



**GLADWIN FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 127 ENTRY YEAR: 2011

Compartment Acreage: 1330 County: Arenac

Revision Date: October 2, 2009; October 21, 2009

Stand Examiner: Tim Gallagher

Legal Description: T20N R3E Sections 33, 34, 35, 36

RMU (if applicable): N/A

Management Goals:

Manage the aspen, oak and red pine stands to maintain a variety of age classes to support forest sustainability and to enhance wildlife habitat.

Much of this compartment (20%) was cleared of all aspen as part of the Deer Range Improvement Program (DRIP) in 1968 and 1969. Within these stands all aspen was cut and all oak and pine were left. These stands have poor to moderate aspen regeneration with scattered mature oak and pine. The aspen in the DRIP stands is now 40 years old and reaching pole size. Two DRIP stands (stands 8 and 27) were harvested last Year of Entry (YOE) with good regeneration results. This YOE three DRIP stands (122.4 acres) are proposed for final harvest with reserves.

Several red pine plantation stands were first time row thinned last YOE. One red pine plantation stand is proposed for a second thinning this YOE. The remaining plantation stands are not yet ready for a second thinning this YOE. There is approximately 350 acres of bog, marsh and lowland hardwood types located at the west end of the compartment where forest management activities are not recommended due to extremely wet mucky soils.

Overall the compartment is on average ground with site indices between 55 and 70. There are numerous old railroad grades criss-crossing the area, remnants from the white pine logging era.

Soil and Topography:

The area varies from poorly drained to well drained soils and is mostly level to gently rolling. The major soil types are Roscommon – AuGres, and Grayling sands.

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

State and private intermixed. State holdings consist of large contiguous blocks. There is a large subdivision (Forest Lake Subdivision) bordering the north line of the compartment. Another smaller subdivision (Eymers Subdivision) lies within the compartment. The location of the two subdivisions concentrates use on state land within this compartment.

Unique, Natural Features:

Red-shouldered hawk nest on record located at northern edge of compartment. Bald eagle nest on record located east of compartment .5 miles. Doll's Merolonche on record to the north of the compartment. Massasauga on record to the south of compartment. Channel Darter on record to the east on Bear Creek; additional record to the north east. The compartment has a variety of rare species that could potentially be present such as; Red-Shouldered Hawk, Bald Eagle, Northern Goshawk, Wood Turtle, Massasauga and Dolls Merolonche.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

None.

Watershed and Fisheries Considerations:

Bear Creek (dredged) and several unnamed drainage's flow into the Rifle River. No fishing activity occurs within the compartment. The Rifle River is located less than a half mile east of the compartment and is listed as type 3 Trout River in the 2009 Trout and Salmon Guide and should be treated as a cold water fishery. There are also many scattered low areas that are seasonally flooded and support populations of waterfowl and many non-game species.

Wildlife Habitat Considerations:

Those aspen stands that have been regenerated, during the past 40 yrs, are now high quality saps/poles. Oak retention, found within the same above stands, also provides very high energy food sources for wintering deer and turkeys. Jack Pine stands are heavily utilized by wintering deer – these sites should be maintained for this purpose. Non-commercial stands situated between I-75 and M-76 offer excellent hunting opportunities. A short access road and parking area should be developed to enhance hunter opportunity. Wildlife Div. would prefer retention components remain clustered in any stand with an objective to enhance the aspen cover type.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan was quarried for gypsum in other areas of the State. A gravel pit is located 1.5 miles to the northeast and there should be some potential on the uplands. The Moffat Field is located in Section 34. The Field has produced over 12,000 BO from three Devonian carbonate formations, with one well still producing. The compartment currently is leased for oil and gas development.

Vehicle Access:

Access to most of the compartment is good via the county road system and state two tracks that are in place. There are access limitations located within the western part of the compartment between I-75 and Old M-76.

Survey Needs:

None needed.

Recreational Facilities and Opportunities:

No official facilities. The area receives moderate hunting pressure primarily used for deer, turkey and grouse hunting.

