

**CHESAPEAKE BAY WATER QUALITY
MONITORING PROGRAM**

**LONG-TERM BENTHIC MONITORING
AND ASSESSMENT COMPONENT
LEVEL I COMPREHENSIVE REPORT**

JULY 1984 - DECEMBER 2009 (VOLUME 2)

Prepared for

Maryland Department of Natural Resources
Resource Assessment Service
Tidewater Ecosystem Assessments
Annapolis, Maryland

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DATA SUMMARY A

**BENTHIC ENVIRONMENT AND COMMUNITY
COMPOSITION AT FIXED SITES:
SUMMER 2009**

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 001		Rep: 01	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 10:32:24	
BOTTOM ENVIRONMENT					
Depth (m): 1.8		Salinity (ppt): 14.58		Temperature (C): 23.01	
Dissolved Oxygen (mg/l): 7.4		Sediment Silt-Clay (%): 1.52		Total Carbon (%): 0.32	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.67		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.25	1	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	640	1	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	0.08	1	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	6.25	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	12.50				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Gemma gemma		80		0.00200	
Geukensia demissa (Epi)		40		0.00200	
Heteromastus filiformis		40		0.00800	
Lepidactylus dytiscus		80		0.03200	
Macoma mitchelli		40		0.01200	
Micrura leidyi		40		0.00200	
Paraonis fulgens		320		0.01600	
Tubificoides spp.		40		0.00400	
Total Abundance w/ Epi.		680			
Total Abundance w/o Epi.		640			
Number of Taxa w/ Epi.		8			
Number of Taxa w/o Epi.		7			
Total Biomass w/ Epi.				0.07800	
Total Biomass w/o Epi.				0.07600	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 001		Rep: 02	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 10:32:24	
BOTTOM ENVIRONMENT					
Depth (m): 1.8		Salinity (ppt): 14.58		Temperature (C): 23.01	
Dissolved Oxygen (mg/l): 7.4		Sediment Silt-Clay (%): 1.52		Total Carbon (%): 0.32	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.00		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.76	1	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	1360	3	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	0.47	1	Pollution Sensitive Species Abundance (%)	2.94	1
Carnivore-Omnivore Abundance (%)	5.88	1	Pollution Sensitive Species Biomass (%)	1.69	
Deep Deposit Feeder Abundance (%)	2.94				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	40		0.00200		
Glycera dibranchiata	40		0.39600		
Heteromastus filiformis	40		0.00800		
Macoma balthica	40		0.00800		
Paraonis fulgens	1200		0.06000		
Total Abundance w/ Epi.	1360				
Total Abundance w/o Epi.	1360				
Number of Taxa w/ Epi.	5				
Number of Taxa w/o Epi.	5				
Total Biomass w/ Epi.			0.47400		
Total Biomass w/o Epi.			0.47400		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 001		Rep: 03	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 10:32:24	
BOTTOM ENVIRONMENT					
Depth (m): 1.8		Salinity (ppt): 14.58		Temperature (C): 23.01	
Dissolved Oxygen (mg/l): 7.4		Sediment Silt-Clay (%): 1.52		Total Carbon (%): 0.32	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.33		Condition: Degraded		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.37	1	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	600	1	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	12.12	5	Pollution Sensitive Species Abundance (%)	6.67	1
Carnivore-Omnivore Abundance (%)	13.33	1	Pollution Sensitive Species Biomass (%)	1.16	
Deep Deposit Feeder Abundance (%)	6.67				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Glycera dibranchiata	40		11.74800		
Heteromastus filiformis	40		0.04000		
Marenzelleria viridis	40		0.14000		
Micrura leidyi	40		0.16800		
Paraonis fulgens	440		0.02400		
Total Abundance w/ Epi.	600				
Total Abundance w/o Epi.	600				
Number of Taxa w/ Epi.	5				
Number of Taxa w/o Epi.	5				
Total Biomass w/ Epi.			12.12000		
Total Biomass w/o Epi.			12.12000		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Calvert Cliffs Discharge		Station: 006		Rep: 01	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 11:03:26	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 14.37		Temperature (C): 23.33	
Dissolved Oxygen (mg/l): 8.8		Sediment Silt-Clay (%): 0.78		Total Carbon (%): 0.05	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.73	3	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	360	1	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	0.21	1	Pollution Sensitive Species Abundance (%)	44.44	3
Carnivore-Omnivore Abundance (%)	44.44	5	Pollution Sensitive Species Biomass (%)	38.46	
Deep Deposit Feeder Abundance (%)	22.22				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Gemma gemma	40		0.01200		
Glycinde solitaria	80		0.00400		
Haminoea solitaria	40		0.08400		
Micrura leidy	40		0.02400		
Spiochaetopterus costarum	40		0.03600		
Spiophanes bombyx	40		0.04000		
Tubificoides spp.	80		0.00800		
Total Abundance w/ Epi.	360				
Total Abundance w/o Epi.	360				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			0.20800		
Total Biomass w/o Epi.			0.20800		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Calvert Cliffs Discharge		Station: 006		Rep: 02	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 11:03:26	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 14.37		Temperature (C): 23.33	
Dissolved Oxygen (mg/l): 8.8		Sediment Silt-Clay (%): 0.78		Total Carbon (%): 0.05	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.57	3	Pollution Indicative Species Abundance (%)	15.38	3
Abundance (#/m2)	520	1	Pollution Indicative Species Biomass (%)	11.36	
Biomass (g/m2)	1.44	3	Pollution Sensitive Species Abundance (%)	23.08	3
Carnivore-Omnivore Abundance (%)	38.46	5	Pollution Sensitive Species Biomass (%)	2.22	
Deep Deposit Feeder Abundance (%)	7.69				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Gemma gemma	160		0.04400		
Glycinde solitaria	120		0.03200		
Heteromastus filiformis	40		0.06000		
Laeonereis culveri	40		0.33600		
Macoma mitchelli	40		0.02000		
Micrura leidyi	40		0.78800		
Mulinia lateralis	80		0.16400		
Stylochus ellipticus (Epi)	40		0.05200		
Total Abundance w/ Epi.	560				
Total Abundance w/o Epi.	520				
Number of Taxa w/ Epi.	8				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			1.49600		
Total Biomass w/o Epi.			1.44400		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Calvert Cliffs Discharge		Station: 006		Rep: 03	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 11:03:26	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 14.37		Temperature (C): 23.33	
Dissolved Oxygen (mg/l): 8.8		Sediment Silt-Clay (%): 0.78		Total Carbon (%): 0.05	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.30	1	Pollution Indicative Species Abundance (%)	4.76	5
Abundance (#/m2)	840	1	Pollution Indicative Species Biomass (%)	4.41	
Biomass (g/m2)	2.81	3	Pollution Sensitive Species Abundance (%)	28.57	3
Carnivore-Omnivore Abundance (%)	42.86	5	Pollution Sensitive Species Biomass (%)	1.28	
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	40		0.00800		
Gemma gemma	280		0.01600		
Glycinde solitaria	240		0.03600		
Macoma mitchelli	80		0.00200		
Micrura leidyi	80		2.61200		
Mulinia lateralis	40		0.12400		
Paraonis fulgens	80		0.01200		
Total Abundance w/ Epi.	840				
Total Abundance w/o Epi.	840				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			2.81000		
Total Biomass w/o Epi.			2.81000		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 015		Rep: 01	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 12:26:15	
BOTTOM ENVIRONMENT					
Depth (m): 2.9		Salinity (ppt): 14.05		Temperature (C): 22.88	
Dissolved Oxygen (mg/l): 8.0		Sediment Silt-Clay (%): 1.45		Total Carbon (%): 0.09	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.67		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.87	3	Pollution Indicative Species Abundance (%)	36.67	1
Abundance (#/m2)	1200	3	Pollution Indicative Species Biomass (%)	39.31	
Biomass (g/m2)	0.81	1	Pollution Sensitive Species Abundance (%)	3.33	1
Carnivore-Omnivore Abundance (%)	13.33	1	Pollution Sensitive Species Biomass (%)	0.49	
Deep Deposit Feeder Abundance (%)	23.33				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	40		0.02400		
Gemma gemma	80		0.00400		
Glycinde solitaria	40		0.00400		
Heteromastus filiformis	160		0.06800		
Macoma mitchelli	240		0.30000		
Micrura leidyi	40		0.08400		
Mulinia lateralis	320		0.31200		
Neanthes succinea	40		0.00200		
Streblospio benedicti	120		0.00800		
Tubificoides spp.	120		0.00800		
Total Abundance w/ Epi.	1200				
Total Abundance w/o Epi.	1200				
Number of Taxa w/ Epi.	10				
Number of Taxa w/o Epi.	10				
Total Biomass w/ Epi.			0.81400		
Total Biomass w/o Epi.			0.81400		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 015		Rep: 02	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 12:26:15	
BOTTOM ENVIRONMENT					
Depth (m): 2.9		Salinity (ppt): 14.05		Temperature (C): 22.88	
Dissolved Oxygen (mg/l): 8.0		Sediment Silt-Clay (%): 1.45		Total Carbon (%): 0.09	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.33		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.37	1	Pollution Indicative Species Abundance (%)	29.17	1
Abundance (#/m2)	960	1	Pollution Indicative Species Biomass (%)	8.96	
Biomass (g/m2)	2.14	3	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	8.33	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	25.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Gemma gemma	40		0.04400		
Heteromastus filiformis	200		0.07600		
Macoma mitchelli	320		0.55200		
Micrura leidyi	80		1.27600		
Mulinia lateralis	240		0.18800		
Streblospio benedicti	40		0.00400		
Tubificoides spp.	40		0.00200		
Total Abundance w/ Epi.	960				
Total Abundance w/o Epi.	960				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			2.14200		
Total Biomass w/o Epi.			2.14200		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 015		Rep: 03	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 15SEP09	
		Sampled Area: 0.025 sq.m		Time: 12:26:15	
BOTTOM ENVIRONMENT					
Depth (m): 2.9		Salinity (ppt): 14.05		Temperature (C): 22.88	
Dissolved Oxygen (mg/l): 8.0		Sediment Silt-Clay (%): 1.45		Total Carbon (%): 0.09	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.67		Condition: Marginal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.80	3	Pollution Indicative Species Abundance (%)	21.43	3
Abundance (#/m2)	1680	5	Pollution Indicative Species Biomass (%)	3.79	
Biomass (g/m2)	1.64	3	Pollution Sensitive Species Abundance (%)	4.76	1
Carnivore-Omnivore Abundance (%)	4.76	1	Pollution Sensitive Species Biomass (%)	57.46	
Deep Deposit Feeder Abundance (%)	26.19				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Gemma gemma	200		0.07200		
Glycinde solitaria	40		0.02000		
Heteromastus filiformis	120		0.02400		
Lepidactylus dytiscus	40		0.00400		
Macoma mitchelli	520		0.10000		
Marenzelleria viridis	40		0.92000		
Micrura leidyi	40		0.43200		
Mulinia lateralis	240		0.06000		
Streblospio benedicti	120		0.00200		
Tubificoides spp.	320		0.00200		
Total Abundance w/ Epi.	1680				
Total Abundance w/o Epi.	1680				
Number of Taxa w/ Epi.	10				
Number of Taxa w/o Epi.	10				
Total Biomass w/ Epi.			1.63600		
Total Biomass w/o Epi.			1.63600		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 022		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 10:11:51	
BOTTOM ENVIRONMENT					
Depth (m): 9.3		Salinity (ppt): 11.18		Temperature (C): 26.51	
Dissolved Oxygen (mg/l): 0.4		Sediment Silt-Clay (%): 88.87		Total Carbon (%): 2.3	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	1
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)	100.00	
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	100.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Eteone heteropoda	45		0.00225		
Total Abundance w/ Epi.	45				
Total Abundance w/o Epi.	45				
Number of Taxa w/ Epi.	1				
Number of Taxa w/o Epi.	1				
Total Biomass w/ Epi.			0.00225		
Total Biomass w/o Epi.			0.00225		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 022		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 10:11:51	
BOTTOM ENVIRONMENT					
Depth (m): 9.3		Salinity (ppt): 11.18		Temperature (C): 26.51	
Dissolved Oxygen (mg/l): 0.4		Sediment Silt-Clay (%): 88.87		Total Carbon (%): 2.3	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.00	1	Pollution Indicative Species Abundance (%)	50.00	1
Abundance (#/m2)	90	1	Pollution Indicative Species Biomass (%)	50.00	
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Macoma mitchelli	45		0.00225		
Streblospio benedicti	45		0.00225		
Total Abundance w/ Epi.	90				
Total Abundance w/o Epi.	90				
Number of Taxa w/ Epi.	2				
Number of Taxa w/o Epi.	2				
Total Biomass w/ Epi.			0.00450		
Total Biomass w/o Epi.			0.00450		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 022		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 10:11:51	
BOTTOM ENVIRONMENT					
Depth (m): 9.3		Salinity (ppt): 11.18		Temperature (C): 26.51	
Dissolved Oxygen (mg/l): 0.4		Sediment Silt-Clay (%): 88.87		Total Carbon (%): 2.3	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	1
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)	100.00	
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Streblospio benedicti	45		0.00450		
Total Abundance w/ Epi.	45				
Total Abundance w/o Epi.	45				
Number of Taxa w/ Epi.	1				
Number of Taxa w/o Epi.	1				
Total Biomass w/ Epi.			0.00450		
Total Biomass w/o Epi.			0.00450		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 023		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:42:49	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 8.95		Temperature (C): 27.80	
Dissolved Oxygen (mg/l): 3.0		Sediment Silt-Clay (%): 67.74		Total Carbon (%): 2.62	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.40	1	Pollution Indicative Species Abundance (%)	12.82	3
Abundance (#/m2)	1755	5	Pollution Indicative Species Biomass (%)	4.31	
Biomass (g/m2)	9.41	5	Pollution Sensitive Species Abundance (%)	74.36	
Carnivore-Omnivore Abundance (%)	7.69		Pollution Sensitive Species Biomass (%)	88.07	5
Deep Deposit Feeder Abundance (%)	7.69				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Eteone heteropoda	45		0.01350		
Macoma balthica	1305		8.28450		
Mulinia lateralis	90		0.38700		
Neanthes succinea	90		0.71550		
Streblospio benedicti	90		0.00450		
Tubificoides spp.	135		0.00225		
Total Abundance w/ Epi.	1755				
Total Abundance w/o Epi.	1755				
Number of Taxa w/ Epi.	6				
Number of Taxa w/o Epi.	6				
Total Biomass w/ Epi.			9.40725		
Total Biomass w/o Epi.			9.40725		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 023		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:42:49	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 8.95		Temperature (C): 27.80	
Dissolved Oxygen (mg/l): 3.0		Sediment Silt-Clay (%): 67.74		Total Carbon (%): 2.62	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.20		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.47	1	Pollution Indicative Species Abundance (%)	5.88	5
Abundance (#/m2)	2295	5	Pollution Indicative Species Biomass (%)	2.75	
Biomass (g/m2)	8.84	5	Pollution Sensitive Species Abundance (%)	74.51	
Carnivore-Omnivore Abundance (%)	11.76		Pollution Sensitive Species Biomass (%)	96.54	5
Deep Deposit Feeder Abundance (%)	5.88				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.02700		
Eteone heteropoda	45		0.00225		
Leptocheirus plumulosus	135		0.00450		
Macoma balthica	1710		8.53650		
Mulinia lateralis	45		0.23850		
Neanthes succinea	180		0.02700		
Tubificidae imm w/o cap chaetae	45		0.00225		
Tubificoides spp.	90		0.00450		
Total Abundance w/ Epi.	2295				
Total Abundance w/o Epi.	2295				
Number of Taxa w/ Epi.	8				
Number of Taxa w/o Epi.	8				
Total Biomass w/ Epi.			8.84250		
Total Biomass w/o Epi.			8.84250		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 023		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:42:49	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 8.95		Temperature (C): 27.80	
Dissolved Oxygen (mg/l): 3.0		Sediment Silt-Clay (%): 67.74		Total Carbon (%): 2.62	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.20		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.40	1	Pollution Indicative Species Abundance (%)	8.00	5
Abundance (#/m2)	2250	5	Pollution Indicative Species Biomass (%)	0.07	
Biomass (g/m2)	9.51	5	Pollution Sensitive Species Abundance (%)	78.00	
Carnivore-Omnivore Abundance (%)	8.00		Pollution Sensitive Species Biomass (%)	96.76	5
Deep Deposit Feeder Abundance (%)	4.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Eteone heteropoda	90		0.00225		
Macoma balthica	1710		9.14850		
Macoma mitchelli	135		0.18900		
Marenzelleria viridis	45		0.04950		
Neanthes succinea	90		0.10350		
Streblospio benedicti	90		0.00450		
Tubificoides spp.	90		0.00900		
Total Abundance w/ Epi.	2250				
Total Abundance w/o Epi.	2250				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			9.50625		
Total Biomass w/o Epi.			9.50625		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 024		Rep: 01	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 15:01:30	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 12.06		Temperature (C): 27.14	
Dissolved Oxygen (mg/l): 1.1		Sediment Silt-Clay (%): 93.82		Total Carbon (%): 2.68	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.33		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.57	3	Pollution Indicative Species Abundance (%)	15.38	
Abundance (#/m2)	1755	5	Pollution Indicative Species Biomass (%)	0.24	5
Biomass (g/m2)	4.75	5	Pollution Sensitive Species Abundance (%)	25.64	
Carnivore-Omnivore Abundance (%)	23.08	3	Pollution Sensitive Species Biomass (%)	87.53	5
Deep Deposit Feeder Abundance (%)	43.59				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	90		0.00900		
Heteromastus filiformis	135		0.19350		
Macoma balthica	450		4.15350		
Micrura leidyi	45		0.03600		
Neanthes succinea	270		0.33750		
Streblospio benedicti	135		0.00900		
Tubificidae imm w/o cap chaetae	135		0.00225		
Tubificoides spp.	495		0.00450		
Total Abundance w/ Epi.	1755				
Total Abundance w/o Epi.	1755				
Number of Taxa w/ Epi.	8				
Number of Taxa w/o Epi.	8				
Total Biomass w/ Epi.			4.74525		
Total Biomass w/o Epi.			4.74525		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 024		Rep: 02	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 15:01:30	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 12.06		Temperature (C): 27.14	
Dissolved Oxygen (mg/l): 1.1		Sediment Silt-Clay (%): 93.82		Total Carbon (%): 2.68	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.51	3	Pollution Indicative Species Abundance (%)	10.00	
Abundance (#/m2)	1350	3	Pollution Indicative Species Biomass (%)	7.84	3
Biomass (g/m2)	5.34	5	Pollution Sensitive Species Abundance (%)	36.67	
Carnivore-Omnivore Abundance (%)	33.33	5	Pollution Sensitive Species Biomass (%)	75.60	5
Deep Deposit Feeder Abundance (%)	23.33				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.02700		
Eteone heteropoda	90		0.00450		
Heteromastus filiformis	45		0.02250		
Macoma balthica	495		4.03650		
Macoma mitchelli	45		0.12600		
Micrura leidyi	90		0.04950		
Mulinia lateralis	45		0.41400		
Neanthes succinea	225		0.65700		
Tubificoides spp.	270		0.00225		
Total Abundance w/ Epi.	1350				
Total Abundance w/o Epi.	1350				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	9				
Total Biomass w/ Epi.			5.33925		
Total Biomass w/o Epi.			5.33925		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Mainstem		Station: 024		Rep: 03	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 15:01:30	
BOTTOM ENVIRONMENT					
Depth (m): 6.2		Salinity (ppt): 12.06		Temperature (C): 27.14	
Dissolved Oxygen (mg/l): 1.1		Sediment Silt-Clay (%): 93.82		Total Carbon (%): 2.68	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.33		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.62	3	Pollution Indicative Species Abundance (%)	13.51	
Abundance (#/m2)	1665	5	Pollution Indicative Species Biomass (%)	0.24	5
Biomass (g/m2)	10.40	3	Pollution Sensitive Species Abundance (%)	29.73	
Carnivore-Omnivore Abundance (%)	27.03	5	Pollution Sensitive Species Biomass (%)	96.73	5
Deep Deposit Feeder Abundance (%)	37.84				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	180		0.04050		
Eteone heteropoda	45		0.01350		
Heteromastus filiformis	45		0.02250		
Macoma balthica	495		10.06200		
Macoma mitchelli	45		0.02250		
Neanthes succinea	225		0.22500		
Streblospio benedicti	45		0.00900		
Tubificidae imm w/o cap chaetae	135		0.00225		
Tubificoides spp.	450		0.00450		
Total Abundance w/ Epi.	1665				
Total Abundance w/o Epi.	1665				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	9				
Total Biomass w/ Epi.			10.40175		
Total Biomass w/o Epi.			10.40175		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Western Shore		Station: 026		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 25AUG09	
		Sampled Area: 0.022 sq.m		Time: 10:50:12	
BOTTOM ENVIRONMENT					
Depth (m): 3.7		Salinity (ppt): 3.50		Temperature (C): 27.49	
Dissolved Oxygen (mg/l): 5.8		Sediment Silt-Clay (%): 96.07		Total Carbon (%): 3.41	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
		Value	Score	Value	Score
Shannon-Wiener Index		3.07	5	Pollution Indicative Species Abundance (%)	13.64 3
Abundance (#/m2)		1980	5	Pollution Indicative Species Biomass (%)	0.02
Biomass (g/m2)		97.09	1	Pollution Sensitive Species Abundance (%)	45.45
Carnivore-Omnivore Abundance (%)		15.91		Pollution Sensitive Species Biomass (%)	99.51 5
Deep Deposit Feeder Abundance (%)		9.09			
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Ameroculodes species complex		180		0.00450	
Carinoma tremaphoros		45		0.34650	
Cyathura polita		270		0.09900	
Heteromastus filiformis		45		0.02700	
Leptocheirus plumulosus		270			
Macoma mitchelli		135		0.02250	
Marenzelleria viridis		180		0.24300	
Melita nitida (Epi)		45		0.00225	
Rangia cuneata		450		96.27300	
Streblospio benedicti		270		0.01800	
Tubificoides spp.		135		0.00450	
Total Abundance w/ Epi.		2025			
Total Abundance w/o Epi.		1980			
Number of Taxa w/ Epi.		11			
Number of Taxa w/o Epi.		10			
Total Biomass w/ Epi.				97.09425	
Total Biomass w/o Epi.				97.09200	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Western Shore		Station: 026	Rep: 02
Gear: Wildco Box Corer		Habitat: Low Mesohaline	Date: 25AUG09
		Sampled Area: 0.022 sq.m	Time: 10:50:12
BOTTOM ENVIRONMENT			
Depth (m): 3.7	Salinity (ppt): 3.50	Temperature (C): 27.49	
Dissolved Oxygen (mg/l): 5.8	Sediment Silt-Clay (%): 96.07	Total Carbon (%): 3.41	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.40	Condition: Meets Goal		# Attributes Scored: 5
	Value	Score	Value
Shannon-Wiener Index	2.71	5	
Abundance (#/m2)	2790	3	Pollution Indicative Species Abundance (%) 16.13
Biomass (g/m2)	32.24	1	Pollution Indicative Species Biomass (%) 0.04
Carnivore-Omnivore Abundance (%)	3.23		Pollution Sensitive Species Abundance (%) 20.97
Deep Deposit Feeder Abundance (%)	19.35		Pollution Sensitive Species Biomass (%) 98.90
			5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	45	0.00225	
Cyathura polita	90	0.27450	
Heteromastus filiformis	90	0.10350	
Leptocheirus plumulosus	945		
Macoma mitchelli	225	0.09900	
Marenzelleria viridis	270	0.75150	
Melita nitida (Epi)	90	0.00450	
Rangia cuneata	225	30.86100	
Streblospio benedicti	450	0.01350	
Tubificoides spp.	450	0.00450	
Total Abundance w/ Epi.	2880		
Total Abundance w/o Epi.	2790		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		32.24475	
Total Biomass w/o Epi.		32.24025	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Western Shore		Station: 026		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 25AUG09	
		Sampled Area: 0.022 sq.m		Time: 10:50:12	
BOTTOM ENVIRONMENT					
Depth (m): 3.7		Salinity (ppt): 3.50		Temperature (C): 27.49	
Dissolved Oxygen (mg/l): 5.8		Sediment Silt-Clay (%): 96.07		Total Carbon (%): 3.41	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.67	5	Pollution Indicative Species Abundance (%)	4.35	5
Abundance (#/m2)	1035	3	Pollution Indicative Species Biomass (%)	0.03	
Biomass (g/m2)	48.10	1	Pollution Sensitive Species Abundance (%)	47.83	
Carnivore-Omnivore Abundance (%)	8.70		Pollution Sensitive Species Biomass (%)	99.45	5
Deep Deposit Feeder Abundance (%)	17.39				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Cyathura polita	90		0.04500		
Heteromastus filiformis	135		0.11250		
Leptocheirus plumulosus	270				
Macoma mitchelli	45		0.11250		
Marenzelleria viridis	270		0.36900		
Melita nitida (Epi)	45		0.00900		
Rangia cuneata	135		47.41650		
Streblospio benedicti	45		0.01350		
Tubificoides spp.	45		0.00900		
Total Abundance w/ Epi.	1080				
Total Abundance w/o Epi.	1035				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	8				
Total Biomass w/ Epi.			48.10500		
Total Biomass w/o Epi.			48.09600		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 029	Rep: 01
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 06OCT09
		Sampled Area: 0.022 sq.m	Time: 13:39:38
BOTTOM ENVIRONMENT			
Depth (m): 5.2	Salinity (ppt): 2.32	Temperature (C): 18.96	
Dissolved Oxygen (mg/l): 8.9	Sediment Silt-Clay (%): 64.71	Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.30		5
Abundance (#/m2)	2700	5	3
Deep Deposit Feeder Abundance (%)	20.00		3
Carnivore-Omnivore Abundance (%)	10.00	1	1
		Oligohaline Pollution Indicative Spp. Abund.	26.67
		Tolerance Score	7.16
		Oligohaline Pollution Sensitive Spp. Abund.	16.67
		Tanypodinae/Chironomidae Abundance Ratio	100.00
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Chaoborus punctipennis	45	0.00225	
Coelotanypus spp.	45	0.00225	
Corbicula fluminea	45	0.00225	
Cyathura polita	180	0.01350	
Gammarus daiberi (Epi)	45	0.02250	
Hobsonia florida	90	0.00225	
Marenzelleria viridis	450	0.31500	
Neomysis americana (Epi)	495	0.28350	
Polydora cornuta	90	0.00450	
Rangia cuneata	1215	137.64600	
Tubificidae imm w/o cap chaetae	540	0.00225	
Total Abundance w/ Epi.	3240		
Total Abundance w/o Epi.	2700		
Number of Taxa w/ Epi.	11		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		138.29625	
Total Biomass w/o Epi.		137.99025	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 029	Rep: 02
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 06OCT09
		Sampled Area: 0.022 sq.m	Time: 13:39:38
BOTTOM ENVIRONMENT			
Depth (m): 5.2	Salinity (ppt): 2.32	Temperature (C): 18.96	
Dissolved Oxygen (mg/l): 8.9	Sediment Silt-Clay (%): 64.71	Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.28		Score
Abundance (#/m2)	3870	3	Oligohaline Pollution Indicative Spp. Abund. 23.26 5
Deep Deposit Feeder Abundance (%)	19.77		Tolerance Score 7.12 3
Carnivore-Omnivore Abundance (%)	17.44	3	Oligohaline Pollution Sensitive Spp. Abund. 11.63 3
			Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Carinoma tremaphoros	45		0.25650
Coelotanypus spp.	90		0.00450
Cyathura polita	540		0.13050
Edotea triloba (Epi)	45		0.00225
Gammarus daiberi (Epi)	90		0.00900
Hobsonia florida	180		0.00450
Limnodrilus hoffmeisteri	45		0.00225
Marenzelleria viridis	450		0.16650
Mytilopsis leucophaeata (Epi)	45		0.00225
Oligochaeta			0.01350
Polydora cornuta	45		0.00225
Rangia cuneata	1755		188.86050
Tubificidae imm w/o cap chaetae *	720		0.00225
Total Abundance w/ Epi.	4050		
Total Abundance w/o Epi.	3870		
Number of Taxa w/ Epi.	11		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.			189.45675
Total Biomass w/o Epi.			189.44325

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 029	Rep: 03
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 06OCT09
		Sampled Area: 0.022 sq.m	Time: 13:39:38
BOTTOM ENVIRONMENT			
Depth (m): 5.2	Salinity (ppt): 2.32	Temperature (C): 18.96	
Dissolved Oxygen (mg/l): 8.9	Sediment Silt-Clay (%): 64.71	Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.67		Score
Abundance (#/m2)	1980	5	Oligohaline Pollution Indicative Spp. Abund. 36.36 3
Deep Deposit Feeder Abundance (%)	27.27		Tolerance Score 7.39 3
Carnivore-Omnivore Abundance (%)	29.55	3	Oligohaline Pollution Sensitive Spp. Abund. 2.27 3
			Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Carinoma tremaphoros	45		0.06300
Coelotanypus spp.	135		0.01800
Cyathura polita	405		0.03150
Hobsonia florida	180		0.00450
Marenzelleria viridis	45		0.02700
Polydora cornuta	45		0.00225
Rangia cuneata	585		55.36800
Tubificidae imm w/o cap chaetae	405		0.00225
Tubificoides spp.	135		0.00225
Total Abundance w/ Epi.	1980		
Total Abundance w/o Epi.	1980		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.			55.51875
Total Biomass w/o Epi.			55.51875

