BENTHIC INDEX OF BIOTIC INTEGRITY RESULTS FOR NOAA NS&T CHESAPEAKE BAY SAMPLES

Prepared for
Toxics Subcommittee
Chesapeake Bay Program
Annapolis, Maryland

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FOREWORD

This document, *Benthic Index of Biotic Integrity Results for NOAA NS&T Chesapeake Bay Samples*, was prepared by Versar, Inc., at the request of Mr. Bruce Michael of the Maryland Department of Natural Resources, under Cooperative Agreement between Versar, Inc., and the University of Maryland Center for Environmental and Estuarine Studies. It was prepared for the Toxics Subcommittee of the Chesapeake Bay Program.

This report is a revision of two previously submitted reports on benthic community condition for samples collected in Chesapeake Bay by the NOAA National Status & Trends Program in 1998, 1999, and 2001.

1.0 INTRODUCTION

In 1998, 1999, and 2001, NOAA National Status & Trends Program (NS&T) conducted a study to assess the environmental condition of Chesapeake Bay. A total of 210 randomly located stations was sampled during the month of September. The upper Maryland portion of the Bay was sampled in the first year of the study, and the lower Maryland and Virginia portions of the Bay were sampled in the second and third years of the study, respectively. The NS&T program collects synoptic measures of (1) general habitat condition (depth, physical properties of water, sediment grain size, organic carbon content), (2) pollution exposure (sediment contaminant concentrations, sediment toxicity, low dissolved oxygen in the water column), and (3) biotic conditions (diversity and abundance of macroinfauna). The data collected by NOAA in Chesapeake Bay were shared with the Toxics Subcommittee of the Chesapeake Bay Program. The Toxics Subcommittee uses contaminant concentrations and the Chesapeake Bay Benthic Index of Biotic Integrity (B-IBI) to report the status of chemical contaminant impacts on the tidal rivers and mainstem of the Chesapeake Bay. The Chesapeake Bay Program asked Versar to calculate the B-IBI on the NOAA data, but since biomass data were unavailable for the NOAA samples, Versar processed one of the replicate samples archived by NOAA. Two data reports were submitted by Scott (2002, 2005) with the results of the processing of these samples, including species-specific abundance and biomass, and the B-IBI scores.

The present report is a revision of the data reports submitted by Scott (2002, 2005) in light of new habitat data (salinity, sediment silt-clay, and organic carbon content) received from NOAA. Using these new data, the B-IBI was recalculated. The results presented here should replace those submitted previously.

2.0 METHODS

Versar Inc., processed macrobenthic samples collected with a Young grab (440 cm^2 surface area, 0.5-mm screen) from 208 locations within the Chesapeake Bay and tributaries (Table 1). Results are presented and discussed based on the B-IBI which was developed for application to benthic communities of the Chesapeake Bay (Weisberg et al. 1997, Alden et al. 2002). This index has been adopted by Chesapeake Bay monitoring programs as the means to characterize bay-wide benthic community condition and assess the health of the Bay. The B-IBI is a multiple-attribute index developed to identify the degree to which a benthic assemblage meets the Chesapeake Bay Program's Benthic Community Restoration Goals. The B-IBI provides a means for comparing relative condition of benthic invertebrate assemblages across habitat types. It also provides a validated mechanism for integrating several benthic community attributes indicative of habitat "health" into a single number that measures overall benthic community condition.

Table 1. NOAA National Status & Trends Program stations in Chesapeake Bay, 1998, 1999, and 2001. 210 stations were sampled. Two benthic samples were not submitted for B-IBI analysis. Sampling date unavailable for 1998 and 1999.

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
1	L0003077	39.48997	-76.12413	1998
2	L0003078	39.52608	-76.00687	1998
3	L0003079	39.46453	-76.0535	1998
4	L0003080	39.58168	-75.9531	1998
5	L0003081	39.46392	-76.02147	1998
6	L0003082	39.39912	-76.14048	1998
7	L0003083	39.55317	-75.86982	1998
8	L0003084	39.50675	-75.9005	1998
9	L0003085	39.47223	-75.97612	1998
10	L0003086	39.38068	-76.0577	1998
11	L0003087	39.38072	-75.99525	1998
12	L0003088	39.37267	-76.08137	1998
13	L0003089	39.41565	-76.0283	1998
14	L0003090	39.37238	-76.13353	1998
15	L0003091	39.29178	-76.22065	1998
16	L0003092	39.37173	-76.13835	1998
17	L0003093	39.31413	-76.2033	1998
18	L0003094	39.30365	-76.36817	1998
19	L0003095	39.28902	-76.38748	1998
20	L0003096	39.20777	-76.39507	1998
21	L0003097	39.12712	-76.32888	1998
22	L0003098	39.10247	-76.35907	1998
23	L0003099	39.2316	-76.53492	1998
24	L0003100	39.22877	-76.56115	1998
25	L0003101	39.17028	-76.48955	1998
26	L0003102	39.17048	-76.51732	1998
27	L0003103	39.10918	-76.38775	1998
28	L0003104	39.06905	-76.4697	1998
29	L0003105	39.09135	-76.40137	1998
30	L0003106	39.00677	-76.32935	1998
31	L0003107	39.10838	-76.17832	1998
32	L0003108	39.04787	-76.2528	1998
33	L0003109	39.04773	-76.267	1998
34	L0003110	38.985	-76.188	1998
35	L0003111	38.98452	-76.40243	1998
36	L0003112	38.94985	-76.46337	1998
37	L0003113	38.90108	-76.44658	1998
38	L0003114	38.83418	-76.47932	1998
39	L0003115	39.00512	-76.34868	1998
40	L0003116	38.98318	-76.37583	1998

Table 1. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
41	L0003117	38.8759	-76.40255	1998
42	L0003118	38.8852	-76.20297	1998
43	L0003119	38.89915	-76.24202	1998
44	L0003120	38.82902	-76.21338	1998
45	L0003121	38.818	-76.38273	1998
46	L0003122	38.793	-76.52133	1998
47	L0003123	38.69373	-76.48407	1998
48	L0003124	38.63553	-76.49963	1998
49	L0003125	38.582	-76.5031	1998
50	L0003126	38.83642	-76.42692	1998
51	L0003127	38.75115	-76.47022	1998
52	L0003128	38.64268	-76.47152	1998
53	L0003129	38.7873	-76.39312	1998
54	L0003130	38.67965	-76.42583	1998
55	L0003131	38.60175	-76.34057	1998
56	L0003132	38.8383	-76.31103	1998
57	L0003133	38.7703	-76.36175	1998
58	L0003134	38.667	-76.32888	1998
59	L0003135	38.73058	-76.25127	1998
60	L0003136	38.68547	-76.17532	1998
61	L0003137	(no benthic sample submitted)		1998
62	L0003138	38.66417	-76.2319	1998
63	L0003139	38.59897	-76.12565	1998
64	L0003140	38.52292	-76.50395	1999
65	L0003141	38.28917	-76.3605	1999
66	L0003142	38.04355	-76.31197	1999
67	L0003143	38.56578	-76.44895	1999
68	L0003144	38.47602	-76.39947	1999
69	L0003145	38.28167	-76.35383	1999
70	L0003146	38.54592	-76.31167	1999
71	L0003147	38.44788	-76.35283	1999
72	L0003148	38.36533	-76.30695	1999
73	L0003149	38.49815	-76.66677	1999
74	L0003150	38.43342	-76.607	1999
75	L0003151	38.40885	-76.58813	1999
76	L0003152	38.39722	-76.54933	1999
77	L0003153	38.36337	-76.50125	1999
78	L0003154	38.35328	-76.49845	1999
79	L0003155	38.32492	-76.45213	1999
80	L0003156	38.31778	-76.4753	1999
81	L0003157	38.28865	-76.45032	1999
82	L0003158	38.2844	-76.9158	1999

Table 1. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
83	L0003159	38.20597	-76.79937	1999
84	L0003160	38.22863	-76.84737	1999
85	L0003161	38.33518	-77.00172	1999
86	L0003162	38.17205	-76.75423	1999
87	L0003163	38.16887	-76.77103	1999
88	L0003164	38.15483	-76.55972	1999
89	L0003165	38.11268	-76.40987	1999
90	L0003166	38.05815	-76.36128	1999
91	L0003167	38.17407	-76.61552	1999
92	L0003168	37.99533	-76.33947	1999
93	L0003169	38.02182	-76.41739	1999
94	L0003170	38.15042	-76.64843	1999
95	L0003171	38.13052	-76.6419	1999
96	L0003172	38.00258	-76.43688	1999
97	L0003173	37.9647	-76.24503	1999
98	L0003174	37.72678	-76.06328	1999
99	L0003175	37.68588	-76.17357	1999
100	L0003176	38.12577	-76.10272	1999
101	L0003177	38.0412	-76.06212	1999
102	L0003178	37.81552	-76.07395	1999
103	L0003179	37.91685	-76.13895	1999
104	L0003180	37.7971	-76.157	1999
105	L0003181	37.74162	-76.12408	1999
106	L0003182	37.89382	-76.2154	1999
107	L0003183	37.80665	-76.27013	1999
108	L0003184	37.70825	-76.24853	1999
109	L0003185	38.25603	-76.14862	1999
110	L0003186	37.89827	-75.97007	1999
111	L0003187	37.87125	-75.95948	1999
112	L0003188	37.94228	-75.94098	1999
113	L0003189	37.90505	-75.93563	1999
114	L0003190	37.85343	-75.92333	1999
115	L0003191	38.16765	-75.96053	1999
116	L0003192	38.0585	-75.92622	1999
117	L0003193	37.84862	-75.90247	1999
118	L0003194	38.33283	-75.90285	1999
119	L0003195	38.27903	-75.9306	1999
120	L0003196	38.27333	-75.92587	1999
121	L0003197	38.22553	-75.8858	1999
122	L0003198	38.22275	-75.8402	1999
123	L0003199	38.20827	-75.86063	1999
124	L0003200	38.13698	-75.81848	1999

Table 1. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
125	L0003201	38.12875	-75.90402	1999
126	L0003202	38.11757	-75.92905	1999
127	L0003203	38.06122	-75.80645	1999
128	L0003204	38.04262	-75.84835	1999
129	L0003205	38.03005	-75.84287	1999
130	L0003206	37.95055	-75.72057	1999
131	L0003207	37.85885	-75.74092	1999
132	L0003208	37.84253	-75.81055	1999
133	L0003492	37.74603333	-75.939	9/13/2001
134	L0003493	37.74257	-75.98792	9/13/2001
135	L0003494	37.69425	-76.0317	9/11/2001
136	L0003495	37.66492	-76.32677	9/12/2001
137	L0003496	37.60991	-76.21578	9/11/2001
138	L0003497	37.543	-76.3059	9/13/2001
139	L0003498	37.33267	-76.22535	9/4/2001
140	L0003499	37.72426	-75.93993	9/13/2001
141	L0003500	37.61578	-76.1026	9/12/2001
142	L0003501	37.56578	-76.19453	9/11/2001
143	L0003502	37.46348	-76.1054	9/10/2001
144	L0003503	37.22484	-76.08566	9/5/2001
145	L0003504	37.72173333	-75.78997	9/13/2001
146	L0003505	37.6361	-75.9253	9/13/2001
147	L0003506	37.4011	-76.04056	9/10/2001
148	L0003507	37.22426	-76.03562	9/5/2001
149	L0003508	37.16998	-76.01307	9/5/2001
150	L0003509	37.08384	-76.08002	9/4/2001
151	L0003510	37.03558	-75.97418	9/5/2001
152	L0003511	37.21525	-76.27094	9/4/2001
153	L0003512	37.08286667	-76.1592	9/4/2001
154	L0003513	36.95907	-76.00819	9/5/2001
155	L0003514	37.11182	-76.27064	9/10/2001
156	L0003515	36.97106	-76.05823	9/6/2001
157	L0003516	37.02	-76.25878	9/6/2001
158	L0003517	36.97813	-76.3734	9/10/2001
159	L0003518	36.97852	-76.38681	9/10/2001
160	L0003519	36.96109	-76.40289	9/18/2001
161	L0003520	36.99864	-76.25222	9/5/2001
162	L0003521	36.9814	-76.31315	9/6/2001
163	L0003522	36.95666	-76.09856	9/6/2001
164	L0003523	36.93358	-76.19126	9/6/2001
165	- -	(station not sampled)		- -
166	L0003524	36.86127	-75.9949	9/6/2001

Table 1. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
167	L0003525	36.93177	-76.36238	9/6/2001
168	L0003526	36.92417	-76.43717	9/17/2001
169	L0003527	36.90485	-76.41966	9/18/2001
170	L0003528	37.74122	-76.51755	9/11/2001
171	L0003529	37.62981	-76.45549	9/11/2001
172	L0003530	37.60431	-76.36789	9/11/2001
173	L0003531	37.79192	-76.6463	9/11/2001
174	L0003532	37.70976	-76.56024	9/11/2001
175	L0003533	37.66721	-76.55449	9/11/2001
176	L0003534	37.89269	-76.78044	9/12/2001
177	L0003535	37.8731	-76.77008	9/12/2001
178	L0003536	37.844	-76.752	9/12/2001
179	L0003537	37.91626667	-76.83445	9/12/2001
180	L0003538	37.8394	-76.7548	9/12/2001
181	L0003539	37.8	-76.713	9/12/2001
182	L0003540	37.41029	-76.67406	9/7/2001
183	L0003541	37.33689	-76.60573	9/7/2001
184	L0003542	37.31041	-76.56535	9/7/2001
185	L0003543	37.35802	-76.63375	9/7/2001
186	L0003544	37.30203	-76.57676	9/7/2001
187	L0003545	37.26189	-76.53493	9/7/2001
188	L0003546	37.34113	-76.63745	9/7/2001
189	L0003547	37.30667	-76.6113	9/7/2001
190	L0003548	37.30223	-76.57702	9/7/2001
191	L0003549	(no benthic sample submitted)		2001
192	L0003550	37.05874	-76.54374	9/17/2001
193	L0003551	37.05203	-76.51142	9/18/2001
194	L0003552	37.08905	-76.64571	9/17/2001
195	L0003553	37.06404	-76.65943	9/17/2001
196	L0003554	37.04463	-76.63417	9/17/2001
197	L0003555	37.00775	-76.56032	9/18/2001
198	L0003556	36.99051	-76.52807	9/18/2001
199	L0003557	36.93866	-76.49369	9/18/2001
200	L0003558	36.91264	-76.34003	9/6/2001
201	L0003559	36.8975	-76.33833	9/10/2001
202	L0003560	36.85919	-76.32227	9/17/2001
203	L0003561	36.83822	-76.23835	9/19/2001
204	L0003562	36.83589	-76.255	9/19/2001
205	L0003563	36.8343	-76.21845	9/19/2001
206	L0003564	36.82258333	-76.29138	9/19/2001
207	L0003565	36.79045	-76.30555	9/19/2001
208	L0003566	36.74432	-76.29713	9/19/2001

Table 1. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Latitude	Longitude	Sampling Date
209	L0003567	37.38499	-76.40053	9/7/2001
210	L0003568	37.31835	-76.36038	9/7/2001
211	L0003569	37.2694	-76.3681	9/13/2001

The B-IBI is scaled from 1 to 5, and sites with values of 3 or more are considered to meet the Restoration Goals. The index is calculated by scoring each of several attributes (abundance, biomass, Shannon diversity, etc.) as either 5, 3, or 1 depending on whether the value of the attribute at a site approximates, deviates slightly from, or deviates strongly from values found at the best reference sites in similar habitats, and then averaging these scores across attributes. The criteria for assigning these scores are numeric and depend on the habitat (see Weisberg et al. 1997 and Alden et al. 2002 for scoring criteria). Calculation methods for the B-IBI can be found online at: http://www.baybenthos.versar.com/referenc.htm.

Benthic community condition is classified into four levels based on the B-IBI. Values less than or equal to 2.0 are classified as severely degraded; values from 2.0 to 2.6 are classified as degraded; values greater than 2.6 but less than 3.0 are classified as marginal; and values of 3.0 or more are classified as meeting the goals. Values in the marginal category do not meet the Restoration Goals, but they differ from the goals within the range of measurement error.

Laboratory processing included sorting of organisms, identification to lowest practical taxonomic level, counting, and species-specific biomass determination. Prior to sorting, samples were gently washed through a 0.5-mm mesh screen using tap water. The organisms were then separated from the detritus and sorted into major taxa using a binocular dissecting microscope. After sorting, the organisms were stored in 70% ethanol and subsequently identified to the lowest possible taxonomic level (usually, species) and counted. Fragments without heads were eliminated from the counts but included in biomass determinations. Sorting efficiency exceeded 95%.

Oligochaetes and chironomids were mounted on slides and examined under a compound microscope for genus and species identification following procedures based upon currently accepted practices in benthic ecology. If the number of oligochaetes or chironomids in a sample is between 20 and 300 individuals, the sample is split and approximately 50% of the specimens are mounted. The remaining portion is saved and used in biomass determinations. Ash-free dry weight biomass was determined for each species by drying the organisms to a constant weight at 60° C and ashing in a muffle furnace at 500° C for four hours and re-weighing (ash weight). The difference between the dry weight and the ash weight is the ash-free dry weight. Bivalves were crushed to open the shells and expose the animal to drying and ashing (shells included). Because most species of oligochaetes need to be slide mounted for identification, species-specific biomass of oligochaetes are not provided except for *Tubificoides* spp. and *Branchiura sowerbyi*,

which do not require slide mounting for identification. For the same reason, species-specific biomass of chironomids are not provided except for *Coelotanypus* spp.

The habitat data used in this revision of the B-IBI were provided by NOAA (Ian Hartwell, pers. comm.) and in many cases these data differ from the data used by Scott (2002, 2005). For this analysis, bottom salinity was missing for 47 stations due to instrument failure. For stations with missing salinity, we used a regression equation provided by NOAA to predict near bottom salinity from pore water salinity of sediment samples collected for laboratory bioassays. Near bottom salinity of stations with non-missing salinity values was positively related to pore water salinity through the following relationship ($R^2 = 0.96$):

$$y = 0.9x + 0.7231$$

The silt-clay data provided by NOAA for 1998 and 1999 were from the analysis of sediment samples collected for contaminant analysis. These data were not used. Instead, we used silt-clay data from sediment samples that were collected in conjunction with the benthic samples and reported by Scott (2002), except where we had missing values for which the data provided by NOAA were used. The 2001 silt-clay data provided by NOAA were from sediment samples collected in conjunction with the benthic samples, so there was not problem in using these data. The final habitat data used in the calculation of the B-IBI are presented in Table 2.

Table 2. Water depth, bottom salinity, silt-clay, and total organic carbon (TOC) data for NOAA National Status & Trends Program stations in Chesapeake Bay, 1998, 1999, and 2001. *Values calculated from a linear relationship between bottom salinity and pore water salinity.

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
1	L0003077	0.5	1.6 *	95.67	3.7
2	L0003078	1.2	1.6 *	4.49	6.5
3	L0003079	4	1.6 *	47.90	2.0
4	L0003080	3	2.5 *	98.91	2.6
5	L0003081	1.8	2.5 *	82.79	10.6
6	L0003082	5.1	3.4 *	95.86	3.4
7	L0003083	1.1	2.5 *	99.11	2.1
8	L0003084	3	2.5 *	61.28	0.1
9	L0003085	1.2	2.5 *	97.14	2.6
10	L0003086	3.4	2.1	97.04	3.4
11	L0003087	3.4	1.7	3.40	0.2
12	L0003088	3.4	2.6	83.08	2.5

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
13	L0003089	8	2.5 *	91.86	2.8
14	L0003090	6.2	4.3 *	79.81	4.8
15	L0003091	6.7	7.8	71.11	3.4
16	L0003092	5.2	4.3 *	96.97	2.5
17	L0003093	6.4	8.2	72.76	2.5
18	L0003094	1.5	4.3	0.73	0.1
19	L0003095	3	4.5	82.81	2.4
20	L0003096	4.6	7.4	97.34	2.9
21	L0003097	7.1	14.5	99.15	3.2
22	L0003098	6.7	12.4 *	98.66	3.1
23	L0003099	6.1	9.2	97.41	2.8
24	L0003100	1.8	9.7 *	0.52	0.2
25	L0003101	3.7	9.7 *	4.32	0.2
26	L0003102	3	9.7 *	84.67	2.3
27	L0003103	4.2	13.3 *	93.54	3.1
28	L0003104	3	9.7 *	88.25	2.3
29	L0003105	4.6	12.4 *	92.83	2.4
30	L0003106	1.5	11.8	0.71	0.1
31	L0003107	1.2	9.7 *	4.57	0.2
32	L0003108	6.4	11.5 *	54.89	0.4
33	L0003109	7.1	14.1	98.61	2.2
34	L0003110	1.2	11.5 *	0.34	0.2
35	L0003111	7.9	13.3 *	96.87	2.1
36	L0003112	1.2	11.0	0.13	0.2
37	L0003113	2.4	11.6	1.82	0.2
38	L0003114	4	11.8	58.11	0.6
39	L0003115	14.6	17.9	80.74	2.2
40	L0003116	17.1	16.9 *	82.09	2.3
41	L0003117	25.9	18.1	96.66	1.7
42	L0003118	1.8	13.3 *	1.36	0.3
43	L0003119	0.6	12.6	1.51	0.1
44	L0003120	8.4	12.4 *	83.88	2.2
45	L0003121	15.5	16.6	87.29	1.3
46	L0003122	4.9	13.8 *	6.28	0.2

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
47	L0003123	10.1	14.2	94.43	2.4
48	L0003124	9.1	11.5 *	98.87	2.4
49	L0003125	8.2	13.3 *	90.03	1.5
50	L0003126	12.5	15.2	98.78	3.1
51	L0003127	11	15.4	99.36	2.9
52	L0003128	10	16.0	98.45	2.4
53	L0003129	6.1	14.2 *	0.80	0.1
54	L0003130	25.6	17.8 *	99.57	2.4
55	L0003131	7.6	15.2	81.5	1.1
56	L0003132	6.1	13.8 *	1.00	0.3
57	L0003133	1.8	14.2 *	0.03	0.1
58	L0003134	2.7	13.9	49.30	0.3
59	L0003135	5.8	12.2	93.87	1.3
60	L0003136	2.4	12.1	92.92	1.4
61	L0003137		(no benthic sample submitted)		
62	L0003138	6.7	13.0	98.24	1.1
63	L0003139	5.8	13.3 *	91.86	1.3
64	L0003140	7.7	17.1	20.45	0.6
65	L0003141	8.3	18.7 *	5.00	0.2
66	L0003142	4.6	18.4	0.15	0.1
67	L0003143	13.2	17.4	75.27	2.3
68	L0003144	19.6	17.2	72.00	2.1
69	L0003145	10.9	18.7 *	28.83	0.5
70	L0003146	6.7	16.9 *	3.31	0.2
71	L0003147	22.1	20.5 *	49.89	1.2
72	L0003148	6.1	17.8 *	0.31	0.1
73	L0003149	5.4	15.1	87.62	2.0
74	L0003150	2.5	16.0	0.58	0.1
75	L0003151	6.4	16.3	79.78	2.3
76	L0003152	9.6	16.4	70.79	1.8
77	L0003153	12.3	17.0	80.33	2.3
78	L0003154	3.7	16.9	28.59	0.5
79	L0003155	5.5	17.3	32.60	1.0
80	L0003156	4.8	17.2	0.59	0.2

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
81	L0003157	5	17.2	90.58	2.1
82	L0003158	5.1	14.7	48.74	0.6
83	L0003159	9.3	15.1 *	77.18	2.1
84	L0003160	7.5	15.9	92.61	2.3
85	L0003161	3.4	12.6	51.33	1.6
86	L0003162	3.4	15.7	0.73	0.1
87	L0003163	2.9	15.3	0.92	0.1
88	L0003164	12.3	16.9 *	56.03	1.6
89	L0003165	5.3	18.6	4.95	1.7
90	L0003166	2.7	18.1	2.13	0.3
91	L0003167	11.5	18.0	86.26	2.2
92	L0003168	13.4	18.3	81.90	2.6
93	L0003169	11.1	17.9	89.47	2.5
94	L0003170	5.5	16.1	62.04	2.2
95	L0003171	3.8	16.1	65.01	1.3
96	L0003172	5.9	18.1	0.70	0.2
97	L0003173	12.7	20.5 *	92.9	2.4
98	L0003174	9.9	24.8	2.11	0.2
99	L0003175	18.8	21.3	42.93	0.4
100	L0003176	1.5	20.0	2.79	0.1
101	L0003177	5.6	21.0	2.51	0.3
102	L0003178	10.1	21.9	0.87	0.2
103	L0003179	18.4	23.2 *	0.47	0.2
104	L0003180	9.9	21.5	0.15	0.1
105	L0003181	9.3	24.4	0.16	0.1
106	L0003182	4.9	20.1	0.06	0.1
107	L0003183	3.5	20.4	0.59	0.1
108	L0003184	5.6	21.8	1.24	0.1
109	L0003185	3.7	18.7 *	26.9	0.3
110	L0003186	5.9	22.5	2.21	0.2
111	L0003187	4.4	22.6	0.19	0.1
112	L0003188	18.4	22.6	91.62	1.8
113	L0003189	4.3	23.2	0.42	0.0
114	L0003190	7.7	23.3	0.22	0.1

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
115	L0003191	4.4	20.5	90.34	2.5
116	L0003192	4.6	21.4	0.36	0.1
117	L0003193	3.5	24.6	1.05	0.1
118	L0003194	1.7	14.8	91.03	2.4
119	L0003195	3.7	17.1	77.41	2.0
120	L0003196	8.1	17.1	97.05	2.5
121	L0003197	1.7	17.2	4.45	0.3
122	L0003198	2	16.5	48.87	1.7
123	L0003199	1.8	17.1	2.63	0.5
124	L0003200	4.1	17.4 *	91.16	2.8
125	L0003201	3.4	18.7 *	90.73	1.9
126	L0003202	2.4	18.7 *	4.36	0.6
127	L0003203	1.8	20.1	1.35	0.4
128	L0003204	5.1	21.3	91.29	2.0
129	L0003205	2.7	20.9	87.42	2.3
130	L0003206	3.8	21.1	92.28	1.6
131	L0003207	4.2	23.8	77.67	1.6
132	L0003208	10.6	24.7	87.26	1.4
133	L0003492	6.5	20.7	2.40	0.1
134	L0003493	6.5	21.5	1.59	0.1
135	L0003494	10.3	22.1	5.3	0.1
136	L0003495	1.3	18.5	0.31	0.0
137	L0003496	8.1	19.3	1.84	0.1
138	L0003497	0.9	17.8	1.98	0.1
139	L0003498	10.6	23.6	36.21	0.6
140	L0003499	14.5	22.1	92.51	1.7
141	L0003500	13	22.5	66.57	0.7
142	L0003501	11	19.9	95.26	1.5
143	L0003502	10.9	24.5	38.71	0.6
144	L0003503	13.5	26.0	33.92	0.4
145	L0003504	4.3	19.6	92.16	3.1
146	L0003505	5.2	21.3	2.15	0.1
147	L0003506	12.5	24.8	4.48	0.1
148	L0003507	7.3	24.7	3.26	0.1

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
149	L0003508	8.6	25.8	12.65	0.2
150	L0003509	7	29.1	1.86	0.1
151	L0003510	8	29.4	0.95	0.2
152	L0003511	5.5	22.6	2.06	0.1
153	L0003512	9.7	28.1	7.42	0.2
154	L0003513	20	30.6	11.28	0.4
155	L0003514	3.0	22.2	0.59	0.1
156	L0003515	10	30.0	2.25	0.2
157	L0003516	5.8	22.0	1.12	0.1
158	L0003517	3.4	22.8	3.84	0.1
159	L0003518	3	22.8	1.07	0.1
160	L0003519	3	23.1	2.56	0.1
161	L0003520	4.7	24.1	0.89	0.0
162	L0003521	5.8	22.6	1.21	0.1
163	L0003522	9	29.5	14.83	0.4
164	L0003523	5	24.3	1.52	0.1
165	- -		(station not sampled)		
166	L0003524	2.1	22.3	38.86	3.2
167	L0003525	5.5	22.5	56.40	0.9
168	L0003526	5.1	22.4	74.66	1.1
169	L0003527	1.2	21.3	5.20	0.2
170	L0003528	0.6	13.4	81.77	3.4
171	L0003529	8.1	17.4	95.61	2.4
172	L0003530	9.4	18.0	1.21	0.1
173	L0003531	2.1	14.9	39.44	1.0
174	L0003532	13.4	17.0	97.46	2.8
175	L0003533	11.9	17.8	91.87	1.5
176	L0003534	6.8	11.8	91.58	2.3
177	L0003535	6.5	12.6	95.60	2.3
178	L0003536	3	12.8	94.34	2.3
179	L0003537	1.3	6.4	4.15	0.1
180	L0003538	3	11.3	94.56	2.3
181	L0003539	2.6	12.5	97.36	2.6
182	L0003540	1.5	17.3	13.29	0.4

Table 2. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	Depth (m)	Bottom Salinity (psu)	Silt-clay (%)	TOC (%)
183	L0003541	7.6	21.1	91.48	2.3
184	L0003542	1.5	20.7	16.91	0.3
185	L0003543	2.7	18.0	66.65	1.8
186	L0003544	4	21.2	69.22	1.6
187	L0003545	10	22.5	90.21	2.1
188	L0003546	2.6	18.5	84.08	2.2
189	L0003547	2.7	18.3	2.58	0.1
190	L0003548	2.7	21.0	64.66	1.7
191	L0003549		(no benthic sample submitted)		
192	L0003550	3.4	20.5	85.78	1.4
193	L0003551	1.4	20.0	3.68	0.1
194	L0003552	4	14.9	90.05	1.7
195	L0003553	2.4	15.4	98.27	2.2
196	L0003554	2.4	15.6	98.72	2.2
197	L0003555	2.7	19.6	85.45	2.1
198	L0003556	2.4	19.4	11.60	0.3
199	L0003557	0.6	20.0	85.96	1.6
200	L0003558	16.3	23.5	98.61	2.1
201	L0003559	15.1	23.7	93.61	2.1
202	L0003560	13.4	23.0	38.98	0.7
203	L0003561	2.3	21.9	80.67	4.4
204	L0003562	1.8	21.9	65.70	3.5
205	L0003563	2.1	21.7	90.86	4.1
206	L0003564	11	22.8	90.00	3.3
207	L0003565	1.2	22.2	7.41	1.3
208	L0003566	4.9	21.1	10.45	0.7
209	L0003567	7	22.2	96.88	2.7
210	L0003568	5.5	21.9	95.76	1.7
211	L0003569	1.6	21.9	37.34	0.8

3.0 RESULTS

Seventy-one of the 208 stations (34%) were classified as meeting the goal by the B-IBI while 137 stations (66%) were classified as failing the goal. Of the stations failing the goal, 79 stations (58%) were classified as "severely degraded", 30 (22%) as "degraded", and 28 (20%) as "marginally degraded". Station locations and the corresponding benthic community condition are shown in Figures 1 through 3. Table 3 lists the B-IBI values, and the Appendix shows the metric values and scores for each station and the abundance and biomass densities by species.

Many of the stations meeting the goal were located in the upper Bay above the Magothy River (Figure 1), and in the Virginia mainstem (Figure 3). Other locations with good benthic community condition were located in the lower and shallow portions of the Chester, Choptank and other Maryland eastern shore tributaries (Figures 1 and 2). Severely degraded sites were concentrated in the deep portion of the Maryland mainstem and tributaries such as the Patuxent, Potomac, Rappahannock, York, and Nanticoke Rivers (Figures 1-3). The large number of stations with severely degraded condition in 1998 (Maryland mainstem) is consistent with Chesapeake Bay benthic monitoring program results and corresponds to a year for which rainfall was above normal and low dissolved oxygen pervasive.

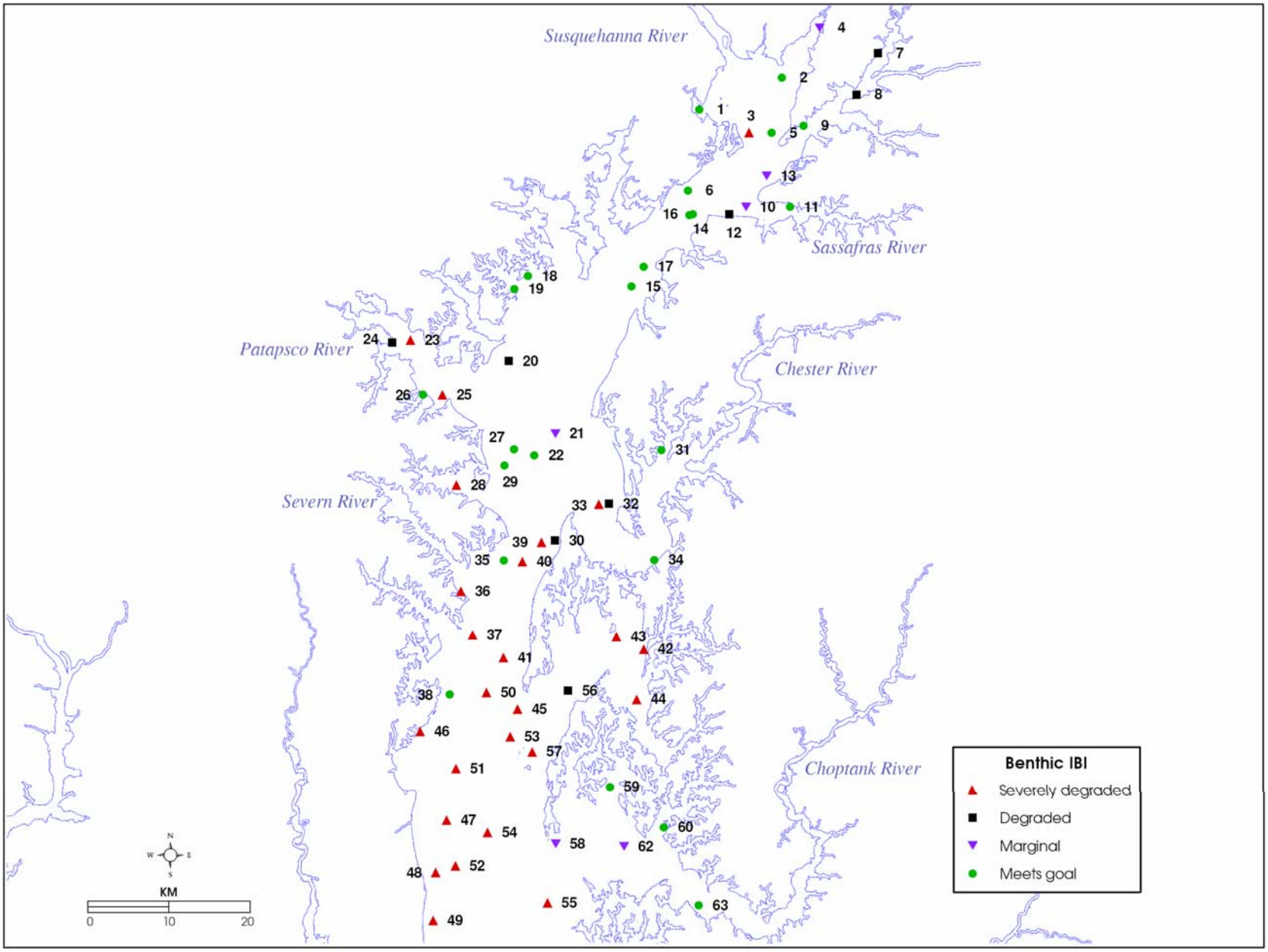

Figure 1. Benthic community condition as determined by the benthic index of biotic integrity for NOAA National Status and Trends Program sampling stations. Upper Chesapeake Bay.

