



**PIGEON RIVER COUNTRY MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT 32 ENTRY YEAR: 2013

Compartment Acreage: 1875 County: Otsego

Review Date:

October 6, 2011

Stand Examiner:

Rick McDonald

Legal Description:

T32N - R01W Sections 4, 5 & 6

RMU (if applicable):

Not Applicable

Management Goals:

Maintain current species mix and apply appropriate management techniques to mature stands of timber that are in need of treatment.

Soil and Topography:

The areas immediately adjacent to the Pigeon River as well as the northern portions of Section 4 and Section 5 all have rolling topography with some steep slopes present. The remainder of the compartment is generally flat.

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

Solid State ownership within and adjacent to this compartment.

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

Devil's Soup Bowl Lake and Section 4 Lake are both limestone sink hole lakes.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):

An old lumber mill was once located in the southern portion of stands 80 and 83.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

The Pigeon River flows through Section 4. Grass Lake provides good pan fishing opportunities. Section 4 Lake is a special regulation Trout lake and is periodically stocked with Trout.

Wildlife Habitat Considerations:

Please refer to Wildlife Biologist's comments.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 5, 8 & 17 T31N-R01W, Otsego County

Surface sediments consist of coarse textured glacial till (SW) and minor glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. There is approximately 140 feet of local relief within the compartment. Beneath the glacial drift is the Devonian- Antrim Shales. The Antrim is quarried for clay/shale (cement) elsewhere in the State. The nearest gravel pit is two miles to the northwest, and potential is considered good on the uplands. This area is partially leased for oil and gas development until 2001. The Antrim Shale development is located along the north edge of the compartment. The Niagaran trend lies to the east and to the south. There is no oil and gas potential for known producing formations in this compartment.

Vehicle Access:

Plenty of county roads and open trail roads provide good access to most portions of the compartment.

Survey Needs:

None required.

Recreational Facilities and Opportunities:

Elk Hill State Forest campground is situated in the southeast corner of section 4 (stand 104). The Shingle Mill Pathway passes through portions of section 4 and section 5.

Fire Protection:

Access is generally good in case of any fire suppression efforts, though the area is generally at low risk to any wildfire potential. Most road systems are closed with berms.

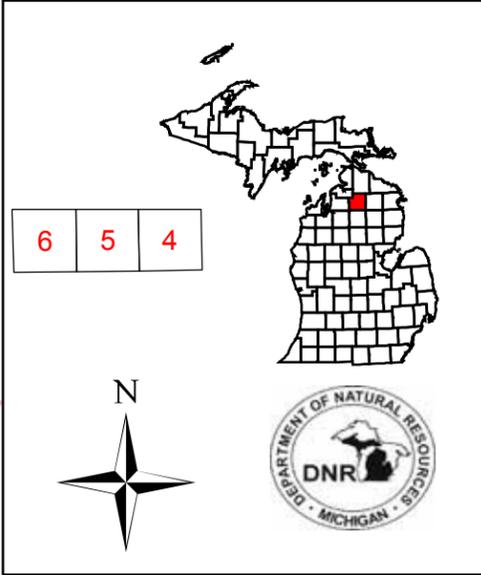
Additional Compartment Information:

- **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**

Cover Type & Treatment Map

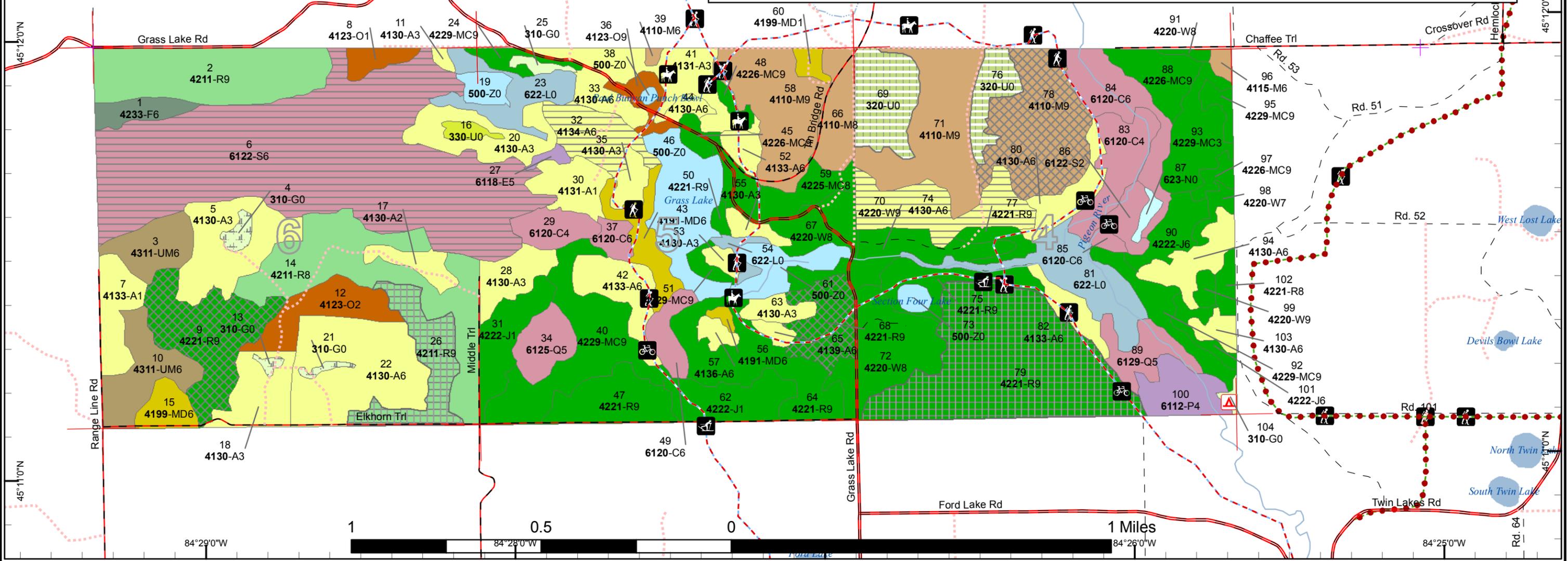
Compartment 32
 T32N, R01W, Sec. 4, 5, 6
 County: Otsego
 Unit: Pigeon River Country
 YOE: 2013
 Acres: 1,875 GIS Calculated
 Stand Examiner: Rick McDonald
 Map Revised: 8/10/2011
 Map Phase: Pre-Review



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

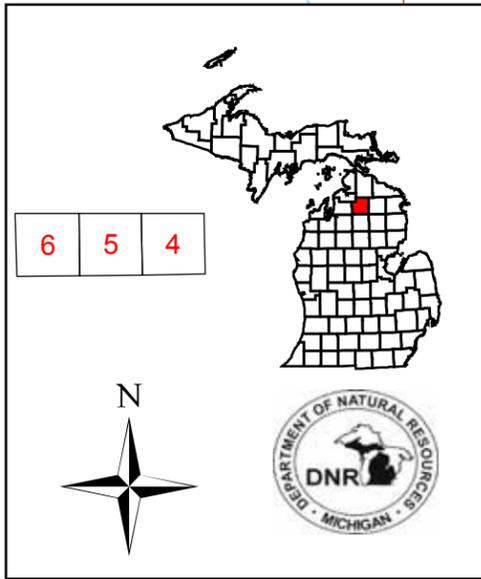
Legend

<ul style="list-style-type: none"> — Miris Corners — Paved Roads — County Gravel Roads - - Poor Dirt Roads - - County Poor Dirt Roads ⋯ Closed Roads ⋯ Hiking Trail ⋯ Ski Trail ⋯ Bike Trail ••• Horse Trail 🚲 Bike Trails 🚶 Hiking Trails 🐎 Horse Trails 🏂 Ski Trails ⚠️ Elk Hill State Forest Campground ~ Intermittent Stream/Drain — Stream — Lakes and Rivers 	<h4>Treatments</h4> <ul style="list-style-type: none"> ▭ Clearcut (w/Reserves, Patch/Strip) ▭ Seed Tree (w/Reserves) ▭ Selection (Group, Single Tree) ▭ Opening Maintenance ▭ Other Treatment - See Comments <h4>Forest Stands</h4> <p>Level 3</p> <ul style="list-style-type: none"> 411 - Northern Hardwood 412 - Oak Types 413 - Aspen Types 419 - Mixed Upland Deciduous 421 - Planted Pines 422 - Natural Pines 423 - Other Upland Conifers 431 - Upland Mixed Forest 611 - Lowland Deciduous Forest 612 - Lowland Coniferous Forest 	<h4>Non-Forest Stands</h4> <p>Level 3</p> <ul style="list-style-type: none"> 310 - Herbaceous Openland 320 - Upland Shrub 330 - Low-Density Trees 500 - Water 622 - Lowland Shrub 623 - Emergent Wetland
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Dedicated & Proposed Special Conservation Area Map

