

ATLANTA FOREST MANAGEMENT UNIT

COMPARTMENT REVIEW PRESENTATION

COMPARTMENT 147 ENTRY YEAR: 2012

Compartment Acreage: 1749 County: Presque Isle

Revision Date: October 26, 2010

Stand Examiner: Barber

Legal Description: T35N, R3E, Sec. 1, 2, 10, 11 & 12; T35N, R4E, Sec. 5 & 6

RMU (if applicable): Hammond Bay Lake Plain

Management Goals: Regenerate aspen and conifers.

Soil and Topography: This compartment has little elevation change, but alternates rapidly between PArVHa and PArVCo/wetland.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Surrounding lands are a mix of state land and hunting lands, with farms to the west a couple of miles.

Unique, Natural Features (include only non-site specific and non-sensitive information): None reported. One or more occurrences have been reported for this compartment.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): One or more occurrences have been reported for this compartment.

Special Management Designations or Considerations: None.

Watershed and Fisheries Considerations: The Ocqueoc River receives potadromous runs of steelhead and Chinook salmon, even some coho salmon and is important to river anglers. Silver Creek is a high quality wild brook trout stream (based recent surveys at multiple sites) that sees its own share of steelhead natural

production. It is also the site of extensive overuse by beavers in its middle reaches, but will be receiving many improvements upstream at various road stream crossings starting this year.

Wildlife Habitat Considerations: Compartment 147 is part of a larger swamp and upland complex. Game species likely to be present in this compartment include white-tailed deer, black bear, coyote, red fox, bobcat, ruffed grouse, beaver, and snowshoe hare. Additional species with potential to be present include northern wood duck, red-shouldered hawk, pileated woodpecker, veery, long-tailed weasel, deer mouse, black-capped chickadee, red-breasted nuthatch, common garter snake, brown snake, tiger salamander, and gray treefrog.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of Lacustrine (lake) sand and gravel. The glacial drift thickness varies between 0 and 100 feet, thickening to the east. Beneath the glacial drift is the Devonian Dundee Limestone, used for limestone/stone. A limestone quarry is located eleven miles to the southeast. The nearest gravel pit is located within one mile to the northeast and potential appears to be limited. This area has had no drilling for oil and gas. Oil and gas producing Silurian Niagaran Reefs are located seven miles to the southeast. Section 1 and 6 are leased for oil and gas development.

Vehicle Access: Access is restricted along the snowmobile trail in the northeast due to wet conditions.

Survey Needs: Surveying may be required for timber sale preparation in sections 6, 10 and 11.

Recreational Facilities and Opportunities: Snowmobiling and hunting are the main opportunities.