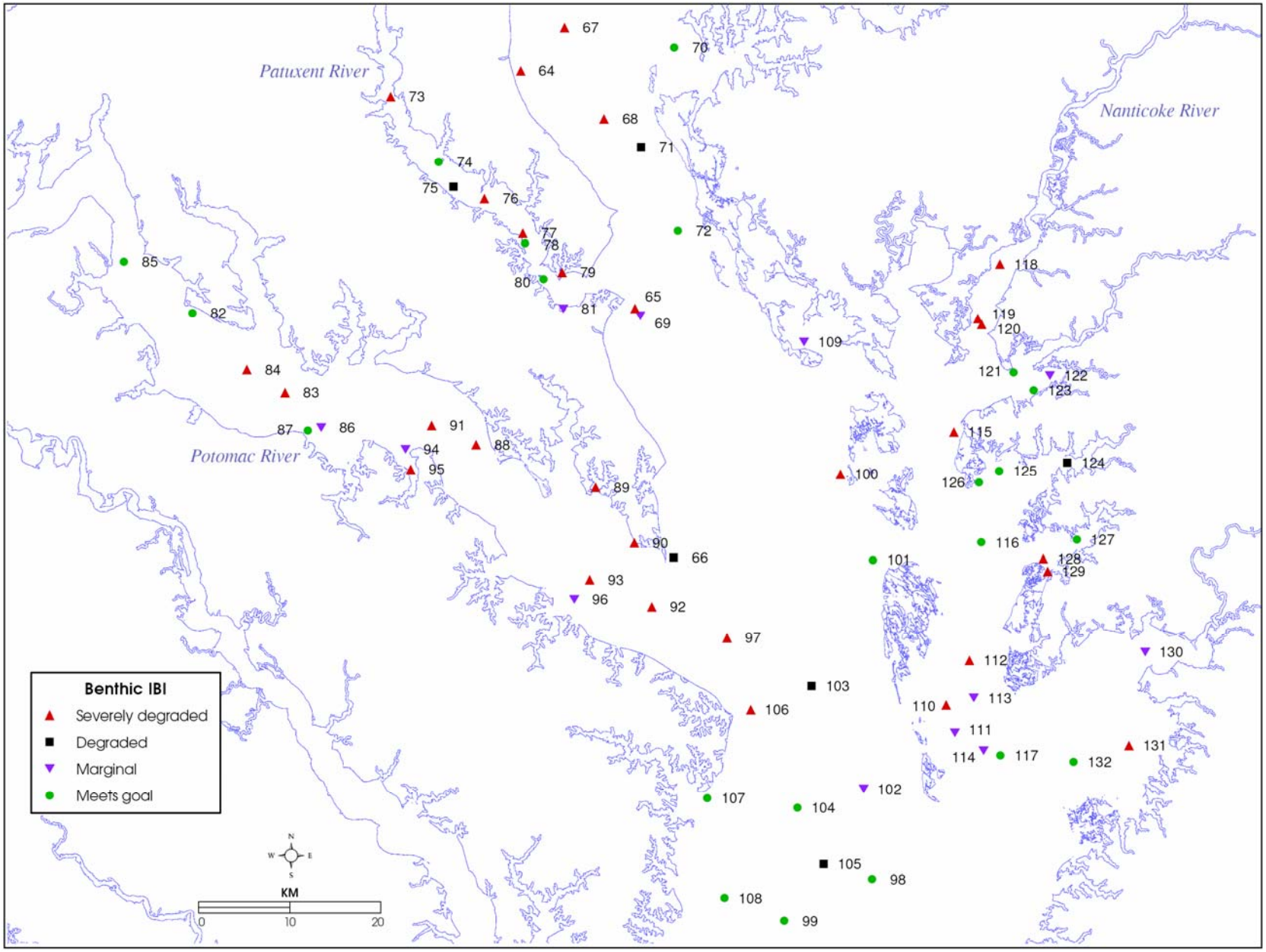

Figure 2. Benthic community condition as determined by the benthic index of biotic integrity for NOAA National Status and Trends Program sampling stations. Mid Chesapeake Bay

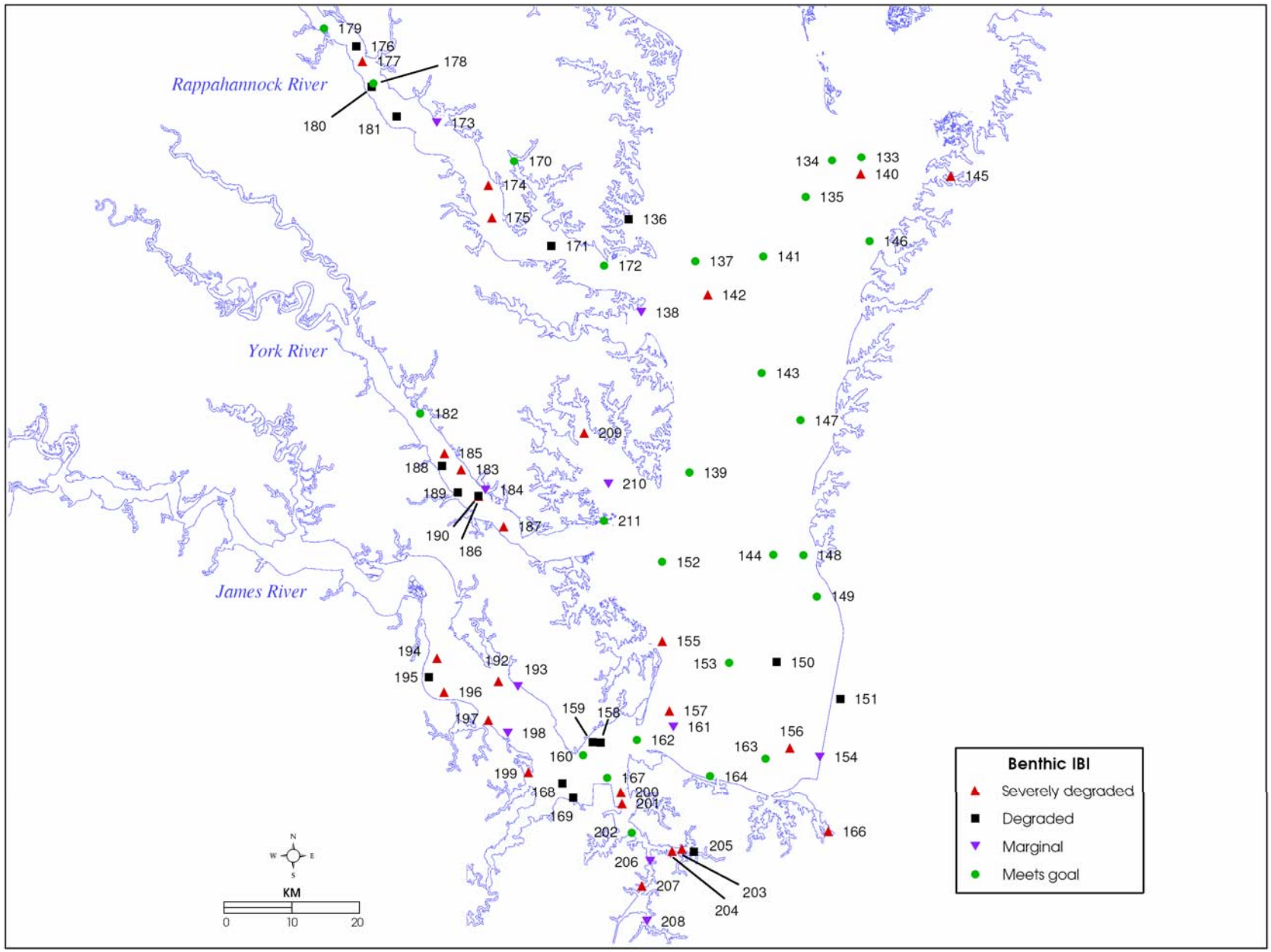

Figure 3. Benthic community condition as determined by the benthic index of biotic integrity for NOAA National Status and Trends Program sampling stations. Lower Chesapeake Bay

Table 3. B-IBI score and classification for NOAA National Status & Trends Program stations in Chesapeake Bay, 1998, 1999, and 2001.

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
1	L0003077	3.0	Meets Goal
2	L0003078	3.3	Meets Goal
3	L0003079	2.0	Severely Degraded
4	L0003080	2.7	Marginal
5	L0003081	3.0	Meets Goal
6	L0003082	3.0	Meets Goal
7	L0003083	2.3	Degraded
8	L0003084	2.6	Degraded
9	L0003085	3.0	Meets Goal
10	L0003086	2.7	Marginal
11	L0003087	3.0	Meets Goal
12	L0003088	2.3	Degraded
13	L0003089	2.7	Marginal
14	L0003090	3.0	Meets Goal
15	L0003091	4.6	Meets Goal
16	L0003092	3.7	Meets Goal
17	L0003093	3.0	Meets Goal
18	L0003094	3.3	Meets Goal
19	L0003095	3.3	Meets Goal
20	L0003096	2.2	Degraded
21	L0003097	2.7	Marginal
22	L0003098	3.0	Meets Goal
23	L0003099	1.0	Severely Degraded
24	L0003100	2.2	Degraded
25	L0003101	1.4	Severely Degraded
26	L0003102	3.0	Meets Goal
27	L0003103	3.7	Meets Goal
28	L0003104	1.4	Severely Degraded
29	L0003105	3.7	Meets Goal
30	L0003106	2.6	Degraded
31	L0003107	3.0	Meets Goal
32	L0003108	2.2	Degraded
33	L0003109	1.3	Severely Degraded
34	L0003110	3.8	Meets Goal
35	L0003111	3.0	Meets Goal
36	L0003112	1.8	Severely Degraded

Table 3. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
37	L0003113	1.8	Severely Degraded
38	L0003114	3.0	Meets Goal
39	L0003115	1.7	Severely Degraded
40	L0003116	1.7	Severely Degraded
41	L0003117	1.7	Severely Degraded
42	L0003118	1.7	Severely Degraded
43	L0003119	1.3	Severely Degraded
44	L0003120	1.7	Severely Degraded
45	L0003121	1.3	Severely Degraded
46	L0003122	1.7	Severely Degraded
47	L0003123	1.3	Severely Degraded
48	L0003124	1.0	Severely Degraded
49	L0003125	2.0	Severely Degraded
50	L0003126	1.7	Severely Degraded
51	L0003127	1.0	Severely Degraded
52	L0003128	1.0	Severely Degraded
53	L0003129	1.7	Severely Degraded
54	L0003130	1.0	Severely Degraded
55	L0003131	2.0	Severely Degraded
56	L0003132	2.3	Degraded
57	L0003133	2.0	Severely Degraded
58	L0003134	2.7	Marginal
59	L0003135	3.7	Meets Goal
60	L0003136	3.7	Meets Goal
61	L0003137	(no benthic sample submitted)	
62	L0003138	2.7	Marginal
63	L0003139	3.3	Meets Goal
64	L0003140	1.3	Severely Degraded
65	L0003141	1.7	Severely Degraded
66	L0003142	2.3	Degraded
67	L0003143	1.7	Severely Degraded
68	L0003144	1.7	Severely Degraded
69	L0003145	2.7	Marginal
70	L0003146	3.7	Meets Goal
71	L0003147	2.3	Degraded
72	L0003148	3.7	Meets Goal
73	L0003149	1.7	Severely Degraded

Table 3. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
74	L0003150	3.3	Meets Goal
75	L0003151	2.3	Degraded
76	L0003152	1.7	Severely Degraded
77	L0003153	1.3	Severely Degraded
78	L0003154	3.7	Meets Goal
79	L0003155	1.7	Severely Degraded
80	L0003156	3.3	Meets Goal
81	L0003157	2.7	Marginal
82	L0003158	3.3	Meets Goal
83	L0003159	1.3	Severely Degraded
84	L0003160	1.0	Severely Degraded
85	L0003161	3.3	Meets Goal
86	L0003162	2.7	Marginal
87	L0003163	3.0	Meets Goal
88	L0003164	1.7	Severely Degraded
89	L0003165	1.0	Severely Degraded
90	L0003166	1.7	Severely Degraded
91	L0003167	1.0	Severely Degraded
92	L0003168	1.0	Severely Degraded
93	L0003169	1.0	Severely Degraded
94	L0003170	2.7	Marginal
95	L0003171	2.0	Severely Degraded
96	L0003172	2.7	Marginal
97	L0003173	2.0	Severely Degraded
98	L0003174	3.3	Meets Goal
99	L0003175	4.3	Meets Goal
100	L0003176	1.3	Severely Degraded
101	L0003177	3.0	Meets Goal
102	L0003178	2.7	Marginal
103	L0003179	2.3	Degraded
104	L0003180	3.0	Meets Goal
105	L0003181	2.3	Degraded
106	L0003182	1.7	Severely Degraded
107	L0003183	3.0	Meets Goal
108	L0003184	3.0	Meets Goal
109	L0003185	2.7	Marginal
110	L0003186	2.0	Severely Degraded

Table 3. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
111	L0003187	2.7	Marginal
112	L0003188	2.0	Severely Degraded
113	L0003189	2.7	Marginal
114	L0003190	2.7	Marginal
115	L0003191	2.0	Severely Degraded
116	L0003192	3.0	Meets Goal
117	L0003193	3.3	Meets Goal
118	L0003194	2.0	Severely Degraded
119	L0003195	2.0	Severely Degraded
120	L0003196	1.7	Severely Degraded
121	L0003197	3.3	Meets Goal
122	L0003198	2.7	Marginal
123	L0003199	3.0	Meets Goal
124	L0003200	2.3	Degraded
125	L0003201	3.0	Meets Goal
126	L0003202	3.0	Meets Goal
127	L0003203	3.0	Meets Goal
128	L0003204	2.0	Severely Degraded
129	L0003205	2.0	Severely Degraded
130	L0003206	2.7	Marginal
131	L0003207	2.0	Severely Degraded
132	L0003208	3.0	Meets Goal
133	L0003492	3.3	Meets Goal
134	L0003493	3.7	Meets Goal
135	L0003494	4.3	Meets Goal
136	L0003495	2.3	Degraded
137	L0003496	3.7	Meets Goal
138	L0003497	2.7	Marginal
139	L0003498	3.3	Meets Goal
140	L0003499	2.0	Severely Degraded
141	L0003500	3.0	Meets Goal
142	L0003501	1.7	Severely Degraded
143	L0003502	3.3	Meets Goal
144	L0003503	3.3	Meets Goal
145	L0003504	1.7	Severely Degraded
146	L0003505	3.7	Meets Goal
147	L0003506	4.3	Meets Goal

Table 3. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
148	L0003507	3.7	Meets Goal
149	L0003508	4.7	Meets Goal
150	L0003509	2.3	Degraded
151	L0003510	2.3	Degraded
152	L0003511	3.7	Meets Goal
153	L0003512	3.0	Meets Goal
154	L0003513	2.7	Marginal
155	L0003514	1.7	Severely Degraded
156	L0003515	2.0	Severely Degraded
157	L0003516	1.7	Severely Degraded
158	L0003517	2.3	Degraded
159	L0003518	2.3	Degraded
160	L0003519	3.3	Meets Goal
161	L0003520	2.7	Marginal
162	L0003521	3.3	Meets Goal
163	L0003522	3.7	Meets Goal
164	L0003523	3.0	Meets Goal
165	- -	(station not sampled)	
166	L0003524	1.0	Severely Degraded
167	L0003525	3.0	Meets Goal
168	L0003526	2.3	Degraded
169	L0003527	2.3	Degraded
170	L0003528	3.3	Meets Goal
171	L0003529	2.3	Degraded
172	L0003530	3.3	Meets Goal
173	L0003531	2.7	Marginal
174	L0003532	1.3	Severely Degraded
175	L0003533	2.0	Severely Degraded
176	L0003534	2.6	Degraded
177	L0003535	1.7	Severely Degraded
178	L0003536	3.0	Meets Goal
179	L0003537	3.4	Meets Goal
180	L0003538	2.2	Degraded
181	L0003539	2.3	Degraded
182	L0003540	3.3	Meets Goal
183	L0003541	1.7	Severely Degraded
184	L0003542	2.7	Marginal

Table 3. (Continued)

Station (This Report)	Station (Chesapeake Bay Program Toxics Database)	B-IBI	B-IBI Classification
185	L0003543	2.0	Severely Degraded
186	L0003544	1.7	Severely Degraded
187	L0003545	1.7	Severely Degraded
188	L0003546	2.3	Degraded
189	L0003547	2.3	Degraded
190	L0003548	2.3	Degraded
191	L0003549	(no benthic sample submitted)	
192	L0003550	2.0	Severely Degraded
193	L0003551	2.7	Marginal
194	L0003552	2.0	Severely Degraded
195	L0003553	2.3	Degraded
196	L0003554	1.3	Severely Degraded
197	L0003555	1.0	Severely Degraded
198	L0003556	2.7	Marginal
199	L0003557	2.0	Severely Degraded
200	L0003558	1.7	Severely Degraded
201	L0003559	1.7	Severely Degraded
202	L0003560	3.3	Meets Goal
203	L0003561	2.0	Severely Degraded
204	L0003562	1.7	Severely Degraded
205	L0003563	2.3	Degraded
206	L0003564	2.7	Marginal
207	L0003565	1.0	Severely Degraded
208	L0003566	2.7	Marginal
209	L0003567	1.0	Severely Degraded
210	L0003568	2.7	Marginal
211	L0003569	4.0	Meets Goal

4.0 REFERENCES

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APPENDIX

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO001	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 0.5	Salinity (ppt): 1.62	Sediment Silt-Clay (%): 95.67

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.29		Oligohaline Pollution Indicative Spp. Abund.	97.46	1
Abundance (#/m2)	2682	5	Tolerance Score	9.53	1
Deep Deposit Feeder Abundance (%)	46.61		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	53.39	5	Tanypodinae/Chironomidae Abundance Ratio	12.70	5

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Branchiura sowerbyi	23	
Chironomidae		1.97272
Chironomidae pupae *	68	0.09773
Chironomus spp.	1182	
Coelotanypus spp.	182	0.01818
Limnodrilus claparedianus	136	
Limnodrilus hoffmeisteri	364	
Oligochaeta		0.38409
Tubificidae imm w/o cap chaetae *	591	
Tubificidae imm. with capilliform chaeta	136	
Total Abundance w/ Epi.	2682	
Total Abundance w/o Epi.	2682	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		2.47272
Total Biomass w/o Epi.		2.47272

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO002	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.2	Salinity (ppt): 1.62	Sediment Silt-Clay (%): 4.49

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	3.58		Oligohaline Pollution Indicative Spp. Abund.	71.31	3
Abundance (#/m2)	2773	5	Tolerance Score	8.22	3
Deep Deposit Feeder Abundance (%)	27.87		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	63.93	5	Tanypodinae/Chironomidae Abundance Ratio	52.31	3

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Almyracuma proximoculi	114	0.00114
Aulodrilus pigueti	45	
Chaoborus punctipennis	68	0.00114
Chironomidae		0.14545
Chironomidae pupae *	68	0.00114
Chironomus spp.	227	
Coelotanypus spp.	591	0.02500
Corbicula fluminea	23	0.01591
Cryptochironomus spp.	45	
Cyathura polita	227	0.01591
Dicrotendipes spp.	91	
Limnodrilus hoffmeisteri	45	
Manayunkia aestuarina	23	0.00114
Oecetis spp. (Epi)	23	0.00114
Oligochaeta		0.03750
Polypedilum halterale group	182	
Procladius spp.	136	
Sphaeriidae	68	0.00114
Tanypus spp.	45	
Tanytarsus spp.	91	
Tubificidae imm w/o cap chaetae *	591	
Tubificidae imm. with capilliform chaeta	91	
Total Abundance w/ Epi.	2795	
Total Abundance w/o Epi.	2773	
Number of Taxa w/ Epi.	18	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		0.24659
Total Biomass w/o Epi.		0.24545

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO003	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.0	Salinity (ppt): 1.62	Sediment Silt-Clay (%): 47.90

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.06		Oligohaline Pollution Indicative Spp. Abund.	87.85	3
Abundance (#/m2)	5614	1	Tolerance Score	9.48	1
Deep Deposit Feeder Abundance (%)	80.16		Oligohaline Pollution Sensitive Spp. Abund.	4.86	3
Carnivore-Omnivore Abundance (%)	12.96	1	Tanypodinae/Chironomidae Abundance Ratio	54.17	3

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chaoborus punctipennis	45	0.00114
Chironomidae		0.00114
Chironomus spp.	136	
Coelotanypus spp.	295	0.01136
Cryptochironomus spp.	68	
Cyathura polita	136	0.05682
Harnischia spp.	45	
Limnodrilus hoffmeisteri	1909	
Marenzelleria viridis	273	0.14318
Oligochaeta		0.99477
Rangia cuneata	23	0.27045
Sphaeriidae	91	0.00114
Tubificidae imm w/o cap chaetae *	2591	
Total Abundance w/ Epi.	5614	
Total Abundance w/o Epi.	5614	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.48000
Total Biomass w/o Epi.		1.48000

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO004	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.0	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 98.91

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.19		Oligohaline Pollution Indicative Spp. Abund.	81.82	3
Abundance (#/m2)	250	3	Tolerance Score	8.78	3
Deep Deposit Feeder Abundance (%)	63.64		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	36.36	5	Tanypodinae/Chironomidae Abundance Ratio	100.00	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Branchiura sowerbyi	23	0.08864
Chaoborus punctipennis	45	0.00114
Coelotanypus spp.	45	0.00114
Limnodrilus hoffmeisteri	45	
Oligochaeta		0.00227
Tubificidae imm w/o cap chaetae *	91	
Total Abundance w/ Epi.	250	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.09318
Total Biomass w/o Epi.		0.09318

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO005	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.8	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 82.79

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.33		Oligohaline Pollution Indicative Spp. Abund.	75.00	3
Abundance (#/m2)	455	5	Tolerance Score	8.44	3
Deep Deposit Feeder Abundance (%)	50.00		Oligohaline Pollution Sensitive Spp. Abund.	15.00	3
Carnivore-Omnivore Abundance (%)	30.00	3	Tanypodinae/Chironomidae Abundance Ratio	100.00	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Anthozoa	23	0.00114
Coelotanypus spp.	114	0.00909
Limnodrilus hoffmeisteri	136	
Marenzelleria viridis	68	0.03182
Oligochaeta		0.00227
Rangia cuneata	23	0.16364
Tubificidae imm w/o cap chaetae *	91	
Total Abundance w/ Epi.	455	
Total Abundance w/o Epi.	455	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.20795
Total Biomass w/o Epi.		0.20795

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO006	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 5.1	Salinity (ppt): 3.42	Sediment Silt-Clay (%): 95.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.31		Oligohaline Pollution Indicative Spp. Abund.	30.65	3
Abundance (#/m2)	1409	5	Tolerance Score	6.43	3
Deep Deposit Feeder Abundance (%)	9.68		Oligohaline Pollution Sensitive Spp. Abund.	4.84	3
Carnivore-Omnivore Abundance (%)	24.19	3	Tanypodinae/Chironomidae Abundance Ratio	90.91	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	23	0.00114
Carinoma tremaphoros	23	
Chiridotea almyra	23	0.00114
Chironomidae		0.00114
Coelotanypus spp.	227	0.00114
Cyathura polita	45	0.00114
Gammarus daiberi (Epi)	45	0.00682
Littoridinops tenuipes (Epi)	23	0.00114
Macoma mitchelli	45	0.00114
Marenzelleria viridis	45	0.00909
Nemertina		0.00909
Oligochaeta		0.00114
Polydora cornuta	45	0.00114
Polypedilum halterale group	23	
Rangia cuneata	773	5.88862
Tubificidae imm w/o cap chaetae	114	
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	1477	
Total Abundance w/o Epi.	1409	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		5.92498
Total Biomass w/o Epi.		5.91703

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO007	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.1	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 99.11

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.72		Oligohaline Pollution Indicative Spp. Abund.	89.47	3
Abundance (#/m2)	432	3	Tolerance Score	8.79	3
Deep Deposit Feeder Abundance (%)	63.16		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	31.58	3	Tanypodinae/Chironomidae Abundance Ratio	66.67	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	45	
Coelotanypus spp.	91	0.00455
Nais spp.	23	
Oligochaeta		0.00227
Rangia cuneata	23	12.32269
Tubificidae imm w/o cap chaetae	250	
Total Abundance w/ Epi.	432	
Total Abundance w/o Epi.	432	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		12.33064
Total Biomass w/o Epi.		12.33064

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO008	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.0	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 61.28

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.60			Condition: Degraded	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.20		Oligohaline Pollution Indicative Spp. Abund.	55.56	3
Abundance (#/m2)	205	3	Tolerance Score	8.53	3
Deep Deposit Feeder Abundance (%)	55.56		Oligohaline Pollution Sensitive Spp. Abund.	22.22	3
Carnivore-Omnivore Abundance (%)	11.11	1	Tanypodinae/Chironomidae Abundance Ratio	0.00	

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.00227
Limnodrilus hoffmeisteri	45	
Marenzelleria viridis	45	0.00909
Oligochaeta		0.00114
Rangia cuneata	23	1.59090
Tubificoides spp.	68	0.00114
Total Abundance w/ Epi.	205	
Total Abundance w/o Epi.	205	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		1.60454
Total Biomass w/o Epi.		1.60454

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO009	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.2	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 97.14

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.43		Oligohaline Pollution Indicative Spp. Abund.	53.76	3
Abundance (#/m2)	2114	5	Tolerance Score	7.29	3
Deep Deposit Feeder Abundance (%)	25.81		Oligohaline Pollution Sensitive Spp. Abund.	5.38	3
Carnivore-Omnivore Abundance (%)	34.41	3	Tanypodinae/Chironomidae Abundance Ratio	85.71	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	23	
Coelotanypus spp.	500	0.05227
Cyathura polita	91	0.04318
Limnodrilus hoffmeisteri	45	
Marenzelleria viridis	114	0.09091
Oligochaeta		0.04318
Polypedilum halterale group	23	
Procladius spp.	45	
Rangia cuneata	727	109.94056
Rheotanytarsus spp.	45	
Tubificidae imm w/o cap chaetae *	500	
Total Abundance w/ Epi.	2114	
Total Abundance w/o Epi.	2114	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		110.17124
Total Biomass w/o Epi.		110.17124

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO010	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.4	Salinity (ppt): 2.10	Sediment Silt-Clay (%): 97.04

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.00		Oligohaline Pollution Indicative Spp. Abund.	49.26	3
Abundance (#/m2)	3091	5	Tolerance Score	7.55	3
Deep Deposit Feeder Abundance (%)	38.24		Oligohaline Pollution Sensitive Spp. Abund.	2.21	3
Carnivore-Omnivore Abundance (%)	9.56	1	Tanypodinae/Chironomidae Abundance Ratio	100.00	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Coelotanypus spp.	273	0.02955
Cyathura polita	23	0.04318
Limnodrilus hoffmeisteri	364	
Marenzelleria viridis	68	0.17273
Oligochaeta		0.04318
Polydora cornuta	45	0.01136
Rangia cuneata	1477	1.94318
Streblospio benedicti	23	0.00114
Tubificidae imm w/o cap chaetae *	818	
Total Abundance w/ Epi.	3091	
Total Abundance w/o Epi.	3091	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		2.24431
Total Biomass w/o Epi.		2.24431

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO011	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.4	Salinity (ppt): 1.70	Sediment Silt-Clay (%): 3.40

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00		Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.43		Oligohaline Pollution Indicative Spp. Abund.	87.16	3
Abundance (#/m2)	3364	3	Tolerance Score	9.59	1
Deep Deposit Feeder Abundance (%)	22.97		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	72.97	5	Tanypodinae/Chironomidae Abundance Ratio	0.00	5

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.54273
Chironomidae pupae *	273	0.03636
Chironomus spp.	1432	
Dicrotendipes spp.	68	
Limnodrilus hoffmeisteri	273	
Oligochaeta		0.07386
Polydora cornuta	45	0.01136
Polypedilum halterale group	682	
Rangia cuneata	91	0.06591
Tubificidae imm w/o cap chaetae *	409	
Tubificoides spp.	91	0.00114
Total Abundance w/ Epi.	3364	
Total Abundance w/o Epi.	3364	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.73136
Total Biomass w/o Epi.		0.73136

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO012	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.4	Salinity (ppt): 2.60	Sediment Silt-Clay (%): 83.08

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.50		Oligohaline Pollution Indicative Spp. Abund.	43.17	3
Abundance (#/m2)	7318	1	Tolerance Score	6.32	3
Deep Deposit Feeder Abundance (%)	4.66		Oligohaline Pollution Sensitive Spp. Abund.	0.31	3
Carnivore-Omnivore Abundance (%)	3.42	1	Tanypodinae/Chironomidae Abundance Ratio	55.56	3

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Coelotanypus spp.	114	0.00114
Cryptochironomus spp.	91	
Cyathura polita	45	0.01591
Limnodrilus hoffmeisteri	114	
Marenzelleria viridis	23	0.00114
Oligochaeta		0.00114
Polydora cornuta	2705	0.23864
Rangia cuneata	4000	32.62490
Tubificidae imm w/o cap chaetae *	227	
Total Abundance w/ Epi.	7318	
Total Abundance w/o Epi.	7318	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		32.89762
Total Biomass w/o Epi.		32.89762

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO013	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 8.0	Salinity (ppt): 2.52	Sediment Silt-Clay (%): 91.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.60		Oligohaline Pollution Indicative Spp. Abund.	84.62	3
Abundance (#/m2)	1477	5	Tolerance Score	9.03	3
Deep Deposit Feeder Abundance (%)	73.85		Oligohaline Pollution Sensitive Spp. Abund.	6.15	3
Carnivore-Omnivore Abundance (%)	12.31	1	Tanypodinae/Chironomidae Abundance Ratio	87.50	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Coelotanypus spp.	159	0.00682
Cryptochironomus spp.	23	
Limnodrilus hoffmeisteri	91	
Marenzelleria viridis	91	0.08409
Oligochaeta		0.46363
Rangia cuneata	114	4.39090
Tubificidae imm w/o cap chaetae *	1000	
Total Abundance w/ Epi.	1477	
Total Abundance w/o Epi.	1477	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		4.94658
Total Biomass w/o Epi.		4.94658

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO014	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.2	Salinity (ppt): 4.32	Sediment Silt-Clay (%): 79.81

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.41		Oligohaline Pollution Indicative Spp. Abund.	10.45	5
Abundance (#/m2)	1523	5	Tolerance Score	6.17	3
Deep Deposit Feeder Abundance (%)	5.97		Oligohaline Pollution Sensitive Spp. Abund.	8.96	3
Carnivore-Omnivore Abundance (%)	10.45	1	Tanypodinae/Chironomidae Abundance Ratio	75.00	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chiridotea almyra	23	0.00114
Chironomidae		0.00114
Coelotanypus spp.	68	0.00455
Cryptochironomus spp.	23	
Cyathura polita	45	0.04545
Marenzelleria viridis	114	0.09318
Oligochaeta		0.00114
Rangia cuneata	1159	14.77268
Tubificidae imm w/o cap chaetae	45	
Tubificoides spp.	45	0.00227
Total Abundance w/ Epi.	1523	
Total Abundance w/o Epi.	1523	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		14.92154
Total Biomass w/o Epi.		14.92154

Station: NO015	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.7	Salinity (ppt): 7.80	Sediment Silt-Clay (%): 71.11

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.60 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.07	5	Pollution Indicative Species Abundance (%)	14.29	3
Abundance (#/m2)	1750	5	Pollution Indicative Species Biomass (%)	0.15	
Biomass (g/m2)	7.74	5	Pollution Sensitive Species Abundance (%)	41.56	
Carnivore-Omnivore Abundance (%)	41.56		Pollution Sensitive Species Biomass (%)	96.96	5
Deep Deposit Feeder Abundance (%)	16.88				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	23	0.00114
Apocorophium lacustre (Epi)	114	0.00682
Balanus improvisus (Epi)	45	0.17045
Carinoma tremaphoros	45	
Chiridotea almyra	23	0.00455
Cyathura polita	409	0.11364
Edotea triloba (Epi)	45	0.00114
Eteone heteropoda	23	0.00227
Hobsonia florida	23	0.00227
Leptocheirus plumulosus	45	0.00114
Macoma mitchelli	23	0.00114
Marenzelleria viridis	295	0.00455
Melita nitida (Epi)	23	0.37273
Neanthes succinea	227	0.04545
Nemertina		0.15454
Polydora cornuta	68	0.00682
Rangia cuneata	23	7.38179
Rhithropanopeus harrisii (Epi)	23	0.12045
Streblospio benedicti	227	0.00909
Tubificoides spp.	295	0.00682
Total Abundance w/ Epi.	2000	
Total Abundance w/o Epi.	1750	
Number of Taxa w/ Epi.	19	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		8.40679
Total Biomass w/o Epi.		7.73520

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO016	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 5.2	Salinity (ppt): 4.32	Sediment Silt-Clay (%): 96.97

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.11		Oligohaline Pollution Indicative Spp. Abund.	16.47	5
Abundance (#/m2)	1932	5	Tolerance Score	6.37	3
Deep Deposit Feeder Abundance (%)	7.06		Oligohaline Pollution Sensitive Spp. Abund.	10.59	3
Carnivore-Omnivore Abundance (%)	22.35	3	Tanypodinae/Chironomidae Abundance Ratio	62.50	3

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	68	
Chiridotea almyra	45	0.00455
Chironomidae		0.00114
Chironomus spp.	23	
Coelotanypus spp.	114	0.00455
Cyathura polita	136	0.05682
Gammarus daiberi (Epi)	23	0.00682
Limnodrilus hoffmeisteri	45	
Marenzelleria viridis	159	0.02955
Nemertina		0.08409
Oligochaeta		0.00114
Polypedilum halterale group	45	
Rangia cuneata	1205	13.25223
Tubificidae imm w/o cap chaetae *	68	
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	1955	
Total Abundance w/o Epi.	1932	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		13.44200
Total Biomass w/o Epi.		13.43518

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO017	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.4	Salinity (ppt): 8.20	Sediment Silt-Clay (%): 72.76

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.37	3	Pollution Indicative Species Abundance (%)	0.00	5
Abundance (#/m2)	250	1	Pollution Indicative Species Biomass (%)	0.00	
Biomass (g/m2)	1.10	3	Pollution Sensitive Species Abundance (%)	45.45	
Carnivore-Omnivore Abundance (%)	54.55		Pollution Sensitive Species Biomass (%)	99.48	3
Deep Deposit Feeder Abundance (%)	9.09				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chiridotea almyra	45	0.00227
Cyathura polita	91	0.00227
Heteromastus filiformis	23	0.00114
Hobsonia florida	23	0.00114
Macoma balthica	23	1.08863
Polydora cornuta	45	0.00114
Rhithropanopeus harrisii (Epi)	45	0.01818
Total Abundance w/ Epi.	295	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		1.11477
Total Biomass w/o Epi.		1.09659

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO018	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.5	Salinity (ppt): 4.30	Sediment Silt-Clay (%): 0.73

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.66		Oligohaline Pollution Indicative Spp. Abund.	5.34	5
Abundance (#/m2)	2977	5	Tolerance Score	6.02	3
Deep Deposit Feeder Abundance (%)	3.05		Oligohaline Pollution Sensitive Spp. Abund.	0.00	1
Carnivore-Omnivore Abundance (%)	3.05	1	Tanypodinae/Chironomidae Abundance Ratio	0.00	5

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	23	0.00114
Chironomidae		0.00114
Chironomidae pupae *	23	0.00455
Cryptochironomus spp.	45	
Cyathura polita	23	0.00114
Gammarus daiberi (Epi)	23	0.00114
Polydora cornuta	68	0.00114
Rangia cuneata	2705	52.39074
Tubificoides spp.	91	0.00114
Total Abundance w/ Epi.	3000	
Total Abundance w/o Epi.	2977	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		52.40211
Total Biomass w/o Epi.		52.40097

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO019	Habitat: Oligohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.0	Salinity (ppt): 4.50	Sediment Silt-Clay (%): 82.81

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.89		Oligohaline Pollution Indicative Spp. Abund.	81.82	3
Abundance (#/m2)	500	5	Tolerance Score	6.17	3
Deep Deposit Feeder Abundance (%)	4.55		Oligohaline Pollution Sensitive Spp. Abund.	4.55	3
Carnivore-Omnivore Abundance (%)	59.09	5	Tanypodinae/Chironomidae Abundance Ratio	100.00	1

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Coelotanypus spp.	273	0.00682
Cyathura polita	23	0.03182
Leptocheirus plumulosus	114	0.00227
Marenzelleria viridis	23	0.00114
Rangia cuneata	45	12.21360
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	500	
Total Abundance w/o Epi.	500	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		12.25678
Total Biomass w/o Epi.		12.25678

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO020	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.6	Salinity (ppt): 7.40	Sediment Silt-Clay (%): 97.34

