

CADILLAC FOREST MANAGEMENT UNIT**COMPARTMENT REVIEW PRESENTATION****COMPARTMENT # 80 ENTRY YEAR: 2011****Compartment Acreage (GIS Acres): 1917 County: Missaukee**

Revision Date: 09/14/2009 3:11 PM**Stand Examiner:** Jim Malloy, Forester, Manton Field Office**Legal Description:** T24N, R5W, Sections 9, 16, 17**RMU (if applicable):** 223**Management Goals:** Maintain cover types and age class diversity.**Soil and Topography:** Mainly sands; rubicon and croswell in uplands with histisols in lowlands.**Ownership Patterns, Development, and Land Use in and Around the Compartment** Solid block of state ownership in all sections. Most adjacent sections also are state owned. Private lands to the west are mostly undeveloped, with some cabins and a few year-round homes.**Unique, Natural Features (include only non-site specific and non-sensitive information):** Dead Stream National Historic Landmark is located to the east.**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** Woodland Indian Mounds in section 16**Special Management Designations or Considerations:** As outlined by the RMU, the key value is habitat/vegetative-wildlife intensive. The major management emphasis is on wildlife research (particularly deer). Also, improvement of winter deer range is a major objective.**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. This compartment is at the north edge of the Deadstream deeryard. Featured wildlife species are deer, bear, bobcat, ruffed grouse and woodcock. (L. Smith, 9/11/09)**Mineral Resource and Development Concerns and/or Restrictions:**

Sections 9, 16, & 17, T24N-R5W, Missaukee County

Surface sediments consist of ice-contact and glacial outwash sand & gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum in other parts of the State. There are not any gravel pits in this area, but there is potential on the uplands. Parts of Sections 9 & 16 have wells from the northwest East Norwich Field. This field has produced over 16 million BO from the Devonian Richfield

Formation and is in secondary recovery operations. Most of the state minerals in Section 17 are currently leased for oil and gas development and also have been nominated for nonmetallic potash exploration. Section 9 and 16 are surface only.

(T. Hone 7/22/09)

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: None needed

Recreational Facilities and Opportunities: No developed recreation. Hunting, Trapping and wildlife viewing are popular activities in this compartment. A portion of the Houghton Lake snowmobile trail passes along the northern portion of the compartment. Portions of the MCCT trail also occur in section 9

Fire Protection: This compartment has numerous oil & gas wells. There are only small areas of pine type, with most of the fuels being grass, aspen & oak. Access for equipment would be fairly good, except on the south end of the compartment. Initial IA is from the Houghton Lake FO. IA response times could be a concern in this compartment.

Additional Compartment Information: N/A.

The following parcels are recommended for acquisition if they become available for sale: N/A

