Macroinvertebrate Data Report: Raw Data

STREAM SITE:	Alplaus Kill, Station ALPL- 01
LOCATION:	West Charlton, NY, downstream of Route 67 bridge
DATE:	14 July 2005
SAMPLE TYPE:	Kick sample
SUBSAMPLE:	100 organisms

ANNELIDA			
OLIGOCHAETA			
TUBIFICIDA	Tubificidae	Undet. Tubificidae w/o cap. setae	1
HIRUDINEA			
	Glossiphoniidae	Undetermined Hirudinea	1
ARTHROPODA			
CRUSTACEA			
DECAPODA	Cambaridae	Undetermined Cambaridae	2
INSECTA			
EPHEMEROPTERA	Baetidae	*Baetis flavistriga*	5
		Baetis intercalaris	6
	Leptophlebiidae	Undetermined Leptophlebiidae	1
PLECOPTERA	Perlidae	*Agnetina capitata*	3
COLEOPTERA	Psephenidae	*Psephenus herricki*	3
	Elmidae	*Optioservus trivittatus*	4
		Stenelmis crenata	31
MEGALOPTERA	Corydalidae	*Nigronia serricornis*	3
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	16
	Hydropsychidae	*Cheumatopsyche sp.*	11
		Hydropsyche betteni	1
DIPTERA	Tipulidae	*Dicranota sp.*	6
		Hexatoma sp.	1
	Athericidae	*Atherix sp.*	1
	Chironomidae	*Polypedilum flavum*	3
		Tanytarsus curticornus gr.	1

SPECIES RICHNESS:	19 (good)
BIOTIC INDEX:	4.59 (good)
EPT RICHNESS:	7 (good)
MODEL AFFINITY:	50 (good)
NUTRIENT INDEX:	5.95 (good)
ASSESSMENT:	slightly impacted (5.78)

DESCRIPTION: This upstream location was at Route 67, north of West Charlton. The macroinvertebrate community contained a full complement of orders, dominated by beetles and caddisflies. Slight impact from nutrient enrichment was indicated.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 02
LOCATION:	Charlton, NY, above Charlton Road bridge
DATE:	14 July 2005
SAMPLE TYPE:	Kick sample
SUBSAMPLE:	100 organisms

ARTHROPODA			
INSECTA			
EPHEMEROPTERA	Baetidae	*Baetis flavistriga*	4
		Baetis intercalaris	4
PLECOPTERA	Perlidae	*Agnetina capitata*	4
COLEOPTERA	Psephenidae	*Psephenus herricki*	5
	Elmidae	*Optioservus sp.*	5
		Stenelmis crenata	27
MEGALOPTERA	Corydalidae	*Nigronia serricornis*	2
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	2
	Psychomyiidae	*Psychomyia flavida*	1
	Hydropsychidae	*Hydropsyche bronta*	22
		Hydropsyche slossonae	3
DIPTERA	Tipulidae	*Antocha sp.*	2
		Dicranota sp.	5
		Hexatoma sp.	1
	Simuliidae	*Simulium tuberosum*	1
	Athericidae	*Atherix sp.*	4
	Chironomidae	*Tvetenia vitracies*	3
		Microtendipes pedellus gr.	1
		Polypedilum flavum	3
		Polypedilum illinoense	1

SPECIES RICHNESS:	20 (good)
BIOTIC INDEX:	4.70 (good)
EPT RICHNESS:	7 (good)
MODEL AFFINITY:	50 (good)
NUTRIENT INDEX:	6.74 (poor)
ASSESSMENT:	slightly impacted (5.35)