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 036		Rep: 01	
Gear: Wildco Box Corer		Habitat: Tidal Freshwater		Date: 01OCT09	
		Sampled Area: 0.022 sq.m		Time: 14:22:33	
BOTTOM ENVIRONMENT					
Depth (m): 1.4		Salinity (ppt): 0.20		Temperature (C): 20.62	
Dissolved Oxygen (mg/l): 7.1		Sediment Silt-Clay (%): 90.57		Total Carbon (%): 3.24	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.50		Condition: Degraded		# Attributes Scored: 3	
		Value	Score	Value	Score
Shannon-Wiener Index		1.77		T.F. Pollution Indicative Spp. Abund. (%)	65.38 3
Abundance (#/m2)		4680	3	Tolerance Score	9.38 1
Deep Deposit Feeder Abundance (%)		76.92	3	Limnodrilus Abundance (%)	65.38
Carnivore-Omnivore Abundance (%)		19.23			
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Branchiura sowerbyi		360		0.25650	
Chironomus spp.		630		0.00225	
Coelotanypus spp.		90		0.01350	
Corbicula fluminea		180		50.66100	
Cryptochironomus spp.		180		0.00225	
Hirudinea (Epi)		45		0.02250	
Ilyodrilus templetoni		90		0.00225	
Oligochaeta				0.40500	
Tubificidae imm w cap chaetae *		90		0.00225	
Tubificidae imm w/o cap chaetae		3060		0.00225	
Total Abundance w/ Epi.		4725			
Total Abundance w/o Epi.		4680			
Number of Taxa w/ Epi.		8			
Number of Taxa w/o Epi.		7			
Total Biomass w/ Epi.				51.36975	
Total Biomass w/o Epi.				51.34725	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 036		Rep: 02	
Gear: Wildco Box Corer		Habitat: Tidal Freshwater		Date: 01OCT09	
		Sampled Area: 0.022 sq.m		Time: 14:22:33	
BOTTOM ENVIRONMENT					
Depth (m): 1.4		Salinity (ppt): 0.20		Temperature (C): 20.62	
Dissolved Oxygen (mg/l): 7.1		Sediment Silt-Clay (%): 90.57		Total Carbon (%): 3.24	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.00		Condition: Severely Degr.		# Attributes Scored: 3	
Shannon-Wiener Index		Value	Score	Value	Score
Abundance (#/m2)		2.02		72.25	3
Deep Deposit Feeder Abundance (%)		8595	1	9.54	1
Carnivore-Omnivore Abundance (%)		90.05	3	80.10	
		8.90			
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Branchiura sowerbyi		585		0.65250	
Chironomus spp.		405		0.00225	
Coelotanypus spp.		180		0.03600	
Corbicula fluminea		90		42.06150	
Cryptochironomus spp.		135		0.00225	
Harnischia spp.		45		0.00225	
Limnodrilus cervix		675		0.00225	
Limnodrilus hoffmeisteri		945		0.00225	
Oligochaeta				0.71940	
Tubificidae imm w cap chaetae		270		0.00225	
Tubificidae imm w/o cap chaetae *		5265		0.00225	
Total Abundance w/ Epi.		8595			
Total Abundance w/o Epi.		8595			
Number of Taxa w/ Epi.		9			
Number of Taxa w/o Epi.		9			
Total Biomass w/ Epi.				43.48515	
Total Biomass w/o Epi.				43.48515	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 036		Rep: 03	
Gear: Wildco Box Corer		Habitat: Tidal Freshwater		Date: 01OCT09	
		Sampled Area: 0.022 sq.m		Time: 14:22:33	
BOTTOM ENVIRONMENT					
Depth (m): 1.4		Salinity (ppt): 0.20		Temperature (C): 20.62	
Dissolved Oxygen (mg/l): 7.1		Sediment Silt-Clay (%): 90.57		Total Carbon (%): 3.24	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.00		Condition: Severely Degr.		# Attributes Scored: 3	
		Value	Score	Value	Score
Shannon-Wiener Index		2.07		T.F. Pollution Indicative Spp. Abund. (%)	71.43
Abundance (#/m2)		6615	1	Tolerance Score	9.52
Deep Deposit Feeder Abundance (%)		85.03	3	Limnodrilus Abundance (%)	77.55
Carnivore-Omnivore Abundance (%)		13.61			
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Branchiura sowerbyi		360		0.69300	
Chironomus spp.		495		0.00225	
Coelotanypus spp.		225		0.04950	
Corbicula fluminea		90		32.74650	
Cryptochironomus spp.		90		0.00225	
Cyathura polita		45		0.00450	
Gammarus daiberi (Epi)		45		0.00450	
Hirudinea (Epi)		45		0.06750	
Limnodrilus cervix		405		0.00225	
Limnodrilus hoffmeisteri		675		0.00225	
Oligochaeta				0.64766	
Procladius spp.		45		0.00225	
Tubificidae imm w cap chaetae		135		0.00225	
Tubificidae imm w/o cap chaetae *		4050		0.00225	
Total Abundance w/ Epi.		6705			
Total Abundance w/o Epi.		6615			
Number of Taxa w/ Epi.		12			
Number of Taxa w/o Epi.		10			
Total Biomass w/ Epi.				34.22891	
Total Biomass w/o Epi.				34.15691	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 040	Rep: 01
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 01OCT09
		Sampled Area: 0.022 sq.m	Time: 9:47:58
BOTTOM ENVIRONMENT			
Depth (m): 7.4	Salinity (ppt): 5.16	Temperature (C): 20.89	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.39	Total Carbon (%): 1.83	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.50	Condition: Degraded		# Attributes Scored: 4
	Value	Score	Value Score
Shannon-Wiener Index	1.89		
Abundance (#/m2)	3375	3	Oligohaline Pollution Indicative Spp. Abund. 89.33 3
Deep Deposit Feeder Abundance (%)	13.33		Tolerance Score 0.00
Carnivore-Omnivore Abundance (%)	6.67	1	Oligohaline Pollution Sensitive Spp. Abund. 4.00 3
			Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Cyathura polita	225		0.08550
Leptocheirus plumulosus	1125		
Marenzelleria viridis	135		0.84600
Streblospio benedicti	1440		0.06750
Tubificoides spp.	450		0.01350
Total Abundance w/ Epi.	3375		
Total Abundance w/o Epi.	3375		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	5		
Total Biomass w/ Epi.			1.10700
Total Biomass w/o Epi.			1.10700

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 040	Rep: 02
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 01OCT09
		Sampled Area: 0.022 sq.m	Time: 9:47:58
BOTTOM ENVIRONMENT			
Depth (m): 7.4	Salinity (ppt): 5.16	Temperature (C): 20.89	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.39	Total Carbon (%): 1.83	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.50	Condition: Meets Goal		# Attributes Scored: 4
Shannon-Wiener Index	Value	Score	Value
Abundance (#/m2)	2250	5	64.00
Deep Deposit Feeder Abundance (%)	14.00		0.00
Carnivore-Omnivore Abundance (%)	10.00	1	26.00
			0.00
			5
			0.00
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Cyathura polita	225	0.03600	
Leptocheirus plumulosus	765		
Marenzelleria viridis	585	1.48500	
Streblospio benedicti	360	0.00900	
Tubificoides spp.	315	0.00225	
Total Abundance w/ Epi.	2250		
Total Abundance w/o Epi.	2250		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	5		
Total Biomass w/ Epi.		1.59525	
Total Biomass w/o Epi.		1.59525	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 040	Rep: 03
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 01OCT09
		Sampled Area: 0.022 sq.m	Time: 9:47:58
BOTTOM ENVIRONMENT			
Depth (m): 7.4	Salinity (ppt): 5.16	Temperature (C): 20.89	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.39	Total Carbon (%): 1.83	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.67	Condition: Marginal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.16		Score
Abundance (#/m2)	3330	5	Oligohaline Pollution Indicative Spp. Abund. 86.49 3
Deep Deposit Feeder Abundance (%)	25.68		Tolerance Score 6.07 3
Carnivore-Omnivore Abundance (%)	4.05	1	Oligohaline Pollution Sensitive Spp. Abund. 8.11 3
			Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	45	0.01800	
Coelotanypus spp.	45	0.02250	
Cyathura polita	45	0.05850	
Leptocheirus plumulosus	585		
Marenzelleria viridis	270	1.73250	
Rangia cuneata	90	40.64850	
Streblospio benedicti	1395	0.03600	
Tubificoides spp.	855	0.00900	
Total Abundance w/ Epi.	3330		
Total Abundance w/o Epi.	3330		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		42.56100	
Total Biomass w/o Epi.		42.56100	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 043		Rep: 01	
Gear: Modified Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 15:41:22	
BOTTOM ENVIRONMENT					
Depth (m): 2.6		Salinity (ppt): 9.78		Temperature (C): 23.44	
Dissolved Oxygen (mg/l): 6.2		Sediment Silt-Clay (%): 3.93		Total Carbon (%): 0.12	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.60		Condition: Degraded		# Attributes Scored: 5	
		Value	Score	Value	Score
Shannon-Wiener Index		2.74	5	Pollution Indicative Species Abundance (%)	11.43 3
Abundance (#/m2)		1400	3	Pollution Indicative Species Biomass (%)	47.17
Biomass (g/m2)		0.85	1	Pollution Sensitive Species Abundance (%)	22.86
Carnivore-Omnivore Abundance (%)		11.43		Pollution Sensitive Species Biomass (%)	28.30 1
Deep Deposit Feeder Abundance (%)		20.00			
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Apocorophium lacustre (Epi)		40		0.00400	
Eteone heteropoda		40		0.00400	
Heteromastus filiformis		120		0.10000	
Leptocheirus plumulosus		440			
Macoma mitchelli		80		0.00400	
Marenzelleria viridis		320		0.24000	
Mulinia lateralis		80		0.39200	
Neanthes succinea		120		0.06000	
Streblospio benedicti		40		0.00400	
Stylochus ellipticus (Epi)		40		0.00200	
Tubificoides spp.		160		0.00800	
Total Abundance w/ Epi.		1480			
Total Abundance w/o Epi.		1400			
Number of Taxa w/ Epi.		11			
Number of Taxa w/o Epi.		9			
Total Biomass w/ Epi.				0.85400	
Total Biomass w/o Epi.				0.84800	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 043		Rep: 02	
Gear: Modified Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 15:41:22	
BOTTOM ENVIRONMENT					
Depth (m): 2.6		Salinity (ppt): 9.78		Temperature (C): 23.44	
Dissolved Oxygen (mg/l): 6.2		Sediment Silt-Clay (%): 3.93		Total Carbon (%): 0.12	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.20	3	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	1560	5	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	0.62	1	Pollution Sensitive Species Abundance (%)	12.82	
Carnivore-Omnivore Abundance (%)	12.82		Pollution Sensitive Species Biomass (%)	27.65	1
Deep Deposit Feeder Abundance (%)	25.64				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Apocorophium lacustre (Epi)	40		0.00400		
Heteromastus filiformis	360		0.28000		
Leptocheirus plumulosus	640				
Macoma mitchelli	120		0.03600		
Marenzelleria viridis	200		0.17200		
Neanthes succinea	200		0.06800		
Tubificidae imm w cap chaetae	40		0.00200		
Total Abundance w/ Epi.	1600				
Total Abundance w/o Epi.	1560				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	6				
Total Biomass w/ Epi.			0.62600		
Total Biomass w/o Epi.			0.62200		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 043		Rep: 03	
Gear: Modified Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 15:41:22	
BOTTOM ENVIRONMENT					
Depth (m): 2.6		Salinity (ppt): 9.78		Temperature (C): 23.44	
Dissolved Oxygen (mg/l): 6.2		Sediment Silt-Clay (%): 3.93		Total Carbon (%): 0.12	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.39	3	Pollution Indicative Species Abundance (%)	6.25	5
Abundance (#/m2)	1920	5	Pollution Indicative Species Biomass (%)	0.42	
Biomass (g/m2)	2.39	3	Pollution Sensitive Species Abundance (%)	18.75	
Carnivore-Omnivore Abundance (%)	10.42		Pollution Sensitive Species Biomass (%)	74.75	3
Deep Deposit Feeder Abundance (%)	14.58				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Eteone heteropoda	40		0.00200		
Heteromastus filiformis	280		0.32800		
Leptocheirus plumulosus	880				
Macoma balthica	40		1.59600		
Macoma mitchelli	120		0.00200		
Marenzelleria viridis	320		0.19200		
Micrura leidy	40		0.08000		
Neanthes succinea	120		0.06800		
Streblospio benedicti	80		0.00800		
Total Abundance w/ Epi.	1920				
Total Abundance w/o Epi.	1920				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	9				
Total Biomass w/ Epi.			2.39200		
Total Biomass w/o Epi.			2.39200		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 044	Rep: 01
Gear: Wildco Box Corer		Habitat: Low Mesohaline	Date: 14SEP09
		Sampled Area: 0.022 sq.m	Time: 16:36:04
BOTTOM ENVIRONMENT			
Depth (m): 12.8	Salinity (ppt): 10.66	Temperature (C): 23.12	
Dissolved Oxygen (mg/l): 6.6	Sediment Silt-Clay (%): 88.56	Total Carbon (%): 1.68	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.80	Condition: Meets Goal		# Attributes Scored: 5
	Value	Score	Value
Shannon-Wiener Index	1.97	3	8.70
Abundance (#/m2)	1035	3	0.05
Biomass (g/m2)	4.90	3	21.74
Carnivore-Omnivore Abundance (%)	8.70		94.95
Deep Deposit Feeder Abundance (%)	56.52		5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Heteromastus filiformis	45	0.09450	
Leptocheirus plumulosus	45		
Macoma balthica	225	4.65300	
Neanthes succinea	90	0.13950	
Streblospio benedicti	90	0.00225	
Tubificoides spp.	540	0.00900	
Total Abundance w/ Epi.	1035		
Total Abundance w/o Epi.	1035		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		4.90050	
Total Biomass w/o Epi.		4.90050	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 044		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.022 sq.m		Time: 16:36:04	
BOTTOM ENVIRONMENT					
Depth (m): 12.8		Salinity (ppt): 10.66		Temperature (C): 23.12	
Dissolved Oxygen (mg/l): 6.6		Sediment Silt-Clay (%): 88.56		Total Carbon (%): 1.68	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.37	1	Pollution Indicative Species Abundance (%)	8.82	5
Abundance (#/m2)	1530	5	Pollution Indicative Species Biomass (%)	0.11	
Biomass (g/m2)	1.97	3	Pollution Sensitive Species Abundance (%)	14.71	
Carnivore-Omnivore Abundance (%)	2.94		Pollution Sensitive Species Biomass (%)	96.23	5
Deep Deposit Feeder Abundance (%)	73.53				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Heteromastus filiformis	45		0.05400		
Macoma balthica	225		1.89450		
Neanthes succinea	45		0.00450		
Streblospio benedicti	135		0.00225		
Tubificoides spp.	1080		0.01350		
Total Abundance w/ Epi.	1530				
Total Abundance w/o Epi.	1530				
Number of Taxa w/ Epi.	5				
Number of Taxa w/o Epi.	5				
Total Biomass w/ Epi.			1.96875		
Total Biomass w/o Epi.			1.96875		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 044		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.022 sq.m		Time: 16:36:04	
BOTTOM ENVIRONMENT					
Depth (m): 12.8		Salinity (ppt): 10.66		Temperature (C): 23.12	
Dissolved Oxygen (mg/l): 6.6		Sediment Silt-Clay (%): 88.56		Total Carbon (%): 1.68	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.60		Condition: Degraded		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.57	1	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	630	3	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	0.56	1	Pollution Sensitive Species Abundance (%)	50.00	
Carnivore-Omnivore Abundance (%)	14.29		Pollution Sensitive Species Biomass (%)	73.31	3
Deep Deposit Feeder Abundance (%)	35.71				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.04050		
Macoma balthica	315		0.41400		
Neanthes succinea	45		0.10800		
Tubificoides spp.	225		0.00225		
Total Abundance w/ Epi.	630				
Total Abundance w/o Epi.	630				
Number of Taxa w/ Epi.	4				
Number of Taxa w/o Epi.	4				
Total Biomass w/ Epi.			0.56475		
Total Biomass w/o Epi.			0.56475		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Morgantown Discharge		Station: 047	Rep: 01
Gear: Modified Box Corer		Habitat: Low Mesohaline	Date: 14SEP09
		Sampled Area: 0.025 sq.m	Time: 14:32:55
BOTTOM ENVIRONMENT			
Depth (m): 2.8	Salinity (ppt): 10.07	Temperature (C): 23.29	
Dissolved Oxygen (mg/l): 6.0	Sediment Silt-Clay (%): 4.65	Total Carbon (%): 0.16	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.40	Condition: Meets Goal		# Attributes Scored: 5
	Value	Score	Value
Shannon-Wiener Index	2.16	3	0.00
Abundance (#/m2)	3120	3	0.00
Biomass (g/m2)	6.21	5	57.69
Carnivore-Omnivore Abundance (%)	15.38		26.36
Deep Deposit Feeder Abundance (%)	12.82		1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	40	0.00800	
Edotea triloba (Epi)	40	0.00200	
Heteromastus filiformis	320	3.76400	
Leptocheirus plumulosus	400		
Macoma balthica	200	0.04400	
Macoma mitchelli	40	0.00800	
Marenzelleria viridis	1600	1.59200	
Neanthes succinea	440	0.48000	
Tubificoides spp.	80	0.00200	
Total Abundance w/ Epi.	3160		
Total Abundance w/o Epi.	3120		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		6.20800	
Total Biomass w/o Epi.		6.20600	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Morgantown Discharge		Station: 047		Rep: 02	
Gear: Modified Box Corer		Habitat: Low Mesohaline		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 14:32:55	
BOTTOM ENVIRONMENT					
Depth (m): 2.8		Salinity (ppt): 10.07		Temperature (C): 23.29	
Dissolved Oxygen (mg/l): 6.0		Sediment Silt-Clay (%): 4.65		Total Carbon (%): 0.16	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.20		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.47	3	Pollution Indicative Species Abundance (%)	2.86	5
Abundance (#/m2)	4200	3	Pollution Indicative Species Biomass (%)	0.09	
Biomass (g/m2)	8.79	5	Pollution Sensitive Species Abundance (%)	30.48	
Carnivore-Omnivore Abundance (%)	8.57		Pollution Sensitive Species Biomass (%)	82.04	5
Deep Deposit Feeder Abundance (%)	25.71				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Apocorophium lacustre	(Epi)	40		0.00800	
Edotea triloba	(Epi)	80		0.00200	
Eteone heteropoda		40		0.00400	
Heteromastus filiformis		840		0.84800	
Leptocheirus plumulosus		1360			
Macoma balthica		120		4.93600	
Macoma mitchelli		40		0.48800	
Marenzelleria viridis		1120		1.50400	
Mulinia lateralis		80		0.00400	
Neanthes succinea		320		0.11200	
Rangia cuneata		40		0.76800	
Tubificoides spp.		240		0.00200	
Total Abundance w/ Epi.		4320			
Total Abundance w/o Epi.		4200			
Number of Taxa w/ Epi.		12			
Number of Taxa w/o Epi.		10			
Total Biomass w/ Epi.				8.79600	
Total Biomass w/o Epi.				8.78600	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Morgantown Discharge		Station: 047	Rep: 03
Gear: Modified Box Corer		Habitat: Low Mesohaline	Date: 14SEP09
		Sampled Area: 0.025 sq.m	Time: 14:32:55
BOTTOM ENVIRONMENT			
Depth (m): 2.8	Salinity (ppt): 10.07	Temperature (C): 23.29	
Dissolved Oxygen (mg/l): 6.0	Sediment Silt-Clay (%): 4.65	Total Carbon (%): 0.16	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 4.20	Condition: Meets Goal		# Attributes Scored: 5
	Value	Score	Value
Shannon-Wiener Index	2.59	5	0.00
Abundance (#/m2)	3600	3	0.00
Biomass (g/m2)	18.50	3	32.22
Carnivore-Omnivore Abundance (%)	10.00		85.23
Deep Deposit Feeder Abundance (%)	30.00		5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	40	0.01200	
Heteromastus filiformis	920	1.65600	
Leptocheirus plumulosus	880		
Macoma balthica	320	15.10000	
Macoma mitchelli	120	0.00200	
Marenzelleria viridis	840	0.66400	
Micrura leidyi	80	0.36400	
Neanthes succinea	240	0.61600	
Rhithropanopeus harrisii (Epi)	40	0.01600	
Tubificoides spp.	160	0.00200	
Total Abundance w/ Epi.	3640		
Total Abundance w/o Epi.	3600		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		18.51200	
Total Biomass w/o Epi.		18.49600	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 051	Rep: 01
Gear: Modified Box Corer		Habitat: High Mesohaline Sand	Date: 14SEP09
		Sampled Area: 0.025 sq.m	Time: 11:28:50
BOTTOM ENVIRONMENT			
Depth (m): 3.1	Salinity (ppt): 14.15	Temperature (C): 23.23	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 1.85	Total Carbon (%): 0.14	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.00	Condition: Severely Degr.		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	1.52	1	3.33
Abundance (#/m2)	1200	3	14.83
Biomass (g/m2)	0.89	1	3.33
Carnivore-Omnivore Abundance (%)	3.33	1	9.44
Deep Deposit Feeder Abundance (%)	10.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Gemma gemma	120	0.00200	
Heteromastus filiformis	120	0.06400	
Macoma mitchelli	840	0.09600	
Marenzelleria viridis	40	0.08400	
Micrura leidyi	40	0.51200	
Mulinia lateralis	40	0.13200	
Total Abundance w/ Epi.	1200		
Total Abundance w/o Epi.	1200		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		0.89000	
Total Biomass w/o Epi.		0.89000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 051		Rep: 02	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 11:28:50	
BOTTOM ENVIRONMENT					
Depth (m): 3.1		Salinity (ppt): 14.15		Temperature (C): 23.23	
Dissolved Oxygen (mg/l): 6.9		Sediment Silt-Clay (%): 1.85		Total Carbon (%): 0.14	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.67		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.09	1	Pollution Indicative Species Abundance (%)	7.14	5
Abundance (#/m2)	560	1	Pollution Indicative Species Biomass (%)	8.82	
Biomass (g/m2)	0.14	1	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	7.14	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	7.14				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Heteromastus filiformis	40		0.04400		
Macoma mitchelli	440		0.05600		
Micrura leidyi	40		0.02400		
Mulinia lateralis	40		0.01200		
Total Abundance w/ Epi.	560				
Total Abundance w/o Epi.	560				
Number of Taxa w/ Epi.	4				
Number of Taxa w/o Epi.	4				
Total Biomass w/ Epi.			0.13600		
Total Biomass w/o Epi.			0.13600		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 051		Rep: 03	
Gear: Modified Box Corer		Habitat: High Mesohaline Sand		Date: 14SEP09	
		Sampled Area: 0.025 sq.m		Time: 11:28:50	
BOTTOM ENVIRONMENT					
Depth (m): 3.1		Salinity (ppt): 14.15		Temperature (C): 23.23	
Dissolved Oxygen (mg/l): 6.9		Sediment Silt-Clay (%): 1.85		Total Carbon (%): 0.14	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.67		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.44	1	Pollution Indicative Species Abundance (%)	33.33	1
Abundance (#/m2)	1080	3	Pollution Indicative Species Biomass (%)	0.68	
Biomass (g/m2)	2.37	3	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	7.41	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	14.81				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Gemma gemma	120		0.08000		
Heteromastus filiformis	120		0.10800		
Laeonereis culveri	40		1.84000		
Leitoscoloplos spp.	40		0.00800		
Macoma mitchelli	400		0.03600		
Micrura leidyi	40		0.28800		
Mulinia lateralis	280		0.00400		
Streblospio benedicti	40		0.00400		
Total Abundance w/ Epi.	1080				
Total Abundance w/o Epi.	1080				
Number of Taxa w/ Epi.	8				
Number of Taxa w/o Epi.	8				
Total Biomass w/ Epi.			2.36800		
Total Biomass w/o Epi.			2.36800		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 052		Rep: 01	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 31AUG09	
		Sampled Area: 0.022 sq.m		Time: 13:30:38	
BOTTOM ENVIRONMENT					
Depth (m): 11.6		Salinity (ppt): 14.71		Temperature (C): 27.58	
Dissolved Oxygen (mg/l): 0.3		Sediment Silt-Clay (%): 95.06		Total Carbon (%): 2.86	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)	100.00	1
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
No Organisms Present			0.00000		
Total Abundance w/ Epi.					
Total Abundance w/o Epi.					
Number of Taxa w/ Epi.	0				
Number of Taxa w/o Epi.	0				
Total Biomass w/ Epi.			0.00000		
Total Biomass w/o Epi.			0.00000		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 052		Rep: 02	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 31AUG09	
		Sampled Area: 0.022 sq.m		Time: 13:30:38	
BOTTOM ENVIRONMENT					
Depth (m): 11.6		Salinity (ppt): 14.71		Temperature (C): 27.58	
Dissolved Oxygen (mg/l): 0.3		Sediment Silt-Clay (%): 95.06		Total Carbon (%): 2.86	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)	100.00	1
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
No Organisms Present				0.00000	
Total Abundance w/ Epi.					
Total Abundance w/o Epi.					
Number of Taxa w/ Epi.		0			
Number of Taxa w/o Epi.		0			
Total Biomass w/ Epi.				0.00000	
Total Biomass w/o Epi.				0.00000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Potomac River		Station: 052		Rep: 03	
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud		Date: 31AUG09	
		Sampled Area: 0.022 sq.m		Time: 13:30:38	
BOTTOM ENVIRONMENT					
Depth (m): 11.6		Salinity (ppt): 14.71		Temperature (C): 27.58	
Dissolved Oxygen (mg/l): 0.3		Sediment Silt-Clay (%): 95.06		Total Carbon (%): 2.86	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)	100.00	1
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
No Organisms Present				0.00000	
Total Abundance w/ Epi.					
Total Abundance w/o Epi.					
Number of Taxa w/ Epi.		0			
Number of Taxa w/o Epi.		0			
Total Biomass w/ Epi.				0.00000	
Total Biomass w/o Epi.				0.00000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Eastern Shore		Station: 062		Rep: 01	
Gear: Petite Ponar		Habitat: Low Mesohaline		Date: 08SEP09	
		Sampled Area: 0.025 sq.m		Time: 9:51:28	
BOTTOM ENVIRONMENT					
Depth (m): 6.5		Salinity (ppt): 7.54		Temperature (C): 23.75	
Dissolved Oxygen (mg/l): 6.3		Sediment Silt-Clay (%): 85.40		Total Carbon (%): 3.29	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.60		Condition: Degraded		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.50	1	Pollution Indicative Species Abundance (%)	2.21	5
Abundance (#/m2)	9040	1	Pollution Indicative Species Biomass (%)	0.33	
Biomass (g/m2)	1.22	3	Pollution Sensitive Species Abundance (%)	2.21	
Carnivore-Omnivore Abundance (%)	0.88		Pollution Sensitive Species Biomass (%)	49.35	3
Deep Deposit Feeder Abundance (%)	73.45				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Ameroculodes species complex	400		0.02400		
Carinoma tremaphoros	40		0.04000		
Cyathura polita	40		0.04000		
Edotea triloba (Epi)	40		0.00200		
Gammarus daiberi (Epi)	360		0.04000		
Heteromastus filiformis	40		0.00800		
Leptocheirus plumulosus	1400				
Leucon americanus	120		0.00400		
Macoma balthica	160		0.56400		
Macoma mitchelli	160		0.28000		
Streblospio benedicti	80		0.00200		
Tubificidae imm w/o cap chaetae	120		0.00200		
Tubificoides spp.	6480		0.07600		
Total Abundance w/ Epi.	9440				
Total Abundance w/o Epi.	9040				
Number of Taxa w/ Epi.	13				
Number of Taxa w/o Epi.	11				
Total Biomass w/ Epi.			1.26600		
Total Biomass w/o Epi.			1.22400		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Eastern Shore		Station: 062	Rep: 02
Gear: Petite Ponar		Habitat: Low Mesohaline	Date: 08SEP09
		Sampled Area: 0.025 sq.m	Time: 9:51:28
BOTTOM ENVIRONMENT			
Depth (m): 6.5	Salinity (ppt): 7.54	Temperature (C): 23.75	
Dissolved Oxygen (mg/l): 6.3	Sediment Silt-Clay (%): 85.40	Total Carbon (%): 3.29	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.60	Condition: Degraded		# Attributes Scored: 5
	Value	Score	Value Score
Shannon-Wiener Index	0.81	1	0.82 5
Abundance (#/m2)	9800	1	Pollution Indicative Species Biomass (%) 0.83
Biomass (g/m2)	1.45	3	Pollution Sensitive Species Abundance (%) 2.45
Carnivore-Omnivore Abundance (%)	2.04		Pollution Sensitive Species Biomass (%) 61.52 3
Deep Deposit Feeder Abundance (%)	88.98		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	40	0.03200	
Cyathura polita	160	0.40800	
Gammarus daiberi (Epi)	80	0.02000	
Heteromastus filiformis	80	0.00400	
Leptocheirus plumulosus	520		
Leucon americanus	40	0.00200	
Macoma balthica	80	0.48400	
Macoma mitchelli	160	0.27600	
Streblospio benedicti	80	0.01200	
Tubificoides spp.	8640	0.12400	
Total Abundance w/ Epi.	9880		
Total Abundance w/o Epi.	9800		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		1.47000	
Total Biomass w/o Epi.		1.45000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Eastern Shore		Station: 062		Rep: 03	
Gear: Petite Ponar		Habitat: Low Mesohaline		Date: 08SEP09	
		Sampled Area: 0.025 sq.m		Time: 9:51:28	
BOTTOM ENVIRONMENT					
Depth (m): 6.5		Salinity (ppt): 7.54		Temperature (C): 23.75	
Dissolved Oxygen (mg/l): 6.3		Sediment Silt-Clay (%): 85.40		Total Carbon (%): 3.29	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.60		Condition: Degraded		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.35	1	Pollution Indicative Species Abundance (%)	2.06	5
Abundance (#/m2)	9720	1	Pollution Indicative Species Biomass (%)	0.64	
Biomass (g/m2)	1.26	3	Pollution Sensitive Species Abundance (%)	2.47	
Carnivore-Omnivore Abundance (%)	2.06		Pollution Sensitive Species Biomass (%)	63.59	3
Deep Deposit Feeder Abundance (%)	68.31				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	40		0.02800		
Cyathura polita	160		0.38400		
Gammarus daiberi (Epi)	80		0.02000		
Heteromastus filiformis	160		0.01600		
Leptocheirus plumulosus	2520				
Macoma balthica	80		0.41600		
Macoma mitchelli	80		0.00200		
Streblospio benedicti	200		0.00800		
Tubificoides spp.	6480		0.08000		
Total Abundance w/ Epi.	9800				
Total Abundance w/o Epi.	9720				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	8				
Total Biomass w/ Epi.			1.27800		
Total Biomass w/o Epi.			1.25800		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 064	Rep: 01
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 18SEP09
		Sampled Area: 0.022 sq.m	Time: 9:08:49
BOTTOM ENVIRONMENT			
Depth (m): 9.7	Salinity (ppt): 13.54	Temperature (C): 22.27	
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 88.67	Total Carbon (%): 1.99	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.67	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.25	3	Pollution Indicative Species Abundance (%) 16.67
Abundance (#/m2)	270	1	Pollution Indicative Species Biomass (%) 0.06
Biomass (g/m2)	7.32	5	Pollution Sensitive Species Abundance (%) 50.00
Carnivore-Omnivore Abundance (%)	50.00	5	Pollution Sensitive Species Biomass (%) 99.69
Deep Deposit Feeder Abundance (%)	0.00		Score 3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	45	0.01350	
Glycinde solitaria	90	0.01350	
Macoma balthica	45	7.28550	
Macoma mitchelli	45	0.00450	
Mulinia lateralis	45	0.00450	
Total Abundance w/ Epi.	270		
Total Abundance w/o Epi.	270		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	5		
Total Biomass w/ Epi.		7.32150	
Total Biomass w/o Epi.		7.32150	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 064	Rep: 02
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 18SEP09
		Sampled Area: 0.022 sq.m	Time: 9:08:49
BOTTOM ENVIRONMENT			
Depth (m): 9.7	Salinity (ppt): 13.54	Temperature (C): 22.27	
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 88.67	Total Carbon (%): 1.99	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.67	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.42	3	22.22
Abundance (#/m2)	405	1	0.12
Biomass (g/m2)	9.50	5	22.22
Carnivore-Omnivore Abundance (%)	44.44	5	94.36
Deep Deposit Feeder Abundance (%)	22.22		3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Macoma balthica	90	8.96400	
Mulinia lateralis	45	0.00900	
Neanthes succinea	135	0.51300	
Parahesionia luteola	45	0.00900	
Tubificidae imm w/o cap chaetae	45	0.00225	
Tubificoides spp.	45	0.00225	
Total Abundance w/ Epi.	405		
Total Abundance w/o Epi.	405		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		9.49950	
Total Biomass w/o Epi.		9.49950	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 064	Rep: 03
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 18SEP09
		Sampled Area: 0.022 sq.m	Time: 9:08:49
BOTTOM ENVIRONMENT			
Depth (m): 9.7	Salinity (ppt): 13.54	Temperature (C): 22.27	
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 88.67	Total Carbon (%): 1.99	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.01	3	17.65
Abundance (#/m2)	765	1	2.43
Biomass (g/m2)	3.98	5	5.88
Carnivore-Omnivore Abundance (%)	23.53	3	68.44
Deep Deposit Feeder Abundance (%)	58.82		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Macoma balthica	45	2.72250	
Mulinia lateralis	90	0.09450	
Neanthes succinea	45	1.13850	
Parahesionia luteola	135	0.01800	
Tubificidae imm w/o cap chaetae	45	0.00225	
Tubificoides spp.	405	0.00225	
Total Abundance w/ Epi.	765		
Total Abundance w/o Epi.	765		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		3.97800	
Total Biomass w/o Epi.		3.97800	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 066	Rep: 01
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 08SEP09
		Sampled Area: 0.022 sq.m	Time: 14:08:06
BOTTOM ENVIRONMENT			
Depth (m): 4.4	Salinity (ppt): 0.13	Temperature (C): 23.98	
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 73.01	Total Carbon (%): 5.64	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value Score
Shannon-Wiener Index	1.93		
Abundance (#/m2)	1710	5	Oligohaline Pollution Indicative Spp. Abund. 73.68 3
Deep Deposit Feeder Abundance (%)	57.89		Tolerance Score 6.22 3
Carnivore-Omnivore Abundance (%)	7.89	1	Oligohaline Pollution Sensitive Spp. Abund. 7.89 3
			Tanypodinae/Chironomidae Abundance Ratio 0.00 5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Cryptochironomus spp.	45		0.00225
Cyathura polita	45		0.00450
Gammarus daiberi (Epi)	990		0.12600
Leptocheirus plumulosus	225		
Littoridinops tenuipes (Epi)	135		0.01350
Marenzelleria viridis	135		0.18900
Polypedilum halterale group	45		0.00225
Rangia cuneata	225		0.09900
Tubificoides spp.	990		0.02700
Total Abundance w/ Epi.	2835		
Total Abundance w/o Epi.	1710		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.			0.48600
Total Biomass w/o Epi.			0.34650

