



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 92 ENTRY YEAR: 2011

Compartment Acreage: 1461 County: Midland

Revision Dates: Draft 10-12-09, Draft 10-29-09.

Stand Examiner: Mark Reichel

Legal Description: T16N, R2E, Sections 7, 8, 9

Management Goals: This is a very lowland compartment: The Kawkawlin Flooding is maintained by Wildlife Division with a dyke, and occupies 212 acres in section 7. 65% of the compartment other than the flooding is lowland, and half of the aspen in the compartment is lowland. The aspen is either too young (none in the 40-49 year old class) or inoperably wet, with the exception of one small stand that will be selection harvested because it is wet and the aspen is old. Two failed (summer) final harvests totaling 69 acres will be planted with pine. Two stands in section 9 (total 42 acres) that were shelterwood harvested last year of entry are not regenerating well; one will receive scarification and the other will be planted to pine. An adjacent small oak stand will have a first entry shelterwood harvest.

Soil and Topography: The area west of the flooding and between the flooding and a large, broad drainage in section 9 has very little relief; it is low and wet, dissected by a labyrinth of slightly higher “ridges”. Section 9 east of the drainage is has a good upland ridge. The forested areas are occupied by somewhat poorly drained Pipestone sand, which has a seasonally high water table. The wet areas are mostly occupied by poorly drained Kingsville loamy fine sand and Kinross mucky sand.

Ownership Patterns, Development, and Land Use in and Around the Compartment: A continuous block of state land with state land to the north and south, and private on the east and part of the west edges, with one inholding in section 8/9. The private land has a few residences along Saiko and Curtis roads; it is not used for agriculture or development currently.

Wildlife Habitat Considerations: There are several active beaver dams that have trappers working them.

Unique, Natural Features: MNFI has observed great blue heron, bald eagle and black tern on the Kawkawlin flooding at times. The prescribed harvests and other treatments will not affect these species.

Archeological, Historical, and Cultural Features: H.A.L. concern in section 8 per H.A.L. database.

Special Management Designations or Considerations: The Kawkawlin Flooding is managed by Wildlife Division for waterfowl.

Wildlife Habitat Considerations: The KCF (Kawkawlin Creek Flooding) historically has generated considerable attention by both hunters and non-hunting groups. This compartment offers avian opportunities for a wide variety of interest groups. Conifer components will improve cover type diversity and provide additional cover for wintering deer. No annually maintained wildlife stands exist within this compartment.

Watershed and Fisheries Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) clay, silt, sand & gravel and dune sand. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale for brick making in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. The pits in Section 17 appear to be for dune sand. Larkin Field is located eight miles to the south. The field produced over 36,000 BO from the Berea since 1935. None of the State lands in the Compartment are leased currently.

Vehicle Access: There is a fairly good network of two tracks along the “ridges”. Many interior roads have been closed; three major berms in section 9 are holding. A major corridor runs from the KCF to the Midland/Gladwin County line at the southern terminus of Deer Road. This forest road is maintained as needed by both FMFM and Wildlife Divisions and is seasonally closed with three gates, two at the flooding and one to the north on the county line. Some of the low spots were recently armored with rock. Access from the south is over the Kawkawlin weir. The eastern edge can only be accessed from Saiko road. The western portion of the compartment is accessed via Curtis Road and is also gated. The compartment is dissected by the flooding and by the drainage in section 9, restricting east-west travel.

Survey Needs: None.

Recreational Facilities and Opportunities: The primary use of the compartment is waterfowl hunting and viewing, as well as deer and grouse hunting. Some people use the main road through section 8 for hiking.

Fire Protection:

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: 92

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	STAND AGE CLASS																All Aged	Total
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159		
Aspen			186	91	5					37									319
Bog or Marsh	14																		14
Grass			41																41
Lowlnd Brush	177		16																193
Lowlnd Poplr			6	64	141					29									240
Marsh	87																		87
Oak				13					36									13	62
Paper Birch			4																4
Swamp Hrdwds			13	21	22		75	38	83	14								23	289
Upland Brush		21																	21
Upland Hdwds									8										8
Water	212																		212
Total	490	21	266	189	168		75	38	127	80								36	1461

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: 92

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	254														28									37			319
V Bog or Marsh			14																								14
G Grass							41																				41
L Lowlnd Brush									193																		193
P Lowlnd Poplr										222									18								240
N Marsh											87																87
O Oak														49										13			62
B Paper Birch															4												4
E Swamp Hrdwds																			289								289
U Upland Brush															21												21
M Upland Hdwds																								8			8
Z Water																									212		212
Total	254		14				41		193	222	87			49	4	49				307				58	212		1461

