

**CHESAPEAKE BAY WATER QUALITY
MONITORING PROGRAM**

**LONG-TERM BENTHIC MONITORING
AND ASSESSMENT COMPONENT
LEVEL 1 COMPREHENSIVE REPORT**

JULY 1984-DECEMBER 2003 (VOLUME 2)

Prepared for

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

Prepared by

Roberto J. Llansó
Frederick S. Kelley
Lisa C. Scott

Versar, Inc.
9200 Rumsay Road
Columbia, Maryland 21045

July 2004

TABLE OF CONTENTS

VOLUME 1

Page

FOREWORD iii

ACKNOWLEDGEMENTS v

EXECUTIVE SUMMARY vii

1.0 INTRODUCTION 1-1

 1.1 BACKGROUND 1-1

 1.2 OBJECTIVES OF THIS REPORT 1-3

 1.3 ORGANIZATION OF REPORT 1-4

2.0 METHODS 2-1

 2.1 SAMPLING DESIGN 2-1

 2.1.1 Fixed Site Sampling 2-1

 2.1.2 Probability-based Sampling 2-8

 2.2 SAMPLE COLLECTION 2-11

 2.2.1 Station Location 2-11

 2.2.2 Water Column Measurements 2-11

 2.2.3 Benthic Samples 2-14

 2.3 LABORATORY PROCESSING 2-14

 2.4 DATA ANALYSIS 2-15

 2.4.1 The B-IBI and the Chesapeake Bay Benthic Community
 Restoration Goals 2-16

 2.4.2 Fixed Site Trend Analysis 2-16

 2.4.3 Probability-Based Estimation 2-16

3.0 RESULTS 3-1

 3.1 TRENDS IN FIXED SITE BENTHIC CONDITION 3-1

 3.2 BAYWIDE BOTTOM COMMUNITY CONDITION 3-2

4.0 DISCUSSION 4-1

 4.1 PATUXENT RIVER 4-2

 4.2 POTOMAC RIVER 4-5

 4.3 UPPER WESTERN TRIBUTARIES 4-8

 4.4 EASTERN TRIBUTARIES 4-9

 4.5 MARYLAND MID BAY AND UPPER BAY MAINSTEMS 4-9

 4.6 VIRGINIA TRIBUTARIES 4-10

 4.7 CONCLUSIONS 4-10

5.0 REFERENCES 5-1

TABLE OF CONTENTS (Continued)**Page****VOLUME 1****APPENDICES**

A	FIXED SITE COMMUNITY ATTRIBUTE 1985-2003 TREND ANALYSIS RESULTS	A-1
B	FIXED SITE B-IBI VALUES, SUMMER 2003	B-1
C	RANDOM SITE B-IBI VALUES, SUMMER 2003	C-1

VOLUME 2**DATA SUMMARIES**

A	BENTHIC ENVIRONMENT AND COMMUNITY COMPOSITION AT FIXED SITES: SPRING 2003	A-1
B	BENTHIC ENVIRONMENT AND COMMUNITY COMPOSITION AT FIXED SITES: SUMMER 2003.....	B-1
C	BENTHIC ENVIRONMENT AND COMMUNITY COMPOSITION AT THE MARYLAND BAY RANDOM SITES: SUMMER 2003.....	C-1

DATA SUMMARY A

**BENTHIC ENVIRONMENT AND COMMUNITY
COMPOSITION AT FIXED SITES:
SPRING 2003**

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 001		Rep: 01
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:25:39
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 10.24	Temperature (C): 16.00
Dissolved Oxygen (mg/l): 9.4	Sediment Silt-Clay (%): 1.74	Total Carbon (%): 0.15
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.06	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	640	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	6.25	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	25.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Leitoscoloplos robustus	80	1.10800
Leitoscoloplos spp.	80	0.01200
Marenzelleria viridis	200	0.13200
Micrura leidyi	40	0.03200
Paraonis fulgens	240	0.02400
Total Abundance w/ Epi.	640	
Total Abundance w/o Epi.	640	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		1.30800
Total Biomass w/o Epi.		1.30800

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 001		Rep: 02	
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:25:39	
BOTTOM ENVIRONMENT			
Depth (m): 2.0	Salinity (ppt): 10.24	Temperature (C): 16.00	
Dissolved Oxygen (mg/l): 9.4	Sediment Silt-Clay (%): 1.74	Total Carbon (%): 0.15	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.76	Pollution Indicative Species Abundance (%)	28.00
Abundance (#/m2)	1000	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	40.00
Carnivore-Omnivore Abundance (%)	16.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	24.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Acteocina canaliculata	40	0.02000	
Ameroculodes species complex	40	0.00200	
Amphiporus bioculatus	40	0.00400	
Eteone heteropoda	40	0.00400	
Leitoscoloplos robustus	120	0.25600	
Leitoscoloplos spp.	120	0.04800	
Macoma balthica	40	0.00400	
Marenzelleria viridis	320	0.16800	
Micrura leidyi	40	0.03600	
Paraonis fulgens	200	0.00800	
Total Abundance w/ Epi.	1000		
Total Abundance w/o Epi.	1000		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	10		
Total Biomass w/ Epi.		0.55000	
Total Biomass w/o Epi.		0.55000	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 001		Rep: 03
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:25:39
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 10.24	Temperature (C): 16.00
Dissolved Oxygen (mg/l): 9.4	Sediment Silt-Clay (%): 1.74	Total Carbon (%): 0.15
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.53	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	840	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	14.29	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	33.33	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	120	0.01600
Ameroculodes species complex	80	0.00200
Leitoscoloplos robustus	280	1.21200
Lepidactylus dytiscus	40	0.05200
Macoma balthica	40	0.00800
Paraonis fulgens	120	0.01600
Polydora cornuta	160	0.00800
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.		1.31400
Total Biomass w/o Epi.		1.31400

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 006		Rep: 01
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:54:00
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 10.26	Temperature (C): 16.06
Dissolved Oxygen (mg/l): 9.5	Sediment Silt-Clay (%): 1.36	Total Carbon (%): 0.06
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	3.51	Pollution Indicative Species Abundance (%) 3.45
Abundance (#/m2)	1160	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 51.72
Carnivore-Omnivore Abundance (%)	31.03	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	17.24	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	120	0.01200
Chiridotea almyra	40	0.00800
Cyathura polita	80	0.38400
Gemma gemma	40	0.02000
Heteromastus filiformis	160	0.02800
Leitoscoloplos spp.	40	0.02000
Lepidactylus dytiscus	80	0.03200
Macoma balthica	80	0.00200
Marenzelleria viridis	240	0.16400
Micrura leidyi	40	0.00200
Nemertina	80	0.00200
Paraonis fulgens	40	0.00800
Phoronis spp.	40	0.16000
Polydora cornuta	40	0.00200
Spiochaetopterus costarum	40	0.08800
Total Abundance w/ Epi.	1160	
Total Abundance w/o Epi.	1160	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.93200
Total Biomass w/o Epi.		0.93200

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 006		Rep: 02	
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:54:00	
BOTTOM ENVIRONMENT			
Depth (m): 2.0	Salinity (ppt): 10.26	Temperature (C): 16.06	
Dissolved Oxygen (mg/l): 9.5	Sediment Silt-Clay (%): 1.36	Total Carbon (%): 0.06	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.82	Pollution Indicative Species Abundance (%)	20.59
Abundance (#/m2)	1360	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	50.00
Carnivore-Omnivore Abundance (%)	17.65	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	35.29		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Acteocina canaliculata	160	0.00800	
Ameroculodes species complex	120	0.00400	
Heteromastus filiformis	200	0.01200	
Leitoscoloplos robustus	280	3.48400	
Marenzelleria viridis	240	0.09600	
Micrura leidyi	80	0.12400	
Phoronis spp.	240	0.20000	
Spiochaetopterus costarum	40	0.15600	
Total Abundance w/ Epi.	1360		
Total Abundance w/o Epi.	1360		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		4.08400	
Total Biomass w/o Epi.		4.08400	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 006		Rep: 03	
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:54:00	
BOTTOM ENVIRONMENT			
Depth (m): 2.0	Salinity (ppt): 10.26	Temperature (C): 16.06	
Dissolved Oxygen (mg/l): 9.5	Sediment Silt-Clay (%): 1.36	Total Carbon (%): 0.06	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	3.29	Pollution Indicative Species Abundance (%)	23.68
Abundance (#/m2)	1520	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	34.21
Carnivore-Omnivore Abundance (%)	28.95	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	28.95		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Acteocina canaliculata	160	0.02000	
Ameroculodes species complex	120	0.04400	
Carinoma tremaphoros	40	0.00200	
Chiridotea almyra	120	0.02400	
Eteone foliosa	40	0.54400	
Gemma gemma	80	0.00800	
Heteromastus filiformis	80	0.01200	
Leitoscoloplos spp.	360	1.82800	
Macoma balthica	40	0.02800	
Marenzelleria viridis	240	0.14800	
Micrura leidyi	80	0.02000	
Paraonis fulgens	80	0.02000	
Phoronis spp.	80	0.05600	
Total Abundance w/ Epi.	1520		
Total Abundance w/o Epi.	1520		
Number of Taxa w/ Epi.	13		
Number of Taxa w/o Epi.	13		
Total Biomass w/ Epi.		2.75400	
Total Biomass w/o Epi.		2.75400	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 015		Rep: 01
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 13MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 11:33:25
BOTTOM ENVIRONMENT		
Depth (m): 1.0	Salinity (ppt): 9.33	Temperature (C): 15.78
Dissolved Oxygen (mg/l): 9.7	Sediment Silt-Clay (%): 1.85	Total Carbon (%): 0.12
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.39	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	1760	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	2.27	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	25.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	440	0.24000
Macoma balthica	40	0.12400
Marenzelleria viridis	1160	0.73600
Mulinia lateralis	40	0.08000
Neanthes succinea	40	0.04800
Streblospio benedicti	40	0.00200
Total Abundance w/ Epi.	1760	
Total Abundance w/o Epi.	1760	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		1.23000
Total Biomass w/o Epi.		1.23000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 015		Rep: 02	
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 13MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 11:33:25	
BOTTOM ENVIRONMENT			
Depth (m): 1.0	Salinity (ppt): 9.33	Temperature (C): 15.78	
Dissolved Oxygen (mg/l): 9.7	Sediment Silt-Clay (%): 1.85	Total Carbon (%): 0.12	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.25	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	5960	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	22.82
Carnivore-Omnivore Abundance (%)	0.67	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	1.34		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	80	0.00800	
Carinoma tremaphoros	40	0.04800	
Gemma gemma	4320	0.12000	
Heteromastus filiformis	80	0.01200	
Lepidactylus dytiscus	40	0.02400	
Macoma balthica	80	0.01200	
Macoma mitchelli	40	0.03200	
Marenzelleria viridis	1240	0.77600	
Tagelus plebeius	40	0.00800	
Total Abundance w/ Epi.	5960		
Total Abundance w/o Epi.	5960		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		1.04000	
Total Biomass w/o Epi.		1.04000	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 015		Rep: 03
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 13MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 11:33:25
BOTTOM ENVIRONMENT		
Depth (m): 1.0	Salinity (ppt): 9.33	Temperature (C): 15.78
Dissolved Oxygen (mg/l): 9.7	Sediment Silt-Clay (%): 1.85	Total Carbon (%): 0.12
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.46	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	5360	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.75	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	5.97	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	40	0.00800
Gemma gemma	3480	0.09200
Heteromastus filiformis	320	0.11200
Macoma mitchelli	80	0.02000
Marenzelleria viridis	1280	0.76000
Neanthes succinea	40	0.04000
Streblospio benedicti	120	0.00800
Total Abundance w/ Epi.	5360	
Total Abundance w/o Epi.	5360	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		1.04000
Total Biomass w/o Epi.		1.04000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 022		Rep: 01	
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:45:24	
BOTTOM ENVIRONMENT			
Depth (m): 4.0	Salinity (ppt): 9.01	Temperature (C): 14.92	
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 79.42	Total Carbon (%): 2.67	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.83	Pollution Indicative Species Abundance (%)	21.46
Abundance (#/m2)	11745	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	67.82
Carnivore-Omnivore Abundance (%)	3.07	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	7.28		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	135	0.00450	
Carinoma tremaphoros	45	0.13950	
Eteone heteropoda	135	0.05400	
Heteromastus filiformis	90	0.00225	
Leptocheirus plumulosus	45	0.00225	
Macoma balthica	990	23.58000	
Marenzelleria viridis	6975	2.65950	
Neanthes succinea	180	0.63000	
Streblospio benedicti	2385	0.06300	
Tubificoides spp.	765	0.00450	
Total Abundance w/ Epi.	11745		
Total Abundance w/o Epi.	11745		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	10		
Total Biomass w/ Epi.		27.13950	
Total Biomass w/o Epi.		27.13950	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 022		Rep: 02
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:45:24
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 9.01	Temperature (C): 14.92
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 79.42	Total Carbon (%): 2.67
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.20	Pollution Indicative Species Abundance (%) 23.08
Abundance (#/m2)	11700	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 65.77
Carnivore-Omnivore Abundance (%)	6.15	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	4.62	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00225
Cyathura polita	45	0.01800
Eteone heteropoda	630	0.25200
Heteromastus filiformis	180	0.02250
Leptocheirus plumulosus	585	0.01350
Macoma balthica	1845	34.23150
Macoma mitchelli	90	0.09450
Marenzelleria viridis	5805	2.46600
Neanthes succinea	45	0.12600
Streblospio benedicti	2070	0.05850
Tubificoides spp.	360	0.00900
Total Abundance w/ Epi.	11700	
Total Abundance w/o Epi.	11700	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		37.29375
Total Biomass w/o Epi.		37.29375

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 022		Rep: 03
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:45:24
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 9.01	Temperature (C): 14.92
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 79.42	Total Carbon (%): 2.67
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.75	Pollution Indicative Species Abundance (%) 3.21
Abundance (#/m2)	7020	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 83.33
Carnivore-Omnivore Abundance (%)	6.41	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	1.92	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	180	0.03150
Carinoma tremaphoros	90	0.14400
Eteone heteropoda	90	0.03150
Heteromastus filiformis	45	0.02700
Leptocheirus plumulosus	270	0.00900
Macoma balthica	1260	0.36450
Marenzelleria viridis	4590	2.02950
Micrura leidyi	45	0.00450
Neanthes succinea	225	0.88200
Streblospio benedicti	135	0.00225
Tubificoides spp.	90	0.00450
Total Abundance w/ Epi.	7020	
Total Abundance w/o Epi.	7020	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		3.53025
Total Biomass w/o Epi.		3.53025

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 023		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:32:35
BOTTOM ENVIRONMENT		
Depth (m): 6.0	Salinity (ppt): 10.52	Temperature (C): 13.88
Dissolved Oxygen (mg/l): 3.8	Sediment Silt-Clay (%): 79.17	Total Carbon (%): 2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.52	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	5130	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	8.77	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	12.28	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00225
Eteone heteropoda	315	0.12150
Heteromastus filiformis	360	0.57150
Leptocheirus plumulosus	180	0.30600
Macoma balthica	1980	26.89650
Macoma mitchelli	45	0.00225
Marenzelleria viridis	405	0.18000
Micrura leidyi	90	1.93500
Neanthes succinea	45	0.04500
Streblospio benedicti	1395	0.04500
Stylochus ellipticus (Epi)	45	0.00450
Tubificoides spp.	270	0.00900
Total Abundance w/ Epi.	5175	
Total Abundance w/o Epi.	5130	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		30.11850
Total Biomass w/o Epi.		30.11400

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 023		Rep: 02	
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:32:35	
BOTTOM ENVIRONMENT			
Depth (m): 6.0	Salinity (ppt): 10.52	Temperature (C): 13.88	
Dissolved Oxygen (mg/l): 3.8	Sediment Silt-Clay (%): 79.17	Total Carbon (%): 2	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.23	Pollution Indicative Species Abundance (%)	27.71
Abundance (#/m2)	3735	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	53.01
Carnivore-Omnivore Abundance (%)	8.43	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	14.46		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	90	0.00900	
Carinoma tremaphoros	45	0.19800	
Eteone heteropoda	225	0.13050	
Heteromastus filiformis	540	1.17450	
Macoma balthica	1665	16.13700	
Marenzelleria viridis	315	0.17550	
Neanthes succinea	45	0.21600	
Streblospio benedicti	810	0.02700	
Total Abundance w/ Epi.	3735		
Total Abundance w/o Epi.	3735		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		18.06750	
Total Biomass w/o Epi.		18.06750	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 023		Rep: 03
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:32:35
BOTTOM ENVIRONMENT		
Depth (m): 6.0	Salinity (ppt): 10.52	Temperature (C): 13.88
Dissolved Oxygen (mg/l): 3.8	Sediment Silt-Clay (%): 79.17	Total Carbon (%): 2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.60	Pollution Indicative Species Abundance (%) 14.81
Abundance (#/m2)	3645	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 54.32
Carnivore-Omnivore Abundance (%)	7.41	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	19.75	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.01800
Carinoma tremaphoros	45	0.20700
Eteone heteropoda	135	0.04500
Heteromastus filiformis	540	0.59400
Leitoscoloplos spp.	45	0.00450
Leptocheirus plumulosus	45	0.00225
Macoma balthica	1665	6.94800
Macoma mitchelli	225	0.00225
Marenzelleria viridis	315	0.17100
Neanthes succinea	90	0.13050
Streblospio benedicti	360	0.00450
Tubificoides spp.	135	0.00450
Total Abundance w/ Epi.	3645	
Total Abundance w/o Epi.	3645	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		8.13150
Total Biomass w/o Epi.		8.13150

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 024		Rep: 01
Watershed: Mainstem	Habitat: High Mesohaline Mud	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:41:54
BOTTOM ENVIRONMENT		
Depth (m): 7.0	Salinity (ppt): 7.19	Temperature (C): 15.42
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 97.58	Total Carbon (%): 3.75
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.41	Pollution Indicative Species Abundance (%) 13.11
Abundance (#/m2)	2745	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 55.74
Carnivore-Omnivore Abundance (%)	9.84	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	22.95	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.02250
Eteone heteropoda	45	0.00900
Leitoscoloplos spp.	90	0.01800
Macoma balthica	1125	4.04550
Marenzelleria viridis	405	0.20250
Neanthes succinea	225	1.55700
Streblospio benedicti	225	0.01350
Tubificoides spp.	540	0.02250
Total Abundance w/ Epi.	2745	
Total Abundance w/o Epi.	2745	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		5.89050
Total Biomass w/o Epi.		5.89050

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 024		Rep: 02
Watershed: Mainstem	Habitat: High Mesohaline Mud	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:41:54
BOTTOM ENVIRONMENT		
Depth (m): 7.0	Salinity (ppt): 7.19	Temperature (C): 15.42
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 97.58	Total Carbon (%): 3.75
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.16	Pollution Indicative Species Abundance (%) 25.77
Abundance (#/m2)	4365	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 61.86
Carnivore-Omnivore Abundance (%)	5.15	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	7.22	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.03600
Eteone heteropoda	90	0.09450
Leptocheirus plumulosus	45	0.02250
Macoma balthica	1845	0.58050
Marenzelleria viridis	855	0.97200
Neanthes succinea	135	1.60200
Neomysis americana (Epi)	135	0.00450
Streblospio benedicti	1035	0.02250
Tubificoides spp.	315	0.00225
Total Abundance w/ Epi.	4500	
Total Abundance w/o Epi.	4365	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		3.33675
Total Biomass w/o Epi.		3.33225

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 024	Rep: 03		
Watershed: Mainstem	Habitat: High Mesohaline Mud	Date: 15MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:41:54	
BOTTOM ENVIRONMENT			
Depth (m): 7.0	Salinity (ppt): 7.19	Temperature (C): 15.42	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 97.58	Total Carbon (%): 3.75	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.35	Pollution Indicative Species Abundance (%)	25.24
Abundance (#/m2)	4635	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	53.40
Carnivore-Omnivore Abundance (%)	3.88	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	12.62		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	270	0.07200	
Leitoscoloplos spp.	45	0.00450	
Macoma balthica	1440	5.08050	
Marenzelleria viridis	1035	0.78750	
Neanthes succinea	180	1.14750	
Streblospio benedicti	1125	0.03600	
Tubificoides spp.	540	0.01800	
Total Abundance w/ Epi.	4635		
Total Abundance w/o Epi.	4635		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		7.14600	
Total Biomass w/o Epi.		7.14600	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 026		Rep: 01
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:35:17
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 2.49	Temperature (C): 16.11
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.81	Total Carbon (%): 3.69
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.14	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	2025	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	6.67	0.00
	11.11	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	180	0.00450
Cyathura polita	135	0.13950
Heteromastus filiformis	45	0.03150
Leptocheirus plumulosus	945	0.17100
Macoma balthica	45	4.99050
Marenzelleria viridis	495	0.86850
Tubificoides spp.	180	0.01350
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.		6.21900
Total Biomass w/o Epi.		6.21900

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 026		Rep: 02
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:35:17
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 2.49	Temperature (C): 16.11
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.81	Total Carbon (%): 3.69
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.87	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	1665	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	10.81	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	315	0.03600
Gammarus daiberi (Epi)	45	0.00225
Heteromastus filiformis	45	0.00450
Leptocheirus plumulosus	810	0.22950
Marenzelleria viridis	360	0.62100
Tubificoides spp.	135	0.00225
Total Abundance w/ Epi.	1710	
Total Abundance w/o Epi.	1665	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.89550
Total Biomass w/o Epi.		0.89325

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 026		Rep: 03
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:35:17
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 2.49	Temperature (C): 16.11
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.81	Total Carbon (%): 3.69
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.15	Pollution Indicative Species Abundance (%) 0.00
Abundance (#/m2)	3780	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 32.14
Carnivore-Omnivore Abundance (%)	7.14	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	47.62	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	315	0.02250
Cyathura polita	270	0.72450
Edotea triloba (Epi)	45	0.01800
Gammarus daiberi (Epi)	45	0.00450
Heteromastus filiformis	90	0.00900
Leptocheirus plumulosus	450	0.10350
Macoma balthica	45	4.28400
Marenzelleria viridis	900	0.40050
Tubificoides spp.	1710	0.02700
Total Abundance w/ Epi.	3870	
Total Abundance w/o Epi.	3780	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		5.59350
Total Biomass w/o Epi.		5.57100

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 029		Rep: 01
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 23MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:20:00
BOTTOM ENVIRONMENT		
Depth (m): 5.5	Salinity (ppt): 1.69	Temperature (C): 16.35
Dissolved Oxygen (mg/l): 9.2	Sediment Silt-Clay (%): 73.34	Total Carbon (%): 2.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.53	Oligohaline Pollution Indicative Spp. Abund. 42.31
Abundance (#/m2)	4680	Tolerance Score 9.60
Deep Deposit Feeder Abundance (%)	36.54	Oligohaline Pollution Sensitive Spp. Abund. 42.31
Carnivore-Omnivore Abundance (%)	8.65	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	225	0.01800
Carinoma tremaphoros	90	0.13050
Chironomidae		0.00225
Cyathura polita	45	0.09000
Gammarus daiberi (Epi)	270	0.08550
Hobsonia florida	315	0.13500
Limnodrilus hoffmeisteri	270	
Marenzelleria viridis	1980	2.55600
Oligochaeta		0.00225
Polypedilum halterale group	270	
Rangia cuneata	45	10.48500
Tubificidae imm w/o cap chaetae *	540	
Tubificoides spp.	900	0.04050
Total Abundance w/ Epi.	4950	
Total Abundance w/o Epi.	4680	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		13.54500
Total Biomass w/o Epi.		13.45950

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 029		Rep: 02
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 23MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:20:00
BOTTOM ENVIRONMENT		
Depth (m): 5.5	Salinity (ppt): 1.69	Temperature (C): 16.35
Dissolved Oxygen (mg/l): 9.2	Sediment Silt-Clay (%): 73.34	Total Carbon (%): 2.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.30	Oligohaline Pollution Indicative Spp. Abund. 37.04
Abundance (#/m2)	3645	Tolerance Score 9.43
Deep Deposit Feeder Abundance (%)	29.63	Oligohaline Pollution Sensitive Spp. Abund. 49.38
Carnivore-Omnivore Abundance (%)	9.88	Tanypodinae/Chironomidae Abundance Ratio 33.33
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	360	0.03600
Carinoma tremaphoros	90	0.04050
Chironomidae		0.00225
Coelotanypus spp.	45	0.00900
Gammarus daiberi (Epi)	585	0.02700
Hobsonia florida	45	0.01350
Limnodrilus hoffmeisteri	90	
Marenzelleria viridis	1800	1.48050
Oligochaeta		0.00225
Polypedilum halterale group	180	
Procladius spp.	45	
Tubificidae imm w/o cap chaetae *	315	
Tubificoides spp.	675	0.01800
Total Abundance w/ Epi.	4230	
Total Abundance w/o Epi.	3645	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		1.62900
Total Biomass w/o Epi.		1.60200

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 029		Rep: 03
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 23MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:20:00
BOTTOM ENVIRONMENT		
Depth (m): 5.5	Salinity (ppt): 1.69	Temperature (C): 16.35
Dissolved Oxygen (mg/l): 9.2	Sediment Silt-Clay (%): 73.34	Total Carbon (%): 2.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.48	Oligohaline Pollution Indicative Spp. Abund. 63.91
Abundance (#/m2)	5985	Tolerance Score 9.61
Deep Deposit Feeder Abundance (%)	58.65	Oligohaline Pollution Sensitive Spp. Abund. 29.32
Carnivore-Omnivore Abundance (%)	7.52	Tanypodinae/Chironomidae Abundance Ratio 37.50
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.01350
Chironomidae		0.00225
Coelotanypus spp.	90	0.01350
Cyathura polita	90	0.04500
Gammarus daiberi (Epi)	855	0.07200
Hobsonia florida	180	0.11700
Limnodrilus hoffmeisteri	450	
Littoridinops tenuipes (Epi)	1710	0.06750
Marenzelleria viridis	1755	2.14200
Oligochaeta		0.15300
Parachironomus spp.	45	
Polypedilum halterale group	180	
Procladius spp.	45	
Tubificidae imm w/o cap chaetae *	1350	
Tubificoides spp.	1710	0.04500
Total Abundance w/ Epi.	8550	
Total Abundance w/o Epi.	5985	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		2.67075
Total Biomass w/o Epi.		2.53125

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 036		Rep: 01
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:01:00
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.11	Temperature (C): 15.53
Dissolved Oxygen (mg/l): 10.2	Sediment Silt-Clay (%): 86.03	Total Carbon (%): 3
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.97	T.F. Pollution Indicative Spp. Abund. (%) 26.09
Abundance (#/m2)	3105	Tolerance Score 9.25
Deep Deposit Feeder Abundance (%)	81.16	Limnodrilus Abundance (%) 26.09
Carnivore-Omnivore Abundance (%)	17.39	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Bothrioneurum vej dovskyanum	180	
Branchiura sowerbyi	90	0.36450
Chironomidae		0.00225
Chironomus spp.	180	
Coelotanypus spp.	90	0.10350
Cryptochironomus spp.	135	
Dero spp.	180	
Gammarus daiberi (Epi)	135	0.01800
Ilyodrilus templetoni	630	
Musculium transversum	45	0.08100
Oligochaeta		0.21600
Procladius spp.	90	
Stictochironomus caffarius	45	
Tubificidae imm w cap chaetae *	630	
Tubificidae imm w/o cap chaetae	810	
Total Abundance w/ Epi.	3240	
Total Abundance w/o Epi.	3105	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.78525
Total Biomass w/o Epi.		0.76725

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 036		Rep: 02
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:01:00
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.11	Temperature (C): 15.53
Dissolved Oxygen (mg/l): 10.2	Sediment Silt-Clay (%): 86.03	Total Carbon (%): 3
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.56	T.F. Pollution Indicative Spp. Abund. (%) 40.12
Abundance (#/m2)	7740	Tolerance Score 9.58
Deep Deposit Feeder Abundance (%)	58.72	Limnodrilus Abundance (%) 40.12
Carnivore-Omnivore Abundance (%)	40.70	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Bothrioneurum vej dovskyanum	270	
Branchiura sowerbyi	495	2.03400
Chironomidae		0.46800
Chironomus spp.	1980	
Cryptochironomus spp.	90	
Gammarus daiberi (Epi)	135	0.02250
Limnodrilus hoffmeisteri	270	
Musculium transversum	45	0.07200
Oligochaeta		0.44362
Polypedilum halterale group	270	
Procladius spp.	810	
Tubificidae imm w cap chaetae	675	
Tubificidae imm w/o cap chaetae *	2835	
Total Abundance w/ Epi.	7875	
Total Abundance w/o Epi.	7740	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		3.04012
Total Biomass w/o Epi.		3.01762

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 036		Rep: 03
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:01:00
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.11	Temperature (C): 15.53
Dissolved Oxygen (mg/l): 10.2	Sediment Silt-Clay (%): 86.03	Total Carbon (%): 3
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.53	T.F. Pollution Indicative Spp. Abund. (%) 41.72
Abundance (#/m2)	6795	Tolerance Score 9.36
Deep Deposit Feeder Abundance (%)	78.81	Limnodrilus Abundance (%) 41.72
Carnivore-Omnivore Abundance (%)	21.19	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Amnicola limosa (Epi)	45	0.09000
Arcteonais lomondi	135	
Bothrioneurum vej dovskyanum	135	
Branchiura sowerbyi	495	2.54250
Chironomidae		0.16200
Chironomus spp.	450	
Cryptochironomus spp.	270	
Limnodrilus hoffmeisteri	135	
Oligochaeta		0.25328
Polypedilum halterale group	270	
Procladius spp.	450	
Tubificidae imm w cap chaetae	1755	
Tubificidae imm w/o cap chaetae *	2700	
Total Abundance w/ Epi.	6840	
Total Abundance w/o Epi.	6795	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		3.04778
Total Biomass w/o Epi.		2.95778

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 040		Rep: 01
Watershed: Potomac River	Habitat: Oligohaline	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:19:00
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 0.10	Temperature (C): 16.38
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.70	Total Carbon (%): 2.35
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.80	Oligohaline Pollution Indicative Spp. Abund. 5.56
Abundance (#/m2)	2430	Tolerance Score 6.75
Deep Deposit Feeder Abundance (%)	5.56	Oligohaline Pollution Sensitive Spp. Abund. 87.04
Carnivore-Omnivore Abundance (%)	5.56	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00225
Cyathura polita	90	0.05850
Gammarus daiberi (Epi)	360	0.02700
Harnischia spp.	45	
Marenzelleria viridis	2115	1.40400
Rangia cuneata	45	0.56250
Tubificoides spp.	135	0.00225
Total Abundance w/ Epi.	2790	
Total Abundance w/o Epi.	2430	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		2.05650
Total Biomass w/o Epi.		2.02950

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 040		Rep: 02
Watershed: Potomac River	Habitat: Oligohaline	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:19:00
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 0.10	Temperature (C): 16.38
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.70	Total Carbon (%): 2.35
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.42	Oligohaline Pollution Indicative Spp. Abund. 25.25
Abundance (#/m2)	4455	Tolerance Score 7.30
Deep Deposit Feeder Abundance (%)	25.25	Oligohaline Pollution Sensitive Spp. Abund. 66.67
Carnivore-Omnivore Abundance (%)	7.07	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.00450
Chiridotea almyra	45	0.00225
Chironomidae		0.00225
Cryptochironomus spp.	45	
Cyathura polita	180	0.39150
Gammarus daiberi (Epi)	2340	0.23850
Hobsonia florida	45	0.00450
Macoma balthica	45	0.53550
Marenzelleria viridis	2925	1.37250
Tubificoides spp.	1125	0.01800
Total Abundance w/ Epi.	6795	
Total Abundance w/o Epi.	4455	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		2.56950
Total Biomass w/o Epi.		2.33100

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 040		Rep: 03
Watershed: Potomac River	Habitat: Oligohaline	Date: 22MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:19:00
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 0.10	Temperature (C): 16.38
Dissolved Oxygen (mg/l): 8.7	Sediment Silt-Clay (%): 96.70	Total Carbon (%): 2.35
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.56	Oligohaline Pollution Indicative Spp. Abund. 8.33
Abundance (#/m2)	4860	Tolerance Score 6.00
Deep Deposit Feeder Abundance (%)	8.33	Oligohaline Pollution Sensitive Spp. Abund. 89.81
Carnivore-Omnivore Abundance (%)	0.00	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Gammarus daiberi (Epi)	1800	0.07650
Macoma balthica	45	0.95400
Marenzelleria viridis	4365	2.28600
Rangia cuneata	45	0.00450
Tubificoides spp.	405	0.00450
Total Abundance w/ Epi.	6660	
Total Abundance w/o Epi.	4860	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		3.32550
Total Biomass w/o Epi.		3.24900

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 043		Rep: 01	
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:39:14	
BOTTOM ENVIRONMENT			
Depth (m): 2.0	Salinity (ppt): 2.62	Temperature (C): 18.40	
Dissolved Oxygen (mg/l): 8.0	Sediment Silt-Clay (%): 4.38	Total Carbon (%): 0.1	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.38	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	7800	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	72.31
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	4.10		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	120	0.00400	
Gammarus daiberi (Epi)	280	0.04400	
Heteromastus filiformis	80	0.10800	
Leptocheirus plumulosus	1640	0.24400	
Macoma balthica	240	0.01200	
Macoma mitchelli	80	0.02400	
Marenzelleria viridis	5400	1.15200	
Odostomia engonia (Epi)	40	0.00400	
Tubificoides spp.	240	0.02400	
Total Abundance w/ Epi.	8120		
Total Abundance w/o Epi.	7800		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		1.61600	
Total Biomass w/o Epi.		1.56800	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 043		Rep: 02	
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:39:14	
BOTTOM ENVIRONMENT			
Depth (m): 2.0	Salinity (ppt): 2.62	Temperature (C): 18.40	
Dissolved Oxygen (mg/l): 8.0	Sediment Silt-Clay (%): 4.38	Total Carbon (%): 0.1	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.53	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	9240	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	59.74
Carnivore-Omnivore Abundance (%)	0.43	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	6.93		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	120	0.00800	
Apocorophium lacustre (Epi)	40	0.00800	
Gammarus daiberi (Epi)	240	0.02400	
Heteromastus filiformis	120	0.08000	
Leptocheirus plumulosus	2920	0.46000	
Macoma balthica	200	0.00400	
Marenzelleria viridis	5320	1.19600	
Neanthes succinea	40	0.40800	
Tubificoides spp.	520	0.00800	
Total Abundance w/ Epi.	9520		
Total Abundance w/o Epi.	9240		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		2.19600	
Total Biomass w/o Epi.		2.16400	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 043		Rep: 03
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:39:14
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 2.62	Temperature (C): 18.40
Dissolved Oxygen (mg/l): 8.0	Sediment Silt-Clay (%): 4.38	Total Carbon (%): 0.1
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.53	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	9000	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.89	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	5.78	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	160	0.00800
Gammarus daiberi (Epi)	120	0.06000
Heteromastus filiformis	200	0.10400
Leptocheirus plumulosus	2520	0.15600
Macoma balthica	200	0.00400
Marenzelleria viridis	5520	1.54400
Neanthes succinea	80	0.25600
Tubificoides spp.	320	0.00800
Total Abundance w/ Epi.	9120	
Total Abundance w/o Epi.	9000	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		2.14000
Total Biomass w/o Epi.		2.08000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 044		Rep: 01
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:17:31
BOTTOM ENVIRONMENT		
Depth (m): 12.5	Salinity (ppt): 6.56	Temperature (C): 15.72
Dissolved Oxygen (mg/l): 4.2	Sediment Silt-Clay (%): 91.69	Total Carbon (%): 2.18
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.54	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	17955	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.50	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.75	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	45	0.08100
Gammarus daiberi (Epi)	135	0.01350
Leptocheirus plumulosus	1215	0.07200
Macoma balthica	16380	0.46800
Marenzelleria viridis	90	0.03600
Neanthes succinea	45	0.00900
Neomysis americana (Epi)	90	0.05400
Streblospio benedicti	45	0.00450
Tubificoides spp.	135	0.01350
Total Abundance w/ Epi.	18180	
Total Abundance w/o Epi.	17955	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.75150
Total Biomass w/o Epi.		0.68400

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 044		Rep: 02
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:17:31
BOTTOM ENVIRONMENT		
Depth (m): 12.5	Salinity (ppt): 6.56	Temperature (C): 15.72
Dissolved Oxygen (mg/l): 4.2	Sediment Silt-Clay (%): 91.69	Total Carbon (%): 2.18
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.81	Pollution Indicative Species Abundance (%) 0.22
Abundance (#/m2)	20700	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 85.00
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	5.43	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.00900
Apocorophium lacustre (Epi)	45	0.00900
Gammarus daiberi (Epi)	270	0.02700
Leptocheirus plumulosus	1845	0.18000
Macoma balthica	17550	0.56250
Marenzelleria viridis	45	0.00450
Streblospio benedicti	45	0.00225
Tubificoides spp.	1125	0.02700
Total Abundance w/ Epi.	21015	
Total Abundance w/o Epi.	20700	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.82125
Total Biomass w/o Epi.		0.78525

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 044		Rep: 03	
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 14MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:17:31	
BOTTOM ENVIRONMENT			
Depth (m): 12.5	Salinity (ppt): 6.56	Temperature (C): 15.72	
Dissolved Oxygen (mg/l): 4.2	Sediment Silt-Clay (%): 91.69	Total Carbon (%): 2.18	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	0.79	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	8685	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	85.49
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	6.22		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Gammarus daiberi (Epi)	270	0.01800	
Leptocheirus plumulosus	720	0.12600	
Macoma balthica	7380	0.35550	
Marenzelleria viridis	45	0.03600	
Neomysis americana (Epi)	90	0.05850	
Tubificoides spp.	540	0.01800	
Total Abundance w/ Epi.	9045		
Total Abundance w/o Epi.	8685		
Number of Taxa w/ Epi.	6		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		0.61200	
Total Biomass w/o Epi.		0.53550	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 047		Rep: 01
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:11:56
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 2.41	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 10.06	Total Carbon (%): 0.44
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.93	Pollution Indicative Species Abundance (%) 1.05
Abundance (#/m2)	30600	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 46.14
Carnivore-Omnivore Abundance (%)	0.13	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	9.28	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	760	0.02800
Gammarus daiberi (Epi)	760	0.02400
Heteromastus filiformis	320	0.05600
Leptocheirus plumulosus	13160	0.96800
Macoma balthica	4080	0.20000
Macoma mitchelli	120	0.17200
Marenzelleria viridis	10000	3.84800
Mya arenaria	40	0.00200
Neanthes succinea	40	0.00800
Streblospio benedicti	320	0.00200
Tubificoides spp.	2520	0.05200
Total Abundance w/ Epi.	32120	
Total Abundance w/o Epi.	30600	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		5.36000
Total Biomass w/o Epi.		5.30800

