



**GRAYLING FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW RESENTATION**

COMPARTMENT # 22 ENTRY YEAR: 2007

GIS Compartment Acreage: 1535 County: Oscoda

Revision Date: September 7, 2005

Stand Examiner: Joan Charlebois

Legal Description: T28N R1E Sections 5, 6, 8, 17, 20 & 21

Management Goals: To maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while providing for multiple use and visual management.

Soils and Topography: Terrain is flat to gently-rolling. Soils are primarily Grayling, Roselawn & Rubicon Sands, with Houghton Muck & Rifle Peat associated with the swamps and river floodplain.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State ownership is broken and spread out across several sections. Consumer's Power owns a 365-foot wide strip of land that runs diagonally through the compartment; they did not clear the entire width of their property on the high-voltage power line corridor's southwest side, however. Adjacent private land had been primarily used for hunting and other seasonal recreation, with large blocks in hunt club ownership. The continuing trend has been one of property subdivision and development, with seasonal cabins giving way to year-round residences and the expansion of an adjacent golf course resort. Stands 56 & 63, two small isolated parcels, are proposed for disposal; Stand 63 had an illegal road pushed through it.

Unique, Natural Features: Native dry prairie plants have been found in association with grassy openings and managed jack and red pine plantations

Archeological, Historical, and Cultural Features: Old building sites, possibly associated with homesteads or logging/railroad activity, were evident.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: The Middle Branch of Big Creek runs through the northern third of the compartment. It is shallow, unshaded and heavily impacted by a series of beaver dams.

Wildlife Habitat Considerations: The compartment's diverse mix of habitats, from riparian zone floodplains to upland jack pine, aspen and oak, provide good habitat for a variety of game and non-game wildlife species. Two grassy openings in Section 21 are maintained by Wildlife Division staff on an annual basis. South of the compartment, in Section 29's cedar swamp, there is a large deer yard which makes winter cutting a priority in Sections 20 & 21. The swamp also provides snowshoe hare habitat, so hare specs and slash retention are very important in any treated stands near that area.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 800 feet. Beneath the glacial drift is the Coldwater Shale formation. There is not an economic use for the Coldwater Shale. Gravel pits are not located in the area, but there should be some potential. This compartment is mostly leased and developed for the Antrim Shale. Four well sites, along with their associated flow lines, have been established.

Vehicle Access: Access is good throughout the compartment by county roads, including Old 612, Pickerel Lake, Williams, Henning and Neuman Roads, and also by a network of two-tracks associated with power line rights-of-way, gas well access roads and the snowmobile trail. No new roads have been identified for closure.

Survey Needs: Corners #13 & #16 in the SESE of Section 6 need to be identified prior to field work on two stands that are proposed for treatment. In the SW of Section 6, two sets of double corners exist; identifying the proper ones to work off of will determine if private property signs and a fence are in trespass.

Recreational Facilities and Opportunities: A snowmobile trail named the Roll Trail Loop (#4) runs through Sections 5, 8 & 17. Deer and grouse hunting are the primary forms of dispersed recreation in the compartment.

Fire Protection: The compartment has pine stands scattered throughout, but they are generally less than 80 acres. Six of those stands are mature and are proposed for final harvest. The larger, contiguous blocks are generally stocked with seedling/sapling sized red or jack pine. The pole-sized pine stands are generally separated by oak and aspen types or by grassy openings. The sandy two-tracks and right-of-way corridors may serve as fire breaks in addition to providing fire equipment access. A potential water source is on Pickerel Lake Road where it crosses the Middle Branch of Big Creek, or to the north where Old 612 crosses the same creek. While there are gas wells within the compartment, none were identified as hydrogen sulfide hazards.

Additional Compartment Information: A small log cabin in Stand 264 needs to be removed; this property was acquired in 2001. Trespasses noted include a fence in Stand 2, lawn mowing in Stand 3, deer blinds in Stand 22, and illegally posted “no trespassing” signs in Stands 22, 25, 34 & 65. As was noted under Ownership, Stand 63 had a road cut through it.