Compartment 32
 T32N, R01W, Sec. 4, 5, 6
 County: Otsego
 Unit: Pigeon River Country
 YOE: 2013
 Acres: 1,875 GIS Calculated
 Stand Examiner: Rick McDonald
 Map Revised: 3/22/2011
 Map Phase: Pre-Review



Legend

- Miris Corners
- Stand Boundaries
- Dedicated Special Conservation Areas
- Cold Water Streams
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- ▲ Campgrounds

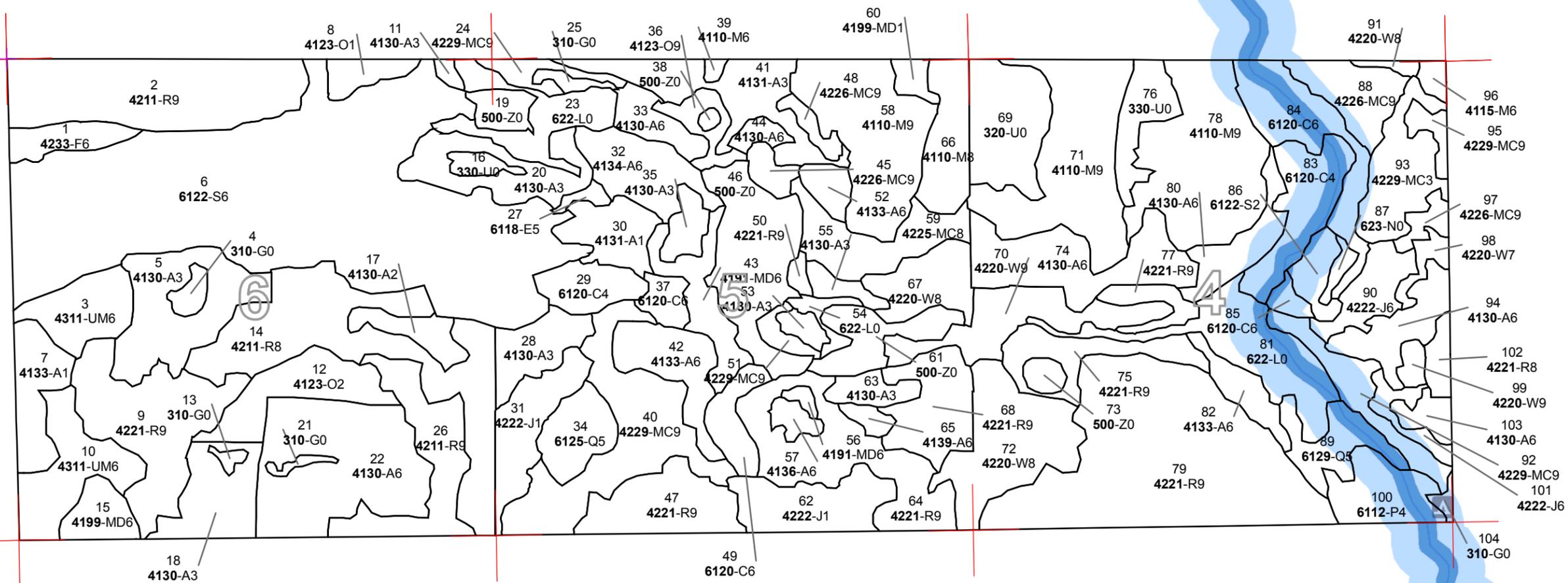
Forest Stands

- Level 3
- 411 - Northern Hardwood
 - 412 - Oak Types
 - 413 - Aspen Types
 - 419 - Mixed Upland Deciduous
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 431 - Upland Mixed Forest
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest

Non-Forest Stands

- Level 3
- 310 - Herbaceous Openland
 - 320 - Upland Shrub
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