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 047		Rep: 02
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:11:56
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 2.41	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 10.06	Total Carbon (%): 0.44
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.84	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	30480	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.26	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	6.04	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	240	0.00400
Apocorophium lacustre (Epi)	480	0.08000
Edotea triloba (Epi)	40	0.00800
Gammarus daiberi (Epi)	680	0.02000
Hargeria rapax	40	0.00800
Heteromastus filiformis	200	0.06400
Leptocheirus plumulosus	14600	0.96400
Macoma balthica	2160	0.08000
Macoma mitchelli	240	0.35200
Marenzelleria viridis	10800	3.83600
Neanthes succinea	80	0.09200
Rangia cuneata	120	4.60400
Streblospio benedicti	360	0.00800
Tubificoides spp.	1640	0.03200
Total Abundance w/ Epi.	31680	
Total Abundance w/o Epi.	30480	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		10.15200
Total Biomass w/o Epi.		10.04400

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 047		Rep: 03
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 15:11:56
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 2.41	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 10.06	Total Carbon (%): 0.44
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.86	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	27160	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.29	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	5.30	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	240	0.00800
Apocorophium lacustre (Epi)	200	0.01600
Edotea triloba (Epi)	80	0.06800
Gammarus daiberi (Epi)	480	0.04800
Heteromastus filiformis	160	0.07200
Leptocheirus plumulosus	11440	0.88000
Macoma balthica	3800	9.23600
Macoma mitchelli	160	0.22800
Marenzelleria viridis	9920	3.97200
Neanthes succinea	80	0.22800
Streblospio benedicti	80	0.00400
Tubificoides spp.	1280	0.03600
Total Abundance w/ Epi.	27920	
Total Abundance w/o Epi.	27160	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		14.79600
Total Biomass w/o Epi.		14.66400

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 051		Rep: 01
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 12:48:28
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 11.47	Temperature (C): 14.32
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 3.20	Total Carbon (%): 0.14
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.39	Pollution Indicative Species Abundance (%) 1.30
Abundance (#/m2)	3080	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 59.74
Carnivore-Omnivore Abundance (%)	5.19	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	10.39	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	80	0.00400
Ameroculodes species complex	40	0.00200
Carinoma tremaphoros	40	0.06000
Edwardsia elegans	40	0.00400
Heteromastus filiformis	320	0.08400
Macoma balthica	1280	0.28000
Macoma mitchelli	760	0.64000
Marenzelleria viridis	160	0.06000
Phoronis spp.	320	0.37600
Streblospio benedicti	40	0.00200
Total Abundance w/ Epi.	3080	
Total Abundance w/o Epi.	3080	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.51200
Total Biomass w/o Epi.		1.51200

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 051		Rep: 02
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 14MAY03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 12:48:28
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 11.47	Temperature (C): 14.32
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 3.20	Total Carbon (%): 0.14
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.45	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	2440	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	1.64	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	8.20	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	80	0.04000
Glycera dibranchiata	40	0.77200
Macoma balthica	280	0.08800
Macoma mitchelli	1080	0.29200
Marenzelleria viridis	240	0.08400
Mediomastus ambiseta	200	0.01200
Mulinia lateralis	80	0.68000
Phoronis spp.	400	0.66000
Streblospio benedicti	40	0.00200
Total Abundance w/ Epi.	2440	
Total Abundance w/o Epi.	2440	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		2.63000
Total Biomass w/o Epi.		2.63000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 051		Rep: 03	
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 14MAY03	
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 12:48:28	
BOTTOM ENVIRONMENT			
Depth (m): 2.5	Salinity (ppt): 11.47	Temperature (C): 14.32	
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 3.20	Total Carbon (%): 0.14	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.27	Pollution Indicative Species Abundance (%)	3.39
Abundance (#/m2)	2360	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	44.07
Carnivore-Omnivore Abundance (%)	6.78	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	3.39		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Edotea triloba (Epi)	40	0.04800	
Heteromastus filiformis	80	0.06800	
Macoma balthica	520	0.12400	
Macoma mitchelli	1000	0.28400	
Marenzelleria viridis	80	0.01200	
Micrura leidyi	120	0.14000	
Neanthes succinea	40	0.03200	
Phoronis spp.	440	0.48400	
Streblospio benedicti	80	0.01200	
Total Abundance w/ Epi.	2400		
Total Abundance w/o Epi.	2360		
Number of Taxa w/ Epi.	9		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		1.20400	
Total Biomass w/o Epi.		1.15600	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 052		Rep: 01	
Watershed: Potomac River	Habitat: High Mesohaline Mud	Date: 14MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:20:36	
BOTTOM ENVIRONMENT			
Depth (m): 11.5	Salinity (ppt): 14.01	Temperature (C): 13.25	
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 93.77	Total Carbon (%): 3.48	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.08	Pollution Indicative Species Abundance (%)	46.51
Abundance (#/m2)	3870	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	52.33
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	1.16		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Macoma balthica	2025	0.31500	
Neomysis americana (Epi)	45	0.00225	
Streblospio benedicti	1800	0.13950	
Tubificoides spp.	45	0.00225	
Total Abundance w/ Epi.	3915		
Total Abundance w/o Epi.	3870		
Number of Taxa w/ Epi.	4		
Number of Taxa w/o Epi.	3		
Total Biomass w/ Epi.		0.45900	
Total Biomass w/o Epi.		0.45675	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 052		Rep: 02	
Watershed: Potomac River	Habitat: High Mesohaline Mud	Date: 14MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:20:36	
BOTTOM ENVIRONMENT			
Depth (m): 11.5	Salinity (ppt): 14.01	Temperature (C): 13.25	
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 93.77	Total Carbon (%): 3.48	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.15	Pollution Indicative Species Abundance (%)	32.35
Abundance (#/m2)	3060	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	67.65
Carnivore-Omnivore Abundance (%)	2.94	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Eteone heteropoda	90	0.00900	
Macoma balthica	2025	0.19800	
Marenzelleria viridis	45	0.02250	
Streblospio benedicti	900	0.03600	
Total Abundance w/ Epi.	3060		
Total Abundance w/o Epi.	3060		
Number of Taxa w/ Epi.	4		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		0.26550	
Total Biomass w/o Epi.		0.26550	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 052		Rep: 03	
Watershed: Potomac River	Habitat: High Mesohaline Mud	Date: 14MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:20:36	
BOTTOM ENVIRONMENT			
Depth (m): 11.5	Salinity (ppt): 14.01	Temperature (C): 13.25	
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 93.77	Total Carbon (%): 3.48	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.14	Pollution Indicative Species Abundance (%)	42.05
Abundance (#/m2)	3960	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	56.82
Carnivore-Omnivore Abundance (%)	1.14	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	1.14		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Apocorophium lacustre (Epi)	45	0.00225	
Eteone heteropoda	45	0.03600	
Macoma balthica	2250	0.21150	
Pectinaria gouldii	45	0.00900	
Streblospio benedicti	1620	0.10350	
Total Abundance w/ Epi.	4005		
Total Abundance w/o Epi.	3960		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		0.36225	
Total Biomass w/o Epi.		0.36000	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 062		Rep: 01	
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03	
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 11:27:02	
BOTTOM ENVIRONMENT			
Depth (m): 6.0	Salinity (ppt): 3.62	Temperature (C): 19.88	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.48	Total Carbon (%): 3.78	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.58	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	8800	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	75.91
Carnivore-Omnivore Abundance (%)	0.45	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	23.64		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Chiridotea almyra	40	0.00200	
Macoma balthica	3040	0.62800	
Marenzelleria viridis	3640	3.37600	
Neomysis americana (Epi)	40	0.02400	
Tubificoides spp.	2080	0.04000	
Total Abundance w/ Epi.	8840		
Total Abundance w/o Epi.	8800		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		4.07000	
Total Biomass w/o Epi.		4.04600	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 062		Rep: 02	
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03	
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 11:27:02	
BOTTOM ENVIRONMENT			
Depth (m): 6.0	Salinity (ppt): 3.62	Temperature (C): 19.88	
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.48	Total Carbon (%): 3.78	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.89	Pollution Indicative Species Abundance (%)	0.00
Abundance (#/m2)	9720	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	70.78
Carnivore-Omnivore Abundance (%)	2.47	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	23.87		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	240	0.02800	
Chiridotea almyra	200	0.00400	
Cyathura polita	40	0.02800	
Gammarus daiberi (Epi)	80	0.01200	
Leptocheirus plumulosus	40	0.00200	
Macoma balthica	3720	0.27600	
Macoma mitchelli	40	0.00800	
Marenzelleria viridis	3120	2.18400	
Neomysis americana (Epi)	40	0.06800	
Tubificoides spp.	2320	0.03600	
Total Abundance w/ Epi.	9840		
Total Abundance w/o Epi.	9720		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		2.64600	
Total Biomass w/o Epi.		2.56600	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 062		Rep: 03
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 11:27:02
BOTTOM ENVIRONMENT		
Depth (m): 6.0	Salinity (ppt): 3.62	Temperature (C): 19.88
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 90.48	Total Carbon (%): 3.78
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.83	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	12840	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	1.25	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	37.69	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	120	0.01200
Carinoma tremaphoros	120	0.12400
Chiridotea almyra	40	0.00400
Leptocheirus plumulosus	80	0.00200
Macoma balthica	3800	0.33200
Macoma mitchelli	120	0.00800
Marenzelleria viridis	3720	3.08000
Tubificoides spp.	4840	0.08800
Total Abundance w/ Epi.	12840	
Total Abundance w/o Epi.	12840	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		3.65000
Total Biomass w/o Epi.		3.65000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 064		Rep: 01
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:28:06
BOTTOM ENVIRONMENT		
Depth (m): 8.7	Salinity (ppt): 9.31	Temperature (C): 17.05
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 92.48	Total Carbon (%): 2.04
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.62	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	5760	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	14.84	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	7.03	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	315	0.06750
Ameroculodes species complex	90	0.00450
Eteone heteropoda	360	0.06300
Geukensia demissa (Epi)	45	0.00225
Glycinde solitaria	45	0.00450
Leptocheirus plumulosus	90	0.00225
Leucon americanus	270	0.01350
Macoma balthica	2610	0.69300
Marenzelleria viridis	90	0.14400
Mulinia lateralis	990	0.11700
Neanthes succinea	135	1.55250
Streblospio benedicti	360	0.02250
Tubificoides spp.	405	0.01350
Total Abundance w/ Epi.	5805	
Total Abundance w/o Epi.	5760	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		2.70000
Total Biomass w/o Epi.		2.69775

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 064		Rep: 02
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:28:06
BOTTOM ENVIRONMENT		
Depth (m): 8.7	Salinity (ppt): 9.31	Temperature (C): 17.05
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 92.48	Total Carbon (%): 2.04
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.64	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	4275	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	12.63	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	8.42	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	135	0.02700
Americamysis spp. (Epi)	45	0.00225
Ameroculodes species complex	45	0.00225
Carinoma tremaphoros	45	0.00225
Eteone heteropoda	135	0.05400
Glycinde solitaria	135	0.01350
Heteromastus filiformis	45	0.25200
Leptocheirus plumulosus	135	0.00450
Leucon americanus	135	0.00450
Macoma balthica	2160	1.72800
Marenzelleria viridis	90	0.20250
Mulinia lateralis	495	0.07200
Neanthes succinea	90	1.48500
Streblospio benedicti	315	0.02250
Tubificoides spp.	315	0.01800
Total Abundance w/ Epi.	4320	
Total Abundance w/o Epi.	4275	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		3.89025
Total Biomass w/o Epi.		3.88800

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 064		Rep: 03
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 9:28:06
BOTTOM ENVIRONMENT		
Depth (m): 8.7	Salinity (ppt): 9.31	Temperature (C): 17.05
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 92.48	Total Carbon (%): 2.04
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.70	Pollution Indicative Species Abundance (%) 35.58
Abundance (#/m2)	4680	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 47.12
Carnivore-Omnivore Abundance (%)	13.46	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	9.62	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	180	0.04950
Ameroculodes species complex	135	0.00900
Cyathura polita	45	0.47700
Diadumene leucolena (Epi)	45	0.01350
Eteone heteropoda	360	0.13050
Leucon americanus	180	0.01800
Macoma balthica	1890	1.48050
Marenzelleria viridis	45	0.09000
Mulinia lateralis	675	0.09900
Mya arenaria	45	0.00225
Neanthes succinea	45	0.04050
Neomysis americana (Epi)	90	0.00450
Streblospio benedicti	630	0.03150
Stylochus ellipticus (Epi)	45	0.02250
Tubificoides spp.	450	0.01350
Total Abundance w/ Epi.	4860	
Total Abundance w/o Epi.	4680	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		2.48175
Total Biomass w/o Epi.		2.44125

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

		Station: 066	Rep: 01		
Watershed: Choptank River		Habitat: Oligohaline	Date: 12MAY03		
Gear: Wildco Box Corer		Sampled Area: 0.022 sq.m	Time: 13:52:23		
=====					
BOTTOM ENVIRONMENT					
=====					
Depth (m): 3.8		Salinity (ppt): 0.20	Temperature (C): 20.32		
Dissolved Oxygen (mg/l): 7.4		Sediment Silt-Clay (%): 77.23	Total Carbon (%): 6.22		
=====					
BENTHIC INDEX OF BIOTIC INTEGRITY					
=====					
B-IBI Score:		Condition: Not Applicable		# Attributes Scored: 0	
		Value	Score	Value	Score
Shannon-Wiener Index		1.09		Oligohaline Pollution Indicative Spp. Abund.	20.90
Abundance (#/m2)		3015		Tolerance Score	6.00
Deep Deposit Feeder Abundance (%)		20.90		Oligohaline Pollution Sensitive Spp. Abund.	73.13
Carnivore-Omnivore Abundance (%)		0.00		Tanypodinae/Chironomidae Abundance Ratio	0.00
=====					
BENTHIC ABUNDANCE (per sq. meter)					
=====					
TAXA		Abundance (#/m2)		Biomass (g/m2)	

Ameroculodes species complex		135		0.01800	
Gammarus daiberi (Epi)		990		0.03600	
Marenzelleria viridis		2205		0.51300	
Rangia cuneata		45		0.01350	
Tubificoides spp.		630		0.01350	

Total Abundance w/ Epi.		4005			
Total Abundance w/o Epi.		3015			
Number of Taxa w/ Epi.		5			
Number of Taxa w/o Epi.		4			
Total Biomass w/ Epi.				0.59400	
Total Biomass w/o Epi.				0.55800	
=====					

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 066		Rep: 02
Watershed: Choptank River	Habitat: Oligohaline	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:52:23
BOTTOM ENVIRONMENT		
Depth (m): 3.8	Salinity (ppt): 0.20	Temperature (C): 20.32
Dissolved Oxygen (mg/l): 7.4	Sediment Silt-Clay (%): 77.23	Total Carbon (%): 6.22
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.39	Oligohaline Pollution Indicative Spp. Abund. 31.82
Abundance (#/m2)	1980	Tolerance Score 6.00
Deep Deposit Feeder Abundance (%)	31.82	Oligohaline Pollution Sensitive Spp. Abund. 54.55
Carnivore-Omnivore Abundance (%)	0.00	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Gammarus daiberi (Epi)	1980	0.18450
Littoridinops tenuipes (Epi)	630	0.01350
Marenzelleria viridis	1080	0.27450
Rangia cuneata	270	41.88600
Tubificoides spp.	630	0.00450
Total Abundance w/ Epi.	4590	
Total Abundance w/o Epi.	1980	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		42.36300
Total Biomass w/o Epi.		42.16500

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 066		Rep: 03
Watershed: Choptank River	Habitat: Oligohaline	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:52:23
BOTTOM ENVIRONMENT		
Depth (m): 3.8	Salinity (ppt): 0.20	Temperature (C): 20.32
Dissolved Oxygen (mg/l): 7.4	Sediment Silt-Clay (%): 77.23	Total Carbon (%): 6.22
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.57	Oligohaline Pollution Indicative Spp. Abund. 41.54
Abundance (#/m2)	2925	Tolerance Score 6.00
Deep Deposit Feeder Abundance (%)	41.54	Oligohaline Pollution Sensitive Spp. Abund. 44.62
Carnivore-Omnivore Abundance (%)	0.00	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	135	0.00900
Gammarus daiberi (Epi)	360	0.03150
Littoridinops tenuipes (Epi)	45	0.01800
Marenzelleria viridis	1305	0.39600
Rangia cuneata	270	0.02250
Tubificoides spp.	1215	0.02250
Total Abundance w/ Epi.	3330	
Total Abundance w/o Epi.	2925	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.49950
Total Biomass w/o Epi.		0.45000

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 068		Rep: 01
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:14:50
BOTTOM ENVIRONMENT		
Depth (m): 5.2	Salinity (ppt): 6.84	Temperature (C): 17.98
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 78.65	Total Carbon (%): 2.78
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.04	Pollution Indicative Species Abundance (%) 5.38
Abundance (#/m2)	11700	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 30.38
Carnivore-Omnivore Abundance (%)	4.23	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	62.69	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.00225
Carinoma tremaphoros	45	0.13950
Chiridotea almyra	90	0.03150
Cyathura polita	315	1.03050
Edotea triloba (Epi)	45	0.01350
Heteromastus filiformis	180	0.16200
Leptocheirus plumulosus	270	0.01800
Macoma balthica	1215	48.44700
Marenzelleria viridis	2025	1.60200
Neanthes succinea	45	1.39500
Oligochaeta		0.00225
Streblospio benedicti	270	0.01350
Tubificidae imm w/o cap chaetae	360	
Tubificoides spp.	6795	0.18900
Total Abundance w/ Epi.	11745	
Total Abundance w/o Epi.	11700	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		53.04600
Total Biomass w/o Epi.		53.03250

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 068		Rep: 02
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:14:50
BOTTOM ENVIRONMENT		
Depth (m): 5.2	Salinity (ppt): 6.84	Temperature (C): 17.98
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 78.65	Total Carbon (%): 2.78
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.06	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	9450	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	6.19	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	65.71	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	135	0.00450
Carinoma tremaphoros	90	0.24300
Chiridotea almyra	45	0.00225
Cyathura polita	270	0.51750
Diadumene leucolena (Epi)	270	0.43200
Edwardsia elegans	90	0.00225
Gammarus daiberi (Epi)	135	0.00450
Heteromastus filiformis	180	0.25200
Leptocheirus plumulosus	360	0.10350
Macoma balthica	1125	12.02400
Macoma mitchelli	45	0.00225
Marenzelleria viridis	360	0.77400
Melita nitida (Epi)	45	0.00225
Mulinia lateralis	135	0.00900
Neanthes succinea	90	3.10500
Streblospio benedicti	495	0.01350
Tubificoides spp.	6030	0.13500
Total Abundance w/ Epi.	9900	
Total Abundance w/o Epi.	9450	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		17.62650
Total Biomass w/o Epi.		17.18775

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 068		Rep: 03
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 12MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 16:14:50
BOTTOM ENVIRONMENT		
Depth (m): 5.2	Salinity (ppt): 6.84	Temperature (C): 17.98
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 78.65	Total Carbon (%): 2.78
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.27	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	9360	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	7.21	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	36.54	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00450
Chiridotea almyra	45	0.00450
Cyathura polita	450	1.31400
Edwardsia elegans	45	0.00225
Eteone heteropoda	45	0.00225
Gammarus daiberi (Epi)	135	0.03150
Heteromastus filiformis	180	0.36450
Leptocheirus plumulosus	360	0.04950
Macoma balthica	945	47.30400
Marenzelleria viridis	3600	2.69550
Neanthes succinea	90	0.21600
Streblospio benedicti	315	0.00900
Tubificoides spp.	3240	0.09000
Turbellaria (Epi)	45	0.00225
Total Abundance w/ Epi.	9540	
Total Abundance w/o Epi.	9360	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		52.08975
Total Biomass w/o Epi.		52.05600

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 071		Rep: 01
Watershed: Patuxent River	Habitat: High Mesohaline Mud	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 17:29:09
BOTTOM ENVIRONMENT		
Depth (m): 12.7	Salinity (ppt): 14.87	Temperature (C): 13.02
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 86.49	Total Carbon (%): 3.2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.50	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	6795	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	6.62	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	6.62	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	180	0.05850
Ampelisca abdita	45	0.01350
Edotea triloba (Epi)	45	0.00225
Eteone heteropoda	225	0.10350
Glycinde solitaria	45	0.00450
Hargeria rapax	45	0.00450
Leucon americanus	90	0.00900
Macoma balthica	5265	0.72900
Macoma mitchelli	45	0.31050
Mediomastus ambiseta	360	0.00900
Mulinia lateralis	135	0.00900
Mysidae (Epi)	90	0.00900
Pectinaria gouldii	45	0.06750
Saccoglossus kowalevskii	45	0.00450
Streblospio benedicti	225	0.01800
Tubificoides spp.	45	0.00450
Total Abundance w/ Epi.	6930	
Total Abundance w/o Epi.	6795	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		1.35675
Total Biomass w/o Epi.		1.34550

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 071		Rep: 02
Watershed: Patuxent River	Habitat: High Mesohaline Mud	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 17:29:09
BOTTOM ENVIRONMENT		
Depth (m): 12.7	Salinity (ppt): 14.87	Temperature (C): 13.02
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 86.49	Total Carbon (%): 3.2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.06	Pollution Indicative Species Abundance (%) 9.24
Abundance (#/m2)	5355	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 74.79
Carnivore-Omnivore Abundance (%)	5.88	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	17.65	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	90	0.02250
Ampelisca abdita	45	0.00900
Eteone heteropoda	180	0.08100
Leucon americanus	405	0.04050
Macoma balthica	3330	0.43200
Mediomastus ambiseta	585	0.01350
Mucrogammarus mucronatus (Epi)	45	0.00225
Mulinia lateralis	90	0.01800
Neanthes succinea	45	1.26900
Pectinaria gouldii	180	0.01350
Streblospio benedicti	225	0.00900
Tubificoides spp.	180	0.00450
Total Abundance w/ Epi.	5400	
Total Abundance w/o Epi.	5355	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.91475
Total Biomass w/o Epi.		1.91250

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 071		Rep: 03	
Watershed: Patuxent River	Habitat: High Mesohaline Mud	Date: 13MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 17:29:09	
BOTTOM ENVIRONMENT			
Depth (m): 12.7	Salinity (ppt): 14.87	Temperature (C): 13.02	
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 86.49	Total Carbon (%): 3.2	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.73	Pollution Indicative Species Abundance (%)	12.61
Abundance (#/m2)	4995	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	77.48
Carnivore-Omnivore Abundance (%)	17.12	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	4.50		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Acteocina canaliculata	315	0.10350	
Eteone heteropoda	360	0.08550	
Geukensia demissa (Epi)	45	0.00450	
Heteromastus filiformis	45	0.03600	
Leucon americanus	90	0.00450	
Macoma balthica	3555	0.62100	
Mulinia lateralis	135	0.01350	
Neanthes succinea	90	1.04850	
Pectinaria gouldii	45	0.00225	
Rictaxis punctostriatus	90	0.00225	
Streblospio benedicti	135	0.01800	
Tubificoides spp.	135	0.00900	
Total Abundance w/ Epi.	5040		
Total Abundance w/o Epi.	4995		
Number of Taxa w/ Epi.	12		
Number of Taxa w/o Epi.	11		
Total Biomass w/ Epi.		1.94850	
Total Biomass w/o Epi.		1.94400	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 074		Rep: 01
Watershed: Chalk Point Discharge	Habitat: Low Mesohaline	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:03:36
BOTTOM ENVIRONMENT		
Depth (m): 3.0	Salinity (ppt): 6.07	Temperature (C): 18.46
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 93.41	Total Carbon (%): 2.97
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.88	Pollution Indicative Species Abundance (%) 2.88
Abundance (#/m2)	9360	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 47.12
Carnivore-Omnivore Abundance (%)	2.88	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	35.58	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00225
Carinoma tremaphoros	45	0.28800
Coelotanypus spp.	45	0.00450
Edwardsia elegans	45	0.00450
Eteone heteropoda	90	0.00450
Gammarus daiberi (Epi)	90	0.04050
Heteromastus filiformis	45	0.00450
Leptocheirus plumulosus	1080	0.27900
Macoma balthica	4365	3.59550
Macoma mitchelli	90	0.57150
Neanthes succinea	45	0.33750
Rangia cuneata	45	0.00225
Streblospio benedicti	135	0.00225
Tubificoides spp.	3285	0.11250
Total Abundance w/ Epi.	9450	
Total Abundance w/o Epi.	9360	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		5.24925
Total Biomass w/o Epi.		5.20875

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 074		Rep: 02	
Watershed: Chalk Point Discharge	Habitat: Low Mesohaline	Date: 13MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:03:36	
BOTTOM ENVIRONMENT			
Depth (m): 3.0	Salinity (ppt): 6.07	Temperature (C): 18.46	
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 93.41	Total Carbon (%): 2.97	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.90	Pollution Indicative Species Abundance (%)	6.53
Abundance (#/m2)	8955	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	41.21
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	42.71		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	90	0.00900	
Gammarus daiberi (Epi)	225	0.06300	
Leptocheirus plumulosus	675	0.13950	
Macoma balthica	3465	3.37500	
Macoma mitchelli	90	0.27450	
Marenzelleria viridis	225	0.48150	
Melita nitida (Epi)	45	0.00900	
Mulinia lateralis	90	0.02700	
Neomysis americana (Epi)	45	0.02250	
Streblospio benedicti	495	0.03150	
Tubificoides spp.	3825	0.09450	
Total Abundance w/ Epi.	9270		
Total Abundance w/o Epi.	8955		
Number of Taxa w/ Epi.	11		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		4.52700	
Total Biomass w/o Epi.		4.43250	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 074		Rep: 03	
Watershed: Chalk Point Discharge	Habitat: Low Mesohaline	Date: 13MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:03:36	
BOTTOM ENVIRONMENT			
Depth (m): 3.0	Salinity (ppt): 6.07	Temperature (C): 18.46	
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 93.41	Total Carbon (%): 2.97	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.72	Pollution Indicative Species Abundance (%)	4.81
Abundance (#/m2)	9360	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	44.71
Carnivore-Omnivore Abundance (%)	0.96	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	42.79		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Ameroculodes species complex	45	0.00900	
Eteone heteropoda	90	0.00900	
Gammarus daiberi (Epi)	90	0.03150	
Leptocheirus plumulosus	495	0.11250	
Leucon americanus	90	0.00900	
Macoma balthica	4140	18.36000	
Macoma mitchelli	90	0.11700	
Marenzelleria viridis	45	0.08550	
Streblospio benedicti	360	0.02700	
Tubificoides spp.	4005	0.10350	
Total Abundance w/ Epi.	9450		
Total Abundance w/o Epi.	9360		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.		18.86400	
Total Biomass w/o Epi.		18.83250	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 077		Rep: 01
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:39:02
BOTTOM ENVIRONMENT		
Depth (m): 2.6	Salinity (ppt): 1.19	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 91.86	Total Carbon (%): 3.26
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.53	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	8190	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.55	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	93.41	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	135	0.01800
Chironomidae		0.00225
Gammarus daiberi (Epi)	405	0.03150
Leptocheirus plumulosus	90	0.00225
Macoma balthica	45	0.67500
Macoma mitchelli	90	0.01800
Marenzelleria viridis	90	0.16650
Procladius spp.	45	
Streblospio benedicti	45	0.00225
Tubificoides spp.	7650	0.19350
Total Abundance w/ Epi.	8595	
Total Abundance w/o Epi.	8190	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		1.10925
Total Biomass w/o Epi.		1.07775

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 077		Rep: 02
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:39:02
BOTTOM ENVIRONMENT		
Depth (m): 2.6	Salinity (ppt): 1.19	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 91.86	Total Carbon (%): 3.26
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.95	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	12330	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	1.82	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	86.13	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00900
Chironomidae		0.00225
Coelotanypus spp.	45	0.01800
Cyathura polita	45	0.25650
Gammarus daiberi (Epi)	45	0.00450
Leptocheirus plumulosus	45	0.00450
Macoma balthica	90	0.00450
Macoma mitchelli	180	0.42750
Marenzelleria viridis	405	1.03950
Procladius spp.	135	
Rangia cuneata	630	0.26550
Streblospio benedicti	90	0.00225
Tubificoides spp.	10620	0.25650
Total Abundance w/ Epi.	12375	
Total Abundance w/o Epi.	12330	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		2.29050
Total Biomass w/o Epi.		2.28600

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 077		Rep: 03
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:39:02
BOTTOM ENVIRONMENT		
Depth (m): 2.6	Salinity (ppt): 1.19	Temperature (C): 20.09
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 91.86	Total Carbon (%): 3.26
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.07	Pollution Indicative Species Abundance (%) 0.90
Abundance (#/m2)	9990	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 8.11
Carnivore-Omnivore Abundance (%)	1.35	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	86.04	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	135	0.01350
Carinoma tremaphoros	45	0.01800
Chironomidae		0.00225
Coelotanypus spp.	45	0.02700
Gammarus daiberi (Epi)	225	0.00900
Heteromastus filiformis	135	0.00450
Leptocheirus plumulosus	45	0.00225
Macoma balthica	90	2.61450
Macoma mitchelli	225	0.29250
Marenzelleria viridis	225	0.69300
Procladius spp.	45	
Rangia cuneata	495	0.01350
Streblospio benedicti	45	0.00450
Tubificoides spp.	8460	0.20250
Total Abundance w/ Epi.	10215	
Total Abundance w/o Epi.	9990	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		3.89700
Total Biomass w/o Epi.		3.88800

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 079		Rep: 01
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 15:38:44
BOTTOM ENVIRONMENT		
Depth (m): 3.7	Salinity (ppt): 0.14	Temperature (C): 17.79
Dissolved Oxygen (mg/l): 8.8	Sediment Silt-Clay (%): 42.41	Total Carbon (%): 2.36
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.70	T.F. Pollution Indicative Spp. Abund. (%) 38.81
Abundance (#/m2)	3015	Tolerance Score 9.44
Deep Deposit Feeder Abundance (%)	92.54	Limnodrilus Abundance (%) 38.81
Carnivore-Omnivore Abundance (%)	7.46	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus limnobius	90	
Chironomidae		0.00225
Chironomus spp.	135	
Dero spp.	180	
Harnischia spp.	45	
Ilyodrilus templetoni	540	
Limnodrilus hoffmeisteri	270	
Oligochaeta		0.50400
Quistadrilus multisetosus	90	
Tanypus neopunctipennis	45	
Tubificidae imm w cap chaetae *	720	
Tubificidae imm w/o cap chaetae *	900	
Total Abundance w/ Epi.	3015	
Total Abundance w/o Epi.	3015	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.50625
Total Biomass w/o Epi.		0.50625

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 079		Rep: 02
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 15:38:44
BOTTOM ENVIRONMENT		
Depth (m): 3.7	Salinity (ppt): 0.14	Temperature (C): 17.79
Dissolved Oxygen (mg/l): 8.8	Sediment Silt-Clay (%): 42.41	Total Carbon (%): 2.36
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.66	T.F. Pollution Indicative Spp. Abund. (%) 77.07
Abundance (#/m2)	11970	Tolerance Score 9.50
Deep Deposit Feeder Abundance (%)	97.74	Limnodrilus Abundance (%) 77.07
Carnivore-Omnivore Abundance (%)	1.88	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Arcteonais lomondi	450	
Aulodrilus pigueti	225	
Chironomidae		0.00225
Chironomus spp.	45	
Dero spp.	225	
Ilyodrilus templetoni	225	
Limnodrilus hoffmeisteri	450	
Littoridinops tenuipes (Epi)	45	0.00450
Marenzelleria viridis	45	0.03150
Nais variabilis	225	
Oligochaeta		1.48950
Paranais litoralis	225	
Polypedilum halterale group	180	
Tubificidae imm w cap chaetae *	900	
Tubificidae imm w/o cap chaetae *	8775	
Total Abundance w/ Epi.	12015	
Total Abundance w/o Epi.	11970	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.52775
Total Biomass w/o Epi.		1.52325

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 079		Rep: 03
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 13MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 15:38:44
BOTTOM ENVIRONMENT		
Depth (m): 3.7	Salinity (ppt): 0.14	Temperature (C): 17.79
Dissolved Oxygen (mg/l): 8.8	Sediment Silt-Clay (%): 42.41	Total Carbon (%): 2.36
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.94	T.F. Pollution Indicative Spp. Abund. (%) 67.01
Abundance (#/m2)	8865	Tolerance Score 9.73
Deep Deposit Feeder Abundance (%)	93.40	Limnodrilus Abundance (%) 67.01
Carnivore-Omnivore Abundance (%)	6.60	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00225
Chironomus spp.	90	
Dero nivea	540	
Dero spp. *	180	
Ilyodrilus templetoni	180	
Limnodrilus hoffmeisteri	360	
Oligochaeta		0.84750
Paranais litoralis	360	
Polypedilum halterale group	495	
Tubificidae imm w cap chaetae *	1080	
Tubificidae imm w/o cap chaetae *	5580	
Total Abundance w/ Epi.	8865	
Total Abundance w/o Epi.	8865	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.84975
Total Biomass w/o Epi.		0.84975

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 201		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:30:20
BOTTOM ENVIRONMENT		
Depth (m): 3.0	Salinity (ppt): 7.77	Temperature (C): 15.15
Dissolved Oxygen (mg/l): 5.1	Sediment Silt-Clay (%): 85.45	Total Carbon (%): 4.27
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.72	Pollution Indicative Species Abundance (%) 2.63
Abundance (#/m2)	11970	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 96.99
Carnivore-Omnivore Abundance (%)	0.75	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	0.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	45	0.00900
Macoma balthica	1305	0.17100
Marenzelleria viridis	10305	6.39450
Neanthes succinea	45	0.05400
Streblospio benedicti	270	0.01350
Total Abundance w/ Epi.	11970	
Total Abundance w/o Epi.	11970	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		6.64200
Total Biomass w/o Epi.		6.64200

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 201		Rep: 02	
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:30:20	
BOTTOM ENVIRONMENT			
Depth (m): 3.0	Salinity (ppt): 7.77	Temperature (C): 15.15	
Dissolved Oxygen (mg/l): 5.1	Sediment Silt-Clay (%): 85.45	Total Carbon (%): 4.27	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	0.83	Pollution Indicative Species Abundance (%)	5.65
Abundance (#/m2)	12735	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	94.35
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	0.35		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Macoma balthica	1440	0.54900	
Marenzelleria viridis	10575	6.55650	
Oligochaeta		0.00225	
Streblospio benedicti	675	0.03150	
Tubificidae imm w/o cap chaetae	45		
Total Abundance w/ Epi.	12735		
Total Abundance w/o Epi.	12735		
Number of Taxa w/ Epi.	4		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		7.13925	
Total Biomass w/o Epi.		7.13925	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 201		Rep: 03
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:30:20
BOTTOM ENVIRONMENT		
Depth (m): 3.0	Salinity (ppt): 7.77	Temperature (C): 15.15
Dissolved Oxygen (mg/l): 5.1	Sediment Silt-Clay (%): 85.45	Total Carbon (%): 4.27
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	0.70	Pollution Indicative Species Abundance (%) 3.80
Abundance (#/m2)	15390	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 95.91
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	0.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Geukensia demissa (Epi)	45	0.00225
Macoma balthica	1440	0.22950
Macoma mitchelli	45	0.00450
Marenzelleria viridis	13320	8.13150
Streblospio benedicti	585	0.02250
Total Abundance w/ Epi.	15435	
Total Abundance w/o Epi.	15390	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		8.39025
Total Biomass w/o Epi.		8.38800

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 202		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:56:15
BOTTOM ENVIRONMENT		
Depth (m): 5.2	Salinity (ppt): 9.04	Temperature (C): 14.66
Dissolved Oxygen (mg/l): 4.7	Sediment Silt-Clay (%): 78.28	Total Carbon (%): 3.52
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.82	Pollution Indicative Species Abundance (%) 31.41
Abundance (#/m2)	8595	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 63.87
Carnivore-Omnivore Abundance (%)	3.66	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	1.57	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.02250
Eteone heteropoda	270	0.16200
Hobsonia florida	45	0.00900
Macoma balthica	1035	0.50400
Macoma mitchelli	180	0.20250
Marenzelleria viridis	4455	3.08250
Streblospio benedicti	2430	0.06750
Tubificoides spp.	135	0.00450
Total Abundance w/ Epi.	8595	
Total Abundance w/o Epi.	8595	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		4.05450
Total Biomass w/o Epi.		4.05450

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 202		Rep: 02	
Watershed: Patapsco & Back Rivers		Date: 15MAY03	
Gear: Wildco Box Corer		Time: 11:56:15	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 5.2		Salinity (ppt): 9.04	
Dissolved Oxygen (mg/l): 4.7		Sediment Silt-Clay (%): 78.28	
		Temperature (C): 14.66	
		Total Carbon (%): 3.52	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:		Condition: Not Applicable	
		# Attributes Scored: 0	
	Value	Score	Value
Shannon-Wiener Index	1.10		5.88
Abundance (#/m2)	7650	Pollution Indicative Species Abundance (%)	100.00
Biomass (g/m2)	0.00	Pollution Indicative Species Biomass (%)	92.94
Carnivore-Omnivore Abundance (%)	4.71	Pollution Sensitive Species Abundance (%)	0.00
Deep Deposit Feeder Abundance (%)	0.00	Pollution Sensitive Species Biomass (%)	
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	90	0.38700	
Eteone heteropoda	270	0.17550	
Macoma balthica	1260	0.50850	
Marenzelleria viridis	5850	4.02750	
Streblospio benedicti	180	0.00225	
Total Abundance w/ Epi.	7650		
Total Abundance w/o Epi.	7650		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	5		
Total Biomass w/ Epi.		5.10075	
Total Biomass w/o Epi.		5.10075	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 202		Rep: 03	
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 15MAY03	
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:56:15	
BOTTOM ENVIRONMENT			
Depth (m): 5.2	Salinity (ppt): 9.04	Temperature (C): 14.66	
Dissolved Oxygen (mg/l): 4.7	Sediment Silt-Clay (%): 78.28	Total Carbon (%): 3.52	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	1.24	Pollution Indicative Species Abundance (%)	11.80
Abundance (#/m2)	7245	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	86.34
Carnivore-Omnivore Abundance (%)	1.24	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	1.86		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Eteone heteropoda	45	0.06750	
Leitoscoloplos spp.	45	0.04500	
Macoma balthica	855	0.38250	
Marenzelleria viridis	5400	4.23000	
Neanthes succinea	45	0.13950	
Streblospio benedicti	765	0.03600	
Tubificoides spp.	90	0.00450	
Total Abundance w/ Epi.	7245		
Total Abundance w/o Epi.	7245		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	7		
Total Biomass w/ Epi.		4.90500	
Total Biomass w/o Epi.		4.90500	