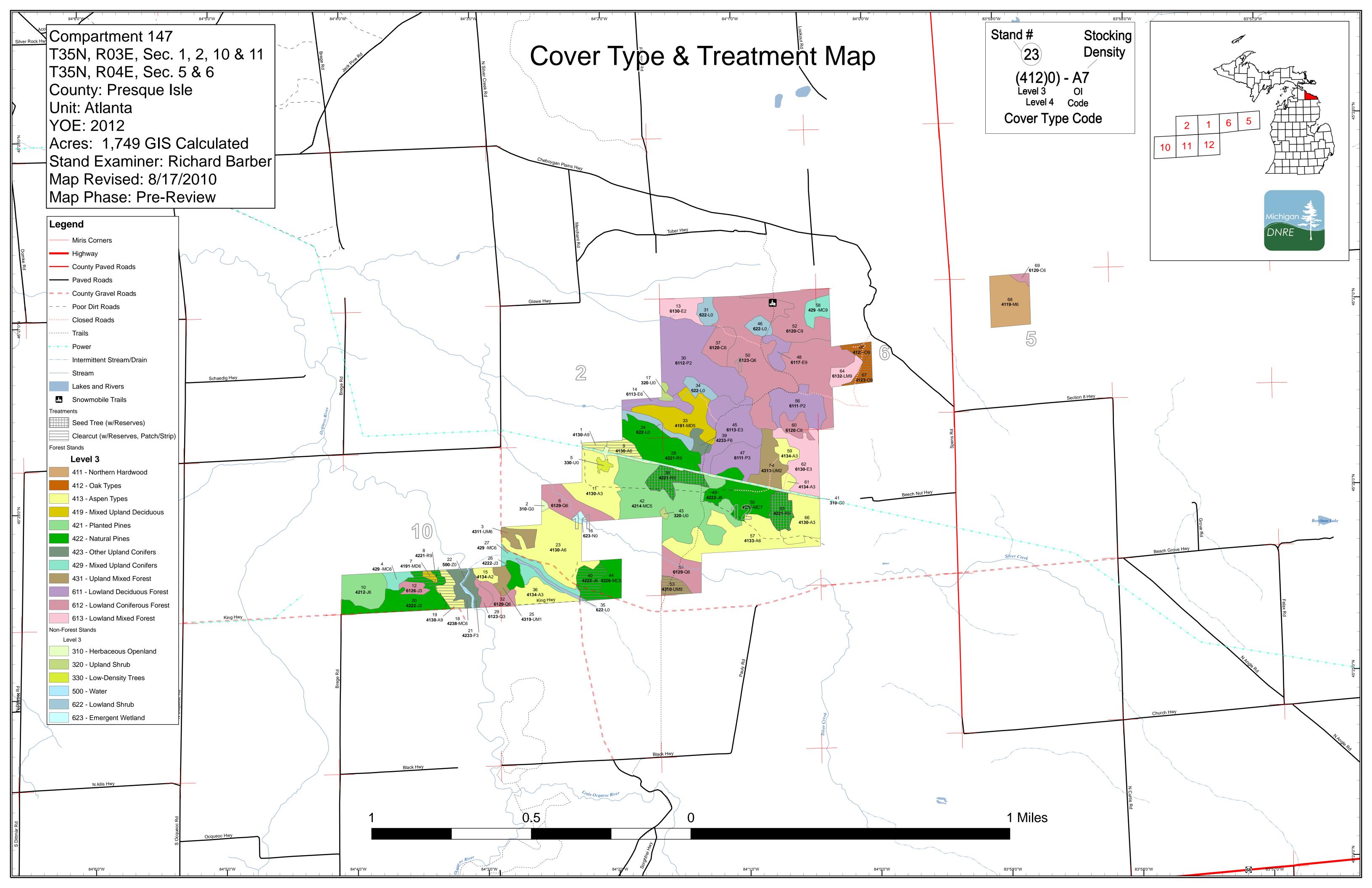
Fire Protection: Adequate.

Additional Compartment Information:

> 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 147 T35N, R03E, Sec. 1, 2, 10 & 11 T35N, R04E, Sec. 5 & 6 County: Presque Isle Unit: Atlanta YOE: 2012 Acres: 1,749 GIS Calculated Stand Examiner: Richard Barber Map Revised: 8/17/2010 Map Phase: Pre-Review

