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Table 4. Seasonal Macrobenthic Standing Crop and Brey's Macrobenthic Secondary Production of Soft-Bottom, Rocky Intertidal, and Rocky Subtidal Habitats in the Hampton Roads Bridge-Tunnel Project Area

Site	Component	Transect	Standing Crop (g AFDW m <sup>-2</sup> )	Secondary Production (g AFDW m <sup>-2</sup> yr <sup>-1</sup> )
17-01	Soft-Bottom	NB	0.14	2.14
17-02	Soft-Bottom		0.32	2.52
17-03	Soft-Bottom		1.17	6.60
17-04	Soft-Bottom		1.31	8.87
17-05	Soft-Bottom		2.25	12.22
17-06	Soft-Bottom		1.95	10.04
17-07	Soft-Bottom		0.99	5.28
17-11-1	Soft-Bottom	t1	2.73	16.90
17-11-2	Soft-Bottom		1.35	6.66
17-11-3	Soft-Bottom		0.57	4.16
17-08-1	Soft-Bottom	t2	1.87	11.18
17-08-2	Soft-Bottom		1.78	11.61
17-08-3	Soft-Bottom		1.89	11.91
17-09-1	Soft-Bottom	t3	0.81	5.72
17-09-2	Soft-Bottom		0.67	4.32
17-09-3	Soft-Bottom		2.12	12.10
17-10-1	Soft-Bottom	t4	2.44	12.53
17-10-2	Soft-Bottom		1.01	2.82
17-10-3	Soft-Bottom		0.82	3.76
17-12-1	Soft-Bottom	t5	0.82	5.45
17-12-2	Soft-Bottom		0.72	4.74
17-12-3	Soft-Bottom		5.90	40.84
17-16-1	Soft-Bottom	t6	3.54	20.76
17-16-2	Soft-Bottom		1.03	5.64
17-16-3	Soft Bottom		1.47	8.92

Table 4. Continued

Site	Component	Transect	Standing Crop (g AFDW m <sup>-2</sup> )	Secondary Production (g AFDW m <sup>-2</sup> yr <sup>-1</sup> )
17-13-1	Soft-Bottom	t7	1.95	11.14
17-13-2	Soft-Bottom		0.69	4.97
17-13-3	Soft-Bottom		1.90	11.21
17-14-1	Soft-Bottom	t8	1.00	6.28
17-14-2	Soft-Bottom		2.05	14.44
17-14-3	Soft-Bottom		1.52	6.65
17-15-1	Soft-Bottom	t9	14.71	104.45
17-15-2	Soft-Bottom		6.70	35.74
17-15-3	Soft-Bottom		4.19	26.57
17-17-1	Soft-Bottom	t10	6.94	35.60
17-17-2	Soft-Bottom		6.34	34.51
17-17-3	Soft-Bottom		10.97	52.03
17-18	Soft-Bottom	SB	7.41	45.04
17-19	Soft-Bottom		1.79	9.73
17-20	Soft-Bottom		0.82	4.77
17-21	Soft-Bottom		2.37	11.00
17-22	Soft-Bottom		3.33	13.05
17-23	Soft-Bottom		4.95	23.86
17-24	Soft-Bottom		1.66	10.08
17-25	Soft-Bottom		SC	2.46
17-26	Soft-Bottom	2.54		13.63
17-27	Soft-Bottom	5.01		22.13
17-28	Soft-Bottom	0.54		5.31
EPI1-INT1	Rocky Intertidal	t1	787.03	578.52
EPI2-INT1	Rocky Intertidal	t2	8.45	38.76
EPI3-INT1	Rocky Intertidal	t3	23.68	102.73
EPI4-INT1	Rocky Intertidal	t4	29.22	49.34
EPI5-INT1	Rocky Intertidal	t5	61.82	167.73

Table 4. Continued

Site	Component	Transect	Standing Crop (g AFDW m <sup>-2</sup> )	Secondary Production (g AFDW m <sup>-2</sup> yr <sup>-1</sup> )
EPI6-INT1	Rocky Intertidal	t6	92.99	253.58
EPI7-INT1	Rocky Intertidal	t7	17.72	66.83
EPI8-INT1	Rocky Intertidal	t8	35.08	68.90
EPI9-INT1	Rocky Intertidal	t9	97.81	128.13
EPI10-INT1	Rocky Intertidal	t10	30.20	114.25
EPI11-INT1	Rocky Intertidal	t11	36.43	145.69
EPI12-INT1	Rocky Intertidal	t12	56.12	157.39
EPI1-SUB1	Rocky Subtidal	t1	24.21	204.09
EPI1-SUB2	Rocky Subtidal		29.67	68.69
EPI1-SUB3	Rocky Subtidal		24.41	30.89
EPI2-SUB1	Rocky Subtidal	t2	189.73	337.73
EPI2-SUB2	Rocky Subtidal		13.99	90.50
EPI2-SUB3	Rocky Subtidal		6.25	36.93
EPI3-SUB1	Rocky Subtidal	t3	3.74	37.68
EPI3-SUB2	Rocky Subtidal		15.85	67.76
EPI3-SUB3	Rocky Subtidal		2.97	29.98
EPI4-SUB1	Rocky Subtidal	t4	8.06	54.43
EPI4-SUB2	Rocky Subtidal		10.35	82.00
EPI4-SUB3	Rocky Subtidal		7.91	72.72
EPI5-SUB1	Rocky Subtidal	t5	13.88	92.31
EPI5-SUB2	Rocky Subtidal		4.43	48.18
EPI5-SUB3	Rocky Subtidal		5.86	59.70
EPI6-SUB1	Rocky Subtidal	t6	16.58	191.01
EPI6-SUB2	Rocky Subtidal		4.13	16.91
EPI6-SUB3	Rocky Subtidal		3.96	30.25
EPI7-SUB1	Rocky Subtidal	t7	11.17	79.76
EPI7-SUB2	Rocky Subtidal		15.71	93.11
EPI7-SUB3	Rocky Subtidal		8.17	64.86

Table 4. Continued

Site	Component	Transect	Standing Crop (g AFDW m <sup>-2</sup> )	Secondary Production (g AFDW m <sup>-2</sup> yr <sup>-1</sup> )
EPI8-SUB1	Rocky Subtidal	t8	12.10	92.56
EPI8-SUB2	Rocky Subtidal		7.63	48.91
EPI8-SUB3	Rocky Subtidal		13.15	108.54
EPI9-SUB1	Rocky Subtidal	t9	14.77	110.76
EPI9-SUB2	Rocky Subtidal		7.60	58.90
EPI9-SUB3	Rocky Subtidal		36.78	234.73
EPI10-SUB1	Rocky Subtidal	t10	5.05	44.68
EPI10-SUB2	Rocky Subtidal		8.52	85.81
EPI10-SUB3	Rocky Subtidal		7.94	42.38
EPI11-SUB1	Rocky Subtidal	t11	2.46	15.61
EPI11-SUB2	Rocky Subtidal		5.54	49.71
EPI11-SUB3	Rocky Subtidal		6.43	50.58
EPI12-SUB1	Rocky Subtidal	t12	9.77	108.66
EPI12-SUB2	Rocky Subtidal		16.03	163.20
EPI12-SUB3	Rocky Subtidal		11.47	99.10

Table 5. Wet Weight Biomass (g m<sup>-2</sup>) of Algae and Colonial Species. p = presence, with null weight.

Site	Component	Transect	Algae	Sponges	Hydroids	Bryozoans
EPI1-INT1	Rocky Intertidal	t1	p	0	0	0
EPI2-INT1	Rocky Intertidal	t2	p	0	0	0
EPI3-INT1	Rocky Intertidal	t3	p	0	0	0
EPI4-INT1	Rocky Intertidal	t4	p	0	0	0
EPI5-INT1	Rocky Intertidal	t5	p	0	0	0
EPI6-INT1	Rocky Intertidal	t6	p	0	0	0
EPI7-INT1	Rocky Intertidal	t7	p	0	0	0
EPI8-INT1	Rocky Intertidal	t8	p	0	0	0
EPI9-INT1	Rocky Intertidal	t9	p	0	0	0
EPI10-INT1	Rocky Intertidal	t10	p	0	0	0
EPI11-INT1	Rocky Intertidal	t11	p	0	0	0
EPI12-INT1	Rocky Intertidal	t12	p	0	0	0
EPI1-SUB1	Rocky Subtidal		717.8	148.9	p	p
EPI1-SUB2	Rocky Subtidal		p	p	p	p
EPI1-SUB3	Rocky Subtidal		t1	288.9	p	p
EPI2-SUB1	Rocky Subtidal		3251.1	p	p	p
EPI2-SUB2	Rocky Subtidal		3427.7	p	0	p
EPI2-SUB3	Rocky Subtidal		t2	51.1	307.8	p
EPI3-SUB1	Rocky Subtidal		400.0	7.3	0	p
EPI3-SUB2	Rocky Subtidal		608.9	p	p	p
EPI3-SUB3	Rocky Subtidal		t3	700.0	p	0
EPI4-SUB1	Rocky Subtidal		2263.3	p	0	p
EPI4-SUB2	Rocky Subtidal		3100.0	133.3	0	p
EPI4-SUB3	Rocky Subtidal		t4	2270.0	355.6	0

Table 5. Continued

Site	Component	Transect	Algae	Sponges	Hydroids	Bryozoans
EPI5-SUB1	Rocky Subtidal	t5	1971.1	p	0	p
EPI5-SUB2	Rocky Subtidal		655.6	0	4.2	p
EPI5-SUB3	Rocky Subtidal		1288.9	p	0	p
EPI6-SUB1	Rocky Subtidal	t6	6051.1	p	0	p
EPI6-SUB2	Rocky Subtidal		p	0	0	0
EPI6-SUB3	Rocky Subtidal		110.0	1232.2	p	p
EPI7-SUB1	Rocky Subtidal	t7	1877.8	p	0	p
EPI7-SUB2	Rocky Subtidal		62.6	854.4	p	p
EPI7-SUB3	Rocky Subtidal		171.1	p	p	p
EPI8-SUB1	Rocky Subtidal	t8	2587.3	0	0	p
EPI8-SUB2	Rocky Subtidal		415.6	0	0	p
EPI8-SUB3	Rocky Subtidal		320.0	110.0	p	p
EPI9-SUB1	Rocky Subtidal	t9	p	0	0	0
EPI9-SUB2	Rocky Subtidal		422.2	p	0	p
EPI9-SUB3	Rocky Subtidal		p	922.2	p	p
EPI10-SUB1	Rocky Subtidal	t10	591.7	57.8	0	p
EPI10-SUB2	Rocky Subtidal		706.2	10.9	p	0
EPI10-SUB3	Rocky Subtidal		508.9	264.4	0	p
EPI11-SUB1	Rocky Subtidal	t11	168.9	0	p	0
EPI11-SUB2	Rocky Subtidal		1297.8	p	0	p
EPI11-SUB3	Rocky Subtidal		128.0	p	p	p
EPI12-SUB1	Rocky Subtidal	t12	750.0	0	0	p
EPI12-SUB2	Rocky Subtidal		1201.1	p	0	p
EPI12-SUB3	Rocky Subtidal		143.3	p	0	23.1



Table 6. Mean (per square meter) and Total (for region) Secondary Production of Macrobenthos in the Hampton Roads Bridge-Tunnel Project Area

<b>Region</b>	<b>Component</b>	<b>Area (m<sup>2</sup>)</b>	<b>Mean Production (g AFDW m<sup>-2</sup> yr<sup>-1</sup>)</b>	<b>Total Production (g AFDW yr<sup>-1</sup>)</b>	<b>Total Production (kg AFDW yr<sup>-1</sup>)</b>
North Bridge	Soft Bottom	101,211	6.81	689,244	689
South Bridge	Soft Bottom	249,984	16.79	4,197,231	4,197
North Island	Soft Bottom	146,324	10.31	1,508,600	1,509
South Island	Soft Bottom	85,013	10.00	850,127	850
South Cove	Soft Bottom	42,350	13.38	566,637	567
t9 and t10*	Soft Bottom	29,145	48.15	1,403,310	1,403
North Island	Rocky Intertidal	1,768	89.64	158,455	158
South Island	Rocky Intertidal	5,773	133.54	770,916	771
t1	Rocky Intertidal	191	578.52	110,358	110
North Island	Rocky Subtidal	4,441	87.57	388,883	389
South Island	Rocky Subtidal	12,393	85.24	1,056,409	1,056
Project Area	Soft Bottom				9,215
Project Area	Portal Islands				2,485

\*South Island Special Area

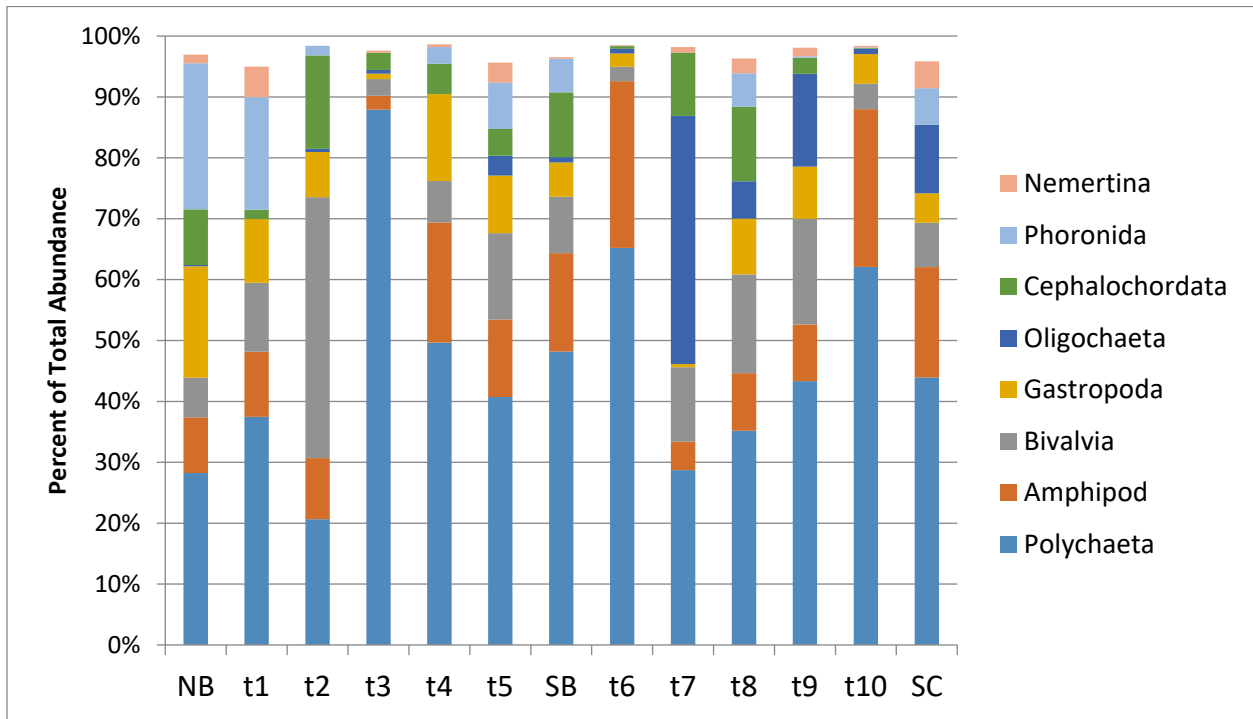


Figure 7. Percent Species Composition of Macrobenthos by Soft-Bottom Transect. NB = North Bridge, SB = South Bridge, SC = South Cove. t1-t5 = North Island, from north to south. t6-t10 = South Island, from north to south

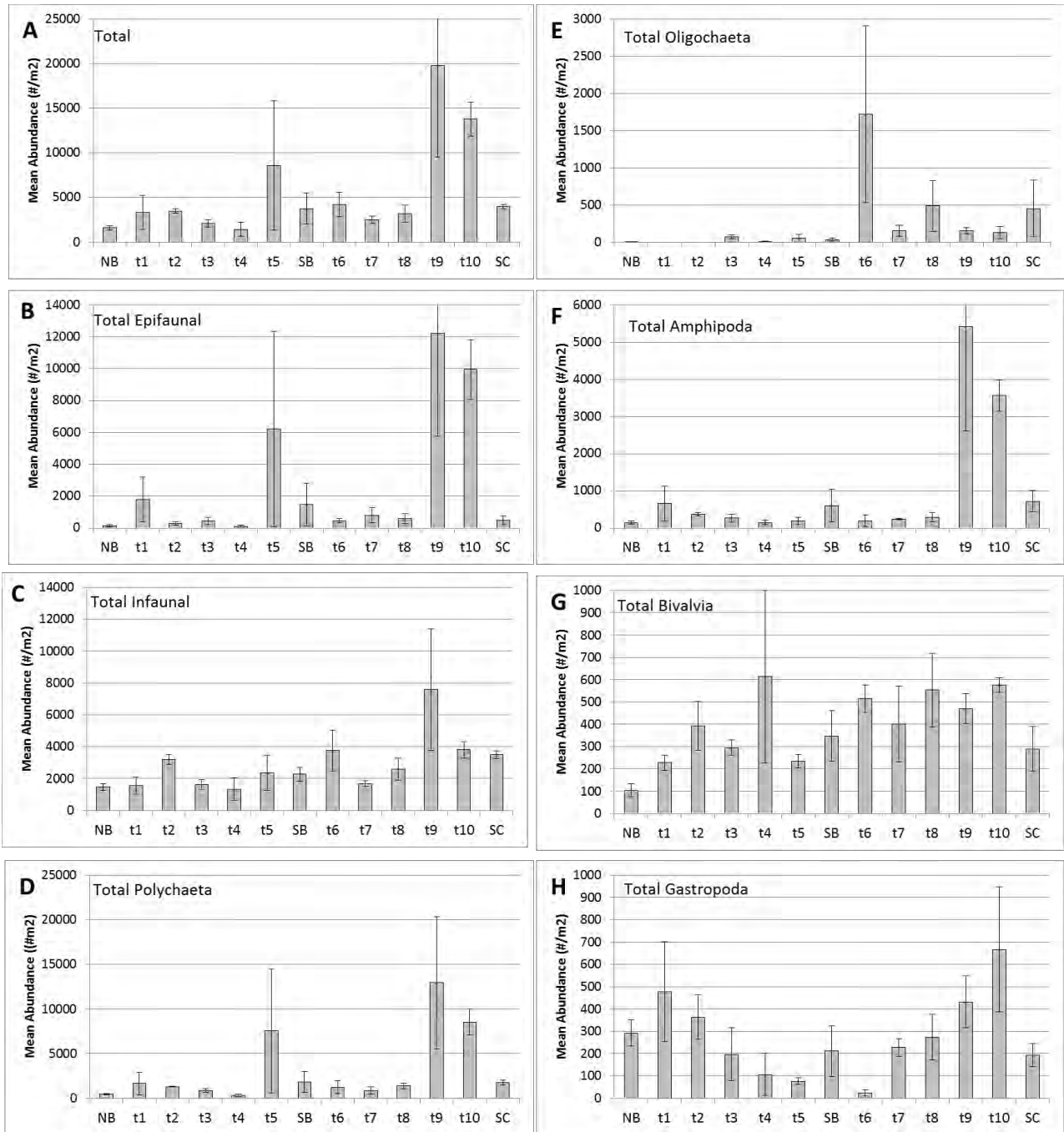


Figure 8. Density of Soft-Bottom Macrobenthos (mean  $\pm$  1 s.e.) for Various Taxa by Transect. Transects as in Figure 7