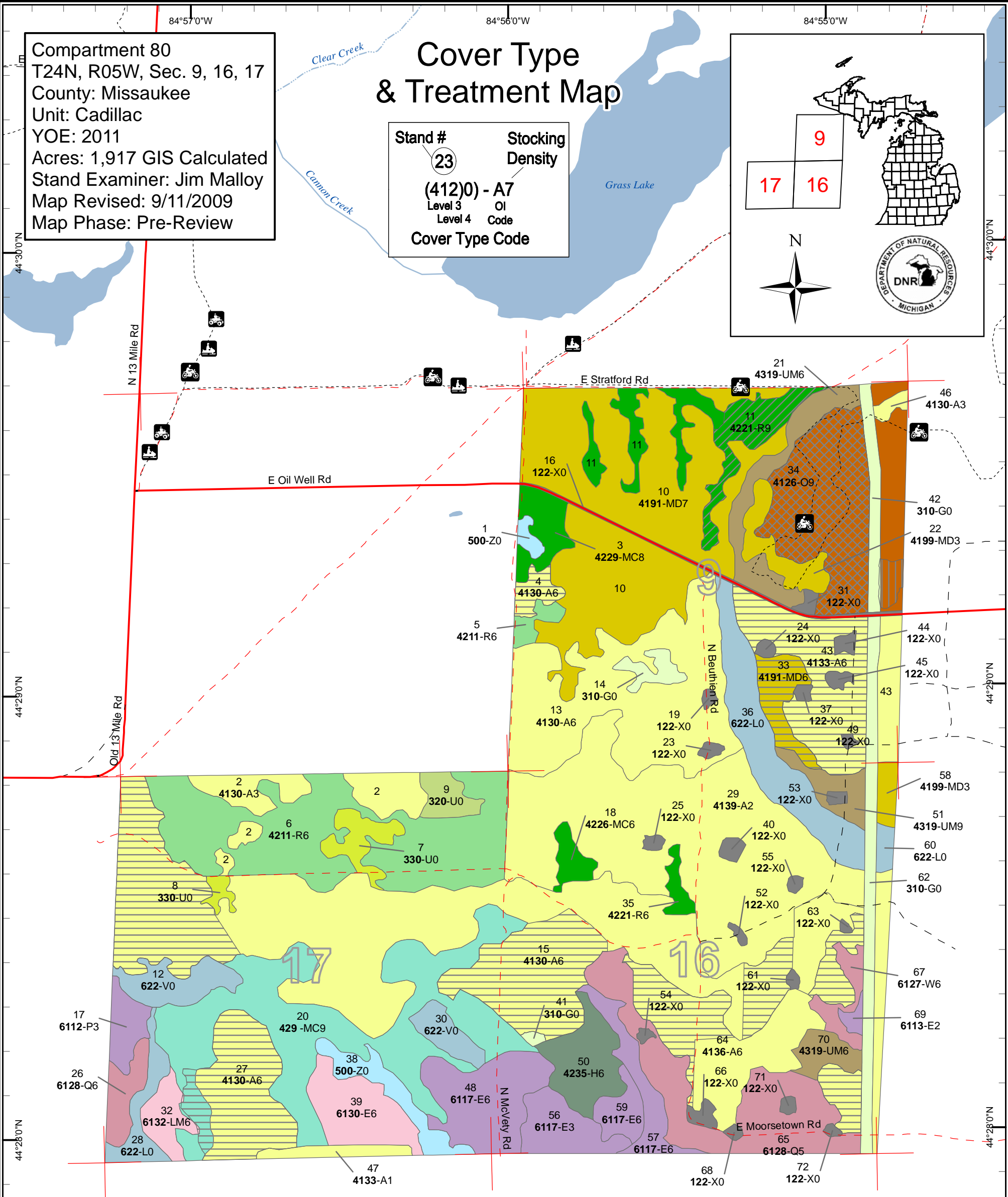
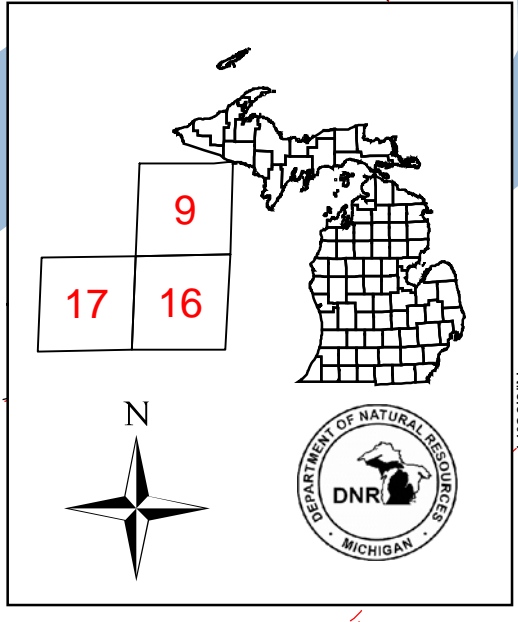
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **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**

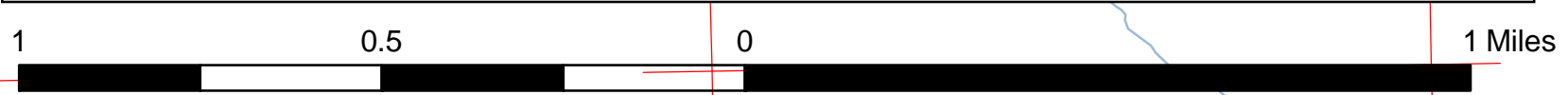
Compartment 80
 T24N, R05W, Sec. 9, 16, 17
 County: Missaukee
 Unit: Cadillac
 YOE: 2011
 Acres: 1,917 GIS Calculated
 Stand Examiner: Jim Malloy
 Map Revised: 9/11/2009
 Map Phase: Pre-Review