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.20 | Condition: Degraded | # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.75	5	Pollution Indicative Species Abundance (%)	33.33	1
Abundance (#/m2)	409	1	Pollution Indicative Species Biomass (%)	8.33	
Biomass (g/m2)	0.16	1	Pollution Sensitive Species Abundance (%)	16.67	
Carnivore-Omnivore Abundance (%)	55.56		Pollution Sensitive Species Biomass (%)	52.78	3
Deep Deposit Feeder Abundance (%)	5.56				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	45	
Cyathura polita	23	0.06591
Eteone heteropoda	114	0.00455
Leptocheirus plumulosus	91	0.01364
Littoridinops tenuipes (Epi)	45	0.01136
Melita nitida (Epi)	23	0.01136
Neanthes succinea	45	0.01591
Nemertina		0.02500
Rangia cuneata	45	0.02045
Streblospio benedicti	23	0.00909
Tubificoides spp.	23	0.00909
Total Abundance w/ Epi.	477	
Total Abundance w/o Epi.	409	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.18636
Total Biomass w/o Epi.		0.16364

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO021	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 7.1	Salinity (ppt): 14.50	Sediment Silt-Clay (%): 99.15

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.10	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	250	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	7.34	5	Pollution Sensitive Species Abundance (%)	72.73	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	98.76	3
Deep Deposit Feeder Abundance (%)	27.27				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.07727
Macoma balthica	182	7.25225
Tubificoides spp.	45	0.01364
Total Abundance w/ Epi.	250	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		7.34316
Total Biomass w/o Epi.		7.34316

Station: NO022	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.7	Salinity (ppt): 12.42	Sediment Silt-Clay (%): 98.66

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00		Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.87	3	Pollution Indicative Species Abundance (%)	8.33	
Abundance (#/m2)	818	1	Pollution Indicative Species Biomass (%)	3.73	5
Biomass (g/m2)	0.43	1	Pollution Sensitive Species Abundance (%)	13.89	
Carnivore-Omnivore Abundance (%)	27.78	5	Pollution Sensitive Species Biomass (%)	55.47	3
Deep Deposit Feeder Abundance (%)	41.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.01136
Heteromastus filiformis	136	0.04545
Leptocheirus plumulosus	68	0.01591
Macoma balthica	91	0.20909
Macoma mitchelli	45	0.03864
Marenzelleria viridis	23	0.02727
Neanthes succinea	205	0.06818
Oligochaeta		0.00114
Streblospio benedicti	23	0.00455
Tubificidae imm w/o cap chaetae	23	
Tubificoides spp.	182	0.00455
Total Abundance w/ Epi.	818	
Total Abundance w/o Epi.	818	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.42614
Total Biomass w/o Epi.		0.42614

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO023	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.1	Salinity (ppt): 9.20	Sediment Silt-Clay (%): 97.41

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00 | Condition: Severely Degr. | # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	0.37	1	Pollution Indicative Species Abundance (%)	100.00	1
Abundance (#/m2)	318	1	Pollution Indicative Species Biomass (%)	85.71	
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	7.14				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Oligochaeta		0.00114
Streblospio benedicti	295	0.00682
Tubificidae imm w/o cap chaetae	23	
Total Abundance w/ Epi.	318	
Total Abundance w/o Epi.	318	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.00795
Total Biomass w/o Epi.		0.00795

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO024	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.8	Salinity (ppt): 9.72	Sediment Silt-Clay (%): 0.52

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.20			Condition: Degraded		# Attributes Scored: 5	
	Value	Score			Value	Score
Shannon-Wiener Index	1.76	3	Pollution Indicative Species Abundance (%)		44.44	1
Abundance (#/m2)	3886	3	Pollution Indicative Species Biomass (%)		4.01	
Biomass (g/m2)	0.85	1	Pollution Sensitive Species Abundance (%)		1.75	
Carnivore-Omnivore Abundance (%)	7.02		Pollution Sensitive Species Biomass (%)		69.25	3
Deep Deposit Feeder Abundance (%)	0.58					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Apocorophium lacustre (Epi)	23	0.01818
Leptocheirus plumulosus	91	0.02500
Littoridinops tenuipes (Epi)	45	0.01591
Macoma mitchelli	136	0.02273
Mytilopsis leucophaeata (Epi)	2182	24.78174
Neanthes succinea	273	0.07955
Polydora cornuta	1568	0.08864
Rangia cuneata	68	0.58863
Streblospio benedicti	1727	0.03409
Tubificoides spp.	23	0.01136
Total Abundance w/ Epi.	6136	
Total Abundance w/o Epi.	3886	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		25.66583
Total Biomass w/o Epi.		0.85000

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO025	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.7	Salinity (ppt): 9.72	Sediment Silt-Clay (%): 4.32

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.40 — Condition: Severely Degr. — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	1.23	1	Pollution Indicative Species Abundance (%)	81.98	1
Abundance (#/m2)	2523	3	Pollution Indicative Species Biomass (%)	13.74	
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	0.90	
Carnivore-Omnivore Abundance (%)	3.60		Pollution Sensitive Species Biomass (%)	0.76	1
Deep Deposit Feeder Abundance (%)	8.11				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	23	
Eteone heteropoda	68	0.00227
Heteromastus filiformis	23	0.00227
Leptocheirus plumulosus	68	0.00455
Littoridinops tenuipes (Epi)	409	0.00227
Macoma mitchelli	136	0.11818
Nemertina		0.00114
Rangia cuneata	23	0.00114
Streblospio benedicti	2000	0.01818
Tubificoides spp.	182	0.00114
Total Abundance w/ Epi.	2932	
Total Abundance w/o Epi.	2523	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.15114
Total Biomass w/o Epi.		0.14886

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO026	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.0	Salinity (ppt): 9.72	Sediment Silt-Clay (%): 84.67

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.11	3	Pollution Indicative Species Abundance (%)	50.79	1
Abundance (#/m2)	1432	3	Pollution Indicative Species Biomass (%)	0.05	
Biomass (g/m2)	4.93	3	Pollution Sensitive Species Abundance (%)	7.94	
Carnivore-Omnivore Abundance (%)	7.94		Pollution Sensitive Species Biomass (%)	98.80	5
Deep Deposit Feeder Abundance (%)	34.92				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	45	
Heteromastus filiformis	91	0.00114
Macoma balthica	114	4.87044
Macoma mitchelli	23	0.05000
Neanthes succinea	23	0.00114
Nemertina	23	0.00114
Rictaxis punctostriatus	23	0.00114
Streblospio benedicti	682	0.00227
Tubificoides spp.	409	0.00114
Total Abundance w/ Epi.	1432	
Total Abundance w/o Epi.	1432	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		4.92953
Total Biomass w/o Epi.		4.92953

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO027	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.2	Salinity (ppt): 13.32	Sediment Silt-Clay (%): 93.54

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.53	3	Pollution Indicative Species Abundance (%)		12.50	
Abundance (#/m2)	909	1	Pollution Indicative Species Biomass (%)		0.02	5
Biomass (g/m2)	5.50	5	Pollution Sensitive Species Abundance (%)		25.00	
Carnivore-Omnivore Abundance (%)	27.50	5	Pollution Sensitive Species Biomass (%)		95.08	3
Deep Deposit Feeder Abundance (%)	35.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	68	
Leptocheirus plumulosus	23	0.00114
Macoma balthica	227	5.23180
Macoma mitchelli	23	0.09318
Neanthes succinea	182	0.16818
Nemertina		0.00455
Oligochaeta		0.00114
Streblospio benedicti	68	0.00114
Tubificidae imm w/o cap chaetae	45	
Tubificoides spp.	273	0.00114
Total Abundance w/ Epi.	909	
Total Abundance w/o Epi.	909	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		5.50226
Total Biomass w/o Epi.		5.50226

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO028	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 3.0	Salinity (ppt): 9.72	Sediment Silt-Clay (%): 88.25

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.40 — Condition: Severely Degr. — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	0.76	1	Pollution Indicative Species Abundance (%)	84.00	1
Abundance (#/m2)	568	3	Pollution Indicative Species Biomass (%)	57.14	
Biomass (g/m2)	0.05	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	16.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.01364
Streblospio benedicti	477	0.02727
Tubificoides spp.	68	0.00682
Total Abundance w/ Epi.	568	
Total Abundance w/o Epi.	568	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.04773
Total Biomass w/o Epi.		0.04773

Station: NO029	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.6	Salinity (ppt): 12.42	Sediment Silt-Clay (%): 92.83

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	3	Pollution Indicative Species Abundance (%)		21.88	
Abundance (#/m2)	727	1	Pollution Indicative Species Biomass (%)		0.15	5
Biomass (g/m2)	2.94	5	Pollution Sensitive Species Abundance (%)		15.63	
Carnivore-Omnivore Abundance (%)	34.38	5	Pollution Sensitive Species Biomass (%)		85.87	3
Deep Deposit Feeder Abundance (%)	43.75					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.00455
Heteromastus filiformis	68	0.03409
Laeonereis culveri	23	0.00682
Macoma balthica	114	2.52045
Macoma mitchelli	45	0.04091
Neanthes succinea	205	0.32500
Oligochaeta		0.00114
Tubificidae imm w/o cap chaetae	136	
Tubificoides spp.	114	0.00227
Total Abundance w/ Epi.	727	
Total Abundance w/o Epi.	727	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		2.93522
Total Biomass w/o Epi.		2.93522

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO030	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.5	Salinity (ppt): 11.80	Sediment Silt-Clay (%): 0.71

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.60			Condition: Degraded		# Attributes Scored: 5	
	Value	Score			Value	Score
Shannon-Wiener Index	1.68	1	Pollution Indicative Species Abundance (%)		8.51	5
Abundance (#/m2)	1068	3	Pollution Indicative Species Biomass (%)		1.05	
Biomass (g/m2)	0.11	1	Pollution Sensitive Species Abundance (%)		61.70	
Carnivore-Omnivore Abundance (%)	4.26		Pollution Sensitive Species Biomass (%)		56.84	3
Deep Deposit Feeder Abundance (%)	0.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Americamysis almyra (Epi)	23	0.00909
Carinoma tremaphoros	23	
Lepidactylus dytiscus	227	0.03182
Leptocheirus plumulosus	23	0.00227
Mulinia lateralis	91	0.00114
Neanthes succinea	23	0.00227
Nemertina		0.00227
Scolelepis texana	23	0.00682
Tellina agilis	659	0.06136
Total Abundance w/ Epi.	1091	
Total Abundance w/o Epi.	1068	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.11705
Total Biomass w/o Epi.		0.10795

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO031	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.2	Salinity (ppt): 9.72	Sediment Silt-Clay (%): 4.57

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	1.75	3	Pollution Indicative Species Abundance (%)	20.26	1
Abundance (#/m2)	5273	3	Pollution Indicative Species Biomass (%)	0.05	
Biomass (g/m2)	4.14	3	Pollution Sensitive Species Abundance (%)	9.05	
Carnivore-Omnivore Abundance (%)	4.31		Pollution Sensitive Species Biomass (%)	94.20	5
Deep Deposit Feeder Abundance (%)	0.86				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	45	0.00114
Carinoma tremaphoros	23	
Edotea triloba (Epi)	250	0.00114
Eteone heteropoda	68	0.00114
Heteromastus filiformis	23	0.00114
Leptocheirus plumulosus	114	0.00114
Littoridinops tenuipes (Epi)	432	0.00114
Macoma mitchelli	3318	0.22954
Neanthes succinea	136	0.00114
Nemertina		0.00114
Polydora cornuta	45	0.00114
Rangia cuneata	477	3.89544
Streblospio benedicti	1000	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	5955	
Total Abundance w/o Epi.	5273	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		4.13749
Total Biomass w/o Epi.		4.13521

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO032	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.4	Salinity (ppt): 11.52	Sediment Silt-Clay (%): 54.89

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.20 | Condition: Degraded | # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.78	5	Pollution Indicative Species Abundance (%)	37.04	1
Abundance (#/m2)	1227	3	Pollution Indicative Species Biomass (%)	0.61	
Biomass (g/m2)	0.37	1	Pollution Sensitive Species Abundance (%)	3.70	
Carnivore-Omnivore Abundance (%)	40.74		Pollution Sensitive Species Biomass (%)	37.92	1
Deep Deposit Feeder Abundance (%)	12.96				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	23	
Edotea triloba (Epi)	23	0.00114
Eteone heteropoda	114	0.00114
Heteromastus filiformis	45	0.00114
Leptocheirus plumulosus	23	0.00114
Macoma balthica	45	0.14091
Macoma mitchelli	159	0.06136
Micrura leidyi	45	
Neanthes succinea	318	0.16136
Nemertina		0.00114
Streblospio benedicti	341	0.00114
Tubificoides spp.	114	0.00114
Total Abundance w/ Epi.	1250	
Total Abundance w/o Epi.	1227	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.37273
Total Biomass w/o Epi.		0.37159

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO033	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 7.1	Salinity (ppt): 14.10	Sediment Silt-Clay (%): 98.61

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	0.91	1	Pollution Indicative Species Abundance (%)		82.00	
Abundance (#/m2)	1136	3	Pollution Indicative Species Biomass (%)		61.19	1
Biomass (g/m2)	0.08	1	Pollution Sensitive Species Abundance (%)		0.00	
Carnivore-Omnivore Abundance (%)	2.00	1	Pollution Sensitive Species Biomass (%)		0.00	1
Deep Deposit Feeder Abundance (%)	18.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.00114
Heteromastus filiformis	23	0.02273
Streblospio benedicti	909	0.04545
Tubificoides spp.	182	0.00682
Total Abundance w/ Epi.	1136	
Total Abundance w/o Epi.	1136	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.07614
Total Biomass w/o Epi.		0.07614

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO034	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.2	Salinity (ppt): 11.52	Sediment Silt-Clay (%): 0.34

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.80 — Condition: Meets Goal — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	3.27	5	Pollution Indicative Species Abundance (%)	11.46	3
Abundance (#/m2)	2182	5	Pollution Indicative Species Biomass (%)	1.29	
Biomass (g/m2)	1.06	3	Pollution Sensitive Species Abundance (%)	4.17	
Carnivore-Omnivore Abundance (%)	46.88		Pollution Sensitive Species Biomass (%)	43.87	3
Deep Deposit Feeder Abundance (%)	19.79				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	68	0.00114
Carinoma tremaphoros	23	
Cyathura polita	45	0.01364
Eteone heteropoda	91	0.00682
Heteromastus filiformis	159	0.06818
Laeonereis culveri	591	0.11136
Lepidactylus dytiscus	114	0.04773
Leptocheirus plumulosus	205	0.03182
Littoridinops tenuipes (Epi)	23	0.00114
Macoma mitchelli	136	0.23636
Marenzelleria viridis	23	0.01136
Neanthes succinea	273	0.06591
Nemertina		0.01591
Rangia cuneata	23	0.43863
Streblospio benedicti	159	0.00682
Tubificoides spp.	273	0.00114
Total Abundance w/ Epi.	2205	
Total Abundance w/o Epi.	2182	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		1.05795
Total Biomass w/o Epi.		1.05681

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO035	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 7.9	Salinity (ppt): 13.32	Sediment Silt-Clay (%): 96.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.03	1	Pollution Indicative Species Abundance (%)		6.77	
Abundance (#/m2)	3023	3	Pollution Indicative Species Biomass (%)		0.94	5
Biomass (g/m2)	1.94	3	Pollution Sensitive Species Abundance (%)		11.28	
Carnivore-Omnivore Abundance (%)	2.26	1	Pollution Sensitive Species Biomass (%)		96.42	5
Deep Deposit Feeder Abundance (%)	81.20					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.00682
Macoma balthica	341	1.86818
Neanthes succinea	45	0.02273
Oligochaeta		0.00114
Streblospio benedicti	159	0.01136
Tubificidae imm w/o cap chaetae	23	
Tubificoides spp.	2432	0.02727
Total Abundance w/ Epi.	3023	
Total Abundance w/o Epi.	3023	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		1.93749
Total Biomass w/o Epi.		1.93749

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO036	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.2	Salinity (ppt): 10.97	Sediment Silt-Clay (%): 0.13

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.80 — Condition: Severely Degr. — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.33	3	Pollution Indicative Species Abundance (%)	25.00	1
Abundance (#/m2)	1273	3	Pollution Indicative Species Biomass (%)	21.97	
Biomass (g/m2)	0.20	1	Pollution Sensitive Species Abundance (%)	5.36	
Carnivore-Omnivore Abundance (%)	57.14		Pollution Sensitive Species Biomass (%)	24.28	1
Deep Deposit Feeder Abundance (%)	12.50				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.00909
Heteromastus filiformis	23	0.00455
Laeonereis culveri	659	0.05227
Leitoscoloplos spp.	114	0.02045
Leptocheirus plumulosus	23	0.00227
Macoma mitchelli	114	0.01364
Marenzelleria viridis	23	0.02500
Neanthes succinea	45	0.03182
Spiophanes bombyx	23	0.01364
Streblospio benedicti	205	0.02273
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	1273	
Total Abundance w/o Epi.	1273	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.19659
Total Biomass w/o Epi.		0.19659

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO037	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 2.4	Salinity (ppt): 11.60	Sediment Silt-Clay (%): 1.82

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.80 — Condition: Severely Degr. — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	1.21	1	Pollution Indicative Species Abundance (%)	8.33	5
Abundance (#/m2)	273	1	Pollution Indicative Species Biomass (%)	0.75	
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	8.33	
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	5.97	1
Deep Deposit Feeder Abundance (%)	8.33				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Macoma mitchelli	205	0.14091
Marenzelleria viridis	23	0.00909
Streblospio benedicti	23	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	273	
Total Abundance w/o Epi.	273	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.15227
Total Biomass w/o Epi.		0.15227

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO038	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.0	Salinity (ppt): 11.80	Sediment Silt-Clay (%): 58.11

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	2.87	5	Pollution Indicative Species Abundance (%)	20.93	1
Abundance (#/m2)	2932	3	Pollution Indicative Species Biomass (%)	0.20	
Biomass (g/m2)	1.16	3	Pollution Sensitive Species Abundance (%)	2.33	
Carnivore-Omnivore Abundance (%)	25.58		Pollution Sensitive Species Biomass (%)	54.79	3
Deep Deposit Feeder Abundance (%)	22.48				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	68	
Eteone heteropoda	91	0.00114
Heteromastus filiformis	432	0.15000
Leptocheirus plumulosus	250	0.02500
Macoma mitchelli	727	0.15682
Marenzelleria viridis	23	0.03409
Neanthes succinea	591	0.15682
Nemertina		0.03182
Oligochaeta		0.00114
Rangia cuneata	45	0.60227
Streblospio benedicti	477	0.00114
Tubificidae imm w/o cap chaetae	45	
Tubificoides spp.	182	0.00114
Total Abundance w/ Epi.	2932	
Total Abundance w/o Epi.	2932	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.16136
Total Biomass w/o Epi.		1.16136

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO039	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 14.6	Salinity (ppt): 17.90	Sediment Silt-Clay (%): 80.74

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	182	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	100.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Tubificoides spp.	182	0.00909
Total Abundance w/ Epi.	182	
Total Abundance w/o Epi.	182	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.00909
Total Biomass w/o Epi.		0.00909

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO040	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 17.1	Salinity (ppt): 16.92	Sediment Silt-Clay (%): 82.09

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	341	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	100.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Tubificoides spp.	341	0.02273
Total Abundance w/ Epi.	341	
Total Abundance w/o Epi.	341	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.02273
Total Biomass w/o Epi.		0.02273

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO041	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 25.9	Salinity (ppt): 18.10	Sediment Silt-Clay (%): 96.66

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)		0.00	5
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	0.00000
Total Abundance w/ Epi.	0	
Total Abundance w/o Epi.	0	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.00000
Total Biomass w/o Epi.		0.00000

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO042	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.8	Salinity (ppt): 13.32	Sediment Silt-Clay (%): 1.36

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.60	3	Pollution Indicative Species Abundance (%)	27.03	1
Abundance (#/m2)	841	1	Pollution Indicative Species Biomass (%)	14.75	
Biomass (g/m2)	0.07	1	Pollution Sensitive Species Abundance (%)	10.81	3
Carnivore-Omnivore Abundance (%)	8.11	1	Pollution Sensitive Species Biomass (%)	26.23	
Deep Deposit Feeder Abundance (%)	5.41				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.00114
Cyclaspis varians	23	0.00114
Gemma gemma	68	0.01364
Glycinde solitaria	23	0.01591
Laeonereis culveri	23	0.01364
Leptocheirus plumulosus	91	0.00114
Macoma mitchelli	318	0.01136
Mediomastus ambiseta	45	0.00114
Mulinia lateralis	23	0.00114
Odostomia engonia (Epi)	68	0.00227
Streblospio benedicti	205	0.00909
Total Abundance w/ Epi.	909	
Total Abundance w/o Epi.	841	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.07159
Total Biomass w/o Epi.		0.06932

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO043	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 0.6	Salinity (ppt): 12.60	Sediment Silt-Clay (%): 1.51

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.14	1	Pollution Indicative Species Abundance (%)	24.14	3
Abundance (#/m2)	659	1	Pollution Indicative Species Biomass (%)	20.60	
Biomass (g/m2)	0.83	1	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyclaspis varians	68	0.40909
Lepidactylus dytiscus	91	0.00114
Leptocheirus plumulosus	23	0.00114
Macoma mitchelli	318	0.25000
Mulinia lateralis	91	0.17045
Streblospio benedicti	68	0.00114
Total Abundance w/ Epi.	659	
Total Abundance w/o Epi.	659	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.83295
Total Biomass w/o Epi.		0.83295

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO044	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 8.4	Salinity (ppt): 12.42	Sediment Silt-Clay (%): 83.88

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	23	1	Pollution Indicative Species Biomass (%)	0.00	5
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)
Macoma mitchelli	23	0.00114
Total Abundance w/ Epi.	23	
Total Abundance w/o Epi.	23	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.00114
Total Biomass w/o Epi.		0.00114

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO045	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 15.5	Salinity (ppt): 16.60	Sediment Silt-Clay (%): 87.29

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.58	1	Pollution Indicative Species Abundance (%)	33.33	
Abundance (#/m2)	68	1	Pollution Indicative Species Biomass (%)	7.69	3
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	66.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.00682
Streblospio benedicti	23	0.00114
Tubificoides spp.	23	0.00682
Total Abundance w/ Epi.	68	
Total Abundance w/o Epi.	68	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.01477
Total Biomass w/o Epi.		0.01477

Station: NO046	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 4.9	Salinity (ppt): 13.77	Sediment Silt-Clay (%): 6.28

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 | Condition: Severely Degr. | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.49	1	Pollution Indicative Species Abundance (%)	27.78	1
Abundance (#/m2)	409	1	Pollution Indicative Species Biomass (%)	5.69	
Biomass (g/m2)	0.28	1	Pollution Sensitive Species Abundance (%)	27.78	3
Carnivore-Omnivore Abundance (%)	27.78	3	Pollution Sensitive Species Biomass (%)	11.38	
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	23	0.00455
Eteone heteropoda	68	0.01136
Glycinde solitaria	23	0.00682
Laeonereis culveri	23	0.00682
Macoma mitchelli	136	0.22045
Marenzelleria viridis	91	0.02500
Streblospio benedicti	45	0.00455
Total Abundance w/ Epi.	409	
Total Abundance w/o Epi.	409	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.27954
Total Biomass w/o Epi.		0.27954

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO047	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 10.1	Salinity (ppt): 14.20	Sediment Silt-Clay (%): 94.43

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.48	1	Pollution Indicative Species Abundance (%)	62.50	
Abundance (#/m2)	727	1	Pollution Indicative Species Biomass (%)	40.74	1
Biomass (g/m2)	0.06	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	12.50	3	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	25.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Neanthes succinea	91	0.02955
Paraprionospio pinnata	23	0.00455
Streblospio benedicti	432	0.02045
Tubificoides spp.	182	0.00682
Total Abundance w/ Epi.	727	
Total Abundance w/o Epi.	727	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.06136
Total Biomass w/o Epi.		0.06136

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO048	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 9.1	Salinity (ppt): 11.52	Sediment Silt-Clay (%): 98.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.	# Attributes Scored: 5	
	Value	Score		Value	Score
Shannon-Wiener Index	0.85	1	Pollution Indicative Species Abundance (%)	72.73	1
Abundance (#/m2)	250	1	Pollution Indicative Species Biomass (%)	97.30	
Biomass (g/m2)	0.04	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	27.27		Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Americamysis almyra (Epi)	23	0.00114
Neanthes succinea	68	0.00114
Streblospio benedicti	182	0.04091
Total Abundance w/ Epi.	273	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.04318
Total Biomass w/o Epi.		0.04205

Station: NO049	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 8.2	Salinity (ppt): 13.32	Sediment Silt-Clay (%): 90.03

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.20	1	Pollution Indicative Species Abundance (%)		67.69	
Abundance (#/m2)	1477	3	Pollution Indicative Species Biomass (%)		14.12	3
Biomass (g/m2)	0.29	1	Pollution Sensitive Species Abundance (%)		0.00	
Carnivore-Omnivore Abundance (%)	21.54	3	Pollution Sensitive Species Biomass (%)		0.00	1
Deep Deposit Feeder Abundance (%)	10.77					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Neanthes succinea	318	0.24773
Streblospio benedicti	1000	0.04091
Tubificoides spp.	159	0.00114
Total Abundance w/ Epi.	1477	
Total Abundance w/o Epi.	1477	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.28977
Total Biomass w/o Epi.		0.28977

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO050	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 12.5	Salinity (ppt): 15.20	Sediment Silt-Clay (%): 98.78

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.83	1	Pollution Indicative Species Abundance (%)	74.03	
Abundance (#/m2)	1750	5	Pollution Indicative Species Biomass (%)	78.85	1
Biomass (g/m2)	0.12	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	25.97				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Paraprionospio pinnata	1295	0.09318
Tubificoides spp.	455	0.02500
Total Abundance w/ Epi.	1750	
Total Abundance w/o Epi.	1750	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.11818
Total Biomass w/o Epi.		0.11818

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO051	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 11.0	Salinity (ppt): 15.40	Sediment Silt-Clay (%): 99.36

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.26	1	Pollution Indicative Species Abundance (%)	64.29	
Abundance (#/m2)	318	1	Pollution Indicative Species Biomass (%)	87.50	1
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	35.71				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Paraprionospio pinnata	182	0.00682
Streblospio benedicti	23	0.00114
Tubificoides spp.	114	0.00114
Total Abundance w/ Epi.	318	
Total Abundance w/o Epi.	318	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.00909
Total Biomass w/o Epi.		0.00909

Station: NO052	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 10.0	Salinity (ppt): 16.00	Sediment Silt-Clay (%): 98.45

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.75	1	Pollution Indicative Species Abundance (%)		33.33	
Abundance (#/m2)	750	1	Pollution Indicative Species Biomass (%)		30.91	1
Biomass (g/m2)	0.06	1	Pollution Sensitive Species Abundance (%)		0.00	
Carnivore-Omnivore Abundance (%)	9.09	1	Pollution Sensitive Species Biomass (%)		0.00	1
Deep Deposit Feeder Abundance (%)	57.58					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.00682
Neanthes succinea	68	0.02500
Paraprionospio pinnata	182	0.01818
Streblospio benedicti	68	0.00114
Tubificoides spp.	409	0.01136
Total Abundance w/ Epi.	750	
Total Abundance w/o Epi.	750	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.06250
Total Biomass w/o Epi.		0.06250

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO053	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.1	Salinity (ppt): 14.22	Sediment Silt-Clay (%): 0.80

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.51	3	Pollution Indicative Species Abundance (%)	46.67	1
Abundance (#/m2)	1023	3	Pollution Indicative Species Biomass (%)	11.31	
Biomass (g/m2)	0.31	1	Pollution Sensitive Species Abundance (%)	4.44	1
Carnivore-Omnivore Abundance (%)	17.78	1	Pollution Sensitive Species Biomass (%)	1.09	
Deep Deposit Feeder Abundance (%)	15.56				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.00227
Heteromastus filiformis	68	0.02045
Macoma mitchelli	205	0.01364
Mediomastus ambiseta	23	0.00114
Micrura leidyi	23	
Mulinia lateralis	23	0.00114
Neanthes succinea	136	0.02500
Nemertina		0.21136
Odostomia engonia (Epi)	45	0.00114
Paraprionospio pinnata	23	0.00682
Streblospio benedicti	432	0.02727
Tubificoides spp.	68	0.00227
Total Abundance w/ Epi.	1068	
Total Abundance w/o Epi.	1023	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.31250
Total Biomass w/o Epi.		0.31136

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO054	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 25.6	Salinity (ppt): 17.82	Sediment Silt-Clay (%): 99.57

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.49	1	Pollution Indicative Species Abundance (%)	89.47	
Abundance (#/m2)	864	1	Pollution Indicative Species Biomass (%)	62.50	1
Biomass (g/m2)	0.04	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	10.53				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Paraprionospio pinnata	386	0.01136
Tubificoides spp.	45	0.00682
Total Abundance w/ Epi.	864	
Total Abundance w/o Epi.	864	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.03636
Total Biomass w/o Epi.		0.03636

Station: NO055	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 7.6	Salinity (ppt): 15.20	Sediment Silt-Clay (%): 81.50

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.61	1	Pollution Indicative Species Abundance (%)	68.42	
Abundance (#/m2)	432	1	Pollution Indicative Species Biomass (%)	1.12	5
Biomass (g/m2)	0.10	1	Pollution Sensitive Species Abundance (%)	10.53	
Carnivore-Omnivore Abundance (%)	10.53	3	Pollution Sensitive Species Biomass (%)	20.22	1
Deep Deposit Feeder Abundance (%)	10.53				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Americamysis almyra (Epi)	23	0.00114
Heteromastus filiformis	23	0.00455
Macoma balthica	45	0.02045
Micrura leidyi	23	
Mysidae (Epi)	23	0.00114
Neanthes succinea	23	0.00114
Nemertina		0.07273
Odostomia engonia (Epi)	23	0.00114
Paraprionospio pinnata	295	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	500	
Total Abundance w/o Epi.	432	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.10455
Total Biomass w/o Epi.		0.10114

Station: NO056	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.1	Salinity (ppt): 13.77	Sediment Silt-Clay (%): 1.00

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.71	3	Pollution Indicative Species Abundance (%)		28.95	1
Abundance (#/m2)	1727	5	Pollution Indicative Species Biomass (%)		13.81	
Biomass (g/m2)	0.24	1	Pollution Sensitive Species Abundance (%)		1.32	1
Carnivore-Omnivore Abundance (%)	28.95	3	Pollution Sensitive Species Biomass (%)		4.76	
Deep Deposit Feeder Abundance (%)	2.63					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Edotea triloba (Epi)	68	0.00114
Eteone heteropoda	136	0.00114
Gemma gemma	364	0.03182
Glycinde solitaria	23	0.01136
Heteromastus filiformis	23	0.01136
Leptocheirus plumulosus	23	0.00114
Macoma mitchelli	432	0.02045
Micrura leidyi	23	
Mulinia lateralis	45	0.00455
Neanthes succinea	318	0.04773
Nemertina		0.07955
Odostomia engonia (Epi)	23	0.00455
Streblospio benedicti	318	0.02727
Tubificoides spp.	23	0.00227
Total Abundance w/ Epi.	1818	
Total Abundance w/o Epi.	1727	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.24432
Total Biomass w/o Epi.		0.23864

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO057	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 1.8	Salinity (ppt): 14.22	Sediment Silt-Clay (%): 0.03

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.51	1	Pollution Indicative Species Abundance (%)	0.40	5
Abundance (#/m2)	11227	1	Pollution Indicative Species Biomass (%)	0.01	
Biomass (g/m2)	40.54	3	Pollution Sensitive Species Abundance (%)	3.04	1
Carnivore-Omnivore Abundance (%)	3.64	1	Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Americamysis almyra (Epi)	23	0.00114
Cyathura polita	341	0.00114
Eteone heteropoda	23	0.00114
Gemma gemma	10409	40.36578
Lepidactylus dytiscus	45	0.01136
Macoma mitchelli	341	0.02273
Micrura leidyi	45	
Nemertina		0.14091
Odostomia engonia (Epi)	23	0.00227
Streblospio benedicti	23	0.00114
Total Abundance w/ Epi.	11273	
Total Abundance w/o Epi.	11227	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		40.54760
Total Biomass w/o Epi.		40.54419

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO058	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 2.7	Salinity (ppt): 13.90	Sediment Silt-Clay (%): 49.30

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.75	3	Pollution Indicative Species Abundance (%)		15.94	
Abundance (#/m2)	1568	5	Pollution Indicative Species Biomass (%)		13.79	3
Biomass (g/m2)	0.20	1	Pollution Sensitive Species Abundance (%)		5.80	
Carnivore-Omnivore Abundance (%)	11.59	3	Pollution Sensitive Species Biomass (%)		4.02	1
Deep Deposit Feeder Abundance (%)	14.49					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	23	
Cyathura polita	23	0.00114
Eteone heteropoda	45	0.00455
Gemma gemma	205	0.04545
Glycinde solitaria	45	0.00227
Heteromastus filiformis	205	0.05000
Leitoscoloplos spp.	23	0.00227
Leptocheirus plumulosus	45	0.00455
Leucon americanus	23	0.00114
Macoma mitchelli	682	0.03864
Marenzelleria viridis	23	0.00455
Mulinia lateralis	23	0.00227
Neanthes succinea	45	0.01591
Nemertina		0.00682
Odostomia engonia (Epi)	114	0.00909
Streblospio benedicti	159	0.01818
Total Abundance w/ Epi.	1682	
Total Abundance w/o Epi.	1568	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		0.20682
Total Biomass w/o Epi.		0.19773

Station: NO059	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 5.8	Salinity (ppt): 12.20	Sediment Silt-Clay (%): 93.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.39	3	Pollution Indicative Species Abundance (%)		9.68	
Abundance (#/m2)	3523	3	Pollution Indicative Species Biomass (%)		0.37	5
Biomass (g/m2)	1.85	3	Pollution Sensitive Species Abundance (%)		16.77	
Carnivore-Omnivore Abundance (%)	16.13	3	Pollution Sensitive Species Biomass (%)		73.48	5
Deep Deposit Feeder Abundance (%)	14.84					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	136	
Cyathura polita	250	0.13182
Heteromastus filiformis	159	0.02273
Leptocheirus plumulosus	1955	0.25909
Macoma balthica	273	0.88182
Marenzelleria viridis	68	0.34318
Neanthes succinea	159	0.14545
Nemertina		0.02045
Odostomia engonia (Epi)	45	0.00909
Oligochaeta		0.00114
Parahesione luteola	23	0.01818
Streblospio benedicti	136	0.00682
Tubificidae imm w/o cap chaetae	205	
Tubificoides spp.	159	0.01591
Total Abundance w/ Epi.	3568	
Total Abundance w/o Epi.	3523	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.85568
Total Biomass w/o Epi.		1.84659

Station: NO060	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 2.4	Salinity (ppt): 12.10	Sediment Silt-Clay (%): 92.92

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.40	3	Pollution Indicative Species Abundance (%)		4.23	
Abundance (#/m2)	3227	3	Pollution Indicative Species Biomass (%)		0.14	5
Biomass (g/m2)	1.61	3	Pollution Sensitive Species Abundance (%)		21.83	
Carnivore-Omnivore Abundance (%)	12.68	3	Pollution Sensitive Species Biomass (%)		83.69	5
Deep Deposit Feeder Abundance (%)	18.31					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	68	
Coelotanypus spp.	23	0.00114
Cyathura polita	273	0.22954
Heteromastus filiformis	364	0.03182
Leptocheirus plumulosus	1727	0.19545
Macoma balthica	318	1.08181
Macoma mitchelli	23	0.00114
Marenzelleria viridis	23	0.03409
Neanthes succinea	23	0.00114
Nemertina		0.02727
Oligochaeta		0.00114
Podarkeopsis levifuscina	23	0.00114
Rangia cuneata	91	0.00114
Streblospio benedicti	45	0.00114
Tubificidae imm w/o cap chaetae	68	
Tubificoides spp.	159	0.00114
Total Abundance w/ Epi.	3227	
Total Abundance w/o Epi.	3227	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		1.60909
Total Biomass w/o Epi.		1.60909

Station: NO062	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 6.7	Salinity (ppt): 13.00	Sediment Silt-Clay (%): 98.24