DESCRIPTION: The kick sample was taken upstream of the Charlton Road bridge near Charlton. The macroinvertebrate community was similar to that at Station-1, dominated by algal-scraping riffle beetles and filter-feeding caddisflies. Water quality was similarly assessed as slightly impacted. Nutrient enrichment was indicated by Impact Source Determination and the Nutrient Biotic Index.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 03		
LOCATION:	Charlton, NY, above Swaggertown Rd. bridge		
DATE:	14 July 2005		
SAMPLE TYPE:	Kick sample		
SUBSAMPLE:	100 organisms		
ANNELIDA			
OLIGOCHAETA			
TUBIFICIDA	Enchytraeidae	Undetermined Enchytraeidae	1
MOLLUSCA			
GASTROPODA	Ancylidae	*Ferrissia sp.*	1
ARTHROPODA			
INSECTA			
EPHEMEROPTERA	Baetidae	*Baetis flavistriga*	3
		Baetis intercalaris	3
	Heptageniidae	*Stenonema sp.*	3
	Leptophlebiidae	Undetermined Leptophlebiidae	1
	Caenidae	*Caenis sp.*	5
PLECOPTERA	Perlidae	*Agnetina capitata*	2
ODONATA	Gomphidae	*Gomphus sp.*	1
COLEOPTERA	Elmidae	*Optioservus fastiditus*	3
		Stenelmis sp.	21
MEGALOPTERA	Corydalidae	*Nigronia serricornis*	3
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	2
	Polycentropodidae	*Neureclipsis sp.*	1
	Hydropsychidae	*Hydropsyche bronta*	5
	Helicopsychidae	*Helicopsyche borealis*	1
DIPTERA	Tipulidae	*Antocha sp.*	1
		Hexatoma sp.	2
	Athericidae	*Atherix sp.*	8
	Empididae	*Hemerodromia sp.*	1
	Chironomidae	*Cricotopus fugax*	1
		Cricotopus tremulus gr.	1
		Cricotopus sp.	1
		Lopescladius sp.	2
		Parachaetocladius sp.	4
		Parametriocnemus lundbecki	6
		Rheocricotopus robacki	1
		Tvetenia vitracies	1
		Microtendipes pedellus gr.	4
		Polypedilum aviceps	8
		Polypedilum flavum	1
		Rheotanytarsus exiguus gr.	2
SPECIES RICHNESS:	32 (very good)		
BIOTIC INDEX:	4.68 (good)		
EPT RICHNESS:	10 (good)		
MODEL AFFINITY:	67 (very good)		
NUTRIENT INDEX:	6.24 (poor)		
ASSESSMENT:	slightly impacted (7.18)		

DESCRIPTION: The kick sample was taken 100 meters above the Swaggertown Road bridge. Midges and riffle beetles dominated the macroinvertebrate community, with a high diversity of species. The overall water quality assessment was slightly impacted. Nutrient enrichment was indicated by the Nutrient Biotic Index.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 04
LOCATION:	East Glenville, NY, above Van Vorst Road bridge
DATE:	14 July 2005
SAMPLE TYPE:	Kick sample
SUBSAMPLE:	100 organisms

ARTHROPODA			
CRUSTACEA			
DECAPODA	Cambaridae	Undetermined Cambaridae	1
INSECTA			
EPHEMEROPTERA	Baetidae	*Acentrella sp.*	3
		Baetis flavistriga	4
		Baetis intercalaris	12
PLECOPTERA	Perlidae	*Agnetina capitata*	3
		Paragnetina media	4
COLEOPTERA	Psephenidae	*Psephenus herricki*	2
	Elmidae	*Optioservus fastiditus*	13
		Stenelmis crenata	33
MEGALOPTERA	Sialidae	*Sialis sp.*	2
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	1
	Psychomyiidae	*Psychomyia flavida*	1
	Hydropsychidae	*Cheumatopsyche sp.*	1
		Hydropsyche bronta	4
	Glossosomatidae	*Glossosoma sp.*	1
DIPTERA	Tipulidae	*Antocha sp.*	2
		Hexatoma sp.	1
	Athericidae	*Atherix sp.*	2
	Chironomidae	*Cricotopus bicinctus*	1
		Cricotopus trifascia gr.	2
		Eukiefferiella devonica gr.	1
		Tvetenia vitracies	2
		Microtendipes pedellus gr.	1
		Polypedilum aviceps	2
		Polypedilum flavum	1

SPECIES RICHNESS:	25 (good)
BIOTIC INDEX:	4.53 (good)
EPT RICHNESS:	10 (good)
MODEL AFFINITY:	60 (good)
NUTRIENT INDEX:	6.42 (poor)
ASSESSMENT:	slightly impacted (6.50)

DESCRIPTION: The sample site was upstream of the Van Vorst Road bridge in East Glenville. The macroinvertebrate community was heavily dominated by algal-scraping riffle beetles, as at other sites. Based on the metrics, water quality was assessed as slightly impacted. Nutrient enrichment was indicated by Impact Source Determination and the Nutrient Biotic Index.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 05
LOCATION:	Burnt Hills, NY, off Rustic Road
DATE:	14 July 2005
SAMPLE TYPE:	Kick sample
SUBSAMPLE:	100 organisms