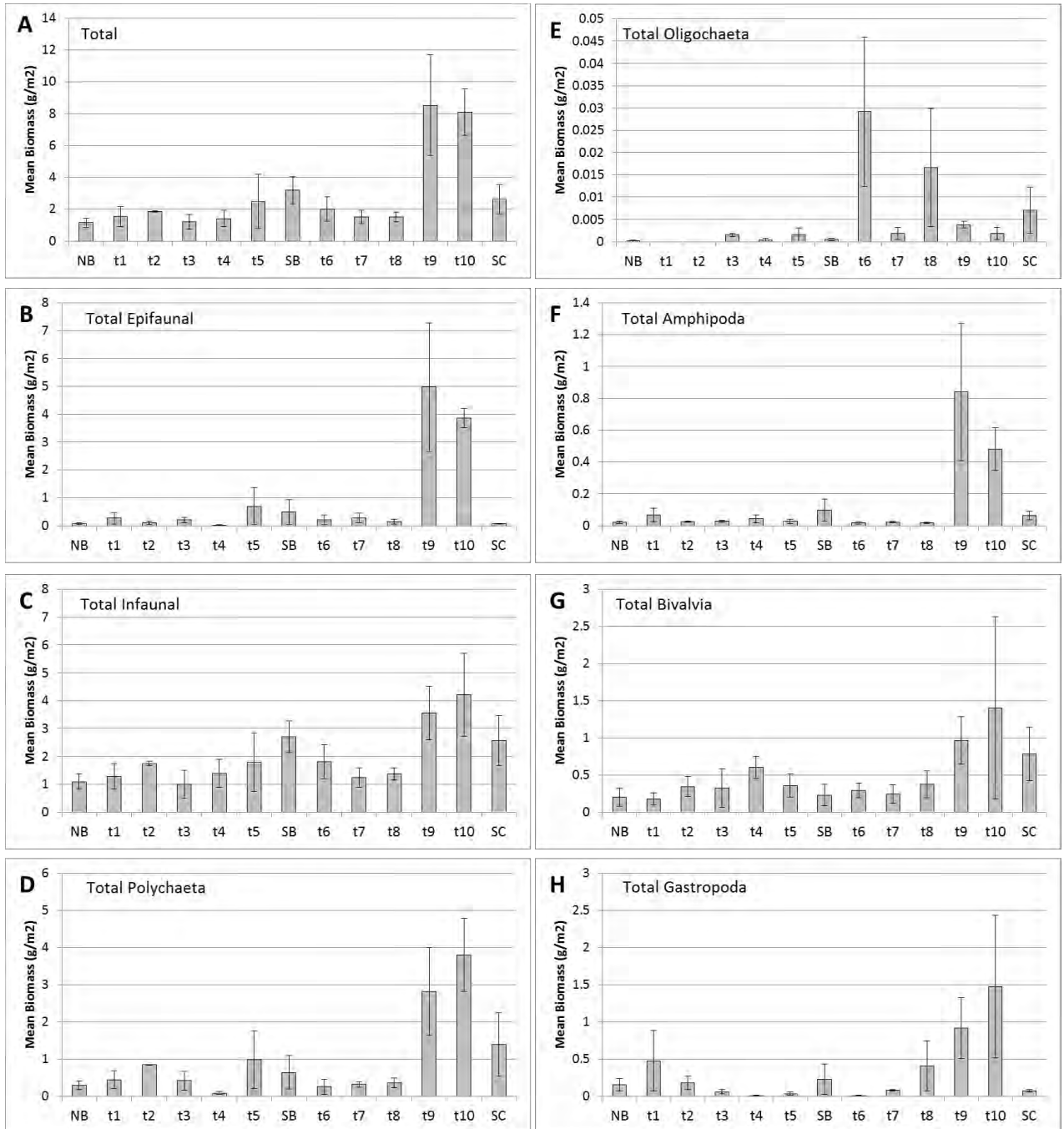


Figure 9. Biomass of Soft-Bottom Macrobenthos (mean g AFDW  $\pm$  1 s.e.) for Various Taxa by Transect. Transects as in Figure 7

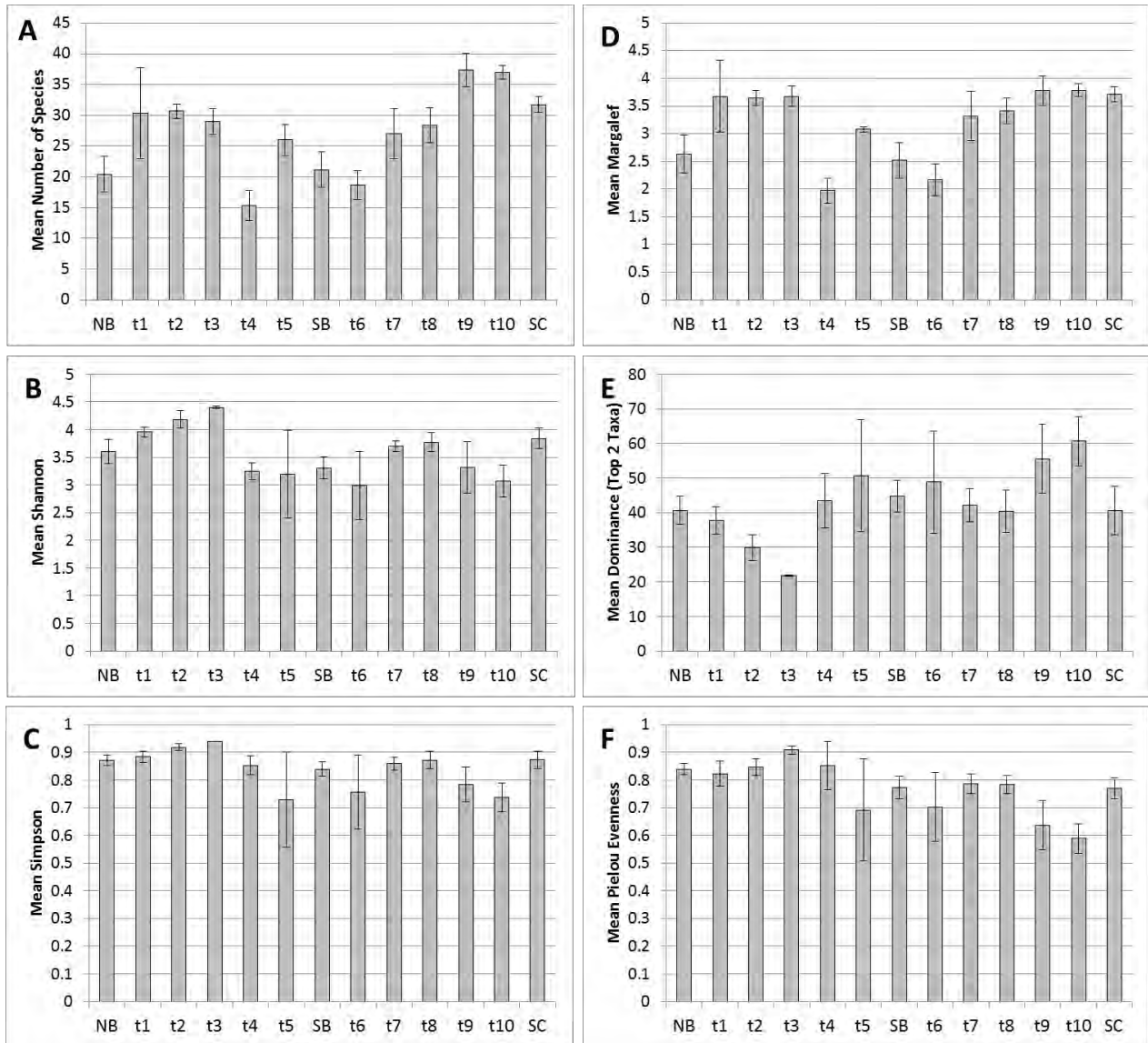


Figure 10. Diversity and Dominance Measures of the Soft-Bottom Benthic Community (mean  $\pm$  1 s.e.) by Transect. Transects as in Figure 7.



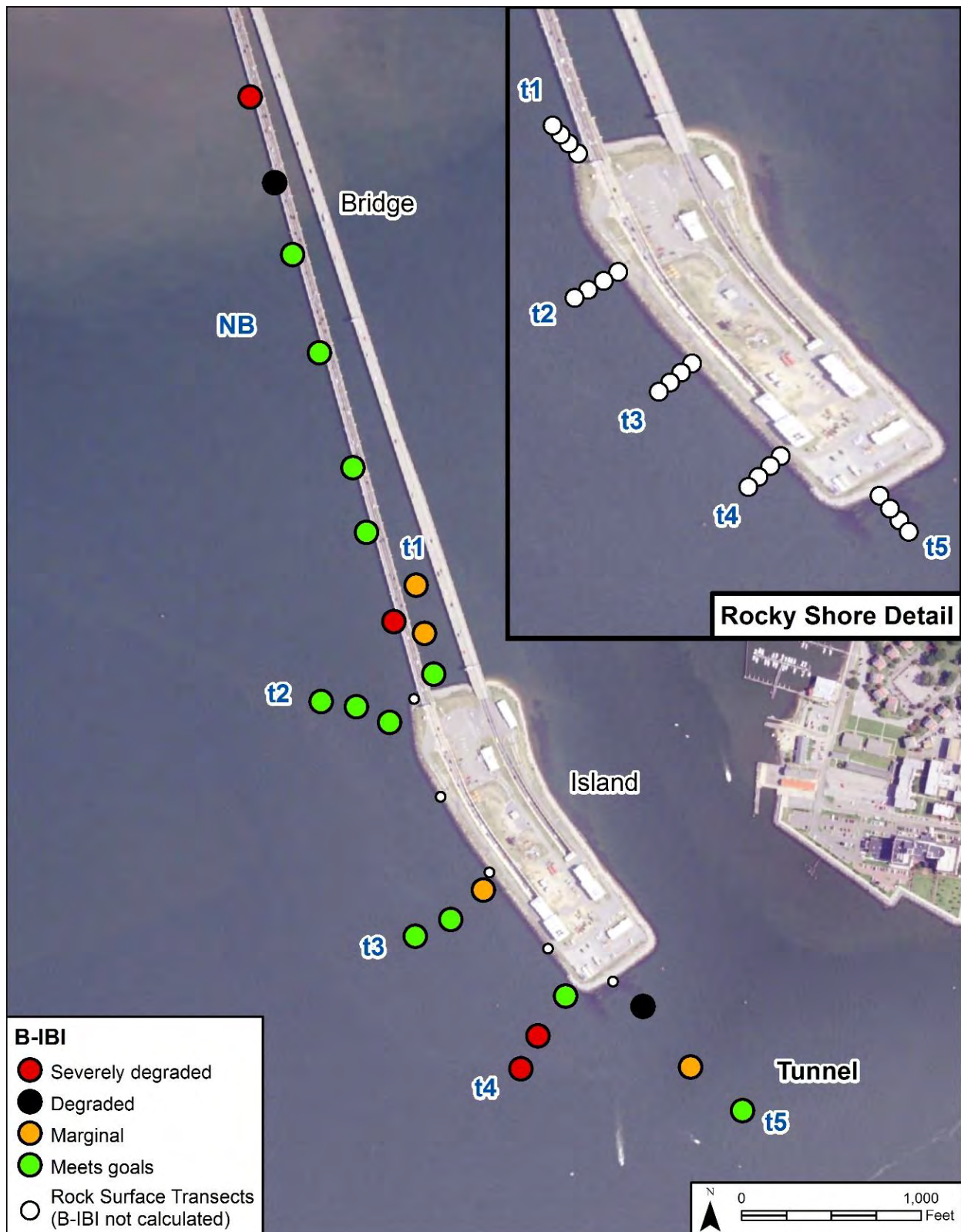


Figure 11. Benthic Community Condition of Soft-Bottom Macrobenthos at Sites in the North Bridge and North Portal Island Region

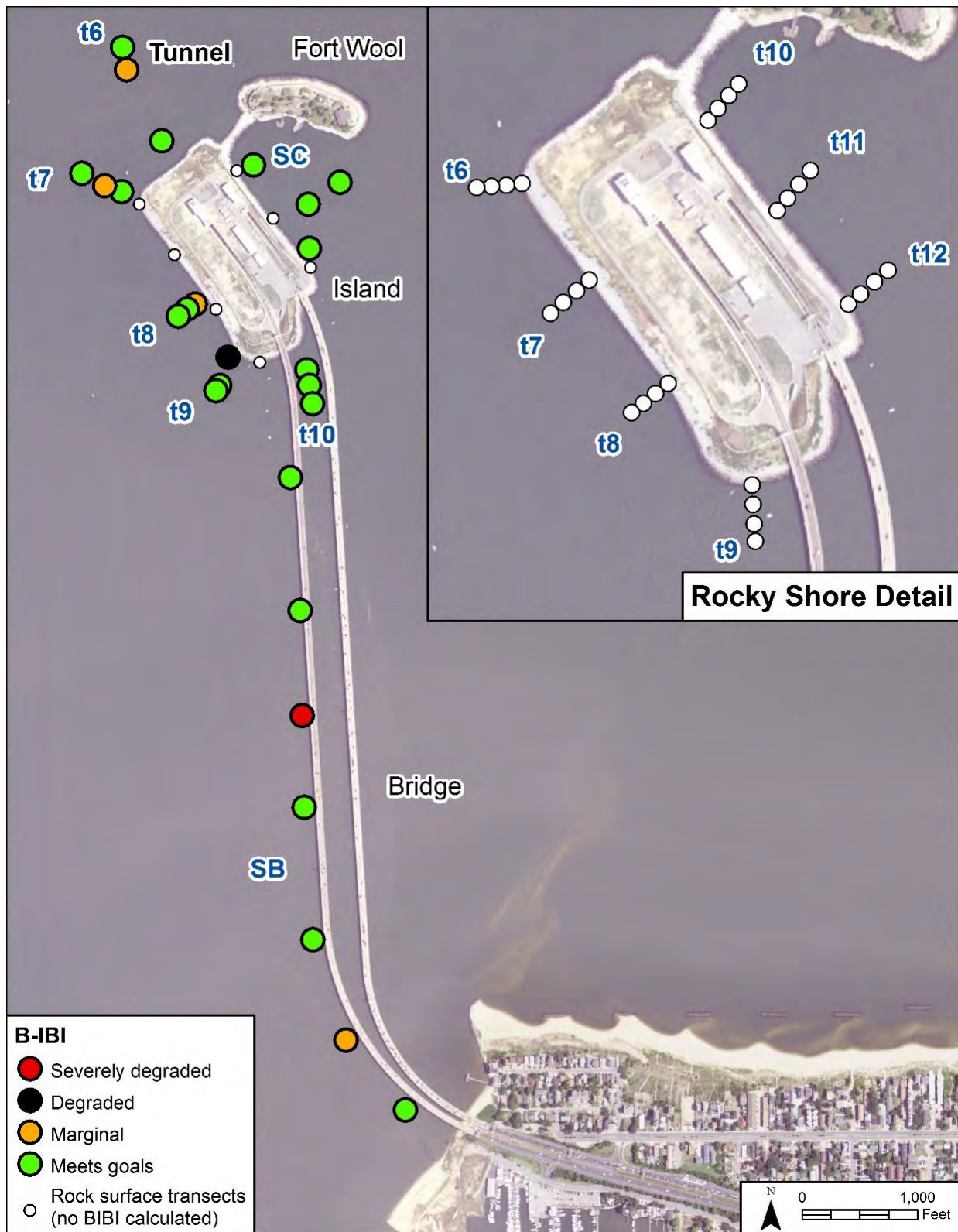


Figure 12. Benthic Community Condition of Soft-Bottom Macroinvertebrates at Sites in the South Bridge and South Portal Island Region

### ROCKY INTERTIDAL

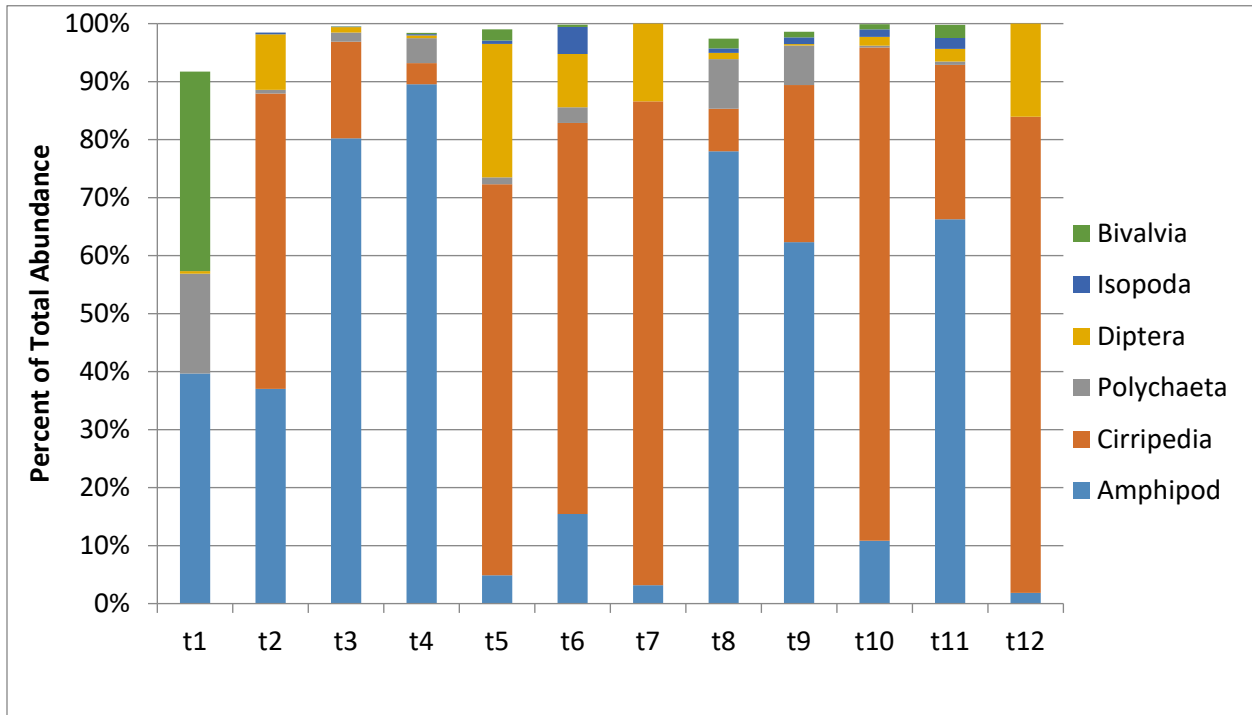


Figure 13. Percent Species Composition of Rocky Intertidal Macrobenthos by Transect. t1-t5 = North Island, t6-t12 = South Island