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 066	Rep: 02
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 08SEP09
		Sampled Area: 0.022 sq.m	Time: 14:08:06
BOTTOM ENVIRONMENT			
Depth (m): 4.4	Salinity (ppt): 0.13	Temperature (C): 23.98	
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 73.01	Total Carbon (%): 5.64	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.67	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value Score
Shannon-Wiener Index	2.55		
Abundance (#/m2)	630	5	Oligohaline Pollution Indicative Spp. Abund. 21.43 5
Deep Deposit Feeder Abundance (%)	7.14		Tolerance Score 7.43 3
Carnivore-Omnivore Abundance (%)	57.14	5	Oligohaline Pollution Sensitive Spp. Abund. 14.29 3
			Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chaoborus punctipennis	225		0.01800
Coelotanypus spp.	90		0.00450
Cyathura polita	45		0.03600
Gammarus daiberi (Epi)	135		0.01350
Hobsonia florida	45		0.00450
Marenzelleria viridis	90		0.18000
Rangia cuneata	90		0.13050
Tubificoides spp.	45		0.00450
Total Abundance w/ Epi.	765		
Total Abundance w/o Epi.	630		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.			0.39150
Total Biomass w/o Epi.			0.37800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Choptank River		Station: 066	Rep: 03
Gear: Wildco Box Corer		Habitat: Oligohaline	Date: 08SEP09
		Sampled Area: 0.022 sq.m	Time: 14:08:06
BOTTOM ENVIRONMENT			
Depth (m): 4.4	Salinity (ppt): 0.13	Temperature (C): 23.98	
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 73.01	Total Carbon (%): 5.64	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.67	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value Score
Shannon-Wiener Index	2.42		47.83 3
Abundance (#/m2)	1035	5	Tolerance Score 6.80 3
Deep Deposit Feeder Abundance (%)	17.39		Oligohaline Pollution Sensitive Spp. Abund. 17.39 3
Carnivore-Omnivore Abundance (%)	17.39	3	Tanypodinae/Chironomidae Abundance Ratio 0.00 5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chaoborus punctipennis	45		0.00450
Cryptochironomus spp.	135		0.00225
Gammarus daiberi (Epi)	720		0.07650
Leptocheirus plumulosus	315		
Littoridinops tenuipes (Epi)	180		0.00450
Marenzelleria viridis	180		0.32850
Rangia cuneata	180		0.03600
Tubificoides spp.	180		0.00450
Total Abundance w/ Epi.	1935		
Total Abundance w/o Epi.	1035		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.			0.50175
Total Biomass w/o Epi.			0.42075

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 068		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 16SEP09	
		Sampled Area: 0.022 sq.m		Time: 11:08:36	
BOTTOM ENVIRONMENT					
Depth (m): 4.3		Salinity (ppt): 9.96		Temperature (C): 22.65	
Dissolved Oxygen (mg/l): 6.0		Sediment Silt-Clay (%): 59.04		Total Carbon (%): 2.27	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.20		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.64	5	Pollution Indicative Species Abundance (%)	12.40	3
Abundance (#/m2)	5445	3	Pollution Indicative Species Biomass (%)	0.34	
Biomass (g/m2)	5.31	5	Pollution Sensitive Species Abundance (%)	21.49	
Carnivore-Omnivore Abundance (%)	14.05		Pollution Sensitive Species Biomass (%)	89.82	5
Deep Deposit Feeder Abundance (%)	55.37				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	180		0.08550		
Cyathura polita	450		0.42750		
Eteone heteropoda	90		0.00225		
Gemma gemma	45		0.00450		
Heteromastus filiformis	225		0.06750		
Leptocheirus plumulosus	540				
Macoma balthica	675		4.32900		
Mulinia lateralis	90		0.00900		
Neanthes succinea	45		0.27450		
Rangia cuneata	45		0.00900		
Streblospio benedicti	270		0.00450		
Tubificidae imm w/o cap chaetae	225		0.00225		
Tubificoides spp.	2565		0.04500		
Total Abundance w/ Epi.	5445				
Total Abundance w/o Epi.	5445				
Number of Taxa w/ Epi.	13				
Number of Taxa w/o Epi.	13				
Total Biomass w/ Epi.			5.30550		
Total Biomass w/o Epi.			5.30550		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 068		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 16SEP09	
		Sampled Area: 0.022 sq.m		Time: 11:08:36	
BOTTOM ENVIRONMENT					
Depth (m): 4.3		Salinity (ppt): 9.96		Temperature (C): 22.65	
Dissolved Oxygen (mg/l): 6.0		Sediment Silt-Clay (%): 59.04		Total Carbon (%): 2.27	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.17	3	Pollution Indicative Species Abundance (%)	11.68	3
Abundance (#/m2)	8865	1	Pollution Indicative Species Biomass (%)	3.26	
Biomass (g/m2)	12.17	3	Pollution Sensitive Species Abundance (%)	9.14	
Carnivore-Omnivore Abundance (%)	8.63		Pollution Sensitive Species Biomass (%)	91.42	5
Deep Deposit Feeder Abundance (%)	69.04				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	180		0.09450		
Cyathura polita	360		0.51300		
Eteone heteropoda	45		0.00225		
Glycinde solitaria	45		0.00225		
Heteromastus filiformis	270		0.12150		
Leptocheirus plumulosus	945				
Macoma balthica	405		10.60650		
Macoma mitchelli	45		0.09450		
Mulinia lateralis	225		0.37800		
Neanthes succinea	135		0.08100		
Streblospio benedicti	360		0.01350		
Tubificidae imm w/o cap chaetae	405		0.00225		
Tubificoides spp.	5445		0.05400		
Total Abundance w/ Epi.	8865				
Total Abundance w/o Epi.	8865				
Number of Taxa w/ Epi.	13				
Number of Taxa w/o Epi.	13				
Total Biomass w/ Epi.			12.16575		
Total Biomass w/o Epi.			12.16575		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Upper Eastern Shore		Station: 068		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 16SEP09	
		Sampled Area: 0.022 sq.m		Time: 11:08:36	
BOTTOM ENVIRONMENT					
Depth (m): 4.3		Salinity (ppt): 9.96		Temperature (C): 22.65	
Dissolved Oxygen (mg/l): 6.0		Sediment Silt-Clay (%): 59.04		Total Carbon (%): 2.27	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.40		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.24	3	Pollution Indicative Species Abundance (%)	9.20	5
Abundance (#/m2)	7335	1	Pollution Indicative Species Biomass (%)	5.35	
Biomass (g/m2)	4.42	3	Pollution Sensitive Species Abundance (%)	14.11	
Carnivore-Omnivore Abundance (%)	7.36		Pollution Sensitive Species Biomass (%)	88.23	5
Deep Deposit Feeder Abundance (%)	61.35				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Ameroculodes species complex	45		0.02250		
Carinoma tremaphoros	90		0.02700		
Cyathura polita	405		0.58050		
Eteone heteropoda	45		0.00450		
Heteromastus filiformis	225		0.04050		
Leptocheirus plumulosus	1080				
Macoma balthica	585		3.07350		
Macoma mitchelli	45		0.02700		
Marenzelleria viridis	45		0.24300		
Mulinia lateralis	180		0.21600		
Streblospio benedicti	315		0.01350		
Tubificidae imm w/o cap chaetae	135		0.00225		
Tubificoides spp.	4140		0.05850		
Total Abundance w/ Epi.	7335				
Total Abundance w/o Epi.	7335				
Number of Taxa w/ Epi.	13				
Number of Taxa w/o Epi.	13				
Total Biomass w/ Epi.			4.41675		
Total Biomass w/o Epi.			4.41675		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 071	Rep: 01
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 02SEP09
		Sampled Area: 0.022 sq.m	Time: 9:37:31
BOTTOM ENVIRONMENT			
Depth (m): 14.1	Salinity (ppt): 13.22	Temperature (C): 26.05	
Dissolved Oxygen (mg/l): 5.4	Sediment Silt-Clay (%): 86.07	Total Carbon (%): 2.93	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00	Condition: Severely Degr.		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	0.92	1	Pollution Indicative Species Abundance (%) 100.00
Abundance (#/m2)	135	1	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.36	1	Pollution Sensitive Species Abundance (%) 0.00
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Mulinia lateralis	45	0.34650	
Paraprionospio pinnata	90	0.00900	
Total Abundance w/ Epi.	135		
Total Abundance w/o Epi.	135		
Number of Taxa w/ Epi.	2		
Number of Taxa w/o Epi.	2		
Total Biomass w/ Epi.		0.35550	
Total Biomass w/o Epi.		0.35550	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 071	Rep: 02
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 02SEP09
		Sampled Area: 0.022 sq.m	Time: 9:37:31
BOTTOM ENVIRONMENT			
Depth (m): 14.1	Salinity (ppt): 13.22	Temperature (C): 26.05	
Dissolved Oxygen (mg/l): 5.4	Sediment Silt-Clay (%): 86.07	Total Carbon (%): 2.93	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.67	Condition: Severely Degr.		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	1.52	1	Pollution Indicative Species Abundance (%) 60.00
Abundance (#/m2)	225	1	Pollution Indicative Species Biomass (%) 88.89
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%) 40.00
Carnivore-Omnivore Abundance (%)	40.00	5	Pollution Sensitive Species Biomass (%) 11.11
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Glycinde solitaria	90	0.00225	
Mulinia lateralis	45	0.00450	
Paraprionospio pinnata	90	0.01350	
Total Abundance w/ Epi.	225		
Total Abundance w/o Epi.	225		
Number of Taxa w/ Epi.	3		
Number of Taxa w/o Epi.	3		
Total Biomass w/ Epi.		0.02025	
Total Biomass w/o Epi.		0.02025	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 071	Rep: 03
Gear: Wildco Box Corer		Habitat: High Mesohaline Mud	Date: 02SEP09
		Sampled Area: 0.022 sq.m	Time: 9:37:31
BOTTOM ENVIRONMENT			
Depth (m): 14.1	Salinity (ppt): 13.22	Temperature (C): 26.05	
Dissolved Oxygen (mg/l): 5.4	Sediment Silt-Clay (%): 86.07	Total Carbon (%): 2.93	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00	Condition: Severely Degr.		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	0.00	1	
Abundance (#/m2)	45	1	Pollution Indicative Species Abundance (%) 100.00
Biomass (g/m2)	0.00	1	Pollution Indicative Species Biomass (%) 100.00
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Abundance (%) 0.00
Deep Deposit Feeder Abundance (%)	0.00		Pollution Sensitive Species Biomass (%) 0.00
			Score 1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Paraprionospio pinnata	45	0.00450	
Total Abundance w/ Epi.	45		
Total Abundance w/o Epi.	45		
Number of Taxa w/ Epi.	1		
Number of Taxa w/o Epi.	1		
Total Biomass w/ Epi.		0.00450	
Total Biomass w/o Epi.		0.00450	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Chalk Point Discharge		Station: 074		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 15:25:52	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 10.55		Temperature (C): 25.94	
Dissolved Oxygen (mg/l): 6.4		Sediment Silt-Clay (%): 84.95		Total Carbon (%): 2.51	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.20		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.92	3	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	1350	3	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	8.82	5	Pollution Sensitive Species Abundance (%)	23.33	
Carnivore-Omnivore Abundance (%)	10.00		Pollution Sensitive Species Biomass (%)	95.23	5
Deep Deposit Feeder Abundance (%)	53.33				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA		Abundance (#/m2)		Biomass (g/m2)	
Americamysis bigelowi	(Epi)	90		0.01350	
Carinoma tremaphoros		90		0.05850	
Leptocheirus plumulosus		90			
Macoma balthica		315		8.40150	
Macoma mitchelli		90		0.23400	
Neanthes succinea		45		0.11700	
Tubificoides spp.		720		0.00900	
Total Abundance w/ Epi.		1440			
Total Abundance w/o Epi.		1350			
Number of Taxa w/ Epi.		7			
Number of Taxa w/o Epi.		6			
Total Biomass w/ Epi.				8.83575	
Total Biomass w/o Epi.				8.82225	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Chalk Point Discharge		Station: 074		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 15:25:52	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 10.55		Temperature (C): 25.94	
Dissolved Oxygen (mg/l): 6.4		Sediment Silt-Clay (%): 84.95		Total Carbon (%): 2.51	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.40		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.32	3	Pollution Indicative Species Abundance (%)	9.09	5
Abundance (#/m2)	990	3	Pollution Indicative Species Biomass (%)	0.02	
Biomass (g/m2)	51.28	1	Pollution Sensitive Species Abundance (%)	59.09	
Carnivore-Omnivore Abundance (%)	18.18		Pollution Sensitive Species Biomass (%)	99.83	5
Deep Deposit Feeder Abundance (%)	18.18				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	90		0.02700		
Eteone heteropoda	45		0.00900		
Heteromastus filiformis	45		0.01350		
Leptocheirus plumulosus	45				
Macoma balthica	540		51.12900		
Neanthes succinea	45		0.03150		
Rangia cuneata	45		0.05850		
Tubificidae imm w/o cap chaetae	45		0.00225		
Tubificoides spp.	90		0.00225		
Total Abundance w/ Epi.	990				
Total Abundance w/o Epi.	990				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	9				
Total Biomass w/ Epi.			51.27525		
Total Biomass w/o Epi.			51.27525		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Chalk Point Discharge		Station: 074		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 15:25:52	
BOTTOM ENVIRONMENT					
Depth (m): 2.4		Salinity (ppt): 10.55		Temperature (C): 25.94	
Dissolved Oxygen (mg/l): 6.4		Sediment Silt-Clay (%): 84.95		Total Carbon (%): 2.51	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.80		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.71	3	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	1170	3	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	3.15	3	Pollution Sensitive Species Abundance (%)	50.00	
Carnivore-Omnivore Abundance (%)	7.69		Pollution Sensitive Species Biomass (%)	96.85	5
Deep Deposit Feeder Abundance (%)	15.38				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	90		0.04050		
Leptocheirus plumulosus	315				
Macoma balthica	585		3.04650		
Tubificoides spp.	180		0.00450		
Total Abundance w/ Epi.	1170				
Total Abundance w/o Epi.	1170				
Number of Taxa w/ Epi.	4				
Number of Taxa w/o Epi.	4				
Total Biomass w/ Epi.			3.14550		
Total Biomass w/o Epi.			3.14550		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 077		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 14:48:35	
BOTTOM ENVIRONMENT					
Depth (m): 3.9		Salinity (ppt): 7.63		Temperature (C): 26.13	
Dissolved Oxygen (mg/l): 8.5		Sediment Silt-Clay (%): 87.92		Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.60	5	Pollution Indicative Species Abundance (%)	13.51	3
Abundance (#/m2)	1665	5	Pollution Indicative Species Biomass (%)	2.84	
Biomass (g/m2)	0.95	1	Pollution Sensitive Species Abundance (%)	24.32	
Carnivore-Omnivore Abundance (%)	5.41		Pollution Sensitive Species Biomass (%)	27.19	1
Deep Deposit Feeder Abundance (%)	40.54				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.01350		
Cyathura polita	45		0.00225		
Leitoscoloplos spp.	45		0.01800		
Leptocheirus plumulosus	315				
Macoma balthica	45		0.12600		
Macoma mitchelli	45		0.57150		
Marenzelleria viridis	45		0.10350		
Melita nitida (Epi)	225		0.02250		
Rangia cuneata	270		0.02700		
Streblospio benedicti	180		0.00900		
Tubificoides spp.	630		0.00900		
Total Abundance w/ Epi.	1890				
Total Abundance w/o Epi.	1665				
Number of Taxa w/ Epi.	11				
Number of Taxa w/o Epi.	10				
Total Biomass w/ Epi.			0.97425		
Total Biomass w/o Epi.			0.95175		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 077		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 14:48:35	
BOTTOM ENVIRONMENT					
Depth (m): 3.9		Salinity (ppt): 7.63		Temperature (C): 26.13	
Dissolved Oxygen (mg/l): 8.5		Sediment Silt-Clay (%): 87.92		Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.20		Condition: Degraded		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	2.31	3	Pollution Indicative Species Abundance (%)	12.00	3
Abundance (#/m2)	1125	3	Pollution Indicative Species Biomass (%)	2.05	
Biomass (g/m2)	0.66	1	Pollution Sensitive Species Abundance (%)	8.00	
Carnivore-Omnivore Abundance (%)	8.00		Pollution Sensitive Species Biomass (%)	9.59	1
Deep Deposit Feeder Abundance (%)	48.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	90		0.02250		
Gammarus daiberi (Epi)	135		0.00900		
Heteromastus filiformis	45		0.01800		
Leptocheirus plumulosus	225				
Macoma mitchelli	45		0.46800		
Rangia cuneata	90		0.06300		
Streblospio benedicti	135		0.01350		
Tubificoides spp.	495		0.00900		
Total Abundance w/ Epi.	1260				
Total Abundance w/o Epi.	1125				
Number of Taxa w/ Epi.	8				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			0.66600		
Total Biomass w/o Epi.			0.65700		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 077		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 02SEP09	
		Sampled Area: 0.022 sq.m		Time: 14:48:35	
BOTTOM ENVIRONMENT					
Depth (m): 3.9		Salinity (ppt): 7.63		Temperature (C): 26.13	
Dissolved Oxygen (mg/l): 8.5		Sediment Silt-Clay (%): 87.92		Total Carbon (%): 1.94	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.40		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.94	3	Pollution Indicative Species Abundance (%)	3.33	5
Abundance (#/m2)	1350	3	Pollution Indicative Species Biomass (%)	0.44	
Biomass (g/m2)	0.51	1	Pollution Sensitive Species Abundance (%)	16.67	
Carnivore-Omnivore Abundance (%)	6.67		Pollution Sensitive Species Biomass (%)	85.46	5
Deep Deposit Feeder Abundance (%)	56.67				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.03150		
Leptocheirus plumulosus	225				
Macoma balthica	45		0.36900		
Neanthes succinea	45		0.00900		
Rangia cuneata	180		0.06750		
Streblospio benedicti	45		0.00225		
Tubificoides spp.	765		0.00900		
Total Abundance w/ Epi.	1350				
Total Abundance w/o Epi.	1350				
Number of Taxa w/ Epi.	7				
Number of Taxa w/o Epi.	7				
Total Biomass w/ Epi.			0.51075		
Total Biomass w/o Epi.			0.51075		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 079	Rep: 01
Gear: Wildco Box Corer		Habitat: Tidal Freshwater	Date: 09SEP09
		Sampled Area: 0.022 sq.m	Time: 11:41:57
BOTTOM ENVIRONMENT			
Depth (m): 0.5	Salinity (ppt): 0.21	Temperature (C): 22.78	
Dissolved Oxygen (mg/l): 6.8	Sediment Silt-Clay (%): 74.08	Total Carbon (%): 2.72	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 4.00	Condition: Meets Goal		# Attributes Scored: 3
	Value	Score	Value
Shannon-Wiener Index	2.54		Score
Abundance (#/m2)	2025	5	T.F. Pollution Indicative Spp. Abund. (%) 40.00 3
Deep Deposit Feeder Abundance (%)	93.33	3	Tolerance Score 7.73 5
Carnivore-Omnivore Abundance (%)	6.67		Limnodrilus Abundance (%) 40.00
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Aulodrilus limnobius	270	0.00225	
Aulodrilus pigueti	450	0.00225	
Branchiura sowerbyi	180	0.77850	
Chironomus spp.	45	0.00225	
Coelotanypus spp.	90	0.03150	
Limnodrilus hoffmeisteri	90	0.00225	
Oligochaeta		0.21600	
Tubificidae imm w cap chaetae	180	0.00225	
Tubificidae imm w/o cap chaetae *	720	0.00225	
Total Abundance w/ Epi.	2025		
Total Abundance w/o Epi.	2025		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		1.03950	
Total Biomass w/o Epi.		1.03950	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 079	Rep: 02
Gear: Wildco Box Corer		Habitat: Tidal Freshwater	Date: 09SEP09
		Sampled Area: 0.022 sq.m	Time: 11:41:57
BOTTOM ENVIRONMENT			
Depth (m): 0.5	Salinity (ppt): 0.21	Temperature (C): 22.78	
Dissolved Oxygen (mg/l): 6.8	Sediment Silt-Clay (%): 74.08	Total Carbon (%): 2.72	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.50	Condition: Meets Goal		# Attributes Scored: 3
	Value	Score	Value
Shannon-Wiener Index	2.68		51.52
Abundance (#/m2)	2970	5	8.28
Deep Deposit Feeder Abundance (%)	84.85	3	51.52
Carnivore-Omnivore Abundance (%)	15.15		
		T.F. Pollution Indicative Spp. Abund. (%)	3
		Tolerance Score	3
		Limnodrilus Abundance (%)	
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Aulodrilus limnobius	90	0.00225	
Aulodrilus pigueti	540	0.00225	
Chironomus spp.	45	0.00225	
Coelotanypus spp.	135	0.02250	
Cryptochironomus spp.	135	0.00225	
Cryptotendipes spp.	45	0.00225	
Dero spp.	90	0.00225	
Harnischia spp.	45	0.00225	
Limnodrilus hoffmeisteri	270	0.00225	
Oligochaeta		0.17550	
Procladius spp.	45	0.00225	
Tubificidae imm w cap chaetae	270	0.00225	
Tubificidae imm w/o cap chaetae *	1260	0.00225	
Total Abundance w/ Epi.	2970		
Total Abundance w/o Epi.	2970		
Number of Taxa w/ Epi.	11		
Number of Taxa w/o Epi.	11		
Total Biomass w/ Epi.		0.22275	
Total Biomass w/o Epi.		0.22275	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patuxent River		Station: 079	Rep: 03
Gear: Wildco Box Corer		Habitat: Tidal Freshwater	Date: 09SEP09
		Sampled Area: 0.022 sq.m	Time: 11:41:57
BOTTOM ENVIRONMENT			
Depth (m): 0.5	Salinity (ppt): 0.21	Temperature (C): 22.78	
Dissolved Oxygen (mg/l): 6.8	Sediment Silt-Clay (%): 74.08	Total Carbon (%): 2.72	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.50	Condition: Meets Goal		# Attributes Scored: 3
	Value	Score	Value
Shannon-Wiener Index	2.06		Score
Abundance (#/m2)	3870	5	T.F. Pollution Indicative Spp. Abund. (%) 60.47 3
Deep Deposit Feeder Abundance (%)	90.70	3	Tolerance Score 8.45 3
Carnivore-Omnivore Abundance (%)	9.30		Limnodrilus Abundance (%) 60.47
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Aulodrilus pigueti	720	0.00225	
Branchiura sowerbyi	90	0.04500	
Coelotanypus spp.	270	0.03150	
Cryptotendipes spp.	45	0.00225	
Ilyodrilus templetoni	90	0.00225	
Limnodrilus hoffmeisteri	180	0.00225	
Oligochaeta		0.23400	
Tanytarsus spp. G Epler	45	0.00225	
Tubificidae imm w cap chaetae *	270	0.00225	
Tubificidae imm w/o cap chaetae *	2160	0.00225	
Total Abundance w/ Epi.	3870		
Total Abundance w/o Epi.	3870		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		0.32625	
Total Biomass w/o Epi.		0.32625	

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 201		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 12:08:10	
BOTTOM ENVIRONMENT					
Depth (m): 3.9		Salinity (ppt): 8.13		Temperature (C): 28.16	
Dissolved Oxygen (mg/l): 1.8		Sediment Silt-Clay (%): 97.58		Total Carbon (%): 3.4	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.88	1	Pollution Indicative Species Abundance (%)	85.71	1
Abundance (#/m2)	1575	5	Pollution Indicative Species Biomass (%)	1.38	
Biomass (g/m2)	1.63	3	Pollution Sensitive Species Abundance (%)	11.43	
Carnivore-Omnivore Abundance (%)	2.86		Pollution Sensitive Species Biomass (%)	98.48	5
Deep Deposit Feeder Abundance (%)	2.86				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Eteone heteropoda	45		0.00450		
Macoma balthica	180		1.60650		
Streblospio benedicti	1305		0.01800		
Tubificoides spp.	45		0.00225		
Total Abundance w/ Epi.	1575				
Total Abundance w/o Epi.	1575				
Number of Taxa w/ Epi.	4				
Number of Taxa w/o Epi.	4				
Total Biomass w/ Epi.			1.63125		
Total Biomass w/o Epi.			1.63125		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 201		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 12:08:10	
BOTTOM ENVIRONMENT					
Depth (m): 3.9		Salinity (ppt): 8.13		Temperature (C): 28.16	
Dissolved Oxygen (mg/l): 1.8		Sediment Silt-Clay (%): 97.58		Total Carbon (%): 3.4	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 2.20		Condition: Degraded		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.65	1	Pollution Indicative Species Abundance (%)	83.33	1
Abundance (#/m2)	540	3	Pollution Indicative Species Biomass (%)	0.94	
Biomass (g/m2)	0.48	1	Pollution Sensitive Species Abundance (%)	16.67	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	99.06	5
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Macoma balthica	90		0.47250		
Streblospio benedicti	450		0.00450		
Total Abundance w/ Epi.	540				
Total Abundance w/o Epi.	540				
Number of Taxa w/ Epi.	2				
Number of Taxa w/o Epi.	2				
Total Biomass w/ Epi.			0.47700		
Total Biomass w/o Epi.			0.47700		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 201	Rep: 03
Gear: Wildco Box Corer		Habitat: Low Mesohaline	Date: 24AUG09
		Sampled Area: 0.022 sq.m	Time: 12:08:10
BOTTOM ENVIRONMENT			
Depth (m): 3.9	Salinity (ppt): 8.13	Temperature (C): 28.16	
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 97.58	Total Carbon (%): 3.4	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00	Condition: Meets Goal		# Attributes Scored: 5
	Value	Score	Value
Shannon-Wiener Index	1.85	3	58.82
Abundance (#/m2)	765	3	1.23
Biomass (g/m2)	1.09	3	17.65
Carnivore-Omnivore Abundance (%)	5.88		93.42
Deep Deposit Feeder Abundance (%)	11.76		5
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Heteromastus filiformis	45	0.00450	
Littoridinops tenuipes (Epi)	45	0.00900	
Macoma balthica	135	1.02150	
Macoma mitchelli	45	0.04950	
Neanthes succinea	45	0.00225	
Streblospio benedicti	450	0.01350	
Tubificoides spp.	45	0.00225	
Total Abundance w/ Epi.	810		
Total Abundance w/o Epi.	765		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		1.10250	
Total Biomass w/o Epi.		1.09350	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 202		Rep: 01	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:07:45	
BOTTOM ENVIRONMENT					
Depth (m): 5.9		Salinity (ppt): 8.03		Temperature (C): 28.31	
Dissolved Oxygen (mg/l): 3.3		Sediment Silt-Clay (%): 84.62		Total Carbon (%): 2.49	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	1
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)	100.00	
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Mulinia lateralis	45		0.14850		
Total Abundance w/ Epi.	45				
Total Abundance w/o Epi.	45				
Number of Taxa w/ Epi.	1				
Number of Taxa w/o Epi.	1				
Total Biomass w/ Epi.			0.14850		
Total Biomass w/o Epi.			0.14850		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 202		Rep: 02	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:07:45	
BOTTOM ENVIRONMENT					
Depth (m): 5.9		Salinity (ppt): 8.03		Temperature (C): 28.31	
Dissolved Oxygen (mg/l): 3.3		Sediment Silt-Clay (%): 84.62		Total Carbon (%): 2.49	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	100.00	1
Abundance (#/m2)	135	1	Pollution Indicative Species Biomass (%)	100.00	
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Streblospio benedicti	135		0.00900		
Total Abundance w/ Epi.	135				
Total Abundance w/o Epi.	135				
Number of Taxa w/ Epi.	1				
Number of Taxa w/o Epi.	1				
Total Biomass w/ Epi.			0.00900		
Total Biomass w/o Epi.			0.00900		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 202		Rep: 03	
Gear: Wildco Box Corer		Habitat: Low Mesohaline		Date: 24AUG09	
		Sampled Area: 0.022 sq.m		Time: 11:07:45	
BOTTOM ENVIRONMENT					
Depth (m): 5.9		Salinity (ppt): 8.03		Temperature (C): 28.31	
Dissolved Oxygen (mg/l): 3.3		Sediment Silt-Clay (%): 84.62		Total Carbon (%): 2.49	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	1.00	1	Pollution Indicative Species Abundance (%)	50.00	1
Abundance (#/m2)	90	1	Pollution Indicative Species Biomass (%)	20.00	
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	50.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	45		0.01800		
Streblospio benedicti	45		0.00450		
Total Abundance w/ Epi.	90				
Total Abundance w/o Epi.	90				
Number of Taxa w/ Epi.	2				
Number of Taxa w/o Epi.	2				
Total Biomass w/ Epi.			0.02250		
Total Biomass w/o Epi.			0.02250		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 203	Rep: 01
Gear: Young Grab		Habitat: Oligohaline	Date: 25AUG09
		Sampled Area: 0.044 sq.m	Time: 9:23:18
BOTTOM ENVIRONMENT			
Depth (m): 1.5	Salinity (ppt): 2.00	Temperature (C): 27.09	
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 82.30	Total Carbon (%): 4.07	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value Score
Shannon-Wiener Index	2.40		78.95 3
Abundance (#/m2)	1727	5	Tolerance Score 9.02 3
Deep Deposit Feeder Abundance (%)	39.47		Oligohaline Pollution Sensitive Spp. Abund. 21.05 3
Carnivore-Omnivore Abundance (%)	27.63	3	Tanypodinae/Chironomidae Abundance Ratio 52.38 3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chironomus spp.	227		0.00114
Coelotanypus spp.	250		0.06362
Leptocheirus plumulosus	136		
Limnodrilus hoffmeisteri	45		0.00114
Marenzelleria viridis	364		0.76112
Oligochaeta			0.16813
Streblospio benedicti	68		0.00454
Tubificidae imm w/o cap chaetae *	636		0.00114
Total Abundance w/ Epi.	1727		
Total Abundance w/o Epi.	1727		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.			1.03490
Total Biomass w/o Epi.			1.03490

