over loamy soils and excessively drained sands. Prominent soil series are Leelanau, Menominee, and Grayling.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is located at the west edge of a belt of state forest land that is about 20 miles long and 8 miles wide in southwestern Menominee County. This belt of land is highly splintered with private in-holdings, and this compartment is fractured with privately owned forest land, which is used primarily for recreation.

Unique, Natural Features (include only non-site specific and non-sensitive information): None known

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: This is an early successional compartment that provides habitat for many of the most popular game species and other wildlife using early stages of forest succession. Two-thirds of this compartment is comprised of aspen forest, most of which is 20-39 years old and must be allowed to age. Oak and white pine are present in the mix along with scattered openings. There is some proposed timber harvesting in aspen and upland deciduous types, and the harvest prescriptions will retain half the mature oak for mast production and diversity. The other half of the oak trees will be harvested in an attempt to regenerate the trees via stump sprouting.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist off an end moraine of medium-textured glacial till. The glacial drift thickness varies between 10 and 50 feet. The Cambrian Munising Formation and the Precambrian Quinnesec Formation underlie the glacial drift. The Munising has been used as a building stone in the past. Part of this Compartment has been leased for metallic exploration, but is not currently leased. A gravel pit is located in Section 22 and potential is good. No economic oil and gas production has been found in the UP.

Vehicle Access: The primary road into the southern half of the compartment is the Miscauna Creek Road. This road is a state maintained road. There are a couple of two-track roads that branch off of this road into other parts of the compartment. Access into some of the compartment is through private property. The northern portion is accessed from an old railroad grade, which is in very poor condition. Access into stands 5 and 8 could be a challenge. There is a good system of old logging roads within the north portion of the compartment.

Survey Needs: Approximately 4 to 6 corners will need to be set.

Recreational Facilities and Opportunities: Hunting and riding ATV's are the two primary recreational uses of this compartment. There are no developed recreational facilities within this compartment.

Fire Protection: The majority of this compartment consists of dry sandy soils, but most of them are covered by deciduous species, thus reducing the potential for large uncontrolled fires. During the spring time a fast moving surface fire is possible, though. The primary water site would be the Menominee River and the Miscauna Creek.

Additional Compartment Information: The forty acres of land in section 21 was moved into compartment 113 instead of this compartment. It blocks in well with compartment 113.