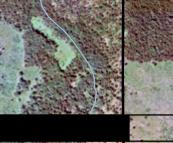
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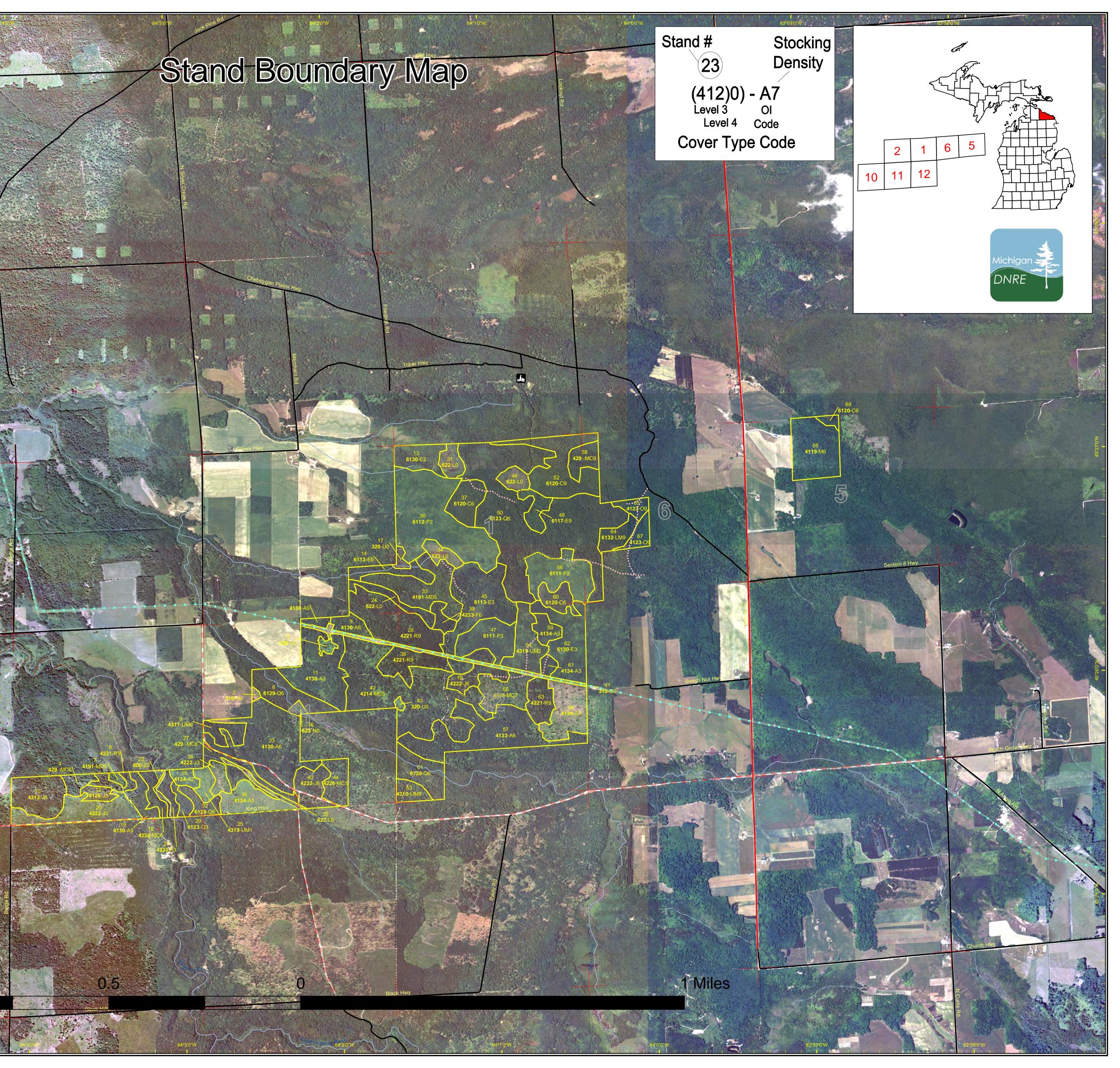
	Miris Corners	
	Highway	10.5
	County Paved Roads	2
	Paved Roads	
=	County Gravel Roads	
	Poor Dirt Roads	CHS.
	Closed Roads	
	Trails	and the second
• • •	Power	
	Intermittent Stream/Drain	
	Stream	1
4	Snowmobile Trails	
	Stand Boundaries	and and
Forest S	Stands	
Le	vel 3	
	411 - Northern Hardwood	
	412 - Oak Types	1
	413 - Aspen Types	Cont of
	419 - Mixed Upland Deciduous	
	421 - Planted Pines	
	422 - Natural Pines	1
	423 - Other Upland Conifers	10.5
	429 - Mixed Upland Conifers	
	431 - Upland Mixed Forest	
	611 - Lowland Deciduous Forest	
	612 - Lowland Coniferous Forest	10
	613 - Lowland Mixed Forest	
Non-For	rest Stands	
Le	vel 3	
	310 - Herbaceous Openland	Ř
	320 - Upland Shrub	
	330 - Low-Density Trees	-
	500 - Water	
	622 - Lowland Shrub	