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 203		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 15MAY03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 10:28:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.93	Temperature (C): 16.76
Dissolved Oxygen (mg/l): 11.2	Sediment Silt-Clay (%): 89.41	Total Carbon (%): 5.01
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.03	Oligohaline Pollution Indicative Spp. Abund. 85.42
Abundance (#/m2)	3272	Tolerance Score 9.80
Deep Deposit Feeder Abundance (%)	81.94	Oligohaline Pollution Sensitive Spp. Abund. 13.89
Carnivore-Omnivore Abundance (%)	0.69	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	23	0.08634
Leptocheirus plumulosus	114	0.04998
Limnodrilus hoffmeisteri	727	
Marenzelleria viridis	454	0.41123
Oligochaeta		0.04771
Tubificidae imm w/o cap chaetae *	500	
Tubificoides spp.	1454	0.04090
Total Abundance w/ Epi.	3272	
Total Abundance w/o Epi.	3272	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.63616
Total Biomass w/o Epi.		0.63616

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 203		Rep: 02
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 15MAY03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 10:28:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.93	Temperature (C): 16.76
Dissolved Oxygen (mg/l): 11.2	Sediment Silt-Clay (%): 89.41	Total Carbon (%): 5.01
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.22	Oligohaline Pollution Indicative Spp. Abund. 82.54
Abundance (#/m2)	2863	Tolerance Score 9.75
Deep Deposit Feeder Abundance (%)	76.19	Oligohaline Pollution Sensitive Spp. Abund. 17.46
Carnivore-Omnivore Abundance (%)	2.38	Tanypodinae/Chironomidae Abundance Ratio 50.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	23	
Coelotanypus spp.	23	0.01818
Gammarus daiberi (Epi)	23	0.00454
Leptocheirus plumulosus	114	0.03408
Limnodrilus hoffmeisteri	1091	
Marenzelleria viridis	500	0.49302
Neanthes succinea	23	0.07725
Oligochaeta		0.15450
Tubificidae imm w/o cap chaetae *	636	
Tubificoides spp.	454	0.01590
Total Abundance w/ Epi.	2885	
Total Abundance w/o Epi.	2863	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.79861
Total Biomass w/o Epi.		0.79406

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 203		Rep: 03
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 15MAY03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 10:28:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 0.93	Temperature (C): 16.76
Dissolved Oxygen (mg/l): 11.2	Sediment Silt-Clay (%): 89.41	Total Carbon (%): 5.01
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	1.71	Oligohaline Pollution Indicative Spp. Abund. 62.50
Abundance (#/m2)	2545	Tolerance Score 9.80
Deep Deposit Feeder Abundance (%)	62.50	Oligohaline Pollution Sensitive Spp. Abund. 37.50
Carnivore-Omnivore Abundance (%)	0.00	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Limnodrilus hoffmeisteri	545	
Marenzelleria viridis	954	0.97923
Oligochaeta		0.03181
Tubificidae imm w/o cap chaetae *	91	
Tubificoides spp.	954	0.03181
Total Abundance w/ Epi.	2545	
Total Abundance w/o Epi.	2545	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		1.04285
Total Biomass w/o Epi.		1.04285

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 204		Rep: 01
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 13MAY03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 8:25:34
BOTTOM ENVIRONMENT		
Depth (m): 6.4	Salinity (ppt): 7.02	Temperature (C): 16.51
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 47.07	Total Carbon (%): 2.08
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.48	Pollution Indicative Species Abundance (%) 27.54
Abundance (#/m2)	3794	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%) 22.16
Carnivore-Omnivore Abundance (%)	1.80	Pollution Sensitive Species Biomass (%) 0.00
Deep Deposit Feeder Abundance (%)	18.56	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	45	0.01590
Heteromastus filiformis	114	0.20448
Leptocheirus plumulosus	1272	0.94742
Macoma balthica	364	0.41350
Marenzelleria viridis	386	0.27946
Mediomastus ambiseta	91	0.00454
Neanthes succinea	23	0.44758
Streblospio benedicti	1000	0.03635
Tubificoides spp.	500	0.00909
Total Abundance w/ Epi.	3794	
Total Abundance w/o Epi.	3794	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		2.35834
Total Biomass w/o Epi.		2.35834

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 204		Rep: 02
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 13MAY03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 8:25:34
BOTTOM ENVIRONMENT		
Depth (m): 6.4	Salinity (ppt): 7.02	Temperature (C): 16.51
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 47.07	Total Carbon (%): 2.08
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0
	Value Score	Value Score
Shannon-Wiener Index	2.57	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	1318	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	6.90	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	10.34	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.00227
Chironomidae		0.00114
Chironomus spp.	23	
Eteone heteropoda	23	0.00682
Heteromastus filiformis	91	0.18858
Leptocheirus plumulosus	500	0.46576
Macoma balthica	273	1.46317
Marenzelleria viridis	159	0.09542
Neanthes succinea	23	0.16813
Streblospio benedicti	159	0.00682
Tubificoides spp.	45	0.00114
Total Abundance w/ Epi.	1318	
Total Abundance w/o Epi.	1318	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		2.39923
Total Biomass w/o Epi.		2.39923

BOTTOM ENVIRONMENT AND BENTHOS, SPRING 2003 (CRUISE 02:2002/2003) FIXED STATIONS

Station: 204		Rep: 03	
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 13MAY03	
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 8:25:34	
BOTTOM ENVIRONMENT			
Depth (m): 6.4	Salinity (ppt): 7.02	Temperature (C): 16.51	
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 47.07	Total Carbon (%): 2.08	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score:	Condition: Not Applicable	# Attributes Scored: 0	
	Value Score	Value Score	
Shannon-Wiener Index	2.66	Pollution Indicative Species Abundance (%)	14.29
Abundance (#/m2)	1908	Pollution Indicative Species Biomass (%)	100.00
Biomass (g/m2)	0.00	Pollution Sensitive Species Abundance (%)	30.95
Carnivore-Omnivore Abundance (%)	2.38	Pollution Sensitive Species Biomass (%)	0.00
Deep Deposit Feeder Abundance (%)	16.67		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Eteone heteropoda	23	0.00682	
Heteromastus filiformis	114	0.17494	
Leitoscoloplos spp.	23	0.00227	
Leptocheirus plumulosus	704	0.49530	
Macoma balthica	295	0.30672	
Macoma mitchelli	23	0.07725	
Marenzelleria viridis	295	0.12723	
Mulinia lateralis	23	0.00909	
Neanthes succinea	23	0.26582	
Streblospio benedicti	204	0.00682	
Tubificoides spp.	182	0.00454	
Total Abundance w/ Epi.	1908		
Total Abundance w/o Epi.	1908		
Number of Taxa w/ Epi.	11		
Number of Taxa w/o Epi.	11		
Total Biomass w/ Epi.		1.47680	
Total Biomass w/o Epi.		1.47680	

DATA SUMMARY B

**BENTHIC ENVIRONMENT AND COMMUNITY
COMPOSITION AT FIXED SITES:
SUMMER 2003**

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 001		Rep: 01
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 6:57:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 8.94	Temperature (C): 27.47
Dissolved Oxygen (mg/l): 7.8	Sediment Silt-Clay (%): 2.61	Total Carbon (%): 0.1
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.68 3	Pollution Indicative Species Abundance (%) 43.40 1
Abundance (#/m2)	2120 5	Pollution Indicative Species Biomass (%) 2.66
Biomass (g/m2)	1.88 3	Pollution Sensitive Species Abundance (%) 1.89 1
Carnivore-Omnivore Abundance (%)	15.09 1	Pollution Sensitive Species Biomass (%) 25.72
Deep Deposit Feeder Abundance (%)	3.77	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	40	0.00200
Heteromastus filiformis	80	0.00400
Macoma balthica	40	0.48400
Macoma mitchelli	360	0.11600
Micrura leidyi	80	1.17600
Mulinia lateralis	640	0.04400
Neanthes succinea	200	0.02000
Paraonis fulgens	440	0.03200
Streblospio benedicti	240	0.00400
Total Abundance w/ Epi.	2120	
Total Abundance w/o Epi.	2120	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		1.88200
Total Biomass w/o Epi.		1.88200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 001		Rep: 02
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 6:57:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 8.94	Temperature (C): 27.47
Dissolved Oxygen (mg/l): 7.8	Sediment Silt-Clay (%): 2.61	Total Carbon (%): 0.1
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.67	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.78 3	Pollution Indicative Species Abundance (%) 19.15 3
Abundance (#/m2)	1880 5	Pollution Indicative Species Biomass (%) 0.81
Biomass (g/m2)	5.21 5	Pollution Sensitive Species Abundance (%) 12.77 3
Carnivore-Omnivore Abundance (%)	27.66 3	Pollution Sensitive Species Biomass (%) 43.59
Deep Deposit Feeder Abundance (%)	2.13	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	40	0.02400
Cyathura polita	40	0.06800
Edotea triloba (Epi)	40	0.00400
Eteone heteropoda	40	0.00200
Macoma balthica	160	2.18000
Macoma mitchelli	120	0.52400
Micrura leidyi	80	2.14400
Mulinia lateralis	120	0.02800
Neanthes succinea	320	0.17600
Paraonis fulgens	720	0.05200
Streblospio benedicti	200	0.01200
Tubificoides spp.	40	0.00200
Total Abundance w/ Epi.	1920	
Total Abundance w/o Epi.	1880	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		5.21600
Total Biomass w/o Epi.		5.21200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 001		Rep: 03
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 6:57:26
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 8.94	Temperature (C): 27.47
Dissolved Oxygen (mg/l): 7.8	Sediment Silt-Clay (%): 2.61	Total Carbon (%): 0.1
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.67	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.42 1	Pollution Indicative Species Abundance (%) 28.89 1
Abundance (#/m2)	1800 5	Pollution Indicative Species Biomass (%) 9.31
Biomass (g/m2)	0.99 1	Pollution Sensitive Species Abundance (%) 6.67 1
Carnivore-Omnivore Abundance (%)	15.56 1	Pollution Sensitive Species Biomass (%) 26.32
Deep Deposit Feeder Abundance (%)	2.22	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	40	0.06000
Heteromastus filiformis	40	0.00200
Macoma mitchelli	120	0.00200
Marenzelleria viridis	120	0.26000
Micrura leidyi	40	0.42400
Mulinia lateralis	440	0.08800
Mytilopsis leucophaeata (Epi)	40	0.00200
Neanthes succinea	200	0.09600
Paraonis fulgens	720	0.05200
Streblospio benedicti	80	0.00400
Total Abundance w/ Epi.	1840	
Total Abundance w/o Epi.	1800	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.99000
Total Biomass w/o Epi.		0.98800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 006		Rep: 01
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 7:23:42
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 9.66	Temperature (C): 28.34
Dissolved Oxygen (mg/l): 8.1	Sediment Silt-Clay (%): 2.67	Total Carbon (%): 0.05
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	3.03 3	Pollution Indicative Species Abundance (%) 17.39 3
Abundance (#/m2)	920 1	Pollution Indicative Species Biomass (%) 2.31
Biomass (g/m2)	1.39 3	Pollution Sensitive Species Abundance (%) 8.70 1
Carnivore-Omnivore Abundance (%)	34.78 3	Pollution Sensitive Species Biomass (%) 8.93
Deep Deposit Feeder Abundance (%)	8.70	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	40	0.07600
Carinoma tremaphoros	40	0.02400
Haminoea solitaria	40	0.02800
Heteromastus filiformis	80	0.32800
Macoma mitchelli	240	0.18000
Melita nitida (Epi)	40	0.02000
Micrura leidyi	80	0.62400
Mulinia lateralis	160	0.03200
Neanthes succinea	80	0.02800
Paraonis fulgens	80	0.01600
Phoronis spp.	40	0.04800
Rictaxis punctostriatus	40	0.00400
Total Abundance w/ Epi.	960	
Total Abundance w/o Epi.	920	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.40800
Total Biomass w/o Epi.		1.38800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 006		Rep: 02
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 7:23:42
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 9.66	Temperature (C): 28.34
Dissolved Oxygen (mg/l): 8.1	Sediment Silt-Clay (%): 2.67	Total Carbon (%): 0.05
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.67	Condition: Marginal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	3.04 3	Pollution Indicative Species Abundance (%) 33.33 1
Abundance (#/m2)	1440 3	Pollution Indicative Species Biomass (%) 5.46
Biomass (g/m2)	1.10 3	Pollution Sensitive Species Abundance (%) 19.44 3
Carnivore-Omnivore Abundance (%)	30.56 3	Pollution Sensitive Species Biomass (%) 71.40
Deep Deposit Feeder Abundance (%)	0.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	200	0.18400
Carinoma tremaphoros	80	0.06400
Chironomidae		0.00200
Chironomus spp.	40	
Haminoea solitaria	80	0.01200
Macoma balthica	80	0.60000
Macoma mitchelli	280	0.11600
Mulinia lateralis	280	0.04400
Neanthes succinea	40	0.04000
Paraonis fulgens	200	0.02000
Streblospio benedicti	160	0.01600
Total Abundance w/ Epi.	1440	
Total Abundance w/o Epi.	1440	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.09800
Total Biomass w/o Epi.		1.09800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 006		Rep: 03
Watershed: Calvert Cliffs Discharge	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 7:23:42
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 9.66	Temperature (C): 28.34
Dissolved Oxygen (mg/l): 8.1	Sediment Silt-Clay (%): 2.67	Total Carbon (%): 0.05
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.00	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.87 3	Pollution Indicative Species Abundance (%) 34.62 1
Abundance (#/m2)	1040 3	Pollution Indicative Species Biomass (%) 3.12
Biomass (g/m2)	0.90 1	Pollution Sensitive Species Abundance (%) 3.85 1
Carnivore-Omnivore Abundance (%)	26.92 3	Pollution Sensitive Species Biomass (%) 5.80
Deep Deposit Feeder Abundance (%)	11.54	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Haminoea solitaria	120	0.12800
Heteromastus filiformis	120	0.15200
Macoma mitchelli	160	0.04800
Micrura leidyi	80	0.46000
Mulinia lateralis	320	0.01200
Neanthes succinea	80	0.01200
Paraonis fulgens	80	0.01600
Phoronis spp.	40	0.05200
Streblospio benedicti	40	0.01600
Total Abundance w/ Epi.	1040	
Total Abundance w/o Epi.	1040	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.89600
Total Biomass w/o Epi.		0.89600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 015		Rep: 01	
Watershed: Mainstem		Date: 28AUG03	
Gear: Modified Box Corer		Time: 8:47:07	
Habitat: High Mesohaline Sand			
Sampled Area: 0.025 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 2.0		Salinity (ppt): 8.09	
Dissolved Oxygen (mg/l): 7.3		Sediment Silt-Clay (%): 2.73	
		Temperature (C): 26.26	
		Total Carbon (%): 0.08	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.67		Condition: Meets Goal	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	2.62	3	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	1640	5	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	5.05	5	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	26.83	3	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	19.51		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	40	0.00200	
Heteromastus filiformis	320	0.46400	
Laeonereis culveri	40	0.06400	
Macoma balthica	40	3.00800	
Macoma mitchelli	360	0.16400	
Marenzelleria viridis	240	0.68400	
Neanthes succinea	360	0.65600	
Streblospio benedicti	240	0.00800	
Total Abundance w/ Epi.	1640		
Total Abundance w/o Epi.	1640		
Number of Taxa w/ Epi.	8		
Number of Taxa w/o Epi.	8		
Total Biomass w/ Epi.		5.05000	
Total Biomass w/o Epi.		5.05000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 015		Rep: 02
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:47:07
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 8.09	Temperature (C): 26.26
Dissolved Oxygen (mg/l): 7.3	Sediment Silt-Clay (%): 2.73	Total Carbon (%): 0.08
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.67	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.65 3	Pollution Indicative Species Abundance (%) 5.88 5
Abundance (#/m2)	1360 3	Pollution Indicative Species Biomass (%) 0.51
Biomass (g/m2)	3.13 5	Pollution Sensitive Species Abundance (%) 20.59 3
Carnivore-Omnivore Abundance (%)	26.47 3	Pollution Sensitive Species Biomass (%) 55.43
Deep Deposit Feeder Abundance (%)	23.53	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	40	0.00400
Heteromastus filiformis	320	0.76400
Leptocheirus plumulosus	40	0.01200
Macoma balthica	40	0.93200
Macoma mitchelli	280	0.11600
Marenzelleria viridis	240	0.80400
Micrura leidyi	40	0.05600
Neanthes succinea	280	0.42800
Streblospio benedicti	80	0.01600
Total Abundance w/ Epi.	1360	
Total Abundance w/o Epi.	1360	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		3.13200
Total Biomass w/o Epi.		3.13200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 015		Rep: 03
Watershed: Mainstem	Habitat: High Mesohaline Sand	Date: 28AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 8:47:07
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 8.09	Temperature (C): 26.26
Dissolved Oxygen (mg/l): 7.3	Sediment Silt-Clay (%): 2.73	Total Carbon (%): 0.08
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.33	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	3.03 3	Pollution Indicative Species Abundance (%) 15.00 3
Abundance (#/m2)	2400 5	Pollution Indicative Species Biomass (%) 0.86
Biomass (g/m2)	3.25 5	Pollution Sensitive Species Abundance (%) 6.67 1
Carnivore-Omnivore Abundance (%)	26.67 3	Pollution Sensitive Species Biomass (%) 51.51
Deep Deposit Feeder Abundance (%)	25.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	160	0.02000
Eteone heteropoda	80	0.01600
Heteromastus filiformis	480	0.89200
Lepidactylus dytiscus	200	0.07200
Macoma balthica	80	1.59600
Macoma mitchelli	560	0.19200
Marenzelleria viridis	80	0.07600
Neanthes succinea	400	0.35200
Oligochaeta		0.00200
Streblospio benedicti	240	0.01200
Tubificidae imm w/o cap chaetae	40	
Tubificoides spp.	80	0.01600
Total Abundance w/ Epi.	2400	
Total Abundance w/o Epi.	2400	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		3.24600
Total Biomass w/o Epi.		3.24600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 022		Rep: 01	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 12:36:49	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 7.0		Salinity (ppt): 10.36	
Dissolved Oxygen (mg/l): 3.4		Sediment Silt-Clay (%): 35.10	
		Temperature (C): 25.92	
		Total Carbon (%): 3.68	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	0.92	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	135	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	33.33		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA		Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)		45	0.00225
Streblospio benedicti		90	0.00225
Tubificoides spp.		45	0.00225
Total Abundance w/ Epi.		180	
Total Abundance w/o Epi.		135	
Number of Taxa w/ Epi.		3	
Number of Taxa w/o Epi.		2	
Total Biomass w/ Epi.			0.00675
Total Biomass w/o Epi.			0.00450

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 022		Rep: 02
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:36:49
BOTTOM ENVIRONMENT		
Depth (m): 7.0	Salinity (ppt): 10.36	Temperature (C): 25.92
Dissolved Oxygen (mg/l): 3.4	Sediment Silt-Clay (%): 35.10	Total Carbon (%): 3.68
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	0.00225
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 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 022		Rep: 03	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 12:36:49	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 7.0		Salinity (ppt): 10.36	
Dissolved Oxygen (mg/l): 3.4		Sediment Silt-Clay (%): 35.10	
		Temperature (C): 25.92	
		Total Carbon (%): 3.68	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
No Organisms Present			0.00225
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.			0.00225
Total Biomass w/o Epi.			0.00225

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 023		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:40:50
BOTTOM ENVIRONMENT		
Depth (m): 6.4	Salinity (ppt): 9.06	Temperature (C): 25.82
Dissolved Oxygen (mg/l): 3.5	Sediment Silt-Clay (%): 75.72	Total Carbon (%): 3.84
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.60	Condition: Degraded	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	0.97 1	Pollution Indicative Species Abundance (%) 80.95 1
Abundance (#/m2)	2835 3	Pollution Indicative Species Biomass (%) 0.26
Biomass (g/m2)	24.04 3	Pollution Sensitive Species Abundance (%) 11.11
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%) 99.58 5
Deep Deposit Feeder Abundance (%)	7.94	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	90	0.03600
Macoma balthica	315	23.94000
Streblospio benedicti	2295	0.06300
Tubificoides spp.	135	0.00225
Total Abundance w/ Epi.	2835	
Total Abundance w/o Epi.	2835	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		24.04125
Total Biomass w/o Epi.		24.04125

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 023		Rep: 02
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:40:50
BOTTOM ENVIRONMENT		
Depth (m): 6.4	Salinity (ppt): 9.06	Temperature (C): 25.82
Dissolved Oxygen (mg/l): 3.5	Sediment Silt-Clay (%): 75.72	Total Carbon (%): 3.84
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.40	Condition: Severely Degr.	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	1.53 1	Pollution Indicative Species Abundance (%) 62.96 1
Abundance (#/m2)	1215 3	Pollution Indicative Species Biomass (%) 8.33
Biomass (g/m2)	0.05 1	Pollution Sensitive Species Abundance (%) 14.81
Carnivore-Omnivore Abundance (%)	0.00	Pollution Sensitive Species Biomass (%) 25.00 1
Deep Deposit Feeder Abundance (%)	22.22	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	135	0.00450
Littoridinops tenuipes (Epi)	45	11.83500
Macoma balthica	180	0.01350
Streblospio benedicti	765	0.00450
Tubificoides spp.	135	0.03150
Total Abundance w/ Epi.	1260	
Total Abundance w/o Epi.	1215	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		11.88900
Total Biomass w/o Epi.		0.05400

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 023		Rep: 03	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 10:40:50	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 6.4		Salinity (ppt): 9.06	
Dissolved Oxygen (mg/l): 3.5		Sediment Silt-Clay (%): 75.72	
		Temperature (C): 25.82	
		Total Carbon (%): 3.84	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00		Condition: Meets Goal	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	1.59	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	720	3	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	14.26	3	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	25.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Heteromastus filiformis	180	0.15750	
Macoma balthica	405	14.00850	
Macoma mitchelli	45	0.09000	
Mytilopsis leucophaeata (Epi)	45	0.02250	
Streblospio benedicti	90	0.00225	
Total Abundance w/ Epi.	765		
Total Abundance w/o Epi.	720		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.		14.28075	
Total Biomass w/o Epi.		14.25825	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 024		Rep: 01
Watershed: Mainstem	Habitat: High Mesohaline Mud	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 14:53:06
BOTTOM ENVIRONMENT		
Depth (m): 6.6	Salinity (ppt): 10.10	Temperature (C): 25.43
Dissolved Oxygen (mg/l): 3.6	Sediment Silt-Clay (%): 97.18	Total Carbon (%): 3.83
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.67	Condition: Marginal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.71 1	Pollution Indicative Species Abundance (%) 0.00
Abundance (#/m2)	765 1	Pollution Indicative Species Biomass (%) 0.00 5
Biomass (g/m2)	1.36 3	Pollution Sensitive Species Abundance (%) 47.06
Carnivore-Omnivore Abundance (%)	23.53 3	Pollution Sensitive Species Biomass (%) 86.09 3
Deep Deposit Feeder Abundance (%)	29.41	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.00900
Macoma balthica	360	1.17000
Neanthes succinea	135	0.16650
Tubificoides spp.	225	0.01350
Total Abundance w/ Epi.	765	
Total Abundance w/o Epi.	765	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		1.35900
Total Biomass w/o Epi.		1.35900

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 024		Rep: 02	
Watershed: Mainstem		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 14:53:06	
Habitat: High Mesohaline Mud			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 6.6		Salinity (ppt): 10.10	
Dissolved Oxygen (mg/l): 3.6		Sediment Silt-Clay (%): 97.18	
		Temperature (C): 25.43	
		Total Carbon (%): 3.83	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00		Condition: Meets Goal	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	1.95	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	810	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	3.24	5	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	22.22	3	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	38.89		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Carinoma tremaphoros	45	0.01800	
Macoma balthica	270	3.05100	
Neanthes succinea	135	0.16200	
Streblospio benedicti	45	0.00225	
Tubificoides spp.	315	0.00450	
Total Abundance w/ Epi.	810		
Total Abundance w/o Epi.	810		
Number of Taxa w/ Epi.	5		
Number of Taxa w/o Epi.	5		
Total Biomass w/ Epi.		3.23775	
Total Biomass w/o Epi.		3.23775	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 026		Rep: 01
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 03SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 7:18:54
BOTTOM ENVIRONMENT		
Depth (m): 3.8	Salinity (ppt): 3.15	Temperature (C): 25.62
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 88.20	Total Carbon (%): 3.9
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.80	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.31 3	Pollution Indicative Species Abundance (%) 4.35 5
Abundance (#/m2)	1035 3	Pollution Indicative Species Biomass (%) 0.03
Biomass (g/m2)	16.31 3	Pollution Sensitive Species Abundance (%) 47.83
Carnivore-Omnivore Abundance (%)	26.09	Pollution Sensitive Species Biomass (%) 99.31 5
Deep Deposit Feeder Abundance (%)	4.35	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	90	0.00450
Coelotanypus spp.	45	0.00450
Cyathura polita	225	0.09450
Heteromastus filiformis	45	0.01350
Leptocheirus plumulosus	450	0.09450
Macoma balthica	90	15.35400
Marenzelleria viridis	90	0.58500
Rangia cuneata	90	0.16650
Total Abundance w/ Epi.	1125	
Total Abundance w/o Epi.	1035	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		16.31700
Total Biomass w/o Epi.		16.31250

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 026		Rep: 02
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 03SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 7:18:54
BOTTOM ENVIRONMENT		
Depth (m): 3.8	Salinity (ppt): 3.15	Temperature (C): 25.62
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 88.20	Total Carbon (%): 3.9
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 4.20	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.84 5	Pollution Indicative Species Abundance (%) 0.00 5
Abundance (#/m2)	1035 3	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	4.55 3	Pollution Sensitive Species Abundance (%) 56.52
Carnivore-Omnivore Abundance (%)	17.39	Pollution Sensitive Species Biomass (%) 94.81 5
Deep Deposit Feeder Abundance (%)	8.70	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00225
Cyathura polita	135	0.06750
Gastropoda (Epi)	90	0.00900
Heteromastus filiformis	45	0.04950
Leptocheirus plumulosus	270	0.06750
Macoma balthica	90	3.17250
Marenzelleria viridis	135	0.76050
Nemertina	45	0.11250
Rangia cuneata	225	0.31500
Tubificoides spp.	45	0.00450
Total Abundance w/ Epi.	1125	
Total Abundance w/o Epi.	1035	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		4.56075
Total Biomass w/o Epi.		4.55175

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 026		Rep: 03
Watershed: Upper Western Shore	Habitat: Low Mesohaline	Date: 03SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 7:18:54
BOTTOM ENVIRONMENT		
Depth (m): 3.8	Salinity (ppt): 3.15	Temperature (C): 25.62
Dissolved Oxygen (mg/l): 7.2	Sediment Silt-Clay (%): 88.20	Total Carbon (%): 3.9
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.80	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.30 3	Pollution Indicative Species Abundance (%) 0.00 5
Abundance (#/m2)	1485 3	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	20.67 3	Pollution Sensitive Species Abundance (%) 48.48
Carnivore-Omnivore Abundance (%)	36.36	Pollution Sensitive Species Biomass (%) 98.57 5
Deep Deposit Feeder Abundance (%)	0.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00450
Carinoma tremaphoros	90	0.15300
Chironomidae		0.00225
Cyathura polita	360	0.35100
Leptocheirus plumulosus	540	0.13500
Marenzelleria viridis	45	0.06300
Melita nitida (Epi)	45	0.01800
Procladius spp.	90	
Rangia cuneata	315	19.96200
Total Abundance w/ Epi.	1530	
Total Abundance w/o Epi.	1485	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		20.68875
Total Biomass w/o Epi.		20.67075

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 029		Rep: 01
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 03SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:58:36
BOTTOM ENVIRONMENT		
Depth (m): 5.0	Salinity (ppt): 1.01	Temperature (C): 26.21
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 69.94	Total Carbon (%): 1.91
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.00	Oligohaline Pollution Indicative Spp. Abund. 72.22 3
Abundance (#/m2)	1620 5	Tolerance Score 9.48 1
Deep Deposit Feeder Abundance (%)	66.67	Oligohaline Pollution Sensitive Spp. Abund. 16.67 3
Carnivore-Omnivore Abundance (%)	16.67 3	Tanypodinae/Chironomidae Abundance Ratio 50.00 3
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00225
Coelotanypus spp.	45	0.00225
Cryptochironomus spp.	90	
Cyathura polita	90	0.03600
Gammarus daiberi (Epi)	90	0.00900
Limnodrilus hoffmeisteri	180	
Marenzelleria viridis	270	0.57600
Oligochaeta		0.07200
Procladius spp.	45	
Tubificidae imm w/o cap chaetae *	900	
Total Abundance w/ Epi.	1710	
Total Abundance w/o Epi.	1620	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.69750
Total Biomass w/o Epi.		0.68850

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 029		Rep: 02
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 03SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:58:36
BOTTOM ENVIRONMENT		
Depth (m): 5.0	Salinity (ppt): 1.01	Temperature (C): 26.21
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 69.94	Total Carbon (%): 1.91
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.83	Oligohaline Pollution Indicative Spp. Abund. 86.05 3
Abundance (#/m2)	1935 5	Tolerance Score 9.40 1
Deep Deposit Feeder Abundance (%)	74.42	Oligohaline Pollution Sensitive Spp. Abund. 13.95 3
Carnivore-Omnivore Abundance (%)	9.30 1	Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Coelotanypus spp.	180	0.01350
Leptocheirus plumulosus	45	0.00450
Limnodrilus hoffmeisteri	450	
Marenzelleria viridis	270	0.65700
Oligochaeta		0.09000
Tubificidae imm w/o cap chaetae *	990	
Total Abundance w/ Epi.	1935	
Total Abundance w/o Epi.	1935	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.76500
Total Biomass w/o Epi.		0.76500

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 029		Rep: 03		
Watershed: Upper Eastern Shore	Habitat: Oligohaline	Date: 03SEP03		
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:58:36		
BOTTOM ENVIRONMENT				
Depth (m): 5.0	Salinity (ppt): 1.01	Temperature (C): 26.21		
Dissolved Oxygen (mg/l): 6.2	Sediment Silt-Clay (%): 69.94	Total Carbon (%): 1.91		
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6		
	Value Score	Value Score		
Shannon-Wiener Index	2.11	Oligohaline Pollution Indicative Spp. Abund.	69.57	3
Abundance (#/m2)	3105	Tolerance Score	9.14	1
Deep Deposit Feeder Abundance (%)	63.77	Oligohaline Pollution Sensitive Spp. Abund.	18.84	3
Carnivore-Omnivore Abundance (%)	10.14	Tanypodinae/Chironomidae Abundance Ratio	80.00	1
BENTHIC ABUNDANCE (per sq. meter)				
TAXA	Abundance (#/m2)	Biomass (g/m2)		
Chironomidae		0.00225		
Coelotanypus spp.	180	0.01350		
Cryptochironomus spp.	45			
Cyathura polita	90	0.04500		
Gammarus daiberi (Epi)	360	0.05850		
Limnodrilus hoffmeisteri	450			
Marenzelleria viridis	585	1.49850		
Oligochaeta		0.11700		
Rangia cuneata	225	147.64500		
Tubificidae imm w/o cap chaetae *	1530			
Total Abundance w/ Epi.	3465			
Total Abundance w/o Epi.	3105			
Number of Taxa w/ Epi.	7			
Number of Taxa w/o Epi.	6			
Total Biomass w/ Epi.		149.37975		
Total Biomass w/o Epi.		149.32125		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 036		Rep: 01
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:21:18
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 0.14	Temperature (C): 22.80
Dissolved Oxygen (mg/l): 7.1	Sediment Silt-Clay (%): 86.96	Total Carbon (%): 3.2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.50	Condition: Severely Degr.	# Attributes Scored: 3
	Value Score	Value Score
Shannon-Wiener Index	1.81	T.F. Pollution Indicative Spp. Abund. (%) 77.59 3
Abundance (#/m2)	7830 1	Tolerance Score 9.56 1
Deep Deposit Feeder Abundance (%)	97.70 1	Limnodrilus Abundance (%) 77.59
Carnivore-Omnivore Abundance (%)	2.30	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Branchiura sowerbyi	630	1.08000
Coelotanypus spp.	180	0.00450
Ilyodrilus templetoni	135	
Limnodrilus hoffmeisteri	1755	
Oligochaeta		2.21810
Tubificidae imm w cap chaetae *	810	
Tubificidae imm w/o cap chaetae *	4320	
Total Abundance w/ Epi.	7830	
Total Abundance w/o Epi.	7830	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		3.30260
Total Biomass w/o Epi.		3.30260

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 036		Rep: 02
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:21:18
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 0.14	Temperature (C): 22.80
Dissolved Oxygen (mg/l): 7.1	Sediment Silt-Clay (%): 86.96	Total Carbon (%): 3.2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.50	Condition: Severely Degr.	# Attributes Scored: 3
	Value Score	Value Score
Shannon-Wiener Index	2.39	T.F. Pollution Indicative Spp. Abund. (%) 69.91 3
Abundance (#/m2)	10170 1	Tolerance Score 9.41 1
Deep Deposit Feeder Abundance (%)	95.58 1	Limnodrilus Abundance (%) 75.66
Carnivore-Omnivore Abundance (%)	2.21	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus limnobius	225	
Aulodrilus pigueti	225	
Branchiura sowerbyi	540	0.85500
Chironomidae		0.00225
Coelotanypus spp.	90	0.00900
Cryptochironomus spp.	135	
Gammarus spp. (Epi)	45	0.00450
Ilyodrilus templetoni	225	
Limnodrilus cervix	585	
Limnodrilus hoffmeisteri	2430	
Musculium transversum	225	0.04050
Oligochaeta		1.76596
Tubificidae imm w cap chaetae *	810	
Tubificidae imm w/o cap chaetae *	4680	
Total Abundance w/ Epi.	10215	
Total Abundance w/o Epi.	10170	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		2.67721
Total Biomass w/o Epi.		2.67271

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 036		Rep: 03
Watershed: Potomac River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:21:18
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 0.14	Temperature (C): 22.80
Dissolved Oxygen (mg/l): 7.1	Sediment Silt-Clay (%): 86.96	Total Carbon (%): 3.2
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.50	Condition: Severely Degr.	# Attributes Scored: 3
	Value Score	Value Score
Shannon-Wiener Index	2.31	T.F. Pollution Indicative Spp. Abund. (%) 67.90 3
Abundance (#/m2)	10935 1	Tolerance Score 9.37 1
Deep Deposit Feeder Abundance (%)	95.47 1	Limnodrilus Abundance (%) 78.19
Carnivore-Omnivore Abundance (%)	3.70	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus pigueti	450	
Branchiura sowerbyi	540	1.29600
Chironomidae		0.00225
Chironomidae pupae *	45	0.00900
Coelotanypus spp.	225	0.02700
Corbicula fluminea	90	26.94150
Cryptochironomus spp.	90	
Harnischia spp.	45	
Limnodrilus cervix	1125	
Limnodrilus hoffmeisteri	2250	
Oligochaeta		1.32750
Tubificidae imm w cap chaetae	900	
Tubificidae imm w/o cap chaetae *	5175	
Total Abundance w/ Epi.	10935	
Total Abundance w/o Epi.	10935	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		29.60325
Total Biomass w/o Epi.		29.60325

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 040		Rep: 01
Watershed: Potomac River	Habitat: Oligohaline	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:43:26
BOTTOM ENVIRONMENT		
Depth (m): 8.0	Salinity (ppt): 0.84	Temperature (C): 27.89
Dissolved Oxygen (mg/l): 8.2	Sediment Silt-Clay (%): 95.76	Total Carbon (%): 2.49
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.80	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.23	Oligohaline Pollution Indicative Spp. Abund. 37.14 3
Abundance (#/m2)	1575 5	Tolerance Score 6.00 5
Deep Deposit Feeder Abundance (%)	5.71	Oligohaline Pollution Sensitive Spp. Abund. 14.29 3
Carnivore-Omnivore Abundance (%)	34.29 3	Tanypodinae/Chironomidae Abundance Ratio 0.00
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.00225
Cyathura polita	540	0.76050
Gammarus spp. (Epi)	225	0.02250
Leptocheirus plumulosus	495	0.08100
Marenzelleria viridis	225	0.13950
Rangia cuneata	135	0.01800
Tubificoides spp.	90	0.00900
Total Abundance w/ Epi.	1800	
Total Abundance w/o Epi.	1575	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		1.03275
Total Biomass w/o Epi.		1.01025

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 040		Rep: 02
Watershed: Potomac River	Habitat: Oligohaline	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:43:26
BOTTOM ENVIRONMENT		
Depth (m): 8.0	Salinity (ppt): 0.84	Temperature (C): 27.89
Dissolved Oxygen (mg/l): 8.2	Sediment Silt-Clay (%): 95.76	Total Carbon (%): 2.49
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	Oligohaline Pollution Indicative Spp. Abund. 29.17 3
Abundance (#/m2)	2160 5	Tolerance Score 6.74 3
Deep Deposit Feeder Abundance (%)	0.00	Oligohaline Pollution Sensitive Spp. Abund. 20.83 3
Carnivore-Omnivore Abundance (%)	43.75 5	Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	180	0.03600
Apocorophium lacustre (Epi)	45	0.01350
Carinoma tremaphoros	45	0.27450
Chironomidae		0.00225
Coelotanypus spp.	90	0.05400
Cyathura polita	765	0.19350
Gammarus daiberi (Epi)	675	0.07200
Leptocheirus plumulosus	495	0.03600
Marenzelleria viridis	450	0.29700
Procladius spp.	45	
Rangia cuneata	90	0.00450
Total Abundance w/ Epi.	2880	
Total Abundance w/o Epi.	2160	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.98325
Total Biomass w/o Epi.		0.89775

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 040		Rep: 03
Watershed: Potomac River	Habitat: Oligohaline	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:43:26
BOTTOM ENVIRONMENT		
Depth (m): 8.0	Salinity (ppt): 0.84	Temperature (C): 27.89
Dissolved Oxygen (mg/l): 8.2	Sediment Silt-Clay (%): 95.76	Total Carbon (%): 2.49
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.33	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.28	Oligohaline Pollution Indicative Spp. Abund. 44.00 3
Abundance (#/m2)	2250 5	Tolerance Score 6.20 3
Deep Deposit Feeder Abundance (%)	26.00	Oligohaline Pollution Sensitive Spp. Abund. 38.00 5
Carnivore-Omnivore Abundance (%)	18.00 3	Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	90	0.02250
Coelotanypus spp.	90	0.03600
Cyathura polita	315	0.13050
Gammarus spp. (Epi)	90	0.01350
Leptocheirus plumulosus	270	0.04050
Marenzelleria viridis	855	1.23750
Streblospio benedicti	45	0.00450
Tubificoides spp.	585	0.07200
Total Abundance w/ Epi.	2340	
Total Abundance w/o Epi.	2250	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		1.55700
Total Biomass w/o Epi.		1.54350