ARTHROPODA			
INSECTA			
EPHEMEROPTERA	Isonychiidae	*Isonychia bicolor*	1
	Baetidae	*Acentrella sp.*	3
		Baetis flavistriga	10
		Baetis intercalaris	8
	Heptageniidae	*Stenonema sp.*	2
PLECOPTERA	Perlidae	*Agnetina capitata*	1
COLEOPTERA	Psephenidae	*Psephenus herricki*	4
	Elmidae	*Optioservus sp.*	18
		Stenelmis sp.	27
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	10
		Chimarra obscura	1
	Hydropsychidae	*Cheumatopsyche sp.*	1
		Hydropsyche betteni	1
		Hydropsyche bronta	5
		Hydropsyche sparna	2
DIPTERA	Tipulidae	*Hexatoma sp.*	1
	Simuliidae	*Simulium sp.*	1
	Athericidae	*Atherix sp.*	1
	Chironomidae	*Lopescladius sp.*	2
		Polypedilum flavum	1

SPECIES RICHNESS:	20 (good)
BIOTIC INDEX:	4.48 (very good)
EPT RICHNESS:	12 (very good)
MODEL AFFINITY:	51 (good)
NUTRIENT INDEX:	6.29 (poor)
ASSESSMENT:	slightly impacted (6.24)

DESCRIPTION: The kick sample site was accessed off the end of Rustic Road near Burnt Hills. As at upstream sites, riffle beetles dominated the macroinvertebrate community and water quality was assessed as slightly impacted. Nutrient enrichment was indicated by Impact Source Determination and the Nutrient Biotic Index.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 06
LOCATION:	Glenridge, NY, above Glenridge Road bridge
DATE:	14 July 2005
SAMPLE TYPE:	Kick sample
SUBSAMPLE:	100 organisms

ARTHROPODA			
CRUSTACEA			
DECAPODA	Cambaridae	Undetermined Cambaridae	1
INSECTA			
EPHEMEROPTERA	Isonychiidae	*Isonychia bicolor*	1
	Baetidae	*Baetis flavistriga*	15
		Baetis intercalaris	3
	Heptageniidae	*Stenonema sp.*	1
	Caenidae	*Caenis sp.*	1
PLECOPTERA	Perlidae	*Agnetina capitata*	5
		Paragnetina media	2
COLEOPTERA	Psephenidae	*Psephenus herricki*	2
	Elmidae	*Optioservus fastiditus*	15
		Stenelmis crenata	39
TRICHOPTERA	Philopotamidae	*Chimarra aterrima?*	3
	Hydropsychidae	*Cheumatopsyche sp.*	3
		Hydropsyche bronta	5
		Hydropsyche sparna	1
DIPTERA	Athericidae	*Atherix sp.*	1
	Chironomidae	*Polypedilum aviceps*	1
		Polypedilum flavum	1

SPECIES RICHNESS:	18 (poor)
BIOTIC INDEX:	4.50 (good)
EPT RICHNESS:	11 (very good)
MODEL AFFINITY:	50 (good)
NUTRIENT INDEX:	6.39 (poor)
ASSESSMENT:	slightly impacted (5.91)

DESCRIPTION: The sampling site was 100 meters upstream of the Glenridge Road bridge in Glenridge. Algal-scraping riffle beetles dominated the macroinvertebrate community and water quality was assessed as slightly impacted. Nutrient enrichment was indicated by Impact Source Determination and the Nutrient Biotic Index.

Macroinvertebrate Data Report: Raw Data, cont'd

STREAM SITE:	Alplaus Kill, Station ALPL- 07
LOCATION:	Alplaus, NY, downstream of Alplaus Avenue bridge
DATE:	14 July 2005
SAMPLE TYPE:	Kick, Sandy Streams
SUBSAMPLE:	100 organisms