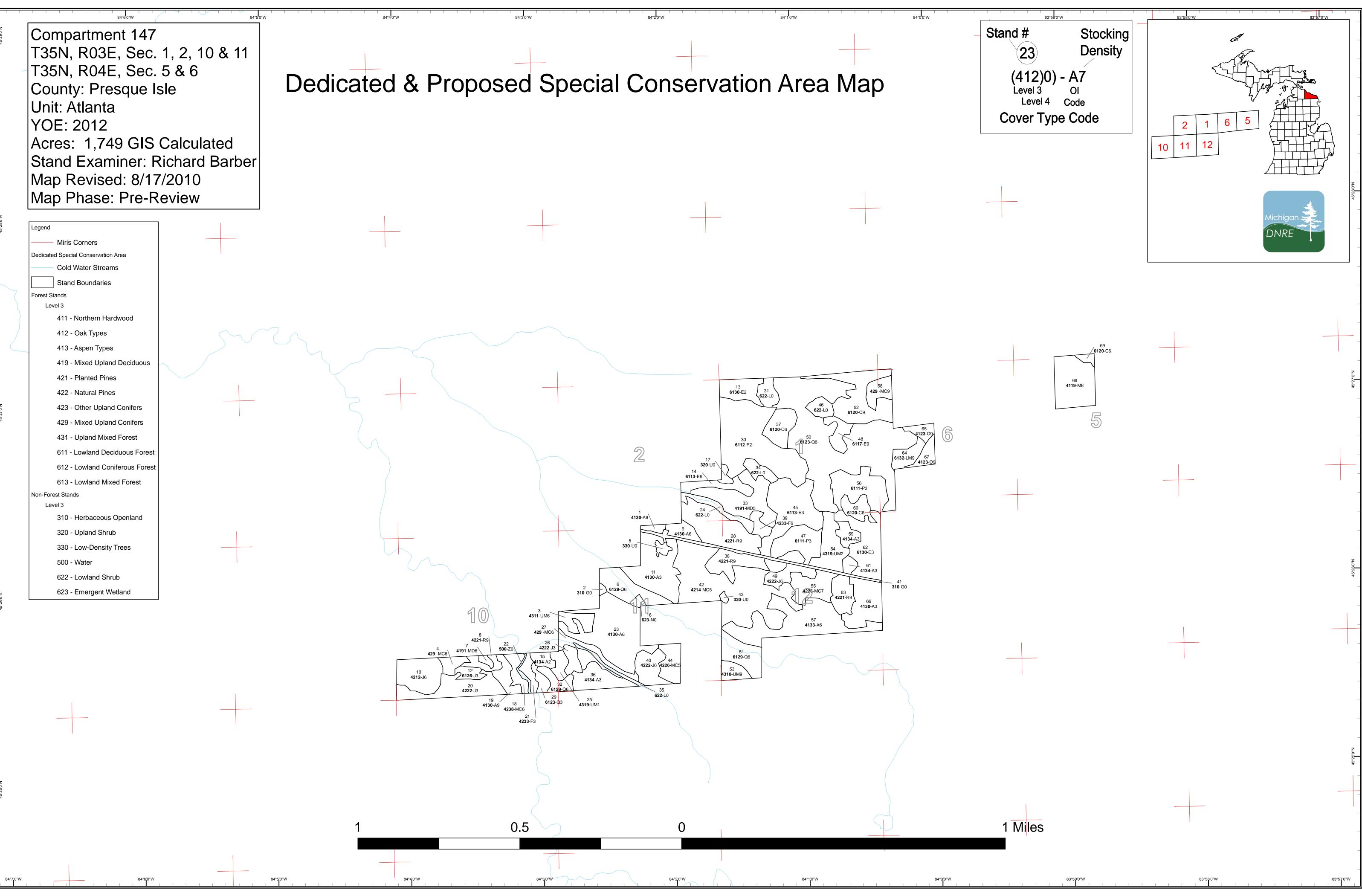


Table 1 – Total Acres by Cover Type and Age Class

Atlanta Mgt. Unit

Data updated before 2:00 PM

Compartment 147 Year of Entry 2012



Age Class																	
	Nor	Cester V	°z	^{70,70}	12 ⁻⁶²	and and a second	10 ⁻¹²	in the second	00 00	10,10	8 ³⁸ 6	69. D	100'100'	70,779	50× 150	AS LO	ie /
Aspen	0	59	62	15	83	0	77	0	14	13	0	0	0	0	0	323	
Cedar	0	0	0	0	0	0	0	0	0	0	21	66	0	3	0	90	
Herbaceous Openland	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
Jack Pine	0	0	55	0	20	34	21	0	0	0	0	0	0	0	0	129	
Low-Density Trees	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Lowland Aspen/Balsam Poplar	0	0	144	31	0	0	0	0	0	0	0	0	0	0	0	174	
Lowland Conifers	0	0	0	6	0	0	0	0	194	0	11	57	0	0	0	269	
Lowland Deciduous	0	0	0	0	0	0	0	0	74	0	13	0	0	0	0	87	
Lowland Mixed Forest	0	0	0	43	0	0	21	0	13	0	0	0	0	0	0	77	
Lowland Shrub	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	46	3	0	0	0	0	0	49	
Natural Mixed Pines	0	0	0	0	0	0	18	26	0	0	0	0	0	0	0	44	
Northern Hardwood	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	47	
Oak	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	18	
Planted Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	130	
Red Pine	0	0	0	0	0	0	0	79	0	8	0	18	0	0	0	105	
Upland Conifers	0	0	0	0	0	0	0	0	0	22	11	20	0	0	0	53	
Upland Mixed Forest	0	0	9	29	12	0	0	0	0	10	0	0	0	0	0	60	
Upland Shrub	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Upland Spruce/Fir	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	16	
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Total	79	59	269	124	122	34	144	105	359	103	55	161	0	3	130	1749	

Table 2 – Proposed Treatment Summaries

Michigan		Tab		LIOP	10360	11160	linei		minarie			
DNRE	Atlanta Mgt. Unit Data updated before 2:00 PM Year of Entry 2012										Compartment Total Compartment Acres:	
				Acre	s by T	reatm	ent Ty	pe				
	Commercial Harvest - 116	Site Prep - 0		Г	Free Pl	anting	- 0		Pres	cribed Burn - 0	Other - 0	
	Habitat Cut - 13	Opening Maintena	ance - 0	T (Free Se	eeding	- 0		Pesti	cide - 0		
	Aspen		27	D C		00 11 00 15	0 0	Chining Contraction	27	Se de la companya de		
	Jack Pin	0	21	0	0	0	0	0	21	l		