LOTS Compartment Acreage: ___1551_____

- **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**

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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

OSCODA COUNTY

COMPARTMENT: 22

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	STAND AGE CLASS																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		All Aged
Aspen		32	251		93	59	24		17	5									481
Bog or Marsh	5																		5
Grass	21																		21
Jack Pine		85	110		78	32		30	36	2									373
Lowlnd Brush	57																		57
Mx Swmp Cnfr											19								19
Oak									69	154		1							224
Red Pine		93	70			79								14				7	263
Treed Bog	3																		3
Upland Brush	43																		43
Water	32																		32
White Pine																		14	14
Total	161	210	431		171	170	24	30	122	161	19	1		14				21	1535

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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

OSCODA COUNTY

COMPARTMENT: 22

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	481																										481
V Bog or Marsh			5																								5
G Grass					21																						21
J Jack Pine							344						29														373
L Lowlnd Brush									57																		57
Q Mx Swmp Cnfr												19															19
O Oak														224													224
R Red Pine																263											263
D Treed Bog																						3					3
U Upland Brush							6																	37			43
Z Water																									32		32
W White Pine																										14	14
Total	481		5		21		350		57			19		253		263						3	37		32	14	1535

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

OSCODA COUNTY

COMPARTMENT: **22**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	3313 Cds	Hardwood	1261 Cds
Hardwood	1254 Mbf	Hardwood	502 Mbf
Softwood	3017 Cds	Softwood	1351 Cds
Softwood	708 Mbf	Softwood	216 Mbf
Sum TotVol	10254 Cds	Sum CutVol	4048 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	267
1535			

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 22

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
1	J6	21	64	49	jack pine	mature	final harvest	1	planting	
comnts Fmd : 60-65 year-old JP poles w/ scattered older JP saw. Nice advanced oak saps and 2 strips of underplanted RP from '64. JP stems dying individually. Final harvest along with stand 2 & replant JP along w/ stands 2 & 103. Not sure what to do with the underplanted RP - it's extremely variable in size & stocking from being suppressed for so long. J5/J7/R4										
2	J6	9	61	48	jack pine	two aged	final harvest	1	planting	
comnts Fmd : Older oak & JP components declining, younger JP/WP component inadequate stocking. Set clock back to zero: final harvest, trench & plant to JP along w/ stands 1 & 103. Scattered TA could present problems for JP regen - plant around it. Stand age based on older JP component. Fence along S edge is in trespass -- see survey folder. J5/J7/O4										
6	A6	24	48	73	aspen (upland)	two aged	final harvest	1	natural regeneration	
comnts Fmd : This "stand" is made up of several aspen clones that vary in age, size & condition & are separated by U/G inclusions & have JP/RP/WP poles & RP/O saw scattered throughout. Most of the clones are mature, some vastly overmature, & the younger clones tend to have a mix of overmature & young stems. Final harvest the aspen, JP, RM & oak, leaving the RP & WP since it is heaviest along the wetland interface & will serve as a buffer. While aspen is the management objective, a mix of regen is expected & acceptable. SI not done on the overmature component. A4/A7/R7/M4										
8	O9	35	79	47	oak	mature	final harvest	1	natural regeneration	