ANNELIDA			
OLIGOCHAETA			
TUBIFICIDA	Tubificidae	Undet. Tubificidae w/o cap. setae	1
MOLLUSCA			
GASTROPODA			
	Physidae	*Physella sp.*	4
ARTHROPODA			
CRUSTACEA			
AMPHIPODA	Gammaridae	*Gammarus sp.*	1
INSECTA			
EPHEMEROPTERA	Baetidae	*Centroptilum sp.*	5
	Heptageniidae	*Stenonema sp.*	2
	Caenidae	*Caenis sp.*	1
PLECOPTERA	Perlidae	*Paragnetina media*	1
COLEOPTERA	Elmidae	*Optioservus trivittatus*	4
		Stenelmis crenata	5
DIPTERA	Chironomidae	*Ablabesmyia mallochi*	3
		Thienemannimyia gr. spp.	1
		Pagastia orthogonia	1
		Cricotopus bicinctus	1
		Cricotopus vierriensis	4
		Chironomus sp.	18
		Cryptochironomus fulvus gr.	4
		Microtendipes pedellus gr.	7
		Phaenopsectra dyari?	5
		Polypedilum fallax gr.	1
		Polypedilum illinoense	5
		Cladotanytarsus sp.	13
		Tanytarsus glabrescens gr.	8
		Tanytarsus guerlus gr.	5

SPECIES RICHNESS:	23 (very good)
BIOTIC INDEX:	6.54 (good)
EPT RICHNESS:	4 (good)
NCO RICHNESS:	8 (good)
NUTRIENT INDEX:	6.77 (poor)
ASSESSMENT:	slightly impacted (5.94)

DESCRIPTION: The sampling site was 50 meters downstream of the Alplaus Avenue bridge in Alplaus. The habitat differed from upstream sites, with a slow current speed and a stream bottom of sand and gravel. The sample method used was a combined kick sample and net jab, and sandy stream criteria were used to interpret the metrics. The macroinvertebrate community was heavily dominated by midges. Based on sandy stream metrics and criteria, water quality was assessed as slightly impacted. Nutrient enrichment was indicated by the Nutrient Biotic Index.

LABORATORY DATA SUMMARY

STREAM NAME: Alplaus Kill	DRAINAGE: 12
DATE SAMPLED: 7/14/2005	COUNTY: Saratoga & Schenectady
SAMPLING METHOD: Travelling Kick	

STATION LOCATION	01 West Charlton Amsterdam Rd	02 Charlton Charlton Rd.	03 Charlton Swaggertown Rd.	04 East Glenville Van Vorst Rd.
DOMINANT SPECIES/%CONTRIBUTION/TOLERANCE/COMMON NAME				
1.	Stenelmis crenata 31 % facultative beetle	Stenelmis crenata 27 % facultative beetle	Stenelmis sp. 21 % facultative beetle	Stenelmis crenata 33 % facultative beetle
2. **Intolerant = not tolerant of poor water quality**	Chimarra aterrima? 16 % intolerant caddisfly	Hydropsyche bronta 22 % facultative caddisfly	Atherix sp. 8 % intolerant crane fly	Optioservus fastiditus 13 % intolerant beetle
3. **Facultative = occurring over a wide range of water quality**	Cheumatopsyche sp. 11 % facultative caddisfly	Psephenus herricki 5 % facultative beetle	Polypedilum aviceps 8 % facultative midge	Baetis intercalaris 12 % intolerant mayfly
4. **Tolerant = tolerant of poor water quality**	Baetis intercalaris 6 % intolerant mayfly	Optioservus sp. 5% intolerant beetle	Parametriocnemus lundbecki 6 % facultative midge	Baetis flavistriga 4 % intolerant mayfly
5.	Dicronata sp. 6 % intolerant crane fly	Dicronata sp. 5 % intolerant crane fly	Caenis sp. 5 % tolerant mayfly	Paragnetina media 4 % intolerant stone fly
% CONTRIBUTION OF MAJOR GROUPS (NUMBER OF TAXA IN PARENTHESES)				
Chironomidae (midges)	4.0 (2.0)	8.0 (4.0)	32.0 (12.0)	10.0 (7.0)
Trichoptera (caddisflies)	28.0 (3.0)	28.0 (4.0)	9.0 (4.0)	8.0 (5.0)
Ephemeroptera (mayflies)	12.0 (3.0)	8.0 (2.0)	15.0 (5.0)	19.0 (3.0)
Plecoptera (stoneflies)	3.0 (1.0)	4.0 (1.0)	2.0 (1.0)	7.0 (2.0)
Coleoptera (beetles)	38.0 (3.0)	37.0 (3.0)	24.0 (2.0)	48.0 (3.0)
Oligochaeta (worms)	1.0 (1.0)	0.0 (0.0)	1.0 (1.0)	0.0 (0.0)
Mollusca (clams and snails)	0.0 (0.0)	0.0 (0.0)	1.0 (1.0)	0.0 (0.0)
Crustacea (crayfish, scuds, sowbugs)	2.0 (1.0)	0.0 (0.0)	0.0 (0.0)	1.0 (1.0)
Other insects (odonates, diptera)	11.0 (4.0)	15.0 (6.0)	16.0 (6.0)	7.0 (4.0)
Other (Nemertea, Platyhelminthes)	1.0 (1.0)	0.0 (0.0)	2.0 (1.0)	0.0 (0.0)
SPECIES RICHNESS	19	20	32	25
BIOTIC INDEX	4.59	4.70	4.68	4.53
EPT RICHNESS	7	7	10	10
PERCENT MODEL AFFINITY	50	50	67	60
NUTRIENT BIOTIC INDEX	5.94	6.74	6.24	6.42
FIELD ASSESSMENT	Very good	Very good	Very good	Very good
OVERALL ASSESSMENT	Slightly impacted	Slightly impacted	Slightly impacted	Slightly impacted