Cover Type & Treatment Map

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



Legend		
	Miris Corners	
	County Paved Road	
	Paved Road	
	County Gravel Road	
	County Poor Dirt Road	
	Poor Dirt Road	
	Trails	
	ORV Trails	
	MCCCT Trails	
	Snowmobile Trails	
	Intermittent Stream/Drain	
	Stream	
	Lakes and Rivers	
	Clearcut (w/Reserves, Patch/Strip)	
	Shelter Wood (w/Reserves)	
	Thinning (Crown, Low, Systematic)	
	Selection (Group, Single Tree)	
Non-Forest Stands		
	Level 3	
	122 - Road/Parking Lot	
	310 - Herbaceous Openland	
	320 - Upland Shrub	
	330 - Low-Density Trees	
	500 - Water	
	622 - Lowland Shrub	
Forest Stands		
Level 3		
	412 - Oak Types	
	413 - Aspen Types	
	419 - Mixed Upland Deciduous	
	421 - Planted Pines	
	422 - Natural Pines	
	423 - Other Upland Conifers	
	429 - Mixed Upland Conifers	
	431 - Upland Mixed Forest	
	611 - Lowland Deciduous Forest	
	612 - Lowland Coniferous Forest	
	613 - Lowland Mixed Forest	

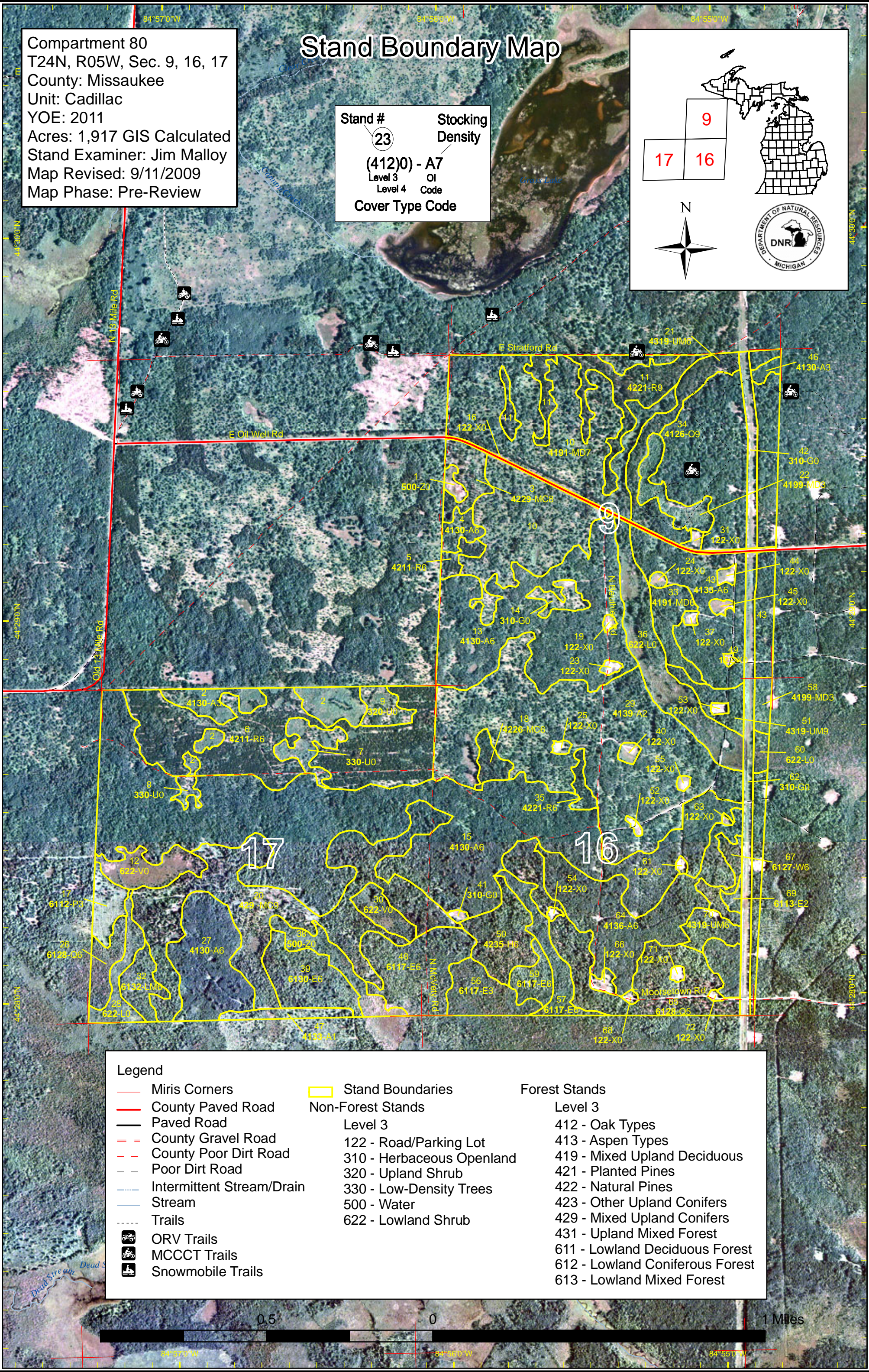
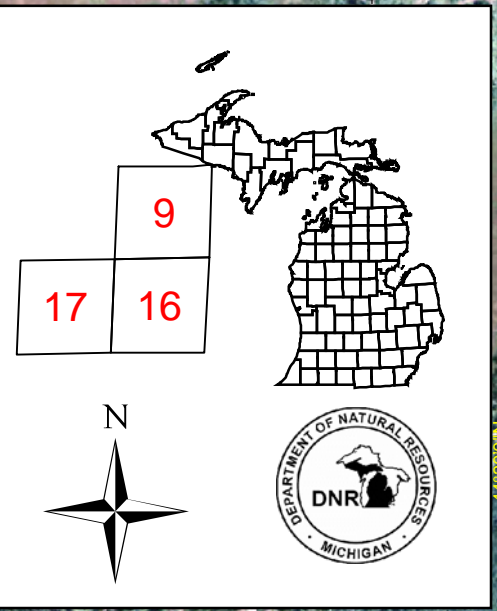


