

CADILLAC FOREST MANAGEMENT UNIT**COMPARTMENT REVIEW PRESENTATION****COMPARTMENT # 90 ENTRY YEAR: 2011****Compartment Acreage (GIS Acres): 1,857 County: Missaukee**

Revision Date: 09/14/2009 7:51 AM**Stand Examiner:** David J. Fisher**Legal Description:** T23N, R5W, Sections 5,6,7,8,16,17.**RMU (if applicable):** 223**Management Goals:** Maintain aspen type and age diversity.**Soil and Topography:** Lupton muck under the marsh areas. A variety of sands through the rest of compartment including, Otisco, Brevort, Graycalm and Moncalm. Topography is mostly flat and marshy.**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Private land in every section. Full time and seasonal residences. Compartment is surrounded by farms and hunting clubs.**Unique, Natural Features (include only non-site specific and non-sensitive information):** Historical slippershell mussel records in the Clam River, which traverses the compartment. Bald eagle records to ne and sw. Numerous common loon records to n, w, and sw. Great blue heron rookery to n. Potential for Kirtland's warbler, prairie warbler, northern goshawk and Cooper's hawk. Potential for wood turtle, Blanding's turtle, and eastern massasauga.**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** None listed.**Special Management Designations or Considerations:** Marshy wetland habitat restrict access to several stands. Wildlife may want to consider these for habitat cuts. Maintain age diversity in aspen stands. Some smaller stands converting to white pine.**Watershed and Fisheries Considerations:** No comments received.**Wildlife Habitat Considerations:** Major management emphasis is to maintain a variety of cover types and age class diversity. Featured wildlife species are deer, bear, bobcat, ruffed grouse and woodcock. (L. Smith, 9/11/09)**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of ice-contact and glacial outwash sand & gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum in other parts of the State. A gravel pit is in Section 4 and there is potential on the uplands. Enterprise Field is located two miles to the east. This field has produced nearly 5 million BO from the Devonian Richfield Formation and is in secondary recovery operations. Most of the state minerals are

currently leased for oil and gas development and sections 5 -8 have been nominated for nonmetallic potash exploration.

Vehicle Access: A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

Proposed new roads or roads recommended for substantial improvement are noted below:

Survey Needs: May need to survey around private 40 in section 8. Inventoried during deep snow conditions and could not find any corners.

Recreational Facilities and Opportunities: Hunting, wildlife viewing.

Fire Protection: This compartment has areas that would not allow good access for fire equipment. Much of the fuels are aspen. IA is from Houghton Lake. Initial attack times could be a concern. If a fire would occur in one of the poor access areas, it possibly could be labor intensive to control.

Additional Compartment Information:

The following parcels are recommended for acquisition if they become available for sale: None

