



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT ECOREGION (45)
Southern Outer Piedmont - 45b Data

(45) PIEDMONT ECOREGION					
45b Southern Outer Piedmont - reference streams					
Station ID	Waterbody Name	Catchment Area (m2)	Basin Name	Major Basin Name	Collection Date
<i>45b-152</i>	<i>Reference Site 1</i>	8389415.309	Upper Oconee	Altamaha	11/05/2000
<i>45b-156</i>	<i>Reference Site 2</i>	55282769	Upper Ocmulgee	Altamaha	02/01/2002
<i>45b-258</i>	<i>Reference Site 3</i>	67389619.23	Upper Ocmulgee	Altamaha	01/02/2001
<i>45b-357</i>	<i>Reference Site 4</i>	12830716.32	Upper Flint	Apalachicola	01/03/2001
<i>HH22</i>	<i>Reference Site 5</i>	13230023.74	Upper Oconee	Altamaha	10/27/2000



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams metric scores							
Station ID	Waterbody Name	ColeoTax	coleotaxstd	PlecoPct	plecopctstd	OligoPct	oligopctstd
45b-152	Reference Site 1	9	100	12.91666667	79.97936017	0.83333333	99.01298906
45b-156	Reference Site 2	5	56.81818182	1.304347826	8.076457127	0	100
45b-258	Reference Site 3	8	90.90909091	16.95906433	100	1.16959064	98.61472149
45b-357	Reference Site 4	6	68.18181818	4.583333333	28.37977296	3.33333333	96.05195626
HH22	Reference Site 5	6	68.18181818	10.83333333	67.07946336	0	100
DE		0.9		0.8		0.8	

45b - Southern Outer Piedmont - reference streams metric scores								
Station ID	Waterbody Name	ScrapTax	scraptaxstd	ShredTax	shredtaxstd	SwmmrTax	swmmertaxstd	Final Index
45b-152	Reference Site 1	8	90.90909091	7	63.63636364	3	78.94736842	85
45b-156	Reference Site 2	9	100	6	54.54545455	1	26.31578947	58
45b-258	Reference Site 3	6	68.18181818	12	100	4	100	93
45b-357	Reference Site 4	4	45.45454545	6	54.54545455	3	78.94736842	62
HH22	Reference Site 5	2	22.72727273	4	36.36363636	3	78.94736842	62
DE		0.9		0.9		0.9		



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

% Land use per Catchment Area for Reference Sites: 45b - Southern Outer Piedmont						
Stream Name and Sample Identification Number						
		<i>Reference Site 1</i>	<i>Reference Site 2</i>	<i>Reference Site 3</i>	<i>Reference Site 4</i>	<i>Reference Site 5</i>
Land use	Year	45b-152	45b-156	45b-258	45b-357	HH22
% Natural	1998	94.8046	97.1155	79.4772	92.352	81.9381
% Urban	1998	3.9609	0	6.5163	4.8037	6.3711
% Agriculture Total	1998	1.2344	2.3419	14.0065	2.8443	11.6907
% Barren	1998	3.0163	0.5606	5.8527	14.7342	4.5773
% Natural	1994	98.7389	97.1155	86.8134	96.4497	NA
% Urban	1994	0	0	0.721	0.0312	NA
% Agriculture Total	1994	0.6647	2.3419	11.4604	2.3336	NA
% Barren	1994	0.5965	0.5606	1.0052	1.1855	NA