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

MIDLAND COUNTY

COMPARTMENT: **92**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4520 Cds	Hardwood	145 Cds
Hardwood	854 Mbf	Hardwood	38 Mbf
Sum TotVol	6228 Cds	Sum CutVol	221 Cds
Total Cmpnt Acres		Acres Proposed For Cut.....	40
1461			

GLADWIN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 92

Entry Year: 2011

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
2	O9	13		60	oak	unevenaged	shelterwood-prep	2			
<p>comnts Fmd : Diverse upland stand with gentle microrelief very shallow flooded areas) bisected by defined drainage (probbly no permit) parallell to and near road. All ages of oak, including some good quality red oak, and some nice mature aspen. Becomes wetter going south but still operable. 2" spec on all but oak and birch. Where oak/birch BA is greater than 70 after species removal, mark additional birch, then oak with orange for removal for target BA of 70. Where total BA is less than 50, green mark additional trees to maintain BA closer to 70. Use shortwood spec. to avoid landing and big operation near homes and road. Decking should be at North end where drier. Harvest dry-frozen, NON-NEGOTIABLE. '99 comments: Survey work needed. Stand buffers road and dwelling. Mixed oak/maple. Some nice red oak. South half of stand is a seasonally wet, upland site. North half is very wet, heavy to lowland brush and marsh vegetation. Upland portion could be managed with adjacent stands.</p>											
5	E9	27	77	75	swamp hardwoods	mature	selection	2			
<p>comnts Fmd : Aspen is over-mature and rotting. Stand is seasonally wet, with scattered vernal ponds. Healthy maple, oak, ash understory. Also, some scattered red oak and beech throughout. Survey line may be needed.</p>											
6	U0	21	7	65	red pine	in process of regeneration		0	planting		
<p>comnts Fmd : Scattered small aspen patches, heavy rose, viburnum and sedge. Heavy browse and insect galls on the very little oak regen present. Plant red pine (1st) or jack pine (2). Upland with easy access. '01 comments: Good advanced oak reproduction. Some nice red oak. Remove overstory to release oak understory. Cut to 2" dbh. Mark some scattered oak trees to leave. Leave patch of white pine out of sale area. Leave tamarack along marsh. Post review comments: Leave the white pine, white birch and tamarack along the marsh. Stay out of the transition zone, consider a buffer. Cut in sale called Marsh Corridor; Sale # 73-019-01-01</p>											
106	O8	21	71	57	oak	in process of regeneration		0	other - specify in remarks		
<p>comnts Fmd : Oak is not regenerating. Heavy rose, bracken and scattered Red Ozier Dogwood ground cover. Some good aspen clumps regenerating, as well as red maple throughout stand. Need a cultural treatment to stimulate oak regen. Therefore scarify to prepare oak seedbed. Fuels not quite heavy enough for Rx burn. '99 comments: Cut aspen and maple to 4" DBH. Mark oak if necessary to reduce basal area to 60 sq. ft./acre. Open canopy up more where existing regeneration is adequate. Some nice red oak. Watch intermittent drainage. Post-review comments: Leave the white pine, white birch, and tamarack along the marsh. Stay out of the transition zone, consider a buffer. Harvested in sale called Marsh Corridor; Sale #73-019-01-01</p>											
114	G0	41	16	62	jack pine	sparse		0	planting		
<p>comnts Fmd : Plant jack pine in furrow tops in fall when driest for access. WLD will review before compartment review to determine if they want to keep it as a G/L, but probably not. 30-40% shallow N areas. Very sparse aspen has deer browse and hypoxylon canker. '01 comments: Clearcut in 1993, summer harvest. TS# 84-92-1. Very poor regeneration. Original intention was to cut in the winter due to poor regeneration of aspen in the past (see contract specifications). Exception was made and summer harvest was allowed. Regeneration would probably have been better if it was cut in the winter. This stand may require hand planting in the future.</p>											
214	A1	28	16	62	red pine	sparse		0	planting		
<p>comnts Fmd : Plant red pine. Poorly regenerated when cut in '93 (sale #84-92). Was summer harvest. Lot of oak- almost O1. 85-90% upland, some shallow hummocky areas and few shallow N drainages. Hypoxylon in the aspen, low level of infection. Oakville and pipestone soils.</p>											
Total Acres.....		151									

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
107	O8	13	27	65	northern hardwood	two aged		0	natural regeneration	

TREATMENT LIMITING FACTORS: Too wet

comnts Fmd : Broken out of stand 7 due to supercanopy. Residual fairly good quality red oak left after '82 harvest (60 BA). Oak canopy has suppressed maple and aspen, and there is little oak regen. Will be M type. Factor limited due to poor access, not stand itself.