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 043		Rep: 01
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:15:31
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.40	Temperature (C): 27.57
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 3.48	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	2.41 3	Pollution Indicative Species Abundance (%) 16.89 3
Abundance (#/m2)	8760 1	Pollution Indicative Species Biomass (%) 0.76
Biomass (g/m2)	3.17 3	Pollution Sensitive Species Abundance (%) 57.99
Carnivore-Omnivore Abundance (%)	1.37	Pollution Sensitive Species Biomass (%) 83.13 5
Deep Deposit Feeder Abundance (%)	5.02	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	520	0.03600
Heteromastus filiformis	160	0.19600
Leptocheirus plumulosus	1400	0.24400
Littoridinops tenuipes (Epi)	3240	0.17600
Macoma mitchelli	80	0.00800
Marenzelleria viridis	2720	0.75200
Melita nitida (Epi)	40	0.00400
Mytilopsis leucophaeata (Epi)	1200	0.30000
Neanthes succinea	120	0.05600
Polydora cornuta	160	0.00200
Rangia cuneata	2360	1.88000
Streblospio benedicti	1480	0.02400
Tubificoides spp.	280	0.00400
Total Abundance w/ Epi.	13760	
Total Abundance w/o Epi.	8760	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		3.68200
Total Biomass w/o Epi.		3.16600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 043		Rep: 02
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:15:31
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.40	Temperature (C): 27.57
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 3.48	Total Carbon (%): 0.12
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.26 3	Pollution Indicative Species Abundance (%) 15.82 3
Abundance (#/m2)	7080 1	Pollution Indicative Species Biomass (%) 0.22
Biomass (g/m2)	5.54 5	Pollution Sensitive Species Abundance (%) 59.32
Carnivore-Omnivore Abundance (%)	1.69	Pollution Sensitive Species Biomass (%) 88.92 5
Deep Deposit Feeder Abundance (%)	0.56	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	160	0.00800
Carinoma tremaphoros	40	0.03600
Geukensia demissa (Epi)	40	0.00200
Heteromastus filiformis	40	0.36800
Leptocheirus plumulosus	1320	0.15200
Littoridinops tenuipes (Epi)	960	0.06800
Macoma mitchelli	200	0.00800
Marenzelleria viridis	2600	2.64800
Melita nitida (Epi)	40	0.00200
Mytilopsis leucophaeata (Epi)	360	0.26000
Neanthes succinea	80	0.03600
Polydora cornuta	80	0.00200
Rangia cuneata	1600	2.28000
Streblospio benedicti	1120	0.01200
Stylochus ellipticus (Epi)	40	0.00200
Total Abundance w/ Epi.	8680	
Total Abundance w/o Epi.	7080	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		5.88400
Total Biomass w/o Epi.		5.54200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 043		Rep: 03
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:15:31
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.40	Temperature (C): 27.57
Dissolved Oxygen (mg/l): 4.9	Sediment Silt-Clay (%): 3.48	Total Carbon (%): 0.12
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.72 5	Pollution Indicative Species Abundance (%) 20.55 1
Abundance (#/m2)	8760 1	Pollution Indicative Species Biomass (%) 0.43
Biomass (g/m2)	5.63 5	Pollution Sensitive Species Abundance (%) 47.03
Carnivore-Omnivore Abundance (%)	2.28	Pollution Sensitive Species Biomass (%) 86.56 5
Deep Deposit Feeder Abundance (%)	10.96	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	80	0.00200
Chiridotea almyra	80	0.02400
Chironomidae		0.00200
Cryptochironomus spp.	80	
Cyathura polita	40	0.10000
Heteromastus filiformis	360	0.48400
Leptocheirus plumulosus	1520	0.20400
Littoridinops tenuipes (Epi)	3240	0.22800
Macoma mitchelli	200	0.00800
Marenzelleria viridis	2200	1.03200
Mediomastus ambiseta	80	0.00200
Mytilopsis leucophaeata (Epi)	600	0.08800
Polydora cornuta	80	0.00200
Rangia cuneata	1800	3.73600
Streblospio benedicti	1800	0.02400
Stylochus ellipticus (Epi)	40	0.00400
Tubificoides spp.	520	0.00800
Total Abundance w/ Epi.	12720	
Total Abundance w/o Epi.	8760	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		5.94800
Total Biomass w/o Epi.		5.62600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 044		Rep: 01
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:43:31
BOTTOM ENVIRONMENT		
Depth (m): 13.0	Salinity (ppt): 7.05	Temperature (C): 27.16
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 89.69	Total Carbon (%): 2.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.20	Condition: Degraded	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	0.92 1	Pollution Indicative Species Abundance (%) 0.00 5
Abundance (#/m2)	135 1	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	0.18 1	Pollution Sensitive Species Abundance (%) 66.67
Carnivore-Omnivore Abundance (%)	33.33	Pollution Sensitive Species Biomass (%) 69.23 3
Deep Deposit Feeder Abundance (%)	0.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.05400
Macoma balthica	90	0.12150
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.		0.17550
Total Biomass w/o Epi.		0.17550

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 044		Rep: 02
Watershed: Potomac River	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:43:31
BOTTOM ENVIRONMENT		
Depth (m): 13.0	Salinity (ppt): 7.05	Temperature (C): 27.16
Dissolved Oxygen (mg/l): 1.8	Sediment Silt-Clay (%): 89.69	Total Carbon (%): 2.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.00	Condition: Severely Degr.	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	0.92 1	Pollution Indicative Species Abundance (%) 33.33 1
Abundance (#/m2)	135 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 (%)	66.67	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Streblospio benedicti	45	0.00225
Tubificoides spp.	90	0.00225
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.		0.00450
Total Biomass w/o Epi.		0.00450

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 044		Rep: 03	
Watershed: Potomac River		Date: 26AUG03	
Gear: Wildco Box Corer		Time: 13:43:31	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 13.0		Salinity (ppt): 7.05	
Dissolved Oxygen (mg/l): 1.8		Sediment Silt-Clay (%): 89.69	
		Temperature (C): 27.16	
		Total Carbon (%): 2.13	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.20		Condition: Degraded	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	0.50	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	405	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.90	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	11.11		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
			Value
			Score
			5
			0.00
			88.89
			99.50
			3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA		Abundance (#/m2)	
		Biomass (g/m2)	
Apocorophium lacustre	(Epi)	45	0.00450
Carinoma tremaphoros		45	0.00450
Littoridinops tenuipes	(Epi)	45	0.00225
Macoma balthica		360	0.89550
Total Abundance w/ Epi.		495	
Total Abundance w/o Epi.		405	
Number of Taxa w/ Epi.		4	
Number of Taxa w/o Epi.		2	
Total Biomass w/ Epi.		0.90675	
Total Biomass w/o Epi.		0.90000	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 047		Rep: 01
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:41:18
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.67	Temperature (C): 27.94
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 7.20	Total Carbon (%): 0.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 4.20	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.06 3	Pollution Indicative Species Abundance (%) 2.78 5
Abundance (#/m2)	4320 3	Pollution Indicative Species Biomass (%) 0.15
Biomass (g/m2)	5.17 5	Pollution Sensitive Species Abundance (%) 63.89
Carnivore-Omnivore Abundance (%)	2.78	Pollution Sensitive Species Biomass (%) 93.81 5
Deep Deposit Feeder Abundance (%)	8.33	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	80	0.00800
Heteromastus filiformis	280	0.17200
Leptocheirus plumulosus	880	0.10000
Macoma balthica	40	2.38800
Macoma mitchelli	80	0.00800
Marenzelleria viridis	2400	1.24800
Neanthes succinea	40	0.01600
Rangia cuneata	320	1.21600
Streblospio benedicti	120	0.00800
Tubificoides spp.	80	0.00800
Total Abundance w/ Epi.	4320	
Total Abundance w/o Epi.	4320	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		5.17200
Total Biomass w/o Epi.		5.17200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 047		Rep: 02
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:41:18
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.67	Temperature (C): 27.94
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 7.20	Total Carbon (%): 0.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.99 5	Pollution Indicative Species Abundance (%) 14.42 3
Abundance (#/m2)	12480 1	Pollution Indicative Species Biomass (%) 0.01
Biomass (g/m2)	198.86 1	Pollution Sensitive Species Abundance (%) 38.78
Carnivore-Omnivore Abundance (%)	6.41	Pollution Sensitive Species Biomass (%) 98.77 5
Deep Deposit Feeder Abundance (%)	14.10	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	240	0.05600
Edotea triloba (Epi)	80	0.00200
Heteromastus filiformis	800	0.64400
Leptocheirus plumulosus	2120	0.25600
Macoma balthica	160	3.21600
Macoma mitchelli	1160	0.58400
Marenzelleria viridis	2080	1.35600
Micrura leidyi	40	0.40800
Mytilopsis leucophaeata (Epi)	40	0.00800
Neanthes succinea	520	0.46400
Rangia cuneata	2600	191.83600
Streblospio benedicti	1800	0.02400
Tubificoides spp.	960	0.01200
Total Abundance w/ Epi.	12600	
Total Abundance w/o Epi.	12480	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		198.86600
Total Biomass w/o Epi.		198.85600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 047		Rep: 03
Watershed: Morgantown Discharge	Habitat: Low Mesohaline	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 14:41:18
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 5.67	Temperature (C): 27.94
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 7.20	Total Carbon (%): 0.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.58 5	Pollution Indicative Species Abundance (%) 4.89 5
Abundance (#/m2)	7360 1	Pollution Indicative Species Biomass (%) 0.22
Biomass (g/m2)	3.64 3	Pollution Sensitive Species Abundance (%) 53.80
Carnivore-Omnivore Abundance (%)	6.52	Pollution Sensitive Species Biomass (%) 65.15 3
Deep Deposit Feeder Abundance (%)	10.33	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	80	0.00400
Carinoma tremaphoros	240	0.06400
Cyathura polita	40	0.00200
Edotea triloba (Epi)	240	0.00400
Heteromastus filiformis	680	0.86800
Leptocheirus plumulosus	1560	0.15600
Littoridinops tenuipes (Epi)	400	0.00800
Macoma mitchelli	280	0.03200
Marenzelleria viridis	2520	1.47600
Mytilopsis leucophaeata (Epi)	80	0.04400
Neanthes succinea	200	0.14000
Rangia cuneata	1400	0.89600
Streblospio benedicti	360	0.00800
Tubificoides spp.	80	0.00200
Total Abundance w/ Epi.	8160	
Total Abundance w/o Epi.	7360	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		3.70400
Total Biomass w/o Epi.		3.64400

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 051		Rep: 01
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 17:44:25
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 7.40	Temperature (C): 28.13
Dissolved Oxygen (mg/l): 10.4	Sediment Silt-Clay (%): 2.32	Total Carbon (%): 0.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.67	Condition: Marginal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.92 1	Pollution Indicative Species Abundance (%) 1.75 5
Abundance (#/m2)	2280 5	Pollution Indicative Species Biomass (%) 0.59
Biomass (g/m2)	2.03 3	Pollution Sensitive Species Abundance (%) 5.26 1
Carnivore-Omnivore Abundance (%)	5.26 1	Pollution Sensitive Species Biomass (%) 36.69
Deep Deposit Feeder Abundance (%)	8.77	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	40	0.00800
Heteromastus filiformis	200	0.05600
Leptocheirus plumulosus	880	0.16800
Macoma mitchelli	920	0.42400
Marenzelleria viridis	120	0.74400
Micrura leidyi	80	0.61600
Streblospio benedicti	40	0.01200
Total Abundance w/ Epi.	2280	
Total Abundance w/o Epi.	2280	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		2.02800
Total Biomass w/o Epi.		2.02800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 051		Rep: 02
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 17:44:25
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 7.40	Temperature (C): 28.13
Dissolved Oxygen (mg/l): 10.4	Sediment Silt-Clay (%): 2.32	Total Carbon (%): 0.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.67	Condition: Marginal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.24 1	Pollution Indicative Species Abundance (%) 2.67 5
Abundance (#/m2)	3000 3	Pollution Indicative Species Biomass (%) 22.48
Biomass (g/m2)	2.76 3	Pollution Sensitive Species Abundance (%) 12.00 3
Carnivore-Omnivore Abundance (%)	4.00 1	Pollution Sensitive Species Biomass (%) 18.42
Deep Deposit Feeder Abundance (%)	13.33	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	40	0.00200
Heteromastus filiformis	400	0.00400
Leptocheirus plumulosus	1200	0.09200
Macoma balthica	200	0.20000
Macoma mitchelli	840	1.08000
Marenzelleria viridis	160	0.30800
Micrura leidyi	80	0.45200
Streblospio benedicti	80	0.62000
Total Abundance w/ Epi.	3000	
Total Abundance w/o Epi.	3000	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		2.75800
Total Biomass w/o Epi.		2.75800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 051		Rep: 03
Watershed: Potomac River	Habitat: High Mesohaline Sand	Date: 26AUG03
Gear: Modified Box Corer	Sampled Area: 0.025 sq.m	Time: 17:44:25
BOTTOM ENVIRONMENT		
Depth (m): 2.0	Salinity (ppt): 7.40	Temperature (C): 28.13
Dissolved Oxygen (mg/l): 10.4	Sediment Silt-Clay (%): 2.32	Total Carbon (%): 0.13
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.04 1	Pollution Indicative Species Abundance (%) 0.00 5
Abundance (#/m2)	2160 5	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	4.04 5	Pollution Sensitive Species Abundance (%) 9.26 1
Carnivore-Omnivore Abundance (%)	3.70 1	Pollution Sensitive Species Biomass (%) 14.40
Deep Deposit Feeder Abundance (%)	12.96	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycera dibranchiata	40	2.54000
Heteromastus filiformis	280	0.15600
Leptocheirus plumulosus	760	0.18400
Macoma mitchelli	840	0.55600
Marenzelleria viridis	160	0.58000
Micrura leidyi	40	0.02400
Rangia cuneata	40	0.00200
Total Abundance w/ Epi.	2160	
Total Abundance w/o Epi.	2160	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		4.04200
Total Biomass w/o Epi.		4.04200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 052		Rep: 01	
Watershed: Potomac River		Date: 26AUG03	
Gear: Wildco Box Corer		Time: 17:20:08	
Habitat: High Mesohaline Mud			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 12.0		Salinity (ppt): 12.92	
Dissolved Oxygen (mg/l): 0.8		Sediment Silt-Clay (%): 95.49	
		Temperature (C): 25.51	
		Total Carbon (%): 2.82	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.67		Condition: Severely Degr.	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Leptocheirus plumulosus	45	0.02250	
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.		0.02250	
Total Biomass w/o Epi.		0.02250	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 052		Rep: 02
Watershed: Potomac River	Habitat: High Mesohaline Mud	Date: 26AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 17:20:08
BOTTOM ENVIRONMENT		
Depth (m): 12.0	Salinity (ppt): 12.92	Temperature (C): 25.51
Dissolved Oxygen (mg/l): 0.8	Sediment Silt-Clay (%): 95.49	Total Carbon (%): 2.82
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		0.00225
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.		0.00225
Total Biomass w/o Epi.		0.00225

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 052		Rep: 03	
Watershed: Potomac River		Date: 26AUG03	
Gear: Wildco Box Corer		Time: 17:20:08	
Habitat: High Mesohaline Mud			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 12.0		Salinity (ppt): 12.92	
Dissolved Oxygen (mg/l): 0.8		Sediment Silt-Clay (%): 95.49	
		Temperature (C): 25.51	
		Total Carbon (%): 2.82	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.67		Condition: Severely Degr.	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	100.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Tubificoides spp.	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 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 062		Rep: 01
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 16SEP03
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 10:54:01
BOTTOM ENVIRONMENT		
Depth (m): 5.0	Salinity (ppt): 2.52	Temperature (C): 23.52
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 92.51	Total Carbon (%): 3.75
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.80	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	1.84 3	Pollution Indicative Species Abundance (%) 8.33 5
Abundance (#/m2)	4800 3	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	2.25 3	Pollution Sensitive Species Abundance (%) 13.33
Carnivore-Omnivore Abundance (%)	1.67	Pollution Sensitive Species Biomass (%) 94.41 5
Deep Deposit Feeder Abundance (%)	70.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	200	0.01600
Boccardiella ligerica	80	0.00400
Chiridotea almyra	40	0.00800
Cyathura polita	40	0.00400
Edotea triloba (Epi)	80	0.01200
Gammarus daiberi (Epi)	240	0.08000
Leptocheirus plumulosus	480	0.06400
Marenzelleria viridis	600	2.12400
Oligochaeta		0.00200
Tubificidae imm w/o cap chaetae	400	
Tubificoides spp.	2960	0.03200
Total Abundance w/ Epi.	5120	
Total Abundance w/o Epi.	4800	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		2.34600
Total Biomass w/o Epi.		2.25400

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 062		Rep: 02
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 16SEP03
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 10:54:01
BOTTOM ENVIRONMENT		
Depth (m): 5.0	Salinity (ppt): 2.52	Temperature (C): 23.52
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 92.51	Total Carbon (%): 3.75
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 4.20	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.21 3	Pollution Indicative Species Abundance (%) 5.33 5
Abundance (#/m2)	3000 3	Pollution Indicative Species Biomass (%) 0.07
Biomass (g/m2)	5.53 5	Pollution Sensitive Species Abundance (%) 32.00
Carnivore-Omnivore Abundance (%)	5.33	Pollution Sensitive Species Biomass (%) 98.44 5
Deep Deposit Feeder Abundance (%)	52.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	80	0.00400
Apocorophium lacustre (Epi)	40	0.00200
Carinoma tremaphoros	40	0.01600
Coelotanypus spp.	40	0.00400
Cyathura polita	80	0.01200
Gammarus daiberi (Epi)	240	0.06400
Leptocheirus plumulosus	320	0.04000
Macoma balthica	40	2.38000
Marenzelleria viridis	760	2.65200
Oligochaeta		0.00200
Rangia cuneata	80	0.39600
Tubificidae imm w/o cap chaetae	120	
Tubificoides spp.	1440	0.02000
Total Abundance w/ Epi.	3280	
Total Abundance w/o Epi.	3000	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		5.59200
Total Biomass w/o Epi.		5.52600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 062		Rep: 03
Watershed: Lower Eastern Shore	Habitat: Low Mesohaline	Date: 16SEP03
Gear: Petite Ponar	Sampled Area: 0.025 sq.m	Time: 10:54:01
BOTTOM ENVIRONMENT		
Depth (m): 5.0	Salinity (ppt): 2.52	Temperature (C): 23.52
Dissolved Oxygen (mg/l): 6.5	Sediment Silt-Clay (%): 92.51	Total Carbon (%): 3.75
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	1.37 1	Pollution Indicative Species Abundance (%) 4.72 5
Abundance (#/m2)	5080 3	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	4.33 3	Pollution Sensitive Species Abundance (%) 25.98
Carnivore-Omnivore Abundance (%)	0.79	Pollution Sensitive Species Biomass (%) 98.01 5
Deep Deposit Feeder Abundance (%)	70.08	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	80	0.01200
Apocorophium lacustre (Epi)	40	0.00400
Boccardiella ligERICA	40	0.00200
Carinoma tremaphoros	40	0.00200
Gammarus daiberi (Epi)	120	0.01600
Leptocheirus plumulosus	40	0.02400
Marenzelleria viridis	1320	4.24000
Oligochaeta		0.00200
Tubificidae imm w/o cap chaetae	240	
Tubificoides spp.	3320	0.04400
Total Abundance w/ Epi.	5240	
Total Abundance w/o Epi.	5080	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		4.34600
Total Biomass w/o Epi.		4.32600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 064		Rep: 01
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 28AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:16:54
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 7.38	Temperature (C): 27.49
Dissolved Oxygen (mg/l): 5.3	Sediment Silt-Clay (%): 69.44	Total Carbon (%): 1.89
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.37 1	Pollution Indicative Species Abundance (%) 1.11
Abundance (#/m2)	4050 3	Pollution Indicative Species Biomass (%) 0.25 5
Biomass (g/m2)	1.77 3	Pollution Sensitive Species Abundance (%) 15.56
Carnivore-Omnivore Abundance (%)	4.44 1	Pollution Sensitive Species Biomass (%) 64.72 5
Deep Deposit Feeder Abundance (%)	4.44	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	90	0.01350
Leptocheirus plumulosus	3105	0.59850
Macoma balthica	270	0.56250
Marenzelleria viridis	45	0.10800
Neanthes succinea	90	0.01800
Rangia cuneata	225	0.46350
Streblospio benedicti	45	0.00450
Tubificoides spp.	180	0.00450
Total Abundance w/ Epi.	4050	
Total Abundance w/o Epi.	4050	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		1.77300
Total Biomass w/o Epi.		1.77300

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 064		Rep: 02
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 28AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:16:54
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 7.38	Temperature (C): 27.49
Dissolved Oxygen (mg/l): 5.3	Sediment Silt-Clay (%): 69.44	Total Carbon (%): 1.89
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.00	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.69 1	Pollution Indicative Species Abundance (%) 6.40
Abundance (#/m2)	5625 1	Pollution Indicative Species Biomass (%) 3.30 5
Biomass (g/m2)	1.36 3	Pollution Sensitive Species Abundance (%) 4.80
Carnivore-Omnivore Abundance (%)	9.60 1	Pollution Sensitive Species Biomass (%) 18.48 1
Deep Deposit Feeder Abundance (%)	4.80	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	135	0.01350
Carinoma tremaphoros	45	0.06750
Eteone heteropoda	90	0.00450
Leptocheirus plumulosus	4095	0.81900
Leucon americanus	135	0.00900
Macoma balthica	135	0.23850
Macoma mitchelli	180	0.02700
Mulinia lateralis	45	0.02700
Neanthes succinea	270	0.12150
Streblospio benedicti	225	0.01350
Tubificoides spp.	270	0.02250
Total Abundance w/ Epi.	5625	
Total Abundance w/o Epi.	5625	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.36350
Total Biomass w/o Epi.		1.36350

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 064	Rep: 03	
Watershed: Choptank River	Habitat: High Mesohaline Mud	Date: 28AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 12:16:54
BOTTOM ENVIRONMENT		
Depth (m): 9.0	Salinity (ppt): 7.38	Temperature (C): 27.49
Dissolved Oxygen (mg/l): 5.3	Sediment Silt-Clay (%): 69.44	Total Carbon (%): 1.89
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.48 1	Pollution Indicative Species Abundance (%) 10.53
Abundance (#/m2)	5985 1	Pollution Indicative Species Biomass (%) 1.34 5
Biomass (g/m2)	1.67 3	Pollution Sensitive Species Abundance (%) 6.02
Carnivore-Omnivore Abundance (%)	8.27 1	Pollution Sensitive Species Biomass (%) 38.17 3
Deep Deposit Feeder Abundance (%)	6.02	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	180	0.06300
Leptocheirus plumulosus	4320	0.78750
Macoma balthica	135	0.43200
Marenzelleria viridis	45	0.14400
Neanthes succinea	315	0.20700
Streblospio benedicti	630	0.02250
Tubificoides spp.	360	0.01800
Total Abundance w/ Epi.	5985	
Total Abundance w/o Epi.	5985	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		1.67400
Total Biomass w/o Epi.		1.67400

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 066		Rep: 01
Watershed: Choptank River	Habitat: Oligohaline	Date: 10SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:04:46
BOTTOM ENVIRONMENT		
Depth (m): 2.4	Salinity (ppt): 0.18	Temperature (C): 24.24
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 86.13	Total Carbon (%): 4.24
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.33	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	3.03	Oligohaline Pollution Indicative Spp. Abund. 71.43 3
Abundance (#/m2)	1575 5	Tolerance Score 8.49 3
Deep Deposit Feeder Abundance (%)	34.29	Oligohaline Pollution Sensitive Spp. Abund. 17.14 3
Carnivore-Omnivore Abundance (%)	28.57 3	Tanypodinae/Chironomidae Abundance Ratio 33.33 3
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.08100
Chironomidae		0.00225
Chironomus spp.	180	
Coelotanypus spp.	135	0.01800
Cryptochironomus spp.	90	
Gammarus spp. (Epi)	90	0.01350
Leptocheirus plumulosus	270	0.06750
Limnodrilus hoffmeisteri	45	
Marenzelleria viridis	270	0.64800
Oligochaeta		0.00225
Rangia cuneata	45	47.25000
Tubificidae imm w/o cap chaetae *	180	
Tubificoides spp.	315	0.00900
Total Abundance w/ Epi.	1665	
Total Abundance w/o Epi.	1575	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		48.09150
Total Biomass w/o Epi.		48.07800

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 066		Rep: 02
Watershed: Choptank River	Habitat: Oligohaline	Date: 10SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:04:46
BOTTOM ENVIRONMENT		
Depth (m): 2.4	Salinity (ppt): 0.18	Temperature (C): 24.24
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 86.13	Total Carbon (%): 4.24
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.67	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.69	Oligohaline Pollution Indicative Spp. Abund. 66.67 3
Abundance (#/m2)	1080 5	Tolerance Score 7.56 3
Deep Deposit Feeder Abundance (%)	33.33	Oligohaline Pollution Sensitive Spp. Abund. 25.00 3
Carnivore-Omnivore Abundance (%)	37.50 5	Tanypodinae/Chironomidae Abundance Ratio 62.50 3
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus pigueti	45	
Chaoborus spp.	45	0.00450
Chironomidae		0.00225
Chironomus spp.	135	
Coelotanypus spp.	225	0.11700
Gammarus spp. (Epi)	45	0.00900
Limnodrilus hoffmeisteri	90	
Littoridinops tenuipes (Epi)	180	0.02700
Marenzelleria viridis	270	0.83250
Oligochaeta		0.00225
Rangia cuneata	45	38.02500
Tubificoides spp.	225	0.00225
Total Abundance w/ Epi.	1305	
Total Abundance w/o Epi.	1080	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		39.02175
Total Biomass w/o Epi.		38.98575

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 066		Rep: 03		
Watershed: Choptank River	Habitat: Oligohaline	Date: 10SEP03		
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:04:46		
BOTTOM ENVIRONMENT				
Depth (m): 2.4	Salinity (ppt): 0.18	Temperature (C): 24.24		
Dissolved Oxygen (mg/l): 6.7	Sediment Silt-Clay (%): 86.13	Total Carbon (%): 4.24		
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score: 2.67	Condition: Marginal	# Attributes Scored: 6		
	Value Score	Value Score		
Shannon-Wiener Index	2.46	Oligohaline Pollution Indicative Spp. Abund.	81.82	3
Abundance (#/m2)	990	Tolerance Score	9.80	1
Deep Deposit Feeder Abundance (%)	72.73	Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	13.64	Tanypodinae/Chironomidae Abundance Ratio	0.00	5
BENTHIC ABUNDANCE (per sq. meter)				
TAXA	Abundance (#/m2)	Biomass (g/m2)		
Chironomidae		0.26100		
Chironomus spp.	135			
Dero spp.	90			
Gammarus daiberi (Epi)	90	0.01800		
Hobsonia florida	45	0.00450		
Leptocheirus plumulosus	90	0.01800		
Mediomastus ambiseta	90	0.28350		
Oligochaeta		0.00225		
Pristinella jenkiniae	45			
Tubificidae imm w/o cap chaetae	450			
Tubificoides spp.	45	0.00225		
Total Abundance w/ Epi.	1080			
Total Abundance w/o Epi.	990			
Number of Taxa w/ Epi.	9			
Number of Taxa w/o Epi.	8			
Total Biomass w/ Epi.		0.58950		
Total Biomass w/o Epi.		0.57150		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 068		Rep: 01
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 10SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:31:05
BOTTOM ENVIRONMENT		
Depth (m): 5.6	Salinity (ppt): 8.12	Temperature (C): 24.73
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 61.13	Total Carbon (%): 2.11
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.92 5	Pollution Indicative Species Abundance (%) 21.67 1
Abundance (#/m2)	5400 3	Pollution Indicative Species Biomass (%) 0.04
Biomass (g/m2)	23.08 3	Pollution Sensitive Species Abundance (%) 41.67
Carnivore-Omnivore Abundance (%)	6.67	Pollution Sensitive Species Biomass (%) 98.23 5
Deep Deposit Feeder Abundance (%)	30.83	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	180	0.07650
Chiridotea almyra	45	0.00450
Cyathura polita	135	0.15750
Heteromastus filiformis	90	0.29250
Leptocheirus plumulosus	360	0.01800
Macoma balthica	585	21.18600
Macoma mitchelli	90	0.00225
Marenzelleria viridis	90	0.69300
Melita nitida (Epi)	90	0.00225
Oligochaeta		0.00225
Rangia cuneata	1440	0.63450
Streblospio benedicti	810	0.00900
Tubificidae imm w/o cap chaetae	360	
Tubificoides spp.	1215	0.00450
Total Abundance w/ Epi.	5490	
Total Abundance w/o Epi.	5400	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		23.08275
Total Biomass w/o Epi.		23.08050

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 068		Rep: 02
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 10SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:31:05
BOTTOM ENVIRONMENT		
Depth (m): 5.6	Salinity (ppt): 8.12	Temperature (C): 24.73
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 61.13	Total Carbon (%): 2.11
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.54 5	Pollution Indicative Species Abundance (%) 37.83 1
Abundance (#/m2)	13680 1	Pollution Indicative Species Biomass (%) 0.59
Biomass (g/m2)	13.71 3	Pollution Sensitive Species Abundance (%) 23.36
Carnivore-Omnivore Abundance (%)	5.92	Pollution Sensitive Species Biomass (%) 93.24 5
Deep Deposit Feeder Abundance (%)	38.16	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00900
Carinoma tremaphoros	90	0.01800
Chiridotea almyra	45	0.01350
Chironomidae		0.00225
Coelotanypus spp.	45	0.01350
Cyathura polita	450	0.46350
Edwardsia elegans	135	0.00900
Heteromastus filiformis	90	0.29700
Leptocheirus plumulosus	135	0.00450
Macoma balthica	360	10.26450
Macoma mitchelli	315	0.43650
Marenzelleria viridis	180	0.58500
Oligochaeta		0.00225
Procladius spp.	45	
Rangia cuneata	2205	1.46700
Streblospio benedicti	4410	0.06750
Tubificidae imm w/o cap chaetae	720	
Tubificoides spp.	4410	0.05400
Total Abundance w/ Epi.	13680	
Total Abundance w/o Epi.	13680	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	16	
Total Biomass w/ Epi.		13.70700
Total Biomass w/o Epi.		13.70700

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 068		Rep: 03
Watershed: Upper Eastern Shore	Habitat: Low Mesohaline	Date: 10SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 10:31:05
BOTTOM ENVIRONMENT		
Depth (m): 5.6	Salinity (ppt): 8.12	Temperature (C): 24.73
Dissolved Oxygen (mg/l): 4.6	Sediment Silt-Clay (%): 61.13	Total Carbon (%): 2.11
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.45 3	Pollution Indicative Species Abundance (%) 16.15 3
Abundance (#/m2)	13095 1	Pollution Indicative Species Biomass (%) 0.12
Biomass (g/m2)	21.31 3	Pollution Sensitive Species Abundance (%) 23.37
Carnivore-Omnivore Abundance (%)	5.84	Pollution Sensitive Species Biomass (%) 91.45 5
Deep Deposit Feeder Abundance (%)	51.89	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.02250
Chiridotea almyra	90	0.00900
Cyathura polita	450	0.07200
Edotea triloba (Epi)	45	0.01350
Edwardsia elegans	90	0.00225
Eteone heteropoda	45	0.00225
Heteromastus filiformis	180	0.17100
Leptocheirus plumulosus	855	0.05850
Macoma balthica	405	18.18450
Macoma mitchelli	270	0.00225
Marenzelleria viridis	90	0.48150
Melita nitida (Epi)	450	0.01800
Neanthes succinea	45	1.47150
Oligochaeta		0.00225
Rangia cuneata	2115	0.75150
Streblospio benedicti	1800	0.02250
Tubificidae imm w/o cap chaetae	270	
Tubificoides spp.	6345	0.05850

BENTHIC ABUNDANCE (per sq. meter) con't		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Total Abundance w/ Epi.	13590	
Total Abundance w/o Epi.	13095	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		21.34350
Total Biomass w/o Epi.		21.31200

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 071		Rep: 01	
Watershed: Patuxent River		Date: 29AUG03	
Gear: Wildco Box Corer		Time: 11:19:23	
Habitat: High Mesohaline Mud			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 13.6		Salinity (ppt): 11.95	
Dissolved Oxygen (mg/l): 4.0		Sediment Silt-Clay (%): 88.94	
		Temperature (C): 27.05	
		Total Carbon (%): 3.85	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.67		Condition: Severely Degr.	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	1.36	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	450	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	50.00	5	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Chironomidae		0.00225	
Chironomus spp.	225		
Macoma mitchelli	180	0.00225	
Streblospio benedicti	45	0.00450	
Total Abundance w/ Epi.	450		
Total Abundance w/o Epi.	450		
Number of Taxa w/ Epi.	3		
Number of Taxa w/o Epi.	3		
Total Biomass w/ Epi.		0.00900	
Total Biomass w/o Epi.		0.00900	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 071		Rep: 02	
Watershed: Patuxent River		Date: 29AUG03	
Gear: Wildco Box Corer		Time: 11:19:23	
Habitat: High Mesohaline Mud			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 13.6		Salinity (ppt): 11.95	
Dissolved Oxygen (mg/l): 4.0		Sediment Silt-Clay (%): 88.94	
		Temperature (C): 27.05	
		Total Carbon (%): 3.85	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.33		Condition: Degraded	
		# Attributes Scored: 6	
	Value	Score	
Shannon-Wiener Index	0.81	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	180	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	25.00	5	Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Chironomidae		0.00225	
Chironomus spp.	45		
Macoma mitchelli	135	0.00225	
Total Abundance w/ Epi.	180		
Total Abundance w/o Epi.	180		
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 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 071		Rep: 03
Watershed: Patuxent River	Habitat: High Mesohaline Mud	Date: 29AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:19:23
BOTTOM ENVIRONMENT		
Depth (m): 13.6	Salinity (ppt): 11.95	Temperature (C): 27.05
Dissolved Oxygen (mg/l): 4.0	Sediment Silt-Clay (%): 88.94	Total Carbon (%): 3.85
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.67	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.12 3	Pollution Indicative Species Abundance (%) 50.00
Abundance (#/m2)	450 1	Pollution Indicative Species Biomass (%) 40.00 1
Biomass (g/m2)	0.01 1	Pollution Sensitive Species Abundance (%) 0.00
Carnivore-Omnivore Abundance (%)	20.00 3	Pollution Sensitive Species Biomass (%) 0.00 1
Deep Deposit Feeder Abundance (%)	10.00	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00225
Chironomus spp.	90	
Macoma mitchelli	180	0.00225
Paraprionospio pinnata	45	0.00225
Streblospio benedicti	90	0.00225
Tubificoides spp.	45	0.00225
Total Abundance w/ Epi.	450	
Total Abundance w/o Epi.	450	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.01125
Total Biomass w/o Epi.		0.01125

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 074		Rep: 01
Watershed: Chalk Point Discharge	Habitat: Low Mesohaline	Date: 29AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:40:08
BOTTOM ENVIRONMENT		
Depth (m): 2.5	Salinity (ppt): 6.37	Temperature (C): 29.34
Dissolved Oxygen (mg/l): 6.6	Sediment Silt-Clay (%): 91.59	Total Carbon (%): 3.4
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.40	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	1.63 1	Pollution Indicative Species Abundance (%) 4.62 5
Abundance (#/m2)	2925 3	Pollution Indicative Species Biomass (%) 0.05
Biomass (g/m2)	14.18 3	Pollution Sensitive Species Abundance (%) 46.15
Carnivore-Omnivore Abundance (%)	3.08	Pollution Sensitive Species Biomass (%) 93.37 5
Deep Deposit Feeder Abundance (%)	43.08	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.00900
Coelotanypus spp.	45	0.00450
Leptocheirus plumulosus	45	0.00450
Macoma balthica	1350	13.24350
Macoma mitchelli	90	0.91800
Streblospio benedicti	90	0.00225
Tubificoides spp.	1260	0.00225
Total Abundance w/ Epi.	2925	
Total Abundance w/o Epi.	2925	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		14.18400
Total Biomass w/o Epi.		14.18400

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Watershed: Chalk Point Discharge		Station: 074	Rep: 02
Gear: Wildco Box Corer		Habitat: Low Mesohaline	Date: 29AUG03
		Sampled Area: 0.022 sq.m	Time: 8:40:08
BOTTOM ENVIRONMENT			
Depth (m): 2.5	Salinity (ppt): 6.37	Temperature (C): 29.34	
Dissolved Oxygen (mg/l): 6.6	Sediment Silt-Clay (%): 91.59	Total Carbon (%): 3.4	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 2.60	Condition: Degraded		# Attributes Scored: 5
	Value	Score	Value Score
Shannon-Wiener Index	1.34	1	Pollution Indicative Species Abundance (%) 4.83 5
Abundance (#/m2)	6525	1	Pollution Indicative Species Biomass (%) 0.01
Biomass (g/m2)	46.90	1	Pollution Sensitive Species Abundance (%) 24.83
Carnivore-Omnivore Abundance (%)	2.07		Pollution Sensitive Species Biomass (%) 99.89 5
Deep Deposit Feeder Abundance (%)	71.72		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Apocorophium lacustre (Epi)	45		0.00450
Aulodrilus pigueti	45		
Coelotanypus spp.	90		0.00450
Macoma balthica	1485		46.64700
Marenzelleria viridis	90		0.06750
Neanthes succinea	45		0.00225
Oligochaeta			0.00225
Rangia cuneata	45		0.13500
Streblospio benedicti	90		0.00225
Tubificidae imm w/o cap chaetae	90		
Tubificoides spp.	4545		0.04050
Total Abundance w/ Epi.	6570		
Total Abundance w/o Epi.	6525		
Number of Taxa w/ Epi.	10		
Number of Taxa w/o Epi.	9		
Total Biomass w/ Epi.			46.90575
Total Biomass w/o Epi.			46.90125

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 074		Rep: 03	
Watershed: Chalk Point Discharge		Date: 29AUG03	
Gear: Wildco Box Corer		Time: 8:40:08	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 2.5		Salinity (ppt): 6.37	
Dissolved Oxygen (mg/l): 6.6		Sediment Silt-Clay (%): 91.59	
		Temperature (C): 29.34	
		Total Carbon (%): 3.4	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 3.00		Condition: Meets Goal	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	1.30	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	4500	3	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	37.39	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	1.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	62.00		
			Value
			Score
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Apocorophium lacustre (Epi)	45	0.00225	
Coelotanypus spp.	45	0.00225	
Macoma balthica	1440	36.94950	
Macoma mitchelli	45	0.34650	
Marenzelleria viridis	45	0.06750	
Streblospio benedicti	135	0.00450	
Tubificoides spp.	2790	0.02250	
Total Abundance w/ Epi.	4545		
Total Abundance w/o Epi.	4500		
Number of Taxa w/ Epi.	7		
Number of Taxa w/o Epi.	6		
Total Biomass w/ Epi.		37.39500	
Total Biomass w/o Epi.		37.39275	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 077		Rep: 01
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 29AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:12:16
BOTTOM ENVIRONMENT		
Depth (m): 3.5	Salinity (ppt): 3.54	Temperature (C): 29.67
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 95.21	Total Carbon (%): 3.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 4.20	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.56 5	Pollution Indicative Species Abundance (%) 13.16 3
Abundance (#/m2)	1710 5	Pollution Indicative Species Biomass (%) 0.21
Biomass (g/m2)	14.73 3	Pollution Sensitive Species Abundance (%) 28.95
Carnivore-Omnivore Abundance (%)	23.68	Pollution Sensitive Species Biomass (%) 98.92 5
Deep Deposit Feeder Abundance (%)	5.26	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	90	0.00900
Chironomidae		0.00225
Coelotanypus spp.	180	0.02700
Cyathura polita	45	0.00450
Edotea triloba (Epi)	90	0.02700
Gammarus spp. (Epi)	405	0.03150
Leptocheirus plumulosus	720	0.12150
Macoma balthica	45	3.56400
Marenzelleria viridis	135	0.26100
Procladius spp.	180	
Rangia cuneata	270	10.73700
Streblospio benedicti	45	0.00450
Tubificoides spp.	90	0.00450
Total Abundance w/ Epi.	2295	
Total Abundance w/o Epi.	1710	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		14.79375
Total Biomass w/o Epi.		14.72625