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

Water Chemistry Values for Reference Sites: 45b - Southern Outer Piedmont						
		Stream Name and Sample Identification Number				
		<i>Reference Site 1</i>	<i>Reference Site 2</i>	<i>Reference Site 3</i>	<i>Reference Site 4</i>	<i>Reference Site 5</i>
Parameters	Chemical Units	45b-152	45b-156	45b-258	45b-357	HH22
Air Temperature	°C	15	17.65	9	8	21.11
Water Temperature	°C	16.86	15.83	1.78	3.64	15.43
Specific Conductivity	mS/cm	0.0815	0.1027	0.044	0.0713	0.1059
Dissolved Oxygen	%	---	72.2	98.4	92.7	72.8
Dissolved Oxygen	mg/l	7.77	7.16	13.77	12.32	7.26
pH	SU	7.16	6.83	6.58	6.8	7.02
Turbidity	NTU	0	20.3	10.5	17.5	1.7
Depth	m	0.2	0.3	0.2	0.1	0.1
Ammonia	mg/l as N	<0.03	0.968	0.031	0.072	<0.03
Nitrate-Nitrite	mg/l as N	0.017	0.133	0.159	0.093	0.010
Total Phosphorus	mg/l as P	<0.01	<0.02	<0.03	<0.04	0.042
Alkalinity	mg/l as CaCO ₃	32.49	34.00	13.27	0.0	44.86
Hardness	mg/l as CaCO ₃	26.63	35.33	13.23	23.17	40.19
Copper	mg/l	<0.1	0.004	<0.1	<0.1	<0.1
Iron	mg/l	<0.1	1.119	<0.1	<0.1	<0.1
Manganese	mg/l	<0.1	0.112	<0.1	<0.1	<0.1
Zinc	mg/l	<0.1	0.010	<0.1	<0.1	<0.1



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

Pebble Count % for Reference Sites: 45b - Southern Outer Piedmont					
	Stream Name and Sample Identification Number				
	<i>Reference Site 1</i>	<i>Reference Site 2</i>	<i>Reference Site 3</i>	<i>Reference Site 4</i>	<i>Reference Site 5</i>
Particle	45b-152	45b-156	45b-258	45b-357	HH22
Silt/Clay	0.97	42	2	--	1.94
Sand	55.34	54	89	24.75	57.28
Gravel	43.69	4	2	40.59	29.13
Cobble	--	--	1	22.77	8.74
Boulder	--	--	--	1.98	2.91
Bedrock	--	--	6	9.90	--



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

Habitat Values for Reference Sites: 45b - Southern Outer Piedmont					
	Stream Name and Sample Identification Number				
	<i>Reference Site 1</i>	<i>Reference Site 2</i>	<i>Reference Site 3</i>	<i>Reference Site 4</i>	<i>Reference Site 5</i>
Habitat Parameters	45b-152	45b-156	45b-258	45b-357	HH22
Epifaunal Substrate/Available Cover	13	19	8	15	18
Embeddedness	13	--	5	10	--
Velocity/Depth Regime	13	--	16	17	--
Pool Substrate Characterization	--	16	--	--	16
Pool Variability	--	16	--	--	16
Sediment Deposition	13	8	6	14	15
Channel Flow Status	13	18	18	17	13
Channel Alteration	16	19	18	17	15
Frequency of Riffles (or bends)	15	--	12	16	--
Channel Sinuosity	--	15	--	--	15
Bank Stability (Left Bank)	7	7	6	6	8
Bank Stability (Right Bank)	9	7	6	5	8
Vegetative Protection (Left Bank)	8	8	7	8	9
Vegetative Protection (Right Bank)	9	8	8	8	9
Riparian Vegetative Zone Width (Left Bank)	7	10	9	10	10
Riparian Vegetative Zone Width (Right Bank)	9	10	9	10	5
Total Habitat Score	145	161	128	153	157



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams
Reference Site 1 (45b-152)