Total Acres..... 13

Compartment 92
 T16N, R2E, Sec. 7-9
 County: Midland
 Unit: Gladwin
 YOE: 2011
 Acres: 1,461 GIS Calculated
 Stand Examiner: Mark Reichel
 Map Revised: 10/30/2009
 Map Phase: Pre-Review

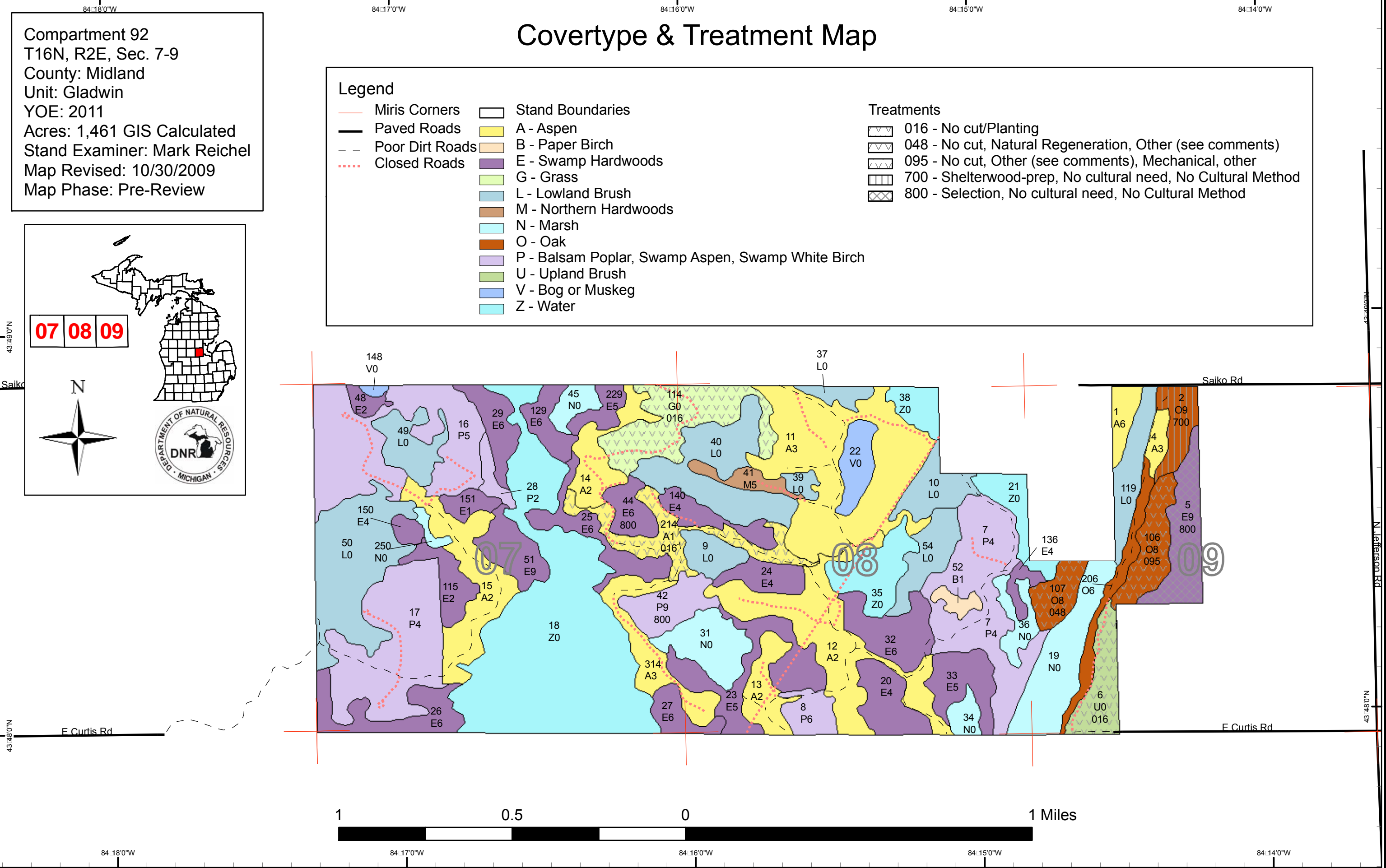
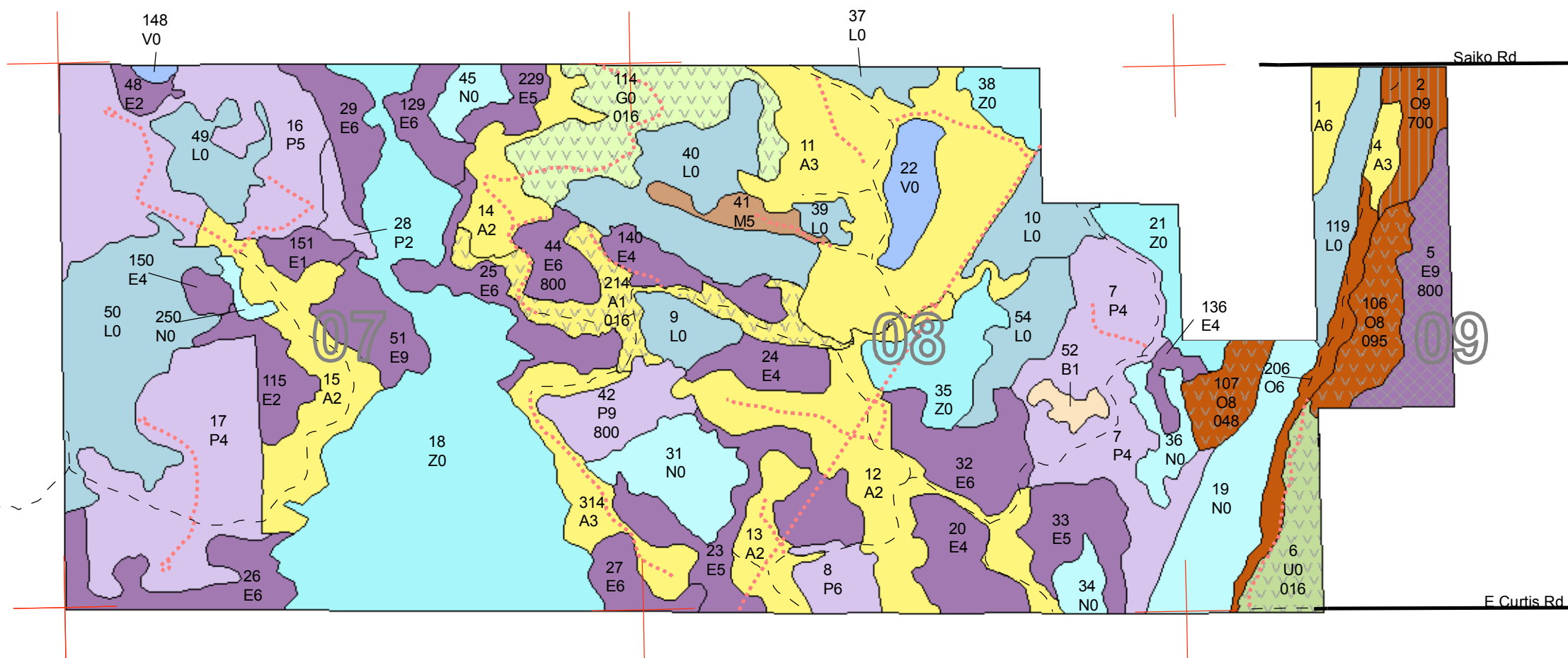
Covertypes & Treatment Map