84°57'0"W 84°56'0"W 84°55'0"W

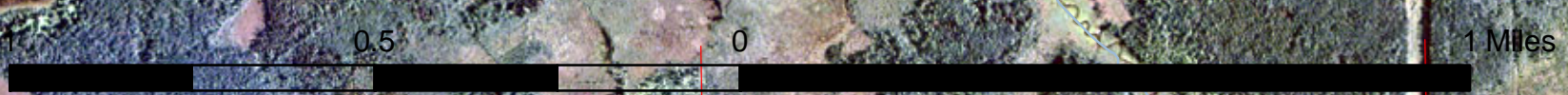
Stand Boundary Map

Compartment 80
 T24N, R05W, Sec. 9, 16, 17
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Stand #
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Stocking Density
 (412)0 - A7
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 Level 4 Code
Cover Type Code



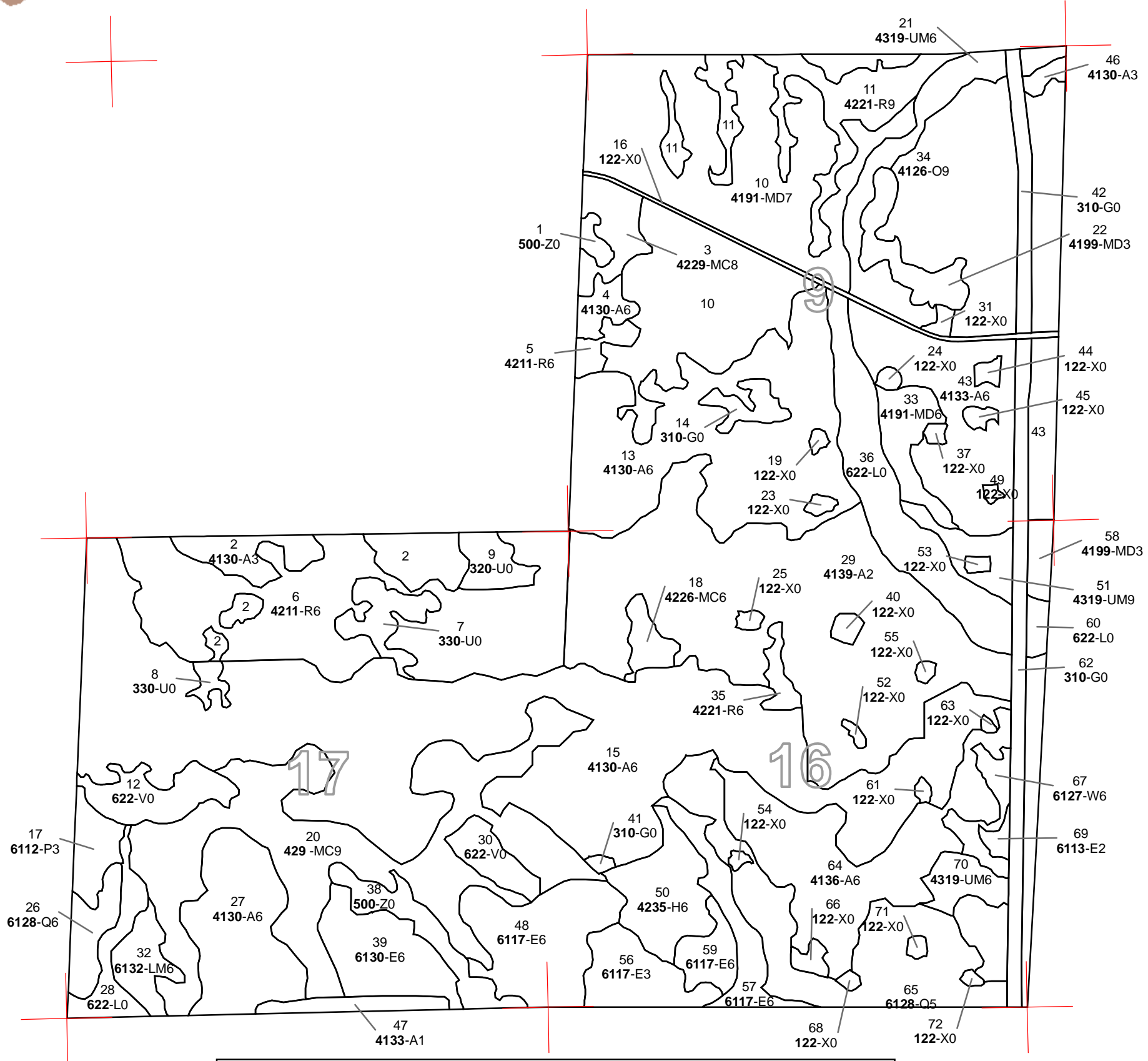
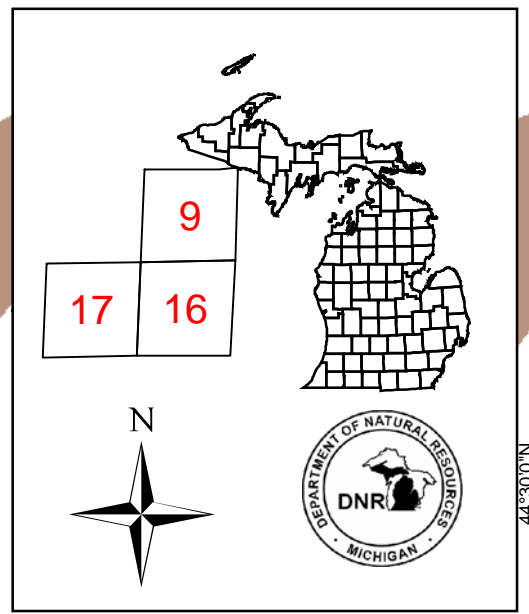
Legend		Forest Stands	
	Miris Corners		Level 3
	County Paved Road		412 - Oak Types
	Paved Road		413 - Aspen Types
	County Gravel Road		419 - Mixed Upland Deciduous
	County Poor Dirt Road		421 - Planted Pines
	Poor Dirt Road		422 - Natural Pines
	Intermittent Stream/Drain		423 - Other Upland Conifers
	Stream		429 - Mixed Upland Conifers
	Trails		431 - Upland Mixed Forest