Order	Family	Final ID	Individuals	TCR	Stage
		Nemata	1		A
Architaenioglossa	Viviparidae	<i>Campeloma limum</i>	2		A
Basommatophora	Physidae	<i>Physella sp.</i>	3		A
Coleoptera	Curculionidae	<i>Anchytarsus bicolor</i>	9		L
	Dryopidae	<i>Helichus fastigiatus</i>	1		A
	Dytiscidae	Hydroporini	3		L
	Elmidae	<i>Dubiraphia sp.</i>	2		L
		<i>Oulimnius latiusculus</i>	1		A
		<i>Oulimnius latiusculus</i>	6		L
		<i>Stenelmis sp.</i>	1		L
	Helodidae (=Scirtidae)	<i>Helodidae (=Scirtidae) sp.</i>	3		L
	Hydrophilidae	<i>Laccobius sp.</i>	1		A
	Psephenidae	<i>Ectopria sp.</i>	1		L
Diptera	Ceratopogonidae	<i>Bezzia complex</i>	2		X
	Chironomidae	<i>Ablabesmyia mallochi</i>	3		X
		<i>Ablabesmyia rhamphe group</i>	1		X
		<i>Chironomus sp.</i>	1		X
		<i>Clinotanytus sp.</i>	1		X
		<i>Microtendipes pedellus group</i>	15		X
		<i>Nanocladius sp.</i>	1		X
		<i>Paramerina sp.</i>	1		X
		<i>Parametriocnemus sp.</i>	3		X
		<i>Paratanytarsus sp.</i>	1		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 1 (45b-152) Continued

Order	Family	Final ID	Individuals	TCR	Stage
Diptera	Chironomidae	<i>Phaenopsectra punctipes</i> group	1		X
		<i>Polypedilum aviceps</i>	7		X
		<i>Polypedilum illinoense</i> group	3		X
		<i>Potthastia longimana</i>	2		X
		<i>Procladius</i> sp.	2		X
		<i>Rheocricotopus pauciseta</i>	4		X
		<i>Rheotanytarsus exiguus</i> group	2		X
		<i>Stempellina</i> B	1		X
		<i>Stempellinella</i> A	6		X
		<i>Stictochironomus</i> sp.	2		X
		<i>Tanytarsus</i> M	1		X
		<i>Tanytarsus</i> T	1		X
		<i>Tanytarsus</i> U	1		X
		<i>Thienemanniella xena</i>	1		X
		<i>Tribelos fuscicorne</i>	1	TCR-2	X
		<i>Tribelos jucundus</i>	1		X
		<i>Zavrelimyia</i> sp.	2		X
	Simuliidae	<i>Simulium</i> sp.	5		X
	Tabanidae	<i>Chrysops</i> sp.	2		X
	Tipulidae	<i>Hexatoma</i> sp.	9		X
		<i>Limnophila</i> sp.	1		X
		<i>Tipula</i> sp.	6		X
Ephemeroptera	Baetidae	<i>Baetis flavistriga</i>	1		X
	Baetidae	<i>Plauditus</i> sp.	1		X
	Ephemerellidae	<i>Eurylophella</i> sp.	2		X
	Ephemeridae	<i>Hexagenia</i> sp.	1		X
		<i>Hexagenia limbata</i>	1		X
	Heptageniidae	Heptageniidae	2		X
		<i>Stenonema</i> sp.	18		X
	Isonychiidae	<i>Isonychia</i> sp.	7		X
	Leptophlebiidae	Leptophlebiidae	1		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 1 (45b-152) Continued

Order	Family	Final ID	Individuals	TCR	Stage
Haplotaxida	Lumbricidae	Lumbricidae	2	TCR-3	A
Odonata	Calopterygidae	<i>Calopteryx sp.</i>	1		X
Plecoptera	Capniidae	Capniidae	29		X
	Taeniopterygidae	<i>Taeniopteryx sp.</i>	2		X
Trichoptera	Hydropsychidae	<i>Cheumatopsyche sp.</i>	17		X
		<i>Diplectrona modesta</i>	2		X
		<i>Hydropsyche depravata</i>	1		X
		Hydropsychidae	2		X
	Leptoceridae	<i>Triaenodes sp.</i>	1		X
	Limnephilidae	Limnephilidae	3		X
	Philopotamidae	<i>Chimarra sp.</i>	9		X
	Polycentropodidae	<i>Nyctiophylax sp.</i>	1		X
	Rhyacophilidae	Rhyacophilidae	1		X
Veneroida	Corbiculidae	<i>Corbicula fluminea</i>	8		A
	Pisidiidae	Pisidiidae	2		A
		<i>Pisidium sp.</i>	1		A
		Total Individuals	240		



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA

PIEDMONT (45)

Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams

Reference Site 2 (45b-156)

Order	Family	Final ID	Individuals	TCR	Stage
Amphipoda	Crangonyctidae	<i>Crangonyx sp.</i>	5		A
	Talitridae	<i>Hyalella azteca</i>	26		A
Architaenioglossa	Viviparidae	<i>Campeloma limum</i>	4		A
Basommatophora	Lymnaeidae	Lymnaeidae	2		A
	Physidae	<i>Physella sp.</i>	3		A
	Planorbidae	<i>Menetus dilatatus</i>	5		A
Coleoptera	Dytiscidae	<i>Hydroporus (Neoporus) sp.</i>	6		A
		<i>Hydroporus mellitus</i>	2	TCR-2	A
	Elmidae	<i>Dubiraphia sp.</i>	1		A
		<i>Dubiraphia sp.</i>	3		L
	Haliplidae	<i>Peltodytes sp.</i>	1		A
	Helodidae (=Scirtidae)	<i>Helodidae (=Scirtidae) sp.</i>	2		L
Decapoda	Cambaridae	Cambarinae	2		I
Diptera	Ceratopogonidae	<i>Bezzia complex</i>	19		X
		Ceratopogonidae	14		X
		<i>Dasyhelea sp.</i>	2		X
	Chironomidae	<i>Ablabesmyia mallochi</i>	2		X
		<i>Ablabesmyia rhamphe group</i>	3		X
		<i>Bryophaenocladus sp.</i>	2	TCR-2	X
		<i>Conchapelopia sp.</i>	1		X
		<i>Dicrotendipes sp.</i>	2		X
		<i>Dicrotendipes modestus</i>	6		X
		<i>Hydrobaenus sp.</i>	2		X
		<i>Kiefferulus sp.</i>	2		X
		<i>Limnophyes sp.</i>	1		X
		<i>Mesocricotopus loticus</i>	1		X
		<i>Orthocladus sp.</i>	3		X
		<i>Parachironomus tenuicaudatus complex</i>	1		X
		<i>Parakiefferiella sp.</i>	1		X
		<i>Paramerina sp.</i>	2		X
		<i>Paratendipes sp.</i>	1		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 2 (45b-156) Continued

Order	Family	Final ID	Individuals	TCR	Stage
Diptera	Chironomidae	<i>Phaenopsectra punctipes</i> group	1		X
		<i>Polypedilum illinoense</i> group	1		X
		<i>Procladius</i> sp.	5		X
		<i>Rheocricotopus glabricollis</i>	1		X
		<i>Stenochironomus</i> sp.	4		X
		<i>Stictochironomus</i> sp.	2		X
		<i>Tanytarsus</i> N	1		X
		<i>Tanytarsus</i> V	2		X
		<i>Tribelos jucundus</i>	4		X
	Dolichopodidae	Dolichopodidae	1		X
	Tabanidae	Tabanidae	1		X
	Tipulidae	<i>Erioptera</i> sp.	5		X
		<i>Gonomyia</i> sp.	8		X
		<i>Tipula</i> sp.	1		X
Ephemeroptera	Caenidae	<i>Caenis</i> sp.	19		X
	Ephemerellidae	<i>Eurylophella</i> sp.	4		X
	Heptageniidae	Heptageniidae	2		X
		<i>Stenacron</i> sp.	1		X
Isopoda	Asellidae	Caecidotea	4		A
Odonata	Coenagrionidae	Coenagrionidae	3		X
		<i>Enallagma</i> sp.	7		X
		<i>Ischnura</i> sp.	2		X
	Corduliidae	<i>Somatochlora</i> sp.	4		X
	Gomphidae	<i>Gomphus</i> sp.	1		X
Plecoptera	Taeniopterygidae	<i>Taeniopteryx</i> sp.	3		X
Trichoptera	Leptoceridae	Leptoceridae	1		X
		<i>Triaenodes</i> sp.	1		X
	Limnephilidae	Limnephilidae	7		X
	Polycentropodidae	Polycentropodidae	1		X
Veneroida	Corbiculidae	<i>Corbicula fluminea</i>	1		A
	Pisidiidae	Pisidiidae	3		A
		<i>Pisidium</i> sp.	2		A
		Total Individuals	230		