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



45°12'0"N
45°11'0"N

45°12'0"N
45°11'0"N

84°29'0"W 84°28'0"W 84°27'0"W 84°26'0"W 84°25'0"W

84°29'0"W 84°28'0"W 84°27'0"W 84°26'0"W 84°25'0"W

Table 1 – Total Acres by Cover Type and Age Class



	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	0	0	36	105	131	43	0	0	0	0	22	0	0	0	35	371
Cedar	0	0	0	0	0	0	0	0	0	12	16	51	0	0	0	78
Herbaceous Openland	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Jack Pine	0	41	0	0	0	0	0	0	0	19	0	0	0	0	0	59
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Aspen/Balsam Poplar	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	17
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	15	0	0	0	14	29
Lowland Deciduous	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Lowland Shrub	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
Lowland Spruce/Fir	0	0	8	0	0	0	0	0	0	223	0	0	0	0	0	231
Marsh	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Mixed Upland Deciduous	0	0	4	0	0	0	10	0	2	0	16	0	0	0	0	31
Natural Mixed Pines	0	0	0	22	0	0	0	0	6	93	4	0	0	0	21	146
Northern Hardwood	0	0	0	0	0	0	0	0	0	147	0	0	0	0	18	165
Oak	0	0	0	0	0	0	0	0	0	0	7	0	0	0	28	35
Red Pine	0	0	0	0	0	0	0	0	27	214	0	0	0	0	162	403
Upland Mixed Forest	0	0	0	0	0	17	0	0	0	0	0	0	0	0	24	41
Upland Shrub	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Upland Spruce/Fir	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Water	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
White Pine	0	0	0	0	0	0	0	0	0	27	0	0	0	0	58	85
Total	171	41	47	127	141	60	10	0	52	737	80	51	0	0	360	1875



Don River Country Mgt. Unit
Year of Entry 2013

Table 2 – Proposed Treatment Summaries

Compartment 032
Total Compartment Acres: 1875

Acres by Treatment Type

Commercial Harvest - 520	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 46	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	53	0	0	0	0	0	53
Lowland Spruce/Fir	223	0	0	0	0	0	223
Northern Hardwood	0	52	0	0	0	0	52
Red Pine	0	64	129	0	0	0	193
Total	276	115	129	0	0	0	520

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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
6 53032006-Cut	223.0	6122 - Black Spruce	High Density Pole	86	Harvest	Clearcut	6128 - Lowland Coniferous, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Clearcut a portion(s) of this stand to promote regeneration of Black Spruce and Cedar along with other mixed species that will invariably regenerate following treatment. Any mix of species will be acceptable in determining regeneration success.								
<u>Specs:</u>								
<u>Other Comments:</u> Ultimately, cedar regeneration is the long term goal, however, it is recognized that other species will dominate the site in the early successional stages.								
<u>Next Steps:</u>								
9 53032009-Cut	42.0	42210 - Natural Red Pine	High Density Log	83	Harvest	Single Tree Selection	42111 - Planted Red Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Selectively mark trees to be harvested, as well as, creating some sizeable holes in the canopy to encourage pine regeneration. Red Pine, of course, is preferred but any mix of species will be acceptable.								
<u>Specs:</u>								
<u>Other Comments:</u>								
<u>Next Steps:</u>								
26 53032026-Cut	26.7	42110 - Planted Red Pine	High Density Log	74	Harvest	Seed Tree	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Mark red pine seed trees to leave and cut all others. A mix of species will be acceptable for regeneration.								
<u>Specs:</u>								
<u>Other Comments:</u> Encourage scarification through the logging process to promote red pine regeneration.								
<u>Next Steps:</u>								
32 53032032-Cut	20.1	4134 - Aspen, Spruce/Fir	High Density Pole	41	Harvest	Clearcut with Reserves	4136 - Aspen, Mixed Conifer	Cmpt. Review Proposal
<u>Prescription</u> --Richard McDonald : 08/04/2011 comments:								
<u>Specs:</u> Clearcut this stand while leaving 2 uncut islands with one of them being that finger that extends toward Grass Lake. Use the hiking trail as the divider.								
<u>Other Comments:</u> Aspen should regenerate well along with a mix of other species would be preferred.								
<u>Next Steps:</u>								
68 53032068-Cut	21.7	42210 - Natural Red Pine	High Density Log	87	Harvest	Single Tree Selection	42260 - Natural Pine, Mixed Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Selectively mark pine and cut aspen and hardwoods. Leave any cavity trees. Mark the stand down to about 60-80 sq. ft.								
<u>Specs:</u>								
<u>Other Comments:</u>								
<u>Next Steps:</u>								



Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
74	53032074-Cut	32.6	4130 - Aspen	High Density Pole	38	Harvest	Clearcut	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Clearcut with no retention as agreed upon at pre-review. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									
78	53032078-Cut	51.7	4110 - Sugar Maple Association	High Density Log	89	Harvest	Single Tree Selection	4110 - Sugar Maple Association	Cmpt. Review Proposal
<u>Prescription</u> Single tree selection in the hardwoods. Crop tree release and best tree in place method. Hemlock pockets will be avoided and any cavity trees will be maintained. Mark this stand to about 80 sq. ft. while maintaining the wide species mix that already exists in the stand. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									
79	53032079-Cut	102.1	42210 - Natural Red Pine	High Density Log	84	Harvest	Seed Tree	42210 - Natural Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Mark seed trees throughout stand to encourage natural regeneration of red pine. A mix of other species will be acceptable for regeneration success. <u>Specs:</u> <u>Other Comments:</u> Encourage as much scarification through the logging process as possible to promote red pine regeneration. <u>Next Steps:</u>									
4	NF_53032004-NonFor	3.5	4134 - Aspen, Spruce/Fir		41	Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									
13	NF_53032013-NonFor	1.4	Non-Forested		0	Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Opening maintenance to enhance grasses <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									
21	NF_53032021-NonFor	1.6	Non-Forested		0	Non-Forest Management	Other - Specify	3102 - Grass	Cmpt. Review Proposal
<u>Prescription</u> Opening maintenance to enhance grasses. <u>Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u>									

**Table 3 -- Treatments Prescribed
with No Limiting Factor**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
69 NF_53032069- NonFor	26.3	Non-Forested		0	Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal

Prescription Mechanically treat to set back brush and cherry.
Specs:

Other
Comments:

Next
Steps:

76 NF_53032076- NonFor	12.9	Non-Forested		0	Non-Forest Management	Brush Cutting	3105 - Mixed Upland Herbaceous	Cmpt. Review Proposal
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Prescription Mechanically treat to set back the brush and cherry.
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 565.5**



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Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription
Specs:

Other
Comment:

Next
Steps:

Limiting Factor and No
Treatment Reason

**Total Treatment
Acreage Proposed: 0**

Out of YOE -- Treatments
Prescribed with No Limiting Factor

Year of Entry: 2013



Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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Prescription
Specs:

Other
Comments:

Next
Steps:

**Total Treatment
Acreage Proposed: 0**

Stand	Pigeon River Country Mgt. Unit		5 – Forested Stands			Compartment: 032	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
1	42330 - Upland Fir	High Density Pole	9.4	38	51-80		
2	42110 - Planted Red Pine	High Density Log	53.9	Uneven Age		Cut in 1994. Everything was cut except pine and oak. Pine BA is highly variable.	
3	4311 - Pine, Aspen Mix	High Density Pole	17.4	47	51-80		
5	4130 - Aspen	High Density Sapling	32.6	26			
6	6122 - Black Spruce	High Density Pole	223.0	86	111-140		Good quality spruce and cedar.
7	4133 - Aspen, Mixed Pine	Low Density Sapling	16.4	Uneven Age			stand cut in 2006
8	4123 - Red Oak	Low Density Sapling	6.6	Uneven Age			Heavy browse damage to maple and aspen. Pine is filling in the stand gradually.
9	42210 - Natural Red Pine	High Density Log	42.0	83	111-140		This stand had all but Pine and Oak removed in 1994-95.
10	4311 - Pine, Aspen Mix	High Density Pole	23.9	Uneven Age	51-80		
11	4130 - Aspen	High Density Sapling	1.6	29			
12	4123 - Red Oak	Medium Density	21.1	Uneven Age			
14	42110 - Planted Red Pine	Medium Density Log	65.0	Uneven Age	1-50		This stand was cut in 1994-95 and had all but Pine and Oak cut. Some browsing but not too bad.
15	4199 - Other Mixed Upland Deciduous	High Density Pole	9.7	50			
17	4130 - Aspen	Medium Density	8.6	17			
18	4130 - Aspen	High Density Sapling	19.8	26			
20	4130 - Aspen	High Density Sapling	21.8	25			
22	4130 - Aspen	High Density Pole	53.2	38	51-80		Pine and Oak was left as residual after stand was cut in 1973.
24	42290 - Natural Mixed Pine	High Density Log	6.1	73	51-80		Composition of stand varies throughout. Dead JP is increasing.