****** 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**

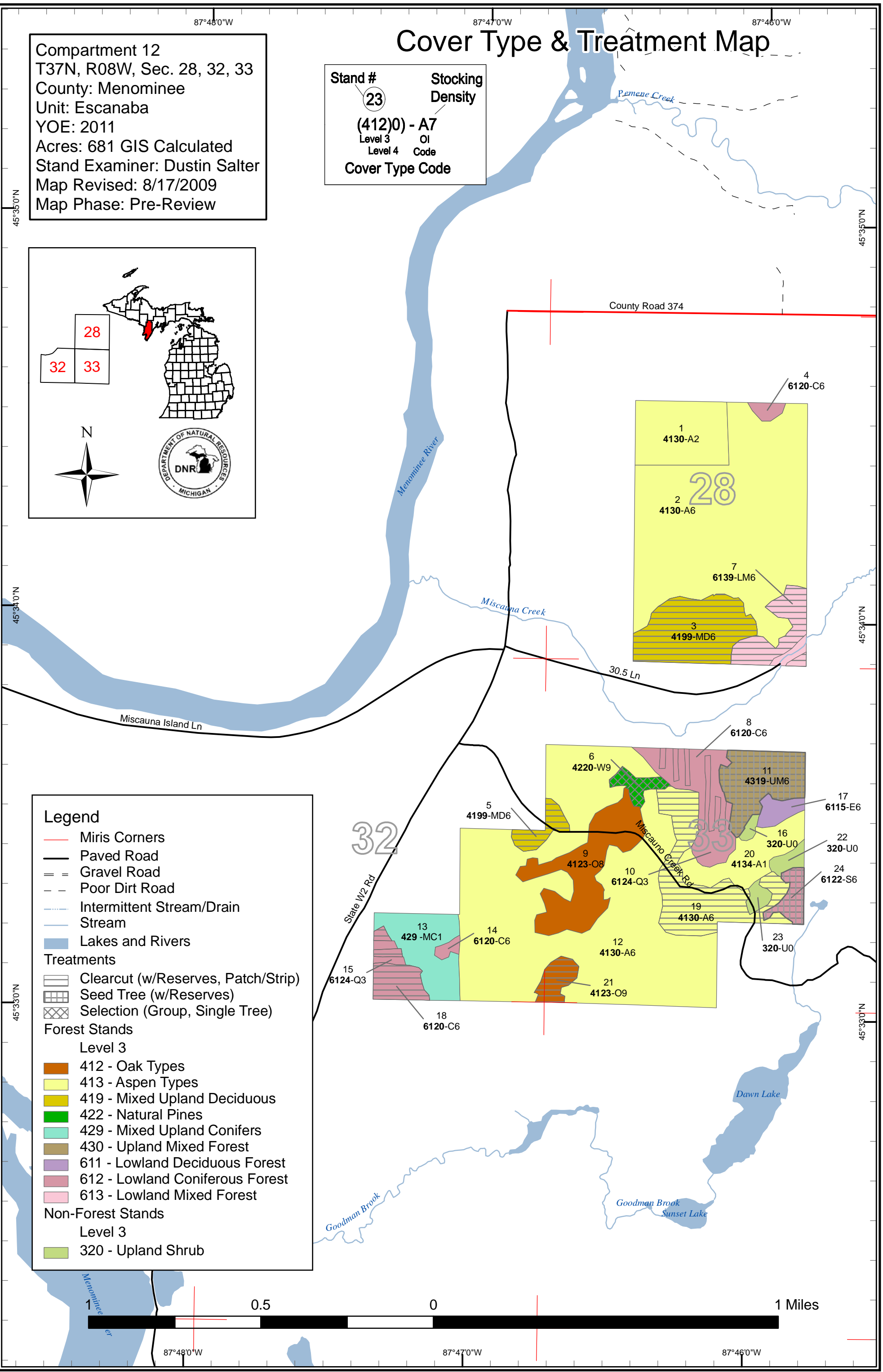
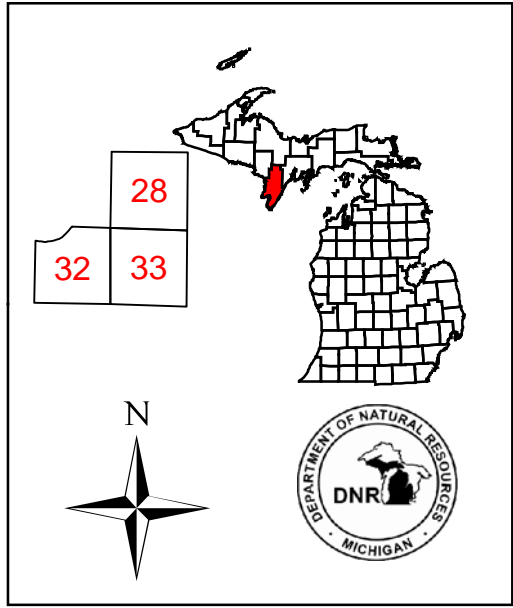
****** The following information is displayed on the attached compartment maps:**

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

Cover Type & Treatment Map

Compartment 12
 T37N, R08W, Sec. 28, 32, 33
 County: Menominee
 Unit: Escanaba
 YOE: 2011
 Acres: 681 GIS Calculated
 Stand Examiner: Dustin Salter
 Map Revised: 8/17/2009
 Map Phase: Pre-Review