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 077		Rep: 02
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 29AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:12:16
BOTTOM ENVIRONMENT		
Depth (m): 3.5	Salinity (ppt): 3.54	Temperature (C): 29.67
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 95.21	Total Carbon (%): 3.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.80	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.84 5	Pollution Indicative Species Abundance (%) 12.22 3
Abundance (#/m2)	4050 3	Pollution Indicative Species Biomass (%) 0.10
Biomass (g/m2)	4.51 3	Pollution Sensitive Species Abundance (%) 54.44
Carnivore-Omnivore Abundance (%)	12.22	Pollution Sensitive Species Biomass (%) 96.71 5
Deep Deposit Feeder Abundance (%)	8.89	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	135	0.01800
Boccardiella ligERICA	315	0.00450
Chironomidae		0.00225
Coelotanypus spp.	90	0.00225
Cryptochironomus spp.	45	
Cyathura polita	315	0.03600
Edotea triloba (Epi)	45	0.00450
Gammarus daiberi (Epi)	990	0.14400
Leptocheirus plumulosus	585	0.13500
Macoma balthica	45	2.25000
Marenzelleria viridis	450	0.27000
Procladius spp.	45	
Rangia cuneata	1395	1.80900
Streblospio benedicti	405	0.00225
Tubificoides spp.	360	0.00225
Total Abundance w/ Epi.	5220	
Total Abundance w/o Epi.	4050	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		4.68000
Total Biomass w/o Epi.		4.51350

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 077		Rep: 03
Watershed: Patuxent River	Habitat: Low Mesohaline	Date: 29AUG03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 8:12:16
BOTTOM ENVIRONMENT		
Depth (m): 3.5	Salinity (ppt): 3.54	Temperature (C): 29.67
Dissolved Oxygen (mg/l): 7.9	Sediment Silt-Clay (%): 95.21	Total Carbon (%): 3.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 4.20	Condition: Meets Goal	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	2.68 5	Pollution Indicative Species Abundance (%) 2.22 5
Abundance (#/m2)	2025 5	Pollution Indicative Species Biomass (%) 3.13
Biomass (g/m2)	1.29 3	Pollution Sensitive Species Abundance (%) 46.67
Carnivore-Omnivore Abundance (%)	20.00	Pollution Sensitive Species Biomass (%) 69.91 3
Deep Deposit Feeder Abundance (%)	17.78	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chiridotea almyra	45	0.01350
Chironomidae		0.00225
Cyathura polita	315	0.22950
Gammarus spp. (Epi)	45	0.01350
Leitoscoloplos spp.	45	0.04050
Leptocheirus plumulosus	585	0.11700
Macoma mitchelli	45	0.20700
Marenzelleria viridis	315	0.22050
Procladius spp.	45	
Rangia cuneata	315	0.45450
Tubificoides spp.	315	0.00900
Total Abundance w/ Epi.	2070	
Total Abundance w/o Epi.	2025	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		1.30725
Total Biomass w/o Epi.		1.29375

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 079		Rep: 01
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:07:18
BOTTOM ENVIRONMENT		
Depth (m): 1.0	Salinity (ppt): 0.13	Temperature (C): 22.59
Dissolved Oxygen (mg/l): 8.4	Sediment Silt-Clay (%): 73.41	Total Carbon (%): 5.09
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.00	Condition: Severely Degr.	# Attributes Scored: 3
	Value Score	Value Score
Shannon-Wiener Index	2.37	T.F. Pollution Indicative Spp. Abund. (%) 53.97 3
Abundance (#/m2)	8505 1	Tolerance Score 9.50 1
Deep Deposit Feeder Abundance (%)	93.65 3	Limnodrilus Abundance (%) 53.97
Carnivore-Omnivore Abundance (%)	5.29	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus limnobius	135	
Chironomidae		0.00225
Coelotanypus spp.	135	0.00450
Corbicula fluminea	45	0.20700
Cryptochironomus spp.	45	
Cryptotendipes spp.	45	
Dero spp.	270	
Gammarus spp. (Epi)	270	0.03150
Ilyodrilus templetoni	270	
Limnodrilus hoffmeisteri	540	
Mesosmittia spp.	45	
Oligochaeta		0.86454
Polypedilum halterale group	45	
Procladius spp.	180	
Quistadrilus multisetosus	675	
Tubificidae imm w cap chaetae *	2025	
Tubificidae imm w/o cap chaetae *	4050	
Total Abundance w/ Epi.	8775	
Total Abundance w/o Epi.	8505	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		1.10979
Total Biomass w/o Epi.		1.07829

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 079		Rep: 02
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:07:18
BOTTOM ENVIRONMENT		
Depth (m): 1.0	Salinity (ppt): 0.13	Temperature (C): 22.59
Dissolved Oxygen (mg/l): 8.4	Sediment Silt-Clay (%): 73.41	Total Carbon (%): 5.09
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.50	Condition: Severely Degr.	# Attributes Scored: 3
	Value	Score
Shannon-Wiener Index	1.96	
Abundance (#/m2)	5985	1
Deep Deposit Feeder Abundance (%)	95.49	1
Carnivore-Omnivore Abundance (%)	4.51	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus pigueti	135	
Branchiura sowerbyi	45	0.01350
Chironomidae		0.00225
Coelotanypus spp.	135	0.00225
Dero spp.	135	
Harnischia spp.	90	
Ilyodrilus templetoni	675	
Limnodrilus hoffmeisteri	135	
Oligochaeta		0.82007
Procladius spp.	45	
Quistadrilus multisetosus	135	
Tubificidae imm w cap chaetae *	405	
Tubificidae imm w/o cap chaetae *	3915	
Tubificoides spp.	135	0.00225
Total Abundance w/ Epi.	5985	
Total Abundance w/o Epi.	5985	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.84032
Total Biomass w/o Epi.		0.84032

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 079		Rep: 03
Watershed: Patuxent River	Habitat: Tidal Freshwater	Date: 11SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:07:18
BOTTOM ENVIRONMENT		
Depth (m): 1.0	Salinity (ppt): 0.13	Temperature (C): 22.59
Dissolved Oxygen (mg/l): 8.4	Sediment Silt-Clay (%): 73.41	Total Carbon (%): 5.09
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.50	Condition: Severely Degr.	# Attributes Scored: 3
	Value Score	Value Score
Shannon-Wiener Index	1.72	T.F. Pollution Indicative Spp. Abund. (%) 64.44 3
Abundance (#/m2)	6075 1	Tolerance Score 9.59 1
Deep Deposit Feeder Abundance (%)	97.78 1	Limnodrilus Abundance (%) 64.44
Carnivore-Omnivore Abundance (%)	2.22	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Aulodrilus limnobius	135	
Chironomidae		0.00225
Ilyodrilus templetoni	135	
Limnodrilus hoffmeisteri	270	
Oligochaeta		1.54303
Polypedilum halterale group	45	
Procladius spp.	90	
Quistadrilus multisetosus	270	
Tubificidae imm w cap chaetae *	1485	
Tubificidae imm w/o cap chaetae *	3645	
Total Abundance w/ Epi.	6075	
Total Abundance w/o Epi.	6075	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		1.54528
Total Biomass w/o Epi.		1.54528

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 201		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 13:10:57
BOTTOM ENVIRONMENT		
Depth (m): 4.0	Salinity (ppt): 4.99	Temperature (C): 26.96
Dissolved Oxygen (mg/l): 6.9	Sediment Silt-Clay (%): 76.94	Total Carbon (%): 4.46
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.40	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)	1485 3	Pollution Indicative Species Biomass (%) 100.00
Biomass (g/m2)	0.03 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	1485	0.02700
Total Abundance w/ Epi.	1485	
Total Abundance w/o Epi.	1485	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.02700
Total Biomass w/o Epi.		0.02700

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 201		Rep: 02	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 13:10:57	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 4.0		Salinity (ppt): 4.99	
Dissolved Oxygen (mg/l): 6.9		Sediment Silt-Clay (%): 76.94	
		Temperature (C): 26.96	
		Total Carbon (%): 4.46	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	90	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)	Biomass (g/m2)	
Streblospio benedicti	90	0.01350	
Total Abundance w/ Epi.	90		
Total Abundance w/o Epi.	90		
Number of Taxa w/ Epi.	1		
Number of Taxa w/o Epi.	1		
Total Biomass w/ Epi.		0.01350	
Total Biomass w/o Epi.		0.01350	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 201		Rep: 03	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 13:10:57	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 4.0		Salinity (ppt): 4.99	
Dissolved Oxygen (mg/l): 6.9		Sediment Silt-Clay (%): 76.94	
		Temperature (C): 26.96	
		Total Carbon (%): 4.46	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.80		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	1.92	3	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	270	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.11	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	33.33		80.39
			3
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Macoma balthica	45		0.09000
Rangia cuneata	45		0.00225
Streblospio benedicti	90		0.01350
Tubificoides spp.	90		0.00900
Total Abundance w/ Epi.	270		
Total Abundance w/o Epi.	270		
Number of Taxa w/ Epi.	4		
Number of Taxa w/o Epi.	4		
Total Biomass w/ Epi.			0.11475
Total Biomass w/o Epi.			0.11475

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 202		Rep: 01	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 11:20:56	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 6.0		Salinity (ppt): 8.37	
Dissolved Oxygen (mg/l): 3.4		Sediment Silt-Clay (%): 80.39	
		Temperature (C): 25.92	
		Total Carbon (%): 3.05	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	1.50	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	180	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.27	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	25.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		0.83
			1
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Chironomidae			0.00225
Chironomus spp.	45		
Rangia cuneata	45		0.00225
Streblospio benedicti	90		0.26550
Total Abundance w/ Epi.	180		
Total Abundance w/o Epi.	180		
Number of Taxa w/ Epi.	3		
Number of Taxa w/o Epi.	3		
Total Biomass w/ Epi.			0.27000
Total Biomass w/o Epi.			0.27000

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 202		Rep: 02
Watershed: Patapsco & Back Rivers	Habitat: Low Mesohaline	Date: 02SEP03
Gear: Wildco Box Corer	Sampled Area: 0.022 sq.m	Time: 11:20:56
BOTTOM ENVIRONMENT		
Depth (m): 6.0	Salinity (ppt): 8.37	Temperature (C): 25.92
Dissolved Oxygen (mg/l): 3.4	Sediment Silt-Clay (%): 80.39	Total Carbon (%): 3.05
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.80	Condition: Severely Degr.	# Attributes Scored: 5
	Value Score	Value Score
Shannon-Wiener Index	0.00 1	Pollution Indicative Species Abundance (%) 0.00 5
Abundance (#/m2)	45 1	Pollution Indicative Species Biomass (%) 0.00
Biomass (g/m2)	0.04 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)
Carinoma tremaphoros	45	0.03600
Mytilopsis leucophaeata (Epi)	45	0.00450
Total Abundance w/ Epi.	90	
Total Abundance w/o Epi.	45	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.04050
Total Biomass w/o Epi.		0.03600

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 202		Rep: 03	
Watershed: Patapsco & Back Rivers		Date: 02SEP03	
Gear: Wildco Box Corer		Time: 11:20:56	
Habitat: Low Mesohaline			
Sampled Area: 0.022 sq.m			
BOTTOM ENVIRONMENT			
Depth (m): 6.0		Salinity (ppt): 8.37	
Dissolved Oxygen (mg/l): 3.4		Sediment Silt-Clay (%): 80.39	
		Temperature (C): 25.92	
		Total Carbon (%): 3.05	
BENTHIC INDEX OF BIOTIC INTEGRITY			
B-IBI Score: 1.00		Condition: Severely Degr.	
		# Attributes Scored: 5	
	Value	Score	
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)
Deep Deposit Feeder Abundance (%)	0.00		
BENTHIC ABUNDANCE (per sq. meter)			
TAXA	Abundance (#/m2)		Biomass (g/m2)
Littoridinops tenuipes (Epi)	45		0.01350
Total Abundance w/ Epi.	45		
Total Abundance w/o Epi.			
Number of Taxa w/ Epi.	1		
Number of Taxa w/o Epi.			
Total Biomass w/ Epi.			0.01350
Total Biomass w/o Epi.			

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 203		Rep: 01
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 08SEP03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 11:09:52
BOTTOM ENVIRONMENT		
Depth (m): 1.8	Salinity (ppt): 0.91	Temperature (C): 24.25
Dissolved Oxygen (mg/l): 10.3	Sediment Silt-Clay (%): 92.21	Total Carbon (%): 2.91
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.00	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	0.88	Oligohaline Pollution Indicative Spp. Abund. 96.67 1
Abundance (#/m2)	682 5	Tolerance Score 9.41 1
Deep Deposit Feeder Abundance (%)	86.67	Oligohaline Pollution Sensitive Spp. Abund. 3.33 3
Carnivore-Omnivore Abundance (%)	10.00 1	Tanypodinae/Chironomidae Abundance Ratio 100.00 1
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Coelotanypus spp.	68	0.02272
Marenzelleria viridis	23	0.09542
Oligochaeta		0.04544
Tubificidae imm w/o cap chaetae	568	
Tubificoides spp.	23	0.01136
Total Abundance w/ Epi.	682	
Total Abundance w/o Epi.	682	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.17494
Total Biomass w/o Epi.		0.17494

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 203		Rep: 02		
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 08SEP03		
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 11:09:52		
BOTTOM ENVIRONMENT				
Depth (m): 1.8	Salinity (ppt): 0.91	Temperature (C): 24.25		
Dissolved Oxygen (mg/l): 10.3	Sediment Silt-Clay (%): 92.21	Total Carbon (%): 2.91		
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 6		
	Value Score	Value Score		
Shannon-Wiener Index	1.34	Oligohaline Pollution Indicative Spp. Abund.	91.18	3
Abundance (#/m2)	772	Tolerance Score	9.80	1
Deep Deposit Feeder Abundance (%)	82.35	Oligohaline Pollution Sensitive Spp. Abund.	8.82	3
Carnivore-Omnivore Abundance (%)	8.82	Tanypodinae/Chironomidae Abundance Ratio	0.00	5
BENTHIC ABUNDANCE (per sq. meter)				
TAXA	Abundance (#/m2)	Biomass (g/m2)		
Chironomidae		0.00114		
Chironomus spp.	68			
Limnodrilus hoffmeisteri	91			
Marenzelleria viridis	68	0.27946		
Oligochaeta		0.02272		
Tubificidae imm w/o cap chaetae *	545			
Total Abundance w/ Epi.	772			
Total Abundance w/o Epi.	772			
Number of Taxa w/ Epi.	3			
Number of Taxa w/o Epi.	3			
Total Biomass w/ Epi.		0.30331		
Total Biomass w/o Epi.		0.30331		

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 203		Rep: 03
Watershed: Patapsco & Back Rivers	Habitat: Oligohaline	Date: 08SEP03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 11:09:52
BOTTOM ENVIRONMENT		
Depth (m): 1.8	Salinity (ppt): 0.91	Temperature (C): 24.25
Dissolved Oxygen (mg/l): 10.3	Sediment Silt-Clay (%): 92.21	Total Carbon (%): 2.91
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 3.00	Condition: Meets Goal	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.73	Oligohaline Pollution Indicative Spp. Abund. 93.75 3
Abundance (#/m2)	1091 5	Tolerance Score 9.44 1
Deep Deposit Feeder Abundance (%)	70.83	Oligohaline Pollution Sensitive Spp. Abund. 6.25 3
Carnivore-Omnivore Abundance (%)	22.92 3	Tanypodinae/Chironomidae Abundance Ratio 36.36 3
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	159	
Coelotanypus spp.	91	0.02726
Marenzelleria viridis	68	0.23174
Oligochaeta		0.01363
Tubificidae imm w/o cap chaetae	659	
Tubificoides spp.	114	0.00454
Total Abundance w/ Epi.	1091	
Total Abundance w/o Epi.	1091	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.27832
Total Biomass w/o Epi.		0.27832

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 204		Rep: 01
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 04SEP03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 9:18:17
BOTTOM ENVIRONMENT		
Depth (m): 6.7	Salinity (ppt): 7.89	Temperature (C): 26.46
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 51.53	Total Carbon (%): 2.33
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 1.67	Condition: Severely Degr.	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.97 1	Pollution Indicative Species Abundance (%) 54.43
Abundance (#/m2)	3590 3	Pollution Indicative Species Biomass (%) 13.24 3
Biomass (g/m2)	0.15 1	Pollution Sensitive Species Abundance (%) 0.00
Carnivore-Omnivore Abundance (%)	6.96 1	Pollution Sensitive Species Biomass (%) 0.00 1
Deep Deposit Feeder Abundance (%)	30.38	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomidae pupae *	23	0.00454
Chironomus spp.	23	
Eteone heteropoda	114	0.00909
Hargeria rapax	23	0.00114
Heteromastus filiformis	68	0.00909
Macoma mitchelli	386	0.00909
Micrura leidyi	23	0.06362
Neanthes succinea	68	0.00682
Polydora cornuta	23	0.00682
Streblospio benedicti	1818	0.01136
Tubificoides spp.	1022	0.03181
Total Abundance w/ Epi.	3590	
Total Abundance w/o Epi.	3590	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.15450
Total Biomass w/o Epi.		0.15450

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 204		Rep: 02
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 04SEP03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 9:18:17
BOTTOM ENVIRONMENT		
Depth (m): 6.7	Salinity (ppt): 7.89	Temperature (C): 26.46
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 51.53	Total Carbon (%): 2.33
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	2.47 3	Pollution Indicative Species Abundance (%) 49.64
Abundance (#/m2)	3113 3	Pollution Indicative Species Biomass (%) 7.71 3
Biomass (g/m2)	0.43 1	Pollution Sensitive Species Abundance (%) 0.00
Carnivore-Omnivore Abundance (%)	16.06 3	Pollution Sensitive Species Biomass (%) 0.00 1
Deep Deposit Feeder Abundance (%)	19.71	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	23	0.09088
Chironomidae		0.00114
Chironomus spp.	204	
Eteone heteropoda	23	0.00114
Heteromastus filiformis	68	0.21811
Leptocheirus plumulosus	68	0.03635
Macoma mitchelli	409	0.02499
Neanthes succinea	273	0.08406
Polydora cornuta	204	0.00909
Streblospio benedicti	1318	0.03181
Tubificoides spp.	545	0.02045
Total Abundance w/ Epi.	3135	
Total Abundance w/o Epi.	3113	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.51802
Total Biomass w/o Epi.		0.42714

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) FIXED STATIONS

Station: 204		Rep: 03
Watershed: Lower Western Shore	Habitat: High Mesohaline Mud	Date: 04SEP03
Gear: Young Grab	Sampled Area: 0.044 sq.m	Time: 9:18:17
BOTTOM ENVIRONMENT		
Depth (m): 6.7	Salinity (ppt): 7.89	Temperature (C): 26.46
Dissolved Oxygen (mg/l): 5.7	Sediment Silt-Clay (%): 51.53	Total Carbon (%): 2.33
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score: 2.33	Condition: Degraded	# Attributes Scored: 6
	Value Score	Value Score
Shannon-Wiener Index	1.98 1	Pollution Indicative Species Abundance (%) 62.11
Abundance (#/m2)	2158 5	Pollution Indicative Species Biomass (%) 20.86 3
Biomass (g/m2)	0.16 1	Pollution Sensitive Species Abundance (%) 0.00
Carnivore-Omnivore Abundance (%)	14.74 3	Pollution Sensitive Species Biomass (%) 0.00 1
Deep Deposit Feeder Abundance (%)	23.16	
BENTHIC ABUNDANCE (per sq. meter)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	0.00114
Chironomidae		0.00114
Chironomus spp.	23	
Eteone heteropoda	68	0.00114
Heteromastus filiformis	68	0.10906
Leptocheirus plumulosus	23	0.00114
Macoma mitchelli	23	0.00114
Mytilopsis leucophaeata (Epi)	68	0.01818
Neanthes succinea	182	0.00227
Polydora cornuta	45	0.00227
Streblospio benedicti	1250	0.03181
Tubificoides spp.	432	0.00682
Total Abundance w/ Epi.	2227	
Total Abundance w/o Epi.	2158	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.17608
Total Biomass w/o Epi.		0.15790

DATA SUMMARY C

**BENTHIC ENVIRONMENT AND COMMUNITY
COMPOSITION AT THE MARYLAND BAY
RANDOM SITES: SUMMER 2003**

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10402	10403	10405	10406	10407
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	High Meso Sand	High Meso Sand	High Meso Sand	High Meso Mud	High Meso Mud
Date	08/25/03	08/25/03	08/25/03	08/25/03	08/25/03
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)	2.5	2.5	2.0	3.0	3.0
Salinity (ppt)	12.98	12.94	12.43	12.59	12.72
Temperature (C)	26.16	26.30	26.44	26.63	26.15
Dissolved Oxygen (mg/L)	7.8	8.0	8.2	8.0	7.8
Sediment Silt-Clay (%)	25.34	10.71	18.38	89.80	65.13
Total Carbon (%)	0.85	0.27	0.44	2.56	1.51
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.33	4.00	3.33	2.33	3.33
Condition	Meets Goal	Meets Goal	Meets Goal	Degraded	Meets Goal
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	3.26 5	2.94 3	2.22 1	2.78 3	3.08 5
Abundance (#/m2)	4430 3	1977 5	2545 5	1045 3	1977 5
Biomass (g/m2)	0.44 1	0.71 1	0.82 1	0.19 1	0.34 1
Pollution Indicative Spp Abund (%)	15.38 3	9.20 5	25.00 3	34.78 3	28.74 3
Pollution Indicative Spp Biom (%)	35.68 3	9.00 3	19.42 3	28.92 3	29.29 3
Pollution Sensitive Spp Abund (%)	55.38 5	57.47 5	61.61 5	17.39 3	33.33 3
Pollution Sensitive Spp Biom (%)	17.19 3	18.01 3	5.96 3	15.66 1	24.92 1
Carnivore-Omnivore Abundance (%)	25.64 3	66.67 5	66.07 5	10.87 3	35.63 5
Deep Deposit Feeder Abundance (%)	45.64 3	9.20 3	8.04 3	15.22 3	8.05 3

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10402	10403	10405	10406	10407
Acteocina canaliculata	477	954	1409	45	409
Ameroculodes species complex	23				
Ampelisca abdita	23		23		45
Ampelisca verrilli		91			
Amphiporus bioculatus	45				
Clymenella torquata					23
Edotea triloba (Epi.)	45	23			
Eteone heteropoda	45				
Gastropoda (Epi.)		23			
Glycera dibranchiata		68	68		
Glycinde solitaria	159	68	91	23	114
Haminoea solitaria	114				
Heteromastus filiformis	23	114	23		23
Leitoscoloplos spp.	68	45	136	68	
Leucon americanus	295			227	114
Loimia medusa	23	45	23	23	
Macoma mitchelli	204	91	114	227	364
Maldanidae	68				
Marenzelleria viridis		23			
Mediomastus ambiseta	1772		45	91	114
Melinna maculata	91				
Mulinia lateralis	454	136	500	273	500
Nassarius trivittatus			23		
Neanthes succinea	68	91	68	45	68
Nemertina		23			
Odostomia engonia (Epi.)	91				23
Paraehesione luteola	23				
Paraprionospio pinnata	91			23	45
Pectinaria gouldii	91	23			
Phoronis spp.	23	23			
Rictaxis punctostriatus	204	114	23		114
Saccoglossus kowalevskii	23				23
Spiophanes bombyx		23			
Streblospio benedicti	23				23
Tharyx sp. A Morris		45			
Total Abundance w/ Epifauna	4567	2022	2545	1045	1999
Total Abundance w/o Epifauna	4430	1977	2545	1045	1977
Number of Taxa w/ Epifauna	26	19	13	10	15
Number of Taxa w/o Epifauna	24	17	13	10	14

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10402	10403	10405	10406	10407
Acteocina canaliculata	0.0045	0.0250	0.0341	0.0114	0.0136
Ameroculodes species complex	0.0011				
Ampelisca abdita	0.0023		0.0011		0.0045
Ampelisca verrilli		0.0545			
Amphiporus bioculatus	0.0011				
Clymenella torquata					0.0114
Edotea triloba (Epi.)	0.0011	0.0068			
Eteone heteropoda	0.0045				
Gastropoda (Epi.)		0.0011			
Glycera dibranchiata		0.0659	0.0704		
Glycinde solitaria	0.0364	0.0159	0.0068	0.0011	0.0545
Haminoea solitaria	0.0068				
Heteromastus filiformis	0.0159	0.0341	0.0045		0.0250
Leitoscoloplos spp.	0.0227	0.0432	0.1022	0.0227	
Leucon americanus	0.0045			0.0091	0.0091
Loimia medusa	0.0045	0.0295	0.0068	0.0159	
Macoma mitchelli	0.0386	0.0500	0.0227	0.0818	0.0841
Maldanidae	0.0011				
Marenzelleria viridis		0.0295			
Mediomastus ambiseta	0.0273		0.0011	0.0011	0.0045
Melinna maculata	0.0841				
Mulinia lateralis	0.0159	0.0204	0.0568	0.0182	0.0318
Nassarius trivittatus			0.4567		
Neanthes succinea	0.0136	0.0659	0.0545	0.0136	0.0273
Nemertina		0.2158			
Odostomia engonia (Epi.)	0.0011				0.0045
Parahelesione luteola	0.0011				
Paraprionospio pinnata	0.1113			0.0136	0.0659
Pectinaria gouldii	0.0273	0.0114			
Phoronis spp.	0.0023	0.0204			
Rictaxis punctostriatus	0.0011	0.0114	0.0011		0.0023
Saccoglossus kowalevskii	0.0068				0.0023
Spiophanes bombyx		0.0068			
Streblospio benedicti	0.0011				0.0011
Tharyx sp. A Morris		0.0068			
Total Biomass w/ Epifauna	0.4385	0.7145	0.8191	0.1886	0.3419
Total Biomass w/o Epifauna	0.4362	0.7066	0.8191	0.1886	0.3374

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10408	10409	10410	10411	10413
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	High Meso Mud	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	08/25/03	08/25/03	08/25/03	09/16/03	08/28/03
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)	2.5	2.0	2.5	1.2	3.0
Salinity (ppt)	12.76	9.02	8.55	7.57	7.71
Temperature (C)	26.60	26.97	26.59	24.02	27.48
Dissolved Oxygen (mg/L)	8.3	7.5	7.5	7.8	6.0
Sediment Silt-Clay (%)	72.13	89.83	90.03	52.55	18.29
Total Carbon (%)	1.47	2.62	2.84	2.08	0.37
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.33	1.80	2.60	2.60	3.00
Condition	Meets Goal	Severely Degr.	Degraded	Degraded	Meets Goal
# Attributes Scored	6	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	3.01 5	1.64 1	1.84 3	1.82 3	2.87 5
Abundance (#/m2)	1431 3	21243 1	32285 1	16336 1	5725 3
Biomass (g/m2)	0.48 1	6.54 5	4.96 3	1.78 3	1.14 3
Pollution Indicative Spp Abund (%)	36.51	23.74 1	9.50 5	5.29 5	14.29 3
Pollution Indicative Spp Biom (%)	0.95 5	2.62	1.79	2.17	1.99
Pollution Sensitive Spp Abund (%)	28.57	3.42	2.81	1.95	17.06
Pollution Sensitive Spp Biom (%)	58.39 3	5.23 1	12.56 1	18.10 1	32.44 1
Carnivore-Omnivore Abundance (%)	12.70 3	4.17	4.01	5.29	23.02
Deep Deposit Feeder Abundance (%)	30.16	8.24	32.51	53.55	4.37

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10408	10409	10410	10411	10413
Acteocina canaliculata	45	477	545		863
Carinoma tremaphoros	23	45	91	68	
Cyathura polita		136	182	250	
Edotea triloba (Epi.)				250	91
Eteone heteropoda		23	68		91
Gemma gemma					659
Glycera dibranchiata	23				
Glycinderia solitaria	45				
Heteromastus filiformis	23	1091	1159	182	114
Hobsonia florida					45
Leitoscoloplos spp.	68	23			
Leptocheirus plumulosus		13450	17154	5544	1840
Leucon americanus	227				
Macoma balthica		45	182	23	
Macoma mitchelli	136		159	409	795
Marenzelleria viridis				45	114
Mediomastus ambiseta	318	68			
Micrura leidyi					45
Mulinia lateralis	386	23	23	23	
Neanthes succinea	45	204	409	545	318
Pectinaria gouldii	23				
Streblospio benedicti	68	4976	2976	682	704
Stylochus ellipticus (Epi.)		91		68	23
Tellinidae		114			
Tubificidae imm w/o cap chaetae				159	23
Tubificoides spp.		568	9338	8406	114
Total Abundance w/ Epifauna	1431	21334	32285	16654	5839
Total Abundance w/o Epifauna	1431	21243	32285	16336	5725
Number of Taxa w/ Epifauna	13	15	12	14	15
Number of Taxa w/o Epifauna	13	14	12	12	13

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10408	10409	10410	10411	10413
Acteocina canaliculata	0.0011	0.0704	0.0636		0.1568
Carinoma tremaphoros	0.0011	0.0704	0.0318	0.0341	
Cyathura polita		0.0011	0.0045	0.1363	
Edotea triloba (Epi.)				0.0227	0.0068
Eteone heteropoda		0.0011	0.0068		0.0045
Gemma gemma					0.1340
Glycera dibranchiata	0.0011				
Glycinde solitaria	0.1545				
Heteromastus filiformis	0.0386	0.1204	0.0704	0.0591	0.0114
Hobsonia florida					0.0136
Leitoscoloplos spp.	0.0011	0.0045			
Leptocheirus plumulosus		5.5959	3.4262	0.8679	0.3840
Leucon americanus	0.0932				
Macoma balthica		0.2499	0.5544	0.0204	
Macoma mitchelli	0.0136		0.4976	0.1886	0.1159
Marenzelleria viridis				0.1659	0.2136
Mediomastus ambiseta	0.1250	0.0204			
Micrura leidyi					0.0273
Mulinia lateralis	0.0023	0.0091	0.0182	0.0136	
Neanthes succinea	0.0182	0.2295	0.1522	0.1931	0.0545
Oligochaeta				0.0011	0.0011
Pectinaria gouldii	0.0295				
Streblospio benedicti	0.0011	0.1568	0.0636	0.0250	0.0182
Stylochus ellipticus (Epi.)		0.0068		0.0023	0.0045
Tellinidae		0.0011			
Tubificoides spp.		0.0045	0.0682	0.0772	0.0068
Total Biomass w/ Epifauna	0.4805	6.5422	4.9575	1.8074	1.1530
Total Biomass w/o Epifauna	0.4805	6.5354	4.9575	1.7824	1.1417

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10414		10415		10417		10418		10419	
Watershed	Eastern Tribs		Eastern Tribs		Eastern Tribs		Eastern Tribs		Eastern Tribs	
Habitat	Low Mesohaline		Low Mesohaline		High Meso Mud		High Meso Mud		High Meso Mud	
Date	08/28/03		08/28/03		09/03/03		09/03/03		09/03/03	
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)	6.0		3.0		13.6		10.5		11.9	
Salinity (ppt)	8.37		7.78		13.29		12.37		12.91	
Temperature (C)	27.45		27.79		25.04		25.22		25.13	
Dissolved Oxygen (mg/L)	6.0		7.8		2.4		2.5		2.6	
Sediment Silt-Clay (%)	10.08		15.52		90.52		88.18		92.39	
Total Carbon (%)	0.69		1.28		3.11		2.37		2.88	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.20		2.60		1.00		1.67		1.67	
Condition	Degraded		Degraded		Severely Degr.		Severely Degr.		Severely Degr.	
# Attributes Scored	5		5		6		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.70	5	3.03	5	0.00	1	0.00	1	0.00	1
Abundance (#/m2)	3340	3	9542	1	0	1	45	1	23	1
Biomass (g/m2)	0.93	1	3.57	3	0.00	1	0.00	1	0.00	1
Pollution Indicative Spp Abund (%)	34.69	1	21.67	1	100.00		0.00		0.00	
Pollution Indicative Spp Biom (%)	47.93		2.00		100.00	1	0.00	5	0.00	5
Pollution Sensitive Spp Abund (%)	2.04		3.57		0.00		0.00		0.00	
Pollution Sensitive Spp Biom (%)	1.95	1	49.79	3	0.00	1	0.00	1	0.00	1
Carnivore-Omnivore Abundance (%)	23.13		9.76		0.00	1	0.00	1	0.00	1
Deep Deposit Feeder Abundance (%)	21.77		17.38		0.00		100.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10414	10415	10417	10418	10419
Acteocina canaliculata	45	114			
Apocorophium lacustre (Epi.)				23	
Carinoma tremaphoros	45	23			
Cyathura polita		68			
Cyclaspis varians	23	23			
Edotea triloba (Epi.)	45	114			
Eteone heteropoda		68			
Gemma gemma		1091			
Glycinde solitaria	23				
Heteromastus filiformis	45	91			
Hobsonia florida		432			
Leptocheirus plumulosus	68	1704			23
Macoma balthica		159			
Macoma mitchelli	591	1545			
Mulinia lateralis	454	91			
Neanthes succinea	659	659			
Streblospio benedicti	704	1908			
Tubificoides spp.	682	1568		45	
Total Abundance w/ Epifauna	3385	9656	0	68	23
Total Abundance w/o Epifauna	3340	9542		45	23
Number of Taxa w/ Epifauna	12	16	0	2	1
Number of Taxa w/o Epifauna	11	15	0	1	1

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10414	10415	10417	10418	10419
Acteocina canaliculata	0.0023	0.0136			
Apocorophium lacustre (Epi.)				0.0250	
Carinoma tremaphoros	0.0011	0.0011			
Cyathura polita		0.0909			
Cyclaspis varians	0.0068	0.0011			
Edotea triloba (Epi.)	0.0068	0.0091			
Eteone heteropoda		0.0011			
Gemma gemma		0.1431			
Glycinde solitaria	0.0159				
Heteromastus filiformis	0.0182	0.0250			
Hobsonia florida		0.0136			
Leptocheirus plumulosus	0.0011	0.2749			0.0023
Macoma balthica		1.6745			
Macoma mitchelli	0.1477	0.4817			
Mulinia lateralis	0.4271	0.0023			
Neanthes succinea	0.2863	0.7657			
Streblospio benedicti	0.0204	0.0682			
Tubificoides spp.	0.0068	0.0159		0.0045	
Total Biomass w/ Epifauna	0.9406	3.5818	0.0011	0.0295	0.0023
Total Biomass w/o Epifauna	0.9338	3.5727	0.0011	0.0045	0.0023

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10420	10421	10422	10426
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	09/03/03	09/03/03	09/03/03	09/03/03
Gear	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT				
Depth (m)	6.4	3.0	2.0	4.1
Salinity (ppt)	10.30	7.71	5.85	7.47
Temperature (C)	25.74	26.13	26.25	26.25
Dissolved Oxygen (mg/L)	3.1	7.0	6.6	5.5
Sediment Silt-Clay (%)	58.07	2.56	5.37	10.21
Total Carbon (%)	1.74	0.06	0.14	0.37
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score	1.40	2.60	2.20	2.20
Condition	Severely Degr.	Degraded	Degraded	Degraded
# Attributes Scored	5	5	5	5
	Value	Score	Value	Score
Shannon-Wiener Index	2.04	3	1.84	3
Abundance (#/m2)	6634	1	7861	1
Biomass (g/m2)	0.95	1	1.43	3
Pollution Indicative Spp Abund (%)	61.99	1	8.09	5
Pollution Indicative Spp Biom (%)	5.76		28.71	
Pollution Sensitive Spp Abund (%)	0.34		1.73	
Pollution Sensitive Spp Biom (%)	22.57	1	38.70	1
Carnivore-Omnivore Abundance (%)	12.33		2.02	
Deep Deposit Feeder Abundance (%)	13.70		5.49	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)				
Site	10420	10421	10422	10426
Ameroculodes species complex				23
Carinoma tremaphoros	227	68		23
Chironomus spp.		23		
Cryptochironomus spp.			23	
Cyathura polita			114	23
Edotea triloba (Epi.)			68	23
Eteone heteropoda	136	23	1068	204
Heteromastus filiformis	23	432	1295	273
Lepidactylus dytiscus		114		
Leptocheirus plumulosus	182	1681	750	1091
Littoridinops tenuipes (Epi.)			45	
Macoma balthica	23			
Macoma mitchelli	795	4748	6612	2704
Marenzelleria viridis		136	159	
Mulinia lateralis		250		
Mytilopsis leucophaeata (Epi.)		45	704	
Neanthes succinea	454	45	68	136
Polydora cornuta	23			
Rangia cuneata			523	23
Streblospio benedicti	3885	341	1681	477
Tubificidae imm w/o cap chaetae	91			
Tubificoides spp.	795		23	204
Total Abundance w/ Epifauna	6634	7907	13132	5203
Total Abundance w/o Epifauna	6634	7861	12314	5180
Number of Taxa w/ Epifauna	11	12	14	12
Number of Taxa w/o Epifauna	11	11	11	11

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)				
Site	10420	10421	10422	10426
Ameroculodes species complex				0.0023
Carinoma tremaphoros	0.0386	0.0045		0.0045
Chironomidae		0.0011	0.0011	
Cyathura polita			0.0795	0.0011
Edotea triloba (Epi.)			0.0068	0.0011
Eteone heteropoda	0.0068	0.0091	0.0386	0.0114
Heteromastus filiformis	0.0159	0.0318	0.1886	0.0863
Lepidactylus dytiscus		0.2272		
Leptocheirus plumulosus	0.0136	0.0068	0.0772	0.0886
Littoridinops tenuipes (Epi.)			0.0023	
Macoma balthica	0.2136			
Macoma mitchelli	0.2817	0.1931	0.1454	0.3567
Marenzelleria viridis		0.5544	0.8179	
Mulinia lateralis		0.3067		
Mytilopsis leucophaeata (Epi.)		2.4151	0.0545	
Neanthes succinea	0.3249	0.0023	0.0432	0.0704
Oligochaeta	0.0011			
Polydora cornuta	0.0011			
Rangia cuneata			0.4658	0.0011
Streblospio benedicti	0.0477	0.0954	0.1022	0.0159
Tubificoides spp.	0.0011		0.0023	0.0011
Total Biomass w/ Epifauna	0.9463	3.8476	2.0255	0.6407
Total Biomass w/o Epifauna	0.9463	1.4325	1.9619	0.6396

