



## GLADWIN FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 9 ENTRY YEAR: 2004

Compartment Acreage: 3402 County: Clare

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**Revision Date:** April 9, 2002

**Final version as per compartment review 09/26/2002**

**Stand Examiner:** Steven Nyhoff and Dale E. Ekdom

**Legal Description:** T20N R6W Sections 13, 14, 23-26, 35 and 36

**RMU (if applicable):**

### **Management Goals:**

This compartment is part of the Kirtland's Warblers recovery plan, so a good portion of the compartment is to be maintained in a Jack Pine coevtype with some stands always in the younger age categories. The compartment has extensive flood plains along the Muskegon and Clam rivers. These will be left as wildlife corridors and areas and for late successional ecosystems.

### **Soil and Topography:**

The soils in the compartment are mainly excessively drained Grayling Sand. The exceptions to this are along the Clam River and the Muskegon River where the soils are mainly poorly drained Winterfield-Evart Complex.

The land is mainly flat with some hills in the north end of the compartment. Also, there are steep ridges that border the flood plains of the Clam River and the Muskegon River.

### **Ownership Patterns, Development, and Land Use in and Around the Compartment:**

The land is mainly in one block of public ownership. This ownership is mainly in state owned but about 770 acres are owned by the U.S. Fish and Wildlife Service (these stand are 900 series stands on the map). There are a few private land holdings in the compartment. This land and the land around the compartment are mainly used for hunting. However, there are a few permanent and seasonal residences along Pine Road, Wilson Road, Lake Station Avenue and Hemlock Avenue.

In addition, the southern end of the compartment is part of an underground gas storage area. There are several injection heads in section 35. There is also an operating well on the private 40 in the SW ¼ of section 36.

### **Unique, Natural Features (include only non-site specific and non-sensitive information):**

In the Muskegon River's flood plain, there is a complex community that is a mix of swamp conifers and swamp hardwoods.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** None known but the area has a high potential for sites.

### **Special Management Designations or Considerations:**

The compartment is part of the Kirtland's Warbler recovery plan and most of the timber decisions are affected by that plan.

### **Watershed and Fisheries Considerations:**

There are two rivers in the compartment, one is the Muskegon River and the other is the Clam River. Both of these rivers have fairly extensive flood plains associated with them that will not be managed because of BMP (best

management practices) procedures. Most of the harvesting that is done in the compartment will be out of the flood plains protecting the rivers from logging activities.

### **Wildlife Habitat Considerations:**

**Ecological Information:** Compartment 9 encompasses 2809 acres and is located in Northwest Clare county Michigan. It is included in the Kirkland's Warblers, an endangered species, management plan. According to Albert's Regional Landscape Ecosystems 1994, this compartment is categorized as Subsection VII.2.1. Within this subsection it contains LTA (Land Type Association) designations of 5-1-1-1 (Broad, flat outwash plain, few kettle lakes, excessively drained sand), and 5-5-4-9 (Narrow outwash channel, very poorly drained peat or muck). Presettlement cover types for LTA 5-1-1-1 in this compartment included White pine as the major component and to a smaller degree American beech, Hemlock, and Sugar maple. Present cover type, largely Jack pine, is a result of heavy cutting and planting of Jack pine for the benefit of the Kirkland's Warbler. In addition, scattered mixed pine and hardwood forests exist within this LTA. LTA 5-5-4-9 originally was composed of Cedar and mixed conifer swamp. Presently this LTA is much more diverse than years past. Lowland hardwoods (22%) is the dominant cover type; Beech/Hemlock and Aspen/White birch also occur in this LTA within the compartment.

**Wildlife Recommendations:** This compartment's harvest and planting prescriptions are heavily influenced by the needs of the Kirkland's Warbler, which is an endangered species. Warblers require relatively young dense Jack pine stands with scattered openings. These Jack pine barrens need to be promoted and maintained to insure continued suitable habitat for the warblers. Other species of wildlife, such as snowshoe hare, red squirrels, an occasional upland sandpiper, and Whitetail deer benefit from this type of habitat. In addition, the Muskegon river corridor, which runs through the compartment, will host a variety of wildlife species such as Wood ducks, Painted turtles, Black bear, Raccoon, and Belted Kingfishers.

A Kirkland's Warbler recovery management plan exists outlining a cutting rotation for not only this compartment, but also for many of the surrounding compartments. Currently the plan is being updated, and until it is finished, the current cutting plan outlined in the plan should be used.

### **Mineral Resource and Development Concerns and/or Restrictions:**

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. Glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Pennsylvanian Saginaw and Grand River Formations. The Saginaw Formation is used for clay/shale in other areas of the State. The nearest gravel pit is located west of the compartment, and potential is thought to be good. The compartment lies between Cranberry Lake and Winterfield Fields. Both fields are gas storage fields and Cranberry Lake is also in secondary recovery operations. Part of the compartment is under lease for oil production or gas storage operations.

### **Vehicle Access:**

Access is very good to the entire compartment.

### **Survey Needs:**

The area is fairly well surveyed and currently there is no need for further survey work.

### **Recreational Facilities and Opportunities:**

Recreation opportunities exist in the compartment. In section 36 part of the Fur Farm Snowmobile trail runs through it. Also, there is access from some of the two tracks in the compartment to the Muskegon and Clam rivers.

### **Fire Protection:**

The timber and soils in the compartment are both predisposed to fire and to maintaining fire. There is some potential to having large fire in the area. The access to the compartment is good but fire control could be hindered because of the many pipelines that run through the compartment.