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 203	Rep: 02
Gear: Young Grab		Habitat: Oligohaline	Date: 25AUG09
		Sampled Area: 0.044 sq.m	Time: 9:23:18
BOTTOM ENVIRONMENT			
Depth (m): 1.5	Salinity (ppt): 2.00	Temperature (C): 27.09	
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 82.30	Total Carbon (%): 4.07	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.40		Score
Abundance (#/m2)	2181	5	Oligohaline Pollution Indicative Sp. Abund. 88.54 3
Deep Deposit Feeder Abundance (%)	39.58		Tolerance Score 9.07 1
Carnivore-Omnivore Abundance (%)	27.08	3	Oligohaline Pollution Sensitive Sp. Abund. 11.46 3
			Tanypodinae/Chironomidae Abundance Ratio 50.00 3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chironomus spp.	295		0.00114
Coelotanypus spp.	295		0.07043
Leptocheirus plumulosus	454		
Limnodrilus hoffmeisteri	91		0.00114
Marenzelleria viridis	250		0.40669
Oligochaeta			0.09315
Streblospio benedicti	23		0.00227
Tubificidae imm w/o cap chaetae *	772		0.00114
Total Abundance w/ Epi.	2181		
Total Abundance w/o Epi.	2181		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.			0.71227
Total Biomass w/o Epi.			0.71227

*Indicates taxa is skipped in taxon counts

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Patapsco & Back Rivers		Station: 203	Rep: 03
Gear: Young Grab		Habitat: Oligohaline	Date: 25AUG09
		Sampled Area: 0.044 sq.m	Time: 9:23:18
BOTTOM ENVIRONMENT			
Depth (m): 1.5	Salinity (ppt): 2.00	Temperature (C): 27.09	
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 82.30	Total Carbon (%): 4.07	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value Score
Shannon-Wiener Index	2.35		
Abundance (#/m2)	1340	5	Oligohaline Pollution Indicative Sp. Abund. 86.44 3
Deep Deposit Feeder Abundance (%)	25.42		Tolerance Score 8.87 3
Carnivore-Omnivore Abundance (%)	27.12	3	Oligohaline Pollution Sensitive Sp. Abund. 13.56 3
			Tanypodinae/Chironomidae Abundance Ratio 50.00 3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chironomus spp.	182		0.00114
Coelotanypus spp.	182		0.02954
Gammarus daiberi (Epi)	45		0.00454
Leptocheirus plumulosus	454		
Limnodrilus hoffmeisteri	45		0.00114
Marenzelleria viridis	182		0.31126
Oligochaeta			0.00227
Tubificidae imm w/o cap chaetae	295		0.00114
Total Abundance w/ Epi.	1386		
Total Abundance w/o Epi.	1340		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.			0.48734
Total Biomass w/o Epi.			0.48280

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Western Shore		Station: 204		Rep: 01	
Gear: Young Grab		Habitat: High Mesohaline Mud		Date: 26AUG09	
		Sampled Area: 0.044 sq.m		Time: 11:37:39	
BOTTOM ENVIRONMENT					
Depth (m): 6.9		Salinity (ppt): 9.99		Temperature (C): 28.45	
Dissolved Oxygen (mg/l): 5.2		Sediment Silt-Clay (%): 51.60		Total Carbon (%): 1.22	
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score: 4.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.53	3	Pollution Indicative Species Abundance (%)	11.11	
Abundance (#/m2)	3067	3	Pollution Indicative Species Biomass (%)	0.22	5
Biomass (g/m2)	2.60	5	Pollution Sensitive Species Abundance (%)	13.33	
Carnivore-Omnivore Abundance (%)	18.52	3	Pollution Sensitive Species Biomass (%)	72.28	5
Deep Deposit Feeder Abundance (%)	58.52				
BENTHIC ABUNDANCE (per sq. meter)					
TAXA	Abundance (#/m2)		Biomass (g/m2)		
Carinoma tremaphoros	250		0.04544		
Heteromastus filiformis	182		0.12496		
Leptocheirus plumulosus	68				
Macoma balthica	409		1.88122		
Macoma mitchelli	114		0.01136		
Neanthes succinea	318		0.51347		
Streblospio benedicti	114		0.00454		
Tubificidae imm w/o cap chaetae	227		0.00114		
Tubificoides spp.	1386		0.01363		
Total Abundance w/ Epi.	3067				
Total Abundance w/o Epi.	3067				
Number of Taxa w/ Epi.	9				
Number of Taxa w/o Epi.	9				
Total Biomass w/ Epi.			2.60258		
Total Biomass w/o Epi.			2.60258		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Western Shore		Station: 204	Rep: 02
Gear: Young Grab		Habitat: High Mesohaline Mud	Date: 26AUG09
		Sampled Area: 0.044 sq.m	Time: 11:37:39
BOTTOM ENVIRONMENT			
Depth (m): 6.9	Salinity (ppt): 9.99	Temperature (C): 28.45	
Dissolved Oxygen (mg/l): 5.2	Sediment Silt-Clay (%): 51.60	Total Carbon (%): 1.22	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 4.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.34	3	6.06
Abundance (#/m2)	2249	5	0.25
Biomass (g/m2)	2.26	5	9.09
Carnivore-Omnivore Abundance (%)	29.29	5	44.18
Deep Deposit Feeder Abundance (%)	55.56		3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	204	0.08406	
Heteromastus filiformis	114	0.24538	
Leptocheirus plumulosus	23		
Macoma balthica	204	0.99968	
Mulinia lateralis	23	0.00227	
Neanthes succinea	454	0.90198	
Polydora cornuta	45	0.00114	
Streblospio benedicti	45	0.00227	
Tubificidae imm w/o cap chaetae	68	0.00114	
Tubificoides spp.	1068	0.01590	
Total Abundance w/ Epi.	2249		
Total Abundance w/o Epi.	2249		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	10		
Total Biomass w/ Epi.		2.26291	
Total Biomass w/o Epi.		2.26291	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) FIXED STATIONS

Watershed: Lower Western Shore		Station: 204	Rep: 03
Gear: Young Grab		Habitat: High Mesohaline Mud	Date: 26AUG09
		Sampled Area: 0.044 sq.m	Time: 11:37:39
BOTTOM ENVIRONMENT			
Depth (m): 6.9	Salinity (ppt): 9.99	Temperature (C): 28.45	
Dissolved Oxygen (mg/l): 5.2	Sediment Silt-Clay (%): 51.60	Total Carbon (%): 1.22	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 4.33	Condition: Meets Goal		# Attributes Scored: 6
	Value	Score	Value
Shannon-Wiener Index	2.17	3	Pollution Indicative Species Abundance (%) 1.30
Abundance (#/m2)	1749	5	Pollution Indicative Species Biomass (%) 0.04
Biomass (g/m2)	2.96	5	Pollution Sensitive Species Abundance (%) 24.68
Carnivore-Omnivore Abundance (%)	15.58	3	Pollution Sensitive Species Biomass (%) 67.69
Deep Deposit Feeder Abundance (%)	53.25		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Balanus improvisus (Epi)	23	0.04544	
Carinoma tremaphoros	45	0.06134	
Heteromastus filiformis	114	0.15677	
Leptocheirus plumulosus	45		
Macoma balthica	432	2.00163	
Macoma mitchelli	23	0.00227	
Mulinia lateralis	23	0.00114	
Neanthes succinea	227	0.71341	
Polydora cornuta	23	0.00114	
Tubificoides spp.	818	0.01818	
Total Abundance w/ Epi.	1772		
Total Abundance w/o Epi.	1749		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		3.00245	
Total Biomass w/o Epi.		2.95701	

DATA SUMMARY B

**BENTHIC ENVIRONMENT AND COMMUNITY
COMPOSITION AT RANDOM SITES:
SUMMER 2009**

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16401	16402	16403	16404	16405
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	High Meso Sand	High Meso Mud	High Meso Sand	High Meso Mud	High Meso Mud
Date	09/01/09	09/01/09	09/01/09	09/01/09	09/01/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	2.9	3.5	2.6	2.8	2.1
Salinity (ppt)	16.58	16.70	16.49	15.45	14.88
Temperature (C)	24.71	25.66	25.26	24.97	23.23
Dissolved Oxygen (mg/L)	6.9	6.1	7.2	6.8	7.2
Sediment Silt-Clay (%)	3.58	76.78	5.72	85.43	86.28
Total Carbon (%)	0.19	1.60	0.18	2.79	1.74
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	4.00	2.67	4.00	1.67	2.00
Condition	Meets Goal	Marginal	Meets Goal	Severely Degr.	Severely Degr.
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.86 3	0.82 1	2.47 1	1.74 1	2.16 3
Abundance (#/m2)	6430 1	477 1	3044 3	341 1	477 1
Biomass (g/m2)	3.61 5	0.14 1	3.11 5	0.09 1	0.18 1
Pollution Indicative Spp Abund (%)	1.06 5	0.00	7.46 5	26.67	33.33
Pollution Indicative Spp Biom (%)	0.38	0.00 5	6.13	76.32 1	74.07 1
Pollution Sensitive Spp Abund (%)	75.27 5	95.24	85.07 5	66.67	57.14
Pollution Sensitive Spp Biom (%)	23.68	96.67 3	79.23	18.42 1	7.41 1
Carnivore-Omnivore Abund (%)	54.06 5	85.71 5	49.25 5	60.00 5	47.62 5
Deep Deposit Feeder Abund (%)	23.67	0.00	20.90	6.67	38.10
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Limnodrilus Abundance (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Tolerance Score	0.00	0.00	0.00	0.00	0.00
Tany./Chir. Abundance Ratio	0.00	0.00	0.00	0.00	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16401	16402	16403	16404	16405
<i>Acteocina canaliculata</i>	3067	409	1386	204	227
<i>Americamysis bigelowi</i> (Epi.)	45				
<i>Ampelisca abdita</i>	91	23	45		
<i>Ampelisca verrilli</i>	23				
<i>Clymenella torquata</i>	273		500		
<i>Cyathura polita</i>			23		
<i>Glycera dibranchiata</i>	23		23		
<i>Glycinde solitaria</i>	227		23		
<i>Haminoea solitaria</i>			23		
<i>Heteromastus filiformis</i>	91		45	23	23
<i>Ilyanassa obsoleta</i>	23				
<i>Leitoscoloplos robustus</i>			91		114
<i>Leitoscoloplos</i> spp.	23				
<i>Listriella barnardi</i>	68		23		
<i>Listriella clymenellae</i>	841		591		
<i>Loimia medusa</i>	91	23	68		
<i>Macoma mitchelli</i>	68		45		23
Maldanidae *	591				
<i>Mediomastus ambiseta</i>	227				45
<i>Mulinia lateralis</i>			136	45	23
<i>Mya arenaria</i>		23			
<i>Neanthes succinea</i>	23				
<i>Paraprionospio pinnata</i>	45			45	23
<i>Phoronis</i> spp.	114			23	
<i>Ptilanthura tenuis</i>	68				
Pyramidellidae (Epi.)	23				
<i>Rictaxis punctostriatus</i>	45		23		
<i>Tharyx</i> sp. A Morris	91				
<i>Tubificoides</i> spp.	318				
Total Abundance w/ Epifauna	6498	477	3044	341	477
Total Abundance w/o Epifauna	6430	477	3044	341	477
Number of Taxa w/ Epifauna	23	4	15	5	7
Number of Taxa w/o Epifauna	21	4	15	5	7

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16401	16402	16403	16404	16405
<i>Acteocina canaliculata</i>	0.1477	0.0250	0.0454	0.0091	0.0091
<i>Americamysis bigelowi</i> (Epi.)	0.0045				
<i>Ampelisca abdita</i>	0.0023	0.0045	0.0091		
<i>Ampelisca verrilli</i>	0.0068				
<i>Clymenella torquata</i>	0.5589		2.0902		
<i>Cyathura polita</i>			0.0250		
<i>Glycera dibranchiata</i>	0.0182		0.4158		
<i>Glycinde solitaria</i>	0.0204		0.0023		
<i>Haminoea solitaria</i>			0.0023		
<i>Heteromastus filiformis</i>	0.0159		0.0091	0.0045	0.0068
<i>Ilyanassa obsoleta</i>	1.2564				
<i>Leitoscoloplos robustus</i>			0.0682		0.0977
<i>Leitoscoloplos</i> spp.	0.0023				
<i>Listriella barnardi</i>	0.0068		0.0011		
<i>Listriella clymenellae</i>	0.0409		0.0250		
<i>Loimia medusa</i>	0.0613	0.0454	0.2772		
<i>Macoma mitchelli</i>	0.0068		0.0068		0.0273
Maldanidae *	1.3723				
<i>Mediomastus ambiseta</i>	0.0023				0.0045
<i>Mulinia lateralis</i>			0.1227	0.0500	0.0295
<i>Mya arenaria</i>		0.0613			
<i>Neanthes succinea</i>	0.0114				
<i>Paraprionospio pinnata</i>	0.0114			0.0159	0.0091
<i>Phoronis</i> spp.	0.0227			0.0068	
<i>Ptilanthura tenuis</i>	0.0159				
Pyramidellidae (Epi.)	0.0011				
<i>Rictaxis punctostriatus</i>	0.0045		0.0114		
<i>Tharyx</i> sp. A Morris	0.0114				
<i>Tubificoides</i> spp.	0.0114				
Total Biomass w/ Epifauna	3.6136	0.1363	3.1115	0.0863	0.1840
Total Biomass w/o Epifauna	3.6079	0.1363	3.1115	0.0863	0.1840

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16407	16408	16409	16410	16411
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	High Meso Sand	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Sand
Date	09/01/09	09/01/09	09/01/09	09/01/09	09/01/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	3.0	4.1	2.7	4.5	2.7
Salinity (ppt)	13.17	12.95	12.58	13.39	12.38
Temperature (C)	24.39	24.56	24.71	25.69	25.32
Dissolved Oxygen (mg/L)	7.1	7.2	7.1	5.7	6.5
Sediment Silt-Clay (%)	6.23	94.20	97.81	88.40	15.75
Total Carbon (%)	0.28	2.90	3.50	3.19	0.48
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.67	2.33	1.00	1.67	1.67
Condition	Meets Goal	Degraded	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.25 1	2.00 3	0.00 1	1.50 1	2.42 1
Abundance (#/m2)	1954 5	91 1	68 1	91 1	273 1
Biomass (g/m2)	0.25 1	0.08 1	0.00 1	0.04 1	0.23 1
Pollution Indicative Spp Abund (%)	8.14 5	25.00	100.00	50.00	33.33 1
Pollution Indicative Spp Biom (%)	61.11	13.89 3	100.00 1	36.36 1	39.22
Pollution Sensitive Spp Abund (%)	70.93 5	50.00	0.00	0.00	16.67 3
Pollution Sensitive Spp Biom (%)	20.37	2.78 1	0.00 1	0.00 1	4.90
Carnivore-Omnivore Abund (%)	70.93 5	75.00 5	0.00 1	25.00 5	33.33 3
Deep Deposit Feeder Abund (%)	8.14	0.00	0.00	25.00	8.33
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Limnodrilus Abundance (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Tolerance Score	0.00	0.00	0.00	0.00	0.00
Tany./Chir. Abundance Ratio	0.00	0.00	0.00	0.00	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16407	16408	16409	16410	16411
Acteocina canaliculata	1159	23			
Americamysis bigelowi (Epi.)					23
Ampelisca abdita					45
Carinoma tremaphoros				23	
Edotea triloba (Epi.)	68				
Edwardsia elegans	23				
Glycera dibranchiata	45				
Glycinde solitaria	68	23			45
Heteromastus filiformis					23
Leitoscoloplos spp.	23				
Leptosynapta tenuis	23				
Leucon americanus					23
Lyonsia hyalina	68				
Macoma mitchelli	159				
Mediomastus ambiseta	136				
Mulinia lateralis	136		68	45	91
Neanthes succinea		23			45
Odostomia engonia (Epi.)	45				
Paraprionospio pinnata		23			
Rictaxis punctostriatus	91				
Spiochaetopterus costarum	23				
Tubificoides spp.				23	
Total Abundance w/ Epifauna	2068	91	68	91	295
Total Abundance w/o Epifauna	1954	91	68	91	273
Number of Taxa w/ Epifauna	14	4	1	3	7
Number of Taxa w/o Epifauna	12	4	1	3	6
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16407	16408	16409	16410	16411
Acteocina canaliculata	0.0364	0.0011			
Americamysis bigelowi (Epi.)					0.0091
Ampelisca abdita					0.0045
Carinoma tremaphoros				0.0227	
Edotea triloba (Epi.)	0.0045				
Edwardsia elegans	0.0068				
Glycera dibranchiata	0.0204				
Glycinde solitaria	0.0068	0.0011			0.0114
Heteromastus filiformis					0.0477
Leitoscoloplos spp.	0.0432				
Leptosynapta tenuis	0.0045				
Leucon americanus					0.0045
Lyonsia hyalina	0.0045				
Macoma mitchelli	0.0068				
Mediomastus ambiseta	0.0023				
Mulinia lateralis	0.1068		0.0045	0.0136	0.0909
Neanthes succinea		0.0682			0.0727
Odostomia engonia (Epi.)	0.0011				
Paraprionospio pinnata		0.0114			
Rictaxis punctostriatus	0.0023				
Spiochaetopterus costarum	0.0045				
Tubificoides spp.				0.0011	
Total Biomass w/ Epifauna	0.2511	0.0818	0.0045	0.0375	0.2408
Total Biomass w/o Epifauna	0.2454	0.0818	0.0045	0.0375	0.2317

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16412	16413	16414	16415	16416
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	High Meso Sand	Low Mesohaline	High Meso Sand	Freshwater	Freshwater
Date	09/18/09	09/18/09	09/18/09	09/08/09	09/08/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	0.8	3.4	2.8	14.4	3.6
Salinity (ppt)	12.59	11.26	13.37	0.41	0.14
Temperature (C)	21.93	22.03	22.19	24.09	23.96
Dissolved Oxygen (mg/L)	7.0	5.8	6.9	4.9	4.9
Sediment Silt-Clay (%)	2.35	90.38	1.84	82.00	18.33
Total Carbon (%)	0.12	2.34	0.07	6.69	0.89
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.33	3.40	1.67	1.00	5.00
Condition	Degraded	Meets Goal	Severely Degr.	Severely Degr.	Meets Goal
# Attributes Scored	6	5	6	3	4
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.19 1	2.63 5	1.23 1	0.00	2.87
Abundance (#/m2)	66342 1	613 3	5157 1	0 1	1386 5
Biomass (g/m2)	6.70 5	2.36 3	0.96 1	0.00	42.56
Pollution Indicative Spp Abund (%)	0.86 5	37.04 1	5.29 5	100.00	13.11
Pollution Indicative Spp Biom (%)	0.70	0.92	7.11	100.00	0.02
Pollution Sensitive Spp Abund (%)	0.17 1	33.33	3.52 1	0.00	42.62
Pollution Sensitive Spp Biom (%)	0.68	97.88 5	26.07	0.00	99.86
Carnivore-Omnivore Abund (%)	0.38 1	37.04	3.96 1	0.00	22.95
Deep Deposit Feeder Abund (%)	0.51	33.33	3.52	0.00 1	36.07 5
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00	100.00 1	13.11 5
Limnodrilus Abundance (%)	0.00	14.81	0.00	0.00	13.11
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Tolerance Score	0.00	7.64	0.00	0.00	7.79 5
Tany./Chir. Abundance Ratio	0.00	100.00	0.00	0.00	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16412	16413	16414	16415	16416
Apocorophium lacustre (Epi.)					45
Carinoma tremaphoros	23	23			
Chiridotea almyra					91
Coelotanypus spp.		136			
Cyathura polita	23	68			227
Edotea triloba (Epi.)	23				
Eteone heteropoda	23				
Gammarus daiberi (Epi.)					45
Gemma gemma	65047		4180		
Glycinde solitaria	68		114		
Heteromastus filiformis	341		159		
Hobsonia florida					68
Laeonereis culveri	45				
Leptocheirus plumulosus		45			136
Limnodrilus hoffmeisteri					182
Littoridinops tenuipes (Epi.)	136				
Macoma balthica		136	23		
Macoma mitchelli	136		250		
Marenzelleria viridis	23		45		159
Mulinia lateralis	23		68		
Neanthes succinea	68		91		
Rangia cuneata					204
Streblospio benedicti	523		204		
Tubificidae imm w/o cap chaetae		91			
Tubificoides spp.		114	23		318
Total Abundance w/ Epifauna	66501	613	5157	0	1477
Total Abundance w/o Epifauna	66342	613	5157		1386
Number of Taxa w/ Epifauna	14	7	10	0	10
Number of Taxa w/o Epifauna	12	7	10	0	8

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16412	16413	16414	16415	16416
Apocorophium lacustre (Epi.)					0.0023
Carinoma tremaphoros	0.0250	0.0023			
Chiridotea almyra					0.0182
Coelotanypus spp.		0.0204			
Cyathura polita	0.0136	0.0886			0.0091
Edotea triloba (Epi.)	0.0011				
Eteone heteropoda	0.0011				
Gammarus daiberi (Epi.)					0.0091
Gemma gemma	6.2366		0.3703		
Glycinde solitaria	0.0023		0.0091		
Heteromastus filiformis	0.1931		0.1159		
Hobsonia florida					0.0159
Laeonereis culveri	0.0068				
Leptocheirus plumulosus		0.0250			0.0114
Limnodrilus hoffmeisteri					0.0011
Littoridinops tenuipes (Epi.)	0.0068				
Macoma balthica		2.2175	0.0682		
Macoma mitchelli	0.0932		0.0091		
Marenzelleria viridis	0.0295		0.1727		0.2340
Mulinia lateralis	0.0136		0.0545		
Neanthes succinea	0.0545		0.1431		
Oligochaeta					0.0068
Rangia cuneata					42.2615
Streblospio benedicti	0.0318		0.0136		
Tubificidae imm w/o cap chaetae		0.0011			
Tubificoides spp.		0.0011	0.0023		0.0068
Total Biomass w/ Epifauna	6.7092	2.3561	0.9588	0.0000	42.5761
Total Biomass w/o Epifauna	6.7013	2.3561	0.9588	0.0000	42.5648

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16418	16419	16420	16421	16422					
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs					
Habitat	Low Mesohaline	Low Mesohaline	Oligohaline	Oligohaline	Oligohaline					
Date	09/16/09	09/16/09	10/06/09	10/06/09	10/06/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	0.6	3.4	0.4	4.6	0.9					
Salinity (ppt)	11.76	8.76	2.30	3.26	3.85					
Temperature (C)	22.71	22.70	18.70	18.74	18.94					
Dissolved Oxygen (mg/L)	6.8	6.2	11.8	9.1	9.9					
Sediment Silt-Clay (%)	5.05	77.44	89.58	94.62	0.80					
Total Carbon (%)	0.29	2.24	2.10	2.31	0.06					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.40		4.20		2.67		3.33		3.33	
Condition	Meets Goal		Meets Goal		Marginal		Meets Goal		Meets Goal	
# Attributes Scored	5		5		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	3.40	5	2.83	5	2.22		2.07		1.48	
Abundance (#/m2)	2567	3	2227	5	318	3	841	5	1340	5
Biomass (g/m2)	2.16	3	1.70	3	0.17		19.97		3.07	
Pollution Indicative Spp Abund (%)	19.47	3	5.10	5	78.57		78.38		1.69	
Pollution Indicative Spp Biom (%)	30.21		0.20		14.29		0.79		0.22	
Pollution Sensitive Spp Abund (%)	12.39		19.39		0.00		10.81		3.39	
Pollution Sensitive Spp Biom (%)	49.37	3	71.74	3	0.00		99.07		0.44	
Carnivore-Omnivore Abund (%)	21.24		22.45		42.86	5	43.24	5	6.78	1
Deep Deposit Feeder Abund (%)	29.20		40.82		57.14		37.84		0.00	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.88		1.02		35.71		37.84		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		100.00	1	86.49	3	77.97	3
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00	1	8.11	3	1.69	3
Tolerance Score	9.80		9.80		8.73	3	7.93	3	6.37	3
Tany./Chir. Abundance Ratio	0.00		0.00		50.00	3	93.33	1	0.00	5

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16418	16419	16420	16421	16422
Branchiura sowerbyi			68		
Carinoma tremaphoros	23	23			
Ceratopogonidae				23	
Chironomus spp.			68	23	
Coelotanypus spp.			68	318	
Corbicula fluminea					954
Cryptochironomus spp.					68
Cyathura polita	68	227			23
Cyclaspis varians	182				
Edotea triloba (Epi.)	23				
Eteone heteropoda	23				
Gammarus daiberi (Epi.)	23				
Gemma gemma	23	23			
Heteromastus filiformis	409	159			
Leitoscoloplos spp.	23				
Lepidactylus dytiscus	45				182
Leptocheirus plumulosus	295	409		68	68
Limnodrilus hoffmeisteri			23		
Macoma balthica	45	204			
Macoma mitchelli	45	91			
Marenzelleria viridis	204			68	23
Mulinia lateralis	45				
Mytilopsis leucophaeata (Epi.)		23			
Neanthes succinea	432	250			
Rangia cuneata				23	
Streblospio benedicti	386	91			23
Tubificidae imm w/o cap chaetae	23	23		318	
Tubificidae imm w/o cap chaetae *			91		
Tubificoides spp.	295	727			
Total Abundance w/ Epifauna	2613	2249	318	841	1340
Total Abundance w/o Epifauna	2567	2227	318	841	1340
Number of Taxa w/ Epifauna	19	12	4	7	7
Number of Taxa w/o Epifauna	17	11	4	7	7

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16418	16419	16420	16421	16422
Branchiura sowerbyi			0.1431		
Carinoma tremaphoros	0.0295	0.0863			
Ceratopogonidae				0.0091	
Chironomus spp.			0.0011	0.0011	
Coelotanypus spp.			0.0159	0.1431	
Corbicula fluminea					2.9309
Cryptochironomus spp.					0.0011
Cyathura polita	0.0818	0.2795			0.0023
Cyclaspis varians	0.0068				
Edotea triloba (Epi.)	0.0068				
Eteone heteropoda	0.0011				
Gammarus daiberi (Epi.)	0.0011				
Gemma gemma	0.0045	0.0023			
Heteromastus filiformis	0.1022	0.1068			
Leitoscoloplos spp.	0.0091				
Lepidactylus dytiscus	0.0409				0.1068
Leptocheirus plumulosus	0.0500	0.0886		0.0204	0.0091
Limnodrilus hoffmeisteri			0.0011		
Macoma balthica	0.7907	0.9406			
Macoma mitchelli	0.0204	0.0386			
Marenzelleria viridis	0.1931			0.0613	0.0114
Mulinia lateralis	0.6112				
Mytilopsis leucophaeata (Epi.)		0.0114			
Neanthes succinea	0.1795	0.1477			
Oligochaeta			0.0045	0.0114	
Rangia cuneata				19.7210	
Streblospio benedicti	0.0295	0.0023			0.0068
Tubificidae imm w/o cap chaetae	0.0011	0.0011		0.0011	
Tubificidae imm w/o cap chaetae *			0.0011		
Tubificoides spp.	0.0068	0.0068			
Total Biomass w/ Epifauna	2.1664	1.7120	0.1670	19.9686	3.0683
Total Biomass w/o Epifauna	2.1584	1.7006	0.1670	19.9686	3.0683