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.72	3	Pollution Indicative Species Abundance (%)	9.68	
Abundance (#/m2)	705	1	Pollution Indicative Species Biomass (%)	21.79	3
Biomass (g/m2)	0.65	3	Pollution Sensitive Species Abundance (%)	6.45	
Carnivore-Omnivore Abundance (%)	54.84	5	Pollution Sensitive Species Biomass (%)	11.25	1
Deep Deposit Feeder Abundance (%)	6.45				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	91	
Glycinde solitaria	23	0.00227
Heteromastus filiformis	23	0.00455
Leptocheirus plumulosus	114	0.04318
Macoma balthica	23	0.07045
Macoma mitchelli	68	0.11136
Mulinia lateralis	45	0.13864
Neanthes succinea	273	0.26136
Nemertina		0.01136
Paraprionospio pinnata	23	0.00227
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	705	
Total Abundance w/o Epi.	705	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.64659
Total Biomass w/o Epi.		0.64659

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO063	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1998	Time:
Depth (m): 5.8	Salinity (ppt): 13.32	Sediment Silt-Clay (%): 91.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.45	1	Pollution Indicative Species Abundance (%)		1.25	
Abundance (#/m2)	1818	5	Pollution Indicative Species Biomass (%)		0.63	5
Biomass (g/m2)	1.44	3	Pollution Sensitive Species Abundance (%)		13.75	
Carnivore-Omnivore Abundance (%)	11.25	3	Pollution Sensitive Species Biomass (%)		48.50	3
Deep Deposit Feeder Abundance (%)	2.50					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	91	0.07273
Heteromastus filiformis	23	0.00682
Leptocheirus plumulosus	1364	0.18864
Macoma balthica	136	0.57273
Macoma mitchelli	23	0.09318
Marenzelleria viridis	23	0.05455
Neanthes succinea	114	0.43409
Paraprionospio pinnata	23	0.00909
Tubificoides spp.	23	0.01136
Total Abundance w/ Epi.	1818	
Total Abundance w/o Epi.	1818	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		1.44318
Total Biomass w/o Epi.		1.44318

Station: NO064	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 7.7	Salinity (ppt): 17.10	Sediment Silt-Clay (%): 20.45

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.30	1	Pollution Indicative Species Abundance (%)	79.31	1
Abundance (#/m2)	659	1	Pollution Indicative Species Biomass (%)	78.80	
Biomass (g/m2)	0.32	1	Pollution Sensitive Species Abundance (%)	10.34	3
Carnivore-Omnivore Abundance (%)	10.34	1	Pollution Sensitive Species Biomass (%)	2.47	
Deep Deposit Feeder Abundance (%)	17.24				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.00682
Glycinde solitaria	23	0.00682
Leitoscoloplos spp.	23	0.04773
Mediomastus ambiseta	45	0.00114
Mulinia lateralis	23	0.03864
Neanthes succinea	23	0.05909
Paraprionospio pinnata	341	0.15909
Pectinaria gouldii	45	0.00114
Streblospio benedicti	114	0.00114
Total Abundance w/ Epi.	659	
Total Abundance w/o Epi.	659	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.32159
Total Biomass w/o Epi.		0.32159

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO065	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 8.3	Salinity (ppt): 18.72	Sediment Silt-Clay (%): 5.00

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.42	1	Pollution Indicative Species Abundance (%)	8.33	
Abundance (#/m2)	818	1	Pollution Indicative Species Biomass (%)	36.54	1
Biomass (g/m2)	0.24	1	Pollution Sensitive Species Abundance (%)	83.33	3
Carnivore-Omnivore Abundance (%)	77.78		Pollution Sensitive Species Biomass (%)	42.31	
Deep Deposit Feeder Abundance (%)	11.11	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	614	0.08636
Branchiostoma caribaeum	23	0.02045
Glycinde solitaria	23	0.00909
Heteromastus filiformis	23	0.01364
Mediomastus ambiseta	45	0.00455
Odostomia engonia (Epi)	45	0.00909
Paraprionospio pinnata	68	0.08636
Tubificoides spp.	23	0.01591
Total Abundance w/ Epi.	864	
Total Abundance w/o Epi.	818	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.24545
Total Biomass w/o Epi.		0.23636

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO066	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.6	Salinity (ppt): 18.40	Sediment Silt-Clay (%): 0.15

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.23	3	Pollution Indicative Species Abundance (%)	5.56	
Abundance (#/m2)	2455	3	Pollution Indicative Species Biomass (%)	18.63	1
Biomass (g/m2)	1.26	3	Pollution Sensitive Species Abundance (%)	25.00	1
Carnivore-Omnivore Abundance (%)	31.48		Pollution Sensitive Species Biomass (%)	20.80	
Deep Deposit Feeder Abundance (%)	22.22	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	159	0.02273
Branchiostoma caribaeum	227	0.45909
Gemma gemma	591	0.05227
Glycinde solitaria	91	0.01136
Leitoscoloplos spp.	136	0.23409
Loimia medusa	23	0.04773
Lyonsia hyalina	23	0.12045
Mediomastus ambiseta	68	0.00909
Micrura leidyi	23	
Neanthes succinea	455	0.06364
Nemertina		0.02727
Pectinaria gouldii	23	0.01136
Phoronis spp.	227	0.14091
Podarkeopsis levifuscina	45	0.01364
Sphaeroma quadridentatum (Epi)	341	0.05227
Spiophanes bombyx	45	0.02955
Tubificoides spp.	318	0.01364
Total Abundance w/ Epi.	2795	
Total Abundance w/o Epi.	2455	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		1.30909
Total Biomass w/o Epi.		1.25681

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO067	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 13.2	Salinity (ppt): 17.40	Sediment Silt-Clay (%): 75.27

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)	0.00	5
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	0.00000
Total Abundance w/ Epi.	0	
Total Abundance w/o Epi.	0	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.00000
Total Biomass w/o Epi.		0.00000

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO068	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 19.6	Salinity (ppt): 17.20	Sediment Silt-Clay (%): 72.00

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	0.00	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)		0.00	5
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	0.00000
Total Abundance w/ Epi.	0	
Total Abundance w/o Epi.	0	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.00000
Total Biomass w/o Epi.		0.00000

Station: NO069	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 10.9	Salinity (ppt): 18.72	Sediment Silt-Clay (%): 28.83

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.01	3	Pollution Indicative Species Abundance (%)	31.09	
Abundance (#/m2)	2705	3	Pollution Indicative Species Biomass (%)	45.75	1
Biomass (g/m2)	0.72	1	Pollution Sensitive Species Abundance (%)	42.02	3
Carnivore-Omnivore Abundance (%)	25.21		Pollution Sensitive Species Biomass (%)	36.95	
Deep Deposit Feeder Abundance (%)	32.77	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	409	0.03409
Ampelisca spp.	23	0.00114
Eteone heteropoda	45	0.00114
Glycinde solitaria	23	0.00114
Loimia medusa	273	0.21364
Mediomastus ambiseta	386	0.00114
Micrura leidyi	23	
Neanthes succinea	23	0.01364
Nemertina		0.03864
Parahesione luteola	91	0.00114
Paraprionospio pinnata	795	0.32954
Pectinaria gouldii	432	0.03636
Phoronis spp.	23	0.00114
Podarkeopsis levifuscina	23	0.00114
Pseudeurythoe paucibranchiata	23	0.00909
Sigambra tentaculata	23	0.02273
Spiochaetopterus costarum	23	0.01591
Stylochus ellipticus (Epi)	23	0.00114
Tubificoides spp.	68	0.00114
Total Abundance w/ Epi.	2727	
Total Abundance w/o Epi.	2705	
Number of Taxa w/ Epi.	18	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		0.72386
Total Biomass w/o Epi.		0.72272

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO070	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 6.7	Salinity (ppt): 16.92	Sediment Silt-Clay (%): 3.31

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.54	3	Pollution Indicative Species Abundance (%)		7.09	5
Abundance (#/m2)	3205	3	Pollution Indicative Species Biomass (%)		30.67	
Biomass (g/m2)	0.56	1	Pollution Sensitive Species Abundance (%)		63.83	5
Carnivore-Omnivore Abundance (%)	64.54	5	Pollution Sensitive Species Biomass (%)		38.04	
Deep Deposit Feeder Abundance (%)	14.89					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	1591	0.19773
Cyclaspis varians	23	0.00114
Gemma gemma	432	0.04091
Glycinde solitaria	205	0.00682
Heteromastus filiformis	23	0.00227
Leitoscoloplos robustus	23	0.02500
Mediomastus ambiseta	250	0.00682
Micrura leidyi	114	
Mulinia lateralis	23	0.00227
Neanthes succinea	159	0.04773
Nemertina		0.06818
Odostomia engonia (Epi)	91	0.00909
Paraprionospio pinnata	182	0.14318
Pectinaria gouldii	68	0.00455
Stylochus ellipticus (Epi)	23	0.00682
Tubificoides spp.	114	0.00909
Total Abundance w/ Epi.	3318	
Total Abundance w/o Epi.	3205	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.57159
Total Biomass w/o Epi.		0.55568

Station: NO071	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 22.1	Salinity (ppt): 20.52	Sediment Silt-Clay (%): 49.89

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33		Condition: Degraded		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.58	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	68	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.06	1	Pollution Sensitive Species Abundance (%)	66.67	
Carnivore-Omnivore Abundance (%)	33.33	3	Pollution Sensitive Species Biomass (%)	89.29	3
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Loimia medusa	23	0.05455
Neanthes succinea	23	0.00682
Spiophanes bombyx	23	0.00227
Total Abundance w/ Epi.	68	
Total Abundance w/o Epi.	68	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.06364
Total Biomass w/o Epi.		0.06364

Station: NO072	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 6.1	Salinity (ppt): 17.82	Sediment Silt-Clay (%): 0.31

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.35	5	Pollution Indicative Species Abundance (%)	17.71	3
Abundance (#/m2)	2182	5	Pollution Indicative Species Biomass (%)	3.09	
Biomass (g/m2)	1.40	3	Pollution Sensitive Species Abundance (%)	22.92	3
Carnivore-Omnivore Abundance (%)	29.17	3	Pollution Sensitive Species Biomass (%)	11.24	
Deep Deposit Feeder Abundance (%)	38.54				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acanthohaustorius millsi	295	0.10000
Acteocina canaliculata	182	0.03864
Branchiostoma caribaeum	205	0.90000
Edotea triloba (Epi)	45	0.00455
Eteone heteropoda	23	0.00455
Gastropoda (Epi)	23	0.00114
Gemma gemma	68	0.02500
Glycinde solitaria	182	0.01818
Heteromastus filiformis	23	0.01136
Leitoscoloplos spp.	364	0.03864
Loimia medusa	23	0.05227
Micrura leidyi	45	
Neanthes succinea	136	0.03409
Nemertina	68	0.02045
Phoronis spp.	91	0.03409
Sphaeroma quadridentatum (Epi)	23	0.00114
Spiophanes bombyx	23	0.01364
Tubificoides spp.	455	0.00909
Turbonilla interrupta (Epi)	45	0.00682
Total Abundance w/ Epi.	2386	
Total Abundance w/o Epi.	2250	
Number of Taxa w/ Epi.	20	
Number of Taxa w/o Epi.	16	
Total Biomass w/ Epi.		1.40909
Total Biomass w/o Epi.		1.39545

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO073	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.4	Salinity (ppt): 15.10	Sediment Silt-Clay (%): 87.62

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.58	1	Pollution Indicative Species Abundance (%)	8.33	
Abundance (#/m2)	273	1	Pollution Indicative Species Biomass (%)	6.59	3
Biomass (g/m2)	0.21	1	Pollution Sensitive Species Abundance (%)	16.67	
Carnivore-Omnivore Abundance (%)	8.33	1	Pollution Sensitive Species Biomass (%)	81.32	3
Deep Deposit Feeder Abundance (%)	66.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.01591
Leucon americanus	23	0.01364
Macoma balthica	23	0.15227
Mulinia lateralis	23	0.01364
Tubificoides spp.	182	0.01136
Total Abundance w/ Epi.	273	
Total Abundance w/o Epi.	273	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.20682
Total Biomass w/o Epi.		0.20682

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO074	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.5	Salinity (ppt): 16.00	Sediment Silt-Clay (%): 0.58

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.14	3	Pollution Indicative Species Abundance (%)	17.28	3
Abundance (#/m2)	1841	5	Pollution Indicative Species Biomass (%)	55.45	
Biomass (g/m2)	0.71	1	Pollution Sensitive Species Abundance (%)	13.58	3
Carnivore-Omnivore Abundance (%)	35.80	5	Pollution Sensitive Species Biomass (%)	12.82	
Deep Deposit Feeder Abundance (%)	18.52				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Amphiporus bioculatus	45	
Edotea triloba (Epi)	136	0.02045
Edwardsia elegans	23	0.00909
Eteone heteropoda	45	0.00455
Gemma gemma	568	0.02500
Glycinde solitaria	205	0.01818
Haminoea solitaria	23	0.00682
Heteromastus filiformis	227	0.06136
Leitoscoloplos spp.	45	0.31136
Loimia medusa	23	0.04318
Marenzelleria viridis	23	0.02955
Micrura leidyi	45	
Mulinia lateralis	227	0.07727
Neanthes succinea	227	0.05455
Nemertina		0.03864
Odostomia engonia (Epi)	227	0.01591
Rictaxis punctostriatus	45	0.00682
Tubificoides spp.	68	0.01136
Total Abundance w/ Epi.	2205	
Total Abundance w/o Epi.	1841	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.74545
Total Biomass w/o Epi.		0.70909

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO075	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 6.4	Salinity (ppt): 16.30	Sediment Silt-Clay (%): 79.78

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.50	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	91	1	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	0.17	1	Pollution Sensitive Species Abundance (%)		25.00	
Carnivore-Omnivore Abundance (%)	75.00	5	Pollution Sensitive Species Biomass (%)		20.41	1
Deep Deposit Feeder Abundance (%)	25.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.03409
Neanthes succinea	45	0.13182
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	91	
Total Abundance w/o Epi.	91	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.16704
Total Biomass w/o Epi.		0.16704

Station: NO076	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 9.6	Salinity (ppt): 16.40	Sediment Silt-Clay (%): 70.79

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.87	1	Pollution Indicative Species Abundance (%)		21.88	
Abundance (#/m2)	727	1	Pollution Indicative Species Biomass (%)		10.92	3
Biomass (g/m2)	0.40	1	Pollution Sensitive Species Abundance (%)		3.13	
Carnivore-Omnivore Abundance (%)	18.75	3	Pollution Sensitive Species Biomass (%)		2.30	1
Deep Deposit Feeder Abundance (%)	59.38					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.00909
Mulinia lateralis	68	0.02727
Neanthes succinea	68	0.34091
Parahesione luteola	45	0.00114
Paraprionospio pinnata	91	0.01591
Tubificoides spp.	432	0.00114
Total Abundance w/ Epi.	727	
Total Abundance w/o Epi.	727	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.39545
Total Biomass w/o Epi.		0.39545

Station: NO077	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 12.3	Salinity (ppt): 17.00	Sediment Silt-Clay (%): 80.33

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.37	1	Pollution Indicative Species Abundance (%)	80.00	
Abundance (#/m2)	114	1	Pollution Indicative Species Biomass (%)	95.00	1
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%)	20.00	
Carnivore-Omnivore Abundance (%)	20.00	3	Pollution Sensitive Species Biomass (%)	5.00	1
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.00114
Mulinia lateralis	23	0.00114
Paraprionospio pinnata	68	0.02045
Total Abundance w/ Epi.	114	
Total Abundance w/o Epi.	114	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.02273
Total Biomass w/o Epi.		0.02273

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO078	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.7	Salinity (ppt): 16.90	Sediment Silt-Clay (%): 28.59

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.28	5	Pollution Indicative Species Abundance (%)	12.82	3
Abundance (#/m2)	1773	5	Pollution Indicative Species Biomass (%)	15.84	
Biomass (g/m2)	0.52	1	Pollution Sensitive Species Abundance (%)	38.46	3
Carnivore-Omnivore Abundance (%)	43.59	5	Pollution Sensitive Species Biomass (%)	25.81	
Deep Deposit Feeder Abundance (%)	14.10				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	182	0.00227
Balanus improvisus (Epi)	45	0.00227
Cyathura polita	23	0.00114
Cyclaspis varians	91	0.00114
Edotea triloba (Epi)	273	0.00909
Eteone heteropoda	23	0.00114
Glycinde solitaria	386	0.05000
Leucon americanus	295	0.00114
Loimia medusa	23	0.02500
Macoma mitchelli	45	0.00114
Micrura leidyi	23	
Neanthes succinea	114	0.24773
Nemertina		0.02955
Oxyurostylis smithi	23	0.00114
Parahesione luteola	23	0.00114
Paraprionospio pinnata	205	0.08182
Pectinaria gouldii	250	0.02273
Spiochaetopterus costarum	68	0.05682
Total Abundance w/ Epi.	2091	
Total Abundance w/o Epi.	1773	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.53523
Total Biomass w/o Epi.		0.52386

Station: NO079	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.5	Salinity (ppt): 17.30	Sediment Silt-Clay (%): 32.60

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.37	1	Pollution Indicative Species Abundance (%)	40.00	1
Abundance (#/m2)	341	1	Pollution Indicative Species Biomass (%)	95.42	
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	26.67	3
Carnivore-Omnivore Abundance (%)	20.00	3	Pollution Sensitive Species Biomass (%)	3.82	
Deep Deposit Feeder Abundance (%)	46.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Edotea triloba (Epi)	23	0.00114
Glycinde solitaria	68	0.00114
Leitoscoloplos spp.	23	0.06136
Mediomastus ambiseta	23	0.00455
Mulinia lateralis	45	0.00114
Paraprionospio pinnata	68	0.07955
Tubificoides spp.	114	0.00114
Total Abundance w/ Epi.	364	
Total Abundance w/o Epi.	341	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.15000
Total Biomass w/o Epi.		0.14886

Station: NO080	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.8	Salinity (ppt): 17.20	Sediment Silt-Clay (%): 0.59

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.83	3	Pollution Indicative Species Abundance (%)		23.40	3
Abundance (#/m2)	1068	3	Pollution Indicative Species Biomass (%)		51.13	
Biomass (g/m2)	0.30	1	Pollution Sensitive Species Abundance (%)		63.83	5
Carnivore-Omnivore Abundance (%)	53.19	5	Pollution Sensitive Species Biomass (%)		42.48	
Deep Deposit Feeder Abundance (%)	8.51					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	295	0.02045
Carinoma tremaphoros	23	
Glycinde solitaria	227	0.02273
Heteromastus filiformis	23	0.00114
Loimia medusa	23	0.06136
Lyonsia hyalina	23	0.00114
Mediomastus ambiseta	23	0.00114
Micrura leidyi	23	
Molgula manhattensis (Epi)	23	0.01591
Mulinia lateralis	23	0.09773
Mysidae (Epi)	45	0.00455
Nemertina		0.00455
Odostomia engonia (Epi)	23	0.00114
Paraprionospio pinnata	227	0.05682
Pectinaria gouldii	45	0.00114
Spiochaetopterus costarum	114	0.02273
Total Abundance w/ Epi.	1159	
Total Abundance w/o Epi.	1068	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.32386
Total Biomass w/o Epi.		0.30227

Station: NO081	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.0	Salinity (ppt): 17.20	Sediment Silt-Clay (%): 90.58

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67		Condition: Marginal		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.21	3	Pollution Indicative Species Abundance (%)	11.76	
Abundance (#/m2)	386	1	Pollution Indicative Species Biomass (%)	2.41	5
Biomass (g/m2)	0.38	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	47.06	5	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	5.88				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.00114
Leptocheirus plumulosus	136	0.06364
Mysidae (Epi)	23	0.00114
Neanthes succinea	68	0.30227
Paraprionospio pinnata	23	0.00455
Podarkeopsis levifuscina	114	0.00114
Streblospio benedicti	23	0.00455
Total Abundance w/ Epi.	409	
Total Abundance w/o Epi.	386	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.37841
Total Biomass w/o Epi.		0.37727

Station: NO082	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.1	Salinity (ppt): 14.70	Sediment Silt-Clay (%): 48.74

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.10	5	Pollution Indicative Species Abundance (%)	35.19	
Abundance (#/m2)	1227	3	Pollution Indicative Species Biomass (%)	15.19	3
Biomass (g/m2)	1.26	3	Pollution Sensitive Species Abundance (%)	22.22	
Carnivore-Omnivore Abundance (%)	22.22	3	Pollution Sensitive Species Biomass (%)	58.77	3
Deep Deposit Feeder Abundance (%)	31.48				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	91	0.00909
Heteromastus filiformis	250	0.12727
Macoma balthica	159	0.71136
Macoma mitchelli	45	0.01136
Marenzelleria viridis	23	0.01818
Micrura leidyi	23	
Mulinia lateralis	68	0.18182
Neanthes succinea	159	0.12955
Nemertina		0.04545
Oligochaeta		0.00114
Pectinaria gouldii	23	0.01136
Streblospio benedicti	273	0.00909
Tubificidae imm w/o cap chaetae	91	
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	1227	
Total Abundance w/o Epi.	1227	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		1.25681
Total Biomass w/o Epi.		1.25681

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO083	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 9.3	Salinity (ppt): 15.12	Sediment Silt-Clay (%): 77.18

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.92	1	Pollution Indicative Species Abundance (%)	80.00	
Abundance (#/m2)	114	1	Pollution Indicative Species Biomass (%)	72.97	1
Biomass (g/m2)	0.04	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	20.00	3	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	0.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Eteone heteropoda	23	0.00114
Macoma mitchelli	23	0.01136
Paraprionospio pinnata	45	0.02045
Streblospio benedicti	23	0.00909
Total Abundance w/ Epi.	114	
Total Abundance w/o Epi.	114	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.04205
Total Biomass w/o Epi.		0.04205

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO084	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 7.5	Salinity (ppt): 15.90	Sediment Silt-Clay (%): 92.61

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00		Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.00	1	Pollution Indicative Species Abundance (%)	100.00	
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)	100.00	1
Biomass (g/m2)	0.01	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)
Paraprionospio pinnata	23	0.00682
Streblospio benedicti	23	0.00682
Total Abundance w/ Epi.	45	
Total Abundance w/o Epi.	45	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.01364
Total Biomass w/o Epi.		0.01364

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO085	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.4	Salinity (ppt): 12.60	Sediment Silt-Clay (%): 51.33

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.64	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	1250	3	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.92	3	Pollution Sensitive Species Abundance (%)	20.00	
Carnivore-Omnivore Abundance (%)	12.73	3	Pollution Sensitive Species Biomass (%)	87.71	5
Deep Deposit Feeder Abundance (%)	72.73				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.11818
Glycinde solitaria	45	0.03409
Heteromastus filiformis	45	0.02955
Macoma balthica	114	0.60909
Marenzelleria viridis	68	0.05000
Neanthes succinea	91	0.07045
Tubificoides spp.	864	0.01364
Total Abundance w/ Epi.	1250	
Total Abundance w/o Epi.	1250	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.92500
Total Biomass w/o Epi.		0.92500

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO086	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.4	Salinity (ppt): 15.70	Sediment Silt-Clay (%): 0.73

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.62	3	Pollution Indicative Species Abundance (%)	12.77	3
Abundance (#/m2)	1068	3	Pollution Indicative Species Biomass (%)	2.43	
Biomass (g/m2)	0.23	1	Pollution Sensitive Species Abundance (%)	25.53	3
Carnivore-Omnivore Abundance (%)	27.66	3	Pollution Sensitive Species Biomass (%)	25.24	
Deep Deposit Feeder Abundance (%)	51.06				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	205	0.01136
Heteromastus filiformis	136	0.09091
Macoma mitchelli	23	0.00227
Marenzelleria viridis	68	0.04773
Micrura leidyi	45	
Mulinia lateralis	45	0.00114
Neanthes succinea	45	0.00455
Nemertina		0.07045
Streblospio benedicti	91	0.00455
Tubificoides spp.	409	0.00114
Total Abundance w/ Epi.	1068	
Total Abundance w/o Epi.	1068	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.23409
Total Biomass w/o Epi.		0.23409

Station: NO087	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.9	Salinity (ppt): 15.30	Sediment Silt-Clay (%): 0.92

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.33	5	Pollution Indicative Species Abundance (%)		26.42	1
Abundance (#/m2)	1205	3	Pollution Indicative Species Biomass (%)		7.06	
Biomass (g/m2)	0.39	1	Pollution Sensitive Species Abundance (%)		20.75	3
Carnivore-Omnivore Abundance (%)	35.85	5	Pollution Sensitive Species Biomass (%)		37.65	
Deep Deposit Feeder Abundance (%)	32.08					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Amphiporus bioculatus	45	
Eteone heteropoda	182	0.00114
Gemma gemma	23	0.00114
Glycinde solitaria	114	0.02045
Heteromastus filiformis	114	0.06591
Leitoscoloplos spp.	23	0.00114
Macoma mitchelli	114	0.00227
Marenzelleria viridis	136	0.12500
Mulinia lateralis	23	0.01591
Neanthes succinea	68	0.04318
Nemertina	23	0.09091
Streblospio benedicti	91	0.00909
Tubificoides spp.	250	0.00909
Total Abundance w/ Epi.	1227	
Total Abundance w/o Epi.	1227	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		0.38636
Total Biomass w/o Epi.		0.38636

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO088	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 12.3	Salinity (ppt): 16.92	Sediment Silt-Clay (%): 56.03

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	0.72	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	114	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)	0.00	1
Deep Deposit Feeder Abundance (%)	20.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Gemma gemma	91	0.00682
Heteromastus filiformis	23	0.00455
Hydrobiidae (Epi)	341	0.02500
Total Abundance w/ Epi.	455	
Total Abundance w/o Epi.	114	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.03636
Total Biomass w/o Epi.		0.01136

Station: NO089	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.3	Salinity (ppt): 18.60	Sediment Silt-Clay (%): 4.95

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.92	1	Pollution Indicative Species Abundance (%)	100.00	
Abundance (#/m2)	205	1	Pollution Indicative Species Biomass (%)	100.00	1
Biomass (g/m2)	0.02	1	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	0.00	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Odostomia engonia (Epi)	45	0.00682
Paraprionospio pinnata	68	0.01136
Streblospio benedicti	136	0.00455
Total Abundance w/ Epi.	250	
Total Abundance w/o Epi.	205	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.02273
Total Biomass w/o Epi.		0.01591

Station: NO090	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.7	Salinity (ppt): 18.10	Sediment Silt-Clay (%): 2.13

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 | Condition: Severely Degr. | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.09	1	Pollution Indicative Species Abundance (%)	0.06	
Abundance (#/m2)	116113	1	Pollution Indicative Species Biomass (%)	0.11	5
Biomass (g/m2)	116.01	1	Pollution Sensitive Species Abundance (%)	0.29	1
Carnivore-Omnivore Abundance (%)	0.61		Pollution Sensitive Species Biomass (%)	0.04	
Deep Deposit Feeder Abundance (%)	0.16	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	227	0.01818
Balanus improvisus (Epi)	45	0.00909
Edotea triloba (Epi)	23	0.01364
Eteone heteropoda	23	0.00455
Gemma gemma	115181	115.39054
Glycinde solitaria	114	0.02955
Heteromastus filiformis	114	0.07955
Mulinia lateralis	45	0.12273
Neanthes succinea	318	0.32954
Odostomia engonia (Epi)	68	0.00682
Pectinaria gouldii	45	0.02273
Rictaxis punctostriatus	23	0.00909
Sphaeroma quadridentatum (Epi)	23	0.00909
Tubificoides spp.	23	0.00682
Total Abundance w/ Epi.	116272	
Total Abundance w/o Epi.	116113	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		116.05190
Total Biomass w/o Epi.		116.01327

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO091	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 11.5	Salinity (ppt): 18.00	Sediment Silt-Clay (%): 86.26

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.00	1	Pollution Indicative Species Abundance (%)	50.00	
Abundance (#/m2)	45	1	Pollution Indicative Species Biomass (%)	75.00	1
Biomass (g/m2)	0.01	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)
Bivalvia	23	0.00227
Streblospio benedicti	23	0.00682
Total Abundance w/ Epi.	45	
Total Abundance w/o Epi.	45	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.00909
Total Biomass w/o Epi.		0.00909

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO092	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 13.4	Salinity (ppt): 18.30	Sediment Silt-Clay (%): 81.90

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)	23	1	Pollution Indicative Species Biomass (%)		100.00	1
Biomass (g/m2)	0.02	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)
Mulinia lateralis	23	0.01818
Total Abundance w/ Epi.	23	
Total Abundance w/o Epi.	23	
Number of Taxa w/ Epi.	1	
Number of Taxa w/o Epi.	1	
Total Biomass w/ Epi.		0.01818
Total Biomass w/o Epi.		0.01818

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO093	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 11.1	Salinity (ppt): 17.90	Sediment Silt-Clay (%): 89.47

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	0.95	1	Pollution Indicative Species Abundance (%)		100.00	
Abundance (#/m2)	250	1	Pollution Indicative Species Biomass (%)		100.00	1
Biomass (g/m2)	0.01	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)
Paraprionospio pinnata	91	0.00114
Streblospio benedicti	159	0.00682
Total Abundance w/ Epi.	250	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	2	
Number of Taxa w/o Epi.	2	
Total Biomass w/ Epi.		0.00795
Total Biomass w/o Epi.		0.00795

Station: NO094	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.5	Salinity (ppt): 16.10	Sediment Silt-Clay (%): 62.04

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 (%)		40.00	
Abundance (#/m2)	114	1	Pollution Indicative Species Biomass (%)		2.56	5
Biomass (g/m2)	0.04	1	Pollution Sensitive Species Abundance (%)		20.00	
Carnivore-Omnivore Abundance (%)	60.00	5	Pollution Sensitive Species Biomass (%)		35.90	3
Deep Deposit Feeder Abundance (%)	0.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.01591
Neanthes succinea	23	0.02273
Podarkeopsis levifuscina	23	0.00455
Streblospio benedicti	45	0.00114
Total Abundance w/ Epi.	114	
Total Abundance w/o Epi.	114	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.04432
Total Biomass w/o Epi.		0.04432

Station: NO095	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.8	Salinity (ppt): 16.10	Sediment Silt-Clay (%): 65.01

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.14	3	Pollution Indicative Species Abundance (%)	60.87	
Abundance (#/m2)	523	1	Pollution Indicative Species Biomass (%)	30.38	1
Biomass (g/m2)	0.86	3	Pollution Sensitive Species Abundance (%)	21.74	
Carnivore-Omnivore Abundance (%)	8.70	1	Pollution Sensitive Species Biomass (%)	69.48	3
Deep Deposit Feeder Abundance (%)	21.74				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	45	0.02955
Leitoscoloplos spp.	23	0.24318
Littoridinops tenuipes (Epi)	23	0.00455
Macoma balthica	68	0.56818
Paraprionospio pinnata	45	0.00909
Streblospio benedicti	250	0.00909
Tubificoides spp.	91	0.00114
Total Abundance w/ Epi.	545	
Total Abundance w/o Epi.	523	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.86477
Total Biomass w/o Epi.		0.86022

Station: NO096	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.9	Salinity (ppt): 18.10	Sediment Silt-Clay (%): 0.70

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.59	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	386	1	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	0.08	1	Pollution Sensitive Species Abundance (%)		82.35	3
Carnivore-Omnivore Abundance (%)	58.82		Pollution Sensitive Species Biomass (%)		56.76	
Deep Deposit Feeder Abundance (%)	29.41	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	136	0.00909
Glycinde solitaria	45	0.00909
Loimia medusa	23	0.00682
Mediomastus ambiseta	91	0.00682
Micrura leidyi	23	
Neanthes succinea	23	0.00909
Nemertina		0.02500
Pectinaria gouldii	23	0.00227
Phoronis spp.	23	0.01591
Total Abundance w/ Epi.	386	
Total Abundance w/o Epi.	386	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.08409
Total Biomass w/o Epi.		0.08409

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO097	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 12.7	Salinity (ppt): 20.52	Sediment Silt-Clay (%): 92.90

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.01	3	Pollution Indicative Species Abundance (%)	30.56	
Abundance (#/m2)	818	1	Pollution Indicative Species Biomass (%)	26.98	1
Biomass (g/m2)	0.24	1	Pollution Sensitive Species Abundance (%)	11.11	
Carnivore-Omnivore Abundance (%)	58.33	5	Pollution Sensitive Species Biomass (%)	0.93	1
Deep Deposit Feeder Abundance (%)	2.78				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.00114
Mediomastus ambiseta	23	0.00114
Microphthalmus spp.	68	0.00227
Micrura leidyi	23	
Nemertina		0.02500
Parahesione luteola	23	0.00455
Paraprionospio pinnata	250	0.06591
Podarkeopsis levifuscina	68	0.01136
Polydora cornuta	23	0.00114
Pseudeurythoe paucibranchiata	136	0.06364
Saccoglossus kowalevskii	45	0.05682
Sigambra tentaculata	91	0.01136
Stylochus ellipticus (Epi)	23	0.00114
Total Abundance w/ Epi.	841	
Total Abundance w/o Epi.	818	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.24545
Total Biomass w/o Epi.		0.24432

Station: NO098	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 9.9	Salinity (ppt): 24.80	Sediment Silt-Clay (%): 2.11

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.64	5	Pollution Indicative Species Abundance (%)	18.84	
Abundance (#/m2)	1568	3	Pollution Indicative Species Biomass (%)	4.30	5
Biomass (g/m2)	0.95	1	Pollution Sensitive Species Abundance (%)	26.09	3
Carnivore-Omnivore Abundance (%)	33.33		Pollution Sensitive Species Biomass (%)	40.10	
Deep Deposit Feeder Abundance (%)	13.04	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	159	0.01818
Aglaophamus verrilli	23	0.02500
Ampelisca abdita	23	0.00909
Amphiporus bioculatus	23	
Glycera dibranchiata	45	0.00227
Listriella barnardi	227	0.00455
Loimia medusa	205	0.36136
Neanthes succinea	45	0.00227
Nemertina	45	0.00114
Notomastus spp.	159	0.40227
Odostomia engonia (Epi)	45	0.00114
Paraprionospio pinnata	295	0.04091
Pectinaria gouldii	45	0.02045
Phoronis spp.	45	0.00227
Podarkeopsis levifuscina	23	0.00114
Polynoidae (Epi)	23	0.00227
Pseudeurythoe paucibranchiata	23	0.01364
Rictaxis punctostriatus	68	0.01364
Saccoglossus kowalevskii	45	0.01591
Sigambra tentaculata	68	0.01136
Turbonilla interrupta (Epi)	23	0.00114
Total Abundance w/ Epi.	1705	
Total Abundance w/o Epi.	1614	
Number of Taxa w/ Epi.	22	
Number of Taxa w/o Epi.	19	
Total Biomass w/ Epi.		0.95682
Total Biomass w/o Epi.		0.95227

Station: NO099	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 18.8	Salinity (ppt): 21.30	Sediment Silt-Clay (%): 42.93

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.33 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.55	5	Pollution Indicative Species Abundance (%)	25.53	
Abundance (#/m2)	2136	5	Pollution Indicative Species Biomass (%)	3.94	5
Biomass (g/m2)	2.31	3	Pollution Sensitive Species Abundance (%)	20.21	
Carnivore-Omnivore Abundance (%)	40.43	5	Pollution Sensitive Species Biomass (%)	47.32	3
Deep Deposit Feeder Abundance (%)	18.09				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.02045
Bhawania heteroseta	205	0.00227
Cerapus tubularis (Epi)	68	0.00114
Chaetopterus variopedatus	23	0.10682
Glycera dibranchiata	68	0.15909
Leitoscoloplos spp.	23	0.03636
Listriella barnardi	45	0.00909
Loimia medusa	136	0.34091
Maldanidae	23	0.01136
Mediomastus ambiseta	23	0.00455
Mya arenaria	23	0.61818
Neanthes succinea	23	0.01136
Nemertina	23	0.01136
Notomastus spp.	205	0.45000
Paracaprella tenuis (Epi)	45	0.00114
Paraprionospio pinnata	523	0.05455
Pectinaria gouldii	91	0.11136
Podarkeopsis levifuscina	23	0.00114

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BENTHIC ABUNDANCE (per sq. meter) (con't)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Polynoidae (Epi)	68	0.01818
Pseudeurythoe paucibranchiata	136	0.01818
Saccoglossus kowalevskii	114	0.28636
Scolelepis texana	23	0.00682
Sigambra tentaculata	364	0.03409
Tubificoides spp.	23	0.01591
Turbonilla interrupta (Epi)	23	0.01364
Total Abundance w/ Epi.	2341	
Total Abundance w/o Epi.	2136	
Number of Taxa w/ Epi.	25	
Number of Taxa w/o Epi.	21	
Total Biomass w/ Epi.		2.34431
Total Biomass w/o Epi.		2.31022