## Rocky Intertidal

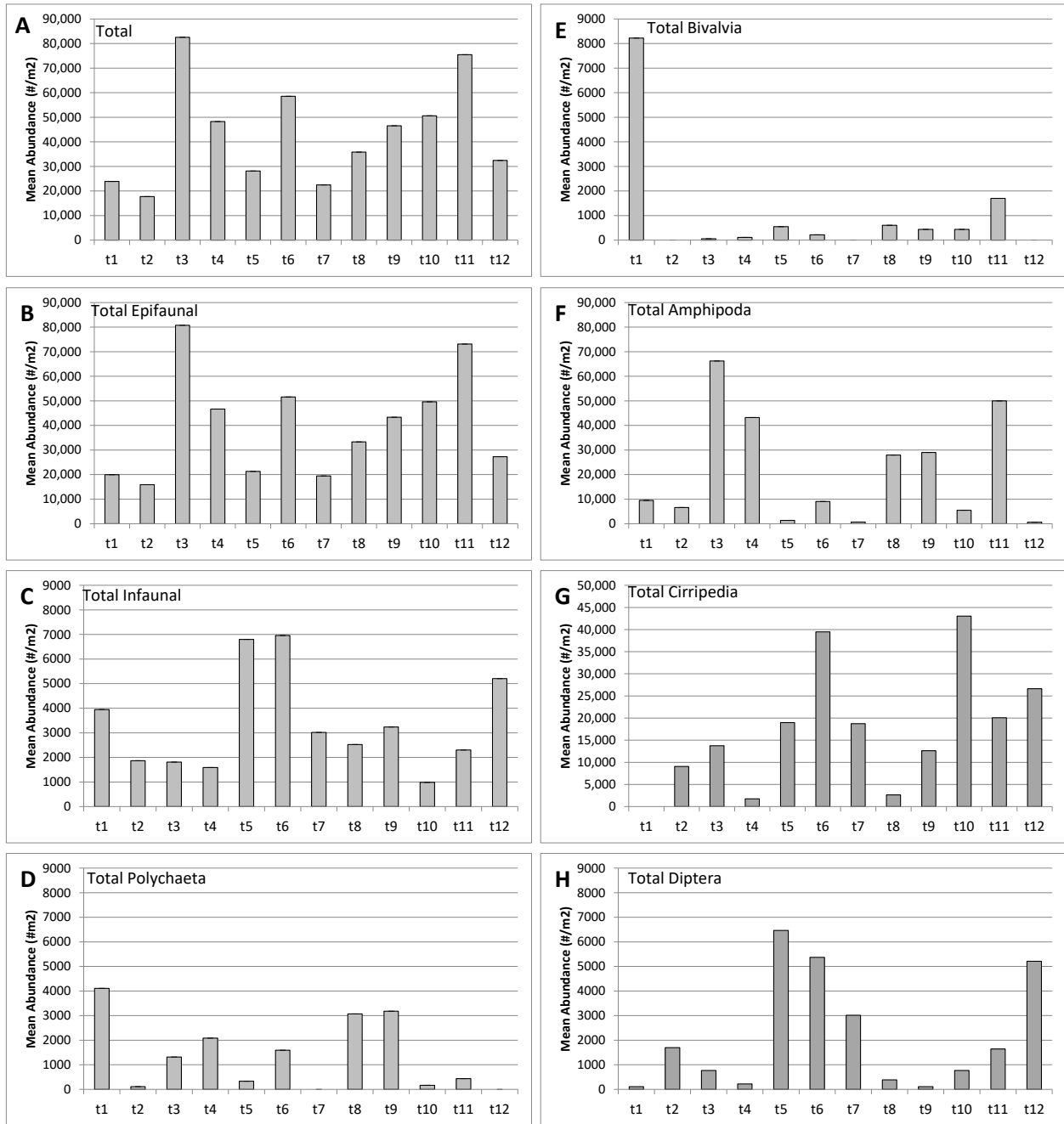


Figure 14. Density of Rocky Intertidal Macrobenthos (indiv m<sup>-2</sup>) for Various Taxa by Transect. Transects as in Figure 13.

## Rocky Intertidal

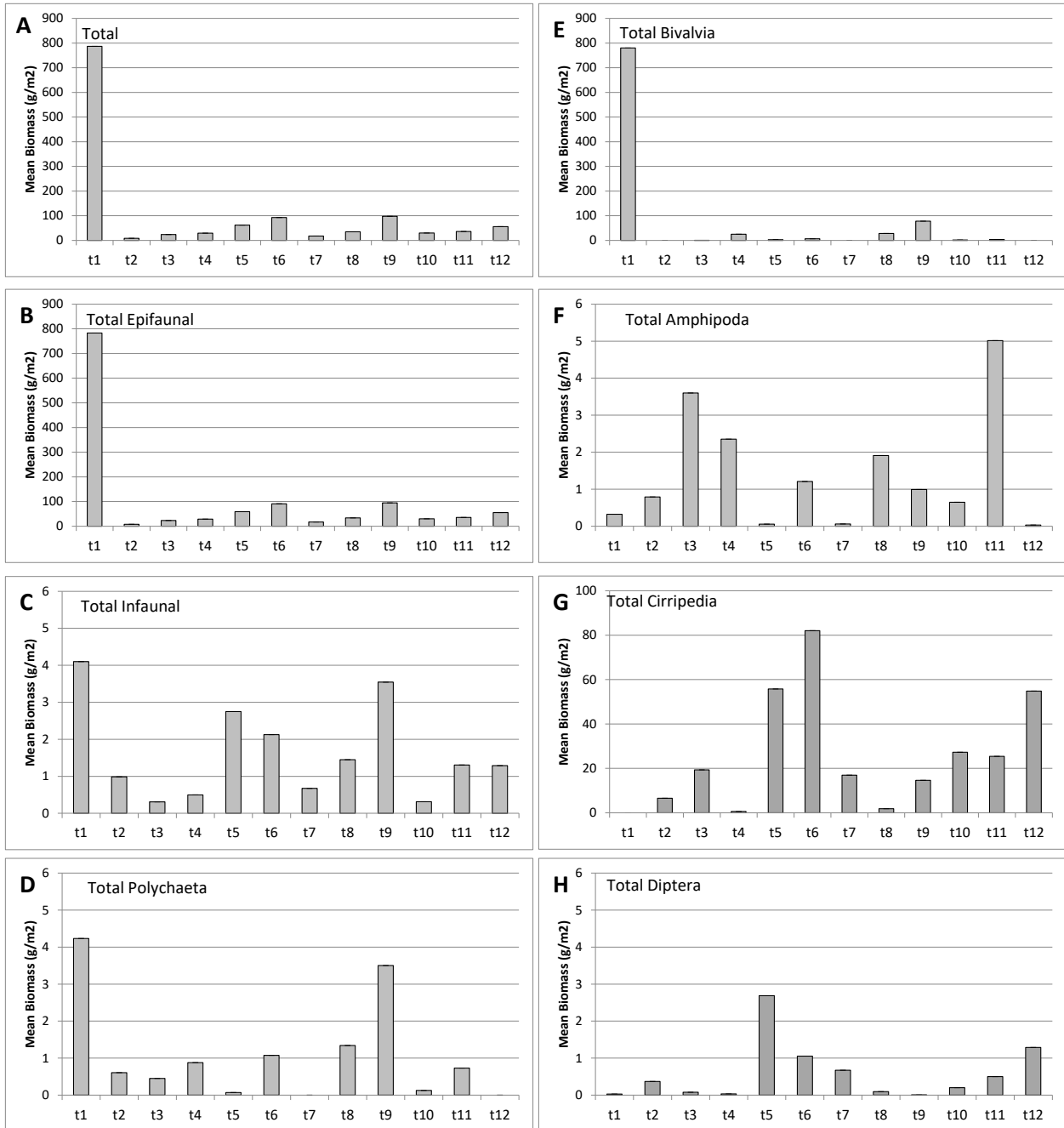


Figure 15. Biomass of Rocky Intertidal Macroenthos (g AFDW) for Various Taxa by Transect. Transects as in Figure 13.

## Rocky Subtidal

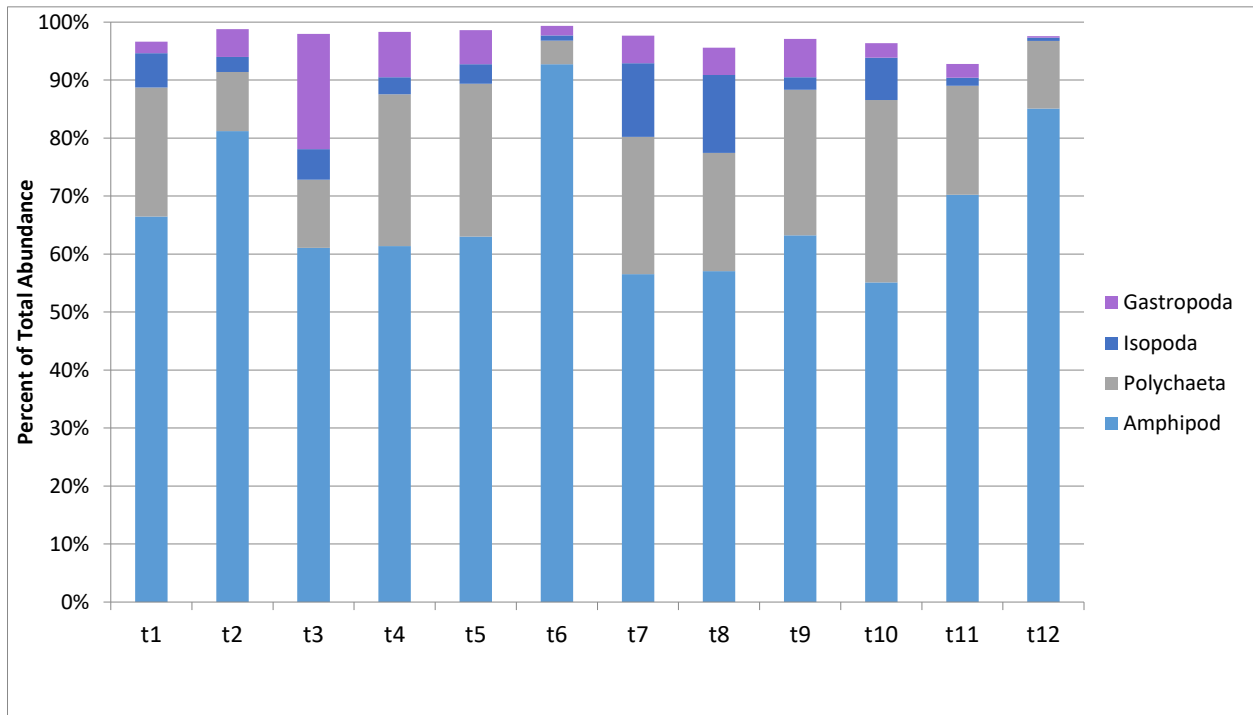


Figure 16. Percent Species Composition of Rocky Subtidal Macrobenthos by Transect. Transects as in Figure 13.

## Rocky Subtidal

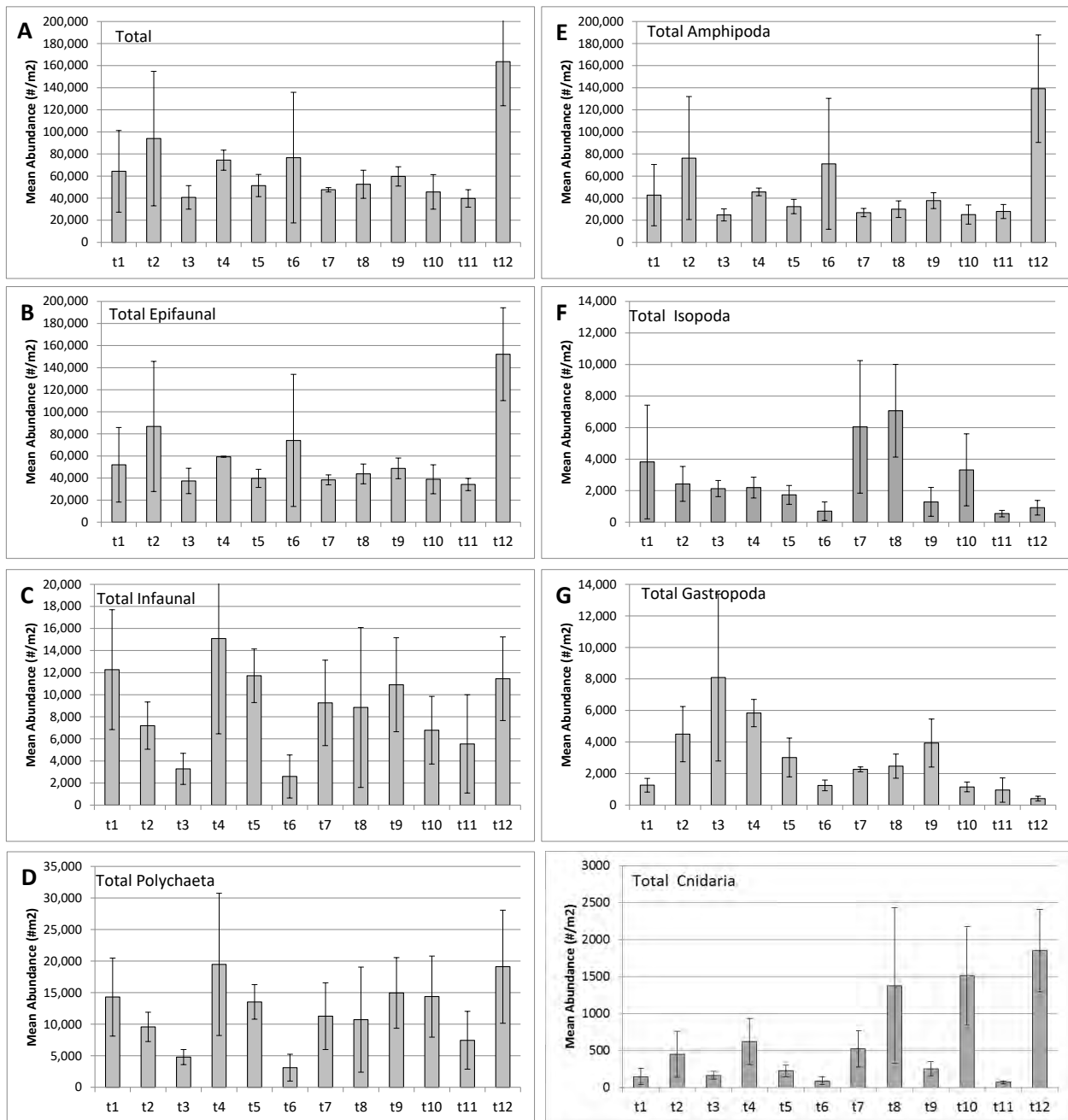


Figure 17. Density of Rocky Subtidal Macrobenthos (mean  $\pm$  1 s.e.) for Various Taxa by Transect. Transects as in Figure 13.

## Rocky Subtidal

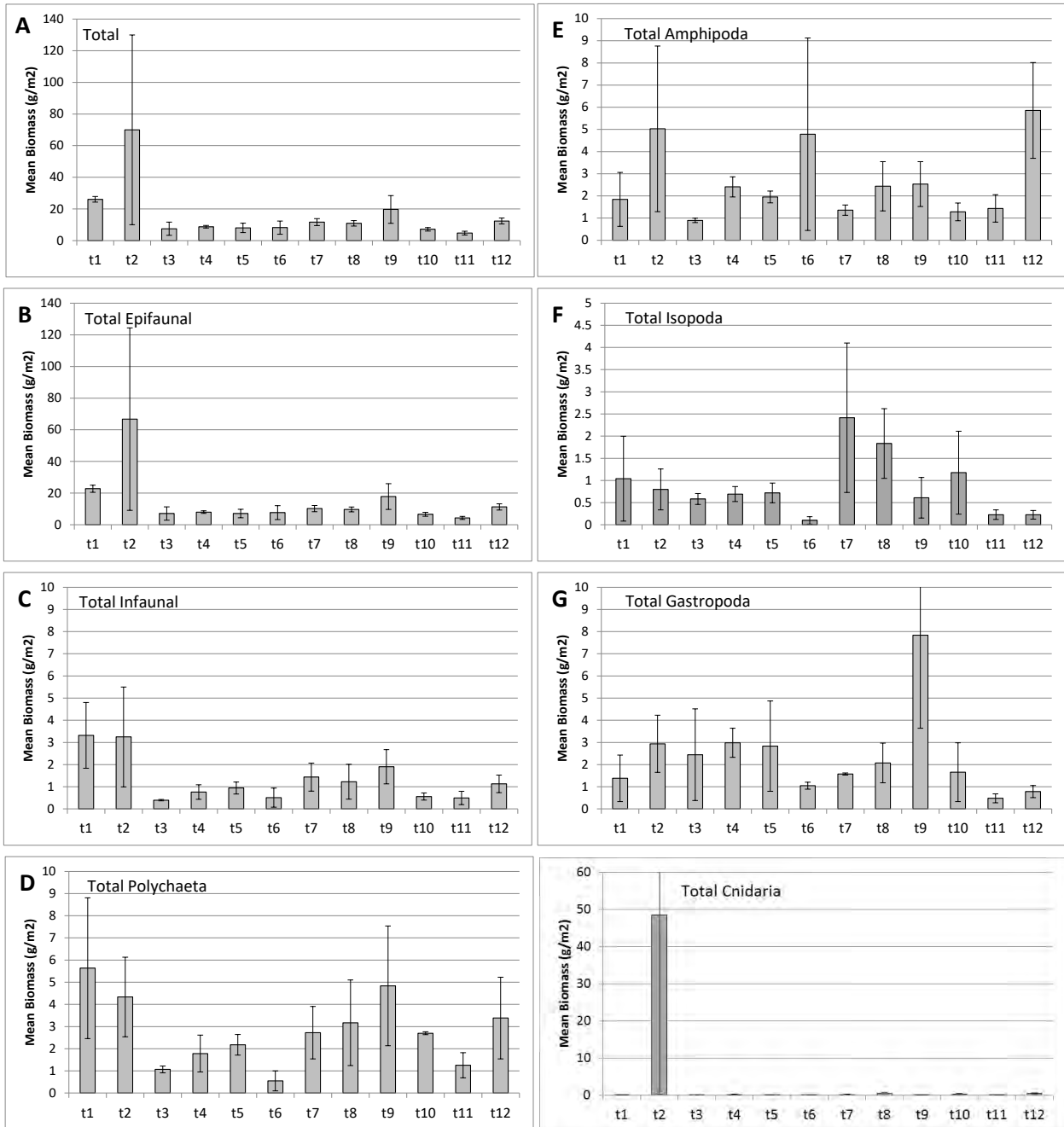


Figure 18. Biomass of Rocky Subtidal Macrobenthos (mean g AFDW  $\pm$  1 s.e.) for Various Taxa by Transect. Transects as in Figure 13.