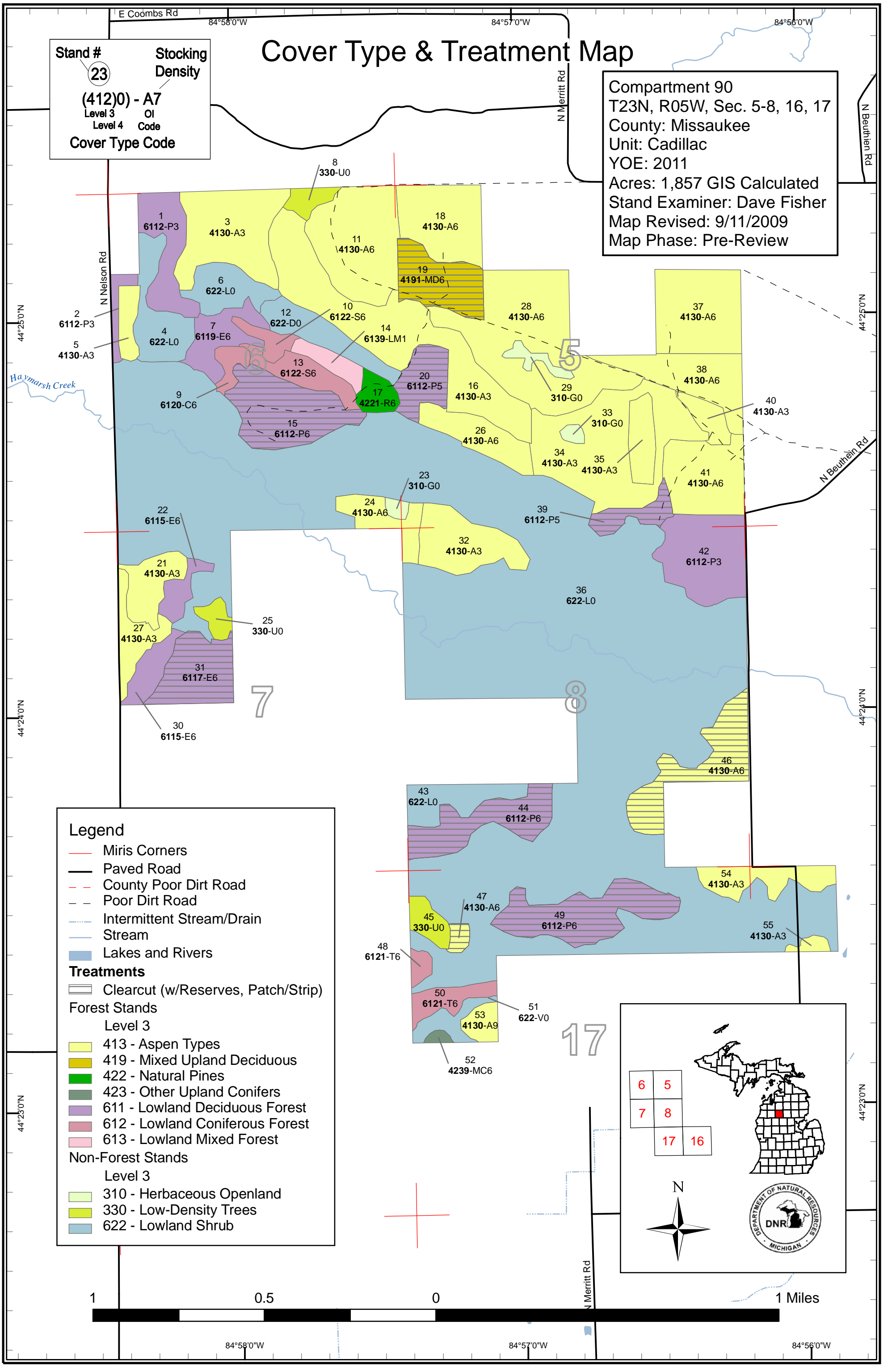
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, 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

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

Compartment 90
 T23N, R05W, Sec. 5-8, 16, 17
 County: Missaukee
 Unit: Cadillac
 YOE: 2011
 Acres: 1,857 GIS Calculated
 Stand Examiner: Dave Fisher
 Map Revised: 9/11/2009
 Map Phase: Pre-Review



Legend

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

Treatments

- Clearcut (w/Reserves, Patch/Strip)