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO100	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 1.5	Salinity (ppt): 20.00	Sediment Silt-Clay (%): 2.79

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.25	1	Pollution Indicative Species Abundance (%)	2.09	
Abundance (#/m2)	10886	1	Pollution Indicative Species Biomass (%)	9.57	3
Biomass (g/m2)	0.21	1	Pollution Sensitive Species Abundance (%)	0.84	1
Carnivore-Omnivore Abundance (%)	1.04		Pollution Sensitive Species Biomass (%)	25.53	
Deep Deposit Feeder Abundance (%)	2.09	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.01591
Eteone foliosa	45	0.00682
Gemma gemma	5409	0.06136
Leitoscoloplos spp.	227	0.02045
Oxyurostylis smithi	23	0.00455
Paraonis fulgens	5091	0.06591
Spiophanes bombyx	23	0.03864
Total Abundance w/ Epi.	10886	
Total Abundance w/o Epi.	10886	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.21364
Total Biomass w/o Epi.		0.21364

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO101	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.6	Salinity (ppt): 21.00	Sediment Silt-Clay (%): 2.51

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.03	1	Pollution Indicative Species Abundance (%)		2.90	
Abundance (#/m2)	3136	5	Pollution Indicative Species Biomass (%)		10.06	3
Biomass (g/m2)	0.75	1	Pollution Sensitive Species Abundance (%)		84.06	5
Carnivore-Omnivore Abundance (%)	73.19		Pollution Sensitive Species Biomass (%)		48.48	
Deep Deposit Feeder Abundance (%)	17.39	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	1909	0.14545
Edotea triloba (Epi)	23	0.00114
Edwardsia elegans	182	0.04545
Glycinde solitaria	114	0.02955
Heteromastus filiformis	23	0.01364
Listriella spp.	114	0.02045
Loimia medusa	91	0.17045
Mediomastus ambiseta	523	0.01591
Micrura leidyi	23	
Mulinia lateralis	23	0.03409
Neanthes succinea	23	0.02273
Nemertina		0.17954
Paraprionospio pinnata	68	0.04091
Rictaxis punctostriatus	23	0.01591
Sigambra tentaculata	23	0.01136
Total Abundance w/ Epi.	3159	
Total Abundance w/o Epi.	3136	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.74659
Total Biomass w/o Epi.		0.74545

Station: NO102	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 10.1	Salinity (ppt): 21.90	Sediment Silt-Clay (%): 0.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.49	1	Pollution Indicative Species Abundance (%)	17.65	
Abundance (#/m2)	1932	3	Pollution Indicative Species Biomass (%)	5.47	3
Biomass (g/m2)	0.62	1	Pollution Sensitive Species Abundance (%)	65.88	5
Carnivore-Omnivore Abundance (%)	44.71		Pollution Sensitive Species Biomass (%)	75.73	
Deep Deposit Feeder Abundance (%)	17.65	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	773	0.24318
Branchiostoma caribaeum	23	0.01591
Glycera dibranchiata	23	0.05455
Listriella barnardi	182	0.01364
Loimia medusa	182	0.22727
Mediomastus ambiseta	318	0.00114
Neanthes succinea	23	0.00682
Paraprionospio pinnata	341	0.03409
Podarkeopsis levifuscina	23	0.00114
Polynoidae (Epi)	23	0.00909
Pseudeurythoe paucibranchiata	23	0.02045
Tubificoides spp.	23	0.00455
Turbonilla interrupta (Epi)	23	0.00114
Total Abundance w/ Epi.	1977	
Total Abundance w/o Epi.	1932	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.63295
Total Biomass w/o Epi.		0.62273

Station: NO103	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 18.4	Salinity (ppt): 23.22	Sediment Silt-Clay (%): 0.47

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.20	3	Pollution Indicative Species Abundance (%)		37.14	
Abundance (#/m2)	1591	3	Pollution Indicative Species Biomass (%)		15.90	1
Biomass (g/m2)	0.64	1	Pollution Sensitive Species Abundance (%)		35.71	3
Carnivore-Omnivore Abundance (%)	22.86		Pollution Sensitive Species Biomass (%)		60.95	
Deep Deposit Feeder Abundance (%)	22.86	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	159	0.09318
Amphiporus bioculatus	23	
Bhawania heteroseta	23	0.00114
Branchiostoma caribaeum	23	0.02273
Glycera dibranchiata	23	0.08409
Leitoscoloplos spp.	23	0.00682
Loimia medusa	114	0.26136
Mediomastus ambiseta	159	0.00455
Nemertina		0.00114
Paraprionospio pinnata	568	0.09545
Pectinaria gouldii	45	0.00909
Phoronis spp.	114	0.03182
Podarkeopsis levifuscina	23	0.00227
Rictaxis punctostriatus	45	0.00227
Saccoglossus kowalevskii	45	0.02045
Sigambra tentaculata	68	0.00455
Tubificoides spp.	136	0.00227
Turbonilla interrupta (Epi)	68	0.00682
Total Abundance w/ Epi.	1659	
Total Abundance w/o Epi.	1591	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	16	
Total Biomass w/ Epi.		0.65000
Total Biomass w/o Epi.		0.64318

Station: NO104	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 9.9	Salinity (ppt): 21.50	Sediment Silt-Clay (%): 0.15

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.50	3	Pollution Indicative Species Abundance (%)	2.33	
Abundance (#/m2)	1955	3	Pollution Indicative Species Biomass (%)	1.74	5
Biomass (g/m2)	1.56	3	Pollution Sensitive Species Abundance (%)	40.70	3
Carnivore-Omnivore Abundance (%)	38.37		Pollution Sensitive Species Biomass (%)	7.85	
Deep Deposit Feeder Abundance (%)	5.81	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	477	0.05909
Ampelisca spp.	91	0.05000
Branchiostoma caribaeum	341	0.97045
Chaetopterus spp.	23	0.08636
Gemma gemma	23	0.00227
Glycera dibranchiata	23	0.09318
Leitoscoloplos spp.	23	0.02500
Neanthes succinea	23	0.00227
Nemertina	23	0.02955
Nereididae	23	0.00455
Odostomia engonia (Epi)	45	0.00227
Orbiniidae	91	0.05000
Paraprionospio pinnata	23	0.00227
Parvilucina crenella	227	0.09545
Phoronis spp.	114	0.01818
Podarkeopsis levifuscina	45	0.00114
Pseudeurythoe paucibranchiata	68	0.02500
Saccoglossus kowalevskii	23	0.00114
Spiophanes bombyx	205	0.04545
Syllidae	68	0.00114
Tellinidae	23	0.00114
Total Abundance w/ Epi.	2000	
Total Abundance w/o Epi.	1955	
Number of Taxa w/ Epi.	21	
Number of Taxa w/o Epi.	20	
Total Biomass w/ Epi.		1.56590
Total Biomass w/o Epi.		1.56363

Station: NO105	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 9.3	Salinity (ppt): 24.40	Sediment Silt-Clay (%): 0.16

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33		Condition: Degraded		# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	3.18	3	Pollution Indicative Species Abundance (%)	9.84	
Abundance (#/m2)	1386	1	Pollution Indicative Species Biomass (%)	2.08	5
Biomass (g/m2)	0.76	1	Pollution Sensitive Species Abundance (%)	50.82	3
Carnivore-Omnivore Abundance (%)	52.46		Pollution Sensitive Species Biomass (%)	30.80	
Deep Deposit Feeder Abundance (%)	0.00	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	500	0.05227
Branchiostoma caribaeum	159	0.15682
Cirratulidae	45	0.00114
Cyclaspis varians	23	0.00227
Glycera dibranchiata	45	0.18182
Glycinde solitaria	45	0.00455
Listriella barnardi	45	0.01136
Loimia medusa	114	0.17727
Nephtyidae	23	0.08409
Odostomia engonia (Epi)	114	0.00455
Paraprionospio pinnata	136	0.01591
Parvilucina crenella	68	0.05682
Phoronis spp.	45	0.00114
Pseudeurythoe paucibranchiata	91	0.01136
Sigambra tentaculata	23	0.00227
Spionidae	23	0.00455
Turbonilla interrupta (Epi)	23	0.00114
Total Abundance w/ Epi.	1523	
Total Abundance w/o Epi.	1386	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.76932
Total Biomass w/o Epi.		0.76363

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO106	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.9	Salinity (ppt): 20.10	Sediment Silt-Clay (%): 0.06

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.62	1	Pollution Indicative Species Abundance (%)	3.95	
Abundance (#/m2)	1727	3	Pollution Indicative Species Biomass (%)	8.97	3
Biomass (g/m2)	0.91	1	Pollution Sensitive Species Abundance (%)	3.95	1
Carnivore-Omnivore Abundance (%)	3.95		Pollution Sensitive Species Biomass (%)	0.12	
Deep Deposit Feeder Abundance (%)	3.95	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acanthohaustorius millsi	1068	0.25227
Acteocina canaliculata	68	0.00114
Branchiostoma caribaeum	295	0.57273
Gemma gemma	227	0.00455
Leitoscoloplos spp.	68	0.08182
Stylochus ellipticus (Epi)	91	0.01364
Total Abundance w/ Epi.	1818	
Total Abundance w/o Epi.	1727	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.92613
Total Biomass w/o Epi.		0.91250

Station: NO107	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.5	Salinity (ppt): 20.40	Sediment Silt-Clay (%): 0.59

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.04	3	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	1136	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	1.56	3	Pollution Sensitive Species Abundance (%)	60.00	3
Carnivore-Omnivore Abundance (%)	50.00		Pollution Sensitive Species Biomass (%)	17.60	
Deep Deposit Feeder Abundance (%)	16.00	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	409	0.05227
Ameroculodes species complex	23	0.01136
Branchiostoma caribaeum	205	1.03636
Cyathura polita	23	0.02955
Gastropoda (Epi)	45	0.01136
Glycinde solitaria	45	0.00909
Loimia medusa	45	0.14773
Mediomastus ambiseta	114	0.01364
Micrura leidyi	45	
Neanthes succinea	23	0.01818
Nemertina		0.17045
Oxyurostylis smithi	23	0.00114
Paraonis fulgens	45	0.02273
Phoronis spp.	45	0.02273
Podarkeopsis levifuscina	23	0.01136
Sphaeroma quadridentatum (Epi)	295	0.03182
Tubificoides spp.	68	0.01591
Total Abundance w/ Epi.	1477	
Total Abundance w/o Epi.	1136	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		1.60568
Total Biomass w/o Epi.		1.56250

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO108	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.6	Salinity (ppt): 21.80	Sediment Silt-Clay (%): 1.24

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.72	3	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	2000	3	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	3.59	3	Pollution Sensitive Species Abundance (%)	19.32	1
Carnivore-Omnivore Abundance (%)	21.59		Pollution Sensitive Species Biomass (%)	2.94	
Deep Deposit Feeder Abundance (%)	12.50	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	136	0.01818
Branchiostoma caribaeum	977	3.43635
Cyathura polita	68	0.04091
Gemma gemma	45	0.00682
Glycinde solitaria	45	0.00909
Leucon americanus	23	0.00227
Neanthes succinea	23	0.00114
Paraonis fulgens	68	0.00455
Parvilucina crenella	23	0.01136
Pectinaria gouldii	23	0.00455
Phoronis spp.	23	0.00114
Podarkeopsis levifuscina	159	0.00682
Spiophanes bombyx	114	0.03636
Tharyx sp. A Morris	45	0.00682
Tubificoides spp.	227	0.00682
Total Abundance w/ Epi.	2000	
Total Abundance w/o Epi.	2000	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		3.59317
Total Biomass w/o Epi.		3.59317

Station: NO109	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.7	Salinity (ppt): 18.72	Sediment Silt-Clay (%): 26.90

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.05	1	Pollution Indicative Species Abundance (%)		8.11	
Abundance (#/m2)	5886	3	Pollution Indicative Species Biomass (%)		36.61	1
Biomass (g/m2)	0.58	1	Pollution Sensitive Species Abundance (%)		88.80	5
Carnivore-Omnivore Abundance (%)	59.07		Pollution Sensitive Species Biomass (%)		61.22	
Deep Deposit Feeder Abundance (%)	28.57	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	3023	0.20227
Ampelisca spp.	23	0.00455
Gastropoda (Epi)	45	0.00114
Glycinde solitaria	341	0.00909
Leitoscoloplos spp.	23	0.01136
Loimia medusa	23	0.09545
Mediomastus ambiseta	1636	0.00909
Molgula manhattensis (Epi)	23	0.00909
Mulinia lateralis	45	0.02045
Neanthes succinea	45	0.00114
Nemertina	68	0.00455
Paraprionospio pinnata	409	0.17954
Phoronis spp.	159	0.03409
Spiochaetopterus costarum	23	0.00114
Spiophanes bombyx	23	0.00227
Tellinidae	23	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	5955	
Total Abundance w/o Epi.	5886	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.58750
Total Biomass w/o Epi.		0.57727

Station: NO110	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.9	Salinity (ppt): 22.50	Sediment Silt-Clay (%): 2.21

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.40	1	Pollution Indicative Species Abundance (%)	8.00	
Abundance (#/m2)	568	1	Pollution Indicative Species Biomass (%)	34.15	1
Biomass (g/m2)	0.05	1	Pollution Sensitive Species Abundance (%)	76.00	3
Carnivore-Omnivore Abundance (%)	20.00		Pollution Sensitive Species Biomass (%)	46.34	
Deep Deposit Feeder Abundance (%)	56.00	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00114
Glycinde solitaria	23	0.00455
Listriella barnardi	23	0.00114
Listriella clymenellae	45	0.00227
Loimia medusa	23	0.00682
Mediomastus ambiseta	295	0.00682
Neanthes succinea	45	0.00682
Paraprionospio pinnata	45	0.01591
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	568	
Total Abundance w/o Epi.	568	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.04659
Total Biomass w/o Epi.		0.04659

Station: NO111	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.4	Salinity (ppt): 22.60	Sediment Silt-Clay (%): 0.19

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.36	3	Pollution Indicative Species Abundance (%)		7.61	
Abundance (#/m2)	2091	3	Pollution Indicative Species Biomass (%)		31.47	1
Biomass (g/m2)	0.45	1	Pollution Sensitive Species Abundance (%)		44.57	3
Carnivore-Omnivore Abundance (%)	19.57		Pollution Sensitive Species Biomass (%)		36.80	
Deep Deposit Feeder Abundance (%)	51.09	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.02955
Ampelisca verrilli	23	0.03182
Amphiporus bioculatus	23	
Cirratulidae	23	0.00455
Edwardsia elegans	23	0.00455
Gemma gemma	91	0.00909
Glycinde solitaria	23	0.00114
Heteromastus filiformis	23	0.00455
Listriella barnardi	23	0.00114
Listriella clymenellae	23	0.00682
Loimia medusa	45	0.12273
Maldanidae	23	0.00682
Mediomastus ambiseta	568	0.00114
Mulinia lateralis	136	0.13636
Neanthes succinea	227	0.06364
Nemertina		0.01136
Paraprionospio pinnata	23	0.00455
Phoronis spp.	23	0.00114
Rictaxis punctostriatus	23	0.00114
Scolelepis texana	45	0.00227
Tagelus plebeius	159	0.00227
Tubificoides spp.	455	0.00114
Total Abundance w/ Epi.	2091	
Total Abundance w/o Epi.	2091	
Number of Taxa w/ Epi.	21	
Number of Taxa w/o Epi.	21	
Total Biomass w/ Epi.		0.44773
Total Biomass w/o Epi.		0.44773

Station: NO112	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 18.4	Salinity (ppt): 22.60	Sediment Silt-Clay (%): 91.62

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.41	3	Pollution Indicative Species Abundance (%)	53.33	
Abundance (#/m2)	682	1	Pollution Indicative Species Biomass (%)	21.01	1
Biomass (g/m2)	0.16	1	Pollution Sensitive Species Abundance (%)	30.00	
Carnivore-Omnivore Abundance (%)	30.00	3	Pollution Sensitive Species Biomass (%)	43.48	3
Deep Deposit Feeder Abundance (%)	6.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	114	0.01591
Chaetopterus spp.	23	0.00114
Glycinde solitaria	23	0.01136
Leitoscoloplos spp.	23	0.00114
Loimia medusa	68	0.04091
Nemertina	23	0.00114
Ogyrides alphaerostris	23	0.05000
Paraprionospio pinnata	341	0.03182
Pectinaria gouldii	23	0.00227
Polynoidae (Epi)	23	0.01136
Sigambra tentaculata	23	0.00114
Total Abundance w/ Epi.	705	
Total Abundance w/o Epi.	682	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.16818
Total Biomass w/o Epi.		0.15682

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO113	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.3	Salinity (ppt): 23.20	Sediment Silt-Clay (%): 0.42

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.37	3	Pollution Indicative Species Abundance (%)	11.90	
Abundance (#/m2)	955	1	Pollution Indicative Species Biomass (%)	3.01	5
Biomass (g/m2)	0.83	1	Pollution Sensitive Species Abundance (%)	35.71	3
Carnivore-Omnivore Abundance (%)	23.81		Pollution Sensitive Species Biomass (%)	16.83	
Deep Deposit Feeder Abundance (%)	14.29	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.00455
Branchiostoma caribaeum	182	0.60454
Cerapus tubularis (Epi)	45	0.00909
Cyathura polita	68	0.01591
Edwardsia elegans	23	0.00682
Eteone heteropoda	23	0.00682
Gastropoda (Epi)	68	0.00455
Gemma gemma	205	0.01136
Glycinde solitaria	45	0.00114
Leitoscoloplos spp.	91	0.01818
Loimia medusa	23	0.08636
Mediomastus ambiseta	45	0.00682
Neanthes succinea	23	0.01818
Oxyurostylis smithi	23	0.01364
Paraonis fulgens	23	0.00682
Phoronis spp.	136	0.02500
Podarkeopsis levifuscina	23	0.00455
Total Abundance w/ Epi.	1068	
Total Abundance w/o Epi.	955	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.84432
Total Biomass w/o Epi.		0.83068

Station: NO114	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 7.7	Salinity (ppt): 23.30	Sediment Silt-Clay (%): 0.22

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.07	3	Pollution Indicative Species Abundance (%)	5.08	
Abundance (#/m2)	1341	1	Pollution Indicative Species Biomass (%)	1.14	5
Biomass (g/m2)	0.60	1	Pollution Sensitive Species Abundance (%)	69.49	3
Carnivore-Omnivore Abundance (%)	54.24		Pollution Sensitive Species Biomass (%)	33.84	
Deep Deposit Feeder Abundance (%)	18.64	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	591	0.02727
Ampelisca abdita	45	0.03636
Amphiporus bioculatus	23	
Branchiostoma caribaeum	23	0.15909
Glycinde solitaria	23	0.00114
Leptochelia dubia	23	0.00455
Leucon americanus	23	0.00114
Listriella barnardi	23	0.00455
Listriella clymenellae	23	0.00114
Loimia medusa	45	0.14545
Maldanidae	23	0.07273
Mediomastus ambiseta	227	0.00227
Micrura leidyi	23	
Nemertina		0.00455
Paraprionospio pinnata	68	0.00682
Parvilucina crenella	23	0.03864
Phyllodocidae	45	0.00682
Ptilanthura tenuis	23	0.01818
Saccoglossus kowalevskii	23	0.01818
Scolelepis spp.	23	0.02273
Spiophanes bombyx	23	0.02500
Turbonilla interrupta (Epi)	91	0.00455
Total Abundance w/ Epi.	1432	
Total Abundance w/o Epi.	1341	
Number of Taxa w/ Epi.	21	
Number of Taxa w/o Epi.	20	
Total Biomass w/ Epi.		0.60227
Total Biomass w/o Epi.		0.59773

Station: NO115	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.4	Salinity (ppt): 20.50	Sediment Silt-Clay (%): 90.34

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.93	1	Pollution Indicative Species Abundance (%)		50.70	
Abundance (#/m2)	1614	5	Pollution Indicative Species Biomass (%)		69.92	1
Biomass (g/m2)	0.58	3	Pollution Sensitive Species Abundance (%)		43.66	
Carnivore-Omnivore Abundance (%)	16.90	1	Pollution Sensitive Species Biomass (%)		12.11	1
Deep Deposit Feeder Abundance (%)	26.76					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	205	0.00682
Glycinde solitaria	23	0.00227
Leucon americanus	45	0.00682
Loimia medusa	45	0.03182
Mediomastus ambiseta	432	0.02955
Molgula manhattensis (Epi)	23	0.02045
Neanthes succinea	23	0.03409
Odostomia engonia (Epi)	45	0.00455
Ogyrides alphaerostris	23	0.06364
Paraprionospio pinnata	818	0.40682
Total Abundance w/ Epi.	1682	
Total Abundance w/o Epi.	1614	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.60682
Total Biomass w/o Epi.		0.58182

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO116	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.6	Salinity (ppt): 21.40	Sediment Silt-Clay (%): 0.36

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.31	3	Pollution Indicative Species Abundance (%)	2.38	
Abundance (#/m2)	955	1	Pollution Indicative Species Biomass (%)	0.76	5
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	69.05	3
Carnivore-Omnivore Abundance (%)	40.48		Pollution Sensitive Species Biomass (%)	65.15	
Deep Deposit Feeder Abundance (%)	26.19	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	205	0.00114
Ampelisca verrilli	45	0.01136
Amphiporus bioculatus	23	
Edotea triloba (Epi)	23	0.00114
Eteone heteropoda	23	0.00114
Glycinde solitaria	23	0.00114
Listriella clymenellae	114	0.00114
Loimia medusa	91	0.08864
Maldanidae	45	0.02273
Mediomastus ambiseta	205	0.00114
Neanthes succinea	68	0.00114
Nemertina		0.00455
Podarkeopsis levifuscina	23	0.00227
Polynoidae (Epi)	23	0.00455
Ptilanthura tenuis	23	0.00682
Spiophanes bombyx	23	0.00455
Turbonilla interrupta (Epi)	23	0.00114
Unciola irrorata	45	0.00227
Total Abundance w/ Epi.	1023	
Total Abundance w/o Epi.	955	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		0.15682
Total Biomass w/o Epi.		0.15000

Station: NO117	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.5	Salinity (ppt): 24.60	Sediment Silt-Clay (%): 1.05

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.56	1	Pollution Indicative Species Abundance (%)	0.76	
Abundance (#/m2)	3000	3	Pollution Indicative Species Biomass (%)	0.25	5
Biomass (g/m2)	0.45	1	Pollution Sensitive Species Abundance (%)	61.36	5
Carnivore-Omnivore Abundance (%)	15.91		Pollution Sensitive Species Biomass (%)	16.16	
Deep Deposit Feeder Abundance (%)	72.73	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	205	0.01136
Americamysis almyra (Epi)	23	0.00114
Ampelisca verrilli	45	0.00682
Branchiostoma caribaeum	45	0.29545
Gemma gemma	45	0.00114
Glycinde solitaria	91	0.00114
Heteromastus filiformis	114	0.00455
Leitoscoloplos spp.	23	0.00114
Listriella barnardi	45	0.00455
Listriella clymenellae	68	0.00455
Loimia medusa	23	0.04091
Mediomastus ambiseta	1432	0.00114
Neanthes succinea	182	0.05682
Oxyurostylis smithi	45	0.00227
Spiophanes bombyx	23	0.01364
Stylochus ellipticus (Epi)	23	0.00227
Tubificoides spp.	614	0.00455
Total Abundance w/ Epi.	3045	
Total Abundance w/o Epi.	3000	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.45341
Total Biomass w/o Epi.		0.45000

Station: NO118	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 1.7	Salinity (ppt): 14.80	Sediment Silt-Clay (%): 91.03

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.60	3	Pollution Indicative Species Abundance (%)	31.25	
Abundance (#/m2)	1455	3	Pollution Indicative Species Biomass (%)	63.58	1
Biomass (g/m2)	0.20	1	Pollution Sensitive Species Abundance (%)	12.50	
Carnivore-Omnivore Abundance (%)	12.50	3	Pollution Sensitive Species Biomass (%)	24.28	1
Deep Deposit Feeder Abundance (%)	60.94				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.00909
Ampelisca spp.	45	0.00455
Glycinde solitaria	91	0.03864
Leucon americanus	45	0.00227
Macoma mitchelli	136	0.00455
Mulinia lateralis	114	0.06591
Oligochaeta		0.00114
Paraprionospio pinnata	23	0.05455
Streblospio benedicti	23	0.00455
Tubificidae imm w/o cap chaetae	295	
Tubificoides spp.	591	0.01136
Total Abundance w/ Epi.	1455	
Total Abundance w/o Epi.	1455	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.19659
Total Biomass w/o Epi.		0.19659

Station: NO119	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.7	Salinity (ppt): 17.10	Sediment Silt-Clay (%): 77.41

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.30	5	Pollution Indicative Species Abundance (%)	36.59	
Abundance (#/m2)	932	1	Pollution Indicative Species Biomass (%)	71.28	1
Biomass (g/m2)	0.32	1	Pollution Sensitive Species Abundance (%)	19.51	
Carnivore-Omnivore Abundance (%)	24.39	3	Pollution Sensitive Species Biomass (%)	14.18	1
Deep Deposit Feeder Abundance (%)	31.71				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.01364
Ampelisca spp.	68	0.00682
Amphiporus bioculatus	23	
Glycinde solitaria	136	0.02273
Heteromastus filiformis	68	0.00114
Leucon americanus	23	0.00114
Mulinia lateralis	68	0.14545
Nemertina	23	0.01136
Oligochaeta		0.00114
Paraprionospio pinnata	205	0.08182
Phoronis spp.	23	0.00909
Podarkeopsis levifuscina	23	0.01364
Streblospio benedicti	23	0.00114
Tubificidae imm w/o cap chaetae	45	
Tubificoides spp.	182	0.00909
Total Abundance w/ Epi.	955	
Total Abundance w/o Epi.	955	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.32045
Total Biomass w/o Epi.		0.32045

Station: NO120	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 8.1	Salinity (ppt): 17.10	Sediment Silt-Clay (%): 97.05

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.50	1	Pollution Indicative Species Abundance (%)	44.44	
Abundance (#/m2)	409	1	Pollution Indicative Species Biomass (%)	82.96	1
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	50.00	
Carnivore-Omnivore Abundance (%)	50.00	5	Pollution Sensitive Species Biomass (%)	16.30	1
Deep Deposit Feeder Abundance (%)	5.56				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	182	0.02273
Mediomastus ambiseta	23	0.00227
Mulinia lateralis	182	0.12727
Neanthes succinea	23	0.00114
Total Abundance w/ Epi.	409	
Total Abundance w/o Epi.	409	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.15341
Total Biomass w/o Epi.		0.15341

Station: NO121	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 1.7	Salinity (ppt): 17.20	Sediment Silt-Clay (%): 4.45

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.17	1	Pollution Indicative Species Abundance (%)	2.94	5
Abundance (#/m2)	2318	5	Pollution Indicative Species Biomass (%)	11.38	
Biomass (g/m2)	0.19	1	Pollution Sensitive Species Abundance (%)	82.35	5
Carnivore-Omnivore Abundance (%)	29.41	3	Pollution Sensitive Species Biomass (%)	63.47	
Deep Deposit Feeder Abundance (%)	60.78				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	295	0.01591
Ampelisca abdita	23	0.00114
Edotea triloba (Epi)	91	0.00227
Eteone heteropoda	23	0.00114
Gemma gemma	136	0.00114
Glycinde solitaria	250	0.01591
Heteromastus filiformis	45	0.00909
Loimia medusa	23	0.06818
Mediomastus ambiseta	1341	0.02045
Molgula manhattensis (Epi)	45	0.02273
Mulinia lateralis	23	0.00455
Mytilus edulis (Epi)	68	0.00455
Neanthes succinea	91	0.03182
Paraprionospio pinnata	23	0.01591
Rictaxis punctostriatus	23	0.00227
Tubificoides spp.	23	0.00227
Total Abundance w/ Epi.	2523	
Total Abundance w/o Epi.	2318	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.21932
Total Biomass w/o Epi.		0.18977

Station: NO122	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.0	Salinity (ppt): 16.50	Sediment Silt-Clay (%): 48.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.30	3	Pollution Indicative Species Abundance (%)	15.79	
Abundance (#/m2)	2591	3	Pollution Indicative Species Biomass (%)	9.05	3
Biomass (g/m2)	0.48	1	Pollution Sensitive Species Abundance (%)	10.53	
Carnivore-Omnivore Abundance (%)	14.04	3	Pollution Sensitive Species Biomass (%)	48.57	3
Deep Deposit Feeder Abundance (%)	80.70				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00114
Amphiporus bioculatus	45	
Cyathura polita	23	0.00114
Edotea triloba (Epi)	23	0.00114
Glycinde solitaria	182	0.02500
Heteromastus filiformis	386	0.01364
Macoma balthica	23	0.20454
Macoma mitchelli	45	0.06136
Mulinia lateralis	45	0.02045
Neanthes succinea	23	0.10909
Nemertina		0.00114
Oligochaeta		0.00114
Paraprionospio pinnata	23	0.02273
Sigambra tentaculata	45	0.00455
Tubificidae imm w/o cap chaetae	341	
Tubificoides spp.	1364	0.01136
Total Abundance w/ Epi.	2614	
Total Abundance w/o Epi.	2591	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.47841
Total Biomass w/o Epi.		0.47727

Station: NO123	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 1.8	Salinity (ppt): 17.10	Sediment Silt-Clay (%): 2.63

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.61	3	Pollution Indicative Species Abundance (%)	10.83	3
Abundance (#/m2)	3568	3	Pollution Indicative Species Biomass (%)	29.48	
Biomass (g/m2)	0.55	1	Pollution Sensitive Species Abundance (%)	74.52	5
Carnivore-Omnivore Abundance (%)	30.57	3	Pollution Sensitive Species Biomass (%)	30.31	
Deep Deposit Feeder Abundance (%)	53.50				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	705	0.01591
Ampelisca spp.	68	0.00455
Glycinde solitaria	205	0.02727
Heteromastus filiformis	23	0.01136
Loimia medusa	23	0.08636
Macoma mitchelli	68	0.01818
Mediomastus ambiseta	1705	0.03636
Mulinia lateralis	205	0.06364
Mytilus edulis (Epi)	23	0.00455
Neanthes succinea	114	0.16364
Nemertina	23	0.01136
Neomysis americana (Epi)	45	0.00682
Odostomia engonia (Epi)	91	0.00114
Paraprionospio pinnata	114	0.09773
Pectinaria gouldii	45	0.00455
Podarkeopsis levifuscina	45	0.00682
Spiochaetopterus costarum	23	0.00114
Streblospio benedicti	68	0.00114
Tubificoides spp.	136	0.00114
Total Abundance w/ Epi.	3727	
Total Abundance w/o Epi.	3568	
Number of Taxa w/ Epi.	19	
Number of Taxa w/o Epi.	16	
Total Biomass w/ Epi.		0.56363
Total Biomass w/o Epi.		0.55113

Station: NO124	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.1	Salinity (ppt): 17.37	Sediment Silt-Clay (%): 91.16

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.67	1	Pollution Indicative Species Abundance (%)		11.11	
Abundance (#/m2)	818	1	Pollution Indicative Species Biomass (%)		9.89	3
Biomass (g/m2)	0.53	3	Pollution Sensitive Species Abundance (%)		77.78	
Carnivore-Omnivore Abundance (%)	77.78	5	Pollution Sensitive Species Biomass (%)		14.84	1
Deep Deposit Feeder Abundance (%)	5.56					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	568	0.07273
Glycinde solitaria	45	0.00455
Leucon americanus	23	0.02273
Macoma mitchelli	23	0.30454
Mediomastus ambiseta	23	0.00114
Ogyrides alphaerostris	23	0.06136
Paraprionospio pinnata	91	0.05227
Tubificoides spp.	23	0.00909
Total Abundance w/ Epi.	818	
Total Abundance w/o Epi.	818	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.52841
Total Biomass w/o Epi.		0.52841

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO125	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.4	Salinity (ppt): 18.72	Sediment Silt-Clay (%): 90.73

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.83	1	Pollution Indicative Species Abundance (%)	12.04	
Abundance (#/m2)	2455	5	Pollution Indicative Species Biomass (%)	26.68	1
Biomass (g/m2)	0.52	3	Pollution Sensitive Species Abundance (%)	83.33	
Carnivore-Omnivore Abundance (%)	72.22	5	Pollution Sensitive Species Biomass (%)	40.78	3
Deep Deposit Feeder Abundance (%)	11.11				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	1568	0.06818
Glycinde solitaria	91	0.00455
Mediomastus ambiseta	273	0.00682
Nemertina	23	0.00114
Ogyrides alphaerostris	68	0.16818
Parahesione luteola	23	0.00114
Paraprionospio pinnata	273	0.13864
Streblospio benedicti	23	0.00114
Tellina agilis	114	0.13409
Total Abundance w/ Epi.	2455	
Total Abundance w/o Epi.	2455	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.52386
Total Biomass w/o Epi.		0.52386

Station: NO126	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.4	Salinity (ppt): 18.72	Sediment Silt-Clay (%): 4.36

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.37	1	Pollution Indicative Species Abundance (%)	7.19	
Abundance (#/m2)	3477	5	Pollution Indicative Species Biomass (%)	16.05	1
Biomass (g/m2)	0.95	1	Pollution Sensitive Species Abundance (%)	84.31	5
Carnivore-Omnivore Abundance (%)	43.14		Pollution Sensitive Species Biomass (%)	60.84	
Deep Deposit Feeder Abundance (%)	48.37	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	886	0.03182
Edotea triloba (Epi)	159	0.01591
Eteone heteropoda	23	0.00114
Glycinde solitaria	500	0.04318
Heteromastus filiformis	45	0.00455
Loimia medusa	68	0.48636
Mediomastus ambiseta	1477	0.01591
Micrura leidyi	23	
Mulinia lateralis	23	0.00114
Neanthes succinea	23	0.00455
Nemertina		0.19545
Paraprionospio pinnata	205	0.15000
Pectinaria gouldii	23	0.01136
Rictaxis punctostriatus	45	0.00227
Tubificoides spp.	136	0.00114
Total Abundance w/ Epi.	3636	
Total Abundance w/o Epi.	3477	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.96477
Total Biomass w/o Epi.		0.94886

Station: NO127	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 1.8	Salinity (ppt): 20.10	Sediment Silt-Clay (%): 1.35

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.10	1	Pollution Indicative Species Abundance (%)	6.02	
Abundance (#/m2)	3023	5	Pollution Indicative Species Biomass (%)	51.87	1
Biomass (g/m2)	0.21	1	Pollution Sensitive Species Abundance (%)	89.47	5
Carnivore-Omnivore Abundance (%)	64.66		Pollution Sensitive Species Biomass (%)	40.64	
Deep Deposit Feeder Abundance (%)	26.32	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	1568	0.04318
Americamysis almyra (Epi)	23	0.00227
Edotea triloba (Epi)	23	0.00227
Edwardsia elegans	23	0.00227
Eteone heteropoda	23	0.00114
Glycinde solitaria	318	0.02273
Leitoscoloplos spp.	68	0.06591
Macoma mitchelli	91	0.00455
Mediomastus ambiseta	727	0.01136
Mulinia lateralis	45	0.00682
Neanthes succinea	23	0.00909
Paraprionospio pinnata	45	0.03636
Phoronis spp.	91	0.00909
Total Abundance w/ Epi.	3068	
Total Abundance w/o Epi.	3023	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.21704
Total Biomass w/o Epi.		0.21250

Station: NO128	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 5.1	Salinity (ppt): 21.30	Sediment Silt-Clay (%): 91.29

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.49	3	Pollution Indicative Species Abundance (%)	15.79	
Abundance (#/m2)	864	1	Pollution Indicative Species Biomass (%)	10.99	3
Biomass (g/m2)	0.21	1	Pollution Sensitive Species Abundance (%)	63.16	
Carnivore-Omnivore Abundance (%)	36.84	3	Pollution Sensitive Species Biomass (%)	10.99	1
Deep Deposit Feeder Abundance (%)	39.47				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	182	0.01136
Ampelisca spp.	23	0.00909
Glycinde solitaria	23	0.00227
Macoma mitchelli	45	0.01364
Mediomastus ambiseta	341	0.00909
Neanthes succinea	23	0.03864
Ogyrides alphaerostris	68	0.09091
Parahesione luteola	23	0.00909
Paraprionospio pinnata	136	0.02273
Total Abundance w/ Epi.	864	
Total Abundance w/o Epi.	864	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.20682
Total Biomass w/o Epi.		0.20682