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams
Reference Site 3 (45b-258)

Order	Family	Final ID	Individuals	TCR	Stage
Basommatophora	Lymnaeidae	Lymnaeidae	1		A
	Physidae	<i>Physella</i> sp.	3		A
Coleoptera	Dryopidae	<i>Helichus fastigiatus</i>	2		A
		<i>Helichus lithophilus</i>	1		A
	Dytiscidae	Hydroporini	1		L
	Elmidae	<i>Ancyronyx variegatus</i>	3		L
		<i>Dubiraphia</i> sp.	8		L
		<i>Macronychus glabratus</i>	4		A
		<i>Macronychus glabratus</i>	3		L
		<i>Stenelmis</i> sp.	1		A
		<i>Stenelmis</i> sp.	1		L
	Gyrinidae	<i>Dineutus ciliatus</i>	1		A
Diptera	Ceratopogonidae	<i>Bezzia</i> complex	2		X
		Ceratopogonidae	3		X
		<i>Dasyhelea</i> sp.	1		X
	Chironomidae	<i>Ablabesmyia mallochi</i>	5		X
		<i>Ablabesmyia rhamphe</i> group	3		X
		<i>Chironomus</i> sp.	5		X
		<i>Conchapelopia</i> sp.	4		X
		<i>Corynoneura</i> sp.	1		X
		<i>Dicrotendipes</i> sp.	1		X
		<i>Diplocladius cultriger</i>	1		X
		<i>Djalmabatista pulcher</i>	2		X
		<i>Eukiefferiella claripennis</i> group	1		X
		<i>Labrundinia pilosella</i>	1		X
		<i>Limnophyes</i> sp.	1		X
		<i>Meropelopia</i> sp.	1		X
		<i>Micropsectra</i> sp.	2		X
		<i>Nanocladius crassicornus/rectinervis</i> complex	1		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 3 (45b-258) Continued

Order	Family	Final ID	Individuals	TCR	Stage
Diptera	Chironomidae	<i>Orthocladius sp.</i>	6		X
		<i>Orthocladius robacki</i>	1	TCR-2	X
		<i>Parametriocnemus sp.</i>	4		X
		<i>Paratanytarsus sp.</i>	1		X
		<i>Polypedilum aviceps</i>	1		X
		<i>Procladius sp.</i>	2		X
		<i>Rheotanytarsus sp.</i>	2		X
		<i>Rheotanytarsus exiguus group</i>	3		X
		<i>Stempellinella A</i>	1		X
		<i>Stenochironomus sp.</i>	1		X
		<i>Tanytarsus sp.</i>	1		X
		<i>Tanytarsus M</i>	1		X
		<i>Thienemanniella xena</i>	1		X
		<i>Tribelos jucundus</i>	6		X
		<i>Zavreliomyia sp.</i>	1		X
	Simuliidae	<i>Simulium sp.</i>	5		X
	Tipulidae	<i>Tipula sp.</i>	2		X
		Tipulidae	2		X
Ephemeroptera	Ephemerellidae	<i>Ephemerella sp.</i>	2		X
		<i>Eurylophella sp.</i>	2		X
	Ephemeridae	<i>Hexagenia limbata</i>	1		X
	Heptageniidae	Heptageniidae	1		X
		<i>Stenonema sp.</i>	3		X
		<i>Stenonema smithae</i>	2	TCR-2	X
	Isonychiidae	<i>Isonychia sp.</i>	1		X
	Leptophlebiidae	Leptophlebiidae	1		X
Haplotaxida	Lumbricidae	Lumbricidae	2		A
Megaloptera	Corydalidae	<i>Nigronia serricornis</i>	1		X
Odonata	Aeshnidae	<i>Boyeria vinosa</i>	1		X
	Calopterygidae	<i>Calopteryx sp.</i>	1		L
	Coenagrionidae	Coenagrionidae	1		X
	Gomphidae	<i>Progomphus obscurus</i>	1		X
Plecoptera	Capniidae	<i>Allocapnia sp.</i>	1		X
		Capniidae	1		X
	Nemouridae	Nemouridae	12		X
	Perlodidae	<i>Clioperla clio</i>	2	TCR-2	X
	Taeniopterygidae	Taeniopterygidae	6		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 3 (45b-258)Continued