comnts Fmd : Poor-quality NPO saw w/ pockets of TA & U/G inclusions, more RP/WP to the N & E along the wetland edge. Stand had 2, 5-spot openings cut in '99 (5 ac. Total). They weren't effective in terms of securing seed-source oak regen, but the patch cuts did demonstrate that the oak stump sprouts were fast-growing enough to get above the browse line. Cut all oak, aspen & red maple, with the goal of regenerating oak, however a mixed composition of natural regeneration is expected and acceptable. Leave the scattered RP & WP since it is concentrated along the stand's wetland interface. O8/O4/A4/A7										
20	J6	2	85	52	jack pine	high risk	final harvest	2	natural regeneration	
comnts Fmd : Overmature JP breaking up, scattered RP saw more to N end. O1-O2 below but RM filling in also. Harvest JP, leave tops scattered for seed, cut when ground is not frozen to maximize scarification. Leave all RP for seed source, release the existing oak regen. Stand curves around a bog (stand 19) & has a border of mostly dead JP -- stay out of that zone when running the line. A mix of oak, RP & JP regen is expected. Cut w/ stands 32, 33 & 34. Used old SI. J5/J7/R7										
32	O9	16	70	47	oak	mature	final harvest	1	natural regeneration	
comnts Fmd : Poor NPO, dieback in mature JP, overmature TA, good advanced oak regen O1-O3, along w/ WP/RP saps. Cut all JP, NPO & aspen. Leave JP tops scattered for seed. Cut when the ground is not frozen to maximize scarification. Leave all RP/WP for additional seed. Cut will release existing oak regen, secure more oak through stump sprouting, & regenerate the aspen. Will perpetuate the existing mixed species composition. Treat with stands 20, 33 & 34. O7/J4/J7/R7										
33	O8	14	79	49	oak	mature	final harvest	1	natural regeneration	
comnts Fmd : Poor NPO & overmature JP w/ dieback & breakup, patches of young & overmature TA. Regen: areas w/ O1, & WP seeding in. Final harvest JP, NPO & TA. Leave all WP & RP for additional seed. Leave JP tops for seed & harvest when the ground is not frozen to maximize scarification. Will regenerate to the same very mixed composition. Cut with stands 20, 32 & 34. O7/O4/J7										
34	J8	29	73	48	oak	high risk	removal	1		
comnts Fmd : Overmature JP that is breaking up, TA & BTA clones, poor-quality NPO, & scattered RP of all sizes especially to S end. Good advanced oak regen 5-25' tall. Cut all JP & aspen. Cut all oak >6" DBH in order to conserve the large sapling/small pole younger oak. Leave scattered RP for vertical diversity considering snowmobile trail corridor. Treat with stands 20, 32 & 33 but don't leave the JP tops on this stand -- there is adequate stocking in oak regen to release over much of the stand. A mix of oak, aspen, red pine and jack pine natural regeneration is acceptable. "No Trespassing" signs are illegally posted along the snowmobile trail. J7/J4/O7										
51	A9	9	75	60	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : JP, BTA & TA mostly overmature & breaking up. Large RO & WO wolf trees scattered throughout. The aspen is not evenly distributed, but is in dense clones. RM is filling in aggressively. Cut all JP, RM & aspen. Leave the scattered oak & RP. Harvest when the ground is not frozen to maximize scarification & leave JP tops for seed in areas where aspen regen won't be coming in. While aspen is the management objective, a mix of natural regeneration is expected and acceptable. Treat along with stand 52. A8/A4/O7/J7										
52	J9	7	72	51	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : 70+ yr old JP, was held last time around for visual along the snow trail. Cut all JP & the small amount of aspen. Leave the scattered RP & RO for visual. Cut along with stand 51 with the same specs re harvest timing & leaving JP tops scattered. While JP is the management objective, a mix of natural regeneration, including aspen, oak, red maple & red pine, is acceptable. J8/J4/R7/O7										
53	R6	14	41	61	red pine	immature	thinning	1		
comnts Fmd : RP was planted around residual NPO, JP & RP so there are pockets of suppressed RP. TA young stems along the NW edge. Scheduled to be thinned with the rest of the plantation (stand 25 in Compt 21 YOE 2001). The stand's boundary has been painted in but no rows have been designated yet.										