	ORV Trails		611 - Lowland Deciduous Forest
	MCCCT Trails		612 - Lowland Coniferous Forest
	Snowmobile Trails		613 - Lowland Mixed Forest



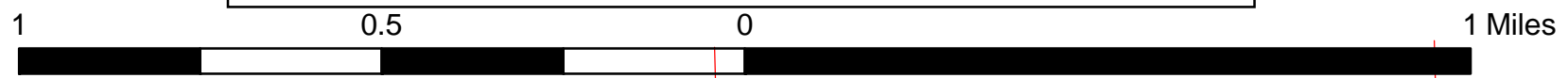
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Dedicated & Proposed Special Conservation Area Map

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



Legend	
	Miris Corners
	Stand Boundaries
	Wildlife Management Areas
Non-Forest Stands	
Level 3	
122	Road/Parking Lot
310	Herbaceous Openland
320	Upland Shrub
330	Low-Density Trees
500	Water
622	Lowland Shrub
Forest Stands	
Level 3	
412	Oak Types
413	Aspen Types
419	Mixed Upland Deciduous
421	Planted Pines
422	Natural Pines
423	Other Upland Conifers
429	Mixed Upland Conifers
431	Upland Mixed Forest
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612	Lowland Coniferous Forest
613	Lowland Mixed Forest