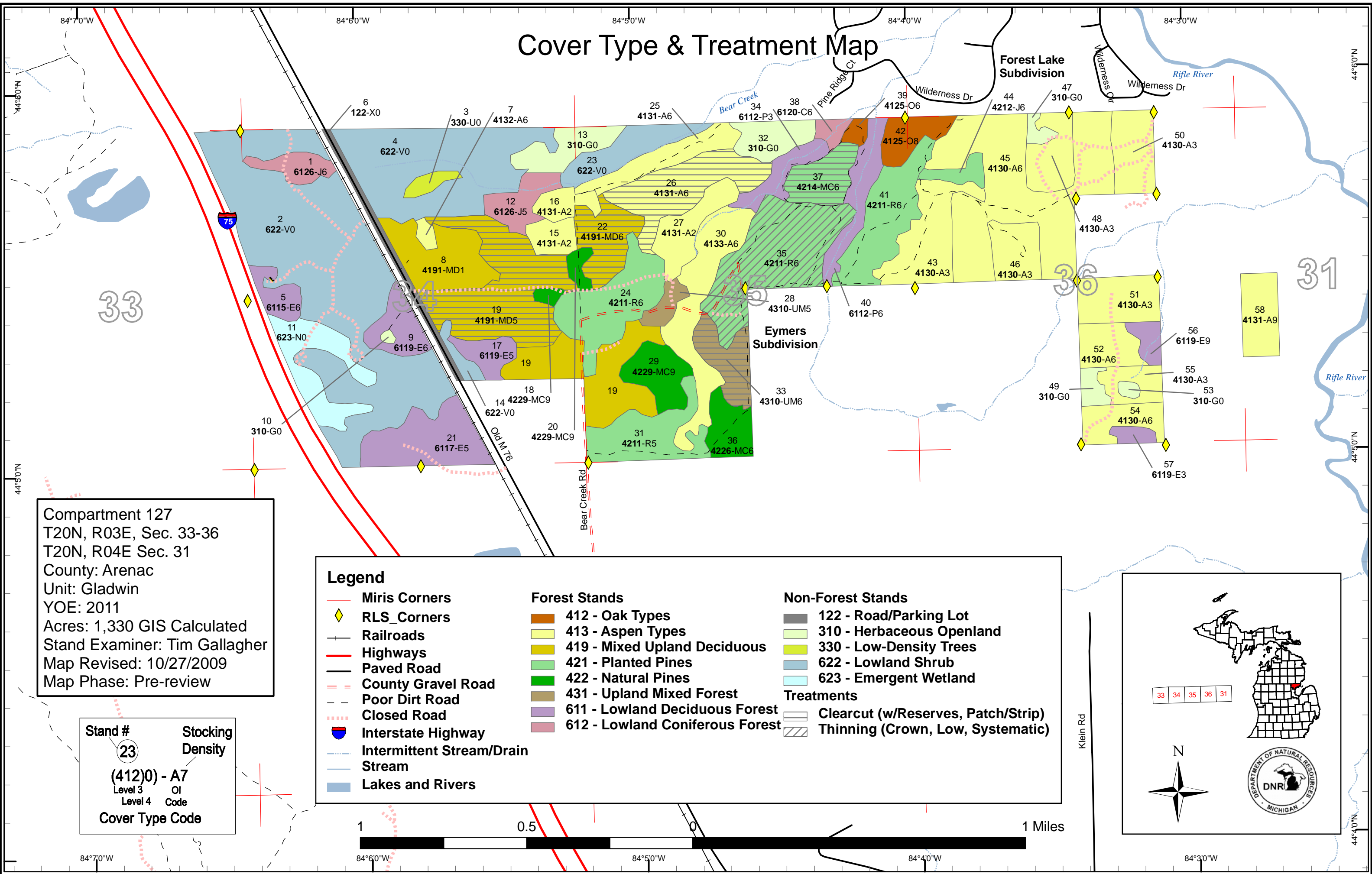
Fire Protection:

A potential fire control problem exists due to the rural/urban interface within this compartment.

Additional Compartment Information:

None.

Cover Type & Treatment Map



Compartment 127
 T20N, R03E, Sec. 33-36
 T20N, R04E Sec. 31
 County: Arenac
 Unit: Gladwin
 YOE: 2011
 Acres: 1,330 GIS Calculated
 Stand Examiner: Tim Gallagher
 Map Revised: 10/27/2009
 Map Phase: Pre-review