## Rocky Intertidal

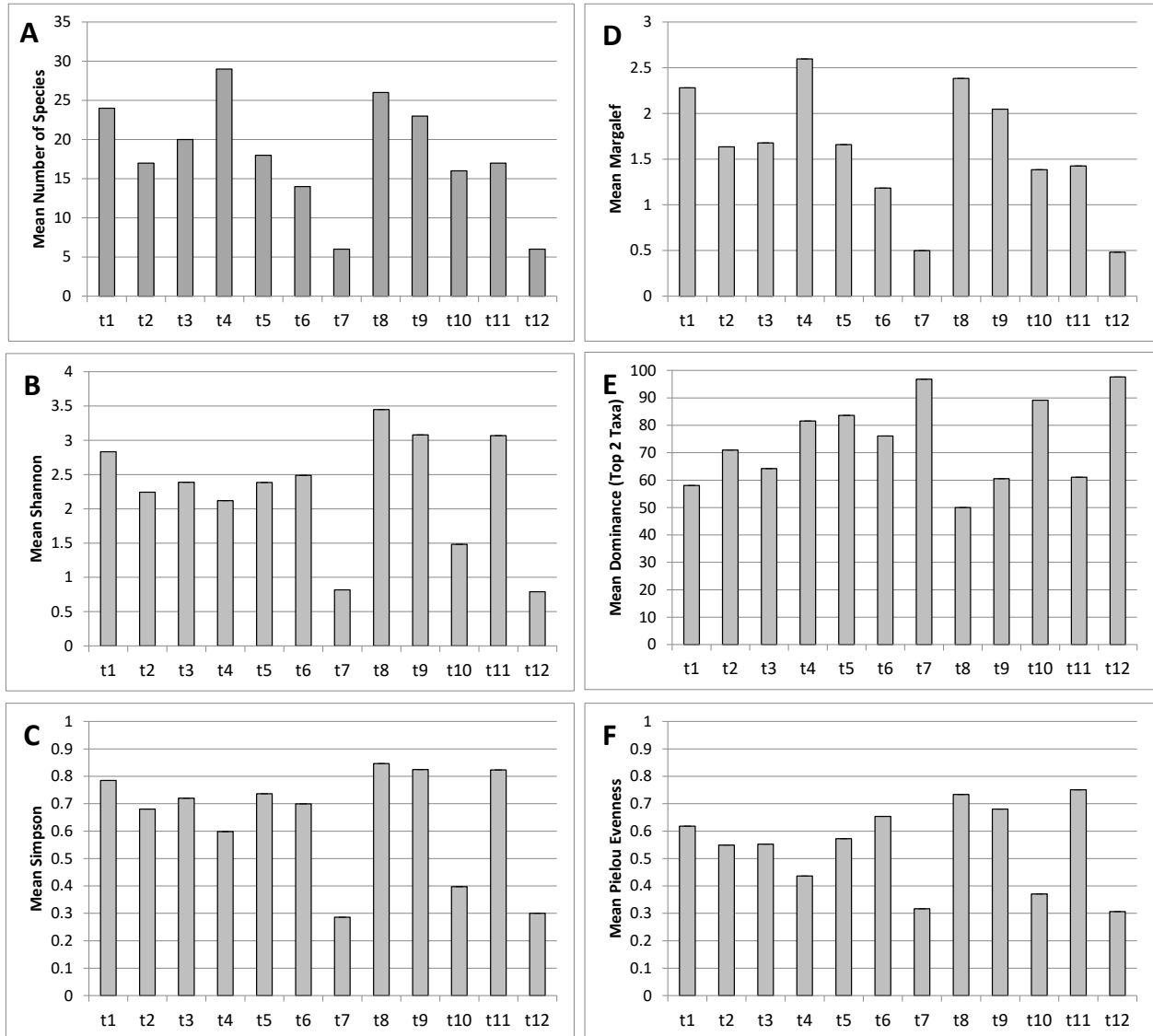


Figure 19. Diversity and Dominance Measures of Rocky Intertidal Macrobenthos by Transect. Transects as in Figure 13.

## Rocky Subtidal

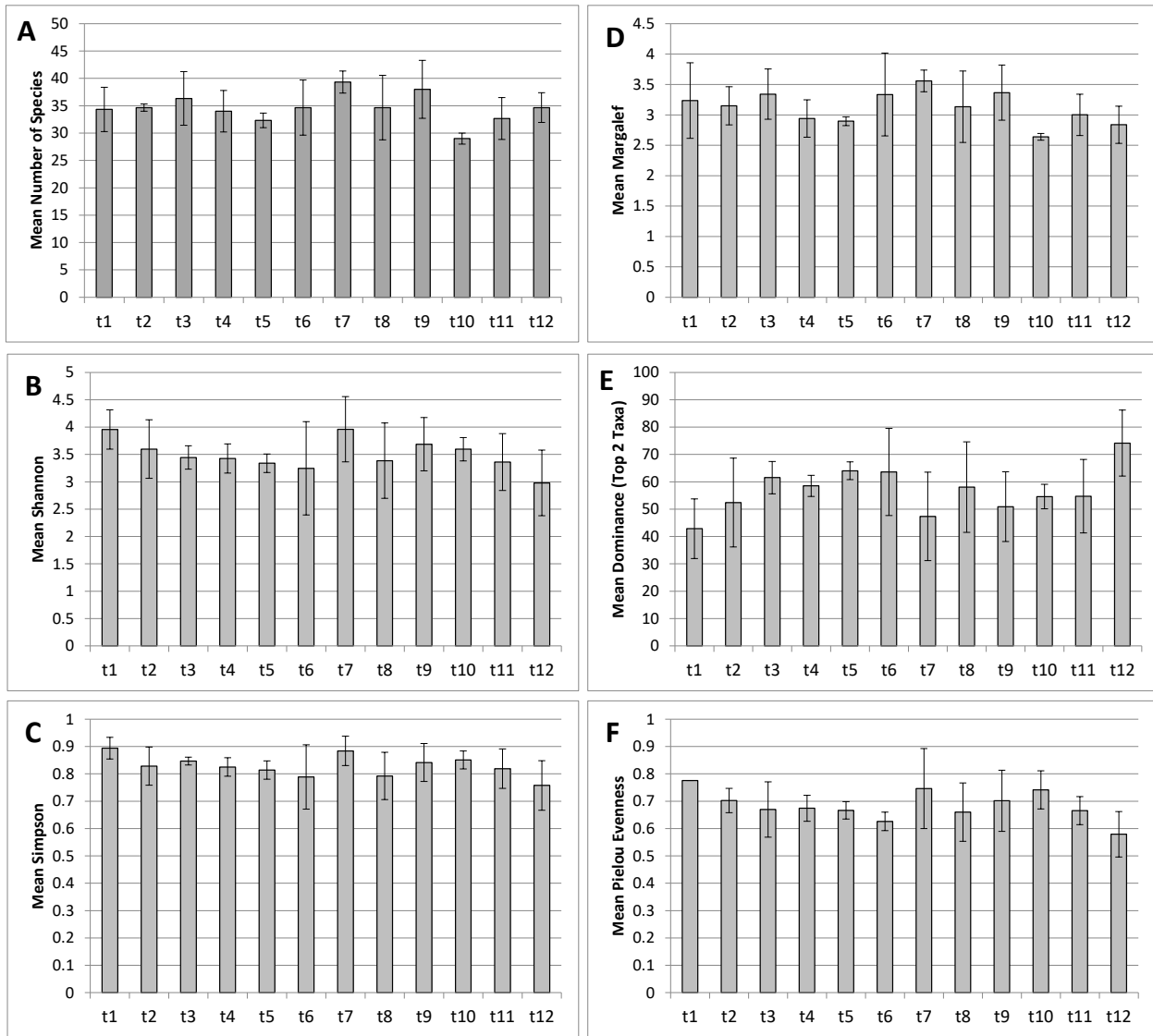


Figure 20. Diversity and Dominance Measures of Rocky Subtidal Macrobenthos (mean  $\pm$  1 s.e.) by Transect. Transects as in Figure 13.

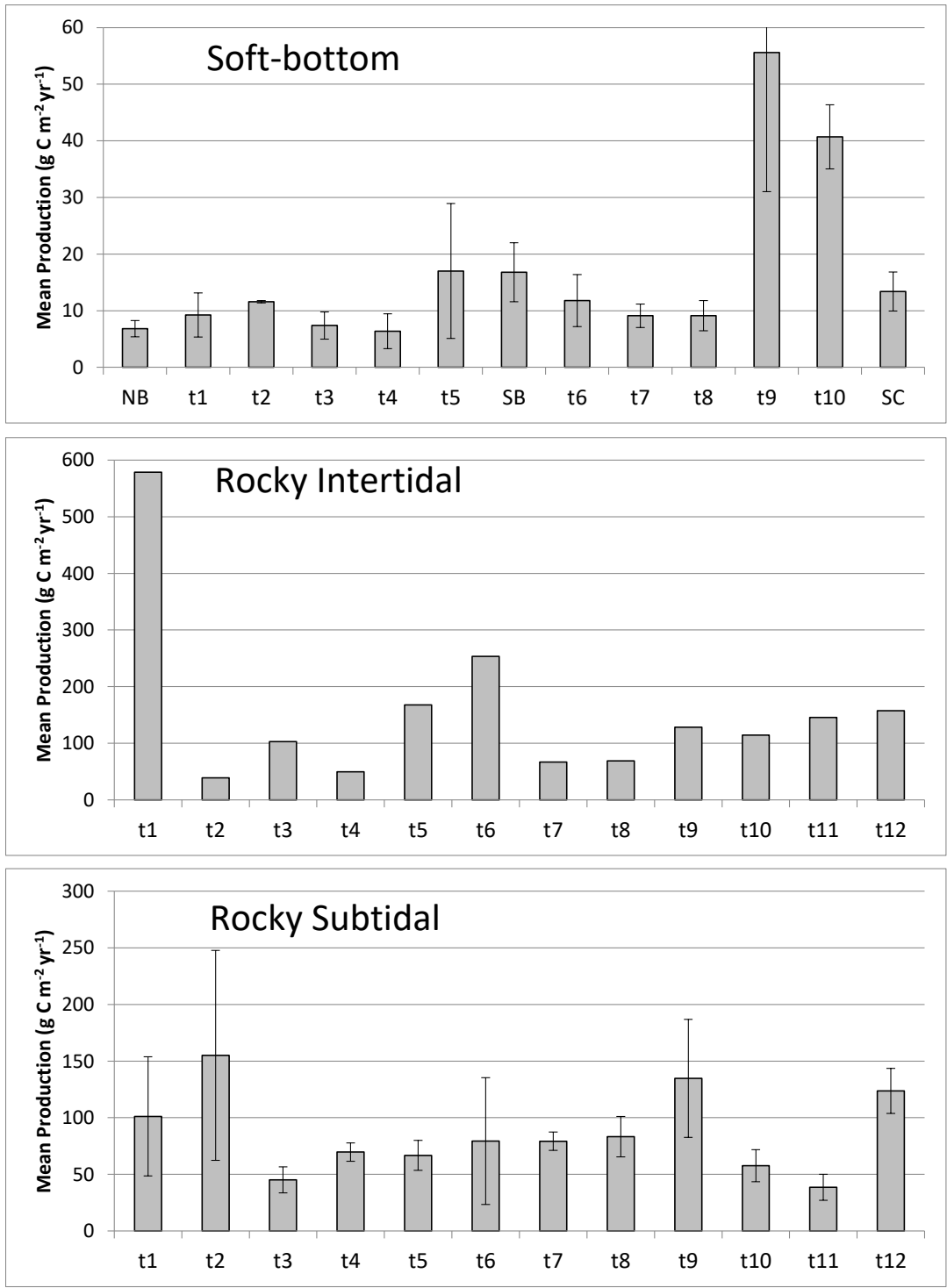


Figure 21. Brey's Macrobenthic Secondary Production (mean  $\pm$  1 s.e.) of Soft-Bottom, Rocky Intertidal, and Rocky Subtidal by Transect. NB = North Bridge, SB = South Bridge, SC = South Cove. Soft-bottom: t1-t5 = North Island, from north to south; t6-t10 = South Island, from north to south. Intertidal and subtidal: t1-t5 = North Island; t6-t12 = South Island



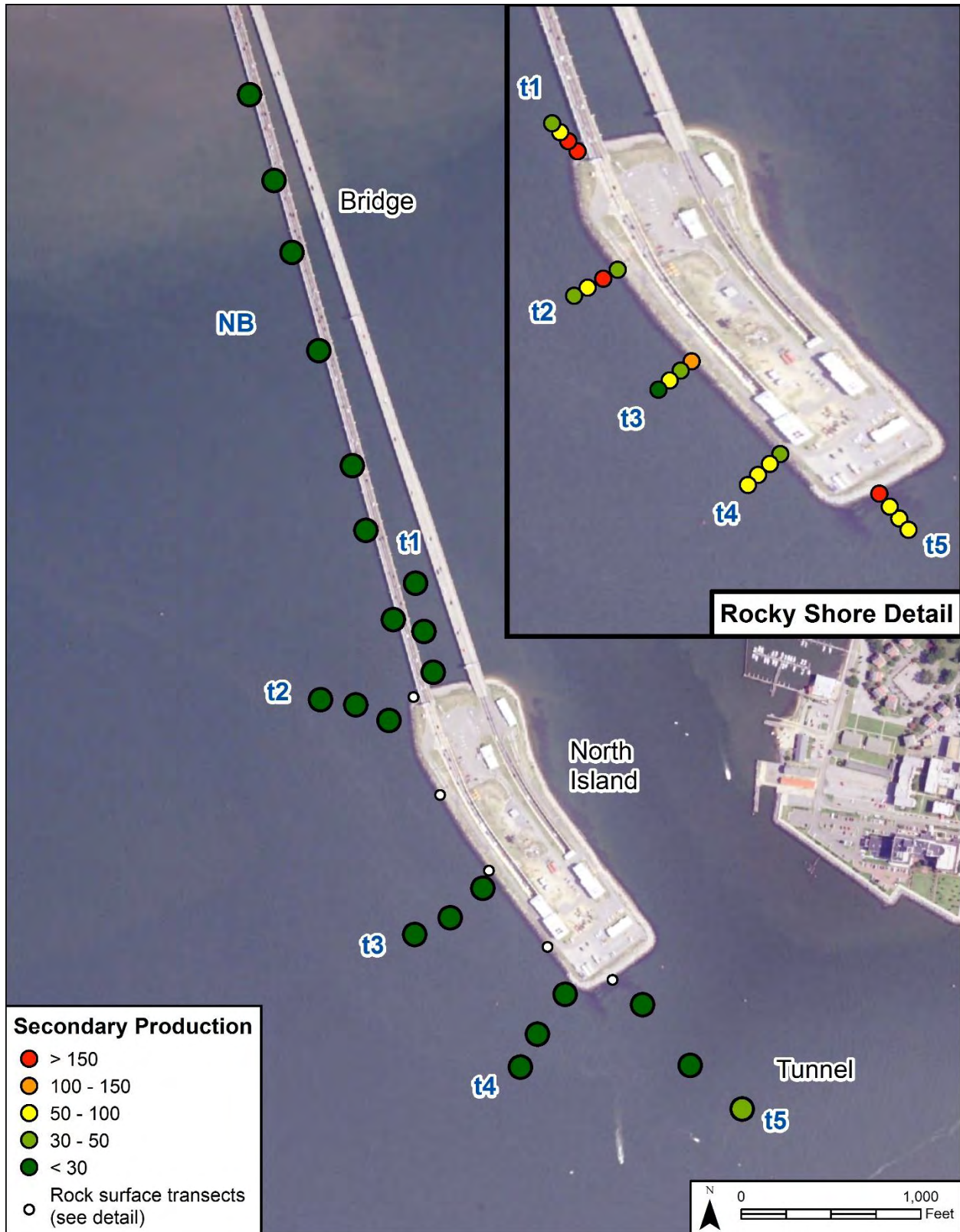


Figure 22. Secondary Production of Macrobenthos at Sites in the North Bridge and North Portal Island Region. Rocky shore transects not to scale.

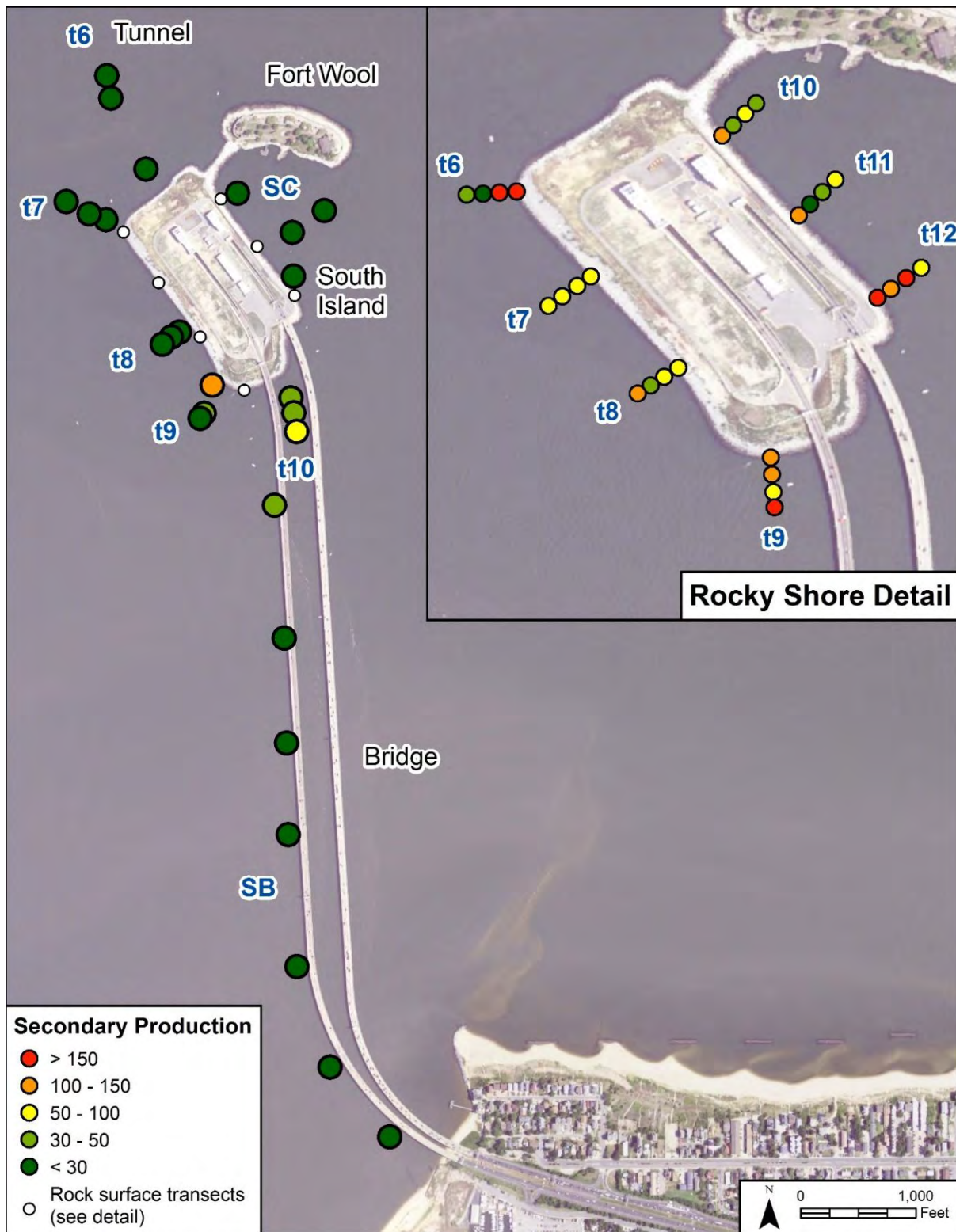


Figure 23. Secondary Production of Macrobenthos at Sites in the South Bridge and South Portal Island Region. Rocky shore transects not to scale.