LABORATORY DATA SUMMARY				
STREAM NAME: Alplaus Kill		**DRAINAGE: 12**		
DATE SAMPLED: 7/14/2005		**COUNTY: Saratoga & Schenectady**		
SAMPLING METHOD: Travelling Kick				
STATION	05	06	07	
LOCATION	Burnt Hills Rustic Bridge Rd.	Glenridge Glenridge Rd.	Alplaus Alplaus Ave.	
DOMINANT SPECIES/%CONTRIBUTION/TOLERANCE/COMMON NAME				
1.	Stenelmis sp. 27 % facultative beetle	Stenelmis crenata 39 % facultative beetle	Chironomus sp. 18 % facultative midge	
2. **Intolerant = not tolerant of poor water quality**	Optioservus sp. 18 % intolerant beetle	Baetis flavistriga 15 % intolerant mayfly	Cladotanytarsus sp. 13 % facultative midge	
3. **Facultative = occurring over a wide range of water quality**	Baetis flavistriga 10 % intolerant mayfly	Optioservus fastiditus 15 % intolerant beetle	Tanytarsus glabrescens gr. 8 % facultative midge	
4. **Tolerant = tolerant of poor water quality**	Chimarra aterrima? 10 % intolerant caddisfly	Agnetina capitata 5 % intolerant stone fly	Microtendipes pedellus gr. 7 % facultative midge	
5.	Baetis intercalaris 8 % intolerant mayfly	Hydropsyche bronta 5 % facultative caddisfly	Centroptilum sp. 5 % intolerant mayfly	
% CONTRIBUTION OF MAJOR GROUPS (NUMBER OF TAXA IN PARENTHESES)				
Chironomidae (midges)	3.0 (2.0)	2.0 (2.0)	76.0 (14.0)	
Trichoptera (caddisflies)	20.0 (6.0)	12.0 (4.0)	0.0 (0.0)	
Ephemeroptera (mayflies)	24.0 (5.0)	21.0 (5.0)	8.0 (3.0)	
Plecoptera (stoneflies)	1.0 (1.0)	7.0 (2.0)	1.0 (1.0)	
Coleoptera (beetles)	49.0 (3.0)	56.0 (3.0)	9.0 (2.0)	
Oligochaeta (worms)	0.0 (0.0)	0.0 (0.0)	1.0 (1.0)	
Mollusca (clams and snails)	0.0 (0.0)	0.0 (0.0)	4.0 (1.0)	
Crustacea (crayfish, scuds, sowbugs)	0.0 (0.0)	1.0 (1.0)	1.0 (1.0)	
Other insects (odonates, diptera)	3.0 (3.0)	1.0 (1.0)	0.0 (0.0)	
Other (Nemertea, Platyhelminthes)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	
SPECIES RICHNESS	20	20	23	
BIOTIC INDEX	4.48	4.50	6.54	
EPT RICHNESS	12	11	4	
PERCENT MODEL AFFINITY	51	50	44	
NUTRIENT BIOTIC INDEX	6.29	6.39	6.77	
FIELD ASSESSMENT	Very good	Very good	Good	
OVERALL ASSESSMENT	Slightly impacted	Slightly impacted	Slightly impacted	

