

Macroinvertebrate Sample Summary

version: 3.0 3/16/2009 10:09:23 AM

Assessment ID:	59292
Station ID:	20081119-1200-kspyker (Latitude: 40.4851, Longitude: -79.1543)
Method:	6-Dframe Composite, 200 subsample
Location:	LR4. Logging has occurred on one side of the stream. It is about 15 feet wide, 95% cover, 2"-3' rocks, and there is lite iron staining on the substrate.

Metrics:

Total # Organisms: 38	Hilsenhoff: 3.74	%EPT: 42	FCPRSH: 8
Taxa Richness: 11	Beck3: 10	Beck4: 9	Modified %EPT: 37
Modified Caddis: 1	EPT: 5	%Mayflies: 0	%Dominant: 39
Caddisfly Taxa: 2	Mayfly Taxa: 0	Modified EPT: 4	Modified %Mayflies: 0
%Intol-Limestone: 39	%Tol-Limestone: 0	%Intol-Freestone: 45	%Tol-Freestone: 55
Shannon Diversity: 1.82			

Taxa:

Code	Standardized ID Level	Number	Tolerance
1040400100	Amphinemura	2	3
1040500200	Leuctra	1	0
1040900200	Alloperla	1	0
1060100100	Sialis	1	6
1080400300	Diplectrona	10	0
1080400600	Cheumatopsyche	2	6
1120200000	Ceratopogonidae	2	6
1121900400	Tipula	2	4
1121901500	Hexatoma	1	2
1122200000	Chironomidae	15	6
13040100100	Cambarus	1	6

Habitat:

1 Instream Cover:	19	2 Epifaunal Substrate:	20
3 Embeddedness:	13	4 Velocity/Depth Regimes:	12
5 Channel Alterations:	15	6 Sediment Deposition:	20
7 Frequency of Riffles:	20	8 Channel Flow Status:	15
9 Condition of Banks:	14	10 Bank Vegetation:	15
11 Grazing or Disruptive:	15	12 Riparian Vegetation:	12
			Total
			190

Metric Name	Standardization Value	Observed Value	Standardized Metric Score	Adjusted Metric Score
Beck's Index (version 3)	39	10	0.256	0.256
EPT Taxa Richness	23	5	0.217	0.217
Total Taxa Richness	35	11	0.314	0.314
Shannon Diversity Index (freestone)	2.90	1.82	0.628	0.628
Hilsenhoff Biotic Index	1.78	3.74	0.762	0.762
Percent Intolerant Individuals (freestone)	92.5	45.0	0.486	0.486

LR4 - mouth

FREESTONE IBI Score = 44.4

Macroinvertebrate Sample Summary

version: 3.0 3/16/2009 10:13:30 AM

Assessment ID: 59291
 Station ID: 20081119-1300-kspyker (Latitude: 40.4884, Longitude: -79.1217)
 Method: 6-Dframe Composite, 200 subsample
 Location: LR2

Metrics:

Total # Organisms: 12 Hilsenhoff: 4.50 %EPT: 25 FCPRSH: 3
 Taxa Richness: 4 Beck3: 6 Beck4: 4 Modified %EPT: 25
 Modified Caddis: 1 EPT: 2 %Mayflies: 0 %Dominant: 67
 Caddisfly Taxa: 1 Mayfly Taxa: 0 Modified EPT: 2 Modified %Mayflies: 0
 %Intol-Limestone: 25 %Tol-Limestone: 0 %Intol-Freestone: 25 %Tol-Freestone: 75
 Shannon Diversity: 0.98

Taxa:

Code	Standardized ID Level	Number	Tolerance
1040500200	Leuctra	1	0
1060100100	Sialis	1	6
1080400300	Diplectrona	2	0
1122200000	Chironomidae	8	6

Habitat:

1 Instream Cover: 16 2 Epifaunal Substrate: 19
 3 Embeddedness: 8 4 Velocity/Depth Regimes: 13
 5 Channel Alterations: 20 6 Sediment Deposition: 20
 7 Frequency of Riffles: 20 8 Channel Flow Status: 19
 9 Condition of Banks: 14 10 Bank Vegetation: 15 Total
 11 Grazing or Disruptive: 15 12 Riparian Vegetation: 12 191

Metric Name	Standardization Value	Observed Value	Standardized Metric Score	Adjusted Metric Score
Beck's Index (version 3)	39	6	0.154	0.154
EPT Taxa Richness	23	2	0.087	0.087
Total Taxa Richness	35	4	0.114	0.114
Shannon Diversity Index (freestone)	2.90	0.98	0.338	0.338
Hilsenhoff Biotic Index	1.78	4.50	0.669	0.669
Percent Intolerant Individuals (freestone)	92.5	25.0	0.270	0.270

LR2 – downstream phase 2

FREESTONE IBI Score = 27.2

Macroinvertebrate Sample Summary

version: 3.0 3/16/2009 10:15:33 AM

Assessment ID: 59290
 Station ID: 20080514-1400-kspyker (Latitude: 40.4960, Longitude: -79.1202)
 Method: 6-Dframe Composite, 200 subsample
 Location: LR1. Laurel Run upstream phase 2 treatment.

Metrics:

Total # Organisms: 20 Hilsenhoff: 4.10 %EPT: 50 FCPRSH: 6
 Taxa Richness: 9 Beck3: 5 Beck4: 6 Modified %EPT: 40
 Modified Caddis: 2 EPT: 5 %Mayflies: 0 %Dominant: 35
 Caddisfly Taxa: 3 Mayfly Taxa: 0 Modified EPT: 4 Modified %Mayflies: 0
 %Intol-Limestone: 40 %Tol-Limestone: 5 %Intol-Freestone: 55 %Tol-Freestone: 45
 Shannon Diversity: 1.90

Taxa:

Code	Standardized ID Level	Number	Tolerance
1040400100	Amphinemura	2	3
1040400300	Paranemoura	1	2
1060200400	Nigronia	1	2
1080100100	Chimarra	1	4
1080400300	Diplectrona	4	0
1080400700	Hydropsyche	2	5
1122200000	Chironomidae	7	6
11000000000	Oligochaeta	1	10
13040100100	Cambarus	1	6

Habitat:

1 Instream Cover:	13	2 Epifaunal Substrate:	20	
3 Embeddedness:	16	4 Velocity/Depth Regimes:	11	
5 Channel Alterations:	20	6 Sediment Deposition:	15	
7 Frequency of Riffles:	20	8 Channel Flow Status:	18	
9 Condition of Banks:	10	10 Bank Vegetation:	11	Total
11 Grazing or Disruptive:	20	12 Riparian Vegetation:	20	194

Metric Name	Standardization Value	Observed Value	Standardized Metric Score	Adjusted Metric Score
Beck's Index (version 3)	39	5	0.128	0.128
EPT Taxa Richness	23	5	0.217	0.217
Total Taxa Richness	35	9	0.257	0.257
Shannon Diversity Index (freestone)	2.90	1.90	0.655	0.655
Hilsenhoff Biotic Index	1.78	4.10	0.718	0.718
Percent Intolerant Individuals (freestone)	92.5	55.0	0.595	0.595

LR1 - upstream phase 2

FREESTONE IBI Score = 42.8