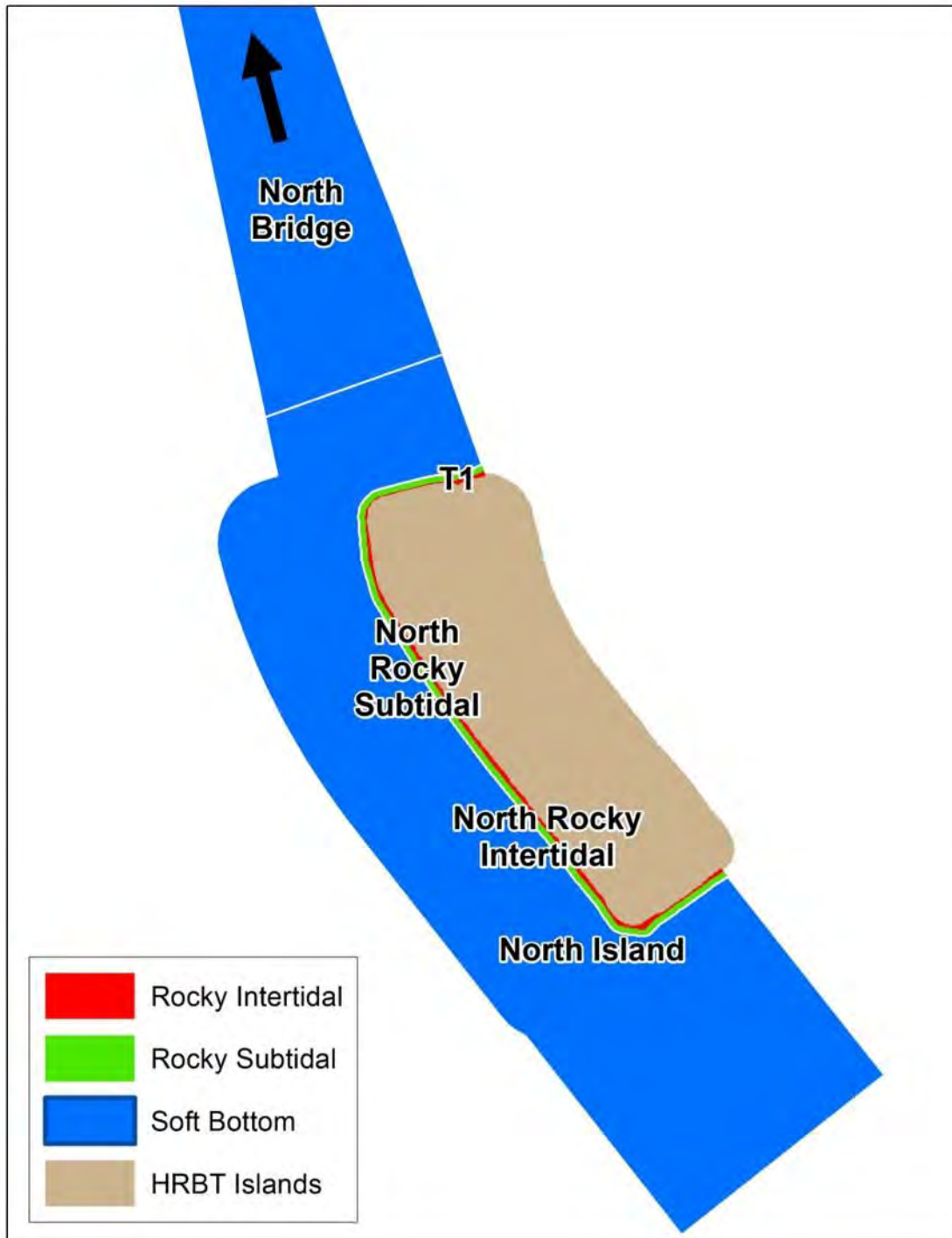


Figure 24. Map of North Island Production Areas



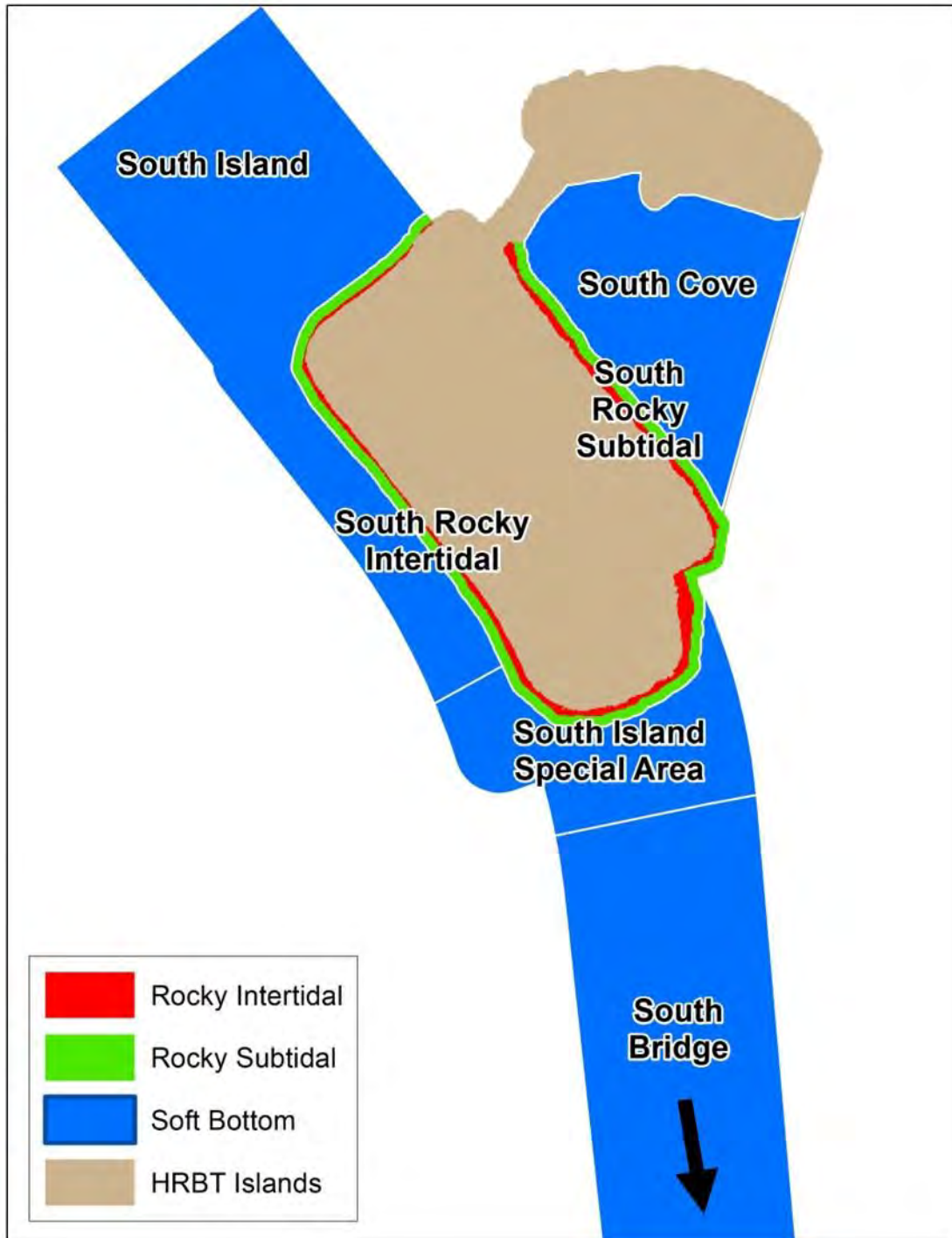


Figure 25. Map of South Island Production Areas

#### 4.0 SUMMARY AND CONCLUSIONS

1. Baseline surveys were conducted in September and October 2017 to characterize the natural background condition of the benthic macroinvertebrate community within and adjacent to the proposed area of disturbance of the Hampton Roads Bridge-Tunnel Expansion Project, known as Alternative A. The surveys consisted of soft-bottom transects along the existing bridge and disturbance area surrounding the portal islands, and rocky intertidal and subtidal transects perpendicular to the portal islands.
2. The surveys yielded a total of 184 taxa in the soft-bottom, 62 taxa in the rocky intertidal, and 117 taxa in the rocky subtidal, a majority of which could be identified to species level.
3. Water depth in the soft-bottom survey area ranged between 1.2 m and 9.5 m, and increased along the bridges toward the tips of the portal islands. Bottom water characteristics were homogeneous throughout the project area, with salinity in the polyhaline range and dissolved oxygen near saturation.
4. The sediments in the survey area were mostly fine and medium sands with various amounts of coarse sand and gravel, and low organic carbon content. The sediments of the cove between the south portal island and Fort Wool were fine and very fine sands with various amounts of silt and clay.
5. Numerically dominant species in the soft-bottom were the reef-forming polychaete *Sabellaria vulgaris*, the amphipod *Unciola serrata*, and oligochaetes. Biomass dominant species were the sand lancelet *Branchiostoma caribaeum*, *Sabellaria vulgaris*, and the decapod *Eurypanopeus depressus*.
6. The rocky intertidal was numerically dominated by barnacles (*Chthamalus fragilis*) and amphipods (*Monocorophium insidiosum*, *Ampithoe valida*, *Jassa marmorata*), whereas oysters (*Croassostera virginica*), mussels (*Geukensia denmissa*), and barnacles were biomass dominants.
7. The rocky subtidal was covered by a dense canopy of algae that provided habitat for numerous species of epibionts, predominately amphipods. Sponges and bryozoans were common. The amphipod *Caprella penantis* was very abundant, followed by *Sabellaria vulgaris*. Anemones (*Diadumene leucolena*), oysters, amphipods (*Caprella penantis*), and gastropods (*Mitrella ocellata*) were biomass dominants.

8. Species abundance, biomass, and composition differed among transects. In the soft-bottom, abundance was higher in the south bridge than in the north bridge, and was highest near the inner (bridge side) tip of the south portal island due to high densities of *Sabellaria vulgaris*. In the rocky intertidal, the inner tip of the north island exhibited high densities of oysters and mussels; elsewhere, the relative densities of barnacles and amphipods differed among transects. In the rocky subtidal, polychaetes, amphipods, isopods, gastropods, and anemones varied considerably among transects, but species composition was homogeneous.
9. Diversity indices and dominance measures were similar in the soft-bottom and the rocky subtidal, but diversity was lower, and dominance higher, in the rocky intertidal. Diversity measures indicated a more homogeneous benthic community in the rocky subtidal.
10. The soft-bottom macrobenthos met the Chesapeake Bay Benthic Community Restoration Goals in 32 sites and failed the goals in 16 sites. Of the 16 sites that failed, eight were classified as marginal, three as degraded, and five as severely degraded by the Benthic Index of Biotic Integrity. Sites that failed the goals as degraded or severely degraded were located along the north bridge (three sites) north island (three sites), south island (one site), and south bridge (one site).
11. Annual secondary production of macrobenthos, estimated by Brey's empirical model, was highest in the rocky intertidal (mean = 156.0 g AFDW m<sup>-2</sup>), including one site with very high oyster and mussel production (578.5 g AFDW m<sup>-2</sup>), and lowest in the soft-bottom (mean = 15.7 g AFDW m<sup>-2</sup>), although production varied among sites. Annual secondary production in the rocky subtidal was high (mean = 86.2 g AFDW m<sup>-2</sup>) and within the range of shoreline stabilization structures reported for other studies.
12. Total macrobenthic production was 3.7x higher for the soft-bottom than for the rocky shore when scaled to the footprint of the inventory area. Thus, the reef area represented by the portal islands will be unable to compensate for production loss in the surrounding soft-bottom benthic community, if the footprint of the disturbance area is of the same magnitude as the footprint of the inventory area.

## **5.0 REFERENCES**

- Brey, T. 2001. Population dynamics in benthic invertebrates. A virtual handbook. Version 4-04. <http://thomas-brey.de/science/virtualhandbook>.
- Burton, W.H., J.S. Farrar, F. Steimle, and B. Cronin. 2002. Assessment of out-of-kind mitigation success of an artificial reef deployed in Delaware Bay, USA. *ICES Journal of Marine Science* 59:S106-S110.
- Dauer, D.M., Lane, M.F., Llansó, R.J. and Diaz, R.J. 2011. Preliminary Evaluations of Secondary Productivity Estimates as Indicators of the Ecological Value of the Benthos to Higher Trophic Levels in Chesapeake Bay. Prepared for Virginia Department of Environmental Quality, Richmond, Virginia by Old Dominion University, Norfolk, Virginia.
- Dolbeth, M., A.I. Lillebø, P.G. Cardoso, S.M. Ferreira, and M.A. Pardal. 2005. Annual production of estuarine fauna in different environmental conditions: An evaluation of the estimation methods. *Journal of Experimental Marine Biology and Ecology* 36:115-127.
- Folk, R.L. 1974. *Petrology of Sedimentary Rocks*. Hemphill Publishing Company, Austin, Texas. 182 pp.
- Holme, N.A. and A.D. McIntyre. 1971. *Methods for the Study of Marine Benthos*. IBP Handbook No. 16. Blackwell Scientific Publications, Oxford and Edinburgh. 334 pp.
- Margalef, R. 1958. Information theory in ecology. *Gen. Syst.* 3:36-71.
- Pielou, E.C. 1966. The measurement of diversity in different types of biological collections. *Journal of Theoretical Biology* 13:131-144.
- Shannon, C.E. 1948. A mathematical theory of communication. *Bell System Technical Journal* 27:379-423 & 623-656.
- Steimle, F., K. Foster, R. Kropp, and B. Cronin. 2002. Benthic macrofauna productivity enhancement by an artificial reef in Delaware Bay, USA. *ICES Journal of Marine Science* 59:S100-S105.
- Weisberg, S.B., J.A. Ranasinghe, D.M. Dauer, L.C. Schaffner, R.J. Diaz, and J.B. Frithsen. 1997. An estuarine benthic index of biotic integrity (B-IBI) for Chesapeake Bay. *Estuaries* 20:149-158.
- Wong, M.C., C.H. Peterson, and M.F. Piehler. 2011. Evaluating estuarine habitats using secondary production as a proxy for food web support. *Marine Ecology progress Series* 440:11-25.

## **APPENDICES**



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## **Appendix A: Site Coordinates**

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Table A-1. Coordinates of the soft-bottom survey sites in the Hampton Roads Bridge-Tunnel project area. Easting and northing coordinates (US ft) are in the NAD83 Virginia South State Plane coordinate system. Latitude and longitude are in decimal degrees in WGS84

<b>Station</b>	<b>Easting</b>	<b>Northing</b>	<b>Latitude</b>	<b>Longitude</b>
17-01	12118586.32	3534621.681	37.01025138	-76.32272900
17-02	12118704.63	3534244.122	37.00920716	-76.32235374
17-03	12118791.79	3533928.303	37.00833444	-76.32208024
17-04	12118920.35	3533496.401	37.00714035	-76.32167422
17-05	12119081.51	3532991.32	37.00574325	-76.32116234
17-06	12119147.851	3532706.312	37.00495645	-76.32095774
17-07	12119279.68	3532314.263	37.00387158	-76.32053739
17-08-1	12119270.48	3531867.857	37.00264639	-76.32060419
17-08-2	12119120.75	3531932.349	37.00283297	-76.32111171
17-08-3	12118963.74	3531952.291	37.00289768	-76.32164765
17-09-1	12119704.21	3531134.885	37.00060624	-76.31917725
17-09-2	12119563.16	3531000.396	37.00024590	-76.31967078
17-09-3	12119407.14	3530923.286	37.00004406	-76.32021099
17-10-1	12120081.37	3530673.204	36.99931459	-76.31792257
17-10-2	12119962.43	3530494.106	36.99883036	-76.31834392
17-10-3	12119889.830	3530347.096	36.99843130	-76.31860410
17-11-1	12119462.41	3532085.726	37.00323246	-76.31992986
17-11-2	12119417.16	3532264.872	37.00372724	-76.32007060
17-11-3	12119373.99	3532477.585	37.00431406	-76.32020161
17-12-1	12120426.79	3530635.126	36.99918810	-76.31674307
17-12-2	12120644.47	3530371.875	36.99845142	-76.31601870
17-12-3	12120880.61	3530183.809	36.99792001	-76.31522519
17-13-1	12123842	3525558.252	36.98503023	-76.30545541
17-13-2	12123724.32	3525594.986	36.98513861	-76.30585531
17-13-3	12123563.01	3525677.195	36.98537464	-76.30640089
17-14-1	12124369.59	3524792.883	36.98289494	-76.30371055
17-14-2	12124314.97	3524758.46	36.98280391	-76.30390023
17-14-3	12124254.74	3524706.572	36.98266528	-76.30411053
17-15-1	12124605.79	3524432.105	36.98188920	-76.30293086
17-15-2	12124553.96	3524235.564	36.98135284	-76.30312390

Table A-1. Continued

<b>Station</b>	<b>Easting</b>	<b>Northing</b>	<b>Latitude</b>	<b>Longitude</b>
17-15-2	12124553.96	3524235.564	36.98135284	-76.30312390
17-15-3	12124528.18	3524200.621	36.98125854	-76.30321492
17-16-1	12124111.65	3525914.041	36.98598996	-76.30450415
17-16-2	12123856.72	3526397.803	36.98733458	-76.30533823
17-16-3	12123824.99	3526552.35	36.98776097	-76.30543454
17-17-1	12125154.6	3524357.368	36.98164889	-76.30105843
17-17-2	12125175.78	3524253.708	36.98136290	-76.30099422
17-17-3	12125199.92	3524125.695	36.98100985	-76.30092180
17-18	12125057.93	3523612.244	36.97960907	-76.30144869
17-19	12125146.61	3522696.523	36.97708896	-76.30121819
17-20	12125178.85	3521971.956	36.97509734	-76.30116563
17-21	12125206.78	3521339.871	36.97335994	-76.30112045
17-22	12125288.11	3520428.806	36.97085308	-76.30091476
17-23	12125533.96	3519741.053	36.96894888	-76.30012829
17-24	12125957.93	3519268.083	36.96762303	-76.29871518
17-25	12124751.43	3525761.467	36.98553013	-76.30232644
17-26	12125354.7	3525656.592	36.98520357	-76.30026994
17-27	12125137.35	3525500.547	36.98478900	-76.30102633
17-28	12125152.9	3525196.753	36.98395383	-76.30099732

Table A-2. Coordinates of the benthic epifauna survey sites surrounding the HRBT portal islands. Easting and northing coordinates (US ft) are in the NAD83 Virginia South State Plane coordinate system. Latitude and longitude are in decimal degrees in WGS84

<b>Station</b>	<b>Easting</b>	<b>Northing</b>	<b>Latitude</b>	<b>Longitude</b>
EPI-01	12119376.989	3531975.787	37.002936	-76.320231
EPI-02	12119520.289	3531512.942	37.001656	-76.319777
EPI-03	12119755.356	3531174.583	37.000712	-76.318999
EPI-04	12119998.257	3530864.085	36.999844	-76.318192
EPI-05	12120313.472	3530761.390	36.999542	-76.317121
EPI-06	12123978.719	3525476.128	36.984796	-76.304994
EPI-07	12124227.293	3525126.829	36.983821	-76.304171
EPI-08	12124494.202	3524780.873	36.982854	-76.303285
EPI-09	12124777.044	3524390.860	36.981765	-76.302348
EPI-10	12124661.851	3525686.862	36.985331	-76.302639
EPI-11	12124911.738	3525369.284	36.984443	-76.301809
EPI-12	12125180.133	3525060.152	36.983577	-76.300915

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## **Appendix B: Water Quality**



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Water Quality Measurements Recorded at Soft-Bottom Survey Sites, September 2017