Station: NO129	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 2.7	Salinity (ppt): 20.90	Sediment Silt-Clay (%): 87.42

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.57	3	Pollution Indicative Species Abundance (%)	8.85	
Abundance (#/m2)	2568	5	Pollution Indicative Species Biomass (%)	48.85	1
Biomass (g/m2)	0.40	1	Pollution Sensitive Species Abundance (%)	62.83	
Carnivore-Omnivore Abundance (%)	21.24	1	Pollution Sensitive Species Biomass (%)	21.26	1
Deep Deposit Feeder Abundance (%)	63.72				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	205	0.01136
Ampelisca spp.	23	0.00909
Edotea triloba (Epi)	136	0.01136
Glycinde solitaria	205	0.02500
Macoma mitchelli	91	0.01364
Mediomastus ambiseta	1182	0.02045
Mulinia lateralis	23	0.01591
Neanthes succinea	23	0.00227
Ogyrides alphaerostris	45	0.05909
Parahesione luteola	45	0.00682
Paraprionospio pinnata	205	0.17727
Podarkeopsis levifuscina	23	0.00909
Spiochaetopterus costarum	23	0.02727
Spionidae	23	0.00455
Tubificoides spp.	455	0.01364
Total Abundance w/ Epi.	2705	
Total Abundance w/o Epi.	2568	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		0.40682
Total Biomass w/o Epi.		0.39545

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO130	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 3.8	Salinity (ppt): 21.10	Sediment Silt-Clay (%): 92.28

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.18	1	Pollution Indicative Species Abundance (%)	23.73	
Abundance (#/m2)	1341	3	Pollution Indicative Species Biomass (%)	20.73	1
Biomass (g/m2)	1.00	3	Pollution Sensitive Species Abundance (%)	61.02	
Carnivore-Omnivore Abundance (%)	57.63	5	Pollution Sensitive Species Biomass (%)	45.10	3
Deep Deposit Feeder Abundance (%)	1.69				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	682	0.05909
Leitoscoloplos spp.	23	0.02727
Listriella barnardi	68	0.00909
Loimia medusa	23	0.32045
Macoma mitchelli	45	0.11818
Neanthes succinea	68	0.17727
Odostomia engonia (Epi)	23	0.00682
Ogyrides alphaerostris	23	0.03636
Paraprionospio pinnata	295	0.17954
Spiochaetopterus costarum	114	0.07045
Total Abundance w/ Epi.	1364	
Total Abundance w/o Epi.	1341	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		1.00454
Total Biomass w/o Epi.		0.99772

Station: NO131	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 4.2	Salinity (ppt): 23.80	Sediment Silt-Clay (%): 77.67

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.34	1	Pollution Indicative Species Abundance (%)	20.00	
Abundance (#/m2)	682	1	Pollution Indicative Species Biomass (%)	16.09	3
Biomass (g/m2)	0.20	1	Pollution Sensitive Species Abundance (%)	56.67	
Carnivore-Omnivore Abundance (%)	56.67	5	Pollution Sensitive Species Biomass (%)	12.64	1
Deep Deposit Feeder Abundance (%)	20.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	250	0.02273
Macoma mitchelli	23	0.00227
Mediomastus ambiseta	136	0.00227
Neanthes succinea	23	0.02727
Odostomia engonia (Epi)	23	0.00227
Ogyrides alphaerostris	91	0.10909
Paraprionospio pinnata	136	0.03182
Podarkeopsis levifuscina	23	0.00227
Total Abundance w/ Epi.	705	
Total Abundance w/o Epi.	682	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.20000
Total Biomass w/o Epi.		0.19773

Station: NO132	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 1999	Time:
Depth (m): 10.6	Salinity (ppt): 24.70	Sediment Silt-Clay (%): 87.26

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.67	3	Pollution Indicative Species Abundance (%)	44.07	
Abundance (#/m2)	1341	3	Pollution Indicative Species Biomass (%)	23.62	1
Biomass (g/m2)	0.72	3	Pollution Sensitive Species Abundance (%)	32.20	
Carnivore-Omnivore Abundance (%)	44.07	5	Pollution Sensitive Species Biomass (%)	40.63	3
Deep Deposit Feeder Abundance (%)	3.39				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	318	0.02955
Glycinde solitaria	23	0.00455
Leitoscoloplos robustus	45	0.09091
Listriella barnardi	68	0.00455
Loimia medusa	91	0.25909
Neanthes succinea	45	0.05000
Nemertina	23	0.00455
Ogyrides alphaerostris	68	0.03636
Paraprionospio pinnata	545	0.07955
Podarkeopsis levifuscina	68	0.11136
Pseudeurythoe paucibranchiata	23	0.05000
Sigambra tentaculata	23	0.00114
Total Abundance w/ Epi.	1341	
Total Abundance w/o Epi.	1341	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.72159
Total Biomass w/o Epi.		0.72159

Station: NO133	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 6.5	Salinity (ppt): 20.70	Sediment Silt-Clay (%): 2.40

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.36	3	Pollution Indicative Species Abundance (%)	5.78	
Abundance (#/m2)	6295	3	Pollution Indicative Species Biomass (%)	6.59	3
Biomass (g/m2)	3.79	3	Pollution Sensitive Species Abundance (%)	35.02	3
Carnivore-Omnivore Abundance (%)	25.63		Pollution Sensitive Species Biomass (%)	21.16	
Deep Deposit Feeder Abundance (%)	49.10	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	795	0.04318
Ampelisca verrilli	182	0.09545
Amphiporus bioculatus	68	
Branchiostoma caribaeum	114	0.66136
Glycinde solitaria	68	0.00682
Heteromastus filiformis	114	0.03864
Leitoscoloplos robustus	68	0.21364
Listriella barnardi	227	0.01364
Listriella clymenellae	45	0.01136
Loimia medusa	432	0.66818
Mediomastus ambiseta	591	0.00909
Micrura leidyi	23	
Monopylephorus rubroniveus	2273	
Nassarius spp.	45	1.79545
Neanthes succinea	91	0.02273
Nemertina		0.00909
Odostomia engonia (Epi)	45	0.00227
Oligochaeta		0.01818
Parapionosyllis longicirrata	477	0.01591
Paraprionospio pinnata	295	0.03636
Phoronis spp.	68	0.00909
Phyllodoce arenae	23	0.01591
Pinnotheridae	23	0.01818
Rhepoxynius hudsoni	23	0.00455

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Scoloplos rubra	45	0.02045
Spiochaetopterus costarum	136	0.01364
Spiophanes bombyx	23	0.00455
Stylochus ellipticus (Epi)	45	0.00682
Tellina agilis	45	0.03636
Turbonilla interrupta (Epi)	205	0.03182
Total Abundance w/ Epi.	6591	
Total Abundance w/o Epi.	6295	
Number of Taxa w/ Epi.	28	
Number of Taxa w/o Epi.	25	
Total Biomass w/ Epi.		3.83181
Total Biomass w/o Epi.		3.79090

Station: NO134	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 6.5	Salinity (ppt): 21.50	Sediment Silt-Clay (%): 1.59

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.27	3	Pollution Indicative Species Abundance (%)		0.81	
Abundance (#/m2)	5591	3	Pollution Indicative Species Biomass (%)		0.03	5
Biomass (g/m2)	8.02	5	Pollution Sensitive Species Abundance (%)		24.80	1
Carnivore-Omnivore Abundance (%)	16.26		Pollution Sensitive Species Biomass (%)		3.23	
Deep Deposit Feeder Abundance (%)	33.33	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	273	0.01364
Ampelisca verrilli	136	0.01818
Ancistrosyllis hartmanae	295	0.01818
Branchiostoma caribaeum	1682	7.58634
Gemma gemma	136	0.03409
Glycera dibranchiata	45	0.03636
Leitoscoloplos spp.	23	0.00114
Listriella barnardi	68	0.00114
Loimia medusa	136	0.08864
Mediomastus ambiseta	545	0.00909
Monopylephorus rubroniveus	1273	
Mya arenaria	23	0.00455
Neanthes succinea	68	0.00227
Odostomia spp. (Epi)	45	0.00114
Oligochaeta		0.00909
Oxyurostylis smithi	114	0.00227
Parapionosyllis longicirrata	136	0.00114
Paraprionospio pinnata	23	0.00114
Phoronis spp.	386	0.13864
Pinnotheridae	23	0.00682
Podarkeopsis levifuscina	45	0.00114
Pseudeurythoe paucibranchiata	23	0.00909
Rhepoxynius hudsoni	91	0.02727

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Scoloplos rubra	23	0.00455
Spiochaetopterus costarum	23	0.00455
Stylochus ellipticus (Epi)	45	0.00114
Turbonilla interrupta (Epi)	68	0.00682
Total Abundance w/ Epi.	5750	
Total Abundance w/o Epi.	5591	
Number of Taxa w/ Epi.	26	
Number of Taxa w/o Epi.	23	
Total Biomass w/ Epi.		8.02838
Total Biomass w/o Epi.		8.01929

Station: NO135	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 10.3	Salinity (ppt): 22.10	Sediment Silt-Clay (%): 5.30

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.33			Condition: Meets Goal	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	4.01	5	Pollution Indicative Species Abundance (%)	5.74	
Abundance (#/m2)	2773	3	Pollution Indicative Species Biomass (%)	2.95	5
Biomass (g/m2)	1.08	3	Pollution Sensitive Species Abundance (%)	54.10	5
Carnivore-Omnivore Abundance (%)	28.69		Pollution Sensitive Species Biomass (%)	62.11	
Deep Deposit Feeder Abundance (%)	30.33	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	273	0.01136
Aglaophamus verrilli	23	0.09318
Ampelisca abdita	68	0.00227
Amphiporus bioculatus	45	
Ancistrosyllis hartmanae	23	0.00227
Arcidae	23	0.00227
Brachyura	91	0.01364
Carinoma tremaphoros	68	
Chaetopterus variopedatus	91	0.37954
Corophiidae (Epi)	23	0.00227
Glycinde solitaria	23	0.00114
Listriella barnardi	68	0.00909
Listriella clymenellae	45	0.00114
Loimia medusa	477	0.15454
Maldanidae	23	0.10000
Mediomastus ambiseta	386	0.00227
Monopylephorus rubroniveus	341	
Mya arenaria	23	0.03636
Neanthes arenaceodentata	23	0.00909
Neanthes succinea	205	0.04545
Nemertina		0.04318
Nephtys picta	23	0.04773
Notomastus sp. A Ewing	23	0.02955
Odostomia engonia (Epi)	23	0.00114
Oligochaeta		0.00114

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ophiuroidea	23	0.02045
Parapionosyllis longicirrata	68	0.00114
Paraprionospio pinnata	159	0.03182
Pectinaria gouldii	23	0.00682
Phoronis spp.	114	0.02500
Polynoidae (Epi)	23	0.00227
Rictaxis punctostriatus	23	0.00227
Spiophanes bombyx	23	0.00455
Tagelus divisus	23	0.00682
Tubificoides spp.	45	0.00455
Total Abundance w/ Epi.	2932	
Total Abundance w/o Epi.	2864	
Number of Taxa w/ Epi.	33	
Number of Taxa w/o Epi.	30	
Total Biomass w/ Epi.		1.09886
Total Biomass w/o Epi.		1.09318

Station: NO136	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.3	Salinity (ppt): 18.50	Sediment Silt-Clay (%): 0.31

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.06	3	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	500	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.88	1	Pollution Sensitive Species Abundance (%)	13.64	1
Carnivore-Omnivore Abundance (%)	13.64		Pollution Sensitive Species Biomass (%)	3.49	
Deep Deposit Feeder Abundance (%)	13.64	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Branchiostoma caribaeum	68	0.67500
Gemma gemma	23	0.00114
Glycinde solitaria	23	0.00114
Haminoea solitaria	45	0.00909
Heteromastus filiformis	23	0.01818
Leptocheirus plumulosus	23	0.00909
Leptosynapta tenuis	182	0.10909
Pectinaria gouldii	23	0.02045
Phoronis spp.	23	0.00455
Scolelepis texana	23	0.00455
Spiophanes bombyx	23	0.02500
Tubificoides spp.	23	0.00227
Total Abundance w/ Epi.	500	
Total Abundance w/o Epi.	500	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.87954
Total Biomass w/o Epi.		0.87954

Station: NO137	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 8.1	Salinity (ppt): 19.30	Sediment Silt-Clay (%): 1.84

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.04	3	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	5432	3	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	3.08	3	Pollution Sensitive Species Abundance (%)	47.28	3
Carnivore-Omnivore Abundance (%)	20.50		Pollution Sensitive Species Biomass (%)	22.21	
Deep Deposit Feeder Abundance (%)	52.72	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	250	0.02500
Ampelisca abdita	91	0.00682
Ampelisca verrilli	23	0.00227
Ancistrosyllis hartmanae	91	0.00114
Branchiostoma caribaeum	773	2.22499
Glycinde solitaria	114	0.00455
Listriella barnardi	68	0.00114
Loimia medusa	364	0.63182
Mediomastus ambiseta	1727	0.00682
Monopylephorus rubroniveus	1136	
Neanthes succinea	227	0.09773
Odostomia engonia (Epi)	68	0.00227
Oligochaeta		0.02273
Oxyurostylis smithi	23	0.00114
Parapionosyllis longicirrata	273	0.00227
Phoronis spp.	68	0.01136
Podarkeopsis levifuscina	114	0.01136
Polynoidae (Epi)	23	0.00114
Pseudeurythoe paucibranchiata	45	0.02273
Spiophanes bombyx	45	0.00455
Tharyx sp. A Morris		0.00114
Turbonilla interrupta (Epi)	45	0.00227
Total Abundance w/ Epi.	5568	
Total Abundance w/o Epi.	5432	
Number of Taxa w/ Epi.	20	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		3.08522
Total Biomass w/o Epi.		3.07954

Station: NO138	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 0.9	Salinity (ppt): 17.80	Sediment Silt-Clay (%): 1.98

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.31	1	Pollution Indicative Species Abundance (%)		0.00	5
Abundance (#/m2)	977	1	Pollution Indicative Species Biomass (%)		0.00	
Biomass (g/m2)	0.09	1	Pollution Sensitive Species Abundance (%)		44.19	3
Carnivore-Omnivore Abundance (%)	44.19	5	Pollution Sensitive Species Biomass (%)		68.42	
Deep Deposit Feeder Abundance (%)	0.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	318	0.04773
Ampelisca abdita	23	0.00114
Gastropoda (Epi)	23	0.00227
Gemma gemma	273	0.01136
Glycinde solitaria	114	0.01136
Leptosynapta tenuis	182	0.00909
Oxyurostylis smithi	45	0.00455
Paraonis fulgens	23	0.00114
Total Abundance w/ Epi.	1000	
Total Abundance w/o Epi.	977	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.08864
Total Biomass w/o Epi.		0.08636

Station: NO139	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 10.6	Salinity (ppt): 23.60	Sediment Silt-Clay (%): 36.21

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.42	3	Pollution Indicative Species Abundance (%)	23.26	
Abundance (#/m2)	2932	3	Pollution Indicative Species Biomass (%)	5.53	3
Biomass (g/m2)	1.93	3	Pollution Sensitive Species Abundance (%)	47.29	3
Carnivore-Omnivore Abundance (%)	24.81		Pollution Sensitive Species Biomass (%)	81.88	
Deep Deposit Feeder Abundance (%)	25.58	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	409	0.03636
Aglaophamus verrilli	23	0.00114
Ampelisca abdita	159	0.01818
Bhawania heteroseta	45	0.00114
Brachyura	23	0.00114
Gastropoda (Epi)	45	0.00114
Gemma gemma	23	0.02727
Glycera americana	45	0.06818
Listriella barnardi	68	0.00227
Listriella clymenellae	23	0.00227
Loimia medusa	364	0.78636
Mediomastus ambiseta	409	0.00227
Neanthes succinea	45	0.01591
Nemertina	68	0.01818
Ophiuroidea	23	0.00909
Paraprionospio pinnata	682	0.10682
Pectinaria gouldii	341	0.09773
Phoronis spp.	45	0.00114
Polynoidae (Epi)	45	0.00455
Pseudeurythoe paucibranchiata	23	0.04318
Saccoglossus kowalevskii	23	0.00114
Sigambra tentaculata	68	0.00909
Tagelus plebeius	45	0.68409

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Turbellaria (Epi)	45	0.00227
Turbonilla interrupta (Epi)	23	0.00682
Total Abundance w/ Epi.	3114	
Total Abundance w/o Epi.	2955	
Number of Taxa w/ Epi.	25	
Number of Taxa w/o Epi.	21	
Total Biomass w/ Epi.		1.94772
Total Biomass w/o Epi.		1.93295

Station: NO140	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 14.5	Salinity (ppt): 22.10	Sediment Silt-Clay (%): 92.51

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 | Condition: Severely Degr. | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.78	3	Pollution Indicative Species Abundance (%)	42.22	
Abundance (#/m2)	1023	3	Pollution Indicative Species Biomass (%)	57.49	1
Biomass (g/m2)	0.28	1	Pollution Sensitive Species Abundance (%)	33.33	
Carnivore-Omnivore Abundance (%)	35.56	3	Pollution Sensitive Species Biomass (%)	20.65	1
Deep Deposit Feeder Abundance (%)	4.44				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	182	0.01818
Ampelisca abdita	45	0.00114
Glycinde solitaria	23	0.00455
Leitoscoloplos robustus	23	0.03864
Leucon americanus	23	0.00114
Loimia medusa	91	0.02955
Mediomastus ambiseta	23	0.00114
Melita nitida (Epi)	23	0.00114
Neanthes succinea	68	0.04545
Paraprionospio pinnata	409	0.12273
Saccoglossus kowalevskii	23	0.00227
Sigambra tentaculata	91	0.01136
Spiochaetopterus costarum	23	0.00455
Total Abundance w/ Epi.	1045	
Total Abundance w/o Epi.	1023	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.28182
Total Biomass w/o Epi.		0.28068

Station: NO141	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 13.0	Salinity (ppt): 22.50	Sediment Silt-Clay (%): 66.57

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.94	3	Pollution Indicative Species Abundance (%)	40.00	
Abundance (#/m2)	1023	3	Pollution Indicative Species Biomass (%)	7.47	3
Biomass (g/m2)	0.40	1	Pollution Sensitive Species Abundance (%)	22.22	
Carnivore-Omnivore Abundance (%)	42.22	5	Pollution Sensitive Species Biomass (%)	54.02	3
Deep Deposit Feeder Abundance (%)	6.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.00455
Amphiporus bioculatus	45	
Bhawania heteroseta	68	0.00114
Cabira incerta	23	0.00114
Listriella barnardi	23	0.00114
Loimia medusa	68	0.20682
Nemertina		0.00114
Nephtyidae	23	0.00114
Paraprionospio pinnata	409	0.02955
Pectinaria gouldii	45	0.02727
Phoronis spp.	23	0.00114
Polynoidae (Epi)	23	0.00114
Pseudeurythoe paucibranchiata	45	0.04545
Sabaco elongatus	23	0.06591
Sigambra tentaculata	159	0.00909
Total Abundance w/ Epi.	1045	
Total Abundance w/o Epi.	1023	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.39659
Total Biomass w/o Epi.		0.39545

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO142	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 11.0	Salinity (ppt): 19.90	Sediment Silt-Clay (%): 95.26

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.47	3	Pollution Indicative Species Abundance (%)	27.03	
Abundance (#/m2)	841	1	Pollution Indicative Species Biomass (%)	25.40	1
Biomass (g/m2)	0.14	1	Pollution Sensitive Species Abundance (%)	18.92	
Carnivore-Omnivore Abundance (%)	21.62	1	Pollution Sensitive Species Biomass (%)	39.68	3
Deep Deposit Feeder Abundance (%)	2.70				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.00909
Chaetopterus variopedatus	23	0.00227
Listriella barnardi	273	0.02045
Loimia medusa	114	0.04545
Paraprionospio pinnata	227	0.03636
Pectinaria gouldii	23	0.00455
Pseudeurythoe paucibranchiata	45	0.01136
Sigambra tentaculata	114	0.01364
Total Abundance w/ Epi.	841	
Total Abundance w/o Epi.	841	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.14318
Total Biomass w/o Epi.		0.14318

Station: NO143	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 10.9	Salinity (ppt): 24.50	Sediment Silt-Clay (%): 38.71

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.80	5	Pollution Indicative Species Abundance (%)	15.94	
Abundance (#/m2)	1568	3	Pollution Indicative Species Biomass (%)	0.89	5
Biomass (g/m2)	2.57	3	Pollution Sensitive Species Abundance (%)	33.33	3
Carnivore-Omnivore Abundance (%)	34.78		Pollution Sensitive Species Biomass (%)	63.42	
Deep Deposit Feeder Abundance (%)	0.00	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.02500
Ampelisca abdita	68	0.00909
Ampelisca verrilli	23	0.01364
Ancistrosyllis hartmanae	23	0.00455
Asabellides oculata	23	0.00682
Bhawania heteroseta	23	0.00227
Chaetopterus variopedatus	23	0.19091
Diopatra cuprea	23	0.22954
Edwardsia elegans	23	0.00909
Euceramus praelongus	23	0.00909
Listriella barnardi	45	0.00114
Loimia medusa	341	1.09091
Molgula manhattensis (Epi)	23	0.12727
Nassarius spp.	68	0.00114
Neanthes succinea	45	0.09091
Nemertina	23	0.00227
Nephtys picta	45	0.08409
Ophiuroidea	136	0.69091
Paracaprella tenuis (Epi)	23	0.00114
Paraprionospio pinnata	250	0.02273
Polynoidae (Epi)	45	0.02727
Pseudeurythoe paucibranchiata	45	0.06364
Sigambra tentaculata	159	0.01136

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Tellina agilis	23	0.00455
Tharyx sp. A Morris	91	0.00227
Turbonilla interrupta (Epi)	45	0.00682
Total Abundance w/ Epi.	1705	
Total Abundance w/o Epi.	1568	
Number of Taxa w/ Epi.	26	
Number of Taxa w/o Epi.	22	
Total Biomass w/ Epi.		2.72840
Total Biomass w/o Epi.		2.56590

Station: NO144	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 13.5	Salinity (ppt): 26.00	Sediment Silt-Clay (%): 33.92

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	4.15	5	Pollution Indicative Species Abundance (%)	15.38	
Abundance (#/m2)	6205	3	Pollution Indicative Species Biomass (%)	14.58	3
Biomass (g/m2)	6.19	5	Pollution Sensitive Species Abundance (%)	34.07	3
Carnivore-Omnivore Abundance (%)	40.29		Pollution Sensitive Species Biomass (%)	46.58	
Deep Deposit Feeder Abundance (%)	2.20	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	114	0.00455
Ampelisca abdita	182	0.00909
Ampelisca verrilli	227	0.03864
Amphiporus bioculatus	23	
Ancistrosyllis hartmanae	136	0.00909
Bhawania heteroseta	705	0.04773
Brachyura	23	0.00114
Branchiostoma caribaeum	91	0.05000
Chaetopterus variopedatus	45	0.00682
Cyathura burbancki	23	0.00227
Glycera spp.	23	0.00227
Glycinde solitaria	23	0.00114
Leptosynapta tenuis	23	0.00114
Loimia medusa	386	1.21363
Mediomastus ambiseta	91	0.00455
Micrura leidyi	68	
Nassarius trivittatus	136	0.02727
Natica pusilla	23	0.00909
Nemertina	523	0.06136
Nephtyidae *	91	0.00455
Nephtys incisa	23	0.51818
Notomastus sp. A Ewing	23	0.04318
Odostomia engonia (Epi)	23	0.07955

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ophiuroidea	182	0.00114
Paraprionospio pinnata	955	0.90227
Phoronis spp.	614	0.28636
Podarkeopsis levifuscina	23	0.19773
Polynoidae (Epi)	45	0.00114
Prionospio perkinsi	409	0.00682
Pseudeurythoe paucibranchiata	23	0.00682
Rictaxis punctostriatus	23	0.01364
Sigambra tentaculata	523	0.03864
Spiochaetopterus costarum	23	0.00227
Spiophanes bombyx	23	0.00909
Tellina agilis	91	1.30681
Tharyx sp. A Morris	318	0.01364
Turbonilla interrupta (Epi)	227	0.06591
Yoldia limatula	23	1.32500
Total Abundance w/ Epi.	7568	
Total Abundance w/o Epi.	7273	
Number of Taxa w/ Epi.	39	
Number of Taxa w/o Epi.	36	
Total Biomass w/ Epi.		6.33634
Total Biomass w/o Epi.		6.18975

Station: NO145	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 4.3	Salinity (ppt): 19.60	Sediment Silt-Clay (%): 92.16

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.88	1	Pollution Indicative Species Abundance (%)		7.69	
Abundance (#/m2)	886	1	Pollution Indicative Species Biomass (%)		1.97	5
Biomass (g/m2)	0.23	1	Pollution Sensitive Species Abundance (%)		69.23	
Carnivore-Omnivore Abundance (%)	17.95	1	Pollution Sensitive Species Biomass (%)		9.85	1
Deep Deposit Feeder Abundance (%)	66.67					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.00682
Leucon americanus	23	0.00114
Macoma mitchelli	45	0.12727
Mediomastus ambiseta	591	0.01591
Ogyrides alphaerostris	45	0.06364
Parahesione luteola	23	0.00227
Podarke obscura	45	0.00682
Rictaxis punctostriatus	23	0.00227
Streblospio benedicti	68	0.00455
Total Abundance w/ Epi.	886	
Total Abundance w/o Epi.	886	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.23068
Total Biomass w/o Epi.		0.23068

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO146	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.2	Salinity (ppt): 21.30	Sediment Silt-Clay (%): 2.15

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	1	Pollution Indicative Species Abundance (%)	2.47	
Abundance (#/m2)	1841	3	Pollution Indicative Species Biomass (%)	4.99	5
Biomass (g/m2)	1.05	3	Pollution Sensitive Species Abundance (%)	70.37	5
Carnivore-Omnivore Abundance (%)	38.27		Pollution Sensitive Species Biomass (%)	11.93	
Deep Deposit Feeder Abundance (%)	30.86	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	591	0.03182
Ampelisca verrilli	45	0.01136
Amphiporus bioculatus	45	
Branchiostoma caribaeum	273	0.75454
Cerapus tubularis (Epi)	45	0.00455
Lepidactylus dytiscus	23	0.00909
Listriella barnardi	23	0.00227
Loimia medusa	68	0.07727
Mediomastus ambiseta	568	0.01136
Neanthes succinea	45	0.01364
Nemertina		0.07045
Neomysis americana (Epi)	23	0.01364
Odostomia engonia (Epi)	45	0.00455
Oxyurostylis smithi	23	0.00455
Paraprionospio pinnata	45	0.05227
Phoronis spp.	68	0.00455
Pseudeurythoe paucibranchiata	23	0.00455
Total Abundance w/ Epi.	1955	
Total Abundance w/o Epi.	1841	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		1.07045
Total Biomass w/o Epi.		1.04772

Station: NO147	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 12.5	Salinity (ppt): 24.80	Sediment Silt-Clay (%): 4.48

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.70	5	Pollution Indicative Species Abundance (%)		0.55	
Abundance (#/m2)	4114	5	Pollution Indicative Species Biomass (%)		0.17	5
Biomass (g/m2)	1.33	3	Pollution Sensitive Species Abundance (%)		33.15	3
Carnivore-Omnivore Abundance (%)	20.44		Pollution Sensitive Species Biomass (%)		3.51	
Deep Deposit Feeder Abundance (%)	52.49	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00227
Aglaophamus verrilli	114	0.08409
Ampelisca verrilli	205	0.04091
Amphiporus bioculatus	91	
Ancistrosyllis hartmanae	45	0.00455
Apoprionospio pygmaea	23	0.00227
Bhawania heteroseta	68	0.00114
Branchiostoma caribaeum	432	0.56818
Leitoscoloplos spp.	23	0.00227
Listriella barnardi	68	0.00227
Loimia medusa	114	0.01591
Mediomastus ambiseta	932	0.00455
Monopylephorus rubroniveus	568	
Natica pusilla	23	0.00227
Nemertina		0.03182
Nephtys picta	45	0.00909
Notomastus sp. A Ewing	45	0.23636
Nucula proxima	591	0.07500
Oligochaeta		0.00455
Ophiuroidea	23	0.00114
Oxyurostylis smithi	23	0.00227
Pandora gouldiana	23	0.10455
Parapionosyllis longicirrata	341	0.00114

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Phoronis spp.	114	0.00227
Pinnotheridae	23	0.00114
Podarkeopsis levifuscina	45	0.10909
Prionospio perkinsi	23	0.00114
Spiophanes bombyx	23	0.00455
Tellina agilis	23	0.00682
Tharyx sp. A Morris	23	0.00455
Turbonilla interrupta (Epi)	23	0.00455
Total Abundance w/ Epi.	4136	
Total Abundance w/o Epi.	4114	
Number of Taxa w/ Epi.	29	
Number of Taxa w/o Epi.	28	
Total Biomass w/ Epi.		1.33068
Total Biomass w/o Epi.		1.32613

Station: NO148	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 7.3	Salinity (ppt): 24.70	Sediment Silt-Clay (%): 3.26

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	4.02	5	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	2364	3	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	1.14	3	Pollution Sensitive Species Abundance (%)	32.69	3
Carnivore-Omnivore Abundance (%)	13.46		Pollution Sensitive Species Biomass (%)	35.36	
Deep Deposit Feeder Abundance (%)	15.38	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.01364
Aglaophamus verrilli	23	0.08636
Ampelisca verrilli	318	0.07045
Apoprionospio pygmaea	409	0.03182
Bhawania heteroseta	23	0.00455
Branchiostoma caribaeum	227	0.34091
Cyathura burbancki	23	0.00227
Gastropoda (Epi)	23	0.00114
Leptosynapta tenuis	68	0.01818
Listriella barnardi	68	0.00114
Loimia medusa	45	0.22727
Mediomastus ambiseta	182	0.00227
Nassarius trivittatus	91	0.01591
Nephtyidae *	23	0.00114
Nephtys picta	68	0.07955
Nucula proxima	159	0.12045
Odostomia engonia (Epi)	182	0.00227
Ophiuroidea	23	0.01136
Owenia fusiformis	23	0.02727
Oxyurostylis smithi	23	0.00114
Pectinaria gouldii	23	0.00114
Phoronis spp.	91	0.00455
Prionospio perkinsi	23	0.00114

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BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Rhepoxynius hudsoni	68	0.00682
Spiochaetopterus costarum	23	0.00114
Spiophanes bombyx	114	0.06818
Tellina agilis	159	0.00227
Total Abundance w/ Epi.	2568	
Total Abundance w/o Epi.	2364	
Number of Taxa w/ Epi.	26	
Number of Taxa w/o Epi.	24	
Total Biomass w/ Epi.		1.14431
Total Biomass w/o Epi.		1.14091

Station: NO149	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 8.6	Salinity (ppt): 25.80	Sediment Silt-Clay (%): 12.65

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.67 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.53	5	Pollution Indicative Species Abundance (%)	5.32	
Abundance (#/m2)	4273	5	Pollution Indicative Species Biomass (%)	1.55	5
Biomass (g/m2)	1.32	3	Pollution Sensitive Species Abundance (%)	50.53	5
Carnivore-Omnivore Abundance (%)	19.68		Pollution Sensitive Species Biomass (%)	55.69	
Deep Deposit Feeder Abundance (%)	35.11	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Aglaophamus verrilli	136	0.35000
Ampelisca abdita	23	0.00114
Ampelisca verrilli	68	0.01136
Apoprionospio pygmaea	591	0.01818
Bhawania heteroseta	91	0.00455
Cyathura burbancki	23	0.00227
Edwardsia elegans	23	0.00114
Ensis directus	23	0.27273
Epitonium spp. (Epi)	23	0.00114
Euceramus praelongus	23	0.00114
Haminoea solitaria	45	0.01136
Loimia medusa	341	0.25909
Macoma balthica	23	0.01818
Maldanidae	23	0.00227
Mediomastus ambiseta	1432	0.02727
Nassarius trivittatus	68	0.03864
Nemertina	23	0.00227
Neomysis americana (Epi)	136	0.01818
Nephtyidae *	364	0.01364
Nephtys picta	23	0.03409
Ophiuroidea	45	0.05909
Owenia fusiformis	182	0.04091
Oxyurostylis smithi	23	0.00227
Paraprionospio pinnata	227	0.02045

Continued . . .