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16423	16424	16425	16426	16427					
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs					
Habitat	Oligohaline	Oligohaline	Oligohaline	High Meso Mud	High Meso Mud					
Date	10/06/09	10/06/09	10/06/09	09/16/09	09/01/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	4.7	4.5	1.0	5.7	2.4					
Salinity (ppt)	4.40	3.02	3.30	12.31	12.43					
Temperature (C)	18.90	18.81	19.21	22.41	24.97					
Dissolved Oxygen (mg/L)	8.1	8.0	9.2	6.0	7.4					
Sediment Silt-Clay (%)	90.97	85.74	95.10	64.46	75.58					
Total Carbon (%)	2.39	2.33	3.00	2.10	1.74					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.67		2.33		2.00		4.33		2.00	
Condition	Marginal		Degraded		Severely Degr.		Meets Goal		Severely Degr.	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.08		1.94		0.81		3.26	5	2.42	3
Abundance (#/m2)	1000	5	409	3	91	1	2908	3	386	1
Biomass (g/m2)	26.47		53.12		0.02		6.22	5	0.20	1
Pollution Indicative Spp Abund (%)	4.55		33.33		100.00		25.78		41.18	
Pollution Indicative Spp Biom (%)	0.06		0.02		100.00		1.31	5	76.30	1
Pollution Sensitive Spp Abund (%)	63.64		61.11		0.00		29.69		35.29	
Pollution Sensitive Spp Biom (%)	99.86		99.98		0.00		92.62	5	4.62	1
Carnivore-Omnivore Abund (%)	9.09	1	11.11	1	75.00	5	12.50	3	41.18	5
Deep Deposit Feeder Abund (%)	6.82		27.78		25.00		39.06		0.00	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		27.78		25.00		17.97		0.00	
Oligo Poll. Indic. Spp Abund (%)	36.36	3	38.89	3	100.00	1	0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	13.64	3	5.56	3	0.00	1	0.00		0.00	
Tolerance Score	6.02	3	7.28	3	7.10	3	9.80		0.00	
Tany./Chir. Abundance Ratio	100.00	1	100.00	1	100.00	1	0.00		0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16423	16424	16425	16426	16427
<i>Acteocina canaliculata</i>					136
<i>Ampelisca abdita</i>					23
<i>Carinoma tremaphoros</i>				91	
<i>Coelotanypus</i> spp.	45	23	68		
<i>Cyathura polita</i>	45	23		182	
<i>Heteromastus filiformis</i>				341	
<i>Leptocheirus plumulosus</i>				454	
<i>Leucon americanus</i>					23
<i>Macoma balthica</i>				477	
<i>Macoma mitchelli</i>				45	23
<i>Marenzelleria viridis</i>	136	23		204	
<i>Melita nitida</i> (Epi.)				45	
<i>Mulinia lateralis</i>				114	91
<i>Mytilopsis leucophaeata</i> (Epi.)	23				
<i>Neanthes succinea</i>				91	
<i>Ogyrides alphaerostris</i>					23
<i>Paraprionospio pinnata</i>					68
<i>Polydora cornuta</i>	250	23			
<i>Rangia cuneata</i>	454	204			
<i>Streblospio benedicti</i>				114	
Tubificidae imm w/o cap chaetae		114	23	523	
<i>Tubificoides</i> spp.	68			273	
Total Abundance w/ Epifauna	1022	409	91	2954	386
Total Abundance w/o Epifauna	1000	409	91	2908	386
Number of Taxa w/ Epifauna	7	6	2	13	7
Number of Taxa w/o Epifauna	6	6	2	12	7

Continued .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16423	16424	16425	16426	16427
Acteocina canaliculata					0.0091
Ampelisca abdita					0.0045
Carinoma tremaphoros				0.0136	
Coelotanypus spp.	0.0159	0.0068	0.0159		
Cyathura polita	0.1022	0.0659		0.2045	
Heteromastus filiformis				0.1113	
Leptocheirus plumulosus				0.0454	
Leucon americanus					0.0011
Macoma balthica				4.8644	
Macoma mitchelli				0.0182	0.0136
Marenzelleria viridis	0.1908	0.0114		0.6930	
Melita nitida (Epi.)				0.0023	
Mulinia lateralis				0.0477	0.1250
Mytilopsis leucophaeata (Epi.)	0.0023				
Neanthes succinea				0.1818	
Ogyrides alphaerostris					0.0182
Oligochaeta		0.0023		0.0023	
Paraprionospio pinnata					0.0250
Polydora cornuta	0.0204	0.0011			
Rangia cuneata	26.1348	53.0285			
Streblospio benedicti				0.0045	
Tubificidae imm w/o cap chaetae		0.0011	0.0011	0.0273	
Tubificoides spp.	0.0011			0.0068	
Total Biomass w/ Epifauna	26.4677	53.1171	0.0170	6.2230	0.1965
Total Biomass w/o Epifauna	26.4654	53.1171	0.0170	6.2207	0.1965

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16501	16502	16503	16504	16505					
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem					
Habitat	High Meso Mud	High Meso Sand	Polyhaline Mud	Polyhaline Sand	Polyhaline Mud					
Date	08/31/09	09/23/09	09/23/09	09/01/09	09/23/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	11.4	2.1	0.9	5.5	0.6					
Salinity (ppt)	15.01	16.69	19.49	18.77	18.52					
Temperature (C)	27.73	23.14	23.49	26.97	23.65					
Dissolved Oxygen (mg/L)	6.1	6.7	6.0	2.1	6.3					
Sediment Silt-Clay (%)	92.41	9.84	76.70	3.12	68.51					
Total Carbon (%)	2.90	0.22	0.68	0.11	1.10					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.00		4.33		2.67		1.67		3.00	
Condition	Severely Degr.		Meets Goal		Marginal		Severely Degr.		Meets Goal	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	1.00	1	3.61	5	3.46	5	2.00	1	3.82	5
Abundance (#/m2)	45	1	4180	3	2136	5	1340	1	6452	3
Biomass (g/m2)	0.00	1	2.39	3	1.43	3	0.30	1	2.88	3
Pollution Indicative Spp Abund (%)	50.00		9.24	5	11.70		6.78		22.18	
Pollution Indicative Spp Biom (%)	33.33	1	23.20		21.46	1	38.35	1	11.44	3
Pollution Sensitive Spp Abund (%)	50.00		53.80	5	43.62		74.58	3	11.62	
Pollution Sensitive Spp Biom (%)	66.67	3	11.94		15.66	1	42.11		29.99	1
Carnivore-Omnivore Abund (%)	50.00	5	52.72	5	7.45	1	76.27		31.69	3
Deep Deposit Feeder Abund (%)	0.00		16.30		35.11		10.17	3	47.89	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		13.03	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		10.00		0.00		0.00		9.80	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16501	16502	16503	16504	16505
Acteocina canaliculata	23	1568	45	909	45
Americamysis almyra (Epi.)					45
Ameroculodes species complex				45	
Ampelisca abdita		45			545
Ampelisca verrilli				23	
Amphiporus bioculatus		45	23		114
Apocorophium lacustre (Epi.)		23			45
Balanus improvisus (Epi.)					45
Brania clavata					114
Clymenella torquata		23			
Cricotopus sylvestris		23			
Cyathura polita					45
Cymadusa compta (Epi.)					68
Demonax microphthalmus					23
Doridella obscura (Epi.)		23			568
Edotea triloba (Epi.)		23			386
Edwardsia elegans		45			
Elasmopus laevis (Epi.)					91
Erichsonella attenuata (Epi.)					4430
Gemma gemma		23	159		23
Glycera americana				23	
Glycera dibranchiata		45	45		
Glycinde solitaria		91	45	45	250
Haminoea solitaria		182		23	23
Heteromastus filiformis		114	45	23	1068
Hydrobia truncata (Epi.)		23			
Leitoscoloplos robustus		45	136	91	568
Leptosynapta tenuis		91	23	45	
Leucon americanus			136		
Listriella barnardi		91		45	
Listriella clymenellae		273	45		
Loimia medusa		23		23	
Macoma balthica					23
Macoma mitchelli		91	23		273
Maldanidae			45		
Maldanidae *		341			
Marenzelleria viridis		45			
Mediomastus ambiseta		159	523		204
Melinna maculata			68		
Micrura leidyi					23
Molgula manhattensis (Epi.)					2340
Mucrogammarus mucronatus (Epi.)					45
Mulinia lateralis		341			23
Mya arenaria					91
Mytilopsis leucophaeata (Epi.)					750
Nassarius vibex		23			
Neanthes succinea		23			977

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter) - Contd.					
Site	16501	16502	16503	16504	16505
Odostomia engonia (Epi.)					114
Paraprionospio pinnata	23		68		
Parvilucina crenella		23			
Phoronis spp.		68			23
Podarkeopsis levifuscina		23		23	273
Polydora cornuta					204
Polypedilum scalaenum group					136
Ptilanthura tenuis		136			
Rictaxis punctostriatus					45
Saccoglossus kowalevskii		159	386		23
Spiochaetopterus costarum			273		68
Streblospio benedicti			45		
Stylochus ellipticus (Epi.)				23	
Tharyx sp. A Morris		23			
Tubificidae imm w/o cap chaetae					841
Tubificoides spp.				23	409
Turbonilla spp. (Epi.)		23			
Total Abundance w/ Epifauna	45	4294	2136	1363	15381
Total Abundance w/o Epifauna	45	4180	2136	1340	6452
Number of Taxa w/ Epifauna	2	33	18	14	39
Number of Taxa w/o Epifauna	2	28	18	13	27

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16501	16502	16503	16504	16505
<i>Acteocina canaliculata</i>	0.0023	0.1136	0.0011	0.0591	0.0045
<i>Americamysis almyra</i> (Epi.)					0.0136
<i>Ameroculodes species complex</i>				0.0023	
<i>Ampelisca abdita</i>		0.0091			0.0523
<i>Ampelisca verrilli</i>				0.0045	
<i>Amphiporus bioculatus</i>		0.0159	0.0023		0.0023
<i>Apocorophium lacustre</i> (Epi.)		0.0091			0.0023
<i>Balanus improvisus</i> (Epi.)					0.0023
<i>Brania clavata</i>					0.0011
<i>Clymenella torquata</i>		0.0500			
<i>Cricotopus sylvestris</i>		0.0011			
<i>Cyathura polita</i>					0.0523
<i>Cymadusa compta</i> (Epi.)					0.0011
<i>Demonax microphthalmus</i>					0.0011
<i>Doridella obscura</i> (Epi.)		0.0023			0.0273
<i>Edotea triloba</i> (Epi.)		0.0068			0.0159
<i>Edwardsia elegans</i>		0.0045			
<i>Elasmopus laevis</i> (Epi.)					0.0011
<i>Erichsonella attenuata</i> (Epi.)					0.7907
<i>Gemma gemma</i>		0.0023	0.0068		0.0023
<i>Glycera americana</i>				0.0250	
<i>Glycera dibranchiata</i>		0.0636	0.0045		
<i>Glycinde solitaria</i>		0.0023	0.0136	0.0091	0.0772
<i>Haminoea solitaria</i>		0.0068		0.0045	0.0011
<i>Heteromastus filiformis</i>		0.0454	0.0227	0.0023	0.3044
<i>Hydrobia truncata</i> (Epi.)		0.0011			
<i>Leitoscoloplos robustus</i>		0.0932	0.1272	0.1159	0.3022
<i>Leptosynapta tenuis</i>		0.0114	0.0011	0.0386	
<i>Leucon americanus</i>			0.0023		
<i>Listriella barnardi</i>		0.0011		0.0011	
<i>Listriella clymenellae</i>		0.0136	0.0045		
<i>Loimia medusa</i>		0.0341		0.0341	
<i>Macoma balthica</i>					0.7020
<i>Macoma mitchelli</i>		0.0023	0.0409		0.1999
Maldanidae			0.1749		
Maldanidae *		0.4362			
<i>Marenzelleria viridis</i>		0.0432			
<i>Mediomastus ambiseta</i>		0.0011	0.0068		0.0023
<i>Melinna maculata</i>			0.2090		
<i>Micrura leidy</i>					0.2022
<i>Molgula manhattensis</i> (Epi.)					0.2045
<i>Mucrogammarus mucronatus</i> (Epi.)					0.0011
<i>Mulinia lateralis</i>		0.4612			0.0114
<i>Mya arenaria</i>					0.0068
<i>Mytilopsis leucophaeata</i> (Epi.)					0.0159
<i>Nassarius vibex</i>		0.8793			
<i>Neanthes succinea</i>		0.0011			0.8429

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter) - Contd.					
Site	16501	16502	16503	16504	16505
Odostomia engonia (Epi.)					0.0023
Oligochaeta					0.0023
Paraprionospio pinnata	0.0011		0.1727		
Parvilucina crenella		0.0011			
Phoronis spp.		0.0273			0.0045
Podarkeopsis levifuscina		0.0011		0.0045	0.0227
Polydora cornuta					0.0250
Polypedilum scalaenum group					0.0011
Ptilanthura tenuis		0.0273			
Rictaxis punctostriatus					0.0045
Saccoglossus kowalevskii		0.0386	0.4340		0.0182
Spiochaetopterus costarum			0.1977		0.0136
Streblospio benedicti			0.0068		
Stylochus ellipticus (Epi.)				0.0091	
Tharyx sp. A Morris		0.0011			
Tubificidae imm w/o cap chaetae					0.0136
Tubificoides spp.				0.0011	0.0045
Turbonilla spp. (Epi.)		0.0023			
Total Biomass w/ Epifauna	0.0034	2.4106	1.4291	0.3113	3.9567
Total Biomass w/o Epifauna	0.0034	2.3890	1.4291	0.3022	2.8786

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16506	16507	16508	16509	16510					
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem					
Habitat	High Meso Sand	High Meso Mud	High Meso Sand	Polyhaline Sand	High Meso Mud					
Date	09/01/09	09/01/09	09/01/09	09/01/09	09/01/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	7.3	15.4	4.7	7.8	9.5					
Salinity (ppt)	15.73	17.29	16.17	19.07	15.82					
Temperature (C)	26.19	26.89	26.06	26.89	26.48					
Dissolved Oxygen (mg/L)	5.8	6.0	5.4	1.0	5.0					
Sediment Silt-Clay (%)	1.86	95.24	1.29	1.17	93.44					
Total Carbon (%)	0.09	1.89	0.04	0.04	2.33					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.67		2.67		3.33		3.00		1.67	
Condition	Meets Goal		Marginal		Meets Goal		Meets Goal		Severely Degr.	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.28	1	0.65	1	2.96	3	2.66	1	1.52	1
Abundance (#/m2)	1749	5	136	1	1613	5	1545	3	114	1
Biomass (g/m2)	0.35	1	0.00	1	0.39	1	1.31	3	0.05	1
Pollution Indicative Spp Abund (%)	0.00	5	0.00	5	0.00	5	0.00	5	40.00	5
Pollution Indicative Spp Biom (%)	0.00	5	0.00	5	0.00	5	0.00	5	93.02	1
Pollution Sensitive Spp Abund (%)	58.44	5	83.33	3	33.80	3	64.71	5	40.00	5
Pollution Sensitive Spp Biom (%)	35.18	5	50.00	3	31.18	3	14.16	5	4.65	1
Carnivore-Omnivore Abund (%)	63.64	5	83.33	5	22.54	3	58.82	5	40.00	5
Deep Deposit Feeder Abund (%)	1.30	5	0.00	5	2.82	3	1.47	1	20.00	5
TF Poll. Indicative Spp Abund (%)	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5
Limnodrilus Abundance (%)	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5
Oligo Poll. Indic. Spp Abund (%)	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5
Oligo Poll. Sens. Spp Abund (%)	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5
Tolerance Score	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5
Tany./Chir. Abundance Ratio	0.00	5	0.00	5	0.00	5	0.00	5	0.00	5

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16506	16507	16508	16509	16510
<i>Acteocina canaliculata</i>	954	114	159	750	45
<i>Ampelisca abdita</i>	341	23		23	
<i>Ampelisca verrilli</i>	91		23		
<i>Amphiporus bioculatus</i>	23				
<i>Cyathura polita</i>			68		
<i>Gemma gemma</i>			91		
<i>Glycinde solitaria</i>	45		136	45	
<i>Haminoea solitaria</i>				23	
<i>Heteromastus filiformis</i>	23		45	23	
<i>Lepidactylus dytiscus</i>			636		
<i>Leptosynapta tenuis</i>	91		204		
<i>Listriella barnardi</i>	45				
<i>Loimia medusa</i>	23		23	45	
<i>Macoma mitchelli</i>			23		
<i>Marenzelleria viridis</i>			45		
<i>Micrura leidyi</i>	23			45	
<i>Molgula manhattensis (Epi.)</i>	1659				
<i>Neanthes succinea</i>	23			45	
<i>Paraonis fulgens</i>			23		
<i>Paraprionospio pinnata</i>					45
<i>Parvilucina crenella</i>	23			273	
<i>Phoronis spp.</i>			114	45	
<i>Podarkeopsis levifuscina</i>	23				
<i>Ptilanthura tenuis</i>	23				
<i>Saccoglossus kowalevskii</i>				45	
<i>Spiochaetopterus costarum</i>				45	
<i>Spiophanes bombyx</i>				68	
<i>Tharyx sp. A Morris</i>			23	68	
<i>Tubificoides spp.</i>					23
Total Abundance w/ Epifauna	3408	136	1613	1545	114
Total Abundance w/o Epifauna	1749	136	1613	1545	114
Number of Taxa w/ Epifauna	15	2	14	14	3
Number of Taxa w/o Epifauna	14	2	14	14	3

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16506	16507	16508	16509	16510
Acteocina canaliculata	0.0636	0.0023	0.0159	0.0318	0.0023
Ampelisca abdita	0.0386	0.0023		0.0023	
Ampelisca verrilli	0.0295		0.0182		
Amphiporus bioculatus	0.0011				
Cyathura polita			0.0364		
Gemma gemma			0.0136		
Glycinde solitaria	0.0023		0.0182	0.0011	
Haminoea solitaria				0.0045	
Heteromastus filiformis	0.0045		0.0045	0.0114	
Lepidactylus dytiscus			0.1363		
Leptosynapta tenuis	0.0182		0.0818		
Listriella barnardi	0.0011				
Loimia medusa	0.0568		0.0204	0.0954	
Macoma mitchelli			0.0023		
Marenzelleria viridis			0.0068		
Micrura leidyi	0.0136			0.0886	
Molgula manhattensis (Epi.)	0.0159				
Neanthes succinea	0.0227			0.0023	
Paraonis fulgens			0.0068		
Paraprionospio pinnata					0.0454
Parvilucina crenella	0.0932			0.9974	
Phoronis spp.			0.0227	0.0068	
Podarkeopsis levifuscina	0.0011				
Ptilanthura tenuis	0.0023				
Saccoglossus kowalevskii				0.0136	
Spiochaetopterus costarum				0.0136	
Spiophanes bombyx				0.0364	
Tharyx sp. A Morris			0.0023	0.0023	
Tubificoides spp.					0.0011
Total Biomass w/ Epifauna	0.3647	0.0045	0.3862	1.3075	0.0488
Total Biomass w/o Epifauna	0.3488	0.0045	0.3862	1.3075	0.0488

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16511	16512	16513	16514	16516					
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem					
Habitat	High Meso Sand	High Meso Sand	High Meso Mud	High Meso Sand	High Meso Sand					
Date	09/01/09	09/01/09	09/15/09	09/15/09	09/15/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	5.7	2.1	3.1	3.2	0.7					
Salinity (ppt)	16.68	15.83	15.77	15.21	15.16					
Temperature (C)	25.92	25.50	23.59	22.45	24.14					
Dissolved Oxygen (mg/L)	4.8	6.6	10.6	9.2	9.4					
Sediment Silt-Clay (%)	4.08	7.95	98.43	19.95	16.89					
Total Carbon (%)	0.11	0.14	0.46	0.25	0.16					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.67		2.67		3.67		3.33		2.00	
Condition	Meets Goal		Marginal		Meets Goal		Meets Goal		Severely Degr.	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	1.69	1	2.96	3	3.18	5	3.20	5	0.63	1
Abundance (#/m2)	1795	5	704	1	1159	3	2317	5	26355	1
Biomass (g/m2)	0.44	1	0.27	1	0.21	1	2.30	3	2.72	3
Pollution Indicative Spp Abund (%)	1.27	5	12.90	3	5.88	3	38.24	1	2.33	5
Pollution Indicative Spp Biom (%)	32.90		61.92		1.10	5	13.84		29.20	
Pollution Sensitive Spp Abund (%)	78.48	5	29.03	3	43.14		20.59	3	0.78	1
Pollution Sensitive Spp Biom (%)	18.54		9.62		32.04	3	15.52		4.42	
Carnivore-Omnivore Abund (%)	81.01	5	45.16	5	45.10	5	27.45	3	1.12	1
Deep Deposit Feeder Abund (%)	2.53		9.68		21.57		19.61		0.95	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		4.90		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		9.80		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16511	16512	16513	16514	16516
<i>Acteocina canaliculata</i>	1295	68	341	250	23
<i>Americamysis bigelowi</i> (Epi.)		45		23	
<i>Ameroculodes species complex</i>	45				
<i>Ampelisca abdita</i>	23				
<i>Carinoma tremaphoros</i>				23	
<i>Cyathura polita</i>					45
<i>Edotea triloba</i> (Epi.)	23	23			68
<i>Gemma gemma</i>				227	24174
<i>Glycera dibranchiata</i>	23				
<i>Glycinde solitaria</i>	91	68	91	23	68
<i>Haminoea solitaria</i>		159			
<i>Heteromastus filiformis</i>	23	23	159	136	136
<i>Laeonereis culveri</i>					45
<i>Leitoscoloplos robustus</i>		45			23
<i>Leptosynapta tenuis</i>	159	182	45		
<i>Leucon americanus</i>			23		
<i>Limulus polyphemus</i> (Epi.)					23
<i>Listriella barnardi</i>	23				
<i>Littoridinops tenuipes</i> (Epi.)					45
<i>Macoma balthica</i>				68	
<i>Macoma mitchelli</i>	23	23	114	114	1000
<i>Marenzelleria viridis</i>				45	45
<i>Mediomastus ambiseta</i>	23		68	91	23
<i>Micrura leidyi</i>			23	68	
<i>Mulinia lateralis</i>	23	45	68	750	364
<i>Neanthes succinea</i>			45	273	114
<i>Odostomia engonia</i> (Epi.)					23
<i>Pectinaria gouldii</i>			23		
<i>Phoronis spp.</i>		68			
<i>Ptilanthura tenuis</i>	45				
<i>Rictaxis punctostriatus</i>		23	23		
<i>Saccoglossus kowalevskii</i>			136		
<i>Streblospio benedicti</i>				23	227
<i>Stylochus ellipticus</i> (Epi.)	23				
Tubificidae imm w/o cap chaetae				114	
<i>Tubificoides spp.</i>				114	68
Total Abundance w/ Epifauna	1840	772	1159	2340	26514
Total Abundance w/o Epifauna	1795	704	1159	2317	26355
Number of Taxa w/ Epifauna	14	12	13	16	18
Number of Taxa w/o Epifauna	12	10	13	15	14

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16511	16512	16513	16514	16516
Acteocina canaliculata	0.0727	0.0011	0.0227	0.0273	0.0045
Americamysis bigelowi (Epi.)		0.0091		0.0011	
Ameroculodes species complex	0.0159				
Ampelisca abdita	0.0023				
Carinoma tremaphoros				0.0114	
Cyathura polita					0.0159
Edotea triloba (Epi.)	0.0023	0.0045			0.0011
Gemma gemma				0.0023	1.0701
Glycera dibranchiata	0.1181				
Glycinde solitaria	0.0068	0.0182	0.0295	0.0114	0.0523
Haminoea solitaria		0.0068			
Heteromastus filiformis	0.0068	0.0011	0.0273	0.0204	0.0273
Laeonereis culveri					0.0204
Leitoscoloplos robustus		0.0250			0.0932
Leptosynapta tenuis	0.0364	0.0523	0.0068		
Leucon americanus			0.0023		
Limulus polyphemus (Epi.)					0.0159
Listriella barnardi	0.0182				
Littoridinops tenuipes (Epi.)					0.0023
Macoma balthica				0.1954	
Macoma mitchelli	0.0023	0.0159	0.0023	0.0011	0.2931
Marenzelleria viridis				0.1113	0.0454
Mediomastus ambiseta	0.0011		0.0136	0.0114	0.0023
Micrura leidyi			0.0432	1.3041	
Mulinia lateralis	0.1431	0.1431	0.0023	0.3158	0.6839
Neanthes succinea			0.0045	0.2817	0.3953
Odostomia engonia (Epi.)					0.0045
Pectinaria gouldii			0.0011		
Phoronis spp.		0.0068			
Ptilanthura tenuis	0.0114				
Rictaxis punctostriatus		0.0011	0.0023		
Saccoglossus kowalevskii			0.0477		
Streblospio benedicti				0.0011	0.0182
Stylochus ellipticus (Epi.)	0.0045				
Tubificidae imm w/o cap chaetae				0.0011	
Tubificoides spp.				0.0023	0.0011
Total Biomass w/ Epifauna	0.4419	0.2851	0.2056	2.2993	2.7468
Total Biomass w/o Epifauna	0.4351	0.2715	0.2056	2.2981	2.7230

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16517		16518		16519		16520		16521	
Watershed	Mainstem		Mainstem		Mainstem		Mainstem		Mainstem	
Habitat	High Meso Sand		High Meso Sand		High Meso Sand		High Meso Sand		High Meso Sand	
Date	09/21/09		09/21/09		09/21/09		09/21/09		09/21/09	
Gear	Young Grab		Young Grab		Young Grab		Young Grab		Young Grab	
Sampled Area (sq.m)	0.044		0.044		0.044		0.044		0.044	
BOTTOM ENVIRONMENT										
Depth (m)	2.2		7.4		1.5		0.8		2.9	
Salinity (ppt)	15.41		15.62		15.32		13.80		15.41	
Temperature (C)	22.17		22.17		22.22		22.91		22.04	
Dissolved Oxygen (mg/L)	8.1		7.8		8.5		8.0		8.3	
Sediment Silt-Clay (%)	4.75		1.83		2.78		10.62		2.94	
Total Carbon (%)	0.29		0.07		0.16		0.23		0.21	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	1.67		4.00		2.00		2.67		1.67	
Condition	Severely Degr.		Meets Goal		Severely Degr.		Marginal		Severely Degr.	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.11	1	2.79	3	0.11	1	3.08	3	0.05	1
Abundance (#/m2)	126596	1	1704	5	152860	1	2749	5	170741	1
Biomass (g/m2)	54.30	1	0.74	1	44.87	3	1.13	3	77.53	1
Pollution Indicative Spp Abund (%)	0.11	5	5.33	5	0.19	5	34.71	1	0.09	5
Pollution Indicative Spp Biom (%)	0.01		36.73		0.26		34.81		0.79	
Pollution Sensitive Spp Abund (%)	0.32	1	50.67	5	0.10	1	10.74	3	0.07	1
Pollution Sensitive Spp Biom (%)	0.73		14.97		0.10		30.38		0.12	
Carnivore-Omnivore Abund (%)	0.43	1	57.33	5	0.56	1	13.22	1	0.19	1
Deep Deposit Feeder Abund (%)	0.23		4.00		0.25		12.40		0.03	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		0.00		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16517	16518	16519	16520	16521
Acteocina canaliculata	159	523	68		45
Ameroculodes species complex			68		
Ampelisca abdita		477			
Balanus improvisus (Epi.)	45				
Carinoma tremaphoros			45		
Chiridotea caeca					23
Cyathura polita	45			23	23
Cyclaspis varians				23	
Eteone foliosa				45	
Eteone heteropoda	23		204	68	68
Gemma gemma	125437	23	151315	136	170127
Glycera dibranchiata		23			
Glycinde solitaria	136	295	91	114	23
Haminoea solitaria	45				
Heteromastus filiformis	295		364	295	
Laeonereis culveri				91	
Leitoscoloplos robustus		45		23	
Lepidactylus dytiscus	91		91		23
Leptocheirus plumulosus				91	
Macoma balthica	23				23
Macoma mitchelli	45	23	23	772	
Marenzelleria viridis				91	
Mediomastus ambiseta		23			
Micrura leidyi	23	23			
Molgula manhattensis (Epi.)		45	23		
Mulinia lateralis				91	68
Mya arenaria	45				
Neanthes succinea	114	45	454	23	136
Paraonis fulgens					91
Paraprionospio pinnata		23			
Pectinaria gouldii			23		45
Phoronis spp.		23			
Polydora cornuta			23		23
Pyramidellidae (Epi.)		23			
Rictaxis punctostriatus		68			
Sayella chesapeakea (Epi.)	23				
Streblospio benedicti	114	23	91	772	23
Stylochus ellipticus (Epi.)		45			
Tagelus plebeius				68	
Tharyx sp. A Morris		68			
Tubificoides spp.				23	
Total Abundance w/ Epifauna	126664	1818	152883	2749	170741
Total Abundance w/o Epifauna	126596	1704	152860	2749	170741
Number of Taxa w/ Epifauna	16	18	14	17	14
Number of Taxa w/o Epifauna	14	15	13	17	14

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16517	16518	16519	16520	16521
Acteocina canaliculata	0.1772	0.0750	0.0273		0.0114
Ameroculodes species complex			0.0250		
Ampelisca abdita		0.0454			
Balanus improvisus (Epi.)	0.0136				
Carinoma tremaphoros			0.0273		
Chiridotea caeca					0.0364
Cyathura polita	0.0023			0.0114	0.0068
Cyclaspis varians				0.0011	
Eteone foliosa				0.1181	
Eteone heteropoda	0.0011		0.1113	0.0318	0.0068
Gemma gemma	53.0876	0.0011	43.7428	0.0023	76.6823
Glycera dibranchiata		0.2772			
Glycinde solitaria	0.0682	0.0318	0.0159	0.0091	0.0045
Haminoea solitaria	0.0341				
Heteromastus filiformis	0.2999		0.2295	0.0750	
Laeonereis culveri				0.1136	
Leitoscoloplos robustus		0.2431		0.0772	
Lepidactylus dytiscus	0.0159		0.0364		0.0068
Leptocheirus plumulosus				0.0273	
Macoma balthica	0.1363				0.0727
Macoma mitchelli	0.2340	0.0011	0.0364	0.0295	
Marenzelleria viridis				0.0750	
Mediomastus ambiseta		0.0023			
Micrura leidyi	0.1659	0.0091			
Molgula manhattensis (Epi.)		0.0114	0.0011		
Mulinia lateralis				0.2476	0.5975
Mya arenaria	0.0136				
Neanthes succinea	0.0545	0.0045	0.6066	0.0250	0.0568
Paraonis fulgens					0.0091
Paraprionospio pinnata		0.0182			
Pectinaria gouldii			0.0023		0.0250
Phoronis spp.		0.0011			
Polydora cornuta			0.0023		0.0045
Pyramidellidae (Epi.)		0.0011			
Rictaxis punctostriatus		0.0011			
Sayella chesapeakea (Epi.)	0.0023				
Streblospio benedicti	0.0068	0.0091	0.0045	0.0364	0.0091
Stylochus ellipticus (Epi.)		0.0159			
Tagelus plebeius				0.2476	
Tharyx sp. A Morris		0.0159			
Tubificoides spp.				0.0011	
Total Biomass w/ Epifauna	54.3133	0.7645	44.8686	1.1292	77.5297
Total Biomass w/o Epifauna	54.2974	0.7361	44.8675	1.1292	77.5297