Stand	Pigeon River Country Mgt. Unit		5 – Forested Stands			Compartment: 032	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
26	42110 - Planted Red Pine	High Density Log	26.7	74	81-110		Aspen and hardwood has already been cut out.
27	6118 - Lowland Deciduous with Cedar	Medium Density Pole	2.1	84	1-50		Ash is dying
28	4130 - Aspen	High Density Sapling	13.9	26			
29	6120 - Lowland Cedar	Low Density Pole	11.9	84			This stand is mostly dead. Most likely, due to higher water levels.
30	4131 - Aspen, Oak	Low Density Sapling	14.6	Uneven Age			Some browse damage. Regeneration didn't appear to come back strong in places. This stand was mostly Red Maple and Birch when cut and they left the Oak and Hemlock.
31	42220 - Natural Jack Pine	Low Density Sapling	19.1	6			
32	4134 - Aspen, Spruce/Fir	High Density Pole	20.1	41	81-110		Creek bed runs though north edge of stand into Grass Lake.
33	4130 - Aspen	High Density Pole	9.4	38	1-50		Nice emerging pole stand with Oak component
34	6125 - Lowland Black Spruce, Jack Pine	Medium Density Pole	14.3	Uneven Age			Treed Bog
35	4130 - Aspen	High Density Sapling	6.5	38			Emerging pole stand of decent quality
36	4123 - Red Oak	High Density Log	7.4	93			This stand was left out of adjacent cut to protect the sink hole lake -- Devil's Soup Bowl
37	6120 - Lowland Cedar	High Density Pole	5.7	96	81-110		Creek flows through stand into Grass Lake
39	4110 - Sugar Maple Association	High Density Pole	1.2	83			Top of hardwood point that sticks out from the north. Left out of adjacent sale because of steep terrain. The slopes below were cut.
40	42290 - Natural Mixed Pine	High Density Log	45.1	87	81-110		
41	4131 - Aspen, Oak	High Density Sapling	27.3	17	1-50		Stand was cut in 1994. Oak was left along with some pine for residual.
42	4133 - Aspen, Mixed Pine	High Density Pole	18.3	38	1-50		
43	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	15.9	91	111-140		Creek with pathway bridge is within stand.



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Pigeon River Country Mgt. Unit

5 – Forested Stands

Compartment: 032
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
44	4130 - Aspen	High Density Pole	3.6	Uneven Age	1-50	Residual pine and oak stand above featured stand of aspen because they were left after the stand was cut in 1973. Emerging nice pole stand of aspen.
45	42260 - Natural Pine, Mixed Deciduous	High Density Log	4.9	84	81-110	Mature stand of poor quality trees. Heavy recreational use by offsite campers.
47	42210 - Natural Red Pine	High Density Log	23.4	87	111-140	
48	42260 - Natural Pine, Mixed Deciduous	High Density Log	3.8	93	81-110	"Grass Lake Overlook" and adjacent side slope is with in this stand. Underbrush on top of overlook is manually cut to preserve view. Trail comes up side-slope. Heavy recreational use by hikers and skiers.
49	6120 - Lowland Cedar	High Density Pole	10.1	93	111-140	Small cedar swamp near hiking trail and draining into Grass Lake
50	42210 - Natural Red Pine	High Density Log	2.0	83	51-80	Small pine pocket on the shore of Grass Lake.
51	42290 - Natural Mixed Pine	High Density Log	3.8	83	111-140	Small pocket of predominantly Pine with heavier hardwood component on the north end. Stand is right on the shore of Grass Lake.
52	4133 - Aspen, Mixed Pine	High Density Pole	5.7	38	51-80	Nice emerging pole stand.
53	4130 - Aspen	High Density Sapling	3.5	26	1-50	
55	4130 - Aspen	High Density Sapling	4.6	26		
56	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	1.6	78	81-110	
57	4136 - Aspen, Mixed Conifer	High Density Pole	3.9	46		
58	4110 - Sugar Maple Association	High Density Log	42.3	84	81-110	Stand was thinned in 1995-97. A good deal of white pine was removed. More Oak in the south and west part of the stand.
59	42250 - Pine, Oak	Medium Density Log	21.2	Uneven Age	51-80	This stand had everything removed but Red Pine, White Pine and Oak in 1985. Advanced Aspen and hardwood regeneration.
60	4199 - Other Mixed Upland Deciduous	Low Density Sapling	3.8	15		This stand was part of a larger hardwood thinning that had a concentrated portion of white pine that was removed creating this open stand.
62	42220 - Natural Jack Pine	Low Density Sapling	21.6	6		Stand was cut in 2005. Jack Pine is regenerating well.