Legend		Forest Stands	Non-Forest Stands	
	Miris Corners		122 - Road/Parking Lot	
	RLS_Corners		310 - Herbaceous Openland	
	Railroads		330 - Low-Density Trees	
	Highways		622 - Lowland Shrub	
	Paved Road		623 - Emergent Wetland	
	County Gravel Road		Treatments	
	Poor Dirt Road			Clearcut (w/Reserves, Patch/Strip)
	Closed Road			Thinning (Crown, Low, Systematic)
	Interstate Highway			
	Intermittent Stream/Drain	412 - Oak Types		
	Stream	413 - Aspen Types		
	Lakes and Rivers	419 - Mixed Upland Deciduous		
		421 - Planted Pines		
		422 - Natural Pines		
		431 - Upland Mixed Forest		
		611 - Lowland Deciduous Forest		
		612 - Lowland Coniferous Forest		

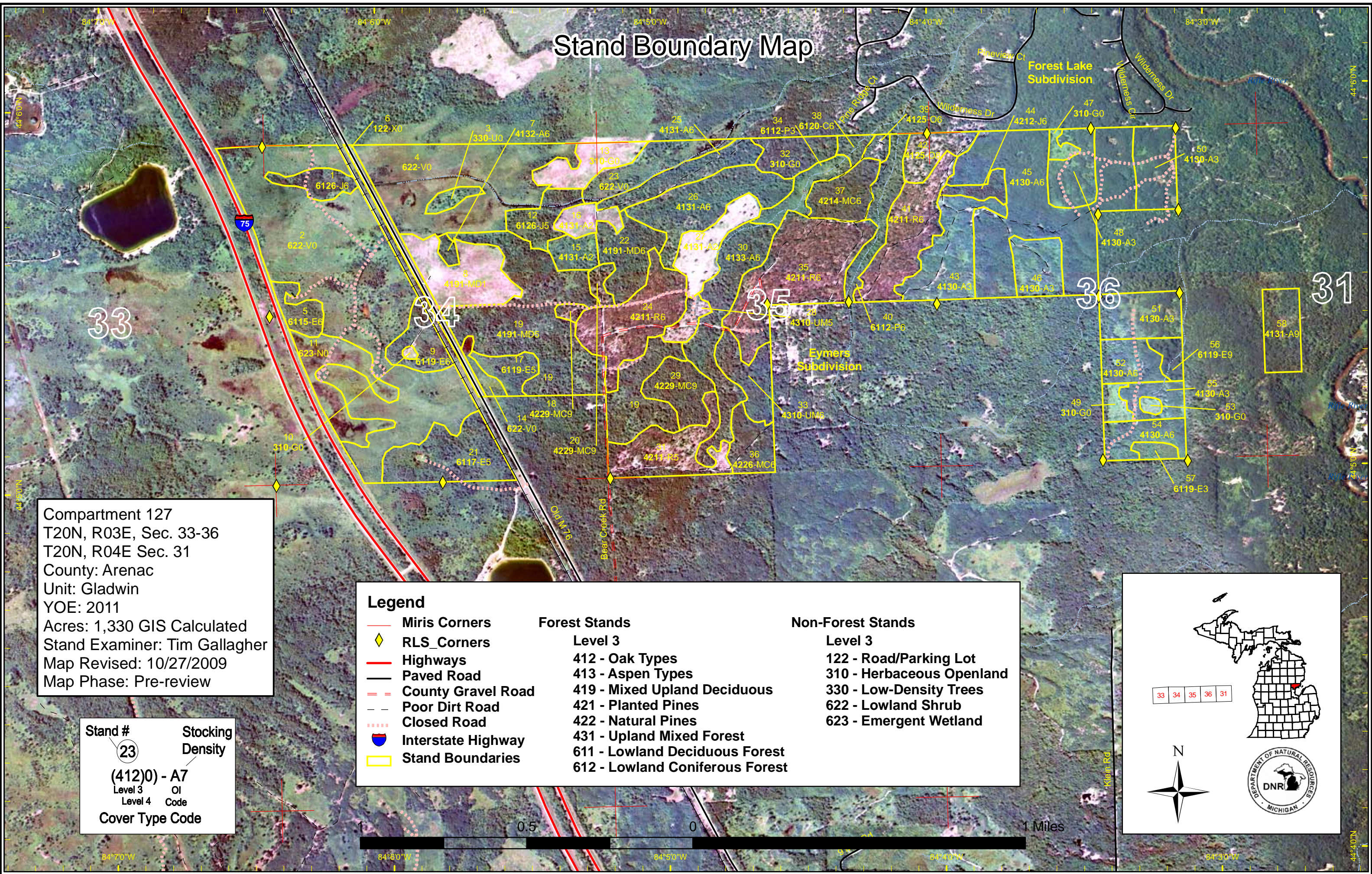
Stand #	Stocking Density
23	
(412)0 - A7	
Level 3	OI
Level 4	Code
Cover Type Code	