Legend		Treatments
— Miris Corners	□ Stand Boundaries	▨ 016 - No cut/Planting
— Paved Roads	■ A - Aspen	▨ 048 - No cut, Natural Regeneration, Other (see comments)
- - Poor Dirt Roads	■ B - Paper Birch	▨ 095 - No cut, Other (see comments), Mechanical, other
⋯ Closed Roads	■ E - Swamp Hardwoods	▨ 700 - Shelterwood-prep, No cultural need, No Cultural Method
	■ G - Grass	▨ 800 - Selection, No cultural need, No Cultural Method
	■ L - Lowland Brush	
	■ M - Northern Hardwoods	
	■ N - Marsh	
	■ O - Oak	
	■ P - Balsam Poplar, Swamp Aspen, Swamp White Birch	
	■ U - Upland Brush	
	■ V - Bog or Muskeg	
	■ Z - Water	

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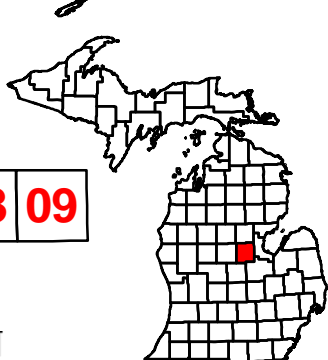
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DEPARTMENT OF NATURAL RESOURCES
MICHIGAN