		pland Deciduous	3	0	0	0	0	0	3	I		
	Oak		18	0	0	0	0	0	18	1		
	Red Pine	9	8	0	42	0	0	0	51	I		
	Upland	Mixed Forest	10	0	0	0	0	0	10	Ī		
		Total	87	0	42	0	0	0	129	i		

S t		Data		tlanta Mgt. Unit ted before 2:00 Pl			atments Pres .imiting Fact		Compartment: 147 Year of Entry 2012	
a n d	Treatn Nam		Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
1	54147 CC		3.8	4130 - Aspen	High Density Log	70	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescri</u> Specs:	re	ed pine,	or white		dium or well stock	ed stand	Retain 3 to 10	percent of stand area i	ombination of aspen, oa n one or more patches.	
<u>Other</u> <u>Comme</u>	ents:									
<u>Next</u> Steps:										
7	54147 CC		2.7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	85	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescri</u> <u>Specs:</u>				ercent of stand area in nix as a whole.	one or more patch	ies. Loca	ation(s) will be d	etermined during sale	prep and will be represer	ntative of the
<u>Other</u> Comme		Close tw locked.	o-track a	at north and south end	on completion of s	ale. This	s closed road wa	s recently used to acco	ess a private timber sale	, and has yet to
<u>Next</u> Steps:										
8	54147 CC		8.3	42210 - Natural Red Pine	High Density Log	85	Harvest	Clearcut with Reserves	Planted Red Pine	Cmpt. Review Proposal
<u>Prescri</u> Specs:				pine. Retain 3 to 10 p the stand's species m		a in one	or more patches	. Location(s) will be de	etermined during sale pr	ep and will be
<u>Other</u> Comme	ents:									
<u>Next</u> <u>Steps:</u>	Т	rench a	nd plant	red pine.						
9	54147 CC		10.4	4130 - Aspen	High Density Pole	70	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
<u>Prescri</u> <u>Specs:</u>				ne, white pine, oak, he d during sale prep and					rea in one or more patch	es. Location(s)
<u>Other</u> Comme	ents:									
<u>Next</u> <u>Steps:</u>										
19	54147 CC		12.7	4130 - Aspen	High Density Log	85	Harvest	Clearcut with Reserves	Aspen, Mixed Pine	Cmpt. Review Proposal
<u>Prescri</u> Specs:	d	etermin	ed durin		e representative of				more patches. Location crown cover in red pine.	
<u>Other</u> Comme	ents:									
<u>Next</u> Steps:										