There is limited access for a Zone 4 dispatch in this area. Before closing any roads, get input from the Fire Officers at Harrison and Gladwin 50

### **Treatment Summary, November, 2007:**

Stand 71 has been identified by the Red Pine Project for final harvest. It is to be put on the 2008 Plan of Work, harvested, and replanted to red pine.

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status	
71	R9	61	73	58	red pine	immature	final harvest	1	planting		
comnts Fmd : THINNED IN 1995 BY REMOVING JP/OAK. Stand was identifed in the Red Pine Project to be harvested. The stand is to be harvested and planted to red pine. Put on the 2008 POW.											
<b>Total Acres.....</b>		<b>61</b>									

Compartment 9  
 T20N, R06W, Sec. 13, 14, 23-26, 35, 36  
 County: Clare  
 Unit: Gladwin  
 YOE: 2004 - Red Pine Project  
 Acres: 3,402 GIS Calculated  
 Stand Examiner: Steve Nyhoff  
 Map Revised: 11/06/2007  
 Map Phase: Pre-review

# Field Map

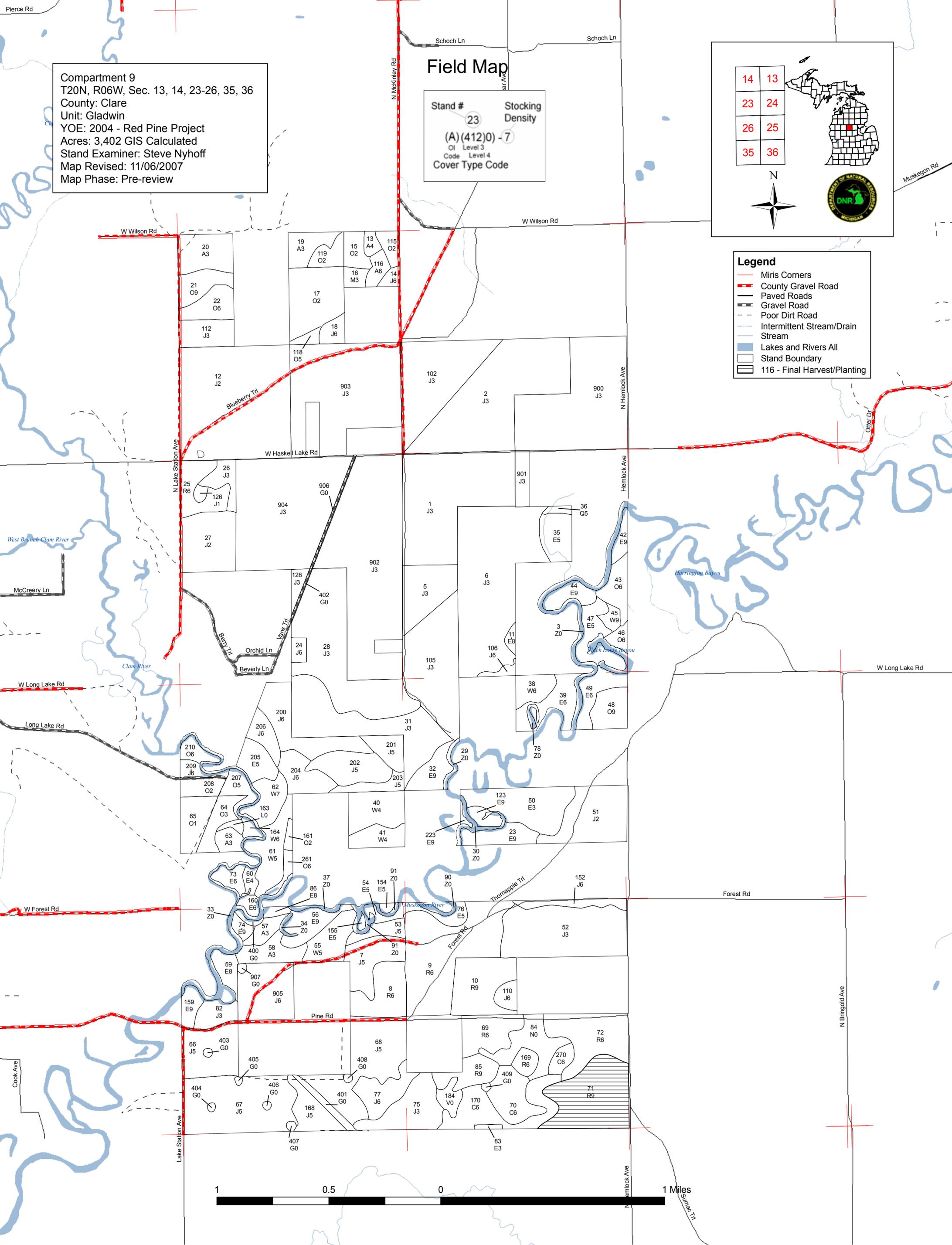
Stand # 23  
 Stocking Density  
 (A) (412)0 - 7  
 OI Level 3  
 Code Level 4  
 Cover Type Code

14	13
23	24
26	25
35	36

N

**Legend**

- Miris Corners
- County Gravel Road
- Paved Roads
- Gravel Road
- Poor Dirt Road
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers All
- Stand Boundary
- 116 - Final Harvest/Planting



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- Intermittent Stream/Drain
- Stream
- Lakes and Rivers All
- Stand Boundary
- A - Aspen
- C - Northern White Cedar
- E - Swamp Hardwoods
- G - Grass
- J - Jack Pine
- L - Lowland Brush
- M - Northern Hardwoods
- N - Marsh
- O - Oak
- Q - Mixed Swamp Conifer
- R - Red Pine
- V - Bog or Muskeg
- W - White Pine
- Z - Water