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 22

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
65	A6	20	39	76	aspen (upland)	high risk	final harvest	1	natural regeneration	
comnts Fmd : Cut in '65 & KG bladed in '66. More poles than saw, individual stems dying, soot-streaked knots & false tinder fungus present. Pockets of JP along powerline & E dege, pocket of NPO in NW corner. Pvt signs incorrectly placed on state @ SE corner along Consumers Power ROW. Final harvest to regenerate aspen before it starts to really deteriorate. Cut with stands 67, 68 & 69. SI averaged with stand 68's.										
67	J6	32	39	50	jack pine	two aged	final harvest	2	planting	
comnts Fmd : Cut in '65 & KG bladed in '66 with many scattered immature JP stands left that then spread & developed into this 2+ aged stand. Double tops & gall rust cankers common. Stand yr of origin is based on harvest records, but there are younger & older age classes. While this stand does have a small-pole/large-sap component, most stems are merchantable. The oldest component is breaking up but the younger components are healthy, so this stand could be left to develop for 10 more years. I recommend final harvest & replanting to JP at this time, though, because this stand's JP type intermixes so much with Stand 68's aspen type; it would be more efficient to treat 67 at the same time as 68 in one integrated sale. Given the scattered aspen w/in the stand & along the boundary of stand 68, plant around areas w/ expected aspen regen. Cut as one sale w/ stands 65, 68 & 69. Note when establishing line: do not run the line out to the cleared powerline ROW -- Consumers Power did not clear to the edge of their property -- see survey folder regarding pin location. J6/J7										
68	A6	27	39	71	aspen (upland)	high risk	final harvest	1	natural regeneration	
comnts Fmd : Cut in '65 followed by KG blade in '66 with small immature JP stands left. Mostly small diam TA poles, w/ more break-up & fungus than what you'd expect in <40 yr old aspen. Final harvest to regenerate aspen before it starts to really deteriorate. Also remove the scattered NPO, JP & RP. This stand has many low-density/U inclusions separating the aspen clones & a wide transition zone w/ the JP stand 67. Cut as one sale w/ stands 65, 67 & 69. Apply snowshoe hare specs to this stand & stand 69, but not to stand 65 (for visual reasons & because it is not contiguous w/ the swamp type to the SW). For this stand & 69, cut in winter and leave tops since they are near a major deer yard. Note when establishing line: do not run the line out to the cleared powerline ROW -- Consumers Power did not clear to the edge of their property -- see survey folder regarding pin location. A5/A7/R7										
69	A9	8	73	80	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Small mixed stand with massive, overmature TA & BTA, along with RM, RP, WP, NPO, & some very nice RO saw in the SE corner. <W1 overall, with RM regen more common. Final harvest to regenerate the aspen and apply snowshoe hare specs. Treat with stands 65, 67 & 68. Leave tops and cut in winter since this stand is near a major deer yard. Oxbow Creek Game Authority fenceline runs along the south edge of this stand and stands 67 & 68. Note when establishing line: do not run the line out to the cleared powerline ROW -- Consumers Power did not clear to the edge of their property -- see survey folder regarding pin location. A8/O7										
103	U1	6		48	jack pine	nonstocked		0	planting	
comnts Fmd : Cut in '99 with JP/O/A removed. Mostly upland brush w/ scattered JP/O regen & occasional RP/WP. Trench & plant to JP w/ stands 1 & 2. Used old SI.										
405	G0	2			grass	nonstocked		0	opening maintenance	
comnts Fmd : High quality wildlife opening, almost pure grass. Maintain as needed through FTP's.										
406	G0	10			grass	nonstocked		0	opening maintenance	
comnts Fmd : High quality wildlife opening, almost pure grass. Maintain as needed through FTP's.										
Total Acres.....		285								