FIELD DATA SUMMARY

STREAM NAME: Alplaus Kill	DATE SAMPLED: 7/14/05			
REACH: West Charlton to Alplaus				
FIELD PERSONNEL INVOLVED: Smith, Bode				
STATION	01	02	03	04
ARRIVAL TIME AT STATION	8:38 am	9:26 am	10:12 am	10:55 am
LOCATION	West Charlton	Charlton	Charlton	East Glenville
PHYSICAL CHARACTERISTICS				
Width (meters)	8	6	15	10
Depth (meters)	0.1	0.1	0.1	0.2
Current speed (cm per sec.)	60	100	100	120
Substrate (%)				
Rock (>25.4 cm, or bedrock)	10	-	-	10
Rubble (6.35 – 25.4 cm)	40	-	-	30
Gravel (0.2 – 6.35 cm)	20	-	-	30
Sand (0.06 – 2.0 mm)	10	-	-	20
Silt (0.004 – 0.06 mm)	20	-	-	20
Embeddedness (%)	25	30	30	30
CHEMICAL MEASUREMENTS				
Temperature (° C)	22.6	20.7	21.8	21.7
Specific Conductance (umhos)	297	319	299	302
Dissolved Oxygen (mg/l)	7.2	9.2	7.3	8.1
pH	7.3	7.6	7.6	7.3
BIOLOGICAL ATTRIBUTES				
Canopy (%)	40	40	30	40
Aquatic Vegetation				
algae – suspended				
algae – attached, filamentous		X	X	X
algae – diatoms		X	X	X
macrophytes or moss				
Occurrence of Macroinvertebrates				
Ephemeroptera (mayflies)	X	X	X	X
Plecoptera (stoneflies)	X	X	X	X
Trichoptera (caddisflies)	X	X	X	X
Coleoptera (beetles)	X	X	X	X
Megaloptera (dobsonflies, alderflies)	X	X	X	X
Odonata (dragonflies, damselflies)		X	X	
Chironomidae (midges)	X		X	
Simuliidae (black flies)				
Decapoda (crayfish)	X	X	X	X
Gammaridae (scuds)				
Mollusca (snails, clams)				
Oligochaeta (worms)				
Other		X	X	X
FIELD ASSESSMENT	Very Good	Very Good	Very Good	Very Good

FIELD DATA SUMMARY

STREAM NAME: Alplaus Kill	DATE SAMPLED: 7/14/05			
REACH: West Charlton to Alplaus				
FIELD PERSONNEL INVOLVED: Smith, Bode				
STATION	05	06	07	
ARRIVAL TIME AT STATION	11:45 am	12:45 pm	3:15 pm	
LOCATION	Burnt Hills	Glenridge	Alplaus	
PHYSICAL CHARACTERISTICS				
Width (meters)	20	15	40	
Depth (meters)	0.2	0.2	0.4	
Current speed (cm per sec.)	120	100	<40	
Substrate (%)				
Rock (>25.4 cm, or bedrock)	10	10		
Rubble (6.35 – 25.4 cm)	40	40		
Gravel (0.2 – 6.35 cm)	20	20	40	
Sand (0.06 – 2.0 mm)	10	10	40	
Silt (0.004 – 0.06 mm)	20	20	20	
Embeddedness (%)	25	25	50	
CHEMICAL MEASUREMENTS				
Temperature (° C)	23.6	23.8	24	
Specific Conductance (umhos)	330	355	368	
Dissolved Oxygen (mg/l)	10.0	9.8	8.0	
pH	7.9	7.8	7.5	
BIOLOGICAL ATTRIBUTES				
Canopy (%)	20	40	10	
Aquatic Vegetation				
algae – suspended				
algae – attached, filamentous	X			
algae – diatoms	X	X		
macrophytes or moss				
Occurrence of Macroinvertebrates				
Ephemeroptera (mayflies)	X	X	X	
Plecoptera (stoneflies)	X	X		
Trichoptera (caddisflies)	Xx	X		
Coleoptera (beetles)	Xx	X	X	
Megaloptera (dobsonflies, alderflies)	X	X		
Odonata (dragonflies, damselflies)				
Chironomidae (midges)	X	X	X	
Simuliidae (black flies)				
Decapoda (crayfish)	X	X		
Gammaridae (scuds)				
Mollusca (snails, clams)		X		
Oligochaeta (worms)				
Other	X	X		
FIELD ASSESSMENT	Very Good	Very Good	Good	