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10401	10412	10423	10424	10425
Watershed	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs	Eastern Tribs
Habitat	Oligohaline	Oligohaline	Oligohaline	Oligohaline	Oligohaline
Date	09/16/03	09/16/03	09/10/03	09/03/03	09/03/03
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)	1.0	3.9	6.1	2.6	6.4
Salinity (ppt)	2.90	3.48	1.36	0.72	2.38
Temperature (C)	25.15	23.68	23.88	25.99	26.43
Dissolved Oxygen (mg/L)	5.7	6.6	6.9	6.7	6.7
Sediment Silt-Clay (%)	75.86	66.08	24.33	74.79	91.70
Total Carbon (%)	4.70	2.90	1.06	1.76	1.91
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.00	2.60	3.33	3.00	4.67
Condition	Severely Degr.	Degraded	Meets Goal	Meets Goal	Meets Goal
# Attributes Scored	6	5	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.70	1.92	2.52	2.54	1.04
Abundance (#/m2)	6839 1	977 5	409 3	1477 5	727 5
Deep Deposit Feeder Abundance (%)	62.46	20.93	22.22	61.54	0.00
Oligo. Poll. Ind. Spp. Abund. (%)	85.71 3	81.40 3	44.44 3	80.00 3	0.00 5
Tolerance Score	7.32 3	9.80 1	6.70 3	8.79 3	6.00 5
Oligo. Poll. Sens. Spp. Abund. (%)	11.96 3	9.30 3	38.89 5	10.77 3	3.13 3
Tany./Chir. Abund. Ratio	100.00 1	0.00	50.00 3	80.00 1	0.00 5
Carnivore-Omnivore Abundance (%)	3.99 1	9.30 1	22.22 3	27.69 3	96.88 5
Deep Deposit Feeder Abundance (%)	62.46	20.93	22.22	61.54	0.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITE

BENTHIC ABUNDANCE (per sq. meter)						
Site	10401	10412	10423	10424	10425	
Ameroculodes species complex		23				
Apocorophium lacustre (Epi.)		23			45	
Axarus spp.					204	
Carinoma tremaphoros		23				
Chiridotea almyra		23				
Coelotanypus spp.	91		23	250		
Cryptochironomus spp.				45		
Cyathura polita	159	45		68	500	
Edotea triloba (Epi.)	23	45				
Gammarus daiberi (Epi.)		227	159			
Gammarus spp. (Epi.)	23				136	
Harnischia spp.				23		
Leptocheirus plumulosus	341	591	23			
Limnodrilus hoffmeisteri				591		
Marenzelleria viridis	818	68	159	159	23	
Melita nitida (Epi.)	45					
Polypedilum halterale group			23			
Procladius spp.	23		23	23		
Rangia cuneata			45			
Rhithropanopeus harrisii (Epi.)	23					
Streblospio benedicti	1136					
Tanytarsini *			23			
Tubificidae imm w/o cap chaetae	23	45				
Tubificidae imm w/o cap chaetae *				136		
Tubificoides spp.	4249	159	91	182		
Total Abundance w/ Epifauna	6952	1272	568	1477	909	
Total Abundance w/o Epifauna	6839	977	409	1477	727	
Number of Taxa w/ Epifauna	12	11	8	8	5	
Number of Taxa w/o Epifauna	8	8	7	8	3	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10401	10412	10423	10424	10425
Ameroculodes species complex		0.0011			
Apocorophium lacustre (Epi.)		0.0011			0.0091
Carinoma tremaphoros		0.0863			
Chiridotea almyra		0.0023			
Chironomidae	0.0011		0.0011	0.0011	0.0011
Coelotanypus spp.	0.0204		0.0023	0.0159	
Cyathura polita	0.1886	0.0704		0.0023	0.0636
Edotea triloba (Epi.)	0.0023	0.0011			
Gammarus daiberi (Epi.)		0.1000	0.0023		
Gammarus spp. (Epi.)	0.0011				0.0045
Leptocheirus plumulosus	0.0204	0.0704	0.0068		
Marenzelleria viridis	3.4194	0.2204	0.3476	0.1204	0.0432
Melita nitida (Epi.)	0.0011				
Oligochaeta	0.0011	0.0011		0.1068	
Rangia cuneata			5.9004		
Rhithropanopeus harrisii (Epi.)	0.0954				
Streblospio benedicti	0.0909				
Tubificoides spp.	0.0136	0.0045	0.0011	0.0023	
Total Biomass	3.8556	0.5589	6.2616	0.2488	0.1216
Total Biomass w/o Epifauna	3.7556	0.4567	6.2594	0.2488	0.1079

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10416	
Watershed	Eastern Tribs	
Habitat	Freshwater	
Date	09/10/03	
Gear	Young Grab	
Sampled Area (sq.m)	0.044	
BOTTOM ENVIRONMENT		
Depth (m)	7.4	
Salinity (ppt)	0.27	
Temperature (C)	24.07	
Dissolved Oxygen (mg/L)	6.6	
Sediment Silt-Clay (%)	43.51	
Total Carbon (%)	5.11	
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	2.50	
Condition	Degraded	
# Attributes Scored	4	
	Value	Score
Shannon-Wiener Index	1.26	
Abundance (#/m2)	386	1
Deep Deposit Feeder Abundance (%)	23.53	1
T.F. Poll. Ind. Spp. Abund. (%)	0.00	5
Tolerance Score	8.50	3
Limnodrilus Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	11.76	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)	
Site	10416
Apocorophium lacustre (Epi.)	23
Chaoborus punctipennis	45
Gammarus daiberi (Epi.)	2454
Marenzelleria viridis	250
Tubificoides spp.	91
Total Abundance w/ Epifauna	2863
Total Abundance w/o Epifauna	386
Number of Taxa w/ Epifauna	5
Number of Taxa w/o Epifauna	3
BENTHIC BIOMASS (Grams per sq. meter)	
Site	10416
Apocorophium lacustre (Epi.)	0.0011
Chaoborus punctipennis	0.0045
Gammarus daiberi (Epi.)	0.2567
Marenzelleria viridis	0.3976
Tubificoides spp.	0.0023
Total Biomass	0.6623
Total Biomass w/o Epifauna	0.4044

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10501		10503		10504		10505		10506	
Watershed	Mainstem		Mainstem		Mainstem		Mainstem		Mainstem	
Habitat	High Meso Sand		High Meso Sand		High Meso Sand		High Meso Mud		High Meso Sand	
Date	09/16/03		08/25/03		08/25/03		09/15/03		08/25/03	
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)	2.4		5.5		3.5		12.4		6.0	
Salinity (ppt)	15.15		12.65		13.32		14.35		16.00	
Temperature (C)	24.24		26.46		25.98		23.72		25.85	
Dissolved Oxygen (mg/L)	8.0		7.4		8.1		4.4		2.6	
Sediment Silt-Clay (%)	2.49		2.68		3.15		81.52		2.24	
Total Carbon (%)	0.06		0.02		0.06		2.68		0.08	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	3.00		2.67		3.67		2.00		1.33	
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	3.05	3	2.72	3	2.87	3	0.94	1	2.09	1
Abundance (#/m2)	932	1	2885	5	1318	3	386	1	1318	3
Biomass (g/m2)	0.78	1	0.45	1	0.60	1	0.01	1	0.83	1
Pollution Indicative Spp Abund (%)	4.88	5	27.56	1	1.72	5	64.71		36.21	1
Pollution Indicative Spp Biom (%)	0.29		7.32		0.19		9.09	3	8.47	
Pollution Sensitive Spp Abund (%)	68.29	3	10.24	3	70.69	5	0.00		6.90	1
Pollution Sensitive Spp Biom (%)	71.64		24.49		24.71		0.00	1	3.28	
Carnivore-Omnivore Abundance (%)	36.59	5	29.92	3	62.07	5	35.29	5	5.17	1
Deep Deposit Feeder Abundance (%)	14.63		35.43		13.79		0.00		6.90	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10501	10503	10504	10505	10506
Acteocina canaliculata	23	45	523		45
Ampelisca spp.					23
Amphiporus bioculatus	23				
Apocorophium lacustre (Epi.)		45			23
Cyathura polita		45			
Drilonereis longa	23				
Eteone heteropoda		23			
Glycera dibranchiata	45		23		
Glycinde solitaria	227	68	136		
Heteromastus filiformis	114	45	159		45
Leitoscoloplos spp.					23
Loimia medusa			23		
Lyonsia hyalina					23
Macoma balthica		45			
Marenzelleria viridis	68	23	45		
Mediomastus ambiseta					23
Micrura leidyi			23		
Mulinia lateralis	45	68			454
Neanthes succinea		682	114		
Paraonis fulgens		23			23
Paraprionospio pinnata				250	
Parvilucina multilineata					613
Pectinaria gouldii	23		23		
Phoronis spp.	91	68	136		
Polydora cornuta		68			
Pseudeurythoe paucibranchiata				136	
Rictaxis punctostriatus					23
Sayella chesapeakea (Epi.)					23
Scolecopsis texana	23				
Scoloplos rubra		91			
Spiophanes bombyx	227		68		23
Streblospio benedicti		704	23		
Stylochus ellipticus (Epi.)			23		
Tellinidae			23		
Tubificoides spp.		886			
Total Abundance w/ Epifauna	932	2931	1340	386	1363
Total Abundance w/o Epifauna	932	2885	1318	386	1318
Number of Taxa w/ Epifauna	12	16	14	2	13
Number of Taxa w/o Epifauna	12	15	13	2	11

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10501	10503	10504	10505	10506
Acteocina canaliculata	0.0045	0.0045	0.0045		0.0114
Ampelisca spp.					0.0114
Amphiporus bioculatus	0.0045				
Apocorophium lacustre (Epi.)		0.0023			0.0045
Cyathura polita		0.0227			
Drilonereis longa	0.0523				
Eteone heteropoda		0.0011			
Glycera dibranchiata	0.0704		0.0341		
Glycinde solitaria	0.0045	0.0045	0.0250		
Heteromastus filiformis	0.0750	0.0636	0.0136		0.0295
Leitoscoloplos spp.					0.0500
Loimia medusa			0.0114		
Lyonsia hyalina					0.0045
Macoma balthica		0.0011			
Marenzelleria viridis	0.1840	0.0250	0.0182		
Mediomastus ambiseta					0.0023
Micrura leidyi			0.2590		
Mulinia lateralis	0.0023	0.0045			0.0204
Neanthes succinea		0.2181	0.1340		
Paraonis fulgens		0.0023			0.0114
Paraprionospio pinnata				0.0011	
Parvilucina multilineata					0.5725
Pectinaria gouldii	0.0068		0.0068		
Phoronis spp.	0.0659	0.0523	0.0704		
Polydora cornuta		0.0023			
Pseudeurythoe paucibranchiata				0.0114	
Rictaxis punctostriatus					0.1045
Sayella chesapeakea (Epi.)					0.0068
Scolelepis texana	0.0091				
Scoloplos rubra		0.0159			
Spiophanes bombyx	0.2976		0.0182		0.0136
Streblospio benedicti		0.0273	0.0011		
Stylochus ellipticus (Epi.)			0.0011		
Tellinidae			0.0011		
Tubificoides spp.		0.0045			
Total Biomass w/ Epifauna	0.7770	0.4521	0.5987	0.0125	0.8429
Total Biomass w/o Epifauna	0.7770	0.4499	0.5975	0.0125	0.8316

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10507	10508	10509	10510	10511
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem
Habitat	Low Mesohaline	Polyhaline Sand	High Meso Sand	High Meso Sand	High Meso Sand
Date	08/25/03	08/25/03	08/25/03	08/25/03	09/15/03
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)	5.5	8.0	2.5	3.5	9.0
Salinity (ppt)	11.90	18.56	13.22	12.60	13.24
Temperature (C)	26.41	25.29	26.56	26.61	23.64
Dissolved Oxygen (mg/L)	7.5	0.8	8.3	8.5	5.6
Sediment Silt-Clay (%)	5.48	2.01	2.11	2.30	3.19
Total Carbon (%)	0.12	0.09	0.08	0.06	0.10
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.60	2.33	3.33	3.00	3.00
Condition	Degraded	Degraded	Meets Goal	Meets Goal	Meets Goal
# Attributes Scored	5	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	3.09 5	3.17 3	3.66 5	2.71 3	2.69 3
Abundance (#/m2)	818 3	1795 3	1454 3	1318 3	3294 3
Biomass (g/m2)	0.44 1	0.77 1	0.21 1	0.38 1	0.81 1
Pollution Indicative Spp Abund (%)	16.67 3	29.11	18.75 3	31.03 1	2.76 5
Pollution Indicative Spp Biom (%)	11.89	32.74 1	6.99	35.42	28.80
Pollution Sensitive Spp Abund (%)	44.44	17.72 1	45.31 5	58.62 5	60.69 5
Pollution Sensitive Spp Biom (%)	12.40 1	44.40	65.59	29.17	11.60
Carnivore-Omnivore Abundance (%)	50.00	17.72	31.25 3	36.21 5	13.10 1
Deep Deposit Feeder Abundance (%)	22.22	29.11 5	26.56	22.41	22.76

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10507	10508	10509	10510	10511
Acteocina canaliculata	227	159	114	341	91
Ameroculodes species complex				23	
Ampelisca spp.					23
Ampelisca verrilli			23	23	
Ancistrostylis hartmanae		23			
Apocorophium lacustre (Epi.)				23	
Carinoma tremaphoros			23		
Edotea triloba (Epi.)		23			
Gemma gemma		23			
Glycera dibranchiata	45			45	23
Glycinde solitaria	23	45	204	68	68
Haminoea solitaria			45		
Heteromastus filiformis	68	341	136	23	295
Leitoscoloplos robustus					45
Leitoscoloplos spp.		23	23		
Leucon americanus			23		
Loimia medusa			91	23	45
Macoma balthica					1681
Macoma mitchelli					23
Marenzelleria viridis	23	23			
Mediomastus ambiseta	91	23	91	273	114
Micrura leidyi					23
Mulinia lateralis	136	454	250	386	
Neanthes succinea	68	91		23	45
Paraprionospio pinnata		45		23	
Parvilucina multilineata	68	318			295
Pectinaria gouldii	23				273
Phoronis spp.		23	91	68	
Ptilanthura tenuis					23
Rictaxis punctostriatus	45		68		159
Scolecopsis texana			68		
Scoloplos rubra					23
Spiophanes bombyx		45	68		
Streblospio benedicti					45
Tharyx sp. A Morris		23			
Tubificoides spp.		136	136		
Total Abundance w/ Epifauna	818	1818	1454	1340	3294
Total Abundance w/o Epifauna	818	1795	1454	1318	3294
Number of Taxa w/ Epifauna	11	17	16	13	18
Number of Taxa w/o Epifauna	11	16	16	12	18

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10507	10508	10509	10510	10511
Acteocina canaliculata	0.0227	0.0364	0.0011	0.0386	0.0068
Ameroculodes species complex				0.0045	
Ampelisca spp.					0.0011
Ampelisca verrilli			0.0341	0.0341	
Ancistrosyllis hartmanae		0.0023			
Apocorophium lacustre (Epi.)				0.0023	
Carinoma tremaphoros			0.0011		
Edotea triloba (Epi.)		0.0011			
Gemma gemma		0.0068			
Glycera dibranchiata	0.0682			0.0818	0.1091
Glycinde solitaria	0.0023	0.0011	0.0114	0.0091	0.0011
Haminoea solitaria			0.0023		
Heteromastus filiformis	0.0341	0.0750	0.0068	0.0136	0.0841
Leitoscoloplos robustus					0.2113
Leitoscoloplos spp.		0.0909	0.0011		
Leucon americanus			0.0023		
Loimia medusa			0.0613	0.0136	0.0386
Macoma balthica					0.0432
Macoma mitchelli					0.0045
Marenzelleria viridis	0.0159	0.0568			
Mediomastus ambiseta	0.0136	0.0011	0.0011	0.0250	0.0045
Micrura leidyi					0.0068
Mulinia lateralis	0.0523	0.1045	0.0136	0.1340	
Neanthes succinea	0.0386	0.0114		0.0011	0.0114
Paraprionospio pinnata		0.0568		0.0011	
Parvilucina multilineata	0.1886	0.0011			0.2068
Pectinaria gouldii	0.0023				0.0357
Phoronis spp.		0.2454	0.0341	0.0250	
Ptilanthura tenuis					0.0068
Rictaxis punctostriatus	0.0011		0.0011		0.0068
Scolecopsis texana			0.0091		
Scoloplos rubra					0.0114
Spiophanes bombyx		0.0011	0.0295		
Streblospio benedicti					0.0227
Tharyx sp. A Morris		0.0750			
Tubificoides spp.		0.0045	0.0011		
Total Biomass w/ Epifauna	0.4396	0.7713	0.2113	0.3840	0.8127
Total Biomass w/o Epifauna	0.4396	0.7702	0.2113	0.3817	0.8127

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10512	10513	10514	10515	10517
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem
Habitat	High Meso Sand	High Meso Sand	High Meso Sand	Low Mesohaline	Low Mesohaline
Date	09/15/03	09/15/03	08/25/03	08/25/03	08/25/03
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)	7.5	8.4	3.5	2.5	1.5
Salinity (ppt)	12.67	14.80	12.10	11.48	10.92
Temperature (C)	23.82	23.59	26.59	26.86	26.98
Dissolved Oxygen (mg/L)	6.7	4.7	7.1	8.7	9.3
Sediment Silt-Clay (%)	2.36	3.95	35.77	2.63	16.62
Total Carbon (%)	0.06	0.08	1.62	0.05	0.13
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.00	1.67	3.33	3.00	2.60
Condition	Meets Goal	Severely Degr.	Meets Goal	Meets Goal	Degraded
# Attributes Scored	6	6	6	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	3.29 5	2.02 1	3.06 3	2.87 5	2.60 5
Abundance (#/m2)	2704 5	364 1	2636 5	1522 5	1999 5
Biomass (g/m2)	0.72 1	0.25 1	0.91 1	0.24 1	0.32 1
Pollution Indicative Spp Abund (%)	31.93 1	6.25 5	18.10 3	37.31 1	63.64 1
Pollution Indicative Spp Biom (%)	3.30	0.45	16.96	24.88	43.97
Pollution Sensitive Spp Abund (%)	12.61 3	0.00 1	32.76 3	46.27	14.77
Pollution Sensitive Spp Biom (%)	6.75	0.00	15.71	45.93 3	7.45 1
Carnivore-Omnivore Abundance (%)	26.89 3	12.50 1	40.52 5	38.81	17.05
Deep Deposit Feeder Abundance (%)	9.24	56.25	20.69	13.43	25.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10512	10513	10514	10515	10517
<i>Acteocina canaliculata</i>	159		318	386	182
<i>Eteone heteropoda</i>	23				
<i>Gemma gemma</i>	45		23		
<i>Glycera dibranchiata</i>			23		
<i>Glycinde solitaria</i>	68		91	159	45
<i>Haminoea solitaria</i>					23
<i>Heteromastus filiformis</i>	68	45	23		295
<i>Leitoscoloplos</i> spp.			45		136
<i>Leucon americanus</i>			500		
<i>Macoma mitchelli</i>	68		45		
<i>Marenzelleria viridis</i>			23	23	
<i>Mediomastus ambiseta</i>	45		432	136	68
<i>Micrura leidy</i>		45			
<i>Mulinia lateralis</i>	659		364	477	841
<i>Neanthes succinea</i>	114		613	23	45
<i>Nemertina</i>	23				
<i>Paraehesion luteola</i>			23		
<i>Paraonis fulgens</i>	68			23	
<i>Paraprionospio pinnata</i>		23	23		
<i>Parvilucina multilineata</i>	727	91		23	
<i>Pectinaria gouldii</i>	45				
<i>Phoronis</i> spp.	23				
<i>Polydora cornuta</i>				23	
<i>Pseudeurythoe paucibranchiata</i>	23				
<i>Rictaxis punctostriatus</i>	318			23	45
<i>Saccoglossus kowalevskii</i>					23
<i>Spiophanes bombyx</i>	45				
<i>Streblospio benedicti</i>	91		45	91	295
<i>Tharyx</i> sp. A Morris				68	
Tubificidae imm w/o cap chaetae	91				
<i>Tubificoides</i> spp.		159	45	68	
Total Abundance w/ Epifauna	2704	364	2636	1522	1999
Total Abundance w/o Epifauna	2704	364	2636	1522	1999
Number of Taxa w/ Epifauna	19	5	16	13	11
Number of Taxa w/o Epifauna	19	5	16	13	11

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10512	10513	10514	10515	10517
Acteocina canaliculata	0.0250		0.0454	0.0500	0.0204
Eteone heteropoda	0.0011				
Gemma gemma	0.0023		0.0023		
Glycera dibranchiata			0.0204		
Glycinde solitaria	0.0023		0.0204	0.0091	0.0023
Haminoea solitaria					0.0091
Heteromastus filiformis	0.0182	0.0295	0.0386		0.0591
Leitoscoloplos spp.			0.0136		0.0727
Leucon americanus			0.0273		
Macoma mitchelli	0.0011		0.0341		
Marenzelleria viridis			0.0613	0.0273	
Mediomastus ambiseta	0.0011		0.0159	0.0227	0.0011
Micrura leidyi		0.1113			
Mulinia lateralis	0.0136		0.1091	0.0545	0.0545
Neanthes succinea	0.0386		0.4794	0.0011	0.0818
Nemertina	0.0023				
Oligochaeta	0.0011				
Parahesionia luteola			0.0023		
Paraonis fulgens	0.0011			0.0023	
Paraprionospio pinnata		0.0011	0.0182		
Parvilucina multilineata	0.5362	0.1091		0.0591	
Pectinaria gouldii	0.0045				
Phoronis spp.	0.0023				
Polydora cornuta				0.0011	
Pseudeurythoe paucibranchiata	0.0386				
Rictaxis punctostriatus	0.0068			0.0023	0.0011
Saccoglossus kowalevskii					0.0045
Spiophanes bombyx	0.0182				
Streblospio benedicti	0.0091		0.0136	0.0045	0.0136
Tharyx sp. A Morris				0.0023	
Tubificoides spp.		0.0011	0.0091	0.0011	
Total Biomass w/ Epifauna	0.7236	0.2522	0.9111	0.2374	0.3204
Total Biomass w/o Epifauna	0.7236	0.2522	0.9111	0.2374	0.3204

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10518		10519		10520		10521		10522		
Watershed	Mainstem		Mainstem		Mainstem		Mainstem		Mainstem		
Habitat	Low Mesohaline		Polyhaline Sand		High Meso Mud		Low Mesohaline		High Meso Sand		
Date	08/25/03		08/28/03		08/28/03		08/28/03		08/28/03		
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)	2.0		12.0		9.0		7.0		7.0		
Salinity (ppt)	11.62		20.50		13.34		8.53		12.86		
Temperature (C)	26.94		24.34		25.72		27.41		25.40		
Dissolved Oxygen (mg/L)	8.7		2.6		3.9		6.5		2.5		
Sediment Silt-Clay (%)	4.94		4.35		70.16		16.29		24.66		
Total Carbon (%)	0.17		0.08		1.80		0.59		0.92		
BENTHIC INDEX OF BIOTIC INTEGRITY											
B-IBI Score	2.20		2.67		1.00		2.60		1.00		
Condition	Degraded		Marginal		Severely Degr.		Degraded		Severely Degr.		
# Attributes Scored	5		6		6		5		6		
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score	
Shannon-Wiener Index	2.51	5	0.81	1	0.00	1	2.60	5	1.98	1	
Abundance (#/m2)	2726	3	91	1	0	1	4203	3	818	1	
Biomass (g/m2)	0.45	1	0.00	1	0.00	1	1.02	3	0.57	1	
Pollution Indicative Spp Abund (%)	45.00	1	0.00		100.00		44.32	1	75.00	1	
Pollution Indicative Spp Biom (%)	26.53		0.00	5	100.00	1	25.25		47.20		
Pollution Sensitive Spp Abund (%)	19.17		25.00	3	0.00		8.65		5.56	1	
Pollution Sensitive Spp Biom (%)	24.49	1	50.00		0.00	1	18.99	1	4.00		
Carnivore-Omnivore Abundance (%)	13.33		0.00		0.00	1	27.57		8.33	1	
Deep Deposit Feeder Abundance (%)	20.83		75.00	5	0.00		3.24		72.22		

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)						
Site	10518	10519	10520	10521	10522	
<i>Acteocina canaliculata</i>	227			318	23	
<i>Apocorophium lacustre</i> (Epi.)		23				
<i>Carinoma tremaphoros</i>					23	
<i>Cyathura polita</i>	23					
<i>Edotea triloba</i> (Epi.)	68			114		
<i>Glycera dibranchiata</i>	23					
<i>Glycinde solitaria</i>	45			23		
<i>Heteromastus filiformis</i>	386			23		
<i>Leitoscoloplos robustus</i>					23	
<i>Leitoscoloplos</i> spp.					500	
<i>Leptocheirus plumulosus</i>				318		
<i>Macoma balthica</i>				23	23	
<i>Macoma mitchelli</i>	364			682	45	
<i>Mediomastus ambiseta</i>	182					
<i>Micrura leidyi</i>					23	
<i>Mulinia lateralis</i>	1227			295		
<i>Neanthes succinea</i>				818		
<i>Parvilucina multilineata</i>	159					
<i>Phoronis</i> spp.	45	23				
<i>Polydora cornuta</i>				45		
<i>Rhithropanopeus harrisi</i> (Epi.)				23		
<i>Rictaxis punctostriatus</i>	45					
<i>Streblospio benedicti</i>				1545	91	
Tubificidae imm w/o cap chaetae				23		
<i>Tubificoides</i> spp.		68		91	68	
Total Abundance w/ Epifauna	2795	114	0	4340	818	
Total Abundance w/o Epifauna	2726	91		4203	818	
Number of Taxa w/ Epifauna	12	3	0	14	9	
Number of Taxa w/o Epifauna	11	2	0	12	9	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10518	10519	10520	10521	10522
Acteocina canaliculata	0.0273			0.0477	0.0114
Apocorophium lacustre (Epi.)		0.0011			
Carinoma tremaphoros					0.0023
Cyathura polita	0.0091				
Edotea triloba (Epi.)	0.0068			0.0114	
Glycera dibranchiata	0.0204				
Glycinde solitaria	0.0386			0.0250	
Heteromastus filiformis	0.1340			0.0636	
Leitoscoloplos robustus					0.1409
Leitoscoloplos spp.					0.0727
Leptocheirus plumulosus				0.0523	
Macoma balthica				0.1204	0.0114
Macoma mitchelli	0.0409			0.0114	0.2454
Mediomastus ambiseta	0.0045				
Micrura leidyi					0.0250
Mulinia lateralis	0.1181			0.1954	
Neanthes succinea				0.4317	
Oligochaeta				0.0011	
Parvilucina multilineata	0.0204				
Phoronis spp.	0.0295	0.0011			
Polydora cornuta				0.0023	
Rhithropanopeus harrisii (Epi.)				0.0011	
Rictaxis punctostriatus	0.0023				
Streblospio benedicti				0.0613	0.0545
Tubificoides spp.		0.0011		0.0045	0.0045
Total Biomass w/ Epifauna	0.4521	0.0034	0.0011	1.0292	0.5680
Total Biomass w/o Epifauna	0.4453	0.0023	0.0011	1.0167	0.5680

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10523	10524	10525	10526	10527	
Watershed	Mainstem	Mainstem	Mainstem	Mainstem	Mainstem	
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	High Meso Sand	
Date	09/09/03	09/04/03	09/04/03	08/28/03	08/25/03	
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)	6.5	3.0	3.4	2.0	7.5	
Salinity (ppt)	10.00	8.30	9.05	8.58	12.61	
Temperature (C)	25.17	25.88	26.05	26.99	26.19	
Dissolved Oxygen (mg/L)	8.8	5.8	7.7	7.5	2.4	
Sediment Silt-Clay (%)	80.15	3.17	2.03	71.72	2.45	
Total Carbon (%)	2.28	0.05	0.08	0.83	0.08	
BENTHIC INDEX OF BIOTIC INTEGRITY						
B-IBI Score	1.00	2.20	3.40	3.00	3.00	
Condition	Severely Degr.	Degraded	Meets Goal	Meets Goal	Meets Goal	
# Attributes Scored	5	5	5	5	6	
	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.00	1	1.34	1	2.27	3
Abundance (#/m2)	0	1	3817	3	1999	5
Biomass (g/m2)	0.00	1	0.34	1	1.32	3
Pollution Indicative Spp Abund (%)	100.00	1	5.95	5	1.14	5
Pollution Indicative Spp Biom (%)	100.00		2.01		0.35	
Pollution Sensitive Spp Abund (%)	0.00		1.19		19.32	
Pollution Sensitive Spp Biom (%)	0.00	1	8.39	1	11.57	1
Carnivore-Omnivore Abundance (%)	0.00		4.76		27.27	
Deep Deposit Feeder Abundance (%)	0.00		3.57		5.68	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10523	10524	10525	10526	10527
Acteocina canaliculata			364		68
Americamysis almyra (Epi.)		23			
Ameroculodes species complex		23			
Chironomus spp.				91	
Cyathura polita				136	
Cyclaspis varians				23	
Edotea triloba (Epi.)		136		23	
Eteone heteropoda		23			
Gemma gemma			23		
Glycera dibranchiata					23
Glycinde solitaria					91
Heteromastus filiformis		45	114	45	114
Leitoscoloplos spp.				68	
Leptocheirus plumulosus		318	636		
Macoma balthica				273	
Macoma mitchelli		2976	636	1977	
Marenzelleria viridis		23	23	45	
Mediomastus ambiseta					23
Mulinia lateralis			23	45	295
Neanthes succinea		159	182	386	114
Paraprionospio pinnata					23
Parvilucina multilineata					386
Phoronis spp.					68
Polypedilum scalaenum group				45	
Rangia cuneata		23			
Rictaxis punctostriatus					23
Spiophanes bombyx					23
Streblospio benedicti		136		227	
Tharyx sp. A Morris					23
Tubificidae imm w/o cap chaetae		68			
Tubificoides spp.		23		45	
Total Abundance w/ Epifauna	0	3976	1999	3431	1272
Total Abundance w/o Epifauna		3817	1999	3408	1272
Number of Taxa w/ Epifauna	0	13	8	14	13
Number of Taxa w/o Epifauna	0	11	8	13	13

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10523	10524	10525	10526	10527
Acteocina canaliculata			0.0636		0.0159
Americamysis almyra (Epi.)		0.0091			
Ameroculodes species complex		0.0023			
Chironomidae				0.0011	
Cyathura polita				0.1590	
Cyclaspis varians				0.0023	
Edotea triloba (Epi.)		0.0454		0.0045	
Eteone heteropoda		0.0045			
Gemma gemma			0.0023		
Glycera dibranchiata					0.0568
Glycinde solitaria					0.0091
Heteromastus filiformis	0.0182		0.0409	0.0341	0.0409
Leitoscoloplos spp.				0.0863	
Leptocheirus plumulosus		0.0523	0.1363		
Macoma balthica				1.2042	
Macoma mitchelli		0.0977	0.9088	0.2545	
Marenzelleria viridis		0.0273	0.0886	0.0500	
Mediomastus ambiseta					0.0011
Mulinia lateralis			0.0045	0.0011	0.0091
Neanthes succinea		0.1272	0.0704	0.9815	0.0386
Oligochaeta		0.0011			
Paraprionospio pinnata					0.0023
Parvilucina multiligneata					1.3905
Phoronis spp.					0.0341
Rangia cuneata		0.0011			
Rictaxis punctostriatus					0.0011
Spiophanes bombyx					0.0159
Streblospio benedicti		0.0023		0.0045	
Tharyx sp. A Morris					0.0045
Tubificoides spp.		0.0045		0.0091	
Total Biomass w/ Epifauna	0.0011	0.3931	1.3155	2.7923	1.6199
Total Biomass w/o Epifauna	0.0011	0.3385	1.3155	2.7877	1.6199

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10301	10302	10303	10304	10305
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	09/04/03	09/04/03	09/04/03	09/04/03	09/04/03
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	3.3	4.4	3.8	3.6
Salinity (ppt)	8.78	8.14	9.02	8.61	7.78
Temperature (C)	25.93	26.30	26.08	26.05	26.63
Dissolved Oxygen (mg/L)	5.6	4.0	6.3	6.5	3.9
Sediment Silt-Clay (%)	17.71	95.35	16.07	17.54	13.72
Total Carbon (%)	0.48	2.51	0.32	0.58	0.50
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.40	2.20	2.60	2.60	2.20
Condition	Meets Goal	Degraded	Degraded	Degraded	Degraded
# Attributes Scored	5	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.78 5	2.30 3	2.78 5	2.68 5	2.77 5
Abundance (#/m2)	4249 3	4135 3	2931 3	8225 1	10179 1
Biomass (g/m2)	2.39 3	0.96 1	0.83 1	1.78 3	2.49 3
Pollution Indicative Spp Abund (%)	8.02 5	14.29 3	13.95 3	14.92 3	43.53 1
Pollution Indicative Spp Biom (%)	0.57	3.55	1.78	2.55	6.11
Pollution Sensitive Spp Abund (%)	15.51	4.40	2.33	0.55	2.68
Pollution Sensitive Spp Biom (%)	39.94 1	31.28 1	23.36 1	5.36 1	30.66 1
Carnivore-Omnivore Abundance (%)	12.30	5.49	12.40	11.05	15.63
Deep Deposit Feeder Abundance (%)	33.16	46.15	28.68	35.64	32.81

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10301	10302	10303	10304	10305
Carinoma tremaphoros	91				
Chironomus spp.					45
Coelotanypus spp.		23			
Cyathura polita	45	114	23		23
Edotea triloba (Epi.)	45			136	
Eteone heteropoda	23		45	386	454
Geukensia demissa (Epi.)					273
Heteromastus filiformis	1204	227	477	1795	1022
Leptocheirus plumulosus	863	1136	568	1613	159
Macoma balthica		68	23		182
Macoma mitchelli	523	227	727	1908	863
Marenzelleria viridis	613		23	45	68
Melita nitida (Epi.)		23			
Mytilopsis leucophaeata (Epi.)					114
Neanthes succinea	364	91	295	523	1068
Polydora cornuta			23		318
Streblospio benedicti	318	568	364	818	3658
Tubificidae imm w/o cap chaetae				23	273
Tubificoides spp.	204	1681	364	1113	2045
Total Abundance w/ Epifauna	4294	4158	2931	8361	10565
Total Abundance w/o Epifauna	4249	4135	2931	8225	10179
Number of Taxa w/ Epifauna	11	10	11	10	15
Number of Taxa w/o Epifauna	10	9	11	9	13

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10301	10302	10303	10304	10305
Carinoma tremaphoros	0.0273				
Chironomidae					0.0011
Coelotanypus spp.		0.0204			
Cyathura polita	0.0432	0.1000	0.0011		0.0023
Edotea triloba (Epi.)	0.0068			0.0091	
Eteone heteropoda	0.0045		0.0011	0.0250	0.0318
Geukensia demissa (Epi.)					0.1795
Heteromastus filiformis	0.3658	0.0159	0.0545	0.3158	0.2476
Leptocheirus plumulosus	0.0954	0.0204	0.1568	0.2636	0.0227
Macoma balthica		0.1999	0.1749		0.7111
Macoma mitchelli	0.3249	0.5725	0.1659	0.4135	0.1772
Marenzelleria viridis	0.9111		0.0182	0.0954	0.0500
Melita nitida (Epi.)		1.3132			
Mytilopsis leucophaeata (Epi.)					0.0182
Neanthes succinea	0.6066	0.0045	0.2431	0.6362	1.0860
Oligochaeta				0.0011	0.0011
Polydora cornuta			0.0011		0.0114
Streblospio benedicti	0.0091	0.0136	0.0136	0.0204	0.1204
Tubificoides spp.	0.0011	0.0114	0.0011	0.0091	0.0273
Total Biomass w/ Epifauna	2.3958	2.2720	0.8316	1.7892	2.6878
Total Biomass w/o Epifauna	2.3890	0.9588	0.8316	1.7801	2.4901

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10306	10307	10308	10309	10310
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	09/04/03	09/04/03	09/04/03	09/04/03	09/04/03
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)	2.5	5.5	6.4	3.0	4.5
Salinity (ppt)	6.41	9.18	8.36	6.23	6.04
Temperature (C)	26.89	26.39	26.10	26.72	26.07
Dissolved Oxygen (mg/L)	4.2	2.4	5.7	7.8	5.2
Sediment Silt-Clay (%)	5.99	88.82	79.84	5.88	96.71
Total Carbon (%)	0.12	5.23	2.74	0.42	3.96
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.40	1.80	2.20	2.20	2.20
Condition	Meets Goal	Severely Degr.	Degraded	Degraded	Degraded
# Attributes Scored	5	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.52 5	0.00 1	1.81 3	1.89 3	1.16 1
Abundance (#/m2)	3317 3	23 1	4635 3	8974 1	3181 3
Biomass (g/m2)	0.98 1	0.00 1	3.09 3	0.64 1	0.84 1
Pollution Indicative Spp Abund (%)	2.74 5	0.00 5	34.31 1	6.84 5	66.43 1
Pollution Indicative Spp Biom (%)	0.93	0.00	3.02	15.03	4.04
Pollution Sensitive Spp Abund (%)	19.18	0.00	5.39	2.53	6.43
Pollution Sensitive Spp Biom (%)	43.16 3	0.00 1	2.43 1	7.87 1	95.15 5
Carnivore-Omnivore Abundance (%)	6.85	0.00	3.92	7.34	0.00
Deep Deposit Feeder Abundance (%)	10.27	100.00	49.51	15.44	27.14

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10306	10307	10308	10309	10310
Almyracuma proximoculi				45	
Ameroculodes species complex	68			23	
Apocorophium lacustre (Epi.)				45	
Carinoma tremaphoros			68		
Chironomus spp.				45	
Cladotanytarsus spp. B Epler				68	
Cyathura polita	91				
Edotea triloba (Epi.)				3726	
Edwardsia elegans				23	
Eteone heteropoda	91			409	
Hargeria rapax				45	
Heteromastus filiformis	318		45	772	
Leptocheirus plumulosus	909			364	
Macoma balthica	68		250		204
Macoma mitchelli	1227		318	6112	
Marenzelleria viridis	91			45	
Mulinia lateralis				23	
Mytilopsis leucophaeata (Epi.)	91			23	
Neanthes succinea	45		114	91	
Parachironomus spp.				23	
Polydora cornuta				23	
Rangia cuneata	386			182	
Streblospio benedicti			1590	68	2113
Tubificoides spp.	23	23	2249	613	863
Total Abundance w/ Epifauna	3408	23	4635	12769	3181
Total Abundance w/o Epifauna	3317	23	4635	8974	3181
Number of Taxa w/ Epifauna	12	1	7	21	3
Number of Taxa w/o Epifauna	11	1	7	18	3