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16522	16523	16524	16525	16527					
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem					
Habitat	High Meso Mud	Low Mesohaline	Low Mesohaline	High Meso Sand	High Meso Sand					
Date	09/24/09	08/26/09	08/26/09	09/18/09	09/15/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	0.8	3.3	4.2	0.9	5.5					
Salinity (ppt)	13.67	10.87	10.73	15.93	14.31					
Temperature (C)	25.32	27.53	27.76	21.68	22.72					
Dissolved Oxygen (mg/L)	4.6	8.2	7.8	7.7	5.9					
Sediment Silt-Clay (%)	58.77	16.43	31.20	5.96	3.04					
Total Carbon (%)	4.71	0.37	0.43	0.19	0.16					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.33		2.60		3.00		1.67		2.00	
Condition	Degraded		Degraded		Meets Goal		Severely Degr.		Severely Degr.	
# Attributes Scored	6		5		5		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.00	3	2.55	5	2.45	3	0.07	1	2.57	3
Abundance (#/m2)	23652	1	3317	3	5385	3	227859	1	1545	5
Biomass (g/m2)	3.71	5	0.86	1	4.05	3	54.19	1	0.97	1
Pollution Indicative Spp Abund (%)	68.30		16.44	3	5.91	5	0.29	5	50.00	1
Pollution Indicative Spp Biom (%)	8.38	3	12.62		0.31		1.01		43.69	
Pollution Sensitive Spp Abund (%)	0.19		12.33		17.30		0.02	1	7.35	1
Pollution Sensitive Spp Biom (%)	2.20	1	25.76	1	37.26	1	0.02		28.04	
Carnivore-Omnivore Abund (%)	7.59	1	2.74		8.86		0.13	1	16.18	1
Deep Deposit Feeder Abund (%)	65.51		30.82		51.05		0.15		16.18	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	61.10		3.42		2.11		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	9.80		9.80		9.80		0.00		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16522	16523	16524	16525	16527
<i>Acteocina canaliculata</i>		23			
<i>Americamysis bigelowi</i> (Epi.)		23			
<i>Amphiporus bioculatus</i>			23		
<i>Apocorophium lacustre</i> (Epi.)	23	23			
<i>Carinoma tremaphoros</i>		23	136		91
<i>Chironomus</i> spp.	409				
<i>Cyathura polita</i>	23				
<i>Cyclaspis varians</i>				45	
<i>Edotea triloba</i> (Epi.)	23				
<i>Edwardsia elegans</i>	227				
<i>Eteone foliosa</i>				23	
<i>Eteone heteropoda</i>				23	
<i>Gemma gemma</i>	23			226473	
<i>Glycinde solitaria</i>		23	23	45	68
<i>Heteromastus filiformis</i>	23	909	2613	341	204
<i>Hobsonia florida</i>	2726				
<i>Laeonereis culveri</i>	1000			23	
<i>Leitoscoloplos robustus</i>					45
<i>Lepidactylus dytiscus</i>				23	
<i>Leptocheirus plumulosus</i>	2249	250	659		
<i>Littoridinops tenuipes</i> (Epi.)	159				
<i>Macoma balthica</i>	23		114		45
<i>Macoma mitchelli</i>	23	1159	386		273
<i>Marenzelleria viridis</i>		364	795		
<i>Micrura leidyi</i>			23		
<i>Mucrogammarus mucronatus</i> (Epi.)	23				
<i>Mulinia lateralis</i>		204	45	45	91
<i>Neanthes succinea</i>	136	23	273	182	91
<i>Paraonis fulgens</i>				23	
<i>Polydora cornuta</i>	23			23	
<i>Streblospio benedicti</i>	1295	227	159	591	636
Tubificidae imm w/o cap chaetae	14450	114	114		
<i>Tubificoides</i> spp.	1022		23		
Total Abundance w/ Epifauna	23879	3363	5385	227859	1545
Total Abundance w/o Epifauna	23652	3317	5385	227859	1545
Number of Taxa w/ Epifauna	19	13	14	13	9
Number of Taxa w/o Epifauna	15	11	14	13	9

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16522	16523	16524	16525	16527
<i>Acteocina canaliculata</i>		0.0045			
<i>Americamysis bigelowi</i> (Epi.)		0.0011			
<i>Amphiporus bioculatus</i>			0.0045		
<i>Apocorophium lacustre</i> (Epi.)	0.0045	0.0011			
<i>Carinoma tremaphoros</i>		0.0045	0.0659		0.0591
<i>Chironomus</i> spp.	0.0011				
<i>Cyathura polita</i>	0.0023				
<i>Cyclaspis varians</i>				0.0023	
<i>Edotea triloba</i> (Epi.)	0.0011				
<i>Edwardsia elegans</i>	0.0841				
<i>Eteone foliosa</i>				0.0204	
<i>Eteone heteropoda</i>				0.1091	
<i>Gemma gemma</i>	0.0023			53.2966	
<i>Glycinde solitaria</i>		0.0068	0.0341	0.0114	0.0023
<i>Heteromastus filiformis</i>	0.0204	0.3999	1.0383	0.2272	0.1704
<i>Hobsonia florida</i>	0.1931				
<i>Laonereis culveri</i>	0.8815			0.0318	
<i>Leitoscoloplos robustus</i>					0.3476
<i>Lepidactylus dytiscus</i>				0.0045	
<i>Leptocheirus plumulosus</i>	0.5680	0.0364	0.1386		
<i>Littoridinops tenuipes</i> (Epi.)	0.0182				
<i>Macoma balthica</i>	0.0795		0.6089		0.2704
<i>Macoma mitchelli</i>	0.2704	0.0772	0.4658		0.0045
<i>Marenzelleria viridis</i>		0.2090	0.8656		
<i>Micrura leidyi</i>			0.1136		
<i>Mucrogammarus mucronatus</i> (Epi.)	0.0023				
<i>Mulinia lateralis</i>		0.0932	0.0023	0.3612	0.0409
<i>Neanthes succinea</i>	1.2928	0.0091	0.6998	0.0295	0.0409
<i>Oligochaeta</i>	0.0045				
<i>Paraonis fulgens</i>				0.0023	
<i>Polydora cornuta</i>	0.0045			0.0136	
<i>Streblospio benedicti</i>	0.0682	0.0136	0.0091	0.0795	0.0364
Tubificidae imm w/o cap chaetae	0.2371	0.0011	0.0011		
<i>Tubificoides</i> spp.	0.0023		0.0011		
Total Biomass w/ Epifauna	3.7382	0.8577	4.0487	54.1895	0.9724
Total Biomass w/o Epifauna	3.7121	0.8554	4.0487	54.1895	0.9724

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16301	16302	16303	16304	16305					
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs					
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline					
Date	08/26/09	08/26/09	08/26/09	08/26/09	08/26/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	1.2	3.3	4.7	9.9	6.1					
Salinity (ppt)	10.85	10.86	10.38	10.39	9.97					
Temperature (C)	27.11	27.93	27.88	25.30	28.26					
Dissolved Oxygen (mg/L)	6.7	8.0	7.2	1.1	0.5					
Sediment Silt-Clay (%)	2.49	57.87	57.08	91.99	56.25					
Total Carbon (%)	0.11	0.71	0.75	5.10	4.95					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.60		4.60		3.80		1.80		1.00	
Condition	Degraded		Meets Goal		Meets Goal		Severely Degr.		Severely Degr.	
# Attributes Scored	5		5		5		5		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	1.82	3	2.57	5	2.59	5	0.00	1	0.00	1
Abundance (#/m2)	16926	1	2590	3	4453	3	23	1	0	1
Biomass (g/m2)	4.20	3	6.09	5	4.93	3	0.01	1	0.00	1
Pollution Indicative Spp Abund (%)	3.62	5	0.00	5	6.63	5	0.00	5	100.00	1
Pollution Indicative Spp Biom (%)	25.72		0.00		0.16		0.00		100.00	
Pollution Sensitive Spp Abund (%)	1.61		50.88		13.78		0.00		0.00	
Pollution Sensitive Spp Biom (%)	4.17	1	93.47	5	68.59	3	0.00	1	0.00	1
Carnivore-Omnivore Abund (%)	1.48		21.05		11.22		100.00		0.00	
Deep Deposit Feeder Abund (%)	1.61		28.95		50.51		0.00		0.00	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		4.08		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		9.80		0.00		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16301	16302	16303	16304	16305
Carinoma tremaphoros		114	68		
Cyathura polita	45	409			
Eteone foliosa	45				
Gemma gemma	10996				
Geukensia demissa (Epi.)	23				
Heteromastus filiformis	159	659	1636		
Laeonereis culveri	136				
Leitoscoloplos robustus	68				
Lepidactylus dytiscus	2431				
Leptocheirus plumulosus	841	295	977		
Macoma balthica		818	454		
Macoma mitchelli	1386	91			
Marenzelleria viridis	204	91	159		
Mediomastus ambiseta	23				
Melita nitida (Epi.)		182	114		
Micrura leidyi	23				
Mulinia lateralis	227				
Neanthes succinea		23	432	23	
Streblospio benedicti	318		114		
Tubificidae imm w/o cap chaetae			182		
Tubificoides spp.	23	91	432		
Total Abundance w/ Epifauna	16949	2772	4567	23	0
Total Abundance w/o Epifauna	16926	2590	4453	23	
Number of Taxa w/ Epifauna	16	10	10	1	0
Number of Taxa w/o Epifauna	15	9	9	1	0
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16301	16302	16303	16304	16305
Carinoma tremaphoros		0.0182	0.0500		
Cyathura polita	0.0386	1.4654			
Eteone foliosa	0.0454				
Gemma gemma	0.6134				
Geukensia demissa (Epi.)	0.0045				
Heteromastus filiformis	0.1454	0.1749	0.7475		
Laeonereis culveri	0.1250				
Leitoscoloplos robustus	0.7838				
Lepidactylus dytiscus	0.0932				
Leptocheirus plumulosus	0.1522	0.0772	0.2113		
Macoma balthica		4.0782	2.9718		
Macoma mitchelli	0.3976	0.1068			
Marenzelleria viridis	0.1340	0.1454	0.4090		
Mediomastus ambiseta	0.0023				
Melita nitida (Epi.)		0.0091	0.0091		
Micrura leidyi	1.3655				
Mulinia lateralis	0.2840				
Neanthes succinea		0.0136	0.5248	0.0114	
Streblospio benedicti	0.0114		0.0068		
Tubificidae imm w/o cap chaetae			0.0011		
Tubificoides spp.	0.0045	0.0068	0.0068		
Total Biomass w/ Epifauna	4.2009	6.0958	4.9382	0.0114	0.0000
Total Biomass w/o Epifauna	4.1964	6.0867	4.9291	0.0114	0.0000

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16306	16307	16308	16309	16310					
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs					
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline					
Date	08/24/09	08/24/09	08/24/09	08/24/09	08/24/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	0.7	2.8	5.0	6.7	5.8					
Salinity (ppt)	6.51	7.04	7.80	9.21	7.91					
Temperature (C)	29.63	27.98	28.17	27.76	27.97					
Dissolved Oxygen (mg/L)	11.2	6.9	2.2	0.9	2.1					
Sediment Silt-Clay (%)	2.03	10.22	85.76	91.45	80.44					
Total Carbon (%)	0.17	0.51	7.93	3.08	2.75					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.80		3.40		2.20		1.00		3.40	
Condition	Meets Goal		Meets Goal		Degraded		Severely Degr.		Meets Goal	
# Attributes Scored	5		5		5		5		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.04	3	2.61	5	0.81	1	1.00	1	1.38	1
Abundance (#/m2)	4430	3	7043	1	91	1	45	1	659	3
Biomass (g/m2)	8.29	5	10.96	3	0.50	1	0.01	1	2.53	3
Pollution Indicative Spp Abund (%)	13.33	3	18.06	3	0.00	5	100.00	1	0.00	5
Pollution Indicative Spp Biom (%)	1.37		0.39		0.00		100.00		0.00	
Pollution Sensitive Spp Abund (%)	22.56		47.10		75.00		0.00		65.52	
Pollution Sensitive Spp Biom (%)	94.16	5	88.53	5	99.77	3	0.00	1	80.04	5
Carnivore-Omnivore Abund (%)	5.13		3.23		0.00		50.00		13.79	
Deep Deposit Feeder Abund (%)	4.10		11.29		0.00		0.00		20.69	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	6.00		6.00		6.00		6.00		6.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16306	16307	16308	16309	16310
Americamysis spp. (Epi.)	91				
Ameroculodes species complex	23				
Apocorophium lacustre (Epi.)	23	45			
Carinoma tremaphoros					23
Cyathura polita	45				
Edotea triloba (Epi.)	114	68			
Eteone heteropoda	182	136		23	
Heteromastus filiformis	23	136			
Leptocheirus plumulosus	2431	1022			
Littoridinops tenuipes (Epi.)		591			
Macoma balthica		159	68		432
Macoma mitchelli	204	727	23		
Marenzelleria viridis	909	2885			
Mediomastus ambiseta		182			
Mya arenaria		45			
Neanthes succinea		91			68
Rangia cuneata	45	45			
Rhithropanopeus harrisii (Epi.)		23			
Streblospio benedicti	409	1136		23	
Tubificoides spp.	159	477			136
Total Abundance w/ Epifauna	4658	7770	91	45	659
Total Abundance w/o Epifauna	4430	7043	91	45	659
Number of Taxa w/ Epifauna	13	16	2	2	4
Number of Taxa w/o Epifauna	10	12	2	2	4
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16306	16307	16308	16309	16310
Americamysis spp. (Epi.)	0.0114				
Ameroculodes species complex	0.0068				
Apocorophium lacustre (Epi.)	0.0011	0.0011			
Carinoma tremaphoros					0.0136
Cyathura polita	0.0091				
Edotea triloba (Epi.)	0.0136	0.0045			
Eteone heteropoda	0.1113	0.0136		0.0068	
Heteromastus filiformis	0.0011	0.1159			
Leptocheirus plumulosus	0.3113	0.1386			
Littoridinops tenuipes (Epi.)		0.0750			
Macoma balthica		0.7748	0.4953		2.0266
Macoma mitchelli	0.0500	0.7929	0.0011		
Marenzelleria viridis	0.2113	1.5972			
Mediomastus ambiseta		0.0011			
Mya arenaria		2.0334			
Neanthes succinea		0.1659			0.4908
Rangia cuneata	7.5839	5.2983			
Rhithropanopeus harrisii (Epi.)		0.0227			
Streblospio benedicti	0.0023	0.0295		0.0011	
Tubificoides spp.	0.0011	0.0011			0.0011
Total Biomass w/ Epifauna	8.3144	11.0658	0.4964	0.0080	2.5321
Total Biomass w/o Epifauna	8.2883	10.9624	0.4964	0.0080	2.5321

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16311	16312	16313	16314	16315
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Oligohaline	Low Mesohaline	Oligohaline	Low Mesohaline	Oligohaline
Date	08/25/09	08/24/09	08/25/09	08/24/09	08/25/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	0.2	5.7	1.3	8.0	0.9
Salinity (ppt)	2.30	8.32	2.04	10.35	3.44
Temperature (C)	27.36	28.38	27.28	24.65	27.05
Dissolved Oxygen (mg/L)	8.5	1.2	7.3	0.6	7.9
Sediment Silt-Clay (%)	2.77	74.08	75.74	90.57	18.37
Total Carbon (%)	0.11	7.22	3.30	3.61	0.16
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.00	1.00	2.33	1.00	3.40
Condition	Meets Goal	Severely Degr.	Degraded	Severely Degr.	Meets Goal
# Attributes Scored	6	5	6	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.76	0.00 1	2.08	0.00 1	1.95
Abundance (#/m2)	5316 1	45 1	4340 1	0 1	2863 5
Biomass (g/m2)	2.30	0.01 1	2.28	0.00 1	0.99
Pollution Indicative Spp Abund (%)	60.26	100.00 1	82.72	100.00 1	11.11
Pollution Indicative Spp Biom (%)	3.16	100.00	91.07	100.00	0.69
Pollution Sensitive Spp Abund (%)	30.77	0.00	0.52	0.00	11.90
Pollution Sensitive Spp Biom (%)	92.75	0.00 1	2.79	0.00 1	56.78
Carnivore-Omnivore Abund (%)	3.85 1	0.00	45.55 5	0.00	0.79 1
Deep Deposit Feeder Abund (%)	2.56	0.00	37.70	0.00	0.00
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Limnodrilus Abundance (%)	0.00	0.00	37.70	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	68.80 3	0.00	98.43 1	0.00	32.54 3
Oligo Poll. Sens. Spp Abund (%)	29.06 5	0.00	0.52 3	0.00	3.97 3
Tolerance Score	7.22 3	0.00	9.33 1	0.00	6.00 5
Tany./Chir. Abundance Ratio	12.50 5	0.00	21.84 3	0.00	0.00

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16311	16312	16313	16314	16315
Ameroculodes species complex					68
Carinoma tremaphoros	23				
Chironomus spp.	114		1500		
Cladotanytarsus spp. B Epler	45				
Coelotanypus spp.	23		432		
Cyathura polita					23
Lepidactylus dytiscus					1522
Leptocheirus plumulosus	227		682		613
Limnodrilus hoffmeisteri			91		
Marenzelleria viridis	1545		23		114
Mytilopsis leucophaeata (Epi.)	91				
Polydora cornuta	91				
Rangia cuneata	91				204
Streblospio benedicti	3022	45	23		318
Tribelos spp.			45		
Tubificidae imm w/o cap chaetae *			1545		
Tubificoides spp.	136				
Total Abundance w/ Epifauna	5407	45	4340	0	2863
Total Abundance w/o Epifauna	5316	45	4340		2863
Number of Taxa w/ Epifauna	11	1	7	0	7
Number of Taxa w/o Epifauna	10	1	7	0	7
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16311	16312	16313	16314	16315
Ameroculodes species complex					0.0045
Carinoma tremaphoros	0.0682				
Chironomus spp.	0.0011		1.6676		
Cladotanytarsus spp. B Epler	0.0011				
Coelotanypus spp.	0.0023		0.0795		
Cyathura polita					0.0068
Lepidactylus dytiscus					0.3703
Leptocheirus plumulosus	0.0136		0.1386		0.0454
Limnodrilus hoffmeisteri			0.0011		
Marenzelleria viridis	0.3794		0.0636		0.0659
Mytilopsis leucophaeata (Epi.)	0.0011				
Oligochaeta			0.3226		
Polydora cornuta	0.0114				
Rangia cuneata	1.7563				0.4885
Streblospio benedicti	0.0682	0.0114	0.0011		0.0068
Tribelos spp.			0.0011		
Tubificidae imm w/o cap chaetae *			0.0011		
Tubificoides spp.	0.0011				
Total Biomass w/ Epifauna	2.3038	0.0114	2.2765	0.0000	0.9883
Total Biomass w/o Epifauna	2.3027	0.0114	2.2765	0.0000	0.9883

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16316	16317	16318	16319	16320
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Freshwater	Oligohaline	Oligohaline	Oligohaline	Low Mesohaline
Date	08/25/09	09/13/09	09/13/09	09/13/09	09/13/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	0.8	2.3	1.8	2.1	3.0
Salinity (ppt)	0.23	4.52	2.04	1.85	5.27
Temperature (C)	25.89	19.98	19.13	19.08	20.88
Dissolved Oxygen (mg/L)	7.7	6.3	9.7	8.1	6.2
Sediment Silt-Clay (%)	93.92	90.36	9.47	93.49	96.13
Total Carbon (%)	4.46	2.41	0.30	1.99	2.62
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.50	3.80	1.80	3.33	3.00
Condition	Meets Goal	Meets Goal	Severely Degr.	Meets Goal	Meets Goal
# Attributes Scored	4	5	5	6	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.05	2.15	2.35	2.45	2.30
Abundance (#/m2)	1681 5	1045 5	4453 1	568 5	591 3
Biomass (g/m2)	4.73	80.36	26.29	0.80	1.03
Pollution Indicative Spp Abund (%)	95.95	2.17	19.90	8.00	11.54
Pollution Indicative Spp Biom (%)	12.55	0.00	0.08	0.28	0.66
Pollution Sensitive Spp Abund (%)	4.05	69.57	52.04	64.00	38.46
Pollution Sensitive Spp Biom (%)	87.45	99.58	99.75	99.01	57.08
Carnivore-Omnivore Abund (%)	14.86	2.17 1	1.02 1	20.00 3	26.92
Deep Deposit Feeder Abund (%)	81.08 3	8.70	37.76	12.00	3.85
TF Poll. Indicative Spp Abund (%)	81.08 3	0.00	0.00	0.00	0.00
Limnodrilus Abundance (%)	81.08	0.00	0.00	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	0.00	28.26 3	65.31 3	36.00 3	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	39.13 5	0.00 1	44.00 5	0.00
Tolerance Score	9.20 3	6.00 5	6.05 3	6.10 3	6.15
Tany./Chir. Abundance Ratio	100.00	0.00	0.00	100.00 1	100.00

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16316	16317	16318	16319	16320
Ameroculodes species complex			45		
Apocorophium lacustre (Epi.)			159		
Coelotanypus spp.	250			23	68
Cyathura polita		23	45	91	91
Gemma gemma				45	
Leptocheirus plumulosus		182	341	45	250
Limnodrilus hoffmeisteri	45				
Macoma mitchelli		23			23
Marenzelleria viridis	45	409		250	114
Mediomastus ambiseta			818		
Melita nitida (Epi.)			45		
Mytilopsis leucophaeata (Epi.)		68	1613	45	
Rangia cuneata	23	295	1454	23	23
Streblospio benedicti		23	886	23	
Tubificidae imm w cap chaetae			23		
Tubificidae imm w/o cap chaetae *	1318				
Tubificoides spp.		91	841	68	23
Total Abundance w/ Epifauna	1681	1113	6271	613	591
Total Abundance w/o Epifauna	1681	1045	4453	568	591
Number of Taxa w/ Epifauna	4	8	11	9	7
Number of Taxa w/o Epifauna	4	7	8	8	7
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16316	16317	16318	16319	16320
Ameroculodes species complex			0.0045		
Apocorophium lacustre (Epi.)			0.0136		
Coelotanypus spp.	0.0227			0.0011	0.0068
Cyathura polita		0.0159	0.0500	0.1477	0.2499
Gemma gemma				0.0023	
Leptocheirus plumulosus		0.0386	0.0295	0.0011	0.0772
Macoma mitchelli		0.2885			0.3590
Marenzelleria viridis	0.2204	0.9133		0.4408	0.1204
Mediomastus ambiseta			0.2476		
Melita nitida (Epi.)			0.0045		
Mytilopsis leucophaeata (Epi.)		0.1454	0.2522	0.0011	
Oligochaeta	0.5703				
Rangia cuneata	3.9124	79.0951	25.9258	0.2068	0.2204
Streblospio benedicti		0.0023	0.0204	0.0011	
Tubificidae imm w cap chaetae			0.0011		
Tubificoides spp.		0.0045	0.0114	0.0023	0.0011
Total Biomass w/ Epifauna	4.7258	80.5038	26.5608	0.8043	1.0349
Total Biomass w/o Epifauna	4.7258	80.3584	26.2904	0.8032	1.0349

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16321	16323	16325	16326	16327
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Oligohaline	Oligohaline	Freshwater	Low Mesohaline	Low Mesohaline
Date	09/13/09	09/20/09	09/13/09	08/24/09	08/26/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	2.1	1.4	2.7	4.9	5.2
Salinity (ppt)	2.98	2.57	0.07	6.78	10.46
Temperature (C)	20.05	21.08	18.01	27.59	28.62
Dissolved Oxygen (mg/L)	7.3	9.6	7.0	4.7	0.5
Sediment Silt-Clay (%)	95.84	71.34	62.33	16.13	77.61
Total Carbon (%)	2.48	1.95	5.66	0.72	4.43
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.00	3.00	2.00	4.20	1.00
Condition	Meets Goal	Meets Goal	Severely Degr.	Meets Goal	Severely Degr.
# Attributes Scored	5	5	4	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.46	1.72	1.70	2.80	1.65
Abundance (#/m2)	136	2908	18699	2408	273
Biomass (g/m2)	19.07	1.61	6.80	18.02	0.02
Pollution Indicative Spp Abund (%)	0.00	7.81	83.96	10.38	83.33
Pollution Indicative Spp Biom (%)	0.00	0.07	13.33	1.05	13.64
Pollution Sensitive Spp Abund (%)	66.67	23.44	1.46	39.62	0.00
Pollution Sensitive Spp Biom (%)	99.96	77.29	86.16	91.69	0.00
Carnivore-Omnivore Abund (%)	0.00	0.00	13.49	21.70	50.00
Deep Deposit Feeder Abund (%)	0.00	8.59	85.05	23.58	8.33
TF Poll. Indicative Spp Abund (%)	0.00	0.00	70.47	0.00	0.00
Limnodrilus Abundance (%)	0.00	8.59	70.47	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	33.33	74.22	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	50.00	19.53	0.00	0.00	0.00
Tolerance Score	6.00	8.61	9.78	0.00	9.80
Tany./Chir. Abundance Ratio	0.00	0.00	2.70	0.00	0.00

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16321	16323	16325	16326	16327
Apocorophium lacustre (Epi.)		23			
Carinoma tremaphoros				91	
Chironomus spp.			2454		114
Coelotanypus spp.			68		
Dero spp.			227		
Eteone heteropoda				45	
Gemma gemma		114			
Heteromastus filiformis				68	
Hobsonia florida		68			
Leptocheirus plumulosus	45	1795		114	
Limnodrilus hoffmeisteri			1590		
Limnodrilus udekemianus		23			
Macoma balthica				795	
Macoma mitchelli				45	
Marenzelleria viridis	68	568	250	159	
Mulinia lateralis				45	
Neanthes succinea				386	23
Rangia cuneata	23	114	23		
Streblospio benedicti				159	114
Tubificidae imm w/o cap chaetae		227			
Tubificidae imm w/o cap chaetae *			11587		
Tubificoides spp.			2499	500	23
Total Abundance w/ Epifauna	136	2931	18699	2408	273
Total Abundance w/o Epifauna	136	2908	18699	2408	273
Number of Taxa w/ Epifauna	3	8	7	11	4
Number of Taxa w/o Epifauna	3	7	7	11	4

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16321	16323	16325	16326	16327
Apocorophium lacustre (Epi.)		0.0011			
Carinoma tremaphoros				0.0136	
Chironomus spp.			0.4090		0.0011
Coelotanypus spp.			0.0091		
Dero spp.			0.0011		
Eteone heteropoda				0.0011	
Gemma gemma		0.0068			
Heteromastus filiformis				0.0091	
Hobsonia florida		0.0114			
Leptocheirus plumulosus	0.0068	0.3453		0.0386	
Limnodrilus hoffmeisteri			0.0011		
Limnodrilus udekemianus		0.0011			
Macoma balthica				16.4765	
Macoma mitchelli				0.0409	
Marenzelleria viridis	0.0568	0.6702	0.8270	0.0500	
Mulinia lateralis				0.1863	
Neanthes succinea				1.2042	0.0204
Oligochaeta			0.4857		
Rangia cuneata	19.0053	0.5748	5.0302		
Streblospio benedicti				0.0023	0.0023
Tubificidae imm w/o cap chaetae		0.0011			
Tubificidae imm w/o cap chaetae *			0.0011		
Tubificoides spp.			0.0341	0.0011	0.0011
Total Biomass w/ Epifauna	19.0689	1.6120	6.7985	18.0238	0.0250
Total Biomass w/o Epifauna	19.0689	1.6108	6.7985	18.0238	0.0250

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16101	16102	16103	16104	16105
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	High Meso Mud	High Meso Mud	High Meso Sand	High Meso Mud	High Meso Sand
Date	08/31/09	08/31/09	08/31/09	08/31/09	08/31/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	12.6	8.3	5.3	7.9	2.8
Salinity (ppt)	17.80	17.10	14.71	15.77	14.63
Temperature (C)	26.83	27.22	27.77	27.35	27.44
Dissolved Oxygen (mg/L)	0.3	0.5	6.5	1.2	4.2
Sediment Silt-Clay (%)	93.83	95.16	13.98	90.96	1.00
Total Carbon (%)	3.48	3.12	0.79	2.59	0.08
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	1.00	1.67	1.33	1.00	3.33
Condition	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.	Meets Goal
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	0.00 1	2.05 1	0.00 1	1.98 1
Abundance (#/m2)	0 1	45 1	250 1	0 1	1500 3
Biomass (g/m2)	0.00 1	0.00 1	0.08 1	0.00 1	52.38 1
Pollution Indicative Spp Abund (%)	100.00	0.00	54.55 1	100.00	0.00 5
Pollution Indicative Spp Biom (%)	100.00 1	0.00 5	20.29	100.00 1	0.00
Pollution Sensitive Spp Abund (%)	0.00	0.00	18.18 3	0.00	71.21 5
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	7.25	0.00 1	99.11
Carnivore-Omnivore Abund (%)	0.00 1	0.00 1	18.18 1	0.00 1	75.76 5
Deep Deposit Feeder Abund (%)	0.00	100.00	9.09	0.00	4.55
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Limnodrilus Abundance (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Tolerance Score	0.00	0.00	0.00	0.00	6.00
Tany./Chir. Abundance Ratio	0.00	0.00	0.00	0.00	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16101	16102	16103	16104	16105
<i>Acteocina canaliculata</i>			23		954
<i>Edwardsia elegans</i>					23
<i>Gemma gemma</i>			23		45
<i>Glycinde solitaria</i>			23		45
<i>Haminoea solitaria</i>					45
<i>Heteromastus filiformis</i>			23		68
<i>Littoridinops tenuipes</i> (Epi.)			23		
<i>Macoma mitchelli</i>			23		182
<i>Micrura leidyi</i>					45
<i>Neanthes succinea</i>					23
<i>Paraprionospio pinnata</i>			136		
<i>Rangia cuneata</i>					68
<i>Tubificoides</i> spp.		45			
Total Abundance w/ Epifauna	0	45	273	0	1500
Total Abundance w/o Epifauna		45	250		1500
Number of Taxa w/ Epifauna	0	1	7	0	10
Number of Taxa w/o Epifauna	0	1	6	0	10
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16101	16102	16103	16104	16105
<i>Acteocina canaliculata</i>			0.0011		0.0477
<i>Edwardsia elegans</i>					0.0011
<i>Gemma gemma</i>			0.0011		0.0068
<i>Glycinde solitaria</i>			0.0045		0.0182
<i>Haminoea solitaria</i>					0.0045
<i>Heteromastus filiformis</i>			0.0545		0.0750
<i>Littoridinops tenuipes</i> (Epi.)			0.0011		
<i>Macoma mitchelli</i>			0.0011		0.2045
<i>Micrura leidyi</i>					0.1613
<i>Neanthes succinea</i>					0.0114
<i>Paraprionospio pinnata</i>			0.0159		
<i>Rangia cuneata</i>					51.8448
<i>Tubificoides</i> spp.		0.0011			
Total Biomass w/ Epifauna	0.0000	0.0011	0.0795	0.0000	52.3753
Total Biomass w/o Epifauna	0.0000	0.0011	0.0784	0.0000	52.3753