S t	Da		tlanta Mgt. Unit ted before 2:00 PN			atments Pre		Compartment: 147 Year of Entry 2012	
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	54147038-STR	24.3	42210 - Natural Red Pine	High Density Log	62	Harvest	Seed Tree with Reserves	Natural Red Pine	Cmpt. Review Proposal
Prese Spec			d pine to average tree l te red pine.	neight spacing. R	equire bo	oth whole tree sk	idding and chipping of	tops. Post sale: Scarify	remaining sale
<u>Othe</u> Com	<u>r</u> ments:								
<u>Next</u> Steps		and plant	t red pine in areas of ins	sufficient regenera	ation.				
40	54147040- CCR	20.9	42220 - Natural Jack Pine	High Density Pole	55	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer	Cmpt. Review Proposal
Prese Spec			pine, or oak, if present. representative of the sta					cation(s) will be determi	ned during sale
<u>Othe</u> Com	<u>r</u> ments:								
<u>Next</u> Steps		and plant	DP if regeneration is in	adequate.					
53	54147053- CCR	10.3	4310 - Pine, Oak Mix	High Density Log	80	Harvest	Clearcut with Reserves	Pine, Oak Mix	Cmpt. Review Proposal
Preso Spec		species r						rep and will be represen otect advanced oak and	
<u>Othe</u> Com	<u>r</u> ments:								
<u>Next</u> Steps									
63	54147063-STR	18.0	42210 - Natural Red Pine	High Density Log	105	Harvest	Seed Tree with Reserves	Natural Red Pine	Cmpt. Review Proposal
Prese Spec			pine or oak, if present. Scarify sale area to reg					vhole tree skidding, with generation	chipping of
<u>Othe</u> Com	<u>r</u> ments:								
<u>Next</u> Steps		le: Scarify	y sale area to regenera	te red pine and oa	ık, but m	ay exclude areas	s of good pine regenera	tion	
65	54147065- CCR	8.0	4123 - Red Oak	High Density Log	70	Harvest	Clearcut with Reserves	Oak, Pine	Cmpt. Review Proposal
<u>Prese</u> Spec	<u>s:</u> stand's (includi	species r ng adjace	mix as a whole. Place 2	2 chain buffer on s ast 5% crown cov	eeps an er each i	d vernal ponds, a	as well as areas of hem	rep and will be represen llock, hemlock regenera be evenly distributed thr	tion, and cedar
<u>Othe</u> Com	r_ hemloc ments:	k regener	ation 3-30'. cedar pres	ent.					
<u>Next</u> Steps									

S t	Data		nta Mgt. Unit before 2:00 PM	Table 4		ents Prescrib ng Factor	Compartment: 147 Year of Entry 2012		
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Specs	ription <u>s:</u>								
<u>Other</u> <u>Comn</u>									
<u>Next</u> <u>Steps</u>	<u>:</u>								
	ng Factor and No ment Reason	<u>)</u>							
Ac	Total Treatmer reage Propose		0						

S t	Da		tlanta Mgt. Unit ted before 2:00 PN			atments Pres _imiting Fact	Compartment: 147 Year of Entry 2012		
a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
67	54147067- CCR	9.5	4123 - Red Oak	High Density Log	70	Harvest	Clearcut with Reserves	Oak, Pine	Cmpt. Review Proposal
Presc Specs	stand's	species m	nix as a whole. Paint s	steep slopes out of	sale. Pa	aint a 2 chain buf	fer on seeps and verr	prep and will be represen al ponds, as well as area white pine and red pine i	as of hemlock,
Other	-								

Comments:

<u>Next</u> <u>Steps:</u>

Total Treatment Acreage Proposed: 128.9

Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2012



L	Data update	d before 2:00 PM	Pr		DNRE			
Treatmer Name	nt Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
022_St28C t	.Cu 25.0				Harvest	Clearcut with Reserves	Oak, Aspen	Cmpt. Review Proposal
	Cut with stand only leave sca		4. Clear cut: Ir	n areas of h	neavy oak leave up	to 10-20BA of oak a	nd pine. In areas prec	lominantly apsen
		gen is any mix of aspe ng steep slope along r			nite pine is present	. Leave both a mix r	ed and white oak. No	retention is needed
<u>Next</u> <u>Steps:</u>	Regen survey	3-5 yrs after harvest.						
54030_Out OE-STR					Harvest	Seed Tree with Reserves	Natural Red Pine, Mixed Deciduous	Cmpt. Review Proposal
Specs:	Country Pathw	ay, using pathway as	centerline. Allo	ow whole tr	ee skidding; require	e chipping of tops, wi	nt. Paint in 2 chain wic th movement of tops to exclude areas of heav	o approved landings
<u>Other</u> Comments: <u>Next</u> Steps:	Continued sca	rification until full stoc	king of red pine	is achieve	d.			
54004_St Burn	8- 12.1			I	Prescribed Burn	Unspecified	Red Oak	Cmpt. Review Proposal
Prescription Specs:	Burn with adja	cent stand in Compar	tment 24. Unde	erstory burr	to remove red ma	ple regeneration		
<u>Other</u> Comments:								
<u>Next</u> <u>Steps:</u>	follow up with	timber harvest next er	ntry.					
	reatment Proposed:	38.2						

S t	Atlanta	a Mgt. Unit			orested Stands ated before 2:00	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4130 - Aspen	High Density Log	3.8	70	51-80	
3	4311 - Pine, Aspen Mix	High Density Pole	12.4	39	51-80	
4	429 - Mixed Upland Conifers	High Density Pole	8.4	85		barely upland. vernal ponds throughout.
6	6129 - Mixed Coniferous Lowland Forest	High Density Pole	29.8	102		Silver Creek flows through strand.
7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	2.7	85		
8	42210 - Natural Red Pine	High Density Log	8.3	85	81-110	
9	4130 - Aspen	High Density Pole	10.4	70	51-80	
10	42121 - Planted Jack Pine, Mixed Deciduous	High Density Pole	33.5	48	1-50	Nearly PVCd.
11	4130 - Aspen	High Density Sapling	54.5	17	1-50	
12	6126 - Lowland Jack Pine	High Density Sapling	7.4	14		leather leaf
13	6130 - Fir, Aspen, Maple	Medium Density	20.5	50		
14	6113 - Lowland Maple	High Density Pole	15.0	78		
15	4134 - Aspen, Spruce/Fir	Medium Density	7.1	14		braken fern with cattails and tag alder.
18	42380 - Non Pine Upland Conifer, Mixed Deciduous	High Density Pole	10.5	90	Ν	lew stand added. Seeps. River. Slopes approaching 100% in places.
19	4130 - Aspen	High Density Log	12.7	85	81-110	
20	42220 - Natural Jack Pine	High Density Sapling	38.6	14		2 x 3 foot spacing
21	42330 - Upland Fir	High Density Sapling	7.7	39		Stream from east, flows into Ocqueoc River.
23	4130 - Aspen	High Density Pole	82.6	39	51-80	

S t	Atlanta	a Mgt. Unit		5 – For Data update	ested Star	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4319 - Mixed Upland Forest	Low Density Sapling	8.9	14		
26	42220 - Natural Jack Pine	High Density Sapling	8.6	14		
27	429 - Mixed Upland Conifers	High Density Pole	20.3	102		Steep slopes. Stream at bottom
28	42210 - Natural Red Pine	High Density Log	54.4	62	111-140	PArVHa
29	6123 - Lowland Fir	High Density Sapling	6.5	25		
30	6112 - Lowland Aspen	Medium Density	103.4	14		Also present are east-west low ridges of upland and frequent patches of lowland shrub. Very hummocky.
32	6129 - Mixed Coniferous Lowland Forest	High Density Pole	11.1	90		
33	4191 - Mixed Upland Deciduous with Conifer	Medium Density Pole	45.9	78		over all upland, but many vernal ponds and swales
36	4134 - Aspen, Spruce/Fir	High Density Sapling	24.9	5		
37	6120 - Lowland Cedar	High Density Pole	21.1	90		More hummocky and wet than 74.
38	42210 - Natural Red Pine	High Density Log	24.3	62	111-140	PArVHa
39	42330 - Upland Fir	High Density Pole	8.0	50	1-50	
40	42220 - Natural Jack Pine	High Density Pole	20.9	55		New stand added.
42	42140 - Planted Mixed Pine	Medium Density Pole	130.5	Uneven Age		
44	42260 - Natural Pine, Mixed Deciduous	Medium Density Pole	17.6	55		wp understory almost pole size in many places.
45	6113 - Lowland Maple	High Density Sapling	58.9	78		
47	6111 - Lowland Balsam Poplar	High Density Sapling	30.8	25		
48	6117 - Lowland Deciduous, Mixed Coniferous	High Density Log	12.7	90		