84°57'0"W 84°56'0"W 84°55'0"W

44°30'0"N

44°29'0"N

44°28'0"N

44°30'0"N

44°29'0"N

44°28'0"N

Cadillac Mgt. Unit

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

Compartment 080 Year of Entry 2011

Report Date: 09/14/2009



	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	29	10	0	181	249	362	0	0	0	0	0	0	0	0	831
Herbaceous Openland	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Low-Density Trees	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Lowland Coniferous Forest	0	0	0	0	0	0	0	9	0	61	11	0	0	0	0	81
Lowland Deciduous Forest	0	10	0	2	58	26	0	0	0	0	0	0	0	0	0	97
Lowland Mixed Forest	0	0	0	0	27	0	0	0	0	0	12	0	0	0	0	38
Lowland Shrub	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Mixed Upland Conifers	0	0	0	0	0	0	0	0	123	0	0	0	0	0	0	123
Mixed Upland Deciduous	0	5	14	0	174	14	0	0	0	0	0	0	0	0	0	208
Natural Pines	0	0	0	5	7	0	0	13	0	0	37	0	0	0	0	62
Oak Types	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	89
Other Upland Conifers	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	25
Planted Pines	0	0	0	116	0	0	0	0	0	0	0	0	0	0	0	116
Road/Parking Lot	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Upland Mixed Forest	0	0	0	0	0	9	0	0	0	0	0	25	0	0	11	45
Upland Shrub	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Water	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Total	203	44	24	123	447	299	362	22	123	86	60	25	0	0	99	1917

**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 2
4	63080004-Cut	6.5	4130 - Aspen	High Density Pole	46	Harvest	Clearcut with Reserves	Aspen	

Rev
Cmnt:

Rev Final harvest aspen clones. Clean up around edges to expand aspen. Leave all oak.
Spec

Next
Steps:

11	63080011-Cut	19.3	42210 - Natural Red Pine	High Density Log	96	Harvest	Low Thinning	Natural Mixed Pine	
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Rev
Cmnt:

Rev Thin white/red pine to a residual ba of 60. Do not cut oaks. Remove all maple and jack pines.
Spec

Next
Steps:

15	63080015-Cut	126.2	4130 - Aspen	High Density Pole	52	Harvest	Clearcut with Reserves	Aspen, Oak	
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Rev Sale will target 1/3-1/2 of the entire stand.
Cmnt:

Rev Final harvest all aspen, maples, balsam, and pine. Leave scattered oaks and shrubs.
Spec

Next
Steps:

27	63080027-Cut	49.5	4130 - Aspen	High Density Pole	44	Harvest	Clearcut with Reserves	Aspen, Oak	
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Rev
Cmnt:

Rev Final harvest all species. Leave oaks and shrubs.
Spec

Next
Steps:

33	63080033-Cut	14.3	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	43	Harvest	Clearcut with Reserves	Aspen, Mixed Conifer	
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Rev
Cmnt:

Rev Final harvest. Leave all pine under 8"dbh.
Spec

Next
Steps:

34	63080034-Cut	65.3	4126 - White, Black, N. Pin Oak	High Density Log	74	Harvest	Single Tree Selection	White, Black, N. Pin Oak	
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Rev Goal is to release existing regen. Protect ORV trail with sale specs. Treat portion east of the pipeline with sales in compartment 78.
Cmnt:

Rev Thin oak to a residual ba of 30-40. Remove all aspen and maples.
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
43 63080043-Cut	51.8	4133 - Aspen, Mixed Pine	High Density Pole	52	Harvest	Clearcut with Reserves	Aspen, Oak

Rev
Cmnt: Treat portion east of the pipeline with sales in compartment 78.

Rev
Spec Final harvest all species.

Next
Steps:

64 63080064-Cut	42.8	4136 - Aspen, Mixed Conifer	High Density Pole	43	Harvest	Clearcut with Reserves	Aspen
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Rev
Cmnt: Treat portion east of the pipeline with sales in compartment 78.

Rev
Spec Final harvest. Remove all aspen, maple, pines, and balsam. Do not cut any oak, hemlock or cedar.

Next
Steps:

**Total Treatment
Acreage Proposed: 375.7**

**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
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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	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.