Forest Stands

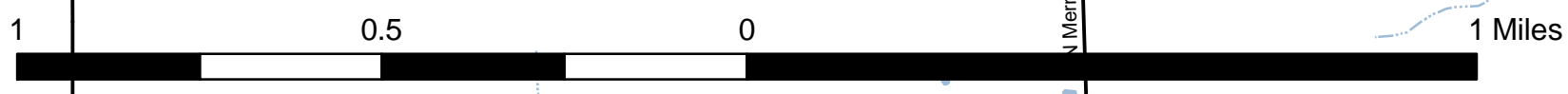
Level 3

- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 622 - Lowland Shrub



84°58'0"W 84°57'0"W 84°56'0"W

44°25'0"N

44°24'0"N

44°23'0"N

44°25'0"N

44°24'0"N

44°23'0"N

E Coombs Rd 84°58'0"W 84°57'0"W 84°56'0"W

N Merritt Rd

N Beuthlein Rd

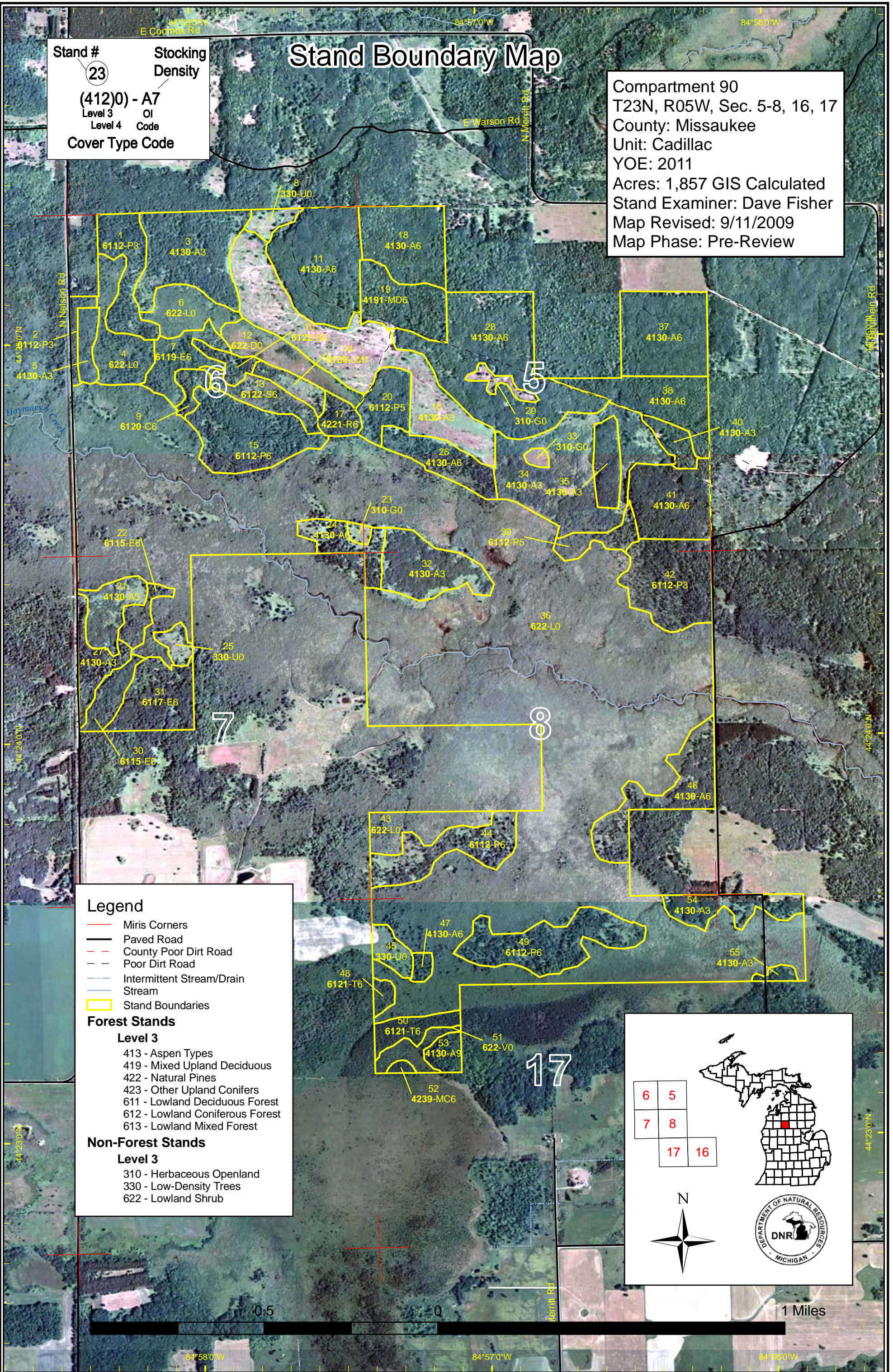
N Beuthlein Rd

N Merritt Rd

Stand Boundary Map

Stand #
23
(412)0 - A7
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 Level 4 Code
 Cover Type Code

Compartment 90
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Legend

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- Stand Boundaries

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6 5
7 8
17 16

N



Cadillac Mgt. Unit

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

Compartment 090 Year of Entry 2011

Report Date: 09/11/2009



	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	97	107	296	0	60	34	14	0	6	0	0	0	0	0	614
Herbaceous Openland	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Low-Density Trees	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Lowland Coniferous Forest	0	0	0	0	0	14	16	0	0	3	0	5	0	0	0	38
Lowland Deciduous Forest	0	64	0	8	10	64	53	37	0	17	0	0	0	0	0	252
Lowland Mixed Forest	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Lowland Shrub	885	0	0	0	0	0	0	0	0	0	0	0	0	0	0	885
Mixed Upland Deciduous	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	25
Natural Pines	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
Other Upland Conifers	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	911	169	107	303	10	137	104	83	0	27	0	5	0	0	0	1857

