

RITCHIE CREEK

Date 4/18/2002

Site Description Bothe State Park

Reach Length (ft) 441

ID RIT2002

Elevation (ft) 360

Chemical Characteristics

Water Temp (C/F)	10	50
Specific Conductivity	158	
pH	6.5	
Dissolved Oxygen (mg/L)	11.5	

Physical Characteristics

(Average values for 3 riffles)

Riffle Length (ft)	65.3
Riffle Width (ft)	13
Riffle Depth (ft)	0.45
Riffle Velocity (ft/sec)	1.2
Gradient (%)	2.3
Riffle Substrate (%)	
<i>Fines</i>	23
<i>Gravel</i>	20
<i>Cobble</i>	23
<i>Boulder</i>	33
<i>Bedrock</i>	0

Consolidation Medium

Habitat Characteristics

Canopy Cover (%)	80	
<u>Scale 0-20</u>		
Substrate	19	Optimal
Embeddedness	18	Optimal
Substrate Complexity	19	Optimal
Velocity/Depth Regime	19	Optimal
Sediment Deposition	16	Optimal
Water Flow	17	Optimal
Channel Alteration	15	Suboptimal
Riffle Frequency	19	Optimal
<u>Scale 0-10</u>		
Bank Stability (Left)	8	Suboptimal
Bank Stability (Right)	8	Suboptimal
Vegetation (Right)	8	Suboptimal
Riparian (Right)	10	Optimal
Vegetation (Left)	8	Suboptimal
Riparian (Left)	9	Optimal

Total Habitat Score 174 Optimal

0-50 = Poor

51-100 = Marginal

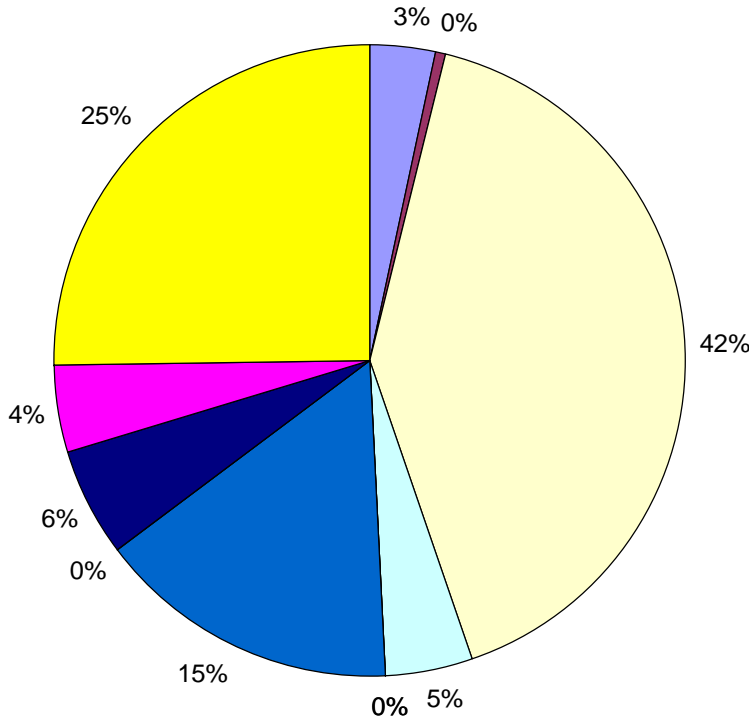
101-150 = Suboptimal

151-200 = Optimal

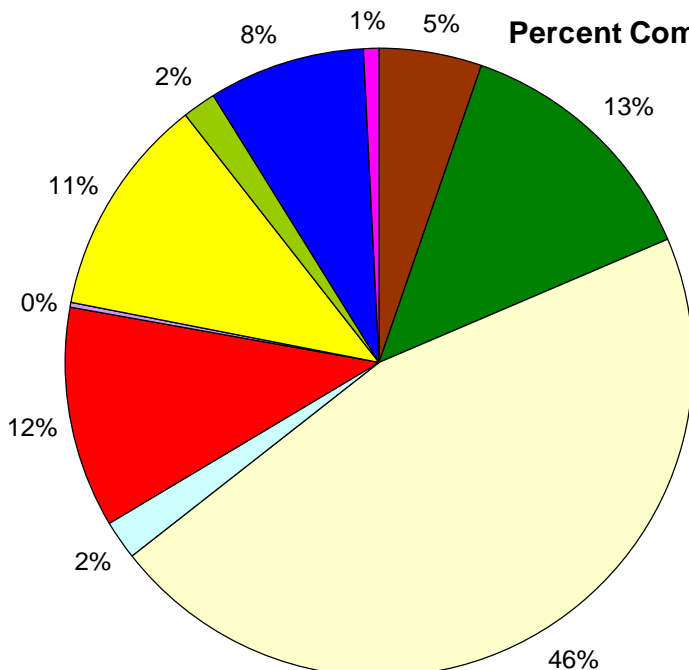
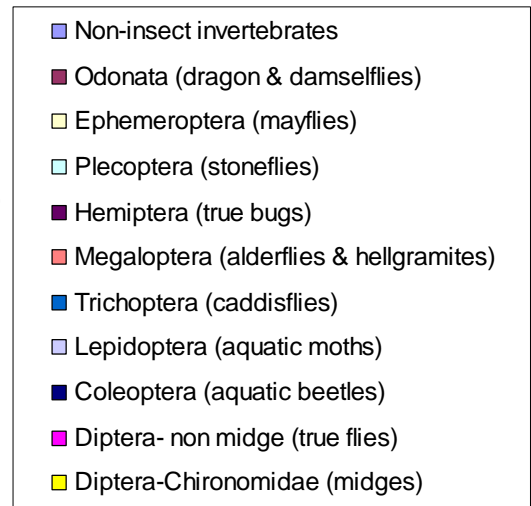
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Benthic Macroinvertebrate Characteristics

Abundance	2,519	Percent Dominant Taxa	16.03	Index of Biological Integrity (IBI) 25 5-11 = Poor 12-18 = Fair 19-25 = Good
Number of Taxa	83	Number of Tolerant Taxa	4	
Number of Taxa (CA)	79	Percent Tolerant Taxa	0.94	
Number of EPT	35	Number of Intolerant Taxa	24	
Hilsenhoff	4.44	Percent Intolerant Taxa	19.98	



Percent Composition by Taxa



Percent Composition by Functional Feeding Group