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10306	10307	10308	10309	10310
Almyracuma proximoculi				0.0011	
Ameroculodes species complex	0.0045			0.0011	
Apocorophium lacustre (Epi.)				0.0091	
Carinoma tremaphoros			0.0023		
Chironomidae				0.0011	
Cyathura polita	0.0591				
Edotea triloba (Epi.)				0.2658	
Edwardsia elegans				0.0182	
Eteone heteropoda	0.0091			0.0613	
Hargeria rapax				0.0045	
Heteromastus filiformis	0.0500		0.0227	0.2340	
Leptocheirus plumulosus	0.0795			0.0523	
Macoma balthica	0.2181		0.0750		0.8020
Macoma mitchelli	0.3317		2.3583	0.0523	
Marenzelleria viridis	0.1204			0.0136	
Mulinia lateralis				0.0318	
Mytilopsis leucophaeata (Epi.)	0.0091			0.0386	
Neanthes succinea	0.0795		0.4839	0.1204	
Polydora cornuta				0.0023	
Rangia cuneata	0.0250			0.0364	
Streblospio benedicti			0.0932	0.0023	0.0341
Tubificoides spp.	0.0023	0.0011	0.0500	0.0023	0.0068
Total Biomass w/ Epifauna	0.9883	0.0011	3.0854	0.9486	0.8429
Total Biomass w/o Epifauna	0.9792	0.0011	3.0854	0.6350	0.8429

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10311		10312		10313		10314		10315	
Watershed	Western Tribs		Western Tribs		Western Tribs		Western Tribs		Western Tribs	
Habitat	Low Mesohaline		Low Mesohaline		Low Mesohaline		Low Mesohaline		Low Mesohaline	
Date	09/04/03		09/02/03		09/02/03		09/02/03		09/02/03	
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)	5.4		5.2		5.6		4.8		5.9	
Salinity (ppt)	6.80		7.66		9.04		7.05		8.43	
Temperature (C)	26.24		26.05		25.80		26.34		25.86	
Dissolved Oxygen (mg/L)	3.1		4.2		4.2		5.3		3.8	
Sediment Silt-Clay (%)	95.77		93.28		96.22		88.76		61.36	
Total Carbon (%)	4.12		5.79		3.40		3.59		3.74	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	1.00		3.00		3.00		4.20		3.00	
Condition	Severely Degr.		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	0.00	1	2.23	3	1.74	3	2.99	5	1.58	1
Abundance (#/m2)	0	1	3703	3	5248	3	3999	3	3885	3
Biomass (g/m2)	0.00	1	3.19	3	2.45	3	5.98	5	7.20	5
Pollution Indicative Spp Abund (%)	100.00	1	46.63	1	60.61	1	13.64	3	62.57	1
Pollution Indicative Spp Biom (%)	100.00		0.64		2.78		0.08		0.19	
Pollution Sensitive Spp Abund (%)	0.00		14.11		9.09		39.20		21.64	
Pollution Sensitive Spp Biom (%)	0.00	1	94.34	5	81.59	5	85.28	5	95.14	5
Carnivore-Omnivore Abundance (%)	0.00		5.52		3.90		5.11		8.77	
Deep Deposit Feeder Abundance (%)	0.00		33.74		26.41		13.07		7.02	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10311	10312	10313	10314	10315
Apocorophium lacustre (Epi.)				23	23
Carinoma tremaphoros		91	91	136	45
Cyathura polita		45			
Heteromastus filiformis		204	68	432	68
Leptocheirus plumulosus		91		818	
Macoma balthica		432	454	591	841
Macoma mitchelli			68	341	
Marenzelleria viridis		23	23	772	
Mytilopsis leucophaeata (Epi.)				1363	
Neanthes succinea		68	114	68	295
Rangia cuneata		23		204	
Streblospio benedicti		1681	3113	545	2431
Tubificidae imm w/o cap chaetae		45	68		
Tubificoides spp.		1000	1250	91	204
Total Abundance w/ Epifauna	0	3703	5248	5385	3908
Total Abundance w/o Epifauna		3703	5248	3999	3885
Number of Taxa w/ Epifauna	0	11	9	12	7
Number of Taxa w/o Epifauna	0	11	9	10	6
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10311	10312	10313	10314	10315
Apocorophium lacustre (Epi.)				0.0011	0.0023
Carinoma tremaphoros		0.0295	0.0273	0.0341	0.0159
Cyathura polita		0.0159			
Heteromastus filiformis		0.1181	0.0500	0.0909	0.0045
Leptocheirus plumulosus		0.0045		0.1113	
Macoma balthica		2.9286	1.9471	4.8962	6.8478
Macoma mitchelli			0.2090	0.0023	
Marenzelleria viridis		0.0659	0.0523	0.1954	
Mytilopsis leucophaeata (Epi.)				0.5044	
Neanthes succinea		0.0045	0.0704	0.6362	0.3135
Oligochaeta		0.0011	0.0011		
Rangia cuneata		0.0011		0.0091	
Streblospio benedicti		0.0204	0.0682	0.0045	0.0136
Tubificoides spp.		0.0023	0.0250	0.0011	0.0023
Total Biomass w/ Epifauna	0.0011	3.1922	2.4504	6.4866	7.2000
Total Biomass w/o Epifauna	0.0011	3.1922	2.4504	5.9810	7.1977

C-42

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10316	10317	10318	10326
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Low Mesohaline	Low Mesohaline	High Meso Mud	Low Mesohaline
Date	09/02/03	09/02/03	09/02/03	09/02/03
Gear	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT				
Depth (m)	5.5	6.0	16.5	3.9
Salinity (ppt)	7.48	10.17	15.77	6.16
Temperature (C)	26.26	25.11	24.54	26.55
Dissolved Oxygen (mg/L)	4.7	3.7	3.0	7.8
Sediment Silt-Clay (%)	85.74	70.60	97.89	41.51
Total Carbon (%)	1.85	3.60	3.74	2.26
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score	3.40	1.80	1.00	2.60
Condition	Meets Goal	Severely Degr.	Severely Degr.	Degraded
# Attributes Scored	5	5	6	5
	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.53 5	0.00 1	0.00 1	2.38 3
Abundance (#/m2)	1908 5	23 1	0 1	14473 1
Biomass (g/m2)	1.44 3	0.00 1	0.00 1	6.57 5
Pollution Indicative Spp Abund (%)	35.71 1	0.00 5	100.00	45.68 1
Pollution Indicative Spp Biom (%)	0.79	0.00	100.00 1	1.66
Pollution Sensitive Spp Abund (%)	22.62	0.00	0.00	9.42
Pollution Sensitive Spp Biom (%)	55.97 3	0.00 1	0.00 1	77.45 3
Carnivore-Omnivore Abundance (%)	14.29	0.00	0.00 1	3.92
Deep Deposit Feeder Abundance (%)	23.81	0.00	0.00	15.54

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)				
Site	10316	10317	10318	10326
Apocorophium lacustre (Epi.)		23		23
Carinoma tremaphoros	136			136
Cyathura polita				295
Diadumene leucolena (Epi.)		45		
Edotea triloba (Epi.)				1250
Edwardsia elegans				91
Eteone heteropoda				23
Heteromastus filiformis	204			1409
Leptocheirus plumulosus				3181
Macoma balthica	409			909
Macoma mitchelli	68	23		818
Marenzelleria viridis				68
Neanthes succinea	136			23
Rangia cuneata				91
Streblospio benedicti	682			6589
Tubificoides spp.	250			841
Total Abundance w/ Epifauna	1908	91	0	15745
Total Abundance w/o Epifauna	1908	23		14473
Number of Taxa w/ Epifauna	8	3	0	15
Number of Taxa w/o Epifauna	8	1	0	13
BENTHIC BIOMASS (Grams per sq. meter)				
Site	10316	10317	10318	10326
Apocorophium lacustre (Epi.)		0.0011		0.0045
Cyathura polita				0.4953
Diadumene leucolena (Epi.)		0.0045		
Edotea triloba (Epi.)				0.1022
Edwardsia elegans				0.0114
Eteone heteropoda				0.0045
Heteromastus filiformis	0.1795			0.5067
Leptocheirus plumulosus				0.3953
Macoma balthica	0.7975			4.4599
Macoma mitchelli	0.1908	0.0023		0.3044
Marenzelleria viridis	0.0114			0.0159
Neanthes succinea	0.2317			0.0954
Rangia cuneata				0.1159
Streblospio benedicti	0.0114			0.1045
Tubificoides spp.	0.0023			0.0136
Total Biomass w/ Epifauna	1.4450	0.0080	0.0011	6.6751
Total Biomass w/o Epifauna	1.4450	0.0023	0.0011	6.5684

C-44

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10319	10320	10321	10329	10330
Watershed	Western Tribs	Western Tribs	Western Tribs	Western Tribs	Western Tribs
Habitat	Oligohaline	Oligohaline	Oligohaline	Oligohaline	Oligohaline
Date	09/08/03	09/08/03	09/08/03	09/08/03	09/08/03
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)	2.4	3.0	1.1	2.6	2.5
Salinity (ppt)	2.44	1.37	1.13	0.94	1.07
Temperature (C)	24.30	24.26	24.73	24.13	24.12
Dissolved Oxygen (mg/L)	8.4	9.0	9.4	8.8	8.3
Sediment Silt-Clay (%)	91.84	72.91	4.07	84.47	92.33
Total Carbon (%)	3.40	2.62	0.06	2.99	2.67
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.67	3.33	4.00	2.67	3.33
Condition	Marginal	Meets Goal	Meets Goal	Marginal	Meets Goal
# Attributes Scored	6	6	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.59	2.02	2.04	1.92	1.87
Abundance (#/m2)	1181 5	386 3	1727 5	114 1	250 3
Deep Deposit Feeder Abundance (%)	82.69	0.00	25.00	0.00	27.27
Oligo. Poll. Ind. Spp. Abund. (%)	94.23 3	52.94 3	81.58 3	60.00 3	63.64 3
Tolerance Score	8.69 3	6.20 3	6.05 3	6.13 3	6.16 3
Oligo. Poll. Sens. Spp. Abund. (%)	1.92 3	35.29 5	1.32 3	20.00 3	27.27 5
Tany./Chir. Abund. Ratio	100.00 1	100.00 1	0.00 5	100.00 1	100.00 1
Carnivore-Omnivore Abundance (%)	11.54 1	41.18 5	67.11 5	40.00 5	36.36 5
Deep Deposit Feeder Abundance (%)	82.69	0.00	25.00	0.00	27.27

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10319	10320	10321	10329	10330
Carinoma tremaphoros		23			
Chiridotea almyra			23		
Chironomidae pupae *			23		
Cladotanytarsus spp.			45		
Coelotanypus spp.	91	114		45	91
Cryptochironomus spp.			91		
Cyathura polita	45	23	68		
Gammarus spp. (Epi.)		23			
Leptocheirus plumulosus	45	91	23	23	
Littoridinops tenuipes (Epi.)			136		
Marenzelleria viridis	23	136		23	68
Melita nitida (Epi.)		23			
Polypedilum halterale group			909		
Rangia cuneata			114	23	23
Tubificidae imm w/o cap chaetae	204				
Tubificoides spp.	772		432		68
Total Abundance w/ Epifauna	1181	432	1863	114	250
Total Abundance w/o Epifauna	1181	386	1727	114	250
Number of Taxa w/ Epifauna	6	7	9	4	4
Number of Taxa w/o Epifauna	6	5	8	4	4
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10319	10320	10321	10329	10330
Carinoma tremaphoros		0.0091			
Chiridotea almyra			0.0045		
Chironomidae			0.0091		
Chironomidae pupae *			0.0011		
Coelotanypus spp.	0.0250	0.0341		0.0091	0.0250
Cyathura polita	0.1500	0.0023	0.0011		
Gammarus spp. (Epi.)		0.0045			
Leptocheirus plumulosus	0.0204	0.0591	0.0045	0.0068	
Littoridinops tenuipes (Epi.)			0.0091		
Marenzelleria viridis	0.0772	0.4090		0.1954	0.4340
Melita nitida (Epi.)		0.0011			
Oligochaeta	0.0011				
Rangia cuneata			0.0432	16.3198	21.3114
Tubificoides spp.	0.0227		0.0114		0.0045
Total Biomass	0.2965	0.5192	0.0841	16.5311	21.7748
Total Biomass w/o Epifauna	0.2965	0.5135	0.0750	16.5311	21.7748

C-46

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10324	
Watershed	Western Tribs	
Habitat	Freshwater	
Date	09/08/03	
Gear	Young Grab	
Sampled Area (sq.m)	0.044	
BOTTOM ENVIRONMENT		
Depth (m)	2.0	
Salinity (ppt)	0.26	
Temperature (C)	24.24	
Dissolved Oxygen (mg/L)	8.4	
Sediment Silt-Clay (%)	95.73	
Total Carbon (%)	2.63	
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	2.50	
Condition	Degraded	
# Attributes Scored	4	
	Value	Score
Shannon-Wiener Index	2.44	
Abundance (#/m2)	432	1
Deep Deposit Feeder Abundance (%)	15.79	1
T.F. Poll. Ind. Spp. Abund. (%)	0.00	5
Tolerance Score	8.08	3
Limnodrilus Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	57.89	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)	
Site	10324
Carinoma tremaphoros	23
Chironomidae pupae *	23
Chironomus spp.	159
Coelotanypus spp.	45
Marenzelleria viridis	23
Rangia cuneata	91
Tubificoides spp.	68
Total Abundance w/ Epifauna	432
Total Abundance w/o Epifauna	432
Number of Taxa w/ Epifauna	6
Number of Taxa w/o Epifauna	6
BENTHIC BIOMASS (Grams per sq. meter)	
Site	10324
Carinoma tremaphoros	0.1659
Chironomidae	0.0011
Chironomidae pupae *	0.0364
Coelotanypus spp.	0.0136
Marenzelleria viridis	0.0273
Rangia cuneata	48.7412
Tubificoides spp.	0.0011
Total Biomass	48.9866
Total Biomass w/o Epifauna	48.9866

C-48

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10101	10102	10103	10104	10105
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	High Meso Mud	Low Mesohaline	High Meso Sand	Polyhaline Sand	High Meso Sand
Date	09/15/03	09/15/03	09/15/03	08/27/03	08/27/03
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)	18.2	6.5	17.0	17.0	12.0
Salinity (ppt)	17.64	11.29	17.93	18.84	15.37
Temperature (C)	24.41	24.03	24.41	24.77	25.46
Dissolved Oxygen (mg/L)	2.4	8.6	1.8	0.3	1.0
Sediment Silt-Clay (%)	92.64	5.70	6.27	5.48	3.92
Total Carbon (%)	3.00	0.21	0.13	0.16	0.12
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	1.00	1.40	1.00	1.00	1.33
Condition	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	6	5	6	6	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	1.92 3	0.00 1	0.00 1	1.58 1
Abundance (#/m2)	0 1	114 1	0 1	0 1	68 1
Biomass (g/m2)	0.00 1	0.01 1	0.00 1	0.00 1	0.03 1
Pollution Indicative Spp Abund (%)	100.00	60.00 1	100.00 1	100.00	33.33 1
Pollution Indicative Spp Biom (%)	100.00 1	20.00	100.00	100.00 1	4.00
Pollution Sensitive Spp Abund (%)	0.00	0.00	0.00 1	0.00 1	0.00 1
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	0.00	0.00	0.00
Carnivore-Omnivore Abundance (%)	0.00 1	20.00	0.00 1	0.00	33.33 3
Deep Deposit Feeder Abundance (%)	0.00	60.00	0.00	0.00 1	33.33

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10101	10102	10103	10104	10105
Apocorophium lacustre (Epi.)	23				
Carinoma tremaphoros					23
Heteromastus filiformis					23
Leitoscoloplos spp.		23			
Macoma mitchelli		23			
Neanthes succinea		23			
Streblospio benedicti					23
Tubificidae imm w/o cap chaetae		45			
Total Abundance w/ Epifauna	23	114	0	0	68
Total Abundance w/o Epifauna		114			68
Number of Taxa w/ Epifauna	1	4	0	0	3
Number of Taxa w/o Epifauna		4	0	0	3
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10101	10102	10103	10104	10105
Apocorophium lacustre (Epi.)	0.0023				
Carinoma tremaphoros					0.0068
Heteromastus filiformis					0.0204
Leitoscoloplos spp.		0.0011			
Macoma mitchelli		0.0011			
Neanthes succinea		0.0023			
Oligochaeta		0.0011			
Streblospio benedicti					0.0011
Total Biomass w/ Epifauna	0.0023	0.0057	0.0011	0.0011	0.0284
Total Biomass w/o Epifauna		0.0057	0.0011	0.0011	0.0284

C-50

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10106		10107		10108		10109		10110	
Watershed	Potomac R		Potomac R		Potomac R		Potomac R		Potomac R	
Habitat	High Meso Mud		Low Mesohaline		Low Mesohaline		High Meso Sand		High Meso Mud	
Date	08/27/03		08/27/03		08/26/03		08/27/03		09/15/03	
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)	8.0		2.0		6.0		16.0		14.0	
Salinity (ppt)	12.38		10.23		10.53		16.48		13.28	
Temperature (C)	25.95		27.07		26.25		25.14		24.17	
Dissolved Oxygen (mg/L)	0.8		6.2		0.8		0.4		2.3	
Sediment Silt-Clay (%)	91.42		13.28		76.98		11.90		76.29	
Total Carbon (%)	3.97		0.39		2.95		0.38		3.14	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	1.00		2.60		1.00		1.00		1.00	
Condition	Severely Degr.		Degraded		Severely Degr.		Severely Degr.		Severely Degr.	
# Attributes Scored	6		5		5		6		6	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	0.00	1	2.44	3	0.00	1	0.00	1	0.00	1
Abundance (#/m2)	0	1	4771	3	0	1	0	1	0	1
Biomass (g/m2)	0.00	1	1.58	3	0.00	1	0.00	1	0.00	1
Pollution Indicative Spp Abund (%)	100.00		10.00	3	100.00	1	100.00	1	100.00	
Pollution Indicative Spp Biom (%)	100.00	1	0.86		100.00		100.00		100.00	1
Pollution Sensitive Spp Abund (%)	0.00		0.95		0.00		0.00	1	0.00	
Pollution Sensitive Spp Biom (%)	0.00	1	0.29	1	0.00	1	0.00		0.00	1
Carnivore-Omnivore Abundance (%)	0.00	1	29.52		0.00		0.00	1	0.00	1
Deep Deposit Feeder Abundance (%)	0.00		8.10		0.00		0.00		0.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10106	10107	10108	10109	10110
Carinoma tremaphoros		318			
Chironomus spp.		204			
Geukensia demissa (Epi.)		45			
Heteromastus filiformis		273			
Leitoscoloplos spp.		23			
Macoma mitchelli		2181			
Mediomastus ambiseta		45			
Mulinia lateralis		45			
Neanthes succinea		886			
Polydora cornuta		545			
Streblospio benedicti		204			
Tubificoides spp.		45			
Total Abundance w/ Epifauna	0	4817	0	0	0
Total Abundance w/o Epifauna		4771			
Number of Taxa w/ Epifauna	0	12	0	0	0
Number of Taxa w/o Epifauna	0	11	0	0	0
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10106	10107	10108	10109	10110
Carinoma tremaphoros		0.0591			
Chironomidae		0.0011			
Geukensia demissa (Epi.)		0.0136			
Heteromastus filiformis		0.2045			
Leitoscoloplos spp.		0.0045			
Macoma mitchelli		0.1113			
Mediomastus ambiseta		0.0045			
Mulinia lateralis		0.0023			
Neanthes succinea		1.1587			
Polydora cornuta		0.0204			
Streblospio benedicti		0.0068			
Tubificoides spp.		0.0045			
Total Biomass w/ Epifauna	0.0011	1.5915	0.0011	0.0011	0.0011
Total Biomass w/o Epifauna	0.0011	1.5779	0.0011	0.0011	0.0011

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10111	10112	10113	10114	10115
Watershed	Potomac R	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	High Meso Mud	Low Mesohaline	Low Mesohaline	Low Mesohaline	High Meso Mud
Date	08/26/03	09/15/03	08/27/03	08/26/03	08/26/03
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)	7.5	8.8	5.0	7.0	9.0
Salinity (ppt)	12.76	11.92	10.88	11.62	13.16
Temperature (C)	25.57	24.00	26.70	25.85	25.43
Dissolved Oxygen (mg/L)	0.9	5.7	0.8	1.3	0.6
Sediment Silt-Clay (%)	83.87	5.18	77.93	90.46	43.98
Total Carbon (%)	3.10	0.18	3.76	3.10	3.43
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	1.00	1.00	1.00	1.00	1.00
Condition	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	6	5	5	5	6
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Abundance (#/m2)	0 1	0 1	0 1	0 1	0 1
Biomass (g/m2)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Pollution Indicative Spp Abund (%)	100.00 1	100.00 1	100.00 1	100.00 1	100.00 1
Pollution Indicative Spp Biom (%)	100.00 1	100.00 1	100.00 1	100.00 1	100.00 1
Pollution Sensitive Spp Abund (%)	0.00	0.00	0.00	0.00	0.00
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	0.00 1	0.00 1	0.00 1
Carnivore-Omnivore Abundance (%)	0.00 1	0.00	0.00	0.00	0.00 1
Deep Deposit Feeder Abundance (%)	0.00	0.00	0.00	0.00	0.00

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10116	10117	10118	10124
Watershed	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	08/26/03	08/26/03	08/26/03	08/26/03
Gear	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT				
Depth (m)	9.0	4.5	3.0	7.0
Salinity (ppt)	11.12	9.63	6.06	6.68
Temperature (C)	26.09	26.66	27.29	27.25
Dissolved Oxygen (mg/L)	0.6	0.8	5.8	2.4
Sediment Silt-Clay (%)	95.73	76.47	76.87	81.67
Total Carbon (%)	2.75	2.00	3.26	2.35
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score	1.80	1.40	2.60	2.20
Condition	Severely Degr.	Severely Degr.	Degraded	Degraded
# Attributes Scored	5	5	5	5
	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	1.88 3	2.41 3	1.81 3
Abundance (#/m2)	23 1	477 1	7407 1	2999 3
Biomass (g/m2)	0.00 1	0.25 1	3.25 3	0.39 1
Pollution Indicative Spp Abund (%)	0.00 5	47.62 1	13.50 3	15.91 3
Pollution Indicative Spp Biom (%)	0.00	0.00	0.31	4.66
Pollution Sensitive Spp Abund (%)	0.00	0.00	8.90	1.52
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	73.41 3	26.82 1
Carnivore-Omnivore Abundance (%)	0.00	71.43	8.90	3.79
Deep Deposit Feeder Abundance (%)	100.00	4.76	48.47	32.58

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)				
Site	10116	10117	10118	10124
Apocorophium lacustre (Epi.)			91	
Balanus improvisus (Epi.)			68	
Carinoma tremaphoros		23	23	45
Chironomus spp.		227		
Cryptochironomus spp.				23
Cyathura polita			68	
Edotea triloba (Epi.)			23	
Eteone heteropoda			23	
Geukensia demissa (Epi.)			23	
Heteromastus filiformis		23	45	
Leptocheirus plumulosus			1522	1386
Macoma balthica			136	23
Macoma mitchelli		114	45	
Marenzelleria viridis			68	23
Melita nitida (Epi.)			23	
Neanthes succinea		91	545	45
Polydora cornuta			136	
Rangia cuneata			386	
Streblospio benedicti			863	477
Tubificidae imm w/o cap chaetae			114	
Tubificoides spp.	23		3431	977
Total Abundance w/ Epifauna	23	477	7634	2999
Total Abundance w/o Epifauna	23	477	7407	2999
Number of Taxa w/ Epifauna	1	5	19	8
Number of Taxa w/o Epifauna	1	5	14	8

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)				
Site	10116	10117	10118	10124
Apocorophium lacustre (Epi.)			0.0045	
Balanus improvisus (Epi.)			0.0136	
Carinoma tremaphoros		0.0011	0.0091	0.0068
Chironomidae		0.0011		0.0011
Cyathura polita			0.1022	
Edotea triloba (Epi.)			0.0023	
Eteone heteropoda			0.0011	
Geukensia demissa (Epi.)			0.0114	
Heteromastus filiformis		0.0409	0.0045	
Leptocheirus plumulosus			0.1886	0.1704
Macoma balthica			2.1720	0.0863
Macoma mitchelli		0.0886	0.0045	
Marenzelleria viridis			0.0591	0.0182
Melita nitida (Epi.)			0.0011	
Neanthes succinea		0.1227	0.6134	0.0613
Oligochaeta			0.0011	
Polydora cornuta			0.0023	
Rangia cuneata			0.0500	
Streblospio benedicti			0.0091	0.0182
Tubificoides spp.	0.0045		0.0295	0.0273
Total Biomass w/ Epifauna	0.0045	0.2545	3.2796	0.3896
Total Biomass w/o Epifauna	0.0045	0.2545	3.2467	0.3896

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10119	10120	10122	10125
Watershed	Potomac R	Potomac R	Potomac R	Potomac R
Habitat	Oligohaline	Oligohaline	Oligohaline	Oligohaline
Date	08/26/03	08/26/03	08/26/03	08/26/03
Gear	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT				
Depth (m)	4.0	7.0	3.0	3.0
Salinity (ppt)	0.56	1.10	2.93	4.11
Temperature (C)	27.51	27.77	27.71	28.20
Dissolved Oxygen (mg/L)	8.9	8.0	6.8	8.3
Sediment Silt-Clay (%)	83.68	88.53	91.14	95.52
Total Carbon (%)	2.44	2.54	1.70	2.15
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score	3.33	3.00	4.00	2.00
Condition	Meets Goal	Meets Goal	Meets Goal	Severely Degr.
# Attributes Scored	6	6	6	6
	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.46	2.42	2.46	0.76
Abundance (#/m2)	2908 5	3794 3	2408 5	5316 1
Deep Deposit Feeder Abundance (%)	4.69	14.37	1.89	6.84
Oligo. Poll. Ind. Spp. Abund. (%)	42.97 3	52.10 3	34.91 3	94.44 3
Tolerance Score	6.59 3	7.57 3	6.32 3	6.20 3
Oligo. Poll. Sens. Spp. Abund. (%)	33.59 5	27.54 5	33.96 5	2.99 3
Tany./Chir. Abund. Ratio	100.00 1	100.00 1	0.00 5	100.00 1
Carnivore-Omnivore Abundance (%)	17.19 3	21.56 3	21.70 3	2.99 1
Deep Deposit Feeder Abundance (%)	4.69	14.37	1.89	6.84

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)				
Site	10119	10120	10122	10125
Ameroculodes species complex	23	45	45	
Apocorophium lacustre (Epi.)	500	23	23	23
Chiridotea almyra	45	23		
Chironomus spp.			23	
Coelotanypus spp.	68	45		23
Corbicula fluminea	23			
Cyathura polita	295	591	409	136
Gammarus daiberi (Epi.)	204	273		
Gammarus spp. (Epi.)			45	
Leptocheirus plumulosus	932	1227	659	4635
Littoridinops tenuipes (Epi.)	45			
Macoma balthica			23	
Macoma mitchelli			23	
Marenzelleria viridis	932	1022	818	159
Melita nitida (Epi.)		45		295
Neanthes succinea			91	
Procladius spp.	91	159		
Rangia cuneata	364	136	250	
Streblospio benedicti			23	
Tubificoides spp.	136	545	45	364
Total Abundance w/ Epifauna	3658	4135	2476	5635
Total Abundance w/o Epifauna	2908	3794	2408	5316
Number of Taxa w/ Epifauna	13	12	13	7
Number of Taxa w/o Epifauna	10	9	11	5

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)				
Site	10119	10120	10122	10125
Ameroculodes species complex	0.0011	0.0011	0.0011	
Apocorophium lacustre (Epi.)	0.0613	0.0023	0.0011	0.0068
Chiridotea almyra	0.0045	0.0091		
Chironomidae	0.0011	0.0011	0.0011	
Coelotanypus spp.	0.0011	0.0045		0.0023
Corbicula fluminea	0.0045			
Cyathura polita	0.0818	0.1045	0.0954	0.3590
Gammarus daiberi (Epi.)	0.0295	0.0364		
Gammarus spp. (Epi.)			0.0091	
Leptocheirus plumulosus	0.1181	0.1409	0.0727	0.5498
Littoridinops tenuipes (Epi.)	0.0045			
Macoma balthica			0.7157	
Macoma mitchelli			0.0091	
Marenzelleria viridis	0.8906	1.5586	0.5316	0.0068
Melita nitida (Epi.)		0.0023		0.1045
Neanthes succinea			0.3635	
Rangia cuneata	225.9050	55.1801	0.0045	
Streblospio benedicti			0.0023	
Tubificoides spp.	0.0011	0.0045	0.0011	0.0182
Total Biomass	227.1046	57.0454	1.8085	1.0474
Total Biomass w/o Epifauna	227.0092	57.0045	1.7983	0.9361

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10121	10123
Watershed	Potomac R	Potomac R
Habitat	Freshwater	Freshwater
Date	08/26/03	08/26/03
Gear	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044
BOTTOM ENVIRONMENT		
Depth (m)	3.0	6.0
Salinity (ppt)	0.13	0.49
Temperature (C)	27.25	27.96
Dissolved Oxygen (mg/L)	9.4	8.4
Sediment Silt-Clay (%)	36.53	80.59
Total Carbon (%)	1.01	2.26
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	4.00	5.00
Condition	Meets Goal	Meets Goal
# Attributes Scored	4	4
	Value Score	Value Score
Shannon-Wiener Index	2.51	2.24
Abundance (#/m2)	6543 1	1522 5
Deep Deposit Feeder Abundance (%)	14.58 5	13.43 5
T.F. Poll. Ind. Spp. Abund. (%)	1.74 5	2.99 5
Tolerance Score	6.50 5	7.03 5
Limnodrilus Abundance (%)	1.74	2.99
Carnivore-Omnivore Abundance (%)	11.46	13.43

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)		
Site	10121	10123
Apocorophium lacustre (Epi.)	295	295
Balanus improvisus (Epi.)		45
Chiridotea almyra	23	
Chironomus spp.	23	
Coelotanypus spp.	23	45
Corbicula fluminea	2863	
Cryptochironomus spp.	23	
Cyathura polita	364	114
Gammarus daiberi (Epi.)	704	
Gammarus spp. (Epi.)		23
Leptocheirus plumulosus	1136	159
Limnodrilus hoffmeisteri	45	
Littoridinops tenuipes (Epi.)	1340	68
Marenzelleria viridis	682	818
Polypedilum halterale group	227	23
Procladius spp.	68	23
Rangia cuneata	159	136
Tubificidae imm w/o cap chaetae		45
Tubificidae imm w/o cap chaetae *	68	
Tubificoides spp.	841	159
Total Abundance w/ Epifauna	8884	1954
Total Abundance w/o Epifauna	6543	1522
Number of Taxa w/ Epifauna	16	13
Number of Taxa w/o Epifauna	13	9

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)		
Site	10121	10123
Apocorophium lacustre (Epi.)	0.0409	0.0295
Balanus improvisus (Epi.)		0.0011
Chiridotea almyra	0.0091	
Chironomidae	0.0011	0.0011
Coelotanypus spp.	0.0023	0.0011
Corbicula fluminea	14.4749	
Cyathura polita	0.1272	0.0432
Gammarus daiberi (Epi.)	0.1250	
Gammarus spp. (Epi.)		0.0068
Leptocheirus plumulosus	0.1227	0.0204
Littoridinops tenuipes (Epi.)	0.4180	0.0091
Marenzelleria viridis	0.3862	0.5748
Oligochaeta	0.0011	0.0011
Rangia cuneata	109.9035	3.5466
Tubificoides spp.	0.0114	0.0011
Total Biomass	125.6234	4.2361
Total Biomass w/o Epifauna	125.0395	4.1896

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10201		10203		10204		10205		10206	
Watershed	Patuxent R		Patuxent R		Patuxent R		Patuxent R		Patuxent R	
Habitat	Low Mesohaline		Low Mesohaline		Low Mesohaline		Low Mesohaline		Low Mesohaline	
Date	08/28/03		08/28/03		08/28/03		08/29/03		08/29/03	
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)	7.0		7.0		8.0		6.0		2.0	
Salinity (ppt)	10.49		10.98		11.18		10.85		10.73	
Temperature (C)	27.97		27.07		27.05		27.68		27.88	
Dissolved Oxygen (mg/L)	9.1		5.9		5.6		7.2		9.9	
Sediment Silt-Clay (%)	2.73		5.46		23.52		44.22		2.27	
Total Carbon (%)	0.28		0.21		0.71		1.65		0.07	
BENTHIC INDEX OF BIOTIC INTEGRITY										
B-IBI Score	2.20		2.20		2.60		3.00		3.00	
Condition	Degraded		Degraded		Degraded		Meets Goal		Meets Goal	
# Attributes Scored	5		5		5		5		5	
	Value	Score	Value	Score	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.46	3	2.72	5	2.71	5	2.74	5	2.76	5
Abundance (#/m2)	1999	5	1431	3	2908	3	2022	5	1159	3
Biomass (g/m2)	0.40	1	0.23	1	2.00	3	1.01	3	11.84	3
Pollution Indicative Spp Abund (%)	37.50	1	44.44	1	44.53	1	23.60	1	15.69	3
Pollution Indicative Spp Biom (%)	25.29		41.46		11.16		5.38		96.36	
Pollution Sensitive Spp Abund (%)	7.95		22.22		8.59		5.62		29.41	
Pollution Sensitive Spp Biom (%)	1.15	1	20.49	1	33.75	1	28.81	1	0.85	1
Carnivore-Omnivore Abundance (%)	21.59		30.16		27.34		37.08		43.14	
Deep Deposit Feeder Abundance (%)	3.41		9.52		4.69		1.12		1.96	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10201	10203	10204	10205	10206
<i>Acteocina canaliculata</i>	159	136	23	23	273
<i>Ameroculodes</i> species complex					45
<i>Apocorophium lacustre</i> (Epi.)			23		
<i>Carinoma tremaphoros</i>				23	45
<i>Chironomus</i> spp.	45	23	250	227	
<i>Gemma gemma</i>					91
<i>Glycera dibranchiata</i>	45				
<i>Glycinde solitaria</i>		68	136	23	68
<i>Heteromastus filiformis</i>	45		23	23	23
<i>Leitoscoloplos</i> spp.		45	45		
<i>Leptocheirus plumulosus</i>				591	
<i>Macoma balthica</i>			91	68	
<i>Macoma mitchelli</i>	795	273	886	341	318
<i>Mediomastus ambiseta</i>		91			
<i>Melita nitida</i> (Epi.)	23				
<i>Micrura leidyi</i>	23		23		
<i>Mulinia lateralis</i>	613	545	182	136	182
<i>Neanthes succinea</i>	91	159	364	454	114
<i>Pectinaria gouldii</i>	23				
<i>Phoronis</i> spp.		23			
<i>Ptilanthura tenuis</i>	23				
<i>Rictaxis punctostriatus</i>	45	45			
<i>Streblospio benedicti</i>	91	23	818	114	
<i>Tubificoides</i> spp.			68		
Total Abundance w/ Epifauna	2022	1431	2931	2022	1159
Total Abundance w/o Epifauna	1999	1431	2908	2022	1159
Number of Taxa w/ Epifauna	13	11	13	11	9
Number of Taxa w/o Epifauna	12	11	12	11	9

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10201	10203	10204	10205	10206
Acteocina canaliculata	0.0045	0.0114	0.0011	0.0045	0.1000
Ameroculodes species complex					0.0204
Apocorophium lacustre (Epi.)			0.0011		
Carinoma tremaphoros				0.0523	0.0227
Chironomidae	0.0011	0.0011	0.0011	0.0011	
Gemma gemma					0.0068
Glycera dibranchiata	0.0227				
Glycinde solitaria		0.0114	0.0818	0.0011	0.0011
Heteromastus filiformis	0.0136		0.0023	0.0523	0.0011
Leitoscoloplos spp.		0.0591	0.0432		
Leptocheirus plumulosus				0.1136	
Macoma balthica			0.5907	0.2863	
Macoma mitchelli	0.0318	0.0568	0.1772	0.0182	0.2317
Mediomastus ambiseta		0.0045			
Melita nitida (Epi.)	0.0045				
Micrura leidyi	0.1772		0.0114		
Mulinia lateralis	0.0977	0.0364	0.1295	0.0432	11.4123
Neanthes succinea	0.0227	0.0295	0.9065	0.4294	0.0477
Pectinaria gouldii	0.0182				
Phoronis spp.		0.0204			
Ptilanthura tenuis	0.0011				
Rictaxis punctostriatus	0.0023	0.0011			
Streblospio benedicti	0.0023	0.0011	0.0500	0.0114	
Tubificoides spp.			0.0011		
Total Biomass w/ Epifauna	0.3999	0.2329	1.9971	1.0133	11.8439
Total Biomass w/o Epifauna	0.3953	0.2329	1.9960	1.0133	11.8439

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10207	10208	10209	10210	10211
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R
Habitat	High Meso Mud	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
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)	16.0	9.0	7.0	9.0	4.0
Salinity (ppt)	13.37	11.49	10.67	11.20	10.25
Temperature (C)	26.51	27.23	27.57	27.33	27.69
Dissolved Oxygen (mg/L)	3.2	4.6	5.0	4.9	5.9
Sediment Silt-Clay (%)	82.62	56.83	83.92	71.45	56.99
Total Carbon (%)	4.09	3.27	3.05	3.11	2.26
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	1.00	1.80	1.80	1.80	2.60
Condition	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.	Degraded
# Attributes Scored	6	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	0.00 1	2.06 3	1.97 3	1.85 3	1.78 3
Abundance (#/m2)	0 1	1045 3	1022 3	954 3	1908 5
Biomass (g/m2)	0.00 1	0.49 1	0.58 1	0.45 1	1.24 3
Pollution Indicative Spp Abund (%)	100.00 1	76.09 1	73.33 1	54.76 1	75.00 1
Pollution Indicative Spp Biom (%)	100.00 1	17.29 1	2.76 1	11.14 1	0.82 1
Pollution Sensitive Spp Abund (%)	0.00 1	0.00 1	8.89 1	0.00 1	10.71 1
Pollution Sensitive Spp Biom (%)	0.00 1	0.00 1	32.68 1	0.00 1	23.79 1
Carnivore-Omnivore Abundance (%)	0.00 1	32.61 1	57.78 1	52.38 1	66.67 1
Deep Deposit Feeder Abundance (%)	0.00 1	4.35 1	0.00 1	2.38 1	0.00 1