Order	Family	Final ID	Individuals	TCR	Stage
Plecoptera	Taeniopterygidae	<i>Taeniopteryx sp.</i>	7		X
Trichoptera	Hydropsychidae	<i>Cheumatopsyche sp.</i>	4		X
	Limnephilidae	Limnephilidae	2		X
		<i>Pycnopsyche sp.</i>	1		X
	Corbiculidae	<i>Corbicula fluminea</i>	6		A
Veneroida	Pisidiidae	Pisidiidae	1		A
		<i>Pisidium sp.</i>	3		A
		Total Individuals	171		



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams
Reference Site 4 (45b-357)

Order	Family	Final ID	Individuals	TCR	Stage
		Oligochaeta	8	TCR-3	A
Coleoptera	Curculionidae	<i>Anchytarsus bicolor</i>	1		L
	Dytiscidae	Hydroporini	2		L
	Elmidae	<i>Ancyronyx variegatus</i>	1		L
		<i>Dubiraphia sp.</i>	3		A
		<i>Dubiraphia sp.</i>	12		L
		<i>Stenelmis sp.</i>	1		L
	Psephenidae	<i>Ectopria sp.</i>	1		X
Decapoda	Cambaridae	Cambarinae	3		I
Diptera	Chironomidae	<i>Ablabesmyia mallochi</i>	1		X
		<i>Conchapelopia sp.</i>	1		X
		<i>Diplocladius cultriger</i>	1		X
		<i>Eukiefferiella claripennis group</i>	2		X
		<i>Labrundinia pilosella</i>	1		X
		<i>Microtendipes pedellus group</i>	26		X
		<i>Orthocladius robacki</i>	2		X
		<i>Orthocladius rubicundus</i>	9	TCR-3	X
		<i>Parametriocnemus sp.</i>	5		X
		<i>Phaenopsectra punctipes group</i>	1		X
		<i>Polypedilum aviceps</i>	2		X
		<i>Rheotanytarsus exiguus group</i>	3		X
		<i>Tribelos jucundus</i>	3		X
		<i>Zavrelimyia sinuosa complex</i>	3		X
		<i>Zavrelimyia thryptica complex</i>	3		X
	Simuliidae	<i>Prosimulium sp.</i>	1		X
		Simuliidae	1		X
		<i>Simulium sp.</i>	25		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 4 (45b-357) Continued

Order	Family	Final ID	Individuals	TCR	Stage
Diptera	Tipulidae	<i>Tipula sp.</i>	3		X
Ephemeroptera	Baetidae	<i>Baetis sp.</i>	1		X
		<i>Baetis pluto</i>	1		X
	Caenidae	<i>Caenis sp.</i>	18		X
	Heptageniidae	<i>Stenonema sp.</i>	4		X
	Isonychiidae	<i>Isonychia sp.</i>	1		X
Hoplonemertea	Tetrastemmatidae	<i>Prostoma sp.</i>	1		A
Isopoda	Asellidae	<i>Lirceus sp.</i>	1		A
Megaloptera	Corydalidae	<i>Nigronia serricornis</i>	1		X
Odonata	Gomphidae	Gomphidae	1		X
Plecoptera	Capniidae	<i>Allocapnia sp.</i>	4		X
		Capniidae	4		X
	Taeniopterygidae	Taeniopterygidae	2		X
		<i>Taeniopteryx sp.</i>	1		X
Trichoptera	Dipseudopsidae	<i>Phylocentropus sp.</i>	1		X
	Hydropsychidae	<i>Cheumatopsyche sp.</i>	65		X
		<i>Hydropsyche depravata</i>	2		X
	Philopotamidae	<i>Chimarra sp.</i>	4		X
	Rhyacophilidae	<i>Rhyacophila sp.</i>	1		X
Veneroida	Corbiculidae	<i>Corbicula fluminea</i>	2		A
Total Individuals			240		