Station		Depth (m)	Salinity (psu)	Conductivity (mS/cm)	DO (mg/L)	DO Sat. (%)	Temp (°C)	pH
17-01	Surface*	.	.	.	.	.	.	.
	Bottom*	.	.	.	.	.	.	.
17-02	Surface	0.4	21.00	33.49	7.24	95.0	22.84	7.92
	Bottom	1.4	21.04	33.54	7.25	95.0	22.76	7.92
17-03	Surface	0.4	21.02	33.50	7.15	93.7	22.69	7.91
	Bottom	2.0	21.01	33.49	7.08	92.7	22.69	7.91
17-04	Surface	0.4	20.97	33.40	7.14	93.4	22.70	7.91
	Bottom	2.7	20.99	33.45	6.90	90.6	22.69	7.88
17-05	Surface	0.4	20.96	33.42	7.12	92.9	22.66	7.91
	Bottom	2.8	20.93	33.39	6.99	91.6	22.65	7.89
17-06	Surface	0.4	20.95	33.43	7.14	93.5	22.66	7.91
	Bottom	2.7	20.99	33.47	7.09	92.7	22.64	7.91
17-07	Surface	0.4	21.02	33.51	7.03	91.9	22.63	7.90
	Bottom	2.9	21.03	33.53	6.86	88.8	22.61	7.87
17-08-1	Surface	0.4	21.21	33.79	7.18	94.8	23.11	7.92
	Bottom	3.8	21.43	34.10	6.78	88.9	22.61	7.89
17-08-2	Surface	0.4	21.21	33.79	7.18	94.8	23.11	7.92
	Bottom	3.8	21.43	34.10	6.78	88.9	22.61	7.89
17-08-3	Surface	0.4	21.21	33.79	7.18	94.8	23.11	7.92
	Bottom	3.8	21.43	34.10	6.78	88.9	22.61	7.89
17-09-1	Surface	0.4	21.18	33.77	7.24	96.3	23.58	7.92
	Bottom	4.4	21.98	34.90	7.12	93.7	22.65	7.94
17-09-2	Surface	0.4	21.18	33.77	7.24	96.3	23.58	7.92
	Bottom	4.4	21.98	34.90	7.12	93.7	22.65	7.94
17-09-3	Surface	0.4	21.18	33.77	7.24	96.3	23.58	7.92
	Bottom	4.4	21.98	34.90	7.12	93.7	22.65	7.94
17-10-1	Surface	0.4	21.66	34.44	7.47	98.9	22.75	7.99
	Bottom	5.6	21.94	34.83	7.46	97.9	22.68	7.99
17-10-2	Surface	0.4	21.66	34.44	7.47	98.9	22.75	7.99
	Bottom	5.6	21.94	34.83	7.46	97.9	22.68	7.99
17-10-3	Surface	0.4	21.66	34.44	7.47	98.9	22.75	7.99
	Bottom	5.6	21.94	34.83	7.46	97.9	22.68	7.99
17-11-1	Surface	0.4	21.20	33.76	6.97	91.1	22.57	7.89
	Bottom	2.8	21.20	33.76	6.90	90.1	22.55	7.88
17-11-2	Surface	0.4	21.20	33.76	6.97	91.1	22.57	7.89
	Bottom	2.8	21.20	33.76	6.90	90.1	22.55	7.88

Station		Depth (m)	Salinity (psu)	Conductivity (mS/cm)	DO (mg/L)	DO Sat. (%)	Temp (°C)	pH
17-12-1	Surface	0.4	21.75	34.58	7.77	102.5	22.88	8.01
	Bottom	2.3	21.91	34.79	7.70	101.1	22.66	8.01
17-12-2	Surface	0.5	21.46	34.14	7.62	100.8	23.06	7.98
	Bottom	7.8	21.78	34.60	7.70	101.1	22.55	8.04
17-12-3	Surface	0.5	21.48	34.17	7.82	102.4	22.54	8.04
	Bottom	9.5	21.88	34.74	7.47	98.2	22.54	8.02
17-13-1	Surface	0.5	21.53	34.24	6.93	91.2	22.81	7.90
	Bottom	3.5	21.46	34.15	6.80	89.4	22.80	7.84
17-13-2	Surface	0.5	21.53	34.24	6.93	91.2	22.81	7.90
	Bottom	3.1	21.53	34.25	6.80	89.6	22.80	7.90
17-13-3	Surface	0.5	21.53	34.24	6.93	91.2	22.81	7.90
	Bottom	3.1	21.53	34.25	6.80	89.6	22.80	7.90
17-14-1	Surface	0.5	21.41	34.08	6.97	91.8	22.92	7.89
	Bottom	4.0	21.50	34.21	6.78	89.4	22.87	7.89
17-14-2	Surface	0.5	21.41	34.08	6.97	91.8	22.92	7.89
	Bottom	4.0	21.50	34.21	6.78	89.4	22.87	7.89
17-14-3	Surface	0.5	21.41	34.08	6.97	91.8	22.92	7.89
	Bottom	4.0	21.50	34.21	6.78	89.4	22.87	7.89
17-15-1	Surface	0.5	21.26	33.86	7.01	92.4	23.07	7.89
	Bottom	9.5	21.26	33.88	6.84	90.0	22.94	7.89
17-15-2	Surface	0.5	21.26	33.86	7.01	92.4	23.07	7.89
	Bottom	9.5	21.26	33.88	6.84	90.0	22.94	7.89
17-15-3	Surface	0.5	21.26	33.68	7.01	92.4	23.07	7.89
	Bottom	9.5	21.26	33.88	6.84	90.0	22.94	7.89
17-16-1	Surface	0.5	21.55	34.26	6.81	89.5	22.73	7.88
	Bottom	3.0	21.52	34.23	6.77	88.9	22.73	7.87
17-16-2	Surface	0.5	21.33	33.89	6.94	91.0	22.77	7.89
	Bottom	7.5	22.10	35.07	6.80	90.0	22.75	7.92
17-16-3	Surface	0.5	21.54	34.25	6.97	91.7	22.78	7.90
	Bottom	9.5	22.03	35.04	6.82	89.9	22.76	7.92
17-17-1	Surface	0.5	21.24	33.83	6.95	91.6	23.02	7.89
	Bottom	6.3	21.61	34.38	6.89	90.8	22.91	7.91
17-17-2	Surface	0.5	21.24	33.83	6.95	91.6	23.02	7.89
	Bottom	6.3	21.61	34.38	6.89	90.8	22.91	7.91

Station		Depth (m)	Salinity (psu)	Conductivity (mS/cm)	DO (mg/L)	DO Sat. (%)	Temp (°C)	pH
17-17-3	Surface	0.5	21.24	33.83	6.95	91.6	23.02	7.89
	Bottom	6.3	21.61	34.38	6.89	90.8	22.91	7.91
17-18	Surface	0.5	21.29	33.92	7.21	95.3	23.21	7.90
	Bottom	4.7	21.33	33.97	6.91	91.2	23.03	7.89
17-19	Surface	0.5	21.35	34.00	7.18	95.2	23.31	7.90
	Bottom	2.3	21.35	34.00	7.15	94.6	23.21	7.90
17-20	Surface	0.4	21.60	34.34	6.86	89.8	27.52	7.90
	Bottom	2.1	21.60	34.34	6.75	88.3	22.51	7.89
17-21	Surface	0.5	21.69	34.47	6.87	89.8	22.40	7.91
	Bottom	2.0	21.69	34.47	6.85	89.5	22.40	7.91
17-22	Surface	0.5	21.63	34.38	6.88	90.0	22.42	7.93
	Bottom	2.0	21.62	34.37	6.83	89.2	22.42	7.91
17-23	Surface	0.5	22.30	34.22	6.91	90.2	22.30	7.91
	Bottom	1.2	21.48	34.17	6.80	88.9	22.27	7.91
17-24	Surface	0.4	21.41	34.06	7.30	94.1	21.77	7.97
	Bottom	2.3	21.52	34.21	6.82	87.8	21.85	7.91
17-25	Surface	0.4	21.84	34.68	7.67	101.1	22.86	8.00
	Bottom	4.1	22.11	35.07	7.54	99.4	22.69	7.99
17-26	Surface	0.4	21.95	34.85	7.60	100.6	22.99	7.99
	Bottom	5.4	22.19	35.21	7.34	96.9	22.72	7.99
17-27	Surface	0.4	21.85	34.71	7.73	102.5	23.19	8.00
	Bottom	4.9	22.20	35.21	7.61	100.1	22.71	7.99
17-28	Surface	0.4	22.24	35.02	7.67	101.5	22.99	8.00
	Bottom	5.0	22.29	35.34	7.59	100.1	22.72	8.01

\*No water quality data collected due to instrument malfunction.

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## **Appendix C: List of Species**

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<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena
Platyhelminthes : Turbellaria	Unidentified	Polycladida
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus
Platyhelminthes : Turbellaria	Prosthlostomidae	Euplana gracilis
Nemertina	Tubulanidae	Carinomella lactea
Nemertina	Cephalothricidae	Cephalothrix spiralis
Nemertina	Lineidae	Lineidae
Nemertina	Lineidae	Micrura sp.
Nemertina	Lineidae	Siphonenteron bicolour
Nemertina	Unidentified	Monostilifera
Nemertina	Amphiporidae	Amphiporus bioculatus
Nemertina	Amphiporidae	Zygonemertes virescens
Nemertina	Tetrastemmatidae	Tetrastemma candidum
Annelida : Polychaeta	Polynoidae	Polynoidae
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis
Annelida : Polychaeta	Polynoidae	Malmgreniella maccroryae
Annelida : Polychaeta	Sigalionidae	Sthenelais boa
Annelida : Polychaeta	Phyllodocidae	Phyllodocidae
Annelida : Polychaeta	Phyllodocidae	Eteone heteropoda
Annelida : Polychaeta	Phyllodocidae	Hypereteone foliosa
Annelida : Polychaeta	Phyllodocidae	Paranaitis speciosa
Annelida : Polychaeta	Phyllodocidae	Eumida sanguinea
Annelida : Polychaeta	Phyllodocidae	Phyllodoce arenae
Annelida : Polychaeta	Hesionidae	Podarke obscura
Annelida : Polychaeta	Hesionidae	Podarkeopsis levifuscina
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae
Annelida : Polychaeta	Pilargidae	Sigambra tentaculata
Annelida : Polychaeta	Pilargidae	Hermundura fauveli
Annelida : Polychaeta	Syllidae	Syllidae
Annelida : Polychaeta	Syllidae	Syllis alternata



<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Annelida : Polychaeta	Syllidae	Exogone sp.
Annelida : Polychaeta	Syllidae	Exogone dispar
Annelida : Polychaeta	Syllidae	Brania sp.
Annelida : Polychaeta	Syllidae	Brania wellfleetensis
Annelida : Polychaeta	Syllidae	Salvatoria clavata
Annelida : Polychaeta	Syllidae	Streptosyllis websteri
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata
Annelida : Polychaeta	Syllidae	Erinaceusyllis erinaceus
Annelida : Polychaeta	Syllidae	Proceraea cornuta
Annelida : Polychaeta	Nereididae	Nereididae
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata
Annelida : Polychaeta	Nereididae	Alitta succinea
Annelida : Polychaeta	Nephtyidae	Nephtys incisa
Annelida : Polychaeta	Nephtyidae	Nephtys picta
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli
Annelida : Polychaeta	Glyceridae	Glyceridae
Annelida : Polychaeta	Glyceridae	Glycera sp.
Annelida : Polychaeta	Glyceridae	Glycera americana
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata
Annelida : Polychaeta	Goniadidae	Glycinde multidentis
Annelida : Polychaeta	Onuphidae	Diopatra cuprea
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea
Annelida : Polychaeta	Eunicidae	Marphysa belli
Annelida : Polychaeta	Arabellidae	Drilonereis longa
Annelida : Polychaeta	Arabellidae	Arabella sp.
Annelida : Polychaeta	Arabellidae	Arabella iricolor
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi
Annelida : Polychaeta	Orbiniidae	Scoloplos rubra
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos robustus
Annelida : Polychaeta	Paraonidae	Aricidea wassi
Annelida : Polychaeta	Paraonidae	Paraonis fulgens
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Annelida : Polychaeta	Spionidae	Polydora websteri
Annelida : Polychaeta	Spionidae	Polydora colonia
Annelida : Polychaeta	Spionidae	Polydora cornuta
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia
Annelida : Polychaeta	Spionidae	Prionospio perkinsi
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus
Annelida : Polychaeta	Spionidae	Spiophanes bombyx
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata
Annelida : Polychaeta	Spionidae	Streblospio benedicti
Annelida : Polychaeta	Spionidae	Scolelepis texana
Annelida : Polychaeta	Spionidae	Boccardiella hamata
Annelida : Polychaeta	Spionidae	Dipolydora socialis
Annelida : Polychaeta	Spionidae	Dipolydora commensalis
Annelida : Polychaeta	Spionidae	Dipolydora caulleryi
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus
Annelida : Polychaeta	Cirratulidae	Caulleriella venefica
Annelida : Polychaeta	Cirratulidae	Tharyx sp.
Annelida : Polychaeta	Cirratulidae	Tharyx acutus
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris
Annelida : Polychaeta	Opheliidae	Opheliidae
Annelida : Polychaeta	Capitellidae	Capitella teleta
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis
Annelida : Polychaeta	Maldanidae	Maldanidae
Annelida : Polychaeta	Maldanidae	Clymenella torquata
Annelida : Polychaeta	Maldanidae	Clymenella zonalis
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii
Annelida : Polychaeta	Terebellidae	Polycirrus eximius
Annelida : Polychaeta	Terebellidae	Loimia viridis
Annelida : Polychaeta	Sabellidae	Sabellidae

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Annelida : Polychaeta	Serpulidae	Hydroides dianthus
Annelida : Polychaeta	Spiroorbidae	Spiroorbis sp.
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata
Annelida : Polychaeta	Polygordiidae	Polygordius jouinae
Annelida : Oligochaeta	Unidentified	Oligochaeta
Mollusca : Gastropoda	Unidentified	Gastropoda
Mollusca : Gastropoda	Caecidae	Caecum regulare
Mollusca : Gastropoda	Cerithiidae	Bittiolum alternatum
Mollusca : Gastropoda	Cerithiidae	Seila adamsii
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta
Mollusca : Gastropoda	Epitoniidae	Epitonium humphreysii
Mollusca : Gastropoda	Calyptraeidae	Crepidula fornicata
Mollusca : Gastropoda	Calyptraeidae	Crepidula convexa
Mollusca : Gastropoda	Calyptraeidae	Crepidula plana
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea
Mollusca : Gastropoda	Columbellidae	Columbellidae
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata
Mollusca : Gastropoda	Columbellidae	Astyris lunata
Mollusca : Gastropoda	Columbellidae	Costoanachis avara
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa
Mollusca : Gastropoda	Nassariidae	Nassarius vibex
Mollusca : Gastropoda	Nassariidae	Ilyanassa trivittata
Mollusca : Gastropoda	Mangeliidae	Oenopota
Mollusca : Gastropoda	Turridae	Kurtziella atrostyla
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa
Mollusca : Gastropoda	Pyramidellidae	Odostomia sp.
Mollusca : Gastropoda	Pyramidellidae	Eulimastoma engonium
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta
Mollusca : Gastropoda	Pyramidellidae	Turbonilla nivea
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa
Mollusca : Gastropoda	Pyramidellidae	Boonea seminuda
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Mollusca : Gastropoda	Acteonidae	Japonactaeon punctostriatus
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata
Mollusca : Gastropoda	Corambidae	Corambe obscura
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii
Mollusca : Bivalvia	Unidentified	Bivalvia
Mollusca : Bivalvia	Nuculidae	Nucula proxima
Mollusca : Bivalvia	Solemyidae	Solemya velum
Mollusca : Bivalvia	Arcidae	Anadara transversa
Mollusca : Bivalvia	Mytilidae	Mytilidae
Mollusca : Bivalvia	Mytilidae	Geukensia demissa
Mollusca : Bivalvia	Anomiidae	Anomia simplex
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella
Mollusca : Bivalvia	Lasaeidae	Erycina sp.
Mollusca : Bivalvia	Kelliidae	Kelliopsis elevata
Mollusca : Bivalvia	Crassatellidae	Crassinella lunulata
Mollusca : Bivalvia	Mactridae	Spisula solidissima
Mollusca : Bivalvia	Mactridae	Mulinia lateralis
Mollusca : Bivalvia	Solenidae	Ensis directus
Mollusca : Bivalvia	Tellinidae	Tellinidae
Mollusca : Bivalvia	Tellinidae	Limecola balthica
Mollusca : Bivalvia	Tellinidae	Ameritella agilis
Mollusca : Bivalvia	Tellinidae	Macoploma tenta
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus
Mollusca : Bivalvia	Veneridae	Mercenaria mercenaria
Mollusca : Bivalvia	Veneridae	Pitar morrhuanus
Mollusca : Bivalvia	Veneridae	Gemma gemma
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis
Mollusca : Bivalvia	Lasaeidae	Lasaeidae
Mollusca : Bivalvia	Pholadidae	Barnea truncata
Mollusca : Bivalvia	Lyonsiidae	Lyonsia sp.
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare
Arthropoda : Pycnogonida	Phoxichilidiidae	Anoplodactylus petiolatus

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Arthropoda : Pycnogonida	Callipallenidae	Callipallene brevirostris
Arthropoda : Cirripedia	Unidentified	Balanomorpha
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis
Arthropoda : Cirripedia	Balanidae	Balanidae
Arthropoda : Mysidacea	Mysidae	Mysidae
Arthropoda : Mysidacea	Mysidae	Chlamydopleon sp.
Arthropoda : Mysidacea	Mysidae	Americamysis bahia
Arthropoda : Cumacea	Leuconidae	Leucon americanus
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi
Arthropoda : Cumacea	Bodotriidae	Cyclaspis varians
Arthropoda : Crustacea	Leptocheliidae	Leptocheliidae
Arthropoda : Tanaidacea	Nototanaididae	Tanaissus psammophilus
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum
Arthropoda : Isopoda	Idoteidae	Synidotea laticauda
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis
Arthropoda : Isopoda	Idoteidae	Idotea balthica
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis
Arthropoda : Isopoda	Idoteidae	Edotia triloba
Arthropoda : Crustacea	Janiridae	Janiridae
Arthropoda : Amphipoda	Amphilochiadae	Apolochus cresti
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida
Arthropoda : Amphipoda	Aoridae	Microdeutopus gryllotalpa
Arthropoda : Amphipoda	Bateidae	Batea catharinensis
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae
Arthropoda : Amphipoda	Corophiidae	Corophiidae
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis
Arthropoda : Amphipoda	Aoridae	Unciola serrata
Arthropoda : Amphipoda	Aoridae	Grandidierella sp.