S t a n d	Pigeon River Country Mgt. Unit		5 – Forested Stands			Compartment: 032	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Year of Entry: 2013	
63	4130 - Aspen	High Density Sapling	6.7	26			
64	42210 - Natural Red Pine	High Density Log	38.7	Uneven Age	81-110		Stand had all but pine and oak removed in 1965-66. Aspen not quite big enough to. Allow it to develop one more rotation.
65	4139 - Aspen, Mixed Deciduous	High Density Pole	3.0	46	51-80		
66	4110 - Sugar Maple Association	Medium Density Log	17.7	Uneven Age	51-80		Heavily cut in 1995-97. All "soft" hardwood and all white pine removed. Poor quality hardwoods were left, so should be managing for the regeneration that's left.
67	42200 - Natural White Pine	Medium Density Log	16.4	Uneven Age	51-80		This stand had everything cut but red pine, white pine and oak.
68	42210 - Natural Red Pine	High Density Log	21.7	87	111-140		
70	42200 - Natural White Pine	High Density Log	24.3	83	81-110		Older stand. Aspen in poor condition. High recreation use area. Leaving this stand would protect the watershed from Grass Lake flowing into the Pigeon River.
71	4110 - Sugar Maple Association	High Density Log	49.3	84	81-110		
72	42200 - Natural White Pine	Medium Density Log	35.4	Uneven Age	51-80		Heavy thinning in 1994. Everything cut but red and white pine and oak. Heavy white pine regeneration throughout the stand.
74	4130 - Aspen	High Density Pole	32.6	38	51-80		Overall, good Aspen. There is some areas where the quality is not so good. Oak and pine were residual from last cut.
75	42210 - Natural Red Pine	High Density Log	16.2	83	141-170		This stand was left out of any past cutting due to pathway and Section 4 Lake influence.
77	42210 - Natural Red Pine	High Density Log	6.7	83	111-140		Small acreage of mature pine with south half on a relatively steep slope along the creek. It also has hiking trail passing thru it.
78	4110 - Sugar Maple Association	High Density Log	51.7	89	141-170		Older, mature hardwood with some larger diameter trees. this stand doesn't appear to ever have been thinned at all. North end of stand is generally smaller diameter.
79	42210 - Natural Red Pine	High Density Log	102.1	84	81-110		This stand had aspen and hardwood removed in 1994. West end was cut heavier, so there is more advanced regeneration.
80	4130 - Aspen	High Density Pole	13.2	90	81-110		Stand occupies steep side slope with hiking trail following all along the bottom.