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16106	16107	16108	16109	16110					
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R					
Habitat	High Meso Mud	High Meso Mud	High Meso Mud	Low Mesohaline	Low Mesohaline					
Date	08/31/09	08/31/09	08/31/09	08/31/09	08/31/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	6.8	7.6	9.1	4.5	5.4					
Salinity (ppt)	15.25	12.89	16.81	9.78	9.94					
Temperature (C)	27.98	27.98	27.08	27.26	27.36					
Dissolved Oxygen (mg/L)	0.3	4.2	0.3	5.5	5.2					
Sediment Silt-Clay (%)	78.34	93.51	95.08	70.42	93.33					
Total Carbon (%)	2.45	3.04	3.03	2.05	2.33					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	1.00		1.00		1.00		2.60		2.20	
Condition	Severely Degr.		Severely Degr.		Severely Degr.		Degraded		Degraded	
# Attributes Scored	6		6		6		5		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.00	1	0.00	1	0.00	1	1.25	1	1.00	1
Abundance (#/m2)	0	1	0	1	0	1	364	1	45	1
Biomass (g/m2)	0.00	1	0.00	1	0.00	1	2.23	3	0.32	1
Pollution Indicative Spp Abund (%)	100.00		100.00		100.00		6.25	5	0.00	5
Pollution Indicative Spp Biom (%)	100.00	1	100.00	1	100.00	1	0.05		0.00	
Pollution Sensitive Spp Abund (%)	0.00		0.00		0.00		56.25		50.00	
Pollution Sensitive Spp Biom (%)	0.00	1	0.00	1	0.00	1	87.43	3	43.17	3
Carnivore-Omnivore Abund (%)	0.00	1	0.00	1	0.00	1	37.50		0.00	
Deep Deposit Feeder Abund (%)	0.00		0.00		0.00		6.25		50.00	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		6.25		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		9.80		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16106	16107	16108	16109	16110
Heteromastus filiformis					23
Macoma balthica				204	23
Neanthes succinea				136	
Tubificidae imm w/o cap chaetae				23	
Total Abundance w/ Epifauna	0	0	0	364	45
Total Abundance w/o Epifauna				364	45
Number of Taxa w/ Epifauna	0	0	0	3	2
Number of Taxa w/o Epifauna	0	0	0	3	2
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16106	16107	16108	16109	16110
Heteromastus filiformis					0.1795
Macoma balthica				1.9516	0.1363
Neanthes succinea				0.2795	
Tubificidae imm w/o cap chaetae				0.0011	
Total Biomass w/ Epifauna	0.0000	0.0000	0.0000	2.2322	0.3158
Total Biomass w/o Epifauna	0.0000	0.0000	0.0000	2.2322	0.3158

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16111	16112	16113	16114	16115
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	High Meso Mud	High Meso Mud	Low Mesohaline	Oligohaline	Oligohaline
Date	08/31/09	08/31/09	09/14/09	10/01/09	10/01/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	4.8	7.7	3.6	3.1	3.6
Salinity (ppt)	12.87	14.49	9.71	3.74	3.66
Temperature (C)	27.46	27.49	22.51	19.12	19.71
Dissolved Oxygen (mg/L)	5.8	0.3	7.0	7.5	7.9
Sediment Silt-Clay (%)	55.16	89.33	81.98	55.60	76.31
Total Carbon (%)	2.44	2.97	1.20	0.95	3.10
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	1.00	1.00	3.40	3.33	3.80
Condition	Severely Degr.	Severely Degr.	Meets Goal	Meets Goal	Meets Goal
# Attributes Scored	6	6	5	6	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	0.00 1	2.48 3	2.55 3	2.80 3
Abundance (#/m2)	0 1	0 1	1113 3	1704 5	1113 5
Biomass (g/m2)	0.00 1	0.00 1	1.25 3	6.72 3	146.23 5
Pollution Indicative Spp Abund (%)	100.00	100.00	2.04 5	6.67 3	12.24 3
Pollution Indicative Spp Biom (%)	100.00 1	100.00 1	0.18 3	0.10 3	0.00 3
Pollution Sensitive Spp Abund (%)	0.00	0.00	20.41 3	53.33 3	57.14 3
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	63.42 3	99.32 3	99.99 3
Carnivore-Omnivore Abund (%)	0.00 1	0.00 1	14.29 3	18.67 3	28.57 3
Deep Deposit Feeder Abund (%)	0.00	0.00	42.86 3	4.00 3	12.24 3
TF Poll. Indicative Spp Abund (%)	0.00	0.00	0.00 3	0.00 3	0.00 3
Limnodrilus Abundance (%)	0.00	0.00	0.00 3	0.00 3	0.00 3
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00 3	34.67 3	40.82 3
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00 3	41.33 3	8.16 3
Tolerance Score	0.00	0.00	0.00 3	6.03 3	6.00 3
Tany./Chir. Abundance Ratio	0.00	0.00	0.00 3	100.00 1	0.00 3

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16111	16112	16113	16114	16115
Ampharetidae					23
Apocorophium lacustre (Epi.)					227
Balanus improvisus (Epi.)					68
Coelotanypus spp.				23	
Cyathura polita			136	68	250
Empididae				204	
Heteromastus filiformis			136		
Leptocheirus plumulosus			386	341	23
Macoma balthica			68		
Maldanidae			23		
Marenzelleria viridis				704	91
Mediomastus ambiseta			23		
Melita nitida (Epi.)			159		
Mytilopsis leucophaeata (Epi.)					91
Neanthes succinea			23	23	68
Polydora cornuta				45	91
Rangia cuneata				136	295
Streblospio benedicti			23	91	136
Tubificoides spp.			295	68	136
Total Abundance w/ Epifauna	0	0	1272	1704	1500
Total Abundance w/o Epifauna			1113	1704	1113
Number of Taxa w/ Epifauna	0	0	10	10	12
Number of Taxa w/o Epifauna	0	0	9	10	9
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16111	16112	16113	16114	16115
Ampharetidae					0.0023
Apocorophium lacustre (Epi.)					0.0227
Balanus improvisus (Epi.)					0.2476
Coelotanypus spp.				0.0045	
Cyathura polita			0.3317	0.1659	0.1840
Empididae				0.0136	
Heteromastus filiformis			0.2340		
Leptocheirus plumulosus			0.0818	0.0204	0.0068
Macoma balthica			0.4589		
Maldanidae			0.0045		
Marenzelleria viridis				1.3791	0.0568
Mediomastus ambiseta			0.0011		
Melita nitida (Epi.)			0.0091		
Mytilopsis leucophaeata (Epi.)					0.0386
Neanthes succinea			0.1295	0.0011	0.0011
Polydora cornuta				0.0023	0.0011
Rangia cuneata				5.1256	145.9760
Streblospio benedicti			0.0023	0.0023	0.0023
Tubificoides spp.			0.0045	0.0011	0.0011
Total Biomass w/ Epifauna	0.0000	0.0000	1.2576	6.7160	146.5406
Total Biomass w/o Epifauna	0.0000	0.0000	1.2485	6.7160	146.2316

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16116	16117	16118	16121	16122					
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R					
Habitat	Oligohaline	Low Mesohaline	Low Mesohaline	Oligohaline	Oligohaline					
Date	10/01/09	09/14/09	09/14/09	10/01/09	10/01/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	0.9	3.6	2.7	4.3	4.4					
Salinity (ppt)	3.36	8.02	7.93	2.32	2.31					
Temperature (C)	18.80	23.35	23.47	19.73	20.24					
Dissolved Oxygen (mg/L)	7.3	6.2	6.4	7.9	7.2					
Sediment Silt-Clay (%)	12.50	57.07	83.39	96.11	97.32					
Total Carbon (%)	0.36	1.05	1.86	1.88	2.48					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.33		3.00		3.80		3.00		3.80	
Condition	Degraded		Meets Goal		Meets Goal		Meets Goal		Meets Goal	
# Attributes Scored	6		5		5		6		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.92		2.67	5	2.74	5	2.73		2.27	
Abundance (#/m2)	4885	1	1272	3	636	3	591	5	932	5
Biomass (g/m2)	22.47		115.76	1	46.84	1	54.06		55.50	
Pollution Indicative Spp Abund (%)	26.98		23.21	1	0.00	5	42.31		19.51	
Pollution Indicative Spp Biom (%)	0.27		0.01		0.00		0.02		0.02	
Pollution Sensitive Spp Abund (%)	5.58		39.29		39.29		38.46		73.17	
Pollution Sensitive Spp Biom (%)	98.24		99.63	5	99.61	5	99.97		68.17	
Carnivore-Omnivore Abund (%)	12.56	1	16.07		14.29		15.38	3	7.32	1
Deep Deposit Feeder Abund (%)	26.98		14.29		17.86		34.62		17.07	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	4.19		0.00		0.00		19.23		17.07	
Oligo Poll. Indic. Spp Abund (%)	76.28	3	0.00		0.00		61.54	3	26.83	5
Oligo Poll. Sens. Spp Abund (%)	0.00	1	0.00		0.00		3.85	3	43.90	5
Tolerance Score	7.92	3	6.00		6.00		7.39	3	7.45	3
Tany./Chir. Abundance Ratio	5.26	5	0.00		0.00		100.00	1	0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16116	16117	16118	16121	16122
Apocorophium lacustre (Epi.)	182	23			
Boccardiella ligerica	45				
Carinoma tremaphoros		23			
Chironomus spp.	45				
Cladotanytarsus spp.	23				
Coelotanypus spp.				45	
Corbicula fluminea					68
Cricotopus bicinctus	23				
Cricotopus spp. *	114				
Cyathura polita	182	23	68	45	68
Gammarus daiberi (Epi.)	45				
Heteromastus filiformis			23		
Hobsonia florida	500				
Leptocheirus plumulosus	1250	114	182	23	
Limnodrilus hoffmeisteri					45
Macoma mitchelli			68		
Marenzelleria viridis		295	114	23	409
Neanthes succinea		159	23		
Parachironomus monochromus/tenuicad tus	45				
Polydora cornuta	23				
Procladius spp.	23				
Rangia cuneata	91	182	68	159	204
Rheotanytarsus spp.	136				
Streblospio benedicti	1045	295		91	23
Thienemanniella spp.	23				
Tubificidae imm w/o cap chaetae	204			114	
Tubificidae imm w/o cap chaetae *					114
Tubificoides spp.	1113	182	91	91	
Total Abundance w/ Epifauna	5112	1295	636	591	932
Total Abundance w/o Epifauna	4885	1272	636	591	932
Number of Taxa w/ Epifauna	18	9	8	8	6
Number of Taxa w/o Epifauna	16	8	8	8	6

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16116	16117	16118	16121	16122
Apocorophium lacustre (Epi.)	0.0136	0.0023			
Boccardiella ligerica	0.0045				
Carinoma tremaphoros		0.0114			
Chironomidae	0.1091				
Chironomus spp.	0.0011				
Cladotanytarsus spp.	0.0011				
Coelotanypus spp.				0.0045	
Corbicula fluminea					17.6557
Cricotopus bicinctus	0.0011				
Cricotopus spp. *	0.0011				
Cyathura polita	0.0114	0.0023	0.1431	0.0364	0.1091
Gammarus daiberi (Epi.)	0.0068				
Heteromastus filiformis			0.0318		
Hobsonia florida	0.0477				
Leptocheirus plumulosus	0.1477	0.0227	0.0250	0.0023	
Limnodrilus hoffmeisteri					0.0011
Macoma mitchelli			0.1091		
Marenzelleria viridis		0.5930	0.4090	0.0227	1.0883
Neanthes succinea		0.3885	0.0159		
Oligochaeta				0.0011	0.0068
Parachironomus monochromus/tenuicad	0.0011				
Polydora cornuta	0.0045				
Procladius spp.	0.0011				
Rangia cuneata	22.0634	114.7269	46.1057	53.9850	36.6337
Rheotanytarsus spp.	0.0011				
Streblospio benedicti	0.0568	0.0091		0.0023	0.0011
Thienemanniella spp.	0.0011				
Tubificidae imm w/o cap chaetae	0.0011			0.0011	
Tubificidae imm w/o cap chaetae *					0.0011
Tubificoides spp.	0.0159	0.0023	0.0023	0.0023	
Total Biomass w/ Epifauna	22.4917	115.7584	46.8418	54.0577	55.4970
Total Biomass w/o Epifauna	22.4712	115.7561	46.8418	54.0577	55.4970

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16123	16124	16125	16126	16127					
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R					
Habitat	Oligohaline	Oligohaline	Freshwater	Low Mesohaline	High Meso Sand					
Date	09/28/09	09/28/09	10/01/09	09/14/09	08/31/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	6.1	5.9	2.9	1.9	7.1					
Salinity (ppt)	1.02	0.82	0.20	8.89	13.86					
Temperature (C)	22.26	21.72	21.03	23.07	27.56					
Dissolved Oxygen (mg/L)	6.9	7.4	6.6	7.6	6.4					
Sediment Silt-Clay (%)	95.35	93.50	3.21	39.62	1.49					
Total Carbon (%)	2.91	2.66	0.10	0.75	0.18					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.00		3.40		4.50		2.60		1.00	
Condition	Meets Goal		Meets Goal		Meets Goal		Degraded		Severely Degr.	
# Attributes Scored	5		5		4		5		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.35		2.44		2.18		2.57	5	1.12	1
Abundance (#/m2)	1659	5	750	5	1454	5	1295	3	750	1
Biomass (g/m2)	215.09		82.64		40.99		0.79	1	0.07	1
Pollution Indicative Spp Abund (%)	57.53		33.33		53.13		26.32	1	87.88	1
Pollution Indicative Spp Biom (%)	0.11		0.02		0.22		0.58		44.62	
Pollution Sensitive Spp Abund (%)	26.03		42.42		3.13		38.60		0.00	1
Pollution Sensitive Spp Biom (%)	95.82		99.63		0.07		63.69	3	0.00	
Carnivore-Omnivore Abund (%)	0.00	1	0.00	1	3.13		12.28		12.12	1
Deep Deposit Feeder Abund (%)	67.12		51.52		56.25	5	15.79		15.15	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		46.87	3	0.00		0.00	
Limnodrilus Abundance (%)	57.53		33.33		46.87		0.00		15.15	
Oligo Poll. Indic. Spp Abund (%)	73.97	3	51.52	3	0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	9.59	3	30.30	5	0.00		0.00		0.00	
Tolerance Score	8.70	3	8.68	3	7.95	5	0.00		9.80	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16123	16124	16125	16126	16127
Apocorophium lacustre (Epi.)		23		886	
Aulodrilus pigueti			91		
Branchiura sowerbyi	159	136			
Corbicula fluminea	114		568		
Cyathura polita			23	45	
Heteromastus filiformis				45	
Laeonereis culveri				23	
Leptocheirus plumulosus				68	
Limnodrilus hoffmeisteri	591	114	273		
Littoridinops tenuipes (Epi.)			23		
Macoma mitchelli				68	
Marenzelleria viridis	159	227	23	454	
Melita nitida (Epi.)				23	
Musculium transversum		45			
Neanthes succinea				91	91
Neorhabdocela (Epi.)			45		
Piguetiella michiganensis			45		
Rangia cuneata	273	91			
Rhithropanopeus harrisii (Epi.)				45	
Stictochironomus spp. group			23		
Streblospio benedicti				341	545
Tubificidae imm w/o cap chaetae					114
Tubificidae imm w/o cap chaetae *	364	136	409		
Tubificoides spp.				159	
Total Abundance w/ Epifauna	1659	772	1522	2249	750
Total Abundance w/o Epifauna	1659	750	1454	1295	750
Number of Taxa w/ Epifauna	5	6	9	12	3
Number of Taxa w/o Epifauna	5	5	7	9	3

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16123	16124	16125	16126	16127
Apocorophium lacustre (Epi.)		0.0011		0.0772	
Aulodrilus pigueti			0.0011		
Branchiura sowerbyi	0.3885	0.2863			
Corbicula fluminea	8.3700		40.8687		
Cyathura polita			0.0011	0.0227	
Heteromastus filiformis				0.1250	
Laeonereis culveri				0.0023	
Leptocheirus plumulosus				0.0159	
Limnodrilus hoffmeisteri	0.0011	0.0011	0.0011		
Littoridinops tenuipes (Epi.)			0.0011		
Macoma mitchelli				0.0636	
Marenzelleria viridis	0.5203	0.8361	0.0295	0.4794	
Melita nitida (Epi.)				0.0011	
Musculium transversum		0.0045			
Neanthes succinea				0.0727	0.0409
Neorhabdocela (Epi.)			0.0023		
Oligochaeta	0.2363	0.0159	0.0886		
Piguetiella michiganensis			0.0011		
Rangia cuneata	205.5774	81.4989			
Rhithropanopeus harrisii (Epi.)				0.5453	
Stictochironomus spp. group			0.0011		
Streblospio benedicti				0.0045	0.0318
Tubificidae imm w/o cap chaetae					0.0011
Tubificidae imm w/o cap chaetae *	0.0011	0.0011	0.0011		
Tubificoides spp.				0.0023	
Total Biomass w/ Epifauna	215.0948	82.6451	40.9971	1.4120	0.0738
Total Biomass w/o Epifauna	215.0948	82.6440	40.9937	0.7884	0.0738

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16201	16202	16203	16204	16206					
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R					
Habitat	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Sand					
Date	08/31/09	08/31/09	09/02/09	08/31/09	09/15/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	9.8	8.2	10.5	11.0	1.6					
Salinity (ppt)	14.01	13.99	14.06	14.01	13.53					
Temperature (C)	27.78	27.86	26.76	28.05	23.37					
Dissolved Oxygen (mg/L)	6.4	5.4	5.8	5.9	8.0					
Sediment Silt-Clay (%)	84.94	56.03	94.26	61.10	2.20					
Total Carbon (%)	0.99	2.99	1.82	1.85	0.32					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.67		2.33		2.33		2.33		3.00	
Condition	Marginal		Degraded		Degraded		Degraded		Meets Goal	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	1.09	1	2.87	3	0.65	1	1.06	1	2.97	3
Abundance (#/m2)	318	1	341	1	136	1	182	1	2158	5
Biomass (g/m2)	0.64	3	0.24	1	0.31	1	0.42	1	0.73	1
Pollution Indicative Spp Abund (%)	14.29		20.00		0.00		12.50		21.05	3
Pollution Indicative Spp Biom (%)	3.55	5	12.50	3	0.00	5	2.15	5	0.62	
Pollution Sensitive Spp Abund (%)	0.00		46.67		0.00		12.50		27.37	3
Pollution Sensitive Spp Biom (%)	0.00	1	9.13	1	0.00	1	1.61	1	5.73	
Carnivore-Omnivore Abund (%)	78.57	5	66.67	5	83.33	5	87.50	5	31.58	3
Deep Deposit Feeder Abund (%)	7.14		6.67		16.67		0.00		27.37	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		14.74	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		0.00		9.80	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16201	16202	16203	16204	16206
Acteocina canaliculata		114			23
Ameroculodes species complex					23
Apocorophium lacustre (Epi.)					23
Carinoma tremaphoros					45
Edotea triloba (Epi.)		23		23	68
Gemma gemma					454
Glycinde solitaria		23		23	568
Heteromastus filiformis			23		91
Hirudinea (Epi.)					23
Leitoscoloplos robustus		23			
Leitoscoloplos spp.	23				
Leptocheirus plumulosus					23
Leucon americanus		23			
Littoridinops tenuipes (Epi.)					1522
Macoma mitchelli	23				250
Micrura leidyi					23
Mulinia lateralis	23				
Nassarius vibex		23			
Neanthes succinea	250	45	114	136	
Paraprionospio pinnata		45		23	23
Podarkeopsis levifuscina		23			
Rictaxis punctostriatus					23
Spiochaetopterus costarum		23			
Streblospio benedicti					114
Tubificidae imm w/o cap chaetae					318
Tubificoides spp.					182
Total Abundance w/ Epifauna	318	364	136	204	3794
Total Abundance w/o Epifauna	318	341	136	182	2158
Number of Taxa w/ Epifauna	4	10	2	4	18
Number of Taxa w/o Epifauna	4	9	2	3	14

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16201	16202	16203	16204	16206
Acteocina canaliculata		0.0114			0.0011
Ameroculodes species complex					0.0011
Apocorophium lacustre (Epi.)					0.0011
Carinoma tremaphoros					0.0227
Edotea triloba (Epi.)		0.0045		0.0011	0.0182
Gemma gemma					0.0341
Glycinde solitaria		0.0091		0.0068	0.0409
Heteromastus filiformis			0.0318		0.0636
Hirudinea (Epi.)					0.0011
Leitoscoloplos robustus		0.0250			
Leitoscoloplos spp.	0.0136				
Leptocheirus plumulosus					0.0011
Leucon americanus		0.0023			
Littoridinops tenuipes (Epi.)					0.0454
Macoma mitchelli	0.0909				0.0227
Micrura leidyi					0.5385
Mulinia lateralis	0.0091				
Nassarius vibex		0.0136			
Neanthes succinea	0.5271	0.1681	0.2817	0.4067	
Paraprionospio pinnata		0.0045		0.0091	0.0023
Podarkeopsis levifuscina		0.0011			
Rictaxis punctostriatus					0.0011
Spiochaetopterus costarum		0.0011			
Streblospio benedicti					0.0011
Tubificidae imm w/o cap chaetae					0.0011
Tubificoides spp.					0.0023
Total Biomass w/ Epifauna	0.6407	0.2408	0.3135	0.4237	0.7997
Total Biomass w/o Epifauna	0.6407	0.2363	0.3135	0.4226	0.7339

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16207	16208	16209	16210	16211					
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R					
Habitat	High Meso Sand	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Mud					
Date	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	9.8	9.4	14.8	8.6	4.8					
Salinity (ppt)	13.85	13.73	13.70	13.69	13.52					
Temperature (C)	27.25	27.09	27.02	26.99	26.62					
Dissolved Oxygen (mg/L)	4.5	4.9	4.9	5.3	5.2					
Sediment Silt-Clay (%)	37.09	56.93	95.91	72.88	88.86					
Total Carbon (%)	1.45	1.72	3.68	2.27	3.47					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.33		2.00		2.33		2.00		1.00	
Condition	Degraded		Severely Degr.		Degraded		Severely Degr.		Severely Degr.	
# Attributes Scored	6		6		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.00	1	1.82	1	0.00	1	1.37	1	0.00	1
Abundance (#/m2)	91	1	295	1	23	1	114	1	0	1
Biomass (g/m2)	0.08	1	0.01	1	0.00	1	0.06	1	0.00	1
Pollution Indicative Spp Abund (%)	25.00	3	7.69	3	0.00	5	20.00	3	100.00	1
Pollution Indicative Spp Biom (%)	2.70	3	7.69	3	0.00	5	12.24	3	100.00	1
Pollution Sensitive Spp Abund (%)	25.00	3	23.08	1	0.00	1	20.00	1	0.00	1
Pollution Sensitive Spp Biom (%)	2.70	3	7.69	1	0.00	1	2.04	1	0.00	1
Carnivore-Omnivore Abund (%)	75.00	5	76.92	5	100.00	5	80.00	5	0.00	1
Deep Deposit Feeder Abund (%)	0.00	1	7.69	1	0.00	1	0.00	1	0.00	1
TF Poll. Indicative Spp Abund (%)	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
Limnodrilus Abundance (%)	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
Oligo Poll. Indic. Spp Abund (%)	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
Oligo Poll. Sens. Spp Abund (%)	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
Tolerance Score	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1
Tany./Chir. Abundance Ratio	0.00	1	0.00	1	0.00	1	0.00	1	0.00	1

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16207	16208	16209	16210	16211
Acteocina canaliculata	23	68		23	
Leucon americanus		23			
Micrura leidyi	23				
Neanthes succinea	23			68	
Paraprionospio pinnata	23	23		23	
Podarkeopsis levifuscina		159	23		
Tubificoides spp.		23			
Total Abundance w/ Epifauna	91	295	23	114	0
Total Abundance w/o Epifauna	91	295	23	114	
Number of Taxa w/ Epifauna	4	5	1	3	0
Number of Taxa w/o Epifauna	4	5	1	3	0
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16207	16208	16209	16210	16211
Acteocina canaliculata	0.0023	0.0011		0.0011	
Leucon americanus		0.0011			
Micrura leidyi	0.0432				
Neanthes succinea	0.0364			0.0477	
Paraprionospio pinnata	0.0023	0.0011		0.0068	
Podarkeopsis levifuscina		0.0091	0.0011		
Tubificoides spp.		0.0023			
Total Biomass w/ Epifauna	0.0841	0.0148	0.0011	0.0557	0.0000
Total Biomass w/o Epifauna	0.0841	0.0148	0.0011	0.0557	0.0000

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16212	16213	16214	16215	16216
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R
Habitat	High Meso Sand	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Mud
Date	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	2.7	8.8	3.1	5.9	8.1
Salinity (ppt)	13.43	13.20	13.20	13.19	12.81
Temperature (C)	25.98	26.02	25.42	26.53	26.10
Dissolved Oxygen (mg/L)	5.9	5.5	5.8	4.3	5.1
Sediment Silt-Clay (%)	2.35	91.91	87.28	84.18	89.19
Total Carbon (%)	0.12	3.22	3.62	2.56	2.79
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.00	1.00	1.67	2.00	1.67
Condition	Meets Goal	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	3.06 3	0.00 1	0.00 1	1.58 1	1.22 1
Abundance (#/m2)	909 1	45 1	23 1	68 1	204 1
Biomass (g/m2)	0.38 1	0.01 1	0.00 1	0.15 1	0.07 1
Pollution Indicative Spp Abund (%)	10.00 5	100.00 1	100.00 1	33.33 3	66.67 1
Pollution Indicative Spp Biom (%)	27.51 1	100.00 1	100.00 1	13.85 3	57.63 1
Pollution Sensitive Spp Abund (%)	57.50 3	0.00 1	0.00 1	0.00 1	11.11 3
Pollution Sensitive Spp Biom (%)	28.40 1	0.00 1	0.00 1	0.00 1	40.68 3
Carnivore-Omnivore Abund (%)	57.50 5	0.00 1	100.00 5	66.67 5	11.11 3
Deep Deposit Feeder Abund (%)	15.00 1	0.00 1	0.00 1	0.00 1	22.22 1
TF Poll. Indicative Spp Abund (%)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Limnodrilus Abundance (%)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Oligo Poll. Indic. Spp Abund (%)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Oligo Poll. Sens. Spp Abund (%)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Tolerance Score	0.00 1	0.00 1	9.80 5	0.00 1	0.00 1
Tany./Chir. Abundance Ratio	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16212	16213	16214	16215	16216
Acteocina canaliculata	273				
Chironomus spp.			23		
Dugesia tigrina (Epi.)				250	
Gemma gemma	23				
Glycinde solitaria	159				23
Haminoea solitaria	45				
Heteromastus filiformis	114				
Leitoscoloplos robustus	23				
Macoma mitchelli	68				
Marenzelleria viridis	23				
Molgula manhattensis (Epi.)	682				
Mulinia lateralis	68				
Neanthes succinea	23			23	
Neorhabdocela (Epi.)				568	
Paraprionospio pinnata		45		23	136
Podarkeopsis levifuscina				23	
Rictaxis punctostriatus	23				
Spiochaetopterus costarum	68				
Stylochus ellipticus (Epi.)	23				
Tubificoides spp.					45
Total Abundance w/ Epifauna	1613	45	23	886	204
Total Abundance w/o Epifauna	909	45	23	68	204
Number of Taxa w/ Epifauna	14	1	1	5	3
Number of Taxa w/o Epifauna	12	1	1	3	3
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16212	16213	16214	16215	16216
Acteocina canaliculata	0.0386				
Chironomus spp.			0.0011		
Dugesia tigrina (Epi.)				0.0182	
Gemma gemma	0.0045				
Glycinde solitaria	0.0091				0.0273
Haminoea solitaria	0.0023				
Heteromastus filiformis	0.0454				
Leitoscoloplos robustus	0.1045				
Macoma mitchelli	0.1136				
Marenzelleria viridis	0.0182				
Molgula manhattensis (Epi.)	0.0091				
Mulinia lateralis	0.0011				
Neanthes succinea	0.0023			0.1204	
Neorhabdocela (Epi.)				0.1159	
Paraprionospio pinnata		0.0068		0.0204	0.0386
Podarkeopsis levifuscina				0.0068	
Rictaxis punctostriatus	0.0011				
Spiochaetopterus costarum	0.0432				
Stylochus ellipticus (Epi.)	0.0011				
Tubificoides spp.					0.0011
Total Biomass w/ Epifauna	0.3942	0.0068	0.0011	0.2817	0.0670
Total Biomass w/o Epifauna	0.3840	0.0068	0.0011	0.1477	0.0670

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16217	16218	16219	16220	16221					
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R					
Habitat	High Meso Mud	High Meso Mud	High Meso Mud	High Meso Mud	Low Mesohaline					
Date	09/02/09	09/02/09	09/02/09	09/02/09	09/02/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	6.2	3.0	6.9	5.2	3.6					
Salinity (ppt)	12.87	12.57	12.67	12.52	11.34					
Temperature (C)	26.30	25.52	26.12	26.07	25.78					
Dissolved Oxygen (mg/L)	5.2	5.2	4.8	4.7	5.2					
Sediment Silt-Clay (%)	96.28	85.60	92.65	72.90	94.90					
Total Carbon (%)	3.05	2.54	2.83	3.11	1.97					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	1.00		2.33		1.00		4.00		2.20	
Condition	Severely Degr.		Degraded		Severely Degr.		Meets Goal		Degraded	
# Attributes Scored	6		6		6		6		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.65	1	1.67	1	0.54	1	2.14	3	2.41	3
Abundance (#/m2)	136	1	364	1	182	1	2317	5	318	1
Biomass (g/m2)	0.02	1	0.20	1	0.06	1	1.44	3	0.22	1
Pollution Indicative Spp Abund (%)	83.33		6.25		87.50		14.71		0.00	5
Pollution Indicative Spp Biom (%)	94.12	1	0.56	5	88.46	1	0.39	5	0.00	
Pollution Sensitive Spp Abund (%)	0.00		0.00		0.00		5.88		7.14	
Pollution Sensitive Spp Biom (%)	0.00	1	0.00	1	0.00	1	41.88	3	26.18	1
Carnivore-Omnivore Abund (%)	0.00	1	31.25	5	0.00	1	27.45	5	35.71	
Deep Deposit Feeder Abund (%)	0.00		0.00		0.00		60.78		35.71	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		6.86		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		9.33		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16217	16218	16219	16220	16221
Carinoma tremaphoros		23		91	45
Glycinde solitaria				45	
Heteromastus filiformis				45	23
Leptocheirus plumulosus	23	227	23		68
Macoma balthica				68	23
Micrura leidyi		23			
Neanthes succinea		23		500	68
Parahesion luteola		45			
Paraprionospio pinnata	114		159		
Rangia cuneata				23	
Streblospio benedicti		23		182	
Tubificidae imm w/o cap chaetae				159	
Tubificoides spp.				1204	91
Total Abundance w/ Epifauna	136	364	182	2317	318
Total Abundance w/o Epifauna	136	364	182	2317	318
Number of Taxa w/ Epifauna	2	6	2	9	6
Number of Taxa w/o Epifauna	2	6	2	9	6
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16217	16218	16219	16220	16221
Carinoma tremaphoros		0.0409		0.0364	0.0227
Glycinde solitaria				0.0023	
Heteromastus filiformis				0.0954	0.0091
Leptocheirus plumulosus	0.0011	0.1204	0.0068		0.0318
Macoma balthica				0.5998	0.0568
Micrura leidyi		0.0159			
Neanthes succinea		0.0159		0.6907	0.0954
Parahesion luteola		0.0068			
Paraprionospio pinnata	0.0182		0.0523		
Rangia cuneata				0.0011	
Streblospio benedicti		0.0011		0.0045	
Tubificidae imm w/o cap chaetae				0.0011	
Tubificoides spp.				0.0091	0.0011
Total Biomass w/ Epifauna	0.0193	0.2011	0.0591	1.4404	0.2170
Total Biomass w/o Epifauna	0.0193	0.2011	0.0591	1.4404	0.2170