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



Legend

- Miris Corners
 - Paved Road
 - Gravel Road
 - Poor Dirt Road
 - Intermittent Stream/Drain
 - Stream
 - Lakes and Rivers
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
 - Seed Tree (w/Reserves)
 - Selection (Group, Single Tree)
- Forest Stands**
- Level 3
- 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 422 - Natural Pines
 - 429 - Mixed Upland Conifers
 - 430 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest
 - 613 - Lowland Mixed Forest
- Non-Forest Stands**
- Level 3
- 320 - Upland Shrub



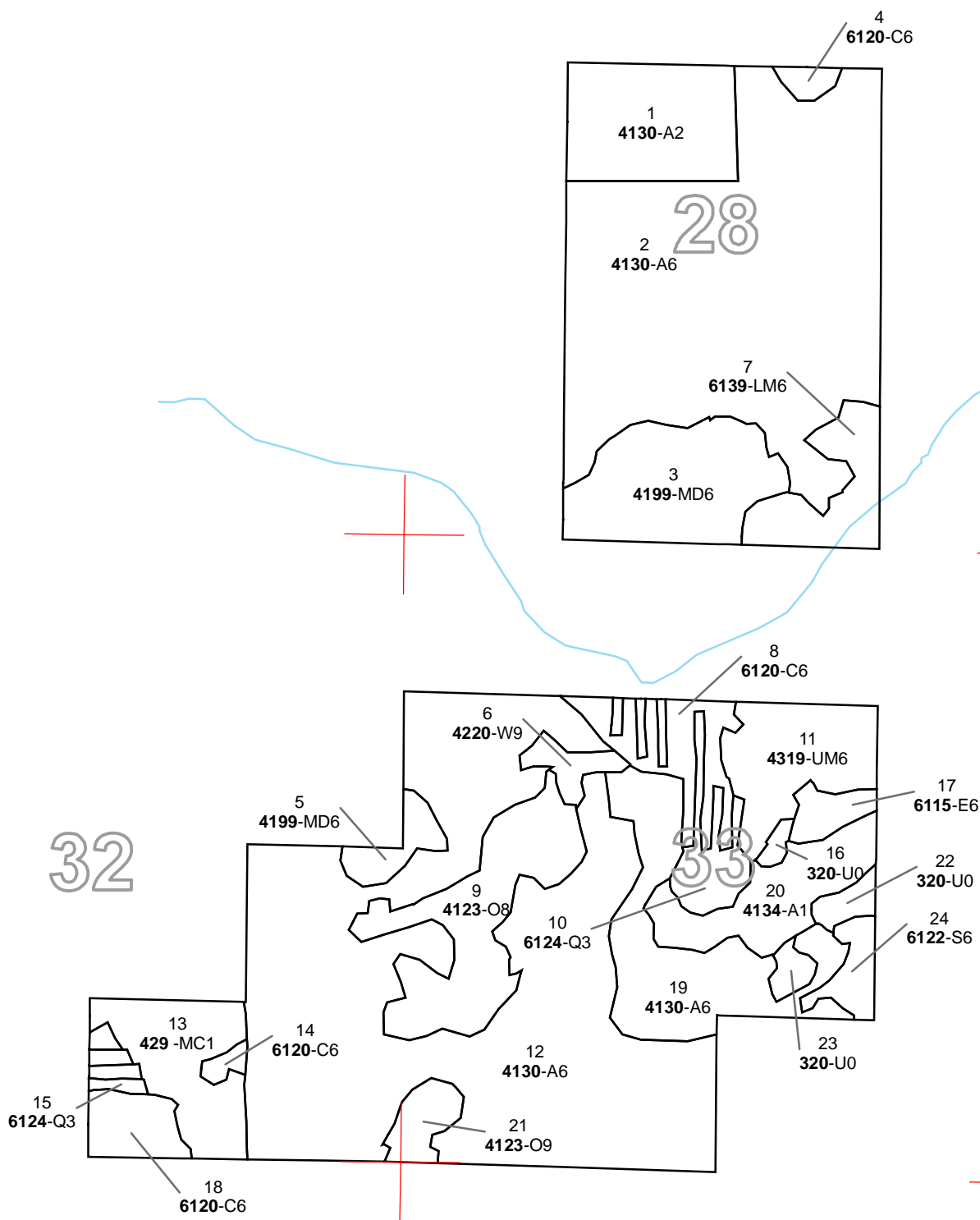
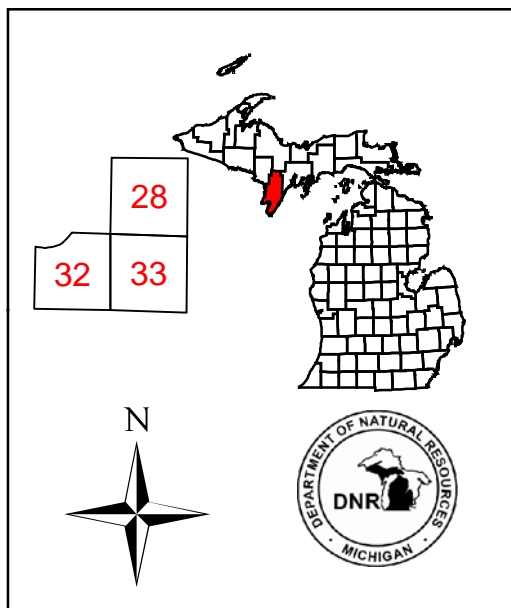
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Dedicated & Proposed Special Conservation Area Map