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum
Arthropoda : Amphipoda	Corophiidae	Monocorophium
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis
Arthropoda : Amphipoda	Melitidae	Melita nitida
Arthropoda : Amphipoda	Melitidae	Dulichiesta appendiculata
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius sp. D
Arthropoda : Amphipoda	Haustoriidae	Bathyporeia parkeri
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae
Arthropoda : Amphipoda	Oedicerotidae	Americhelidium americanum
Arthropoda : Amphipoda	Oedicerotidae	Ameroculodes species
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni
Arthropoda : Amphipoda	Phoxocephalidae	Eobrolgus spinosus
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta
Arthropoda : Amphipoda	Caprellidae	Caprella sp.
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra
Arthropoda : Amphipoda	Caprellidae	Caprella penantis
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis
Arthropoda : Decapoda	Unidentified	Axiidea sp.
Arthropoda : Decapoda	Unidentified	Caridea
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha
Arthropoda : Decapoda	Callianassidae	Biffarius biformis
Arthropoda : Decapoda	Paguridae	Pagurus sp.
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus
Arthropoda : Decapoda	Porcellanidae	Euceramus praelongus
Arthropoda : Decapoda	Portunidae	Callinectes sapidus
Arthropoda : Decapoda	Xanthidae	Xanthidae
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus

<b>Group Name</b>	<b>Family</b>	<b>Taxa Name</b>
Arthropoda : Decapoda	Panopeidae	Panopeidae
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae
Arthropoda : Decapoda	Pinnotheridae	Pinnixa sp.
Arthropoda : Diptera	Unidentified	Diptera
Phoronida	Phoronidae	Phoronis sp.
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra
Echinodermata :	Phylloporidae	Pentamera pulcherrima
Echinodermata :	Synaptidae	Leptosynapta tenuis
Hemichordata	Harrimaniidae	Saccoglossus kowalevskii
Chordata : Ascidiacea	Unidentified	Ascidiacea
Chordata : Ascidiacea	Molgulidae	Molgula manhattensis
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum

## **Appendix D: Site Specific Species Abundance and Biomass**



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## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-01

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	4	90.88	0.0114
Annelida : Polychaeta	Glyceridae	Glycera americana	1	22.72	0.0204
Annelida : Polychaeta	Goniadidae	Glycinde multicens	2	45.44	0.0045
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	5	113.6	0.025
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	1	22.72	0.0011
Annelida : Polychaeta	Phyllodocidae	Phyllodoce arenae	2	45.44	0.0023
Annelida : Polychaeta	Phyllodocidae	Hypereteone foliosa	1	22.72	0.0114
Annelida : Polychaeta	Pilargidae	Hermundura fauveli	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia	1	22.72	0.0011
Annelida : Polychaeta	Spionidae	Streblospio benedicti	2	45.44	0.0011
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	2	45.44	0.0023
Arthropoda : Amphipoda	Oedicerotidae	Ameroculodes-species complex	1	22.72	0.0068
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	1	22.72	0.0011
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	1	22.72	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	6	136.32	0.0159
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0045
Phoronida	Phoronidae	Phoronis sp.	12	272.64	0.0318
			<b>Total</b>	<b>44</b>	<b>999.68</b>
			<b># Taxa</b>	<b>17</b>	

SampleID: 17-02

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0045
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	4	90.88	0.0045
Annelida : Polychaeta	Syllidae	Brania wellfleetensis	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0011
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	2	45.44	0.0045
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	0	68.16	0.209
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	2	45.44	0.0023
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.0159
Mollusca : Bivalvia	Veneridae	Gemma gemma	1	22.72	0.0023
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	1	22.72	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	8	181.76	0.0182
Phoronida	Phoronidae	Phoronis sp.	12	318.08	0.05
			<b>Total</b>	<b>36</b>	<b>931.52</b>
			<b># Taxa</b>	<b>13</b>	

\* denotes not included in total number of taxa

**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: 17-03

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculus	1	22.72	0.0023
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	5	113.6	0.0114
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	3	68.16	0.0045
Annelida : Polychaeta	Spionidae	Streblospio benedicti	1	22.72	0.0045
Annelida : Polychaeta	Spionidae	Scolecopsis texana	1	22.72	0.0011
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	1	22.72	0.0023
Annelida : Polychaeta	Syllidae	Brania wellfleetensis	1	22.72	0.0011
Arthropoda : Amphipoda	Liljeborgiidae	Igrella barnardi	6	136.32	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	5	340.8	0.9929
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	22.72	0.025
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	4	90.88	0.0045
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	12	272.64	0.0341
Nemertina	Lineidae	Micrura sp.	1	22.72	0.025
Phoronida	Phoronidae	Phoronis sp.	19	431.68	0.0545
		<b>Total</b>	<b>62</b>	<b>1635.8</b>	<b>1.1722</b>
		<b># Taxa</b>	<b>15</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-04

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	1	22.72	0.0523
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis	1	22.72	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	7	159.04	0.0114
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	4	113.6	0.0182
Annelida : Polychaeta	Cirratulidae	Tharyx acutus	1	22.72	0.0068
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	3*	68.16	0.0114
Annelida : Polychaeta	Glyceridae	Glycera americana	1	22.72	0.0204
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Maldanidae	Clymenella torquata	0	22.72	0.1318
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0136
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	1	22.72	0.0011
Annelida : Polychaeta	Phyllodoceidae	Eteone heteropoda	1	22.72	0.0011
Annelida : Polychaeta	Pilargidae	Sigambra tentaculata	1	22.72	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0011
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	2	90.88	0.1204
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	5	136.32	0.0568
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0011
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	3	68.16	0.0045
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	1	22.72	0.0011
Arthropoda : Amphipoda	Aoridae	Grandidierella sp.	1	22.72	0.0023
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	3	68.16	0.0114
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	1	22.72	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	2	45.44	0.0068
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	1	22.72	0.0023
Arthropoda : Mysidacea	Mysidae	Mysidae	1	22.72	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	0	113.6	0.384
Echinodermata : Ophiuroidea	Amphiluridae	Microphiopholis atra	1	22.72	0.0011
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	6	136.32	0.1363
Mollusca : Gastropoda	Columbellidae	Paryanachis obesa	13	295.36	0.1181
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	3	68.16	0.0204
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	2	45.44	0.0023
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	8	181.76	0.0636
Nemertina	Amphiporidae	Zygonemertes virescens	1	22.72	0.0182
Nemertina	Tubulanidae	Carinomella lactea	2	45.44	0.0045
Phoronida	Phoronidae	Phoronis sp.	9	227.2	0.0523
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0068
		<b>Total</b>	<b>93</b>	<b>2362.9</b>	<b>1.3084</b>
		<b># Taxa</b>	<b>36</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-05

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	3	68.16	0.2817
Annelida : Polychaeta	Chaetopteridae	Spirochaetopterus oculatus	4	90.88	0.0227
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	7*	159.04	0.0364
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris	4	90.88	0.0227
Annelida : Polychaeta	Glyceridae	Glycera americana	1	45.44	0.3544
Annelida : Polychaeta	Gonjadiae	Glycinde multidentis	1	22.72	0.0682
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	1	22.72	0.0045
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	1	22.72	0.0136
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	3	68.16	0.0159
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	2	45.44	0.0364
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	7	159.04	0.0068
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	4	90.88	0.0545
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	1	22.72	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	1	22.72	0.0045
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	3	68.16	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	2	45.44	0.2567
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	5	113.6	0.1886
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0023
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	4	90.88	0.0841
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0011
Mollusca : Gastropoda	Nassariidae	Nassaricus vibex	1	22.72	0.5771
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	11	249.92	0.0613
Phoronida	Phoronidae	Phoronis sp.	14	431.68	0.1454
			<b>Total</b>	<b>1999.4</b>	<b>2.2457</b>
			<b># Taxa</b>	<b>22</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-06

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0011
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	4	90.88	0.0045
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	3	90.88	0.0295
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1*	22.72	0.0011
Annelida : Polychaeta	Cirratulidae	Tharyx acutus	1	22.72	0.0045
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris	1	22.72	0.0045
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	1	22.72	0.0341
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	0	45.44	0.259
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	5	113.6	0.0364
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	5	113.6	0.0273
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	6	159.04	0.2817
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0045
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.6975
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	9	204.48	0.2204
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	1	22.72	0.0058
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	12	272.64	0.0841
Nemertina	Tubulanidae	Carinomella lactea	2	45.44	0.0045
Phoronida	Phoronidae	Phoronis sp.	38	863.36	0.234
			<b>Total</b>	<b>95</b>	<b>2249.3</b>
			<b># Taxa</b>	<b>20</b>	

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: 17-07

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Arabellidae	Drilonereis longa	0	22.72	0.0591
Annelida : Polychaeta	Chaetopteridae	Spirochaetopterus oculatus	1	22.72	0.0045
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0011
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	1	22.72	0.0295
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	45.44	0.075
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	2	45.44	0.0023
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0409
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0023
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	2	45.44	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	1	22.72	0.0011
Arthropoda : Amphipoda	Oedicerotidae	Ameroculodes species complex	1	22.72	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	9	227.2	0.4044
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	2	45.44	0.0182
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	4	90.88	0.0091
Mollusca : Bivalvia	Mactridae	Mulinia lateralis	1	22.72	0.2454
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0023
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	22.72	0.0114
Mollusca : Gastropoda	Pyramidellidae	Turbonilla nivea	1	22.72	0.0023
Mollusca : Gastropoda	Scaphandriidae	Acteocina canaliculata	4	90.88	0.0318
Phoronida	Phoronidae	Phoronis sp.	6	136.32	0.0386
<b>Total</b>			<b>41</b>	<b>999.68</b>	<b>0.9861</b>
<b># Taxa</b>			<b>20</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-08-1

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	181.76	0.0045
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	4	90.88	0.5157
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	4	159.04	0.0454
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris	7	159.04	0.0364
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	8*	181.76	0.0295
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0023
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	0	22.72	0.0704
Annelida : Polychaeta	Nereididae	Nereididae	2	45.44	0.0011
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	3	68.16	0.0068
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	0	22.72	0.0636
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	9	204.48	0.0636
Annelida : Polychaeta	Spionidae	Prionospio perkinsi	4	90.88	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	5	113.6	0.0091
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	2	45.44	0.0011
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barmardi	3	68.16	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	0	159.04	0.3067
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	2	45.44	0.0818
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	1	22.72	0.075
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	6	136.32	0.0977
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0011
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	14	318.08	0.184
Mollusca : Gastropoda	Nassariidae	Nassarius vibex	1	22.72	0.0772
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	1	22.72	0.0091
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	7	159.04	0.0682
Mollusca : Gastropoda	Turridae	Kurtziella atrostyle	1	22.72	0.0159
Nemertina	Tubulanidae	Carinomella lactea	6	136.32	0.0318
Phoronida	Phoronidae	Phoronis sp.	15	386.24	0.0591
			<b>Total</b>	<b>120</b>	<b>3044.5</b>
			<b># Taxa</b>	<b>30</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-08-2

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	4	90.88	0.0011
Annelida : Polychaeta	Capitellidae	Capitella teleta	4	90.88	0.0011
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	9	204.48	0.0091
Annelida : Polychaeta	Glyceridae	Glycera americana	0	22.72	0.259
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0011
Annelida : Polychaeta	Nephtyidae	Nephtys picta	1	22.72	0.0023
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	0	45.44	0.0545
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	3	68.16	0.0204
Annelida : Polychaeta	Phyllodoceidae	Paranaitis speciosa	1	22.72	0.0204
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	16	408.96	0.1908
Annelida : Polychaeta	Spionidae	Prionospio perkinsi	4	90.88	0.0045
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	4	90.88	0.1363
Annelida : Polychaeta	Terebellidae	Loimia viridis	2	45.44	0.1477
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	4	90.88	0.0182
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	10	227.2	0.0068
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	2	45.44	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	4	90.88	0.0011
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans	1	22.72	0.0011
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	8	181.76	0.0886
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	2	45.44	0.0182
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	16	363.52	0.2567
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0011
Mollusca : Bivalvia	Tellinidae	Macoploma tenta	2	45.44	0.2999
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	22.72	0.0227
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	1	22.72	0.0068
Mollusca : Gastropoda	Pyramidellidae	Odostomia sp.	1	22.72	0.0182
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	7	159.04	0.0182
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	5	113.6	0.0295
Nemertina	Amphiporidae	Amphiporus bioculatus	2	45.44	0.0011
Nemertina	Lineidae	Lineidae	1	22.72	0.0011
Nemertina	Tubulanidae	Carinomella lactea	9	204.48	0.0386
Phoronida	Phoronidae	Phoronis sp.	30	749.76	0.0977
		<b>Total</b>	<b>158</b>	<b>3771.5</b>	<b>1.7785</b>
		<b># Taxa</b>	<b>33</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-08-3

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	15	340.8	0.0182
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	3	113.6	0.0454
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	0	22.72	0.3703
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0045
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	45.44	0.1363
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	2	45.44	0.0045
Annelida : Polychaeta	Spionidae	Prionospio perkinsi	8	181.76	0.0023
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	20	499.84	0.1545
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	4	90.88	0.0932
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	6	136.32	0.0068
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	8	181.76	0.0182
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	1	22.72	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barmardi	1	22.72	0.0023
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0023
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans	2	45.44	0.0091
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	3	113.6	0.3522
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	1	22.72	0.0091
Mollusca : Bivalvia	Lasaeidae	Lasaeidae	1	22.72	0.0091
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	19	431.68	0.3022
Mollusca : Bivalvia	Mytilidae	Mytilidae	1	22.72	0.0023
Mollusca : Bivalvia	Nuculidae	Nucula proxima	1	22.72	0.0011
Mollusca : Bivalvia	Tellinidae	Macoploma tenta	1	22.72	0.0591
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0023
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	2	45.44	0.0011
Mollusca : Gastropoda	Pyramidellidae	Odostomia sp.	1	22.72	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	6	136.32	0.0727
Nemertina	Tubulanidae	Carinomella lactea	5	113.6	0.0182
Phoronida	Phoronidae	Phoronis sp.	32	795.2	0.184
		<b>Total</b>	<b>148</b>	<b>3612.5</b>	<b>1.8892</b>
		<b># Taxa</b>	<b>29</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-09-1

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	90.88	0.0011
Annelida : Polychaeta	Capitellidae	Capitella teleta	1	22.72	0.0023
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	3	68.16	0.0068
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	1	22.72	0.0011
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	11	249.92	0.0409
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	2	45.44	0.0023
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0023
Annelida : Polychaeta	Orbiniidae	Scoloplos rubra	1	22.72	0.0045
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0045
Annelida : Polychaeta	Paraonidae	Aricidea wassi	1	22.72	0.0011
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	11	249.92	0.0182
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	3	68.16	0.0045
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	1	22.72	0.0045
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0341
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	9	204.48	0.0795
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	2	45.44	0.0011
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	1	22.72	0.0023
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	6	136.32	0.0091
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	2	45.44	0.0045
Arthropoda : Amphipoda	Ischyroceridae	Enithonius brasiliensis	3	68.16	0.0045
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	4	90.88	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barmardi	2	45.44	0.0011
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis	1	22.72	0.0045
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	2	45.44	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	2	181.76	0.4226
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	10	227.2	0.0182
Mollusca : Bivalvia	Nuculidae	Nucula proxima	3	68.16	0.0886
Mollusca : Bivalvia	Tellinidae	Tellinidae	1	22.72	0.0023
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	2	45.44	0.0364
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0011
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0011
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0023
		<b>Total</b>	<b>96</b>	<b>2317.4</b>	<b>0.812</b>
		<b># Taxa</b>	<b>32</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-09-2

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0023
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	4	90.88	0.0045
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	3	68.16	0.0011
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	3*	90.88	0.0114
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris	1	22.72	0.0045
Annelida : Polychaeta	Gonjadiae	Glycinde multident	2	45.44	0.0091
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	22.72	0.0386
Annelida : Polychaeta	Orbiniidae	Scoloplos rubra	1	22.72	0.0114
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	1	22.72	0.0023
Annelida : Polychaeta	Paraonidae	Aricidea wassi	3	68.16	0.0068
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0227
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	4	90.88	0.0318
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	1	22.72	0.0068
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	1	22.72	0.3772
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	1	45.44	0.0591
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0114
Mollusca : Bivalvia	Lasaeidae	Erycina sp.	1	22.72	0.0045
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	2	45.44	0.0023
Mollusca : Bivalvia	Nuculidae	Nucula proxima	5	113.6	0.0068
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0045
Mollusca : Gastropoda	Mangeliidae	Oenopota	1	22.72	0.0068
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	4	90.88	0.0114
Phoronida	Phoronidae	Phoronis sp.	7	159.04	0.0204
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0011
		<b>Total</b>	<b>54</b>	<b>1272.3</b>	<b>0.6644</b>
		<b># Taxa</b>	<b>25</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-09-3

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	90.88	0.0011
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	4	90.88	0.0045
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	4	159.04	0.0704
Annelida : Polychaeta	Cirratulidae	Caulerella venefica	5	113.6	0.0114
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	5*	113.6	0.05
Annelida : Polychaeta	Cirratulidae	Tharyx sp. A Morris	1	22.72	0.0114
Annelida : Polychaeta	Glyceridae	Glycera americana	1	45.44	0.3022
Annelida : Polychaeta	Gonadidae	Glycine multidentis	0	22.72	0.1136
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	2	45.44	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0068
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	2	45.44	0.0091
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	9	272.64	0.3363
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	1	22.72	0.0011
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	7	159.04	0.0136
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	2	45.44	0.0023
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	1	22.72	0.0227
Arthropoda : Decapoda	Pinnotheridae	Pinnixa sp.	1	22.72	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	2	45.44	0.0568
Echinodermata : Ophiuroidea	Amphiuridae	Microphiophois atra	1	22.72	0.0023
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	9	204.48	0.6452
Mollusca : Bivalvia	Nuculidae	Nucula proxima	5	113.6	0.0023
Mollusca : Bivalvia	Tellinidae	Limecola balthica	1	22.72	0.1886
Mollusca : Gastropoda	Acteonidae	Japonactaeon punctostriatus	1	22.72	0.0023
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	13	295.36	0.0636
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	2	45.44	0.0114
Mollusca : Gastropoda	Turridae	Kurtziella atrotyla	3	68.16	0.0386
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0023
Nemertina	Tubulanidae	Carinomella lactea	6	136.32	0.0227
Phoronida	Phoronidae	Phoronis sp.	10	295.36	0.1113
Platyhelminthes : Turbellaria	Unidentified	Polycladida	1	22.72	0.0023
			<b>Total</b>	<b>106</b>	<b>2658.2</b>
			<b># Taxa</b>	<b>30</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-10-1

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0011
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis	3	68.16	0.0091
Annelida : Polychaeta	Hesionidae	Podarkeopsis levifuscina	1	22.72	0.0045
Annelida : Polychaeta	Maldanidae	Clymenella torquata	0	22.72	0.0341
Annelida : Polychaeta	Nephtyidae	Nephtys picta	1	22.72	0.0477
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0045
Annelida : Polychaeta	Paraonidae	Paraonis fulgens	1	22.72	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	11	249.92	0.0386
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0204
Annelida : Polychaeta	Terebellidae	Loimia viridis	1	22.72	0.0045
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	4	90.88	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0045
Arthropoda : Amphipoda	Aoridae	Unciola serrata	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	20	590.72	1.7199
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0159
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	6	136.32	0.0045
Mollusca : Bivalvia	Nuculidae	Nucula proxima	51	1158.72	0.3999
Mollusca : Bivalvia	Tellinidae	Limecola balthica	4	90.88	0.0704
Mollusca : Gastropoda	Caecidae	Caecum regulare	13	295.36	0.0136
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0341
			<b>Total</b>	<b>124</b>	<b>2976.3</b>
			<b># Taxa</b>	<b>20</b>	

SampleID: 17-10-2

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0091
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0432
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	2	45.44	0.0091
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius sp. D (Morris)	1	22.72	0.0068
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3	68.16	0.0204
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	5	113.6	0.0613
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.8384
Mollusca : Bivalvia	Tellinidae	Tellinidae	2	45.44	0.0011
Mollusca : Bivalvia	Unidentified	Bivalvia	1	22.72	0.0011
Mollusca : Bivalvia	Veneridae	Gemma gemma	3	68.16	0.0011
Phoronida	Phoronidae	Phoronis sp.	2	45.44	0.0091
			<b>Total</b>	<b>24</b>	<b>545.28</b>
			<b># Taxa</b>	<b>12</b>	