S t	Atlanta	Mgt. Unit			orested Sta	
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
49	42220 - Natural Jack Pine	High Density Pole	19.8	30		
50	6123 - Lowland Fir	High Density Pole	194.4	70		may have areas which are heavy to cedar, esp. west of the snowmobile trail.
51	6129 - Mixed Coniferous Lowland Forest	High Density Pole	26.9	102		Silver Creek flows through stand.
52	6120 - Lowland Cedar	High Density Log	52.6	100		New stand added.
53	4310 - Pine, Oak Mix	High Density Log	10.3	80	111-140	
54	4319 - Mixed Upland Forest	Medium Density	28.8	25		
55	42260 - Natural Pine, Mixed Deciduous	Low Density Log	26.2	60		Very open.
56	6111 - Lowland Balsam Poplar	Medium Density	40.2	16		
57	4133 - Aspen, Mixed Pine	High Density Pole	77.2	50	81-110	Stand varies between diverse pine, oak and aspen mix vs. aspen monoculture. PArVHa.
58	429 - Mixed Upland Conifers	High Density Log	13.6	80		barely upland
59	4134 - Aspen, Spruce/Fir	High Density Sapling	10.1	25	1-50	
60	6120 - Lowland Cedar	High Density Pole	13.2	106		
61	4134 - Aspen, Spruce/Fir	High Density Sapling	4.8	25	1-50	
62	6130 - Fir, Aspen, Maple	High Density Sapling	43.1	25		
63	42210 - Natural Red Pine	High Density Log	18.0	105	81-110	PArVHa.
64	6132 - Mixed Lowland Forest with Cedar	High Density Log	13.5	70	111-140	up to half the cedar blew down maybe thirty years ago. Appears to be just into log decomposition class 2.
65	4123 - Red Oak	High Density Log	8.0	70	81-110	hemlock regeneration 3-30'. cedar present.
66	4130 - Aspen	High Density Sapling	34.6	5		

S t n d	Atlant	a Mgt. Unit			orested Stands ated before 2:00 PM	Compartment: 147 Year of Entry: 2012	
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:	
67	4123 - Red Oak	High Density Log	9.5	70	81-110	hemlock clumps present	
68	4119 - Mixed Northern Hardwoods	High Density Pole	46.7	85			
69	6120 - Lowland Cedar	High Density Pole	3.4	130			

Atlanta Mgt. Unit

6 – Nonforested Stands

Compartment: 147 Year of Entry: 2012



Data updated before 2:00 PM

Stand	Cover Type	Acres	Gen Cmts:
2	3102 - Grass	1.5	
5	330 - Low-Density Trees	3.6	
16	623 - Emergent Wetland	2.7	
17	320 - Upland Shrub	3.7	
22	50 - Water	2.7	Stand swapped from Non-Forested to Forested. Stand swapped from Forested to Non-Forested.
24	622 - Lowland Shrub	12.6	
31	622 - Lowland Shrub	10.9	
34	622 - Lowland Shrub	9.5	
35	622 - Lowland Shrub	5.3	
41	3102 - Grass	15.5	
43	320 - Upland Shrub	1.6	
46	622 - Lowland Shrub	9.6	



7 – 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.

Data updated before 2:00 PM

Stand	SCA Type	SCA Name	Acres	Comments



8 – 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.

Conservation Area	Туре	Description	Data updated before 2:00 PM	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area	
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced 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 a designated as trout resources by Fisheries Order 210.			