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16223	16224	16225	16226	16227
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R
Habitat	Low Mesohaline	Low Mesohaline	Freshwater	Freshwater	High Meso Mud
Date	09/02/09	09/02/09	09/09/09	09/09/09	09/02/09
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT					
Depth (m)	3.2	2.3	0.5	2.5	2.2
Salinity (ppt)	10.96	9.74	0.16	0.41	13.49
Temperature (C)	25.70	25.73	22.52	23.32	25.80
Dissolved Oxygen (mg/L)	5.4	6.0	6.1	5.4	4.8
Sediment Silt-Clay (%)	80.58	81.53	90.77	87.04	88.82
Total Carbon (%)	2.27	1.80	2.17	4.53	3.17
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.60	3.40	2.00	2.00	1.00
Condition	Degraded	Meets Goal	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	5	5	4	4	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.19 3	2.06 3	1.93	1.20	0.00 1
Abundance (#/m2)	1409 3	1999 5	386 1	1863 5	0 1
Biomass (g/m2)	0.36 1	1.33 3	0.30	0.46	0.00 1
Pollution Indicative Spp Abund (%)	8.06 5	10.23 3	76.47	96.34	100.00
Pollution Indicative Spp Biom (%)	0.63	0.17	6.74	87.93	100.00 1
Pollution Sensitive Spp Abund (%)	1.61	4.55	0.00	1.22	0.00
Pollution Sensitive Spp Biom (%)	30.28 1	54.17 3	0.00	11.82	0.00 1
Carnivore-Omnivore Abund (%)	3.23	3.41	5.88	1.22	0.00 1
Deep Deposit Feeder Abund (%)	59.68	71.59	94.12 1	97.56 1	0.00
TF Poll. Indicative Spp Abund (%)	0.00	0.00	70.59 3	95.12 1	0.00
Limnodrilus Abundance (%)	4.84	7.95	70.59	95.12	0.00
Oligo Poll. Indic. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Oligo Poll. Sens. Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Tolerance Score	9.80	9.80	9.32 3	9.70 1	0.00
Tany./Chir. Abundance Ratio	0.00	0.00	100.00	100.00	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16223	16224	16225	16226	16227
Branchiura sowerbyi			68		
Carinoma tremaphoros	23	23			
Coelotanypus spp.			23	23	
Gammarus daiberi (Epi.)				45	
Heteromastus filiformis	295	91			
Leptocheirus plumulosus	454	273			
Limnodrilus hoffmeisteri			91	545	
Littoridinops tenuipes (Epi.)				23	
Macoma balthica	23	91			
Macoma mitchelli		91			
Melita nitida (Epi.)	204	68			
Neanthes succinea	23	45			
Rangia cuneata				23	
Streblospio benedicti	45	45			
Tubificidae imm w cap chaetae			23	45	
Tubificidae imm w/o cap chaetae	68	159			
Tubificidae imm w/o cap chaetae *			182	1227	
Tubificoides spp.	477	1181			
Total Abundance w/ Epifauna	1613	2068	386	1931	0
Total Abundance w/o Epifauna	1409	1999	386	1863	
Number of Taxa w/ Epifauna	9	10	4	6	0
Number of Taxa w/o Epifauna	8	9	4	4	0
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16223	16224	16225	16226	16227
Branchiura sowerbyi			0.2817		
Carinoma tremaphoros	0.0011	0.0318			
Coelotanypus spp.			0.0045	0.0011	
Gammarus daiberi (Epi.)				0.0091	
Heteromastus filiformis	0.0386	0.0841			
Leptocheirus plumulosus	0.1272	0.0523			
Limnodrilus hoffmeisteri			0.0011	0.0011	
Littoridinops tenuipes (Epi.)				0.0011	
Macoma balthica	0.1091	0.7225			
Macoma mitchelli		0.1772			
Melita nitida (Epi.)	0.0068	0.0023			
Neanthes succinea	0.0772	0.2590			
Oligochaeta			0.0136	0.4021	
Rangia cuneata				0.0545	
Streblospio benedicti	0.0011	0.0011			
Tubificidae imm w cap chaetae			0.0011	0.0011	
Tubificidae imm w/o cap chaetae	0.0011	0.0011			
Tubificidae imm w/o cap chaetae *			0.0011	0.0011	
Tubificoides spp.	0.0045	0.0045			
Total Biomass w/ Epifauna	0.3669	1.3359	0.3033	0.4714	0.0000
Total Biomass w/o Epifauna	0.3601	1.3337	0.3033	0.4612	0.0000

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16602	16603	16604	16605	16606					
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay					
Habitat	High Meso Mud	Low Mesohaline	High Meso Mud	High Meso Mud	Low Mesohaline					
Date	08/24/09	08/24/09	08/24/09	08/25/09	08/25/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	7.8	5.4	6.4	11.4	4.6					
Salinity (ppt)	13.92	7.65	12.42	14.46	10.12					
Temperature (C)	26.93	27.49	27.11	26.83	27.20					
Dissolved Oxygen (mg/L)	1.2	5.2	1.2	0.4	2.4					
Sediment Silt-Clay (%)	97.37	7.18	95.27	96.18	3.17					
Total Carbon (%)	3.41	0.71	2.13	3.29	0.10					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.33		4.20		2.67		1.67		3.40	
Condition	Degraded		Meets Goal		Marginal		Severely Degr.		Meets Goal	
# Attributes Scored	6		5		6		6		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.00	1	2.89	5	1.89	1	0.92	1	2.54	5
Abundance (#/m2)	68	1	2022	5	295	1	68	1	2158	5
Biomass (g/m2)	0.07	1	5.48	5	2.18	5	0.00	1	0.98	1
Pollution Indicative Spp Abund (%)	0.00		14.61	3	7.69		0.00		6.32	5
Pollution Indicative Spp Biom (%)	0.00	5	28.48		4.38	5	0.00	5	7.91	
Pollution Sensitive Spp Abund (%)	0.00		17.98		7.69		0.00		22.11	
Pollution Sensitive Spp Biom (%)	0.00	1	44.86	3	87.58	3	0.00	1	31.63	1
Carnivore-Omnivore Abund (%)	100.00	5	16.85		7.69	1	0.00	1	11.58	
Deep Deposit Feeder Abund (%)	0.00		37.08		76.92		33.33		6.32	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Tolerance Score	0.00		0.00		0.00		0.00		0.00	
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16602	16603	16604	16605	16606
Apocorophium lacustre (Epi.)					23
Carinoma tremaphoros		45	23		136
Gemma gemma				45	
Glycinde solitaria		23			
Heteromastus filiformis		704	91	23	114
Leitoscoloplos spp.					23
Lepidactylus dytiscus					45
Leptocheirus plumulosus		273			863
Macoma balthica		159	23		23
Macoma mitchelli		23			273
Marenzelleria viridis		182			454
Micrura leidyi	68	114			45
Mulinia lateralis		227	23		
Neanthes succinea		159			68
Streblospio benedicti		68			114
Tubificoides spp.		45	136		
Total Abundance w/ Epifauna	68	2022	295	68	2181
Total Abundance w/o Epifauna	68	2022	295	68	2158
Number of Taxa w/ Epifauna	1	12	5	2	12
Number of Taxa w/o Epifauna	1	12	5	2	11
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16602	16603	16604	16605	16606
Apocorophium lacustre (Epi.)					0.0011
Carinoma tremaphoros		0.0011	0.0409		0.0068
Gemma gemma				0.0011	
Glycinde solitaria		0.0068			
Heteromastus filiformis		0.3226	0.1295	0.0011	0.0523
Leitoscoloplos spp.					0.0409
Lepidactylus dytiscus					0.0318
Leptocheirus plumulosus		0.0500			0.1568
Macoma balthica		2.3583	1.9062		0.0841
Macoma mitchelli		0.0011			0.0068
Marenzelleria viridis		0.0954			0.2249
Micrura leidyi	0.0704	0.9838			0.3067
Mulinia lateralis		1.5609	0.0954		
Neanthes succinea		0.1022			0.0295
Streblospio benedicti		0.0011			0.0364
Tubificoides spp.		0.0011	0.0045		
Total Biomass w/ Epifauna	0.0704	5.4846	2.1766	0.0023	0.9781
Total Biomass w/o Epifauna	0.0704	5.4846	2.1766	0.0023	0.9770

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16607	16608	16610	16611	16612					
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay					
Habitat	Low Mesohaline	Low Mesohaline	Oligohaline	Low Mesohaline	Oligohaline					
Date	08/25/09	08/25/09	08/25/09	08/25/09	08/25/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	5.0	4.0	5.1	7.4	1.6					
Salinity (ppt)	5.69	5.17	4.93	8.02	2.54					
Temperature (C)	27.54	27.33	27.24	27.46	27.86					
Dissolved Oxygen (mg/L)	4.6	6.2	6.1	2.5	6.2					
Sediment Silt-Clay (%)	93.23	4.89	88.54	71.65	3.08					
Total Carbon (%)	1.51	0.23	1.93	1.74	0.12					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.80		3.80		3.40		3.80		3.00	
Condition	Meets Goal		Meets Goal		Meets Goal		Meets Goal		Meets Goal	
# Attributes Scored	5		5		5		5		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.98	5	1.71	3	3.04		3.10	5	2.30	
Abundance (#/m2)	1113	3	4158	3	2976	5	3113	3	4521	1
Biomass (g/m2)	2.44	3	6.23	5	139.33		62.86	1	1.09	
Pollution Indicative Spp Abund (%)	2.04	5	14.21	3	22.14		2.19	5	18.59	
Pollution Indicative Spp Biom (%)	0.05		0.18		0.01		0.01		1.45	
Pollution Sensitive Spp Abund (%)	40.82		21.86		32.06		43.80		29.15	
Pollution Sensitive Spp Biom (%)	77.04	3	93.34	5	99.29		98.42	5	75.80	
Carnivore-Omnivore Abund (%)	24.49		1.09		7.63	1	18.25		0.50	1
Deep Deposit Feeder Abund (%)	26.53		0.55		30.53		37.96		2.01	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	2.04		0.00		0.00		1.46		0.00	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		64.89	3	0.00		50.25	3
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		17.56	3	0.00		27.64	5
Tolerance Score	9.80		6.00		6.00	5	7.09		6.00	5
Tany./Chir. Abundance Ratio	0.00		0.00		0.00		0.00		0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16607	16608	16610	16611	16612
Americamysis bigelowi (Epi.)					23
Ameroculodes species complex				23	45
Apocorophium lacustre (Epi.)			23		
Balanus improvisus (Epi.)				23	
Carinoma tremaphoros	91		45	182	
Chiridotea almyra					23
Cyathura polita	114	45	159	159	
Diadumene leucolea (Epi.)				23	
Edotea triloba (Epi.)				45	
Gammarus daiberi (Epi.)			23		
Heteromastus filiformis	250	23	273	432	91
Lepidactylus dytiscus					841
Leptocheirus plumulosus	159	2408	227	91	1340
Littoridinops tenuipes (Epi.)					45
Macoma balthica	227		182	477	
Macoma mitchelli	45	227	45	23	23
Marenzelleria viridis	114	841	523	591	1227
Melita nitida (Epi.)	45				
Mya arenaria				23	
Mytilopsis leucophaeata (Epi.)				23	91
Neanthes succinea	68		23	227	
Polydora cornuta			114		
Rangia cuneata		23	91	114	91
Streblospio benedicti		591	659	23	841
Tubificidae imm w/o cap chaetae	23			45	
Tubificoides spp.	23		636	704	
Total Abundance w/ Epifauna	1159	4158	3022	3226	4680
Total Abundance w/o Epifauna	1113	4158	2976	3113	4521
Number of Taxa w/ Epifauna	11	7	14	18	12
Number of Taxa w/o Epifauna	10	7	12	14	9

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16607	16608	16610	16611	16612
Americamysis bigelowi (Epi.)					0.0011
Ameroculodes species complex				0.0023	0.0011
Apocorophium lacustre (Epi.)			0.0011		
Balanus improvisus (Epi.)				0.0682	
Carinoma tremaphoros	0.0159		0.0182	0.0500	
Chiridotea almyra					0.0011
Cyathura polita	0.1772	0.0045	0.2295	0.1477	
Diadumene leucolea (Epi.)				0.0727	
Edotea triloba (Epi.)				0.0011	
Gammarus daiberi (Epi.)			0.0045		
Heteromastus filiformis	0.0636	0.0011	0.0977	0.1931	0.0045
Lepidactylus dytiscus					0.1045
Leptocheirus plumulosus	0.0523	0.3953	0.0454	0.0114	0.1363
Littoridinops tenuipes (Epi.)					0.0023
Macoma balthica	1.4927		72.4768	13.4684	
Macoma mitchelli	0.1022	0.0068	0.1999	0.0091	0.0011
Marenzelleria viridis	0.2136	0.3476	0.3385	0.6612	0.1181
Melita nitida (Epi.)	0.0023				
Mya arenaria				0.3317	
Mytilopsis leucophaeata (Epi.)				0.0011	0.0023
Neanthes succinea	0.3249		0.6021	0.7111	
Polydora cornuta			0.0023		
Rangia cuneata		5.4619	65.2950	47.2553	0.7111
Streblospio benedicti		0.0114	0.0182	0.0068	0.0159
Tubificidae imm w/o cap chaetae	0.0011			0.0011	
Tubificoides spp.	0.0011		0.0091	0.0114	
Total Biomass w/ Epifauna	2.4469	6.2287	139.3384	63.0037	1.0996
Total Biomass w/o Epifauna	2.4447	6.2287	139.3327	62.8606	1.0940

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16613	16614	16616	16617	16618					
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay					
Habitat	Oligohaline	Oligohaline	Oligohaline	Oligohaline	Low Mesohaline					
Date	08/25/09	09/13/09	08/25/09	09/13/09	10/06/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	0.7	0.6	8.2	2.3	7.1					
Salinity (ppt)	2.69	3.77	4.39	3.57	6.84					
Temperature (C)	29.57	19.93	27.86	20.30	18.91					
Dissolved Oxygen (mg/L)	9.3	8.5	4.1	8.2	8.5					
Sediment Silt-Clay (%)	2.01	1.13	81.00	64.19	45.71					
Total Carbon (%)	0.13	0.04	1.78	1.78	2.15					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.40		3.80		3.33		2.67		4.20	
Condition	Meets Goal		Meets Goal		Meets Goal		Marginal		Meets Goal	
# Attributes Scored	5		5		6		6		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.36		1.50		2.21		2.42		1.92	3
Abundance (#/m2)	2227	5	1568	5	1590	5	2795	5	2499	5
Biomass (g/m2)	0.35		0.29		27.37		73.17		11.09	3
Pollution Indicative Spp Abund (%)	30.61		0.00		1.43		5.69		5.45	5
Pollution Indicative Spp Biom (%)	6.45		0.00		0.02		0.02		0.04	
Pollution Sensitive Spp Abund (%)	10.20		4.35		71.43		36.59		60.00	
Pollution Sensitive Spp Biom (%)	21.29		21.51		99.07		99.80		99.59	5
Carnivore-Omnivore Abund (%)	9.18	1	7.25	1	8.57	1	10.57	1	9.09	
Deep Deposit Feeder Abund (%)	0.00		0.00		22.86		26.02		30.91	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	0.00		0.00		0.00		0.00		0.00	
Oligo Poll. Indic. Spp Abund (%)	51.02	3	18.84	5	25.71	5	63.41	3	0.00	
Oligo Poll. Sens. Spp Abund (%)	6.12	3	4.35	3	52.86	5	14.63	3	0.00	
Tolerance Score	6.00	5	6.00	5	6.05	3	6.02	3	6.00	
Tany./Chir. Abundance Ratio	0.00		0.00		100.00	1	100.00	1	0.00	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16613	16614	16616	16617	16618
Ameroculodes species complex		45			
Carinoma tremaphoros			23		91
Chiridotea almyra		68	23		
Coelotanypus spp.			23	45	
Cyathura polita		45	45	250	114
Edotea triloba (Epi.)					23
Eteone heteropoda					23
Heteromastus filiformis			68		
Hydrobia truncata (Epi.)	23				
Laeonereis culveri	204				
Lepidactylus dytiscus	659	1068			
Leptocheirus plumulosus	409	295		886	
Macoma balthica			204		
Macoma mitchelli		23			
Marenzelleria viridis	136		818	409	1227
Mytilopsis leucophaeata (Epi.)	114			23	23
Neanthes succinea			23		
Polydora cornuta	45				
Rangia cuneata	91	23	68	364	159
Rhithropanopeus harrisi (Epi.)				23	
Streblospio benedicti	682			114	114
Tubificoides spp.			295	727	772
Total Abundance w/ Epifauna	2363	1568	1590	2840	2545
Total Abundance w/o Epifauna	2227	1568	1590	2795	2499
Number of Taxa w/ Epifauna	9	7	10	9	9
Number of Taxa w/o Epifauna	7	7	10	7	7
BENTHIC BIOMASS (Grams per sq. meter)					
Site	16613	16614	16616	16617	16618
Ameroculodes species complex		0.0045			
Carinoma tremaphoros			0.0091		0.0386
Chiridotea almyra		0.0250	0.0045		
Coelotanypus spp.			0.0045	0.0045	
Cyathura polita		0.0386	0.0295	0.2158	0.0613
Edotea triloba (Epi.)					0.0045
Eteone heteropoda					0.0023
Heteromastus filiformis			0.0818		
Hydrobia truncata (Epi.)	0.0114				
Laeonereis culveri	0.0182				
Lepidactylus dytiscus	0.1886	0.1568			
Leptocheirus plumulosus	0.0454	0.0364		0.1318	
Macoma balthica			1.8721		
Macoma mitchelli		0.0011			
Marenzelleria viridis	0.0136		2.0244	0.9701	1.8721
Mytilopsis leucophaeata (Epi.)	0.0011			0.0182	0.0114
Neanthes succinea			0.1522		
Polydora cornuta	0.0023				
Rangia cuneata	0.0613	0.0227	23.1858	71.8361	9.1153
Rhithropanopeus harrisi (Epi.)				0.1068	
Streblospio benedicti	0.0227			0.0091	0.0023
Tubificoides spp.			0.0023	0.0045	0.0023
Total Biomass w/ Epifauna	0.3647	0.2851	27.3662	73.2970	11.1101
Total Biomass w/o Epifauna	0.3522	0.2851	27.3662	73.1720	11.0942

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16619	16620	16621	16622	16623					
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay					
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Oligohaline					
Date	09/13/09	10/06/09	10/06/09	09/13/09	09/13/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	9.6	4.7	6.0	0.5	3.5					
Salinity (ppt)	7.00	5.40	5.22	5.34	1.81					
Temperature (C)	21.87	18.72	18.89	22.00	21.71					
Dissolved Oxygen (mg/L)	5.9	8.3	8.2	7.5	8.2					
Sediment Silt-Clay (%)	70.37	87.74	76.89	2.03	36.98					
Total Carbon (%)	2.19	2.50	1.73	0.08	3.61					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.80		3.80		3.80		4.20		3.67	
Condition	Meets Goal		Meets Goal		Meets Goal		Meets Goal		Meets Goal	
# Attributes Scored	5		5		5		5		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.24	3	2.37	3	2.72	5	2.88	5	2.35	
Abundance (#/m2)	659	3	2068	5	1181	3	1840	5	1772	5
Biomass (g/m2)	8.69	5	63.35	1	38.28	1	61.12	1	27.01	
Pollution Indicative Spp Abund (%)	10.34	3	4.40	5	9.62	5	0.00	5	35.90	
Pollution Indicative Spp Biom (%)	0.03		0.01		0.01		0.00		0.26	
Pollution Sensitive Spp Abund (%)	79.31		80.22		61.54		27.16		50.00	
Pollution Sensitive Spp Biom (%)	99.23	5	99.97	5	99.96	5	97.14	5	67.15	
Carnivore-Omnivore Abund (%)	10.34		9.89		28.85		17.28		8.97	1
Deep Deposit Feeder Abund (%)	6.90		6.59		23.08		8.64		35.90	
TF Poll. Indicative Spp Abund (%)	0.00		0.00		0.00		0.00		0.00	
Limnodrilus Abundance (%)	3.45		1.10		0.00		0.00		35.90	
Oligo Poll. Indic. Spp Abund (%)	0.00		0.00		0.00		0.00		48.72	3
Oligo Poll. Sens. Spp Abund (%)	0.00		0.00		0.00		0.00		39.74	5
Tolerance Score	7.90		6.25		6.03		6.62		8.76	3
Tany./Chir. Abundance Ratio	0.00		0.00		100.00		0.00		0.00	5

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16619	16620	16621	16622	16623
Ameroculodes species complex	23	23		23	
Apocorophium lacustre (Epi.)		23		136	
Carinoma tremaphoros	23				
Chiridotea almyra				23	
Chironomus spp.		23			
Coelotanypus spp.			23		
Corbicula fluminea				568	204
Cryptochironomus spp.					23
Cyathura polita	45	159	250	250	136
Eteone heteropoda			45		
Gammarus daiberi (Epi.)					23
Heteromastus filiformis			23		
Lepidactylus dytiscus		23		114	
Leptocheirus plumulosus				409	23
Limnodrilus hoffmeisteri					364
Macoma balthica	91				
Macoma mitchelli		45			
Marenzelleria viridis	364	841	318	136	704
Mytilopsis leucophaeata (Epi.)		23			
Neanthes succinea		23	23		
Paranais litoralis				23	
Polydora cornuta		91	45		
Polypedilum halterale group				45	
Rangia cuneata	23	659	159	114	45
Streblospio benedicti	45	45	45		
Tubificidae imm w cap chaetae				91	
Tubificidae imm w/o cap chaetae	23	23			
Tubificidae imm w/o cap chaetae *					273
Tubificoides spp.	23	114	250	45	
Total Abundance w/ Epifauna	659	2113	1181	1977	1795
Total Abundance w/o Epifauna	659	2068	1181	1840	1772
Number of Taxa w/ Epifauna	9	14	10	13	8
Number of Taxa w/o Epifauna	9	12	10	12	7

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16619	16620	16621	16622	16623
Ameroculodes species complex	0.0011	0.0011		0.0023	
Apocorophium lacustre (Epi.)		0.0068		0.0273	
Carinoma tremaphoros	0.0613				
Chiridotea almyra				0.0136	
Chironomus spp.		0.0011			
Coelotanypus spp.			0.0023		
Corbicula fluminea				1.5972	8.7972
Cryptochironomus spp.					0.0011
Cyathura polita	0.0772	0.0500	0.1159	0.0636	0.0318
Eteone heteropoda			0.0023		
Gammarus daiberi (Epi.)					0.0159
Heteromastus filiformis			0.0011		
Lepidactylus dytiscus		0.0068		0.0613	
Leptocheirus plumulosus				0.0659	0.0045
Limnodrilus hoffmeisteri					0.0011
Macoma balthica	0.2045				
Macoma mitchelli		0.0011			
Marenzelleria viridis	1.0542	0.4748	0.4112	0.0409	0.4998
Mytilopsis leucophaeata (Epi.)		0.0545			
Neanthes succinea		0.0023	0.0011		
Oligochaeta					0.0682
Paranais litoralis				0.0011	
Polydora cornuta		0.0011	0.0045		
Polypedilum halterale group				0.0011	
Rangia cuneata	7.2840	62.8072	37.7379	59.2697	17.6080
Streblospio benedicti	0.0011	0.0011	0.0011		
Tubificidae imm w cap chaetae				0.0011	
Tubificidae imm w/o cap chaetae	0.0011	0.0011			
Tubificidae imm w/o cap chaetae *					0.0011
Tubificoides spp.	0.0023	0.0011	0.0011	0.0023	
Total Biomass w/ Epifauna	8.6870	63.4104	38.2787	61.1475	27.0288
Total Biomass w/o Epifauna	8.6870	63.3490	38.2787	61.1202	27.0129

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

Site	16624	16625	16626	16627	16630					
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay					
Habitat	Oligohaline	Freshwater	Low Mesohaline	High Meso Mud	Freshwater					
Date	10/06/09	10/06/09	10/06/09	08/24/09	10/06/09					
Gear	Young Grab	Young Grab	Young Grab	Young Grab	Young Grab					
Sampled Area (sq.m)	0.044	0.044	0.044	0.044	0.044					
BOTTOM ENVIRONMENT										
Depth (m)	4.0	2.6	5.8	6.4	2.0					
Salinity (ppt)	2.31	0.40	5.35	12.92	0.13					
Temperature (C)	18.75	19.22	19.05	27.03	19.68					
Dissolved Oxygen (mg/L)	8.6	10.7	8.2	0.9	13.8					
Sediment Silt-Clay (%)	83.32	30.09	22.58	91.55	74.09					
Total Carbon (%)	3.47	3.45	2.30	2.73	1.67					
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.00		4.50		3.40		3.33		4.00	
Condition	Meets Goal		Meets Goal		Meets Goal		Meets Goal		Meets Goal	
# Attributes Scored	5		4		5		6		4	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.81		2.55		2.91	5	2.41	3	2.79	
Abundance (#/m2)	91	1	2817	5	863	3	182	1	1659	5
Biomass (g/m2)	18.68		37.56		22.84	3	22.73	3	33.36	
Pollution Indicative Spp Abund (%)	0.00		42.74		23.68	1	25.00		49.32	
Pollution Indicative Spp Biom (%)	0.00		0.13		0.06		0.24	5	0.45	
Pollution Sensitive Spp Abund (%)	100.00		21.77		50.00		25.00		5.48	
Pollution Sensitive Spp Biom (%)	100.00		86.34		99.66	5	99.55	3	0.16	
Carnivore-Omnivore Abund (%)	0.00	1	18.55		26.32		37.50	5	20.55	
Deep Deposit Feeder Abund (%)	0.00		38.71	5	15.79		25.00		46.58	5
TF Poll. Indicative Spp Abund (%)	0.00		37.10	5	0.00		0.00		43.84	3
Limnodrilus Abundance (%)	0.00		38.71		0.00		0.00		43.84	
Oligo Poll. Indic. Spp Abund (%)	0.00	5	0.00		0.00		0.00		0.00	
Oligo Poll. Sens. Spp Abund (%)	25.00	3	0.00		0.00		0.00		0.00	
Tolerance Score	6.00	5	8.11	3	6.07		6.00		8.17	3
Tany./Chir. Abundance Ratio	0.00		75.00		100.00		0.00		33.33	

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	16624	16625	16626	16627	16630
Ameroculodes species complex			23		
Carinoma tremaphoros			23	23	
Chiridotea almyra		23			
Clinotanypus spp.		23			
Coelotanypus spp.		159	45		91
Corbicula fluminea		818			432
Cricotopus bicinctus					23
Cricotopus spp. *					23
Cyathura polita		227	159		
Dicrotendipes spp.					23
Dugesia tigrina (Epi.)					682
Ferrissia spp. (Epi.)					23
Gammarus daiberi (Epi.)		3453			11246
Heteromastus filiformis				23	
Leitoscoloplos robustus				23	
Leptocheirus plumulosus			23		
Limnodrilus hoffmeisteri		45			136
Limnodrilus udekemianus		45			
Macoma balthica				23	
Marenzelleria viridis	23	341	182		91
Micrura leidyi				45	
Musculium transversum					23
Nanocladus crassicornus		23			
Neorhabdocelea (Epi.)					204
Oecetis spp. (Epi.)					23
Orthocladus spp.					114
Parachironomus monochromus/tenuicad tus					23
Paraprionospio pinnata				23	
Polydora cornuta			23		
Polypedilum flavum					23
Polypedilum halterale group		45			
Procladius spp.		23			23
Rangia cuneata	68	45	91	23	
Streblospio benedicti			159		
Stylaria lacustris					45
Tubificidae imm w/o cap chaetae *		1000			591
Tubificoides spp.			136		
Total Abundance w/ Epifauna	91	6271	863	182	13836
Total Abundance w/o Epifauna	91	2817	863	182	1659
Number of Taxa w/ Epifauna	2	13	10	7	17
Number of Taxa w/o Epifauna	2	12	10	7	12

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BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2009 (CRUISE 01:2009/2010) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	16624	16625	16626	16627	16630
Ameroculodes species complex			0.0045		
Carinoma tremaphoros			0.0500	0.0011	
Chiridotea almyra		0.0068			
Chironomidae					0.0318
Clinotanypus spp.		0.0011			
Coelotanypus spp.		0.0159	0.0091		0.0295
Corbicula fluminea		5.0666			33.1099
Cricotopus bicinctus					0.0011
Cricotopus spp. *					0.0011
Cyathura polita		0.1068	0.0704		
Dicrotendipes spp.					0.0011
Dugesia tigrina (Epi.)					0.0863
Ferrissia spp. (Epi.)					0.0023
Gammarus daiberi (Epi.)		0.6771			2.0584
Heteromastus filiformis				0.0091	
Leitoscoloplos robustus				0.0454	
Leptocheirus plumulosus			0.0023		
Limnodrilus hoffmeisteri		0.0011			0.0011
Limnodrilus udekemianus		0.0011			
Macoma balthica				0.1136	
Marenzelleria viridis	0.0045	0.3317	0.0954		0.0545
Micrura leidyi				0.0386	
Musculium transversum					0.0011
Nanocladius crassicornus		0.0011			
Neorhabdocela (Epi.)					0.0591
Oecetis spp. (Epi.)					0.0011
Oligochaeta		0.0318			0.1181
Orthocladius spp.					0.0011
Parachironomus monochromus/tenuicad					0.0011
Paraprionospio pinnata				0.0091	
Polydora cornuta			0.0023		
Polypedilum flavum					0.0011
Polypedilum halterale group		0.0011			
Procladius spp.		0.0011			0.0011
Rangia cuneata	18.6804	31.9875	22.5996	22.5132	
Streblospio benedicti			0.0045		
Stylaria lacustris					0.0011
Tubificidae imm w/o cap chaetae *		0.0011			0.0011
Tubificoides spp.			0.0045		
Total Biomass w/ Epifauna	18.6849	38.2321	22.8427	22.7302	35.5636
Total Biomass w/o Epifauna	18.6849	37.5550	22.8427	22.7302	33.3564