Area Map



- Legend**
- Miris Corners
 - Stand Boundaries
 - Dedicated Special Conservation Areas**
 - Boat Access Sites
 - Cold Water Streams
 - Forest Stands**
 - Level 3**
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
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87°48'0"W 87°47'0"W 87°46'0"W

45°35'0"N
45°34'0"N
45°33'0"N

Escanaba Mgt. Unit

Covertypes, Acres, and Age summary
(Level 3 Cover Type)

Compartment 012 Year of Entry 2011

Report Date: 08/17/2009



	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	22	32	156	206	0	40	0	0	0	0	0	0	0	0	456
Lowland Coniferous Forest	0	0	0	0	0	15	0	0	0	0	7	0	30	2	0	54
Lowland Deciduous Forest	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
Lowland Mixed Forest	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	18
Mixed Upland Conifers	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	24
Mixed Upland Deciduous	0	0	0	0	0	0	0	35	0	0	7	0	0	0	0	42
Natural Pines	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5
Oak Types	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	44
Upland Mixed Forest	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	25
Upland Shrub	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	8	22	56	156	206	15	65	53	0	0	57	5	36	2	0	681

**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
3 33012003-Cut	35.2	4199 - Other Mixed Upland Deciduous	High Density Pole	67	Harvest	Clearcut with Reserves	Other Mixed Upland Deciduous

Rev Focus on saving larger diameter oaks. The oak that is retained will be left in clumps, this will provide some gaps to allow the harvested oak to stump sprout. Wildlife will assist in marking the oaks to leave if they are available at the time the sale is set up.

Spec Poor quality Mr stand with a mix of other species. Final Harvest, remove all species; except leave 50% of the oak and some W, R, and Fs for seed. Leave enough oak, pine, and spruce to meet the retention guidelines.

Next Steps: Any mix of the current overstory species is acceptable for regeneration.

5 33012005-Cut	6.6	4199 - Other Mixed Upland Deciduous	High Density Pole	93	Harvest	Clearcut with Reserves	Other Mixed Upland Deciduous
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Rev There is a patch of dead oak on the south side of the road. Not sure what has killed it. If it is oak wilt we will treat when funding becomes available. Wildlife will assist in marking the oaks to retain if they are available when the sale is set up.

Spec Poor quality maple stand with a high component of red oak mixed in. Only 50% of the oak is to be harvested, leave some dead oak as part of the 50% away from the road. Try to leave larger diameter oaks with full crowns. Create gaps to allow some of the oak to stump sprout.

Next Steps: This stand will regenerate to a mix of maple and oak. The oak will stump sprout with the maple. Any mix of maple and oak is acceptable.