GADNR/EPD MACROINVERTEBRATE REFERENCE DATA
PIEDMONT (45)
Southern Outer Piedmont - 45b Data

45b - Southern Outer Piedmont - reference streams
Reference Site 5 (HH22)

Order	Family	Final ID	Individuals	TCR	Stage
Amphipoda	Talitridae	<i>Hyalella azteca</i>	6		A
Coleoptera	Curculionidae	<i>Anchytarsus bicolor</i>	1		L
	Dryopidae	<i>Helichus fastigiatus</i>	1		A
	Dytiscidae	Hydroporini	2		L
		<i>Hydroporus (Neoporus) sp.</i>	5	TCR-2	L
	Elmidae	<i>Dubiraphia sp.</i>	1		A
		<i>Dubiraphia sp.</i>	5		L
		<i>Macronychus glabratus</i>	1		L
Decapoda	Cambaridae	Cambarinae	1		I
Diptera	Chironomidae	<i>Ablabesmyia mallochii</i>	8		X
		<i>Ablabesmyia rhamphe group</i>	3		X
		<i>Conchapelopia sp.</i>	4		X
		<i>Corynoneura sp.</i>	5		X
		<i>Cryptochironomus sp.</i>	1		X
		<i>Diplocladius cultriger</i>	1		X
		<i>Limnophyes sp.</i>	2		X
		<i>Microtendipes pedellus group</i>	9		X
		<i>Nanocladius sp.</i>	1		X
		<i>Nanocladius crassicornus/rectinervis complex</i>	2		X
		<i>Parametriocnemus sp.</i>	2		X
		<i>Paratendipes albimanus</i>	7		X
		<i>Polypedilum aviceps</i>	8		X
		<i>Polypedilum flavum</i>	3		X
		<i>Polypedilum illinoense group</i>	7		X
		<i>Rheocricotopus robacki</i>	1		X
		<i>Rheotanytarsus exiguus group</i>	2		X

* continued on next page

45b - Southern Outer Piedmont - reference streams
Reference Site 5 (HH22)

Order	Family	Final ID	Individuals	TCR	Stage
Diptera	Chironomidae	<i>Stempellinella A</i>	2		X
		<i>Stictochironomus sp.</i>	2		X
		<i>Tanytarsus C</i>	1		X
		<i>Tanytarsus M</i>	1		X
		<i>Thienemanniella xena</i>	2		X
		<i>Tribelos jucundus</i>	8		X
		<i>Zavrelimyia thryptica complex</i>	1		X
Ephemeroptera	Baetidae	<i>Baetis flavistriga</i>	1		X
	Caenidae	<i>Caenis sp.</i>	59		X
	Heptageniidae	<i>Stenacron sp.</i>	3		X
		<i>Stenonema sp.</i>	6		X
	Leptophlebiidae	Leptophlebiidae	6		X
Isopoda	Asellidae	<i>Caecidotea</i>	3		A
Megaloptera	Sialidae	<i>Sialis sp.</i>	1		X
Odonata	Aeshnidae	<i>Aeshna sp.</i>	1	TCR-2	X
	Calopterygidae	<i>Calopteryx sp.</i>	1		X
	Coenagrionidae	<i>Argia sp.</i>	2		X
Plecoptera	Capniidae	Capniidae	26		X
Trichoptera	Calamoceratidae	<i>Anisocentropus pyraloides</i>	1		X
	Hydropsychidae	<i>Cheumatopsyche sp.</i>	16		X
		<i>Hydropsyche sp.</i>	1		X
	Philopotamidae	<i>Chimarra sp.</i>	5		X
	Polycentropodidae	<i>Nyctiophylax moestus</i>	1		X
		<i>Polycentropus sp.</i>	1		X
		Total Individuals	240		