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Pectinaria gouldii	45	0.00114
Phoronis spp.	91	0.00682
Prionospio perkinsi	159	0.00455
Sigambra tentaculata	23	0.00227
Spiophanes bombyx	23	0.02273
Tellina agilis	114	0.08864
Total Abundance w/ Epi.	4432	
Total Abundance w/o Epi.	4273	
Number of Taxa w/ Epi.	29	
Number of Taxa w/o Epi.	27	
Total Biomass w/ Epi.		1.33750
Total Biomass w/o Epi.		1.31818

Station: NO150	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 7.0	Salinity (ppt): 29.10	Sediment Silt-Clay (%): 1.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.73	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	2977	3	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	1.03	3	Pollution Sensitive Species Abundance (%)	10.69	1
Carnivore-Omnivore Abundance (%)	9.92		Pollution Sensitive Species Biomass (%)	16.39	
Deep Deposit Feeder Abundance (%)	0.76	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00227
Aglaophamus verrilli	23	0.30000
Ameroculodes species complex	68	0.00455
Apoprionospio pygmaea	295	0.01136
Edwardsia elegans	23	0.00227
Ensis directus	45	0.00114
Mediomastus ambiseta	23	0.00114
Nassarius trivittatus	23	0.02045
Natica pusilla	23	0.04545
Nephtys picta	136	0.15000
Odostomia engonia (Epi)	114	0.00455
Phyllodoce arenae	23	0.00114
Rhepoxynius hudsoni	45	0.00682
Tellina agilis	68	0.01364
Tharyx sp. A Morris	2136	0.46591
Total Abundance w/ Epi.	3091	
Total Abundance w/o Epi.	2977	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		1.03068
Total Biomass w/o Epi.		1.02613

Station: NO151	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 8.0	Salinity (ppt): 29.40	Sediment Silt-Clay (%): 0.95

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.20	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	205	1	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	0.04	1	Pollution Sensitive Species Abundance (%)		33.33	3
Carnivore-Omnivore Abundance (%)	33.33		Pollution Sensitive Species Biomass (%)		33.33	
Deep Deposit Feeder Abundance (%)	22.22	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ancinus depressus	23	0.01136
Branchiostoma caribaeum	23	0.00114
Hemipodus roseus	45	0.01364
Monopylephorus rubroniveus	45	
Oligochaeta		0.00114
Spisula solidissima	68	0.01364
Total Abundance w/ Epi.	205	
Total Abundance w/o Epi.	205	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.04091
Total Biomass w/o Epi.		0.04091

Station: NO152	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.5	Salinity (ppt): 22.60	Sediment Silt-Clay (%): 2.06

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.76	3	Pollution Indicative Species Abundance (%)	0.48	
Abundance (#/m2)	4750	5	Pollution Indicative Species Biomass (%)	3.06	5
Biomass (g/m2)	3.71	3	Pollution Sensitive Species Abundance (%)	54.55	5
Carnivore-Omnivore Abundance (%)	7.66		Pollution Sensitive Species Biomass (%)	13.20	
Deep Deposit Feeder Abundance (%)	3.83	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	182	0.01136
Ampelisca verrilli	91	0.00909
Amphiporus bioculatus	23	
Branchiostoma caribaeum	1000	2.96590
Euclymene zonalis	23	0.05682
Leitoscoloplos robustus	23	0.11364
Lepidactylus dytiscus	182	0.02727
Listriella barnardi	295	0.01818
Loimia medusa	227	0.05909
Mediomastus ambiseta	136	0.00114
Neanthes arenaceodentata	68	0.01136
Nemertina		0.00114
Nephtys picta	45	0.11136
Odostomia engonia (Epi)	886	0.04773
Phoronis spp.	1955	0.24545
Podarke obscura	23	0.00455
Rhepoxynius hudsoni	432	0.06818
Rictaxis punctostriatus	23	0.00114
Spiophanes bombyx	23	0.00455
Stylochus ellipticus (Epi)	23	0.00227
Total Abundance w/ Epi.	5659	
Total Abundance w/o Epi.	4750	
Number of Taxa w/ Epi.	19	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		3.76022
Total Biomass w/o Epi.		3.71022

Station: NO153	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 9.7	Salinity (ppt): 28.10	Sediment Silt-Clay (%): 7.42

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.76	5	Pollution Indicative Species Abundance (%)	2.63	
Abundance (#/m2)	1727	3	Pollution Indicative Species Biomass (%)	0.15	5
Biomass (g/m2)	1.47	3	Pollution Sensitive Species Abundance (%)	13.16	1
Carnivore-Omnivore Abundance (%)	13.16		Pollution Sensitive Species Biomass (%)	33.62	
Deep Deposit Feeder Abundance (%)	9.21	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Aglaophamus verrilli	159	0.00114
Ampelisca abdita	295	0.02045
Ampelisca verrilli	364	0.04545
Brachyura	45	0.00114
Branchiostoma caribaeum	182	0.58409
Euclymene zonalis	45	0.05455
Glycinde solitaria	23	0.00114
Haminoea solitaria	23	0.00114
Lepidactylus dytiscus	23	0.00227
Listriella barnardi	68	0.00227
Loimia medusa	91	0.41136
Magelona spp.	23	0.02273
Natica pusilla	23	0.04318
Nucula proxima	91	0.15682
Odostomia engonia (Epi)	68	0.02045
Ophiuroidea	45	0.00227
Owenia fusiformis	68	0.02273
Oxyurostylis smithi	23	0.00114
Paraprionospio pinnata	45	0.00227
Phoronis spp.	23	0.00114
Spiophanes bombyx	23	0.02500
Tellina agilis	23	0.00227
Tharyx sp. A Morris	45	0.00909

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Travisia spp.	23	0.06136
Turbonilla interrupta (Epi)	159	0.06818
Total Abundance w/ Epi.	2000	
Total Abundance w/o Epi.	1773	
Number of Taxa w/ Epi.	25	
Number of Taxa w/o Epi.	23	
Total Biomass w/ Epi.		1.56363
Total Biomass w/o Epi.		1.47500

Station: NO154	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 20.0	Salinity (ppt): 30.60	Sediment Silt-Clay (%): 11.28

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.25	1	Pollution Indicative Species Abundance (%)		4.24	
Abundance (#/m2)	2682	3	Pollution Indicative Species Biomass (%)		1.82	5
Biomass (g/m2)	1.62	3	Pollution Sensitive Species Abundance (%)		14.41	1
Carnivore-Omnivore Abundance (%)	3.39		Pollution Sensitive Species Biomass (%)		66.13	
Deep Deposit Feeder Abundance (%)	11.02	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Aglaophamus verrilli	23	0.05455
Amastigos caperatus	23	0.00114
Ampelisca verrilli	23	0.00227
Brachyura	23	0.00455
Capitella capitata complex	23	0.00114
Columbellidae (Epi)	45	0.06136
Ensis directus	136	0.89318
Leitoscoloplos robustus	23	0.02727
Leitoscoloplos spp. *	91	0.00227
Leucon americanus	23	0.00114
Maldanidae	23	0.00227
Mediomastus ambiseta	114	0.00455
Nassarius trivittatus	45	0.08182
Nephtyidae *	23	0.00455
Ophiuroidea	23	0.06591
Phoronis spp.	45	0.00114
Prionospio steenstrupi	273	0.00909
Spiophanes bombyx	68	0.07500
Tellina agilis	23	0.09773
Tharyx sp. A Morris	1682	0.29545
Total Abundance w/ Epi.	2750	
Total Abundance w/o Epi.	2705	
Number of Taxa w/ Epi.	18	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		1.68636
Total Biomass w/o Epi.		1.62499

Station: NO155	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.0	Salinity (ppt): 22.20	Sediment Silt-Clay (%): 0.59

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.99	1	Pollution Indicative Species Abundance (%)	3.92	
Abundance (#/m2)	1159	1	Pollution Indicative Species Biomass (%)	13.79	3
Biomass (g/m2)	0.07	1	Pollution Sensitive Species Abundance (%)	76.47	3
Carnivore-Omnivore Abundance (%)	78.43		Pollution Sensitive Species Biomass (%)	60.34	
Deep Deposit Feeder Abundance (%)	5.88	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	750	0.03409
Amphiporus bioculatus	23	
Edwardsia elegans	45	0.00682
Glycinde solitaria	68	0.00455
Mediomastus ambiseta	68	0.00114
Neanthes arenaceodentata	23	0.00227
Nemertina		0.00227
Neomysis americana (Epi)	23	0.00227
Nudibranchia (Epi)	23	0.01136
Odostomia engonia (Epi)	23	0.00114
Oxyurostylis smithi	91	0.00227
Paraprionospio pinnata	45	0.00909
Rhepoxynius hudsoni	23	0.00114
Tharyx sp. A Morris	23	0.00227
Turbonilla interrupta (Epi)	45	0.01364
Total Abundance w/ Epi.	1273	
Total Abundance w/o Epi.	1159	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.09432
Total Biomass w/o Epi.		0.06591

Station: NO156	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 10.0	Salinity (ppt): 30.00	Sediment Silt-Clay (%): 2.25

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.64	1	Pollution Indicative Species Abundance (%)	0.47	
Abundance (#/m2)	9591	1	Pollution Indicative Species Biomass (%)	0.04	5
Biomass (g/m2)	3.08	3	Pollution Sensitive Species Abundance (%)	1.66	1
Carnivore-Omnivore Abundance (%)	4.74		Pollution Sensitive Species Biomass (%)	4.32	
Deep Deposit Feeder Abundance (%)	1.18	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Aglaophamus verrilli	23	0.30909
Americhelidium americanum	45	0.00455
Apoprionospio pygmaea	114	0.00682
Columbellidae (Epi)	45	0.02500
Haminoea solitaria	182	0.00682
Leitoscoloplos spp.	45	0.00114
Mediomastus ambiseta	68	0.00114
Nassarius trivittatus	114	0.66136
Natica pusilla	68	0.12500
Nephtys picta	68	0.12727
Odostomia engonia (Epi)	91	0.01364
Pagurus spp. (Epi)	68	0.11818
Tellina agilis	23	0.00455
Tharyx sp. A Morris	8841	1.83181
Turbonilla interrupta (Epi)	23	0.00227
Total Abundance w/ Epi.	9818	
Total Abundance w/o Epi.	9591	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		3.23863
Total Biomass w/o Epi.		3.07954

Station: NO157	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.8	Salinity (ppt): 22.00	Sediment Silt-Clay (%): 1.12

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.63	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	1318	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.15	1	Pollution Sensitive Species Abundance (%)	6.90	1
Carnivore-Omnivore Abundance (%)	18.97		Pollution Sensitive Species Biomass (%)	3.73	
Deep Deposit Feeder Abundance (%)	1.72	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.00455
Ameroculodes species complex	23	0.00227
Amphiporus bioculatus	68	
Branchiostoma caribaeum	91	0.05227
Cyathura burbancki	23	0.00455
Lepidactylus dytiscus	91	0.00227
Macoma mitchelli	45	0.00114
Natica pusilla	23	0.00909
Nemertina		0.00227
Nephtyidae	68	0.01136
Nucula proxima	23	0.00682
Odostomia engonia (Epi)	68	0.00227
Oxyurostylis smithi	91	0.00909
Phoronis spp.	23	0.00114
Rhepoxynius hudsoni	682	0.04545
Total Abundance w/ Epi.	1386	
Total Abundance w/o Epi.	1318	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.15454
Total Biomass w/o Epi.		0.15227

Station: NO158	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.4	Salinity (ppt): 22.80	Sediment Silt-Clay (%): 3.84

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.46	1	Pollution Indicative Species Abundance (%)	5.26	
Abundance (#/m2)	1727	3	Pollution Indicative Species Biomass (%)	13.41	3
Biomass (g/m2)	0.20	1	Pollution Sensitive Species Abundance (%)	77.63	5
Carnivore-Omnivore Abundance (%)	39.47		Pollution Sensitive Species Biomass (%)	26.26	
Deep Deposit Feeder Abundance (%)	3.95	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	591	0.02727
Ampelisca abdita	68	0.00114
Ampelisca verrilli	91	0.00909
Branchiostoma caribaeum	23	0.10000
Edwardsia elegans	23	0.00114
Glycera dibranchiata	23	0.00909
Glycinde solitaria	45	0.00114
Loimia medusa	23	0.00114
Maldanidae	45	0.00114
Mediomastus ambiseta	23	0.00114
Neomysis americana (Epi)	23	0.00114
Odostomia engonia (Epi)	136	0.00227
Paraprionospio pinnata	91	0.02727
Phoronis spp.	659	0.02273
Tharyx sp. A Morris	23	0.00114
Turbonilla interrupta (Epi)	386	0.03182
Total Abundance w/ Epi.	2273	
Total Abundance w/o Epi.	1727	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.23864
Total Biomass w/o Epi.		0.20341

Station: NO159	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.0	Salinity (ppt): 22.80	Sediment Silt-Clay (%): 1.07

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.93	1	Pollution Indicative Species Abundance (%)	3.37	
Abundance (#/m2)	2023	3	Pollution Indicative Species Biomass (%)	11.26	3
Biomass (g/m2)	0.50	1	Pollution Sensitive Species Abundance (%)	83.15	5
Carnivore-Omnivore Abundance (%)	6.74		Pollution Sensitive Species Biomass (%)	56.76	
Deep Deposit Feeder Abundance (%)	2.25	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.00909
Ampelisca abdita	45	0.00909
Ampelisca verrilli	114	0.03636
Branchiostoma caribaeum	23	0.09773
Glycinde solitaria	23	0.05000
Loimia medusa	45	0.02955
Mediomastus ambiseta	45	0.00455
Nephtys picta	23	0.01591
Paraprionospio pinnata	68	0.05682
Phoronis spp.	1386	0.16591
Spiochaetopterus costarum	68	0.01136
Tharyx sp. A Morris	91	0.01818
Turbonilla interrupta (Epi)	250	0.05227
Total Abundance w/ Epi.	2273	
Total Abundance w/o Epi.	2023	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.55682
Total Biomass w/o Epi.		0.50454

Station: NO160	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.0	Salinity (ppt): 23.10	Sediment Silt-Clay (%): 2.56

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.37	3	Pollution Indicative Species Abundance (%)		3.70	
Abundance (#/m2)	1841	3	Pollution Indicative Species Biomass (%)		4.93	5
Biomass (g/m2)	0.41	1	Pollution Sensitive Species Abundance (%)		32.10	3
Carnivore-Omnivore Abundance (%)	12.35		Pollution Sensitive Species Biomass (%)		38.36	
Deep Deposit Feeder Abundance (%)	37.04	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	114	0.00682
Ampelisca verrilli	23	0.02727
Amphiporus bioculatus	45	
Arcidae	23	0.00114
Ascidiacea (Epi)	68	0.00682
Batea catharinensis (Epi)	45	0.00455
Caprella penantis (Epi)	114	0.00682
Elasmopus laevis (Epi)	68	0.00227
Gemma gemma	455	0.00455
Glycinde solitaria	45	0.00227
Marenzelleria viridis	23	0.00455
Mediomastus ambiseta	318	0.00455
Melita spp. (Epi)	23	0.00114
Monopylephorus rubroniveus	341	
Nemertina		0.00227
Nephtys picta	23	0.13636
Nucula proxima	23	0.04545
Odostomia engonia (Epi)	23	0.00114
Oligochaeta		0.00114
Paracaprella tenuis (Epi)	364	0.01136
Paraprionospio pinnata	45	0.01818
Phoronis spp.	23	0.00227
Polycirrus spp.	114	0.15000
Polynoidae (Epi)	23	0.00114
Sabellidae	68	0.00114
Scolelepis texana	91	0.00227

Continued . . .

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Spiochaetopterus costarum	23	0.00114
Streblospio benedicti	23	0.00227
Tellina agilis	23	0.00114
Turbonilla spp. (Epi)	45	0.00455
Total Abundance w/ Epi.	2614	
Total Abundance w/o Epi.	1841	
Number of Taxa w/ Epi.	28	
Number of Taxa w/o Epi.	19	
Total Biomass w/ Epi.		0.45454
Total Biomass w/o Epi.		0.41477

Station: NO161	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 4.7	Salinity (ppt): 24.10	Sediment Silt-Clay (%): 0.89

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.81	1	Pollution Indicative Species Abundance (%)	0.00	
Abundance (#/m2)	4909	5	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	1.06	3	Pollution Sensitive Species Abundance (%)	1.39	1
Carnivore-Omnivore Abundance (%)	3.70		Pollution Sensitive Species Biomass (%)	0.43	
Deep Deposit Feeder Abundance (%)	2.31	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chiridotea caeca	23	0.00227
Gemma gemma	4341	0.09545
Hargeria rapax	227	0.00227
Lepidactylus dytiscus	23	0.00455
Mediomastus ambiseta	68	0.00455
Micrura leidyi	23	
Molgulidae (Epi)	68	0.00114
Nemertina		0.02727
Nephtys bucera	136	0.77045
Orbinia spp.	23	0.11136
Tharyx sp. A Morris	23	0.00114
Travisia spp.	23	0.04545
Total Abundance w/ Epi.	4977	
Total Abundance w/o Epi.	4909	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.06591
Total Biomass w/o Epi.		1.06477

Station: NO162	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.8	Salinity (ppt): 22.60	Sediment Silt-Clay (%): 1.21

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.02	3	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	2864	3	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	1.18	3	Pollution Sensitive Species Abundance (%)		9.52	1
Carnivore-Omnivore Abundance (%)	21.43		Pollution Sensitive Species Biomass (%)		8.26	
Deep Deposit Feeder Abundance (%)	25.40	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.01136
Ampelisca verrilli	23	0.00227
Arcidae	45	0.00455
Ascidiacea (Epi)	68	0.00227
Brachyura	23	0.02045
Branchiostoma caribaeum	159	0.42727
Gemma gemma	909	0.00682
Glycinde solitaria	45	0.00227
Lyonsia hyalina	23	0.00114
Macoma mitchelli	23	0.01591
Monopylephorus rubroniveus	727	
Nassarius trivittatus	182	0.54091
Neanthes succinea	159	0.02045
Nephtys picta	136	0.08409
Oligochaeta		0.00909
Oxyurostylis smithi	23	0.00455
Polycirrus spp.	68	0.01364
Sabellidae	45	0.00455
Turbonilla interrupta (Epi)	23	0.00682
Unciola spp.	205	0.03409
Total Abundance w/ Epi.	2977	
Total Abundance w/o Epi.	2886	
Number of Taxa w/ Epi.	19	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		1.21250
Total Biomass w/o Epi.		1.20341

Station: NO163	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 9.0	Salinity (ppt): 29.50	Sediment Silt-Clay (%): 14.83

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.67			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	4.42	5	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	1818	3	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	3.54	3	Pollution Sensitive Species Abundance (%)		42.50	3
Carnivore-Omnivore Abundance (%)	41.25		Pollution Sensitive Species Biomass (%)		54.51	
Deep Deposit Feeder Abundance (%)	25.00	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.00114
Aglaophamus verrilli	250	0.68182
Ampelisca abdita	45	0.00455
Ampelisca verrilli	68	0.00909
Bhawania heteroseta	68	0.00909
Edotea triloba (Epi)	45	0.00227
Ensis directus	45	1.34318
Euclymene zonalis	114	0.22045
Glycinde solitaria	23	0.00114
Haminoea solitaria	68	0.00227
Leptosynapta tenuis	23	0.00227
Loimia medusa	114	0.17273
Magelona spp.	23	0.00909
Mediomastus ambiseta	136	0.00227
Nassarius trivittatus	45	0.01818
Nemertina	23	0.00114
Nephtys incisa	23	0.13864
Nephtys picta	68	0.15909
Nucula proxima	114	0.00455
Odostomia engonia (Epi)	45	0.00114
Ophiuroidea	23	0.55682
Owenia fusiformis	45	0.00114
Pectinaria gouldii	45	0.00227
Phoronis spp.	68	0.00682
Polynoidae (Epi)	45	0.00114
Prionospio perkinsi	114	0.00227

Continued . . .

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Rictaxis punctostriatus	91	0.00114
Spiophanes bombyx	45	0.01364
Tubificoides spp.	23	0.00227
Turbonilla interrupta (Epi)	45	0.00227
Yoldia limatula	23	0.17273
Total Abundance w/ Epi.	2000	
Total Abundance w/o Epi.	1818	
Number of Taxa w/ Epi.	31	
Number of Taxa w/o Epi.	27	
Total Biomass w/ Epi.		3.54658
Total Biomass w/o Epi.		3.53976

Station: NO164	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.0	Salinity (ppt): 24.30	Sediment Silt-Clay (%): 1.52

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.74	3	Pollution Indicative Species Abundance (%)		0.53	
Abundance (#/m2)	8523	1	Pollution Indicative Species Biomass (%)		0.10	5
Biomass (g/m2)	2.37	3	Pollution Sensitive Species Abundance (%)		20.80	1
Carnivore-Omnivore Abundance (%)	39.20		Pollution Sensitive Species Biomass (%)		7.24	
Deep Deposit Feeder Abundance (%)	39.73	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Amphiporus bioculatus	114	
Apoprionospio pygmaea	23	0.00114
Branchiostoma caribaeum	614	2.05454
Gemma gemma	341	0.00682
Glycinde solitaria	68	0.00682
Leitoscoloplos spp.	45	0.00227
Lepidactylus dytiscus	23	0.00682
Mediomastus ambiseta	1318	0.01136
Monopylephorus rubroniveus	2023	
Natica pusilla	23	0.01818
Neanthes arenaceodentata	136	0.01591
Nemertina		0.00227
Nephtys picta	23	0.01136
Odostomia engonia (Epi)	364	0.01818
Oligochaeta		0.01818
Oxyurostylis smithi	23	0.00682
Parapionosyllis longicirrata	2955	0.01591
Phoronis spp.	341	0.14091
Pinnotheridae	23	0.02045
Polydora spp.	23	0.00114
Stylochus ellipticus (Epi)	23	0.00114
Tellina agilis	23	0.00114

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Tharyx sp. A Morris	386	0.02727
Turbonilla interrupta (Epi)	23	0.00909
Total Abundance w/ Epi.	8932	
Total Abundance w/o Epi.	8523	
Number of Taxa w/ Epi.	22	
Number of Taxa w/o Epi.	19	
Total Biomass w/ Epi.		2.39772
Total Biomass w/o Epi.		2.36931

Station: NO166	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.1	Salinity (ppt): 22.30	Sediment Silt-Clay (%): 38.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.87	1	Pollution Indicative Species Abundance (%)	85.71	
Abundance (#/m2)	795	1	Pollution Indicative Species Biomass (%)	21.36	1
Biomass (g/m2)	0.12	1	Pollution Sensitive Species Abundance (%)	0.00	1
Carnivore-Omnivore Abundance (%)	8.57		Pollution Sensitive Species Biomass (%)	0.00	
Deep Deposit Feeder Abundance (%)	2.86	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Heteromastus filiformis	23	0.07727
Micrura leidyi	23	
Nemertina		0.00682
Nephtys spp.	45	0.00682
Rhepoxynius hudsoni	23	0.00114
Streblospio benedicti	682	0.02500
Total Abundance w/ Epi.	795	
Total Abundance w/o Epi.	795	
Number of Taxa w/ Epi.	5	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.11705
Total Biomass w/o Epi.		0.11705

Station: NO167	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.5	Salinity (ppt): 22.50	Sediment Silt-Clay (%): 56.40

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.89	3	Pollution Indicative Species Abundance (%)	23.08	
Abundance (#/m2)	1182	3	Pollution Indicative Species Biomass (%)	10.45	3
Biomass (g/m2)	0.61	3	Pollution Sensitive Species Abundance (%)	57.69	
Carnivore-Omnivore Abundance (%)	25.00	3	Pollution Sensitive Species Biomass (%)	48.32	3
Deep Deposit Feeder Abundance (%)	38.46				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	136	0.00455
Anthozoa	23	0.01136
Bhawania heteroseta	23	0.00682
Gastropoda (Epi)	45	0.00227
Glycinde solitaria	23	0.00114
Leucon americanus	23	0.00114
Listriella barnardi	45	0.00114
Loimia medusa	23	0.25000
Mediomastus ambiseta	432	0.01818
Nemertina	68	0.01364
Notomastus spp.	23	0.10682
Paraprionospio pinnata	273	0.06364
Phoronis spp.	23	0.01136
Saccoglossus kowalevskii	23	0.11591
Sigambra tentaculata	23	0.00114
Spiochaetopterus costarum	23	0.00227
Total Abundance w/ Epi.	1227	
Total Abundance w/o Epi.	1182	
Number of Taxa w/ Epi.	16	
Number of Taxa w/o Epi.	15	
Total Biomass w/ Epi.		0.61136
Total Biomass w/o Epi.		0.60909

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO168	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.1	Salinity (ppt): 22.40	Sediment Silt-Clay (%): 74.66

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.59	3	Pollution Indicative Species Abundance (%)	36.00	
Abundance (#/m2)	1705	5	Pollution Indicative Species Biomass (%)	68.79	1
Biomass (g/m2)	0.48	1	Pollution Sensitive Species Abundance (%)	58.67	
Carnivore-Omnivore Abundance (%)	28.00	3	Pollution Sensitive Species Biomass (%)	29.79	1
Deep Deposit Feeder Abundance (%)	16.00				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	386	0.02955
Glycinde solitaria	68	0.00682
Leucon americanus	23	0.00114
Mediomastus ambiseta	227	0.00682
Nephtyidae	23	0.00455
Paraprionospio pinnata	591	0.32954
Phoronis spp.	227	0.07500
Pycnogonida (Epi)	23	0.00114
Spiochaetopterus costarum	91	0.02500
Streblospio benedicti	23	0.00114
Tubificoides spp.	45	0.00114
Total Abundance w/ Epi.	1727	
Total Abundance w/o Epi.	1705	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.48182
Total Biomass w/o Epi.		0.48068

Station: NO169	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.2	Salinity (ppt): 21.30	Sediment Silt-Clay (%): 5.20

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.47	1	Pollution Indicative Species Abundance (%)		13.33	
Abundance (#/m2)	2045	3	Pollution Indicative Species Biomass (%)		53.04	1
Biomass (g/m2)	0.26	1	Pollution Sensitive Species Abundance (%)		82.22	5
Carnivore-Omnivore Abundance (%)	38.89		Pollution Sensitive Species Biomass (%)		43.04	
Deep Deposit Feeder Abundance (%)	17.78	3				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	659	0.03636
Cerapus tubularis (Epi)	23	0.00114
Epitonium rupicola (Epi)	23	0.00114
Glycinde solitaria	91	0.00682
Mediomastus ambiseta	318	0.00682
Odostomia engonia (Epi)	45	0.00114
Paraprionospio pinnata	227	0.13636
Phoronis spp.	591	0.06136
Phyllodoce arenae	23	0.00682
Rictaxis punctostriatus	23	0.00227
Spiochaetopterus costarum	23	0.00114
Streblospio benedicti	45	0.00227
Tubificoides spp.	45	0.00114
Turbonilla interrupta (Epi)	114	0.00909
Total Abundance w/ Epi.	2250	
Total Abundance w/o Epi.	2045	
Number of Taxa w/ Epi.	14	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.27386
Total Biomass w/o Epi.		0.26136

Station: NO170	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 0.6	Salinity (ppt): 13.40	Sediment Silt-Clay (%): 81.77

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.41	3	Pollution Indicative Species Abundance (%)		18.68	
Abundance (#/m2)	4136	3	Pollution Indicative Species Biomass (%)		0.92	5
Biomass (g/m2)	2.22	5	Pollution Sensitive Species Abundance (%)		1.10	
Carnivore-Omnivore Abundance (%)	12.09	3	Pollution Sensitive Species Biomass (%)		2.26	1
Deep Deposit Feeder Abundance (%)	17.03					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Chironomidae		0.00114
Chironomus spp.	68	
Culicoides spp.	23	0.00114
Cyathura polita	45	0.05000
Eteone heteropoda	23	0.00227
Heteromastus filiformis	318	0.27954
Laeonereis culveri	295	0.28864
Leptocheirus plumulosus	2205	0.50227
Macoma mitchelli	227	0.85682
Neanthes succinea	45	0.21136
Oligochaeta		0.00227
Oxyurostylis smithi	23	0.00114
Streblospio benedicti	477	0.01818
Tubificidae imm w/o cap chaetae	205	
Tubificoides spp.	182	0.00114
Total Abundance w/ Epi.	4136	
Total Abundance w/o Epi.	4136	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		2.21590
Total Biomass w/o Epi.		2.21590

Station: NO171	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 8.1	Salinity (ppt): 17.40	Sediment Silt-Clay (%): 95.61

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 | Condition: Degraded | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.84	3	Pollution Indicative Species Abundance (%)	25.00	
Abundance (#/m2)	818	1	Pollution Indicative Species Biomass (%)	37.70	1
Biomass (g/m2)	0.28	1	Pollution Sensitive Species Abundance (%)	61.11	
Carnivore-Omnivore Abundance (%)	27.78	5	Pollution Sensitive Species Biomass (%)	48.36	3
Deep Deposit Feeder Abundance (%)	16.67				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	227	0.01364
Ampelisca abdita	45	0.00114
Listriella barnardi	23	0.00682
Loimia medusa	45	0.05455
Maldanidae	23	0.00114
Mediomastus ambiseta	91	0.00682
Paraprionospio pinnata	205	0.10455
Pectinaria gouldii	23	0.02955
Phoronis spp.	45	0.03636
Spiochaetopterus costarum	91	0.02273
Total Abundance w/ Epi.	818	
Total Abundance w/o Epi.	818	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.27727
Total Biomass w/o Epi.		0.27727

Station: NO172	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 9.4	Salinity (ppt): 18.00	Sediment Silt-Clay (%): 1.21

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.46	3	Pollution Indicative Species Abundance (%)	1.72	
Abundance (#/m2)	2636	3	Pollution Indicative Species Biomass (%)	1.85	5
Biomass (g/m2)	2.58	3	Pollution Sensitive Species Abundance (%)	66.38	5
Carnivore-Omnivore Abundance (%)	52.59		Pollution Sensitive Species Biomass (%)	36.96	
Deep Deposit Feeder Abundance (%)	5.17	1			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	1000	0.07045
Ampelisca abdita	182	0.00909
Ampelisca verrilli	227	0.04091
Clymenella torquata	45	0.08636
Glycera dibranchiata	68	0.19091
Glycinde solitaria	136	0.00455
Listriella barnardi	91	0.00227
Listriella clymenellae	23	0.00227
Loimia medusa	182	0.65000
Mediomastus ambiseta	91	0.00227
Micrura leidyi	68	
Mulinia lateralis	23	0.01364
Nassarius trivittatus	23	0.00455
Nassarius vibex	23	1.11818
Nemertina	23	0.00682
Odostomia engonia (Epi)	45	0.01136
Paraprionospio pinnata	23	0.03409
Parvilucina crenella	68	0.18409
Phoronis spp.	136	0.08864
Podarke obscura	23	0.00227
Rictaxis punctostriatus	23	0.00227
Spiochaetopterus costarum	68	0.01591

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BENTHIC ABUNDANCE (per sq. meter) (con't)		
TAXA	Abundance (#/m2)	Biomass (g/m2)
Spiophanes bombyx	68	0.03409
Tharyx sp. A Morris	23	0.00114
Total Abundance w/ Epi.	2705	
Total Abundance w/o Epi.	2659	
Number of Taxa w/ Epi.	25	
Number of Taxa w/o Epi.	24	
Total Biomass w/ Epi.		2.59431
Total Biomass w/o Epi.		2.58295

Station: NO173	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.1	Salinity (ppt): 14.90	Sediment Silt-Clay (%): 39.44

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.10	1	Pollution Indicative Species Abundance (%)	10.92	3
Abundance (#/m2)	2705	5	Pollution Indicative Species Biomass (%)	6.82	
Biomass (g/m2)	1.37	3	Pollution Sensitive Species Abundance (%)	5.88	1
Carnivore-Omnivore Abundance (%)	31.93	3	Pollution Sensitive Species Biomass (%)	19.63	
Deep Deposit Feeder Abundance (%)	49.58				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ampelisca abdita	23	0.00227
Glycinde solitaria	68	0.02045
Heteromastus filiformis	1318	0.26818
Macoma balthica	91	0.24773
Macoma mitchelli	91	0.01591
Neanthes succinea	773	0.70454
Paraprionospio pinnata	205	0.09091
Podarkeopsis levifuscina	23	0.00682
Streblospio benedicti	91	0.00227
Tubificoides spp.	23	0.00682
Total Abundance w/ Epi.	2705	
Total Abundance w/o Epi.	2705	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		1.36590
Total Biomass w/o Epi.		1.36590

Station: NO174	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 13.4	Salinity (ppt): 17.00	Sediment Silt-Clay (%): 97.46

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.25	1	Pollution Indicative Species Abundance (%)		82.93	
Abundance (#/m2)	932	1	Pollution Indicative Species Biomass (%)		73.25	1
Biomass (g/m2)	0.67	3	Pollution Sensitive Species Abundance (%)		4.88	
Carnivore-Omnivore Abundance (%)	9.76	1	Pollution Sensitive Species Biomass (%)		2.56	1
Deep Deposit Feeder Abundance (%)	4.88					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Mediomastus ambiseta	23	0.00114
Neanthes succinea	45	0.13636
Parahesione luteola	23	0.00455
Paraprionospio pinnata	750	0.48636
Pectinaria gouldii	23	0.01818
Phoronis spp.	23	0.01591
Podarkeopsis levifuscina	23	0.00227
Streblospio benedicti	23	0.00227
Total Abundance w/ Epi.	932	
Total Abundance w/o Epi.	932	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.66704
Total Biomass w/o Epi.		0.66704

Station: NO175	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 11.9	Salinity (ppt): 17.80	Sediment Silt-Clay (%): 91.87

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.94	1	Pollution Indicative Species Abundance (%)		44.00	
Abundance (#/m2)	568	1	Pollution Indicative Species Biomass (%)		9.13	3
Biomass (g/m2)	0.50	1	Pollution Sensitive Species Abundance (%)		28.00	
Carnivore-Omnivore Abundance (%)	16.00	3	Pollution Sensitive Species Biomass (%)		53.88	3
Deep Deposit Feeder Abundance (%)	12.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Loimia medusa	159	0.26818
Monocorophium acherusicum (Epi)	45	0.00227
Neanthes succinea	91	0.18182
Paraprionospio pinnata	250	0.04545
Pectinaria gouldii	45	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	614	
Total Abundance w/o Epi.	568	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.50000
Total Biomass w/o Epi.		0.49773

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO176	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 6.8	Salinity (ppt): 11.80	Sediment Silt-Clay (%): 91.58

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.60 — Condition: Degraded — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	1.56	1	Pollution Indicative Species Abundance (%)	7.27	5
Abundance (#/m2)	2500	5	Pollution Indicative Species Biomass (%)	2.61	
Biomass (g/m2)	0.61	1	Pollution Sensitive Species Abundance (%)	0.91	
Carnivore-Omnivore Abundance (%)	5.45		Pollution Sensitive Species Biomass (%)	26.87	1
Deep Deposit Feeder Abundance (%)	23.64				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Coelotanypus spp.	23	0.00455
Eteone heteropoda	23	0.00227
Leptocheirus plumulosus	1591	0.32273
Macoma balthica	23	0.16364
Macoma mitchelli	23	0.00909
Melita nitida (Epi)	318	0.01136
Neanthes succinea	91	0.09091
Streblospio benedicti	136	0.00909
Tubificoides spp.	591	0.00682
Total Abundance w/ Epi.	2818	
Total Abundance w/o Epi.	2500	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.62045
Total Biomass w/o Epi.		0.60909

Station: NO177	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 6.5	Salinity (ppt): 12.60	Sediment Silt-Clay (%): 95.60

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.88	1	Pollution Indicative Species Abundance (%)	11.28	
Abundance (#/m2)	4432	3	Pollution Indicative Species Biomass (%)	10.22	3
Biomass (g/m2)	0.16	1	Pollution Sensitive Species Abundance (%)	1.03	
Carnivore-Omnivore Abundance (%)	2.56	1	Pollution Sensitive Species Biomass (%)	7.30	1
Deep Deposit Feeder Abundance (%)	84.10				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	45	0.01136
Leucon americanus	45	0.00227
Macoma mitchelli	45	0.04545
Monocorophium acherusicum (Epi)	45	0.00227
Neanthes succinea	45	0.02500
Podarkeopsis levifuscina	23	0.00114
Streblospio benedicti	500	0.01591
Tubificoides spp.	3727	0.05455
Total Abundance w/ Epi.	4477	
Total Abundance w/o Epi.	4432	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.15795
Total Biomass w/o Epi.		0.15568

Station: NO178	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.0	Salinity (ppt): 12.80	Sediment Silt-Clay (%): 94.34

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.00			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.51	3	Pollution Indicative Species Abundance (%)		19.23	
Abundance (#/m2)	1182	3	Pollution Indicative Species Biomass (%)		2.61	5
Biomass (g/m2)	0.26	1	Pollution Sensitive Species Abundance (%)		7.69	
Carnivore-Omnivore Abundance (%)	11.54	3	Pollution Sensitive Species Biomass (%)		46.09	3
Deep Deposit Feeder Abundance (%)	53.85					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	68	0.00455
Heteromastus filiformis	182	0.07500
Leptocheirus plumulosus	91	0.00682
Macoma balthica	23	0.11591
Macoma mitchelli	68	0.00909
Neanthes succinea	68	0.04091
Streblospio benedicti	227	0.00682
Tubificoides spp.	455	0.00227
Total Abundance w/ Epi.	1182	
Total Abundance w/o Epi.	1182	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.26136
Total Biomass w/o Epi.		0.26136

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO179	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.3	Salinity (ppt): 6.40	Sediment Silt-Clay (%): 4.15

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.40			Condition: Meets Goal		# Attributes Scored: 5	
	Value	Score			Value	Score
Shannon-Wiener Index	2.25	3	Pollution Indicative Species Abundance (%)		2.41	5
Abundance (#/m2)	1886	5	Pollution Indicative Species Biomass (%)		1.59	
Biomass (g/m2)	0.29	1	Pollution Sensitive Species Abundance (%)		12.05	
Carnivore-Omnivore Abundance (%)	3.61		Pollution Sensitive Species Biomass (%)		52.78	3
Deep Deposit Feeder Abundance (%)	0.00					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ameroculodes species complex	23	0.00114
Cyathura polita	23	0.00114
Hobsonia florida	455	0.02273
Leptocheirus plumulosus	705	0.04545
Macoma mitchelli	386	0.05455
Neanthes succinea	45	0.00682
Rangia cuneata	205	0.15000
Streblospio benedicti	45	0.00455
Total Abundance w/ Epi.	1886	
Total Abundance w/o Epi.	1886	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.28636
Total Biomass w/o Epi.		0.28636

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO180	Habitat: Low Mesohaline	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.0	Salinity (ppt): 11.30	Sediment Silt-Clay (%): 94.56

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.20 — Condition: Degraded — # Attributes Scored: 5

	Value	Score		Value	Score
Shannon-Wiener Index	1.72	3	Pollution Indicative Species Abundance (%)	20.62	1
Abundance (#/m2)	2205	5	Pollution Indicative Species Biomass (%)	3.64	
Biomass (g/m2)	0.44	1	Pollution Sensitive Species Abundance (%)	1.03	
Carnivore-Omnivore Abundance (%)	3.09		Pollution Sensitive Species Biomass (%)	0.26	1
Deep Deposit Feeder Abundance (%)	22.68				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.00114
Heteromastus filiformis	45	0.00909
Leptocheirus plumulosus	1182	0.35000
Melita nitida (Epi)	159	0.00455
Neanthes succinea	45	0.05682
Streblospio benedicti	455	0.01591
Tubificoides spp.	455	0.00455
Total Abundance w/ Epi.	2364	
Total Abundance w/o Epi.	2205	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.44204
Total Biomass w/o Epi.		0.43750

Station: NO181	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.6	Salinity (ppt): 12.50	Sediment Silt-Clay (%): 97.36