**Proposed Treatments
With Limiting Factors**

Compartment: 22

Entry Year: 2007

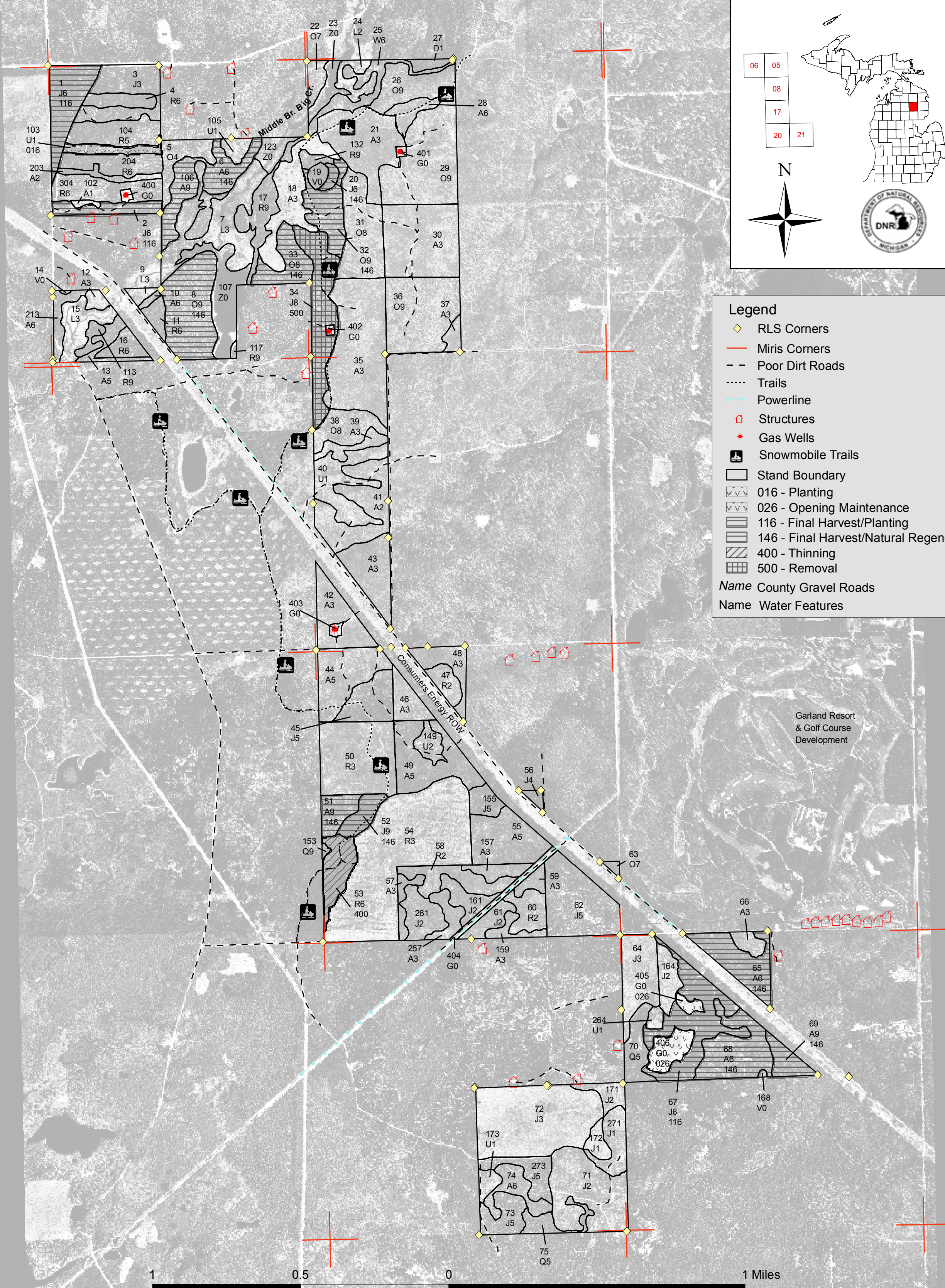
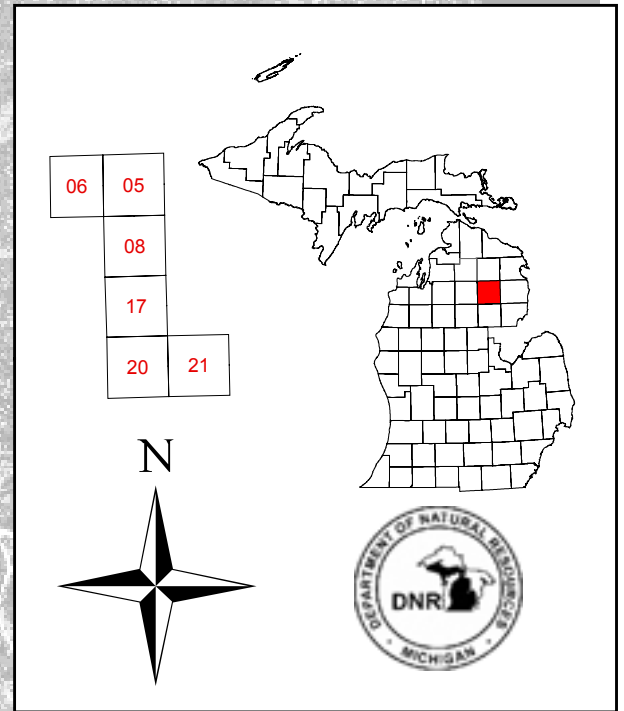
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 22
 T28N, R1E, Sec. 5, 6, 8, 17, 20, 21
 County: Oscoda
 Unit: Grayling
 YOE: 2007
 Acres: 1,535 GIS Calculated
 Stand Examiner: Joan Charlebois
 Map Revised: 9/14/2005
 Map Phase: Pre-review



Legend

- ◆ RLS Corners
- Miris Corners
- - Poor Dirt Roads
- Trails
- Powerline
- 🏠 Structures
- ★ Gas Wells
- 🚙 Snowmobile Trails
- ▭ Stand Boundary
- ▨ 016 - Planting
- ▩ 026 - Opening Maintenance
- ▧ 116 - Final Harvest/Planting
- ▦ 146 - Final Harvest/Natural Regeneration
- ▤ 400 - Thinning
- ▣ 500 - Removal

Name County Gravel Roads

Name Water Features

Garland Resort & Golf Course Development