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Stand Boundary Map



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	Highways	413 - Aspen Types	310 - Herbaceous Openland
	Paved Road	419 - Mixed Upland Deciduous	330 - Low-Density Trees
	County Gravel Road	421 - Planted Pines	622 - Lowland Shrub
	Poor Dirt Road	422 - Natural Pines	623 - Emergent Wetland
	Closed Road	431 - Upland Mixed Forest	
	Interstate Highway	611 - Lowland Deciduous Forest	
	Stand Boundaries	612 - Lowland Coniferous Forest	

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

Gladwin Mgt. Unit

Compartment 127 Year of Entry 2011

Report Date: 10/27/2009



	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	28	128	146	3	77	0	18	0	0	0	0	0	0	0	398
Emergent Wetland	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Herbaceous Openland	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Low-Density Trees	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lowland Coniferous Forest	0	0	0	0	0	0	24	0	0	0	4	0	0	0	0	29
Lowland Deciduous Forest	0	0	0	16	0	0	0	25	34	34	0	0	0	0	0	109
Lowland Shrub	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284
Mixed Upland Deciduous	0	31	0	0	0	127	0	0	0	0	0	0	0	0	0	158
Natural Pines	0	0	0	0	0	14	0	18	0	0	0	7	0	0	0	39
Oak Types	0	0	0	0	0	0	0	0	0	0	3	13	0	0	0	16
Planted Pines	0	0	0	0	0	0	187	0	0	0	0	0	0	0	0	187
Road/Parking Lot	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Upland Mixed Forest	0	0	0	0	7	17	0	0	0	0	0	0	0	0	0	24
Total	370	58	128	162	9	236	212	60	34	34	7	20	0	0	0	1330

**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
19 73127019-CCWR	63.4	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	41	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer

Rev

Cmnt:

Rev

Spec: Final harvet 2" spec manage for a mix of natural regeneration of aspen, jack pine, oak and white pine. Interplant red pine to maintain full stocking if needed. The same Rx worked very well in adjacent stand (stand 8) last year of entry. Focus retention along Bear Creek Road.

Next

Steps: May need to interplant red pine to maintain full stocking.

22 73127022-CCWR	21.8	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	41	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer
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Rev

Cmnt: Focus retention along Bear Creek Road.

Rev

Spec: Final harvet 2" spec manage for a mix of natural regeneration of aspen, jack pine, oak and white pine.

Next

Steps: Interplant red pine to maintain full stocking if needed.

26 73127026-CCWR	37.2	4131 - Aspen, Oak	High Density Pole	41	Harvest	Clearcut with Reserves	Aspen, Oak
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Rev

Cmnt: Focus retention along drain that bi-sects stand also leave scattered mature oak and white pine to meet retention guidelines.

Rev

Spec: Final harvet 2" spec manage for a mix of natural regeneration of aspen, jack pine, oak and white pine.

Next

Steps:

33 73127033-CCWR	17.5	4310 - Pine, Oak Mix	High Density Pole	49	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer
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Rev

Cmnt: Stand boarders subdivision to the east. Possible to leave some red pine along the subdivision for visual and to aid in meeting the retention guidelines.

Rev

Spec: Final harvest 2" spec and manage for a mix of aspen, oak and white pine regeneration.

Next

Steps:

35 73127035-RPT	59.8	42110 - Planted Red Pine	High Density Pole	53	Harvest	Crown Thinning	Planted Red Pine
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Rev

Cmnt: First time row thinning in 2004. All scattered oak was left in the 2004 harvest. There is a pocket of denser oak stocking at south end of stand along subdivision.

Rev

Spec: Individual tree mark down to 120 BA/AC. Do not remove more than 1/3 of the volume in denser areas. Leave all scattered oak with this harvest.

Next

Steps:

**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
37 73127037-CCWR	17.5	42141 - Planted Mixed Pine, Mixed Deciduous	High Density Pole	53	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer

Rev Cmnt: Wide transition zone between this stand and stand 39 to the north. Leave scattered mature oak and red pine to meet retention guidelines.

Rev Spec: Final harvest 2" spec. converting to a mixed hardwood site.

Next Steps: May need to interplant red pine tp maintain full stocking.

**Total Treatment
Acreage Proposed: 217.2**

**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
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
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.