**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
15 63090015-Cut	38.1	6112 - Lowland Aspen	High Density Pole	46	Harvest	Clearcut with Reserves	Aspen

Rev Wet and hummucky ground.
Cmnt:

Rev Final harvest for aspen. Need to harvest during dry or frozen conditions. Dormant cut. Cuts in similar stands last yoe came back well. Leave all oak.
Spec: Manage for a mix of aspen, red maple, pine and spruce. Leave all oak if found.

Next
Steps:

19 63090019-Cut	24.8	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	60	Harvest	Clearcut with Reserves	Aspen
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Rev Mix of aspen and white pine. Small pocket of rp located in north central portion of the stand.
Cmnt:

Rev Final harvest all aspen, red maple, white pine, and paper birch. Leave all beech and oak. Mark red pine to cut in areas heavy to red pine. Red pine is a small pocket of solid red pine less than one acre. Mark to cut in the red pine. Manage for a mix of aspen, maple, oak, beech and pine.

Next
Steps:

20 63090020-Cut	15.8	6112 - Lowland Aspen	Medium Density Pole	55	Harvest	Clearcut	Aspen
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Rev Moderate to heavy red maple and tag alder understory. Wet hummucky ground.
Cmnt:

Rev Final harvest. Aspen is in poor condition. Needs to be a dormant, dry or frozen harvest.
Spec:

Next
Steps:

31 63090031-Cut	25.5	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	49	Harvest	Clearcut	Aspen
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Rev Will need to access from the private to the south. Low wet hummucky ground. Old barb wired fence along east edge of stand. Found se private corner.
Cmnt:

Rev Final harvest. Winter or late summer harvest. Leave retention in the form of islands or a penninsula. Manage for a mix of aspen and lowland conifers.
Spec: Wildlife will habitat cut what cannot be reached by commercial harvest.

Next
Steps:

39 63090039-Cut	9.5	6112 - Lowland Aspen	Medium Density Pole	55	Harvest	Clearcut	Aspen
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Rev Harvest during dry or frozen conditions. Low hummucky ground. tag alder understory.
Cmnt:

Rev Final harvest. Acceptable regen is aspen, cherry and red maple. No retention.
Spec:

Next
Steps:

46 63090046-Cut	31.2	4130 - Aspen	High Density Pole	50	Harvest	Clearcut with Reserves	Aspen
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Rev Difficult to access. County road is in poor shape. Portions of the stand are wet and hummucky. Could hold 10 more years. May need survey. Stand boarders private on two sides.
Cmnt:

Rev Final harvest. Leave all oak.
Spec:

Next
Steps:

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Cadillac Mgt. Unit
Inventory Method: IFMAP

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

Compartment: 090

Entry Yr: 2011

Date 09/11/2009



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
Total Treatment Acreage Proposed:		144.7					

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**



S t a n d	Treatment Name	Acres	Stage1 Cover Type	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Page 1 of 1
47	63090047-Cut	2.9	4130 - Aspen	High Density Pole	50	Harvest	Clearcut	Aspen	

Limiting Factor 2F: Too wet
and Comment:

Rev No access. Isolated by wetlands and private land.
Cmnt:

Rev Habitat cut.
Spec:

Next
Steps:

No Treatment
Reason

44	63090044-Cut	27.4	6112 - Lowland Aspen	High Density Pole	50	Harvest	Clearcut	Aspen
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Limiting Factor 2F: Too wet
and Comment:

Rev No access. Low, wet hummucky ground.
Cmnt:

Rev Habitat cut.
Spec:

Next
Steps:

No Treatment
Reason

49	63090049-Cut	36.8	6112 - Lowland Aspen	High Density Pole	60	Harvest	Clearcut with Reserves	Aspen
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Limiting Factor 2F: Too wet
and Comment:

Rev Portions of stand are low and wet. Habitat cut? No access. Stand is an island in middle of tag alder swamp.
Cmnt:

Rev Habitat cut. Leave all oak.
Spec:

Next
Steps:

No Treatment
Reason

**Total Treatment
Acreage Proposed: 67.2**



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
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