Stand Boundary Map

Compartment 92
T16N, R2E, Sec. 7-9
County: Midland
Unit: Gladwin
YOE: 2011
Acres: 1,461 GIS Calculated
Stand Examiner: Mark Reichel
Map Revised: 10/30/2009
Map Phase: Pre-Review

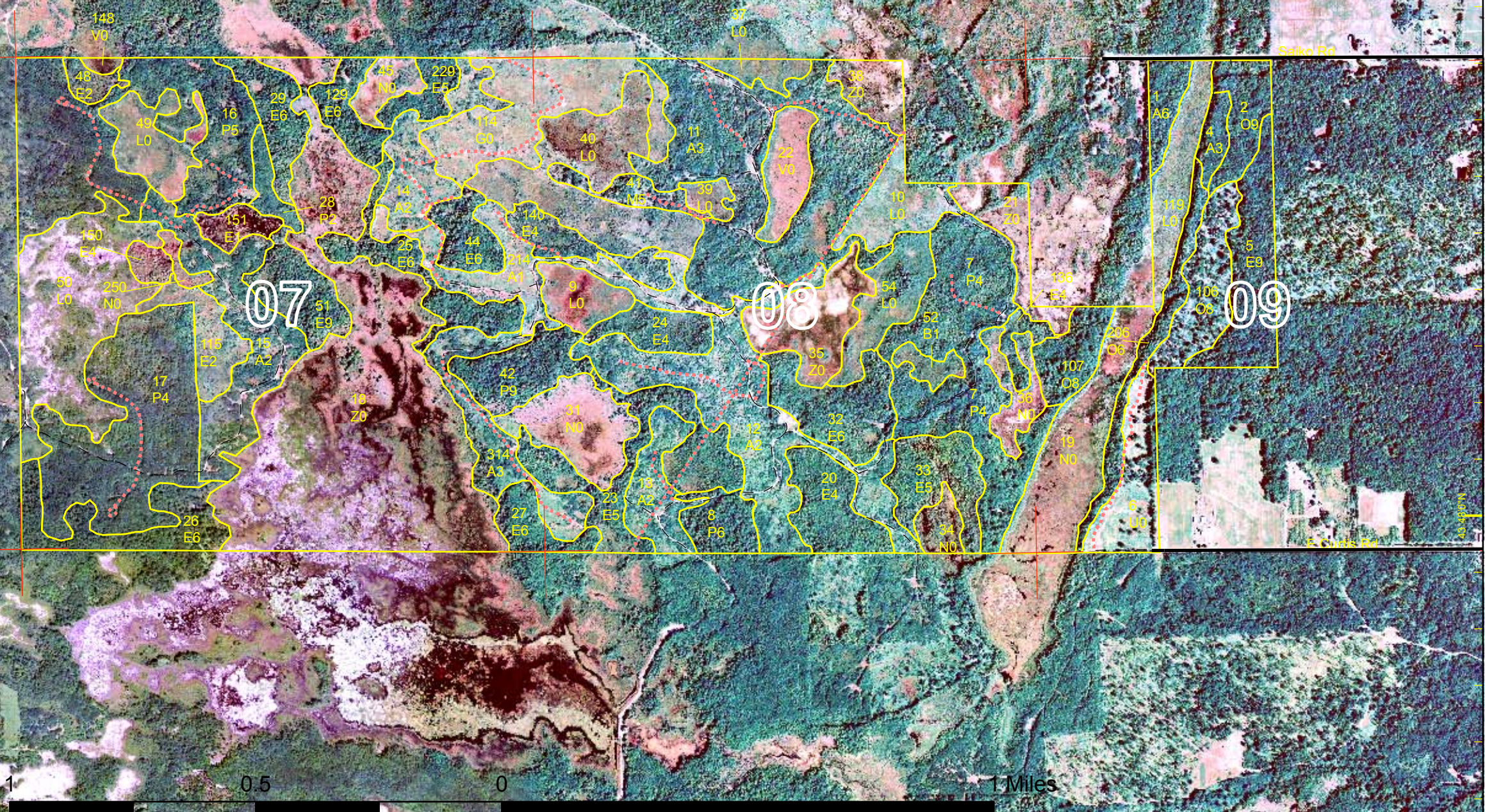


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Legend

- Miris Corners
- Paved Roads
- Stand Boundaries





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	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
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	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.