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.50	3	Pollution Indicative Species Abundance (%)		16.67	
Abundance (#/m2)	409	1	Pollution Indicative Species Biomass (%)		6.33	3
Biomass (g/m2)	0.25	1	Pollution Sensitive Species Abundance (%)		5.56	
Carnivore-Omnivore Abundance (%)	38.89	5	Pollution Sensitive Species Biomass (%)		0.45	1
Deep Deposit Feeder Abundance (%)	16.67					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.00114
Heteromastus filiformis	68	0.06591
Leptocheirus plumulosus	114	0.04318
Neanthes succinea	114	0.12273
Paraprionospio pinnata	45	0.01364
Podarkeopsis levifuscina	23	0.00227
Streblospio benedicti	23	0.00227
Total Abundance w/ Epi.	409	
Total Abundance w/o Epi.	409	
Number of Taxa w/ Epi.	7	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.25114
Total Biomass w/o Epi.		0.25114

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO182	Habitat: High Mesohaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.5	Salinity (ppt): 17.30	Sediment Silt-Clay (%): 13.29

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33 | Condition: Meets Goal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.79	3	Pollution Indicative Species Abundance (%)	7.80	5
Abundance (#/m2)	4955	3	Pollution Indicative Species Biomass (%)	21.16	
Biomass (g/m2)	1.29	3	Pollution Sensitive Species Abundance (%)	81.65	5
Carnivore-Omnivore Abundance (%)	15.60	1	Pollution Sensitive Species Biomass (%)	60.49	
Deep Deposit Feeder Abundance (%)	27.52				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00227
Ampelisca abdita	45	0.00227
Amphiporus bioculatus	23	
Anthozoa	23	0.00455
Edwardsia elegans	114	0.01364
Glycinde solitaria	386	0.04091
Loimia medusa	159	0.28409
Macoma balthica	23	0.18636
Mediomastus ambiseta	1227	0.02727
Micrura leidyi	45	
Neanthes succinea	91	0.03636
Nemertina		0.17273
Paraprionospio pinnata	364	0.27045
Phoronis spp.	1841	0.20000
Podarkeopsis levifuscina	45	0.00114
Spiochaetopterus costarum	364	0.03864
Streblospio benedicti	23	0.00227
Tubificoides spp.	136	0.00114
Total Abundance w/ Epi.	4955	
Total Abundance w/o Epi.	4955	
Number of Taxa w/ Epi.	17	
Number of Taxa w/o Epi.	17	
Total Biomass w/ Epi.		1.28863
Total Biomass w/o Epi.		1.28863

Station: NO183	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 7.6	Salinity (ppt): 21.10	Sediment Silt-Clay (%): 91.48

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.37	1	Pollution Indicative Species Abundance (%)	16.67	
Abundance (#/m2)	409	1	Pollution Indicative Species Biomass (%)	8.45	3
Biomass (g/m2)	0.08	1	Pollution Sensitive Species Abundance (%)	50.00	
Carnivore-Omnivore Abundance (%)	22.22	1	Pollution Sensitive Species Biomass (%)	39.44	3
Deep Deposit Feeder Abundance (%)	44.44				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Loimia medusa	23	0.01364
Mediomastus ambiseta	159	0.01136
Paraprionospio pinnata	68	0.00682
Phoronis spp.	23	0.00682
Rhithropanopeus harrisii (Epi)	23	0.00227
Sigambra tentaculata	91	0.03636
Tharyx sp. A Morris	23	0.00455
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	432	
Total Abundance w/o Epi.	409	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	7	
Total Biomass w/ Epi.		0.08295
Total Biomass w/o Epi.		0.08068

Station: NO184	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.5	Salinity (ppt): 20.70	Sediment Silt-Clay (%): 16.91

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.20	3	Pollution Indicative Species Abundance (%)	22.12	
Abundance (#/m2)	2568	3	Pollution Indicative Species Biomass (%)	40.83	1
Biomass (g/m2)	0.63	1	Pollution Sensitive Species Abundance (%)	63.72	5
Carnivore-Omnivore Abundance (%)	8.85		Pollution Sensitive Species Biomass (%)	37.59	
Deep Deposit Feeder Abundance (%)	16.81	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00227
Ampelisca abdita	45	0.00455
Ampelisca vadorum	23	0.00455
Clymenella torquata	23	0.02045
Cyathura burbancki	45	0.01136
Glycinde solitaria	45	0.01136
Leitoscoloplos robustus	23	0.05455
Listriella barnardi	23	0.00455
Listriella clymenellae	182	0.02045
Loimia medusa	91	0.07955
Maldanidae *	91	0.09091
Mediomastus ambiseta	250	0.00455
Nassarius spp.	45	0.01591
Neanthes succinea	23	0.00114
Paraprionospio pinnata	523	0.20227
Phoronis spp.	864	0.09773
Rictaxis punctostriatus	23	0.00114
Spiochaetopterus costarum	136	0.00114
Streblospio benedicti	23	0.00114
Tubificoides spp.	45	0.00227
Turbonilla interrupta (Epi)	45	0.00227
Total Abundance w/ Epi.	2614	
Total Abundance w/o Epi.	2568	
Number of Taxa w/ Epi.	20	
Number of Taxa w/o Epi.	19	
Total Biomass w/ Epi.		0.63409
Total Biomass w/o Epi.		0.63182

Station: NO185	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.7	Salinity (ppt): 18.00	Sediment Silt-Clay (%): 66.65

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.82	3	Pollution Indicative Species Abundance (%)	20.97	
Abundance (#/m2)	1409	3	Pollution Indicative Species Biomass (%)	55.24	1
Biomass (g/m2)	0.44	1	Pollution Sensitive Species Abundance (%)	54.84	
Carnivore-Omnivore Abundance (%)	8.06	1	Pollution Sensitive Species Biomass (%)	37.60	3
Deep Deposit Feeder Abundance (%)	30.65				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Edwardsia elegans	23	0.02727
Glycinde solitaria	91	0.02955
Leitoscoloplos robustus	23	0.14545
Leucon americanus	23	0.00114
Loimia medusa	23	0.08182
Macoma mitchelli	23	0.00114
Mediomastus ambiseta	159	0.00227
Oxyurostylis smithi	23	0.00114
Paraprionospio pinnata	273	0.10000
Phoronis spp.	432	0.05227
Spiochaetopterus costarum	68	0.00114
Tubificoides spp.	250	0.00114
Total Abundance w/ Epi.	1409	
Total Abundance w/o Epi.	1409	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.44432
Total Biomass w/o Epi.		0.44432

Station: NO186	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 4.0	Salinity (ppt): 21.20	Sediment Silt-Clay (%): 69.22

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.50	3	Pollution Indicative Species Abundance (%)		49.12	
Abundance (#/m2)	1295	3	Pollution Indicative Species Biomass (%)		41.76	1
Biomass (g/m2)	0.49	1	Pollution Sensitive Species Abundance (%)		36.84	
Carnivore-Omnivore Abundance (%)	12.28	1	Pollution Sensitive Species Biomass (%)		16.01	1
Deep Deposit Feeder Abundance (%)	12.28					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ampelisca abdita	23	0.00114
Amphiporus bioculatus	68	
Edwardsia elegans	23	0.00455
Glycinde solitaria	23	0.00114
Listriella clymenellae	23	0.00114
Loimia medusa	136	0.07045
Macoma mitchelli	23	0.17273
Mediomastus ambiseta	159	0.00455
Neanthes succinea	23	0.02045
Nemertina		0.00682
Paraprionospio pinnata	636	0.20454
Phoronis spp.	136	0.00114
Podarkeopsis levifuscina	23	0.00114
Polynoidae (Epi)	23	0.01136
Total Abundance w/ Epi.	1318	
Total Abundance w/o Epi.	1295	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.50113
Total Biomass w/o Epi.		0.48977

Station: NO187	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 10.0	Salinity (ppt): 22.50	Sediment Silt-Clay (%): 90.21

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.05	3	Pollution Indicative Species Abundance (%)	35.71	
Abundance (#/m2)	636	1	Pollution Indicative Species Biomass (%)	38.46	1
Biomass (g/m2)	0.44	1	Pollution Sensitive Species Abundance (%)	14.29	
Carnivore-Omnivore Abundance (%)	14.29	1	Pollution Sensitive Species Biomass (%)	50.26	3
Deep Deposit Feeder Abundance (%)	7.14				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Edwardsia elegans	23	0.00455
Leitoscoloplos robustus	45	0.14318
Listriella barnardi	114	0.00682
Loimia medusa	68	0.21818
Marenzelleria viridis	23	0.00455
Neanthes succinea	45	0.03409
Neomysis americana (Epi)	23	0.00682
Ophiuroidea	23	0.00114
Paraprionospio pinnata	182	0.02727
Polydora cornuta	68	0.00114
Sigambra tentaculata	23	0.00114
Tharyx sp. A Morris	23	0.00114
Total Abundance w/ Epi.	659	
Total Abundance w/o Epi.	636	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		0.45000
Total Biomass w/o Epi.		0.44318

Station: NO188	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.6	Salinity (ppt): 18.50	Sediment Silt-Clay (%): 84.08

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 | Condition: Degraded | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.77	3	Pollution Indicative Species Abundance (%)	39.73	
Abundance (#/m2)	1659	5	Pollution Indicative Species Biomass (%)	55.86	1
Biomass (g/m2)	0.82	3	Pollution Sensitive Species Abundance (%)	38.36	
Carnivore-Omnivore Abundance (%)	9.59	1	Pollution Sensitive Species Biomass (%)	11.31	1
Deep Deposit Feeder Abundance (%)	27.40				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ampelisca abdita	45	0.00114
Edotea triloba (Epi)	23	0.00114
Glycinde solitaria	136	0.03864
Leitoscoloplos robustus	23	0.14318
Leucon americanus	205	0.00227
Loimia medusa	23	0.03409
Macoma balthica	23	0.00114
Macoma mitchelli	45	0.26136
Mediomastus ambiseta	386	0.01591
Paraprionospio pinnata	614	0.31591
Phoronis spp.	45	0.00227
Rictaxis punctostriatus	23	0.00455
Spiochaetopterus costarum	23	0.00114
Streblospio benedicti	23	0.00114
Tubificoides spp.	45	0.00114
Total Abundance w/ Epi.	1682	
Total Abundance w/o Epi.	1659	
Number of Taxa w/ Epi.	15	
Number of Taxa w/o Epi.	14	
Total Biomass w/ Epi.		0.82500
Total Biomass w/o Epi.		0.82386

Station: NO189	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.7	Salinity (ppt): 18.30	Sediment Silt-Clay (%): 2.58

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 — Condition: Degraded — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.93	3	Pollution Indicative Species Abundance (%)	11.76	
Abundance (#/m2)	773	1	Pollution Indicative Species Biomass (%)	46.67	1
Biomass (g/m2)	0.10	1	Pollution Sensitive Species Abundance (%)	70.59	3
Carnivore-Omnivore Abundance (%)	14.71		Pollution Sensitive Species Biomass (%)	33.33	
Deep Deposit Feeder Abundance (%)	32.35	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Edwardsia elegans	45	0.00114
Glycinde solitaria	68	0.00227
Heteromastus filiformis	23	0.01364
Loimia medusa	45	0.00682
Mediomastus ambiseta	182	0.00909
Monopylephorus rubroniveus	45	
Oligochaeta		0.00114
Paraprionospio pinnata	91	0.04773
Phoronis spp.	205	0.01364
Scolelepis texana	23	0.00455
Spiochaetopterus costarum	45	0.00227
Turbonilla interrupta (Epi)	45	0.00909
Total Abundance w/ Epi.	818	
Total Abundance w/o Epi.	773	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.11136
Total Biomass w/o Epi.		0.10227

Station: NO190	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.7	Salinity (ppt): 21.00	Sediment Silt-Clay (%): 64.66

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 | Condition: Degraded | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.40	3	Pollution Indicative Species Abundance (%)	26.87	
Abundance (#/m2)	1523	5	Pollution Indicative Species Biomass (%)	44.29	1
Biomass (g/m2)	0.33	1	Pollution Sensitive Species Abundance (%)	64.18	
Carnivore-Omnivore Abundance (%)	5.97	1	Pollution Sensitive Species Biomass (%)	33.22	3
Deep Deposit Feeder Abundance (%)	43.28				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Glycinde solitaria	23	0.02273
Leitoscoloplos robustus	23	0.04318
Leucon americanus	23	0.01136
Loimia medusa	114	0.04091
Mediomastus ambiseta	591	0.02045
Monopylephorus rubroniveus	45	
Neanthes succinea	23	0.01136
Oligochaeta		0.00114
Paraprionospio pinnata	386	0.10227
Phoronis spp.	250	0.02500
Podarkeopsis levifuscina	45	0.05000
Total Abundance w/ Epi.	1523	
Total Abundance w/o Epi.	1523	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.32841
Total Biomass w/o Epi.		0.32841

Station: NO192	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 3.4	Salinity (ppt): 20.50	Sediment Silt-Clay (%): 85.78

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.63	1	Pollution Indicative Species Abundance (%)	13.51	
Abundance (#/m2)	2523	5	Pollution Indicative Species Biomass (%)	58.33	1
Biomass (g/m2)	0.34	1	Pollution Sensitive Species Abundance (%)	82.88	
Carnivore-Omnivore Abundance (%)	10.81	1	Pollution Sensitive Species Biomass (%)	38.67	3
Deep Deposit Feeder Abundance (%)	72.07				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.00682
Ampelisca spp.	23	0.00114
Amphiporus bioculatus	23	
Edwardsia elegans	23	0.00114
Glycinde solitaria	159	0.05000
Mediomastus ambiseta	1795	0.07273
Nemertina		0.00682
Paraprionospio pinnata	250	0.19773
Spiochaetopterus costarum	68	0.00227
Streblospio benedicti	91	0.00114
Tubificoides spp.	23	0.00114
Total Abundance w/ Epi.	2523	
Total Abundance w/o Epi.	2523	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.34091
Total Biomass w/o Epi.		0.34091

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO193	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.4	Salinity (ppt): 20.00	Sediment Silt-Clay (%): 3.68

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 — Condition: Marginal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.91	3	Pollution Indicative Species Abundance (%)	2.04	
Abundance (#/m2)	1114	1	Pollution Indicative Species Biomass (%)	0.00	5
Biomass (g/m2)	0.87	1	Pollution Sensitive Species Abundance (%)	67.35	3
Carnivore-Omnivore Abundance (%)	55.10		Pollution Sensitive Species Biomass (%)	10.40	
Deep Deposit Feeder Abundance (%)	18.37	3			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	295	0.02273
Ameroculodes species complex	23	0.00227
Ampelisca abdita	91	0.01818
Gemma gemma	114	0.00227
Glycinde solitaria	273	0.05455
Heteromastus filiformis	23	0.01136
Laeonereis culveri	23	0.00909
Macoma mitchelli	45	0.00909
Mediomastus ambiseta	159	0.01136
Nassarius spp.	23	0.72954
Oligochaeta		0.00114
Spiochaetopterus costarum	23	0.00227
Tubificidae imm w/o cap chaetae	23	
Total Abundance w/ Epi.	1114	
Total Abundance w/o Epi.	1114	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	12	
Total Biomass w/ Epi.		0.87386
Total Biomass w/o Epi.		0.87386

Station: NO194	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 4.0	Salinity (ppt): 14.90	Sediment Silt-Clay (%): 90.05

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	0.48	1	Pollution Indicative Species Abundance (%)		0.00	
Abundance (#/m2)	841	1	Pollution Indicative Species Biomass (%)		0.00	5
Biomass (g/m2)	0.31	1	Pollution Sensitive Species Abundance (%)		5.41	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)		97.42	3
Deep Deposit Feeder Abundance (%)	91.89					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Leucon americanus	23	0.00114
Macoma balthica	45	0.30000
Tubificoides spp.	773	0.00682
Total Abundance w/ Epi.	841	
Total Abundance w/o Epi.	841	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.30795
Total Biomass w/o Epi.		0.30795

Station: NO195	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.4	Salinity (ppt): 15.40	Sediment Silt-Clay (%): 98.27

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33			Condition: Degraded		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.58	3	Pollution Indicative Species Abundance (%)		14.29	
Abundance (#/m2)	477	1	Pollution Indicative Species Biomass (%)		3.85	5
Biomass (g/m2)	0.12	1	Pollution Sensitive Species Abundance (%)		19.05	
Carnivore-Omnivore Abundance (%)	9.52	1	Pollution Sensitive Species Biomass (%)		75.00	3
Deep Deposit Feeder Abundance (%)	47.62					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.07955
Glycinde solitaria	23	0.00682
Leptocheirus plumulosus	68	0.01591
Leucon americanus	23	0.00114
Loimia medusa	23	0.00114
Macoma mitchelli	23	0.00682
Mediomastus ambiseta	23	0.00114
Streblospio benedicti	68	0.00455
Tubificoides spp.	205	0.00114
Total Abundance w/ Epi.	477	
Total Abundance w/o Epi.	477	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.11818
Total Biomass w/o Epi.		0.11818

Station: NO196	Habitat: High Mesohaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.4	Salinity (ppt): 15.60	Sediment Silt-Clay (%): 98.72

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.33			Condition: Severely Degr.		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	1.35	1	Pollution Indicative Species Abundance (%)		44.44	
Abundance (#/m2)	205	1	Pollution Indicative Species Biomass (%)		42.86	1
Biomass (g/m2)	0.01	1	Pollution Sensitive Species Abundance (%)		55.56	
Carnivore-Omnivore Abundance (%)	0.00	1	Pollution Sensitive Species Biomass (%)		57.14	3
Deep Deposit Feeder Abundance (%)	55.56					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Mediomastus ambiseta	114	0.00455
Paraprionospio pinnata	23	0.00114
Streblospio benedicti	68	0.00227
Total Abundance w/ Epi.	205	
Total Abundance w/o Epi.	205	
Number of Taxa w/ Epi.	3	
Number of Taxa w/o Epi.	3	
Total Biomass w/ Epi.		0.00795
Total Biomass w/o Epi.		0.00795

Station: NO197	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.7	Salinity (ppt): 19.60	Sediment Silt-Clay (%): 85.45

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.36	1	Pollution Indicative Species Abundance (%)	43.59	
Abundance (#/m2)	886	1	Pollution Indicative Species Biomass (%)	90.89	1
Biomass (g/m2)	0.47	1	Pollution Sensitive Species Abundance (%)	43.59	
Carnivore-Omnivore Abundance (%)	15.38	1	Pollution Sensitive Species Biomass (%)	3.84	1
Deep Deposit Feeder Abundance (%)	38.46				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	91	0.00227
Anthozoa	23	0.00114
Mediomastus ambiseta	295	0.01591
Neanthes succinea	23	0.02045
Paraprionospio pinnata	295	0.42954
Streblospio benedicti	91	0.00114
Tellinidae	23	0.00227
Tubificoides spp.	45	0.00114
Total Abundance w/ Epi.	886	
Total Abundance w/o Epi.	886	
Number of Taxa w/ Epi.	8	
Number of Taxa w/o Epi.	8	
Total Biomass w/ Epi.		0.47386
Total Biomass w/o Epi.		0.47386

Station: NO198	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.4	Salinity (ppt): 19.40	Sediment Silt-Clay (%): 11.60

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.16	1	Pollution Indicative Species Abundance (%)		17.95	
Abundance (#/m2)	1773	3	Pollution Indicative Species Biomass (%)		63.09	1
Biomass (g/m2)	0.34	1	Pollution Sensitive Species Abundance (%)		71.79	5
Carnivore-Omnivore Abundance (%)	10.26		Pollution Sensitive Species Biomass (%)		25.50	
Deep Deposit Feeder Abundance (%)	71.79	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	68	0.00455
Ampelisca abdita	23	0.00227
Gemma gemma	23	0.00227
Glycinde solitaria	68	0.02045
Heteromastus filiformis	45	0.00455
Leitoscoloplos spp.	68	0.04091
Loimia medusa	23	0.01136
Mediomastus ambiseta	1114	0.05000
Neanthes succinea	23	0.02500
Nemertina	23	0.00227
Paraprionospio pinnata	182	0.16818
Streblospio benedicti	68	0.00455
Tubificoides spp.	45	0.00227
Total Abundance w/ Epi.	1773	
Total Abundance w/o Epi.	1773	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.33864
Total Biomass w/o Epi.		0.33864

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO199	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 0.6	Salinity (ppt): 20.00	Sediment Silt-Clay (%): 85.96

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.54	1	Pollution Indicative Species Abundance (%)	1.99	
Abundance (#/m2)	3432	3	Pollution Indicative Species Biomass (%)	13.78	3
Biomass (g/m2)	0.64	3	Pollution Sensitive Species Abundance (%)	64.90	
Carnivore-Omnivore Abundance (%)	5.30	1	Pollution Sensitive Species Biomass (%)	26.86	1
Deep Deposit Feeder Abundance (%)	91.39				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyathura polita	23	0.09091
Glycinde solitaria	114	0.02727
Leitoscoloplos spp.	45	0.07955
Leucon americanus	68	0.00682
Macoma mitchelli	23	0.32500
Mediomastus ambiseta	2091	0.05455
Neanthes succinea	45	0.03636
Streblospio benedicti	23	0.00909
Tubificoides spp.	1000	0.01364
Total Abundance w/ Epi.	3432	
Total Abundance w/o Epi.	3432	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.64318
Total Biomass w/o Epi.		0.64318

Station: NO200	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 16.3	Salinity (ppt): 23.50	Sediment Silt-Clay (%): 98.61

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	2.22	1	Pollution Indicative Species Abundance (%)	45.45	
Abundance (#/m2)	250	1	Pollution Indicative Species Biomass (%)	44.00	1
Biomass (g/m2)	0.06	1	Pollution Sensitive Species Abundance (%)	36.36	
Carnivore-Omnivore Abundance (%)	27.27	3	Pollution Sensitive Species Biomass (%)	32.00	3
Deep Deposit Feeder Abundance (%)	18.18				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00909
Loimia medusa	23	0.00682
Mediomastus ambiseta	23	0.00227
Paraprionospio pinnata	114	0.02500
Pectinaria gouldii	23	0.00227
Sigambra tentaculata	23	0.01136
Total Abundance w/ Epi.	250	
Total Abundance w/o Epi.	250	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	6	
Total Biomass w/ Epi.		0.05682
Total Biomass w/o Epi.		0.05682

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO201	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 15.1	Salinity (ppt): 23.70	Sediment Silt-Clay (%): 93.61

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67			Condition: Severely Degr.	# Attributes Scored: 6	
	Value	Score		Value	Score
Shannon-Wiener Index	1.99	1	Pollution Indicative Species Abundance (%)	42.86	
Abundance (#/m2)	318	1	Pollution Indicative Species Biomass (%)	8.07	3
Biomass (g/m2)	0.37	1	Pollution Sensitive Species Abundance (%)	50.00	
Carnivore-Omnivore Abundance (%)	14.29	1	Pollution Sensitive Species Biomass (%)	91.61	3
Deep Deposit Feeder Abundance (%)	7.14				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00455
Leucon americanus	23	0.00114
Loimia medusa	91	0.32954
Mediomastus ambiseta	23	0.00114
Paraprionospio pinnata	136	0.02955
Polynoidae (Epi)	45	0.02500
Total Abundance w/ Epi.	364	
Total Abundance w/o Epi.	318	
Number of Taxa w/ Epi.	6	
Number of Taxa w/o Epi.	5	
Total Biomass w/ Epi.		0.39091
Total Biomass w/o Epi.		0.36591

Station: NO202	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 13.4	Salinity (ppt): 23.00	Sediment Silt-Clay (%): 38.98

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 3.33			Condition: Meets Goal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	3.22	3	Pollution Indicative Species Abundance (%)		43.48	
Abundance (#/m2)	523	1	Pollution Indicative Species Biomass (%)		1.74	5
Biomass (g/m2)	1.90	3	Pollution Sensitive Species Abundance (%)		47.83	3
Carnivore-Omnivore Abundance (%)	26.09		Pollution Sensitive Species Biomass (%)		98.02	
Deep Deposit Feeder Abundance (%)	34.78	5				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.01136
Glycera americana	23	1.43636
Glycinde solitaria	45	0.00909
Leitoscoloplos spp.	68	0.01818
Loimia medusa	68	0.39773
Mediomastus ambiseta	68	0.00455
Oligochaeta		0.00114
Paraprionospio pinnata	114	0.01364
Pectinaria gouldii	23	0.00227
Podarkeopsis levifuscina	23	0.00114
Pycnogonida (Epi)	23	0.00114
Streblospio benedicti	23	0.00114
Tubificidae imm w/o cap chaetae	23	
Total Abundance w/ Epi.	545	
Total Abundance w/o Epi.	523	
Number of Taxa w/ Epi.	12	
Number of Taxa w/o Epi.	11	
Total Biomass w/ Epi.		1.89772
Total Biomass w/o Epi.		1.89658

BOTTOM ENVIRONMENT AND BENTHOS: NOAA SAMPLES

Station: NO203	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.3	Salinity (ppt): 21.90	Sediment Silt-Clay (%): 80.67

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.45	1	Pollution Indicative Species Abundance (%)	18.64	
Abundance (#/m2)	6341	3	Pollution Indicative Species Biomass (%)	40.96	1
Biomass (g/m2)	0.92	3	Pollution Sensitive Species Abundance (%)	73.84	
Carnivore-Omnivore Abundance (%)	3.58	1	Pollution Sensitive Species Biomass (%)	53.87	3
Deep Deposit Feeder Abundance (%)	77.06				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Capitella capitata complex	23	0.00682
Carinoma tremaphoros	91	
Cyathura polita	68	0.04091
Eteone heteropoda	23	0.00114
Heteromastus filiformis	23	0.00114
Leitoscoloplos robustus	91	0.35909
Leptocheirus plumulosus	23	0.00114
Leucon americanus	114	0.00114
Macoma balthica	23	0.04773
Mediomastus ambiseta	4591	0.40909
Nemertina		0.03409
Podarkeopsis levifuscina	45	0.00227
Streblospio benedicti	1068	0.01818
Tubificoides spp.	159	0.00114
Total Abundance w/ Epi.	6341	
Total Abundance w/o Epi.	6341	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		0.92386
Total Biomass w/o Epi.		0.92386

Station: NO204	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.8	Salinity (ppt): 21.90	Sediment Silt-Clay (%): 65.70

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.67 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	0.96	1	Pollution Indicative Species Abundance (%)	8.73	
Abundance (#/m2)	12500	1	Pollution Indicative Species Biomass (%)	21.05	1
Biomass (g/m2)	0.50	1	Pollution Sensitive Species Abundance (%)	86.73	
Carnivore-Omnivore Abundance (%)	2.91	1	Pollution Sensitive Species Biomass (%)	60.87	5
Deep Deposit Feeder Abundance (%)	88.73				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	136	
Cyathura polita	182	0.04545
Eteone heteropoda	45	0.00455
Heteromastus filiformis	159	0.04545
Leitoscoloplos robustus	159	0.08636
Leucon americanus	159	0.00114
Mediomastus ambiseta	10659	0.25682
Nemertina		0.04091
Streblospio benedicti	886	0.01364
Tubificoides spp.	114	0.00227
Total Abundance w/ Epi.	12500	
Total Abundance w/o Epi.	12500	
Number of Taxa w/ Epi.	9	
Number of Taxa w/o Epi.	9	
Total Biomass w/ Epi.		0.49659
Total Biomass w/o Epi.		0.49659

Station: NO205	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 2.1	Salinity (ppt): 21.70	Sediment Silt-Clay (%): 90.86

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.33 | Condition: Degraded | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.70	1	Pollution Indicative Species Abundance (%)	11.22	
Abundance (#/m2)	9114	1	Pollution Indicative Species Biomass (%)	11.41	3
Biomass (g/m2)	2.09	3	Pollution Sensitive Species Abundance (%)	68.83	
Carnivore-Omnivore Abundance (%)	4.99	1	Pollution Sensitive Species Biomass (%)	69.78	5
Deep Deposit Feeder Abundance (%)	69.58				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Carinoma tremaphoros	159	
Cyathura polita	205	0.40909
Eteone heteropoda	45	0.00682
Heteromastus filiformis	91	0.06591
Leitoscoloplos robustus	68	0.20454
Leptocheirus plumulosus	1386	0.21818
Macoma balthica	23	0.61136
Mediomastus ambiseta	6045	0.43863
Nemertina		0.10455
Parahesione luteola	23	0.00114
Paraprionospio pinnata	45	0.00227
Podarkeopsis levifuscina	23	0.00227
Streblospio benedicti	864	0.02500
Tubificoides spp.	136	0.00114
Total Abundance w/ Epi.	9114	
Total Abundance w/o Epi.	9114	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		2.09090
Total Biomass w/o Epi.		2.09090

Station: NO206	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 11.0	Salinity (ppt): 22.80	Sediment Silt-Clay (%): 90.00

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67			Condition: Marginal		# Attributes Scored: 6	
	Value	Score			Value	Score
Shannon-Wiener Index	2.07	1	Pollution Indicative Species Abundance (%)		12.28	
Abundance (#/m2)	2591	5	Pollution Indicative Species Biomass (%)		22.38	1
Biomass (g/m2)	0.57	3	Pollution Sensitive Species Abundance (%)		52.63	
Carnivore-Omnivore Abundance (%)	4.39	1	Pollution Sensitive Species Biomass (%)		76.63	5
Deep Deposit Feeder Abundance (%)	82.46					

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	45	0.00114
Eteone heteropoda	23	0.00114
Glycinde solitaria	45	0.02045
Leitoscoloplos robustus	68	0.10909
Listriella barnardi	23	0.00114
Loimia medusa	91	0.39545
Mediomastus ambiseta	1182	0.02273
Paraprionospio pinnata	114	0.01591
Streblospio benedicti	114	0.00227
Synidotea laticauda (Epi)	23	0.00909
Tubificoides spp.	886	0.00455
Total Abundance w/ Epi.	2614	
Total Abundance w/o Epi.	2591	
Number of Taxa w/ Epi.	11	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.58295
Total Biomass w/o Epi.		0.57386

Station: NO207	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.2	Salinity (ppt): 22.20	Sediment Silt-Clay (%): 7.41

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 (%)		0.00	
Abundance (#/m2)	0	1	Pollution Indicative Species Biomass (%)		100.00	1
Biomass (g/m2)	0.00	1	Pollution Sensitive Species Abundance (%)		0.00	1
Carnivore-Omnivore Abundance (%)	0.00		Pollution Sensitive Species Biomass (%)		0.00	
Deep Deposit Feeder Abundance (%)	0.00	1				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
No Organisms Present		0.00000
Total Abundance w/ Epi.		
Total Abundance w/o Epi.		
Number of Taxa w/ Epi.	0	
Number of Taxa w/o Epi.	0	
Total Biomass w/ Epi.		0.00000
Total Biomass w/o Epi.		0.00000

Station: NO208	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 4.9	Salinity (ppt): 21.10	Sediment Silt-Clay (%): 10.45

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.99	1	Pollution Indicative Species Abundance (%)	14.08	
Abundance (#/m2)	1614	3	Pollution Indicative Species Biomass (%)	57.43	1
Biomass (g/m2)	0.11	1	Pollution Sensitive Species Abundance (%)	77.46	5
Carnivore-Omnivore Abundance (%)	15.49		Pollution Sensitive Species Biomass (%)	37.62	
Deep Deposit Feeder Abundance (%)	60.56	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Cyclaspis varians	68	0.00227
Glycinde solitaria	250	0.02045
Leitoscoloplos robustus	23	0.06136
Leucon americanus	45	0.00227
Mediomastus ambiseta	955	0.02045
Mulinia lateralis	23	0.00227
Mya arenaria	23	0.00114
Oxyurostylis smithi	23	0.00114
Streblospio benedicti	182	0.00227
Tellina agilis	23	0.00114
Total Abundance w/ Epi.	1614	
Total Abundance w/o Epi.	1614	
Number of Taxa w/ Epi.	10	
Number of Taxa w/o Epi.	10	
Total Biomass w/ Epi.		0.11477
Total Biomass w/o Epi.		0.11477

Station: NO209	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 7.0	Salinity (ppt): 22.20	Sediment Silt-Clay (%): 96.88

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 1.00 — Condition: Severely Degr. — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	1.14	1	Pollution Indicative Species Abundance (%)	76.47	
Abundance (#/m2)	386	1	Pollution Indicative Species Biomass (%)	94.34	1
Biomass (g/m2)	0.06	1	Pollution Sensitive Species Abundance (%)	0.00	
Carnivore-Omnivore Abundance (%)	5.88	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)
Ampelisca abdita	45	0.00114
Edwardsia elegans	23	0.00114
Listriella barnardi	23	0.00114
Paraprionospio pinnata	295	0.05682
Total Abundance w/ Epi.	386	
Total Abundance w/o Epi.	386	
Number of Taxa w/ Epi.	4	
Number of Taxa w/o Epi.	4	
Total Biomass w/ Epi.		0.06023
Total Biomass w/o Epi.		0.06023

Station: NO210	Habitat: Polyhaline Mud	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 5.5	Salinity (ppt): 21.90	Sediment Silt-Clay (%): 95.76

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 2.67 | Condition: Marginal | # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	2.88	3	Pollution Indicative Species Abundance (%)	35.71	
Abundance (#/m2)	955	1	Pollution Indicative Species Biomass (%)	1.99	5
Biomass (g/m2)	2.86	3	Pollution Sensitive Species Abundance (%)	21.43	
Carnivore-Omnivore Abundance (%)	16.67	1	Pollution Sensitive Species Biomass (%)	37.11	3
Deep Deposit Feeder Abundance (%)	11.90				

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Acteocina canaliculata	23	0.00114
Ampelisca abdita	23	0.00114
Bhawania heteroseta	23	0.00682
Lepidametria commensalis	23	0.02727
Listriella barnardi	159	0.00682
Loimia medusa	136	1.04545
Neanthes succinea	23	0.02045
Notomastus sp. A Ewing	114	1.61590
Ogyrides alphaerostris	23	0.03409
Paraprionospio pinnata	341	0.05682
Phoronis spp.	23	0.00682
Pinnotheridae	23	0.02955
Podarkeopsis levifuscina	23	0.00455
Total Abundance w/ Epi.	955	
Total Abundance w/o Epi.	955	
Number of Taxa w/ Epi.	13	
Number of Taxa w/o Epi.	13	
Total Biomass w/ Epi.		2.85681
Total Biomass w/o Epi.		2.85681

Station: NO211	Habitat: Polyhaline Sand	
Gear: Young Grab	Date: 2001	Time:
Depth (m): 1.6	Salinity (ppt): 21.90	Sediment Silt-Clay (%): 37.34

BENTHIC INDEX OF BIOTIC INTEGRITY

B-IBI Score: 4.00 — Condition: Meets Goal — # Attributes Scored: 6

	Value	Score		Value	Score
Shannon-Wiener Index	3.28	3	Pollution Indicative Species Abundance (%)	1.89	
Abundance (#/m2)	6000	3	Pollution Indicative Species Biomass (%)	4.23	5
Biomass (g/m2)	6.98	5	Pollution Sensitive Species Abundance (%)	38.26	3
Carnivore-Omnivore Abundance (%)	5.30		Pollution Sensitive Species Biomass (%)	90.72	
Deep Deposit Feeder Abundance (%)	66.29	5			

BENTHIC ABUNDANCE (per sq. meter)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Ampelisca abdita	45	0.00227
Anthozoa	114	0.01136
Capitella capitata complex	1045	0.07500
Clymenella torquata	1295	6.29771
Edotea triloba (Epi)	23	0.09318
Elasmopus laevis (Epi)	341	0.04091
Erichsonella attenuata (Epi)	523	0.00455
Exogone dispar	136	0.00114
Gemma gemma	841	0.05682
Glycinde solitaria	23	0.00227
Heteromastus filiformis	205	0.08409
Leitoscoloplos robustus	68	0.29318
Listriella barnardi	23	0.00114
Listriella clymenellae	250	0.01818
Loimia medusa	23	0.00114
Mediomastus ambiseta	705	0.01591
Melita spp. (Epi)	68	0.00227
Neanthes succinea	45	0.05909
Paracaprella tenuis (Epi)	45	0.00114
Polydora cornuta	23	0.00227
Prionospio steenstrupi	432	0.03409
Sabellidae	23	0.00909

BENTHIC ABUNDANCE (per sq. meter) (con't)

TAXA	Abundance (#/m2)	Biomass (g/m2)
Streblospio benedicti	45	0.00227
Tubificoides spp.	659	0.01591
Total Abundance w/ Epi.	7000	
Total Abundance w/o Epi.	6000	
Number of Taxa w/ Epi.	24	
Number of Taxa w/o Epi.	19	
Total Biomass w/ Epi.		7.12498
Total Biomass w/o Epi.		6.98293