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10207	10208	10209	10210	10211
Apocorophium lacustre (Epi.)	23				
Carinoma tremaphoros		23			
Chironomus spp.		227	545	91	1159
Eteone heteropoda				23	
Heteromastus filiformis		23			
Leitoscoloplos spp.		23		23	
Leptocheirus plumulosus		23	45		
Macoma balthica			91		204
Macoma mitchelli		91	91	45	159
Mulinia lateralis					23
Neanthes succinea		91	45	386	114
Streblospio benedicti		545	204	386	250
Total Abundance w/ Epifauna	23	1045	1022	954	1908
Total Abundance w/o Epifauna		1045	1022	954	1908
Number of Taxa w/ Epifauna	1	8	6	6	6
Number of Taxa w/o Epifauna		8	6	6	6
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10207	10208	10209	10210	10211
Apocorophium lacustre (Epi.)	0.0023				
Carinoma tremaphoros		0.0011			
Chironomidae		0.0011	0.1363	0.0011	0.3044
Eteone heteropoda				0.0068	
Heteromastus filiformis		0.0159			
Leitoscoloplos spp.		0.0568		0.0227	
Leptocheirus plumulosus		0.0023	0.0091		
Macoma balthica			0.1886		0.2954
Macoma mitchelli		0.0954	0.1340	0.0114	0.2363
Mulinia lateralis					0.0011
Neanthes succinea		0.2863	0.0932	0.3862	0.3953
Streblospio benedicti		0.0273	0.0159	0.0204	0.0091
Total Biomass w/ Epifauna	0.0023	0.4862	0.5771	0.4487	1.2416
Total Biomass w/o Epifauna		0.4862	0.5771	0.4487	1.2416

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10212	10213	10214	10215	10216
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
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)	2.0	11.0	6.0	6.0	6.0
Salinity (ppt)	9.31	11.36	10.12	10.60	10.26
Temperature (C)	28.06	27.09	27.59	27.41	27.52
Dissolved Oxygen (mg/L)	6.3	3.2	3.7	4.0	4.9
Sediment Silt-Clay (%)	5.94	98.64	96.82	93.02	95.52
Total Carbon (%)	0.19	3.63	3.16	3.09	3.29
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.60	1.80	1.00	1.40	1.80
Condition	Degraded	Severely Degr.	Severely Degr.	Severely Degr.	Severely Degr.
# Attributes Scored	5	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.31 3	0.00 1	1.61 1	1.15 1	1.52 1
Abundance (#/m2)	4044 3	23 1	409 1	1272 3	1590 5
Biomass (g/m2)	2.82 3	0.00 1	0.03 1	0.10 1	0.21 1
Pollution Indicative Spp Abund (%)	21.35 1	0.00 5	88.89 1	91.07 1	82.86 1
Pollution Indicative Spp Biom (%)	1.65	0.00	32.00	52.94	40.44
Pollution Sensitive Spp Abund (%)	16.85	0.00	0.00	0.00	0.00
Pollution Sensitive Spp Biom (%)	71.96 3	0.00 1	0.00 1	0.00 1	0.00 1
Carnivore-Omnivore Abundance (%)	19.10	0.00	72.22	10.71	17.14
Deep Deposit Feeder Abundance (%)	2.25	0.00	0.00	5.36	4.29

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10212	10213	10214	10215	10216
Acteocina canaliculata	295				
Apocorophium lacustre (Epi.)			23	23	
Carinoma tremaphoros	23				
Chironomidae pupae *			23		
Chironomus spp.	45		250	114	136
Coelotanypus spp.			23		
Epitonium rupicola (Epi.)	23				
Eteone heteropoda	23				23
Heteromastus filiformis	68			23	
Leitoscoloplos spp.				23	23
Leptocheirus plumulosus	23				
Macoma balthica	386				
Macoma mitchelli	1999		23	45	114
Mulinia lateralis	45				
Neanthes succinea	364			23	114
Rictaxis punctostriatus	23				
Streblospio benedicti	727		91	1022	1136
Tellinidae		23			
Tubificidae imm w/o cap chaetae	23				
Tubificoides spp.				23	45
Total Abundance w/ Epifauna	4067	23	432	1295	1590
Total Abundance w/o Epifauna	4044	23	409	1272	1590
Number of Taxa w/ Epifauna	14	1	5	8	7
Number of Taxa w/o Epifauna	13	1	4	7	7

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10212	10213	10214	10215	10216
Acteocina canaliculata	0.0682				
Apocorophium lacustre (Epi.)			0.0011	0.0023	
Carinoma tremaphoros	0.0159				
Chironomidae	0.0011		0.0011	0.0011	0.0011
Chironomidae pupae *			0.0114		
Coelotanypus spp.			0.0023		
Epitonium rupicola (Epi.)	0.0795				
Eteone heteropoda	0.0091				0.0045
Heteromastus filiformis	0.0477			0.0068	
Leitoscoloplos spp.				0.0011	0.0295
Leptocheirus plumulosus	0.0091				
Macoma balthica	1.9607				
Macoma mitchelli	0.3612		0.0068	0.0011	0.0091
Mulinia lateralis	0.0011				
Neanthes succinea	0.3067			0.0341	0.1091
Oligochaeta	0.0011				
Rictaxis punctostriatus	0.0011				
Streblospio benedicti	0.0364		0.0068	0.0500	0.0500
Tellinidae		0.0045			
Tubificoides spp.				0.0023	0.0045
Total Biomass w/ Epifauna	2.8991	0.0045	0.0295	0.0988	0.2079
Total Biomass w/o Epifauna	2.8196	0.0045	0.0284	0.0966	0.2079

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10217	10219	10220	10221	10223
Watershed	Patuxent R	Patuxent R	Patuxent R	Patuxent R	Patuxent R
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	08/29/03	08/29/03	08/29/03	08/29/03	08/29/03
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	7.0	2.0	3.0	2.0
Salinity (ppt)	9.31	10.77	8.93	8.81	6.50
Temperature (C)	27.77	27.28	28.07	28.03	29.07
Dissolved Oxygen (mg/L)	7.7	3.9	7.1	7.6	6.8
Sediment Silt-Clay (%)	28.26	98.90	6.41	15.07	87.27
Total Carbon (%)	1.15	3.41	0.22	0.36	2.22
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.40	1.00	2.60	2.60	3.40
Condition	Meets Goal	Severely Degr.	Degraded	Degraded	Meets Goal
# Attributes Scored	5	5	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.69 5	0.00 1	2.46 3	2.11 3	2.26 3
Abundance (#/m2)	5544 3	0 1	4158 3	2181 5	2976 3
Biomass (g/m2)	6.05 5	0.00 1	1.23 3	0.89 1	10.70 3
Pollution Indicative Spp Abund (%)	39.34 1	100.00 1	20.77 1	40.63 1	11.45 3
Pollution Indicative Spp Biom (%)	2.74	100.00	3.88	1.79	0.13
Pollution Sensitive Spp Abund (%)	14.34	0.00	4.92	1.04	52.67
Pollution Sensitive Spp Biom (%)	78.47 3	0.00 1	58.54 3	40.20 3	92.23 5
Carnivore-Omnivore Abundance (%)	22.13	0.00	21.31	20.83	6.11
Deep Deposit Feeder Abundance (%)	13.11	0.00	1.64	0.00	6.87

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10217	10219	10220	10221	10223
Acteocina canaliculata			23		
Apocorophium lacustre (Epi.)	23		23	23	
Carinoma tremaphoros	23		45	68	91
Chironomidae pupae *			23		
Chironomus spp.	182		591	23	
Cyathura polita					45
Edotea triloba (Epi.)			23		
Eteone heteropoda	68		23		
Heteromastus filiformis	114		23		23
Hobsonia florida			273		
Leptocheirus plumulosus	68		454	227	704
Leucon americanus	23				
Macoma balthica	795		136	23	1409
Macoma mitchelli	772		2090	613	23
Marenzelleria viridis					23
Melita nitida (Epi.)					250
Micrura leidyi			23		
Mulinia lateralis	68				
Neanthes succinea	954		159	364	45
Rangia cuneata			45		91
Streblospio benedicti	1863		204	863	341
Tubificidae imm w/o cap chaetae			45		
Tubificoides spp.	613				182
Total Abundance w/ Epifauna	5566	0	4203	2204	3226
Total Abundance w/o Epifauna	5544		4158	2181	2976
Number of Taxa w/ Epifauna	13	0	16	8	12
Number of Taxa w/o Epifauna	12	0	14	7	11

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10217	10219	10220	10221	10223
Acteocina canaliculata			0.0045		
Apocorophium lacustre (Epi.)	0.0011		0.0091	0.0011	
Carinoma tremaphoros	0.0318		0.0068	0.0204	0.0318
Chironomidae	0.0011		0.0682	0.0011	
Chironomidae pupae *			0.0114		
Cyathura polita					0.0364
Edotea triloba (Epi.)			0.0182		
Eteone heteropoda	0.0091		0.0182		
Heteromastus filiformis	0.0318		0.0136		0.0045
Hobsonia florida			0.0204		
Leptocheirus plumulosus	0.0023		0.0364	0.0795	0.1295
Leucon americanus	0.0011				
Macoma balthica	4.7462		0.7111	0.3567	8.5859
Macoma mitchelli	0.2068		0.1590	0.1999	0.1749
Marenzelleria viridis					0.2363
Melita nitida (Epi.)					0.0114
Micrura leidyi			0.0204		
Mulinia lateralis	0.0932				
Neanthes succinea	0.8543		0.1250	0.2136	0.4748
Oligochaeta			0.0011		
Rangia cuneata			0.0045		1.0133
Streblospio benedicti	0.0636		0.0295	0.0159	0.0136
Tubificoides spp.	0.0068				0.0023
Total Biomass w/ Epifauna	6.0492	0.0011	1.2576	0.8884	10.7148
Total Biomass w/o Epifauna	6.0481	0.0011	1.2303	0.8872	10.7034

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10226	10228
Watershed	Patuxent R	Patuxent R
Habitat	Low Mesohaline	Low Mesohaline
Date	08/29/03	08/29/03
Gear	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044
BOTTOM ENVIRONMENT		
Depth (m)	11.0	2.0
Salinity (ppt)	11.28	9.95
Temperature (C)	27.11	28.32
Dissolved Oxygen (mg/L)	3.4	10.4
Sediment Silt-Clay (%)	92.83	4.47
Total Carbon (%)	3.56	0.21
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	1.00	2.20
Condition	Severely Degr.	Degraded
# Attributes Scored	5	5
	Value Score	Value Score
Shannon-Wiener Index	0.00 1	2.23 3
Abundance (#/m2)	0 1	3408 3
Biomass (g/m2)	0.00 1	0.72 1
Pollution Indicative Spp Abund (%)	100.00 1	20.00 3
Pollution Indicative Spp Biom (%)	100.00	3.15
Pollution Sensitive Spp Abund (%)	0.00	7.33
Pollution Sensitive Spp Biom (%)	0.00 1	28.39 1
Carnivore-Omnivore Abundance (%)	0.00	26.00
Deep Deposit Feeder Abundance (%)	0.00	2.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)			
Site	10226	10228	
Acteocina canaliculata		204	
Ameroculodes species complex		23	
Chironomidae pupae *		91	
Chironomus spp.		386	
Edotea triloba (Epi.)		45	
Gemma gemma		23	
Haminoea solitaria		23	
Heteromastus filiformis		45	
Leptocheirus plumulosus		45	
Macoma balthica		45	
Macoma mitchelli		2022	
Mulinia lateralis		227	
Neanthes succinea		182	
Streblospio benedicti		68	
Tubificoides spp.		23	
Total Abundance w/ Epifauna	0	3453	
Total Abundance w/o Epifauna		3408	
Number of Taxa w/ Epifauna	0	14	
Number of Taxa w/o Epifauna	0	13	
BENTHIC BIOMASS (Grams per sq. meter)			
Site	10226	10228	
Acteocina canaliculata		0.0704	
Ameroculodes species complex		0.0011	
Chironomidae		0.0011	
Chironomidae pupae *		0.0273	
Edotea triloba (Epi.)		0.0011	
Gemma gemma		0.0114	
Haminoea solitaria		0.0011	
Heteromastus filiformis		0.0454	
Leptocheirus plumulosus		0.0182	
Macoma balthica		0.1340	
Macoma mitchelli		0.2749	
Mulinia lateralis		0.0068	
Neanthes succinea		0.1113	
Streblospio benedicti		0.0159	
Tubificoides spp.		0.0011	
Total Biomass w/ Epifauna	0.0011	0.7214	
Total Biomass w/o Epifauna	0.0011	0.7202	

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10224
Watershed	Patuxent R
Habitat	Oligohaline
Date	08/29/03
Gear	Young Grab
Sampled Area (sq.m)	0.044
BOTTOM ENVIRONMENT	
Depth (m)	5.0
Salinity (ppt)	2.72
Temperature (C)	29.21
Dissolved Oxygen (mg/L)	7.0
Sediment Silt-Clay (%)	85.85
Total Carbon (%)	4.83
BENTHIC INDEX OF BIOTIC INTEGRITY	
B-IBI Score	3.00
Condition	Meets Goal
# Attributes Scored	5
	Value Score
Shannon-Wiener Index	1.29
Abundance (#/m2)	886 5
Deep Deposit Feeder Abundance (%)	43.59
Oligo. Poll. Ind. Spp. Abund. (%)	94.87 3
Tolerance Score	6.00 5
Oligo. Poll. Sens. Spp. Abund. (%)	0.00 1
Tany./Chir. Abund. Ratio	0.00
Carnivore-Omnivore Abundance (%)	2.56 1
Deep Deposit Feeder Abundance (%)	43.59

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)	
Site	10224
Carinoma tremaphoros	23
Gammarus spp. (Epi.)	273
Leptocheirus plumulosus	454
Littoridinops tenuipes (Epi.)	45
Rangia cuneata	23
Tubificoides spp.	386
Total Abundance w/ Epifauna	1204
Total Abundance w/o Epifauna	886
Number of Taxa w/ Epifauna	6
Number of Taxa w/o Epifauna	4
BENTHIC BIOMASS (Grams per sq. meter)	
Site	10224
Carinoma tremaphoros	0.0159
Gammarus spp. (Epi.)	0.0011
Leptocheirus plumulosus	0.0364
Littoridinops tenuipes (Epi.)	0.0841
Rangia cuneata	0.0011
Tubificoides spp.	0.0659
Total Biomass	0.2045
Total Biomass w/o Epifauna	0.1193

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10225	10227
Watershed	Patuxent R	Patuxent R
Habitat	Freshwater	Freshwater
Date	09/11/03	09/11/03
Gear	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044
BOTTOM ENVIRONMENT		
Depth (m)	1.5	1.0
Salinity (ppt)	0.14	0.14
Temperature (C)	21.43	22.92
Dissolved Oxygen (mg/L)	7.0	8.0
Sediment Silt-Clay (%)	53.85	89.98
Total Carbon (%)	2.44	4.36
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	2.50	3.50
Condition	Degraded	Meets Goal
# Attributes Scored	4	4
	Value Score	Value Score
Shannon-Wiener Index	2.78	1.74
Abundance (#/m2)	4249 3	1454 5
Deep Deposit Feeder Abundance (%)	92.51 3	81.25 3
T.F. Poll. Ind. Spp. Abund. (%)	48.13 3	71.87 3
Tolerance Score	9.53 1	9.30 3
Limnodrilus Abundance (%)	48.13	71.87
Carnivore-Omnivore Abundance (%)	6.95	17.19

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)			
Site	10225	10227	
Aulodrilus limnobioides		45	
Aulodrilus pigueti		45	
Branchiura sowerbyi	250		
Chironomus spp.	182	159	
Corbicula fluminea	23	23	
Cryptochironomus spp.	45	68	
Dero spp.	273		
Ilyodrilus templetoni	818	45	
Limnodrilus hoffmeisteri	750	45	
Littoridinops tenuipes (Epi.)	23		
Polypedilum halterale group	45		
Procladius spp.	23	23	
Quistadrilus multisetosus	68		
Tubificidae imm w cap chaetae *	477		
Tubificidae imm w/o cap chaetae *	1295	1000	
Total Abundance w/ Epifauna	4271	1454	
Total Abundance w/o Epifauna	4249	1454	
Number of Taxa w/ Epifauna	11	8	
Number of Taxa w/o Epifauna	10	8	
BENTHIC BIOMASS (Grams per sq. meter)			
Site	10225	10227	
Branchiura sowerbyi	0.2908		
Chironomidae	0.0011	0.0011	
Corbicula fluminea	2.5469	0.0750	
Littoridinops tenuipes (Epi.)	0.0045		
Oligochaeta	0.6119	0.3272	
Total Biomass	3.4553	0.4033	
Total Biomass w/o Epifauna	3.4507	0.4033	

C-79

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10601	10602	10603	10604	10605
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay
Habitat	Low Mesohaline	High Meso Mud	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	09/03/03	09/02/03	09/02/03	09/03/03	09/02/03
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)	6.4	11.5	6.8	7.1	6.8
Salinity (ppt)	8.65	14.57	9.76	10.65	10.04
Temperature (C)	25.82	24.85	25.61	25.52	25.53
Dissolved Oxygen (mg/L)	4.1	2.7	4.0	3.6	4.0
Sediment Silt-Clay (%)	15.51	94.89	91.71	84.98	97.85
Total Carbon (%)	0.51	3.60	1.75	2.74	3.68
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	2.60	1.67	3.00	1.80	2.60
Condition	Degraded	Severely Degr.	Meets Goal	Severely Degr.	Degraded
# Attributes Scored	5	6	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.80 3	0.00 1	2.40 3	2.12 3	1.73 3
Abundance (#/m2)	4612 3	23 1	932 3	545 3	273 1
Biomass (g/m2)	2.36 3	0.00 1	1.37 3	0.12 1	0.53 1
Pollution Indicative Spp Abund (%)	65.02 1	0.00	26.83 1	62.50 1	0.00 5
Pollution Indicative Spp Biom (%)	3.75	0.00 5	1.49	15.45	0.00
Pollution Sensitive Spp Abund (%)	4.93	0.00	21.95	4.17	50.00
Pollution Sensitive Spp Biom (%)	76.01 3	0.00 1	92.87 5	20.00 1	93.19 3
Carnivore-Omnivore Abundance (%)	8.37	0.00 1	12.20	25.00	25.00
Deep Deposit Feeder Abundance (%)	5.42	100.00	39.02	33.33	25.00

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10601	10602	10603	10604	10605
Apocorophium lacustre (Epi.)	23				
Carinoma tremaphoros	227		45	114	45
Chironomus spp.	23				
Edotea triloba (Epi.)				23	
Heteromastus filiformis	23			23	
Leitoscoloplos spp.	68		45	159	
Macoma balthica	204		204		136
Macoma mitchelli	841		45	23	
Marenzelleria viridis				23	
Micrura leidyi				23	
Mytilopsis leucophaeata (Epi.)	91				
Neanthes succinea	136		68		23
Rangia cuneata	23				
Streblospio benedicti	2908		204	182	
Tubificoides spp.	159	23	318		68
Total Abundance w/ Epifauna	4726	23	932	568	273
Total Abundance w/o Epifauna	4612	23	932	545	273
Number of Taxa w/ Epifauna	12	1	7	8	4
Number of Taxa w/o Epifauna	10	1	7	7	4
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10601	10602	10603	10604	10605
Apocorophium lacustre (Epi.)	0.0023				
Carinoma tremaphoros	0.0341		0.0386	0.0409	0.0250
Chironomidae	0.0011				
Edotea triloba (Epi.)				0.0023	
Heteromastus filiformis	0.0045			0.0318	
Leitoscoloplos spp.	0.0136		0.0159	0.0182	
Macoma balthica	1.7949		1.2723		0.4976
Macoma mitchelli	0.2749		0.0159	0.0068	
Marenzelleria viridis				0.0250	
Micrura leidyi				0.0011	
Mytilopsis leucophaeata (Epi.)	0.0011				
Neanthes succinea	0.1613		0.0182		0.0091
Rangia cuneata	0.0011				
Streblospio benedicti	0.0750		0.0045	0.0011	
Tubificoides spp.	0.0023	0.0011	0.0045		0.0023
Total Biomass w/ Epifauna	2.3663	0.0011	1.3700	0.1272	0.5339
Total Biomass w/o Epifauna	2.3629	0.0011	1.3700	0.1250	0.5339

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10606	10607	10608	10609	10610	
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay	
Habitat	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	Low Mesohaline	
Date	09/02/03	09/02/03	09/02/03	09/02/03	09/02/03	
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)	7.5	6.0	7.1	2.3	6.4	
Salinity (ppt)	11.48	9.45	11.01	8.44	9.72	
Temperature (C)	25.31	25.62	25.30	25.80	25.60	
Dissolved Oxygen (mg/L)	3.5	4.2	3.3	5.0	5.4	
Sediment Silt-Clay (%)	93.05	87.25	92.41	2.04	92.83	
Total Carbon (%)	3.74	3.80	3.74	0.05	3.82	
BENTHIC INDEX OF BIOTIC INTEGRITY						
B-IBI Score	1.80	2.60	3.00	3.00	3.40	
Condition	Severely Degr.	Degraded	Meets Goal	Meets Goal	Meets Goal	
# Attributes Scored	5	5	5	5	5	
	Value	Score	Value	Score	Value	Score
Shannon-Wiener Index	2.18	3	1.61	1	2.26	3
Abundance (#/m2)	454	1	1409	3	568	3
Biomass (g/m2)	0.70	1	0.50	1	2.46	3
Pollution Indicative Spp Abund (%)	25.00	1	8.06	5	24.00	1
Pollution Indicative Spp Biom (%)	1.62		0.45		0.69	
Pollution Sensitive Spp Abund (%)	25.00		8.06		44.00	
Pollution Sensitive Spp Biom (%)	93.53	3	65.00	3	86.44	5
Carnivore-Omnivore Abundance (%)	25.00		19.35		20.00	
Deep Deposit Feeder Abundance (%)	45.00		64.52		28.00	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10606	10607	10608	10609	10610
Ameroculodes species complex				45	
Carinoma tremaphoros	114	68	45		159
Cyathura polita				45	
Heteromastus filiformis				114	
Leitoscoloplos spp.	114		91		
Lepidactylus dytiscus				500	
Leptocheirus plumulosus				545	
Macoma balthica	114	114	250		386
Macoma mitchelli	23			250	
Marenzelleria viridis				909	
Neanthes succinea		204	68		136
Rangia cuneata				136	
Streblospio benedicti		114	45	591	250
Tubificoides spp.	91	909	68		409
Total Abundance w/ Epifauna	454	1409	568	3135	1340
Total Abundance w/o Epifauna	454	1409	568	3135	1340
Number of Taxa w/ Epifauna	5	5	6	9	5
Number of Taxa w/o Epifauna	5	5	6	9	5
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10606	10607	10608	10609	10610
Ameroculodes species complex				0.0023	
Carinoma tremaphoros	0.0318	0.0045	0.0045		0.0545
Cyathura polita				0.0318	
Heteromastus filiformis				0.0704	
Leitoscoloplos spp.	0.0114		0.0159		
Lepidactylus dytiscus				0.0568	
Leptocheirus plumulosus				0.1159	
Macoma balthica	0.6566	0.3249	2.1289		1.3927
Macoma mitchelli	0.0011			0.5998	
Marenzelleria viridis				0.4476	
Neanthes succinea		0.1568	0.3113		0.0886
Rangia cuneata				0.0068	
Streblospio benedicti		0.0023	0.0011	0.0182	0.0023
Tubificoides spp.	0.0011	0.0114	0.0011		0.0136
Total Biomass w/ Epifauna	0.7020	0.4998	2.4628	1.3496	1.5518
Total Biomass w/o Epifauna	0.7020	0.4998	2.4628	1.3496	1.5518

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

Site	10611	10612	10615	10626	10627
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay
Habitat	Low Mesohaline	High Meso Mud	Low Mesohaline	Low Mesohaline	Low Mesohaline
Date	09/02/03	09/02/03	09/03/03	09/02/03	09/02/03
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)	5.9	16.5	7.0	8.0	6.7
Salinity (ppt)	9.87	16.42	7.25	9.64	10.54
Temperature (C)	25.51	24.51	25.76	25.67	25.37
Dissolved Oxygen (mg/L)	3.3	2.9	5.4	4.3	3.2
Sediment Silt-Clay (%)	46.82	94.07	82.63	86.02	95.19
Total Carbon (%)	1.89	3.21	4.89	3.94	3.64
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	3.00	1.67	4.60	1.80	2.60
Condition	Meets Goal	Severely Degr.	Meets Goal	Severely Degr.	Degraded
# Attributes Scored	5	6	5	5	5
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	1.89 3	0.00 1	2.67 5	2.34 3	2.25 3
Abundance (#/m2)	2726 3	45 1	2863 3	568 3	795 3
Biomass (g/m2)	2.79 3	0.00 1	6.56 5	0.69 1	0.75 1
Pollution Indicative Spp Abund (%)	60.00 1	0.00	0.00 5	52.00 1	34.29 1
Pollution Indicative Spp Biom (%)	0.81	0.00 5	0.00	68.71	0.91
Pollution Sensitive Spp Abund (%)	15.83	0.00	69.84	0.00	25.71
Pollution Sensitive Spp Biom (%)	90.24 5	0.00 1	90.42 5	0.00 1	82.42 5
Carnivore-Omnivore Abundance (%)	12.50	0.00 1	27.78	40.00	17.14
Deep Deposit Feeder Abundance (%)	9.17	0.00	5.56	32.00	22.86

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01:2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)					
Site	10611	10612	10615	10626	10627
Carinoma tremaphoros	23		227	204	68
Cyathura polita			432		
Edotea triloba (Epi.)			23		
Heteromastus filiformis	45		45	23	23
Leitoscoloplos spp.				159	
Leptocheirus plumulosus	45	45	295		
Macoma balthica	386		841		204
Macoma mitchelli	23		45	23	
Marenzelleria viridis	45		727		
Micrura leidyi			23		
Neanthes succinea	318		91	23	68
Paraprionospio pinnata				68	
Procladius spp.			23		
Streblospio benedicti	1636			68	273
Tubificoides spp.	204		114		159
Total Abundance w/ Epifauna	2726	45	2885	568	795
Total Abundance w/o Epifauna	2726	45	2863	568	795
Number of Taxa w/ Epifauna	9	1	12	7	6
Number of Taxa w/o Epifauna	9	1	11	7	6
BENTHIC BIOMASS (Grams per sq. meter)					
Site	10611	10612	10615	10626	10627
Carinoma tremaphoros	0.0045		0.0523	0.0364	0.0182
Chironomidae			0.0011		
Cyathura polita			0.5930		
Edotea triloba (Epi.)			0.0091		
Heteromastus filiformis	0.0364		0.0432	0.1681	0.0341
Leitoscoloplos spp.				0.3408	
Leptocheirus plumulosus	0.0068	0.0023	0.0523		
Macoma balthica	2.4992		4.8257		0.6180
Macoma mitchelli	0.0023		0.0068	0.0091	
Marenzelleria viridis	0.0204		0.5112		
Micrura leidyi			0.0023		
Neanthes succinea	0.1908		0.4635	0.0011	0.0636
Paraprionospio pinnata				0.1295	
Streblospio benedicti	0.0227			0.0011	0.0068
Tubificoides spp.	0.0091		0.0068		0.0091
Total Biomass w/ Epifauna	2.7923	0.0023	6.5672	0.6861	0.7498
Total Biomass w/o Epifauna	2.7923	0.0023	6.5581	0.6861	0.7498

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10613	10616	10617	10618
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay
Habitat	Oligohaline	Oligohaline	Oligohaline	Oligohaline
Date	09/02/03	09/03/03	09/03/03	09/08/03
Gear	Young Grab	Young Grab	Young Grab	Young Grab
Sampled Area (sq.m)	0.044	0.044	0.044	0.044
BOTTOM ENVIRONMENT				
Depth (m)	4.8	3.6	4.5	1.6
Salinity (ppt)	4.53	3.01	2.12	1.80
Temperature (C)	26.41	25.77	25.59	24.49
Dissolved Oxygen (mg/L)	6.5	7.0	7.2	8.6
Sediment Silt-Clay (%)	90.68	96.22	80.11	5.50
Total Carbon (%)	3.44	2.30	3.65	0.15
BENTHIC INDEX OF BIOTIC INTEGRITY				
B-IBI Score	2.20	3.00	3.80	4.00
Condition	Degraded	Meets Goal	Meets Goal	Meets Goal
# Attributes Scored	5	6	5	6
	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.57	1.74	1.96	2.92
Abundance (#/m2)	7929 1	2204 5	4430 1	1068 5
Deep Deposit Feeder Abundance (%)	17.48	2.06	5.13	19.15
Oligo. Poll. Ind. Spp. Abund. (%)	72.21 3	78.35 3	10.26 5	51.06 3
Tolerance Score	6.15 3	6.25 3	6.00 5	5.38 5
Oligo. Poll. Sens. Spp. Abund. (%)	0.29 3	5.15 3	53.85 5	14.89 3
Tany./Chir. Abund. Ratio	0.00	91.67 1	0.00	0.00 5
Carnivore-Omnivore Abundance (%)	4.58 1	26.80 3	16.92 3	31.91 3
Deep Deposit Feeder Abundance (%)	17.48	2.06	5.13	19.15

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)				
Site	10613	10616	10617	10618
Ameroculodes species complex	45			
Apocorophium lacustre (Epi.)		23	318	23
Balanus improvisus (Epi.)		23	23	
Cassidinidea ovalis (Epi.)		23		
Chiridotea almyra			45	68
Cladotanytarsus spp. B Epler				136
Coelotanypus spp.		250		
Cryptochironomus spp.		23		45
Cyathura polita	364	295	704	91
Edotea triloba (Epi.)			23	
Gammarus daiberi (Epi.)		68	182	
Gammarus spp. (Epi.)				23
Geukensia demissa (Epi.)	23			
Heteromastus filiformis	114	45		23
Hobsonia florida			863	
Hydrobiidae (Epi.)	23			
Leptocheirus plumulosus	863	1409	159	204
Macoma balthica	136			
Macoma mitchelli	500			
Marenzelleria viridis	23	114	2340	91
Melita nitida (Epi.)	45	68		
Mytilopsis leucophaeata (Epi.)	386			
Neanthes succinea		23		
Polydora cornuta	182			
Rangia cuneata	1136	45	23	227
Streblospio benedicti	3294		68	
Tubificidae imm w/o cap chaetae	45			
Tubificoides spp.	1227		227	182
Total Abundance w/ Epifauna	8406	2408	4976	1113
Total Abundance w/o Epifauna	7929	2204	4430	1068
Number of Taxa w/ Epifauna	16	13	12	11
Number of Taxa w/o Epifauna	12	8	8	9

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)				
Site	10613	10616	10617	10618
Ameroculodes species complex	0.0023			
Apocorophium lacustre (Epi.)		0.0011	0.0159	0.0023
Balanus improvisus (Epi.)		0.3363	0.1068	
Cassidinidea ovalis (Epi.)		0.0023		
Chiridotea almyra			0.0136	0.0159
Chironomidae		0.0011		0.0011
Coelotanypus spp.		0.0159		
Cyathura polita	0.1431	0.2545	0.2704	0.0386
Edotea triloba (Epi.)			0.0011	
Gammarus daiberi (Epi.)		0.0011	0.0909	
Gammarus spp. (Epi.)				0.0011
Geukensia demissa (Epi.)	0.0023			
Heteromastus filiformis	0.0977	0.0364		0.0772
Hobsonia florida			0.0636	
Hydrobiidae (Epi.)	0.0068			
Leptocheirus plumulosus	0.1363	0.2885	0.0250	0.0454
Macoma balthica	2.3742			
Macoma mitchelli	0.0114			
Marenzelleria viridis	0.0273	0.0568	0.7566	0.1818
Melita nitida (Epi.)	0.0045	0.0023		
Mytilopsis leucophaeata (Epi.)	0.0159			
Neanthes succinea		0.1795		
Oligochaeta	0.0011			
Polydora cornuta	0.0023			
Rangia cuneata	0.6112	6.5570	0.0159	86.8063
Streblospio benedicti	0.1000		0.0011	
Tubificoides spp.	0.0159		0.0011	0.0023
Total Biomass	3.5523	7.7328	1.3621	87.1721
Total Biomass w/o Epifauna	3.5227	7.3897	1.1474	87.1687

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10620	10621	10622	10623	10624
Watershed	Upper Bay	Upper Bay	Upper Bay	Upper Bay	Upper Bay
Habitat	Freshwater	Freshwater	Freshwater	Freshwater	Freshwater
Date	09/03/03	09/03/03	09/03/03	09/03/03	09/03/03
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)	4.4	3.8	2.0	2.6	2.1
Salinity (ppt)	0.11	0.11	0.13	0.11	0.12
Temperature (C)	25.17	25.52	25.98	24.79	25.38
Dissolved Oxygen (mg/L)	8.1	8.0	7.3	8.2	7.5
Sediment Silt-Clay (%)	63.02	82.67	43.14	21.92	16.09
Total Carbon (%)	5.57	2.70	4.88	4.01	4.77
BENTHIC INDEX OF BIOTIC INTEGRITY					
B-IBI Score	5.00	4.00	3.50	3.50	2.00
Condition	Meets Goal	Meets Goal	Meets Goal	Meets Goal	Severely Degr.
# Attributes Scored	4	4	4	4	4
	Value Score	Value Score	Value Score	Value Score	Value Score
Shannon-Wiener Index	2.13	1.98	2.80	2.99	2.14
Abundance (#/m2)	3817 5	2204 5	4408 3	4067 3	5771 1
Deep Deposit Feeder Abundance (%)	7.14 5	63.92 5	65.98 5	50.28 5	79.92 3
T.F. Poll. Ind. Spp. Abund. (%)	0.00 5	63.92 3	57.22 3	50.28 3	79.92 3
Tolerance Score	7.23 5	8.92 3	9.08 3	8.84 3	9.58 1
Limnodrilus Abundance (%)	0.00	63.92	57.22	50.28	79.92
Carnivore-Omnivore Abundance (%)	26.19	28.87	27.32	36.31	12.99

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)						
Site	10620	10621	10622	10623	10624	
Ameroculodes species complex	91					
Apocorophium lacustre (Epi.)	1159			23		
Branchiura sowerbyi			250			
Chaoborus punctipennis					45	
Chaoborus spp.		295				
Chiridotea almyra	68			23	45	
Chironomidae pupae *			23			
Chironomus spp.		23	136	136	114	
Coelotanypus spp.	91	318	182	273	45	
Corbicula fluminea		23	204	295	45	
Cryptochironomus spp.			136	273	91	
Cyathura polita	750		45	364	204	
Dero spp.			68			
Gammarus daiberi (Epi.)	2136		68	136		
Gammarus spp. (Epi.)		23				
Leptocheirus plumulosus	409					
Limnodrilus hoffmeisteri		182	545	545	2249	
Littoridinops tenuipes (Epi.)		23				
Marenzelleria viridis	2022	23		250	227	
Melita nitida (Epi.)	23					
Neanthes succinea	23					
Parachironomus spp.				45		
Pisidium spp.			91			
Polypedilum halterale group	23			45	204	
Procladius spp.	45		454	182		
Rangia cuneata		114			136	
Streblospio benedicti	23					
Tanytarsus spp.			227	136		
Tubificidae imm w cap chaetae			68			
Tubificidae imm w/o cap chaetae *		1227	1977	1500	2363	
Tubificoides spp.	273					
Total Abundance w/ Epifauna	7134	2249	4476	4226	5771	
Total Abundance w/o Epifauna	3817	2204	4408	4067	5771	
Number of Taxa w/ Epifauna	14	9	13	14	11	
Number of Taxa w/o Epifauna	11	7	12	12	11	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC BIOMASS (Grams per sq. meter)					
Site	10620	10621	10622	10623	10624
Ameroculodes species complex	0.0045				
Apocorophium lacustre (Epi.)	0.0977			0.0011	
Branchiura sowerbyi			0.1227		
Chaoborus punctipennis					0.0068
Chaoborus spp.		0.0182			
Chiridotea almyra	0.0114			0.0023	0.0114
Chironomidae	0.0011	0.0011	0.2227	0.0591	0.0011
Chironomidae pupae *			0.0011		
Coelotanypus spp.	0.0045	0.0273	0.0023	0.0159	0.0023
Corbicula fluminea		0.0045	0.3135	0.5498	0.0091
Cyathura polita	0.2340		0.0023	0.0841	0.0909
Gammarus daiberi (Epi.)	0.6680		0.0011	0.0091	
Gammarus spp. (Epi.)		0.0011			
Leptocheirus plumulosus	0.0750				
Littoridinops tenuipes (Epi.)		0.0068			
Marenzelleria viridis	1.0156	0.0386		0.3294	0.1568
Melita nitida (Epi.)	0.0011				
Neanthes succinea	0.0045				
Oligochaeta		0.1749	0.1708	0.0818	0.1901
Pisidium spp.			0.0011		
Rangia cuneata		68.1100			39.2579
Streblospio benedicti	0.0011				
Tubificoides spp.	0.0023				
Total Biomass	2.1209	68.3827	0.8377	1.1326	39.7263
Total Biomass w/o Epifauna	1.3541	68.3747	0.8365	1.1224	39.7263

C-91

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

Site	10625	
Watershed	Upper Bay	
Habitat	Freshwater	
Date	09/03/03	
Gear	Young Grab	
Sampled Area (sq.m)	0.044	
BOTTOM ENVIRONMENT		
Depth (m)	3.3	
Salinity (ppt)	0.13	
Temperature (C)	27.44	
Dissolved Oxygen (mg/L)	6.7	
Sediment Silt-Clay (%)	11.98	
Total Carbon (%)	1.16	
BENTHIC INDEX OF BIOTIC INTEGRITY		
B-IBI Score	3.00	
Condition	Meets Goal	
# Attributes Scored	4	
	Value	Score
Shannon-Wiener Index	2.37	
Abundance (#/m2)	3772	5
Deep Deposit Feeder Abundance (%)	79.52	3
T.F. Poll. Ind. Spp. Abund. (%)	61.45	3
Tolerance Score	9.55	1
Limnodrilus Abundance (%)	61.45	
Carnivore-Omnivore Abundance (%)	17.47	

Continued . . .

BOTTOM ENVIRONMENT AND BENTHOS, SUMMER 2003 (CRUISE 01 :2003/2004) BAY-WIDE RANDOM SITES

BENTHIC ABUNDANCE (per sq. meter)	
Site	10625
Apocorophium lacustre (Epi.)	23
Aulodrilus limnobius	68
Aulodrilus pluriseta	68
Chironomus spp.	91
Coelotanypus spp.	45
Cryptochironomus spp.	45
Cyathura polita	23
Gammarus spp. (Epi.)	45
Limnodrilus hoffmeisteri	136
Lipiniella spp.	45
Musculium transversum	114
Polypedilum halterale group	91
Procladius spp.	318
Tubifex tubifex	341
Tubificidae imm w cap chaetae	204
Tubificidae imm w/o cap chaetae *	2181
Total Abundance w/ Epifauna	3840
Total Abundance w/o Epifauna	3772
Number of Taxa w/ Epifauna	15
Number of Taxa w/o Epifauna	13
BENTHIC BIOMASS (Grams per sq. meter)	
Site	10625
Apocorophium lacustre (Epi.)	0.0091
Chironomidae	0.1545
Coelotanypus spp.	0.0045
Cyathura polita	0.0011
Gammarus spp. (Epi.)	0.0011
Musculium transversum	0.1068
Oligochaeta	0.0441
Total Biomass	0.3213
Total Biomass w/o Epifauna	0.3110

C-93