S t a n d	Pigeon River Country Mgt. Unit		5 – Forested Stands			Compartment: 032 Year of Entry: 2013	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		
82	4133 - Aspen, Mixed Pine	High Density Pole	9.0	91	51-80	Steep slope of Aspen leading to the river bottom along the Pigeon River. too steep for harvesting operations and also presents an erosion threat.	
83	6120 - Lowland Cedar	Low Density Pole	21.7	101	51-80	Wet, river bottom stand. Poor quality timber.	
84	6120 - Lowland Cedar	High Density Pole	25.9	103	111-140	Pigeon River (Natural River) passes thru stand. Thick Cedar stand along river - good cover.	
85	6120 - Lowland Cedar	High Density Pole	3.1	103	111-140	Nice stand of cedar along Pigeon River. Left uncut after stand 86 was cut.	
86	6122 - Black Spruce	Medium Density	7.8	15		winter deer cut in 1986	
88	42260 - Natural Pine, Mixed Deciduous	High Density Log	15.8	81	111-140	Mature pine on steep sidehill and ravines sloping toward the river bottom of Pigeon River. The bottom ends in a Cedar swamp. No real good way out.	
89	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	14.6	94	51-80	Not a uniform stand. Tag Alder is fairly uniform throughout. Stand lies within Natural River corridor of Pigeon River.	
90	42220 - Natural Jack Pine	High Density Pole	12.7	81	81-110	Steep slopes would be difficult to harvest and get the wood. Heavy white pine understory developing well. Manage for white pine by allowing overstory to fall out over time letting the white pine take over.	
91	42200 - Natural White Pine	Medium Density Log	1.7	Uneven Age	51-80	Stand was thinned in 2003. Red and White pine was thinned and all other species were cut.	
92	42290 - Natural Mixed Pine	High Density Log	14.9	84			
93	42290 - Natural Mixed Pine	High Density Sapling	22.2	28		Mixed pine regeneration - advanced	
94	4130 - Aspen	High Density Pole	15.6	49	51-80		
95	42290 - Natural Mixed Pine	High Density Log	4.2	81	111-140	Natural pine stand on some steep slopes, but also part of larger stand in comp 33, stand 11.	
96	4115 - Y.Birch, Hemlock NH	High Density Pole	2.6	83	111-140	Part of larger hardwood stand to the east last treated in 1985. Continue to treat with that stand. Significant Hemlock component.	
97	42260 - Natural Pine, Mixed Deciduous	High Density Log	4.4	84	111-140	Steep slope with nice timber. More and more hardwood becoming part of the stand. This portion was left out of the sale when stand 98 was cut due to the steep terrain.	



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Pigeon River Country Mgt. Unit

5 – Forested Stands

Compartment: 032
Year of Entry: 2013

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
98	42200 - Natural White Pine	Low Density Log	4.3	Uneven Age	1-50	This stand was cut in 2005 and left some mature pine.
99	42200 - Natural White Pine	High Density Log	3.1	85	81-110	Poor quality white pine.
100	6112 - Lowland Aspen	Low Density Pole	17.3	74	51-80	Scattered aspen and balm along the river bottom.
101	42220 - Natural Jack Pine	High Density Pole	6.0	85	51-80	Mature JP on steep slope leading to Pigeon River.
102	42210 - Natural Red Pine	Medium Density Log	4.8	Uneven Age	1-50	This stand was cut in 2005. It had RP thinned and other species removed. Aspen has had some browse damage.
103	4130 - Aspen	High Density Pole	5.4	37	1-50	Stand was cut in early '70's and was roller chopped in 1974. Nice emerging pole stand.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
4	3102 - Grass	3.5	Yes	Medium (NonForested)	
13	3102 - Grass	1.4	Yes	Medium (NonForested)	
16	3301 - Low Density Deciduous Tree	3.5	No	Unspecified	This opening was created with Tordon in 1973. Scattered Fir but mostly cherry.
19	50 - Water	6.4	No	Unspecified	Beaver flooding
21	3102 - Grass	1.6	Yes	Medium (NonForested)	
23	6220 - Alder/willow	19.3	No	Unspecified	
25	3102 - Grass	2.5	No	Unspecified	
38	50 - Water	1.0	No	Unspecified	Devil's Soup Bowl Lake
46	50 - Water	35.6	No	Unspecified	Grass Lake
54	6220 - Alder/willow	3.7	No	Unspecified	
61	50 - Water	15.2	No	Unspecified	Grass Lake overflow
69	3205 - Mixed Upland Shrub	26.3	Yes	Medium (NonForested)	Cut in 1975 and again in 1993 to create brushy opening. Scattered cherry throughout with pockets of Aspen and scattered hardwood
73	50 - Water	3.5	No	Unspecified	Section 4 Lake
76	3205 - Mixed Upland Shrub	12.9	Yes	Medium (NonForested)	Scattered cherry and clones of aspen. treated with Tordon in 1973 and commercially cut in 1993.
81	6220 - Alder/willow	30.8	No	Unspecified	Tag alder and willow along river bottom
87	6239 - Mixed Emergent Wetland	2.4	N/A	Unspecified	Marsh grass, backwater flowage into river
104	3102 - Grass	1.5	No	Unspecified	Open area within Elk Hill Campground, part of which slopes down to the river.



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.

Stand	SCA Type	SCA Name	Acres	Comments
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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.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
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.
SCA	Concentrated Recreation Area	Facilities that are designed and maintained for routine or heavy recreational use, including State Parks, State Forest campgrounds, motorized and non-motorized trails, trailheads, staging areas and public access sites.
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.