6 33012006-Cut	5.2	42200 - Natural White Pine	High Density Log	101	Harvest	Single Tree Selection	Natural White Pine
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Rev Small stand.

Spec Thin this stand down to a BA of 60 to 70 to begin to regenerate white pine on this site. Retain 60 to 70 BA of pine and oak and remove all other species. Only 50% of the oak may be harvested.

Next Steps: Any mix of W, R, and oak is acceptable for regen.

7 33012007-Cut	15.3	6139 - Mixed Lowland Forest	High Density Pole	67	Harvest	Clearcut with Reserves	Mixed Lowland Forest
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Rev

Spec This stand is a mix of species all of which are mature. The Fb and Fs are dying out from the spruce budworm and the aspen and balm are overmature. Final harvest this stand, removing all species. Except, leave all C greater than 10" and mark some pine and Fs seed trees to leave. Also, leave all elm. In addition a 100' buffer will be left along the Miscauno Creek, this will be part of the retention.

Next Steps: Any mix of the overstory species is acceptable for regeneration.

11 33012011-Cut	25.1	4319 - Mixed Upland Forest	High Density Pole	55	Harvest	Seed Tree with Reserves	Mixed Upland Forest
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Rev This stand is a mix of many species, with a couple of thick areas of mature pine mixed in.

Spec Final harvest this stand, removing all species. Except, leave pine, oak, Fs, and B seed trees. In areas where the pine is thicker leave 20 BA of mature pine. Manage this stand for a mix of white pine and F. 50% of the oak is to be retained.

Next Steps: Any mix of the overstory species is acceptable for regeneration.



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
18 33012018-Cut	11.6	6120 - Lowland Cedar	High Density Pole	111	Harvest	Clearcut with Reserves	Mixed Coniferous Lowland Forest

Rev Cmnt: A new road will have to be pushed in from the Miscauno Creek road into the system of roads that access this stand if access can't be obtained from the private landowner to the West.

Rev Spec: Final harvest this stand, removing all merchantable stems. The sub-merchantable stems will provide seed and retention for the stand.

Next Steps: Acceptable regen is T, S, C, and P.

19 33012019-Cut	39.9	4130 - Aspen	High Density Pole	56	Harvest	Clearcut with Reserves	Aspen, Mixed Pine
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Rev Cmnt: Wildlife will assist in marking the oaks to retain if they are available when the sale is set up.

Rev Spec: Final Harvest this stand, removing all species. Except, leave 50% of the oak and some large pine to meet the retention guidelines. The oak that is to be retained should consist primarily of large diameter oak with full crowns. Try to remove the oaks where there will be adequate sunlight for stump sprouting. There is also areas of this stand that have thick advanced W regeneration. This regen is 20' + tall and some of it is 3" in diameter. Try to protect as much of this as possible when harvesting this stand.

Next Steps: Aspen is the desired regen, with some W included.

21 33012021-Cut	6.9	4123 - Red Oak	High Density Log	93	Harvest	Clearcut with Reserves	Red Oak
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Rev Cmnt: Cut this stand on the same sale as stand 23, because the same road system will need to be used. Access will be through private property or a new access trail will need to be opened up.

Rev Spec: Final harvest this stand, leaving enough oak and pine to meet retention guidelines.

Next Steps: Oak is the management objective of this stand. But there can also be some A and Mr mixed in.

24 33012024-Cut	6.5	6122 - Black Spruce	High Density Pole	97	Harvest	Seed Tree with Reserves	Black Spruce
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Rev Cmnt:

Rev Spec: Final harvest this stand, removing all species. Except, leave enough S, T, and C seed trees to meet the retention guidelines and to supply an adequate seed source for the stand.

Next Steps: Any mix of S, T, and C regen is acceptable.

**Total Treatment
Acreage Proposed: 152.3**

**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	Page 1 of 1
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Limiting Factor
and Comment:

Rev
Cmnt:

Rev
Spec:

Next
Steps:

No Treatment
Reason

**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
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.