\* denotes not included in total number of taxa

**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: 17-10-3

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	2	45.44	0.0068
Annelida : Polychaeta	Paraonidae	Aricidea wassi	6	136.32	0.0068
Annelida : Polychaeta	Paraonidae	Paraonis fulgens	1	22.72	0.0068
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius intermedius	7	159.04	0.0613
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barmardi	1	22.72	0.0023
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3	68.16	0.025
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0023
Arthropoda : Decapoda	Unidentified	Caridea	1	22.72	0.0159
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	1	68.16	0.2454
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	4	90.88	0.0182
Mollusca : Bivalvia	Macluridae	Mulinia lateralis	1	22.72	0.3544
Mollusca : Bivalvia	Nuculidae	Nucula proxima	1	22.72	0.0011
Mollusca : Bivalvia	Veneridae	Gemma gemma	2	45.44	0.0659
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0023
<b>Total</b>			<b>32</b>	<b>772.48</b>	<b>0.8145</b>
<b># Taxa</b>			<b>14</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-11-1

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	11	249.92	0.0068	
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	2	68.16	0.0523	
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	13	295.36	0.05	
Annelida : Polychaeta	Eunicidae	Marphysa belli	2	45.44	0.0023	
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	2	45.44	0.0477	
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	2	45.44	0.0011	
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	1	22.72	0.0568	
Annelida : Polychaeta	Nereididae	Allitta succinea	8	227.2	0.1409	
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0045	
Annelida : Polychaeta	Pilargidae	Hermundura fauveli	1	22.72	0.0045	
Annelida : Polychaeta	Sabelliariidae	Parasabella microphthalma	6	136.32	0.0591	
Annelida : Polychaeta	Sabelliariidae	Sabellaria vulgaris	115	2612.8	0.3862	
Annelida : Polychaeta	Sabellidae	Sabellidae	3*	68.16	0.0023	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	6	136.32	0.0273	
Annelida : Polychaeta	Sigalionidae	Sthenelais boa	1	22.72	0.0136	
Annelida : Polychaeta	Spionidae	Dipolydora socialis	2	45.44	0.0045	
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	1	22.72	0.0159	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	2	45.44	0.0011	
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia	1	22.72	0.0011	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	3	68.16	0.0318	
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	4	90.88	0.0114	
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	15	340.8	0.0454	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	4	90.88	0.0159	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	13	295.36	0.0227	
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	13	295.36	0.0114	
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	10	227.2	0.0227	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	2	45.44	0.0023	
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	7	159.04	0.0091	
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	1	22.72	0.0045	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	22.72	0.0045	
Arthropoda : Decapoda	Unidentified	Axiidea sp.	1	22.72	0.0011	
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	1	22.72	0.0023	
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	1	22.72	0.0011	
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	6	136.32	0.3158	
Mollusca : Bivalvia	Anomiidae	Anomia simplex	1	22.72	0.0045	
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.0091	
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	2	45.44	0.0136	
Mollusca : Bivalvia	Nuculidae	Nucula proxima	5	113.6	0.0182	
Mollusca : Gastropoda	Caecidae	Caecum regulare	1	22.72	0.0023	
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	1	22.72	0.0091	
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	8	181.76	0.0318	
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	19	431.68	0.1318	
Mollusca : Gastropoda	Nassariidae	Nassaricus vibex	1	22.72	1.0565	
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	3	68.16	0.0023	
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	6	136.32	0.05	
Nemertina	Amphiporidae	Amphiporus bioculatus	2	45.44	0.025	
			<b>Total</b>	<b>312</b>	<b>7156.8</b>	<b>2.7342</b>
			<b># Taxa</b>	<b>45</b>		

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: 17-11-2

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	7	159.04	0.0273
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	2	45.44	0.0011
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	1	22.72	0.1136
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	45.44	0.1522
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0023
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	1	22.72	0.0011
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	1	22.72	0.0011
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	2	45.44	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	1	22.72	0.0045
Arthropoda : Cumacea	Bodotriidae	Cyclaspis varians	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	13	295.36	0.6498
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0045
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	4	90.88	0.0182
Mollusca : Bivalvia	Nuculidae	Nucula proxima	1	22.72	0.0011
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0364
Mollusca : Bivalvia	Veneridae	Mercenaria mercenaria	1	22.72	0.2704
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	2	45.44	0.0295
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	2	45.44	0.0058
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0068
Phoronida	Phoronidae	Phoronis sp.	2	45.44	0.0159
Platyhelminthes : Turbellaria	Unidentified	Polycladida	1	22.72	0.0045
			<b>Total</b>	<b>48</b>	<b>1113.3</b>
			<b># Taxa</b>	<b>21</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-11-3

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	1	22.72	0.0045
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0011
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	2	45.44	0.0409
Annelida : Polychaeta	Maldanidae	Maldanidae	1	22.72	0.0273
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	22.72	0.0182
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	13	295.36	0.0295
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	2	45.44	0.0204
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0023
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	3	68.16	0.0023
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	45.44	0.0091
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	22.72	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	2	45.44	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	3	68.16	0.1204
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	7	159.04	0.0364
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0023
Mollusca : Bivalvia	Tellinidae	Macoploma tenta	1	22.72	0.1272
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	3	68.16	0.0023
Mollusca : Gastropoda	Acteonidae	Japonactaeon punctostriatus	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	3	68.16	0.0273
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	5	113.6	0.0182
Mollusca : Gastropoda	Pyramidellidae	Eulimastoma engonium	1	22.72	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	9	204.48	0.05
Phoronida	Phoronidae	Phoronis sp.	10	227.2	0.0204
<b>Total</b>			<b>77</b>	<b>1749.4</b>	<b>0.5737</b>
<b># Taxa</b>			<b>25</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-12-1

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	1	22.72	0.0023
Annelida : Polychaeta	Cirratulidae	Caulleriella venefica	1	22.72	0.0011
Annelida : Polychaeta	Glyceridae	Glyceridae	1	22.72	0.0295
Annelida : Polychaeta	Goniadidae	Glycinde multident	1	22.72	0.0068
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0068
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	0	22.72	0.0727
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	4	113.6	0.0432
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0023
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	2	45.44	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	2	45.44	0.0204
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	9	249.92	0.3499
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans	1	22.72	0.0068
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	4	90.88	0.0159
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	0	22.72	0.0341
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	3	68.16	0.1113
Mollusca : Bivalvia	Mactridae	Mulinia lateralis	2	45.44	0.0023
Mollusca : Bivalvia	Nuculidae	Nucula proxima	3	68.16	0.0841
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	22.72	0.0091
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	3	68.16	0.0114
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0023
		<b>Total</b>	<b>44</b>	<b>1113.3</b>	<b>0.8225</b>
		<b># Taxa</b>	<b>23</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-12-2

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis	1	22.72	0.0068
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	19	431.68	0.0114
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	3	68.16	0.0114
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1*	22.72	0.0091
Annelida : Polychaeta	Cirratulidae	Tharyx acutus	1	22.72	0.0182
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	0	22.72	0.075
Annelida : Polychaeta	Pilargidae	Sigambra tentaculata	1	22.72	0.0011
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0011
Annelida : Polychaeta	Spionidae	Streblospio benedicti	4	90.88	0.0011
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	2	45.44	0.0636
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus	1	22.72	0.0045
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	4	90.88	0.0364
Arthropoda : Amphipoda	Ampeliscidae	Ampelisa verrilli	5	113.6	0.0204
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	1	22.72	0.0011
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3	68.16	0.0182
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	2	45.44	0.0023
Arthropoda : Cumacea	Leuconidae	Leucon americanus	1	22.72	0.0023
Arthropoda : Decapoda	Callinassidae	Biffarius biformis	1	22.72	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	2	68.16	0.1522
Mollusca : Bivalvia	Kelliidae	Kelliopsis elevata	1	22.72	0.0204
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	6	136.32	0.1795
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0011
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	3	68.16	0.0432
Mollusca : Gastropoda	Nassariidae	Ilyanassa trivittata	1	22.72	0.0295
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0023
			<b>Total</b>	<b>67</b>	<b>1567.7</b>
			<b># Taxa</b>	<b>24</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-12-3

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	7	159.04	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	20	454.4	0.0182
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis	2	45.44	0.0045
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	2	45.44	0.0295
Annelida : Polychaeta	Glyceridae	Glyceridae	1	22.72	0.0011
Annelida : Polychaeta	Hesionidae	Podarke obscura	22	499.84	0.0909
Annelida : Polychaeta	Nereididae	Alitta succinea	26	590.72	0.1431
Annelida : Polychaeta	Orbiniidae	Scoloplos rubra	1	22.72	0.0045
Annelida : Polychaeta	Phyllodoceidae	Eumida sanguinea	1	22.72	0.0136
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	792	17994.24	1.3587
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	3	68.16	0.0364
Annelida : Polychaeta	Spionidae	Dipolydora socialis	23	522.56	0.0318
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	1	22.72	0.0068
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	49	1113.28	0.777
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	2	45.44	0.0011
Arthropoda : Amphipoda	Aoridae	Unciola serrata	10	227.2	0.0318
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	2	45.44	0.0011
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	1	22.72	0.0045
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	22.72	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus sp.	1	22.72	0.0182
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	5	113.6	0.4726
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	10	408.96	2.0334
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	3	68.16	0.0727
Mollusca : Bivalvia	Arcidae	Anadara transversa	3	68.16	0.3385
Mollusca : Bivalvia	Nuculidae	Nucula proxima	8	181.76	0.2795
Mollusca : Bivalvia	Veneridae	Mercenaria mercenaria	2	45.44	0.05
Mollusca : Gastropoda	Calyptraeidae	Crepidula plana	1	22.72	0.0023
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	1	22.72	0.0011
Nemertina	Amphiporidae	Amphiporus bioculatus	2	45.44	0.0114
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	4	90.88	0.0545
		<b>Total</b>	<b>1007</b>	<b>23061</b>	<b>5.9001</b>
		<b># Taxa</b>	<b>31</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-13-1

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	10	227.2	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	2	45.44	0.0011
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	1	22.72	0.0136
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0023
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	1	22.72	0.0159
Annelida : Polychaeta	Nephtyidae	Nephtys picta	2	45.44	0.075
Annelida : Polychaeta	Nereididae	Alitta succinea	5	113.6	0.0341
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos robustus	0	22.72	0.1204
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	7	159.04	0.0409
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	1	22.72	0.0011
Annelida : Polychaeta	Syllidae	Brania wellfleetensis	1	22.72	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	5	113.6	0.1068
Arthropoda : Amphipoda	Aoridae	Unciola serrata	11	249.92	0.0318
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis	1	22.72	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	21	545.28	1.3291
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	3	68.16	0.0011
Mollusca : Bivalvia	Nuculidae	Nucula proxima	4	90.88	0.0045
Mollusca : Gastropoda	Caecidae	Caecum regulare	1	22.72	0.0023
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	1	22.72	0.0114
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	8	181.76	0.0772
Nemertina	Amphiporidae	Amphiporus bioculatus	4	90.88	0.0068
Nemertina	Tubulanidae	Carinomella lactea	2	45.44	0.0045
Phoronida	Phoronidae	Phoronis sp.	9	204.48	0.0545
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0011
			<b>Total</b>	<b>102</b>	<b>2408.3</b>
			<b># Taxa</b>	<b>24</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-13-2

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Arabellidae	Drilonereis longa	0	22.72	0.0204
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	1	22.72	0.0636
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	6	136.32	0.0318
Annelida : Polychaeta	Maldanidae	Clymenella torquata	1	22.72	0.0409
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	2	45.44	0.0068
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	2	45.44	0.0011
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	3	68.16	0.0114
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	4	90.88	0.0091
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	4	90.88	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	1	22.72	0.0011
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	1	22.72	0.0795
Hemichordata	Harrimaniidae	Saccoglossus kowalevskii	1	22.72	0.0091
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	27	613.44	0.1613
Mollusca : Bivalvia	Nuculidae	Nucula proxima	1	22.72	0.0023
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0011
Mollusca : Bivalvia	Tellinidae	Limecola balthica	1	22.72	0.1113
Mollusca : Bivalvia	Veneridae	Pitar morrhuanus	1	22.72	0.0068
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	8	181.76	0.0477
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	1	22.72	0.0023
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	4	90.88	0.0159
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0045
Phoronida	Phoronidae	Phoronis sp.	7	159.04	0.0545
<b>Total</b>			<b>79</b>	<b>1817.6</b>	<b>0.6848</b>
<b># Taxa</b>			<b>22</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-13-3

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	10	227.2	0.0011
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	5	113.6	0.0045
Annelida : Polychaeta	Goniadidae	Glycinde multicens	1	22.72	0.0011
Annelida : Polychaeta	Onuphidae	Diopatra cuprea	1	22.72	0.0409
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0045
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	1	22.72	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	54	1226.88	0.1795
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	2	45.44	0.0182
Annelida : Polychaeta	Syllidae	Erinacausyllis erinaceus	1	22.72	0.0011
Annelida : Polychaeta	Terebellidae	Loimia viridis	1	22.72	0.0454
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	5	113.6	0.0613
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	2	45.44	0.0091
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	1	22.72	0.0045
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	1	22.72	0.0011
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	1	22.72	0.0023
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	3	68.16	0.0023
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	3	68.16	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	3	68.16	0.2136
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	1	22.72	0.0011
Arthropoda : Isopoda	Idoteidae	Enichsonella filiformis	1	22.72	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	10	363.52	0.7634
Echinodermata : Holothuroidea	Phylloporidae	Pentamera pulcherrima	1	22.72	0.0045
Mollusca : Bivalvia	Anomiidae	Anomia simplex	1	22.72	0.15
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	2	45.44	0.0136
Mollusca : Bivalvia	Lyonsiidae	Lyonsia sp.	1	22.72	0.0023
Mollusca : Bivalvia	Nuculidae	Nucula proxima	8	181.76	0.0136
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0227
Mollusca : Bivalvia	Tellinidae	Macoploma tenta	1	22.72	0.2369
Mollusca : Gastropoda	Caecidae	Caecum regulare	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Paryanachis obesa	3	68.16	0.0386
Mollusca : Gastropoda	Columbellidae	Costoanachis evara	1	22.72	0.0068
Mollusca : Gastropoda	Columbellidae	Astyris lunata	2	45.44	0.025
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0045
Phoronida	Phoronidae	Phoronis sp.	2	45.44	0.0045
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	2	45.44	0.0011
			<b>Total</b>	<b>135</b>	<b>3203.5</b>
			<b># Taxa</b>	<b>35</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-14-1

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	11	249.92	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	3	68.16	0.0011
Annelida : Polychaeta	Cirratulidae	Cautleriella vanefica	38	863.36	0.0568
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0114
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	0	22.72	0.0863
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0011
Annelida : Polychaeta	Nereididae	Nereididae	2	45.44	0.0011
Annelida : Polychaeta	Paraonidae	Aricidea wassi	1	22.72	0.0023
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	2	45.44	0.0114
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	2	45.44	0.0204
Annelida : Polychaeta	Terabellidae	Polycirrus eximius	2	45.44	0.0409
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0068
Arthropoda : Amphipoda	Aoridae	Unciola serrata	3	68.16	0.0011
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	1	90.88	0.3294
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0011
Mollusca : Bivalvia	Lucinidae	Parvulucina crenella	2	45.44	0.0136
Mollusca : Bivalvia	Nuculidae	Nucula proxima	8	181.76	0.2613
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	1	22.72	0.0204
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	2	45.44	0.0159
Nemertina	Amphiporidae	Amphiporus bioculatus	3	68.16	0.0045
Nemertina	Lineidae	Lineidae	1	22.72	0.0954
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0068
			<b>Total</b>	<b>91</b>	<b>2158.4</b>
			<b># Taxa</b>	<b>25</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-14-2

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	51	1158.72	0.0432
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	5	113.6	0.0182
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	6	136.32	0.0182
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	1	22.72	0.0023
Annelida : Polychaeta	Nereididae	Alitta succinea	3	68.16	0.0114
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	3	68.16	0.0136
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	3	68.16	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	36	817.92	0.234
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	5	113.6	0.0273
Annelida : Polychaeta	Spionidae	Dipolydora socialis	2	45.44	0.0011
Annelida : Polychaeta	Syllidae	Streptosyllis websteri	2	45.44	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	20	454.4	0.2613
Annelida : Polychaeta	Terebellidae	Loimia viridis	1	22.72	0.0045
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0011
Arthropoda : Amphipoda	Aoridae	Unciola serrata	19	431.68	0.0182
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	45.44	0.0045
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	1	22.72	0.0023
Arthropoda : Cumacea	Diastylidae	Oxyrostylis smithi	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	4	113.6	0.3703
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans	1	22.72	0.1659
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0114
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.0045
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	8	181.76	0.1204
Mollusca : Bivalvia	Nuculidae	Nucula proxima	22	499.84	0.593
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0023
Mollusca : Bivalvia	Veneridae	Pitar morrhuanus	1	22.72	0.0011
Mollusca : Bivalvia	Veneridae	Gemma gemma	1	22.72	0.0011
Mollusca : Gastropoda	Caecidae	Caecum regulare	4	90.88	0.0045
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	2	45.44	0.0273
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	2	45.44	0.0182
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	8	181.76	0.05
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0023
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	2	45.44	0.0023
			<b>Total</b>	<b>222</b>	<b>5066.6</b>
			<b># Taxa</b>	<b>34</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-14-3

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	2	45.44	0.0023
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	0	22.72	0.0068
Annelida : Polychaeta	Cirratulidae	Cautleriella vanefica	9	204.48	0.0091
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0011
Annelida : Polychaeta	Nephtyidae	Nephtys picta	1	45.44	0.0704
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	2	45.44	0.0011
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	3	68.16	0.0068
Annelida : Polychaeta	Spionidae	Dipolydora commensalis	1	22.72	0.0011
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	3	68.16	0.0011
Annelida : Polychaeta	Syllidae	Exogone dispar	1	22.72	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	14	318.08	0.1204
Annelida : Polychaeta	Terebellidae	Loimia viridis	1	22.72	0.0045
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0011
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	8	181.76	0.0114
Arthropoda : Amphipoda	Ischyroceridae	Encthonius brasiliensis	2	45.44	0.0068
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	1	22.72	0.0114
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	1	22.72	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	2	45.44	0.0568
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	10	227.2	0.0091
Mollusca : Bivalvia	Nuculidae	Nucula proxima	17	386.24	0.1068
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0023
Mollusca : Gastropoda	Caecidae	Caecum regulare	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	8	181.76	0.0523
Mollusca : Gastropoda	Nassariidae	Nassaricus vibex	1	22.72	0.9883
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	7	159.04	0.0386
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0068
			<b>Total</b>	<b>100</b>	<b>2317.4</b>
			<b># Taxa</b>	<b>26</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-15-1

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	6	136.32	0.0045
Annelida : Polychaeta	Capitellidae	Heteromastus filiformis	1	22.72	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	16	363.52	0.0182
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	1	22.72	0.0011
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	6	136.32	0.0114
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	1	22.72	0.0023
Annelida : Polychaeta	Glyceridae	Glycera americana	0	22.72	0.2045
Annelida : Polychaeta	Hesionidae	Podarke obscura	34	772.48	0.0841
Annelida : Polychaeta	Nereididae	Alitta succinea	47	1067.84	0.4112
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	15	340.8	0.3363
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	953	21652.16	2.6151
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	13	295.36	0.0318
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	31	704.32	0.3181
Annelida : Polychaeta	Spionidae	Dipolydora socialis	4	90.88	0.0068
Annelida : Polychaeta	Syllidae	Erinaceusyllis erinaceus	1	22.72	0.0023
Annelida : Polychaeta	Syllidae	Exogone dispar	4	90.88	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	87	1976.64	1.1201
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	43	976.96	0.2113
Arthropoda : Amphipoda	Aoridae	Unciola serrata	354	8042.88	1.2541
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	42	954.24	0.1704
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	2	45.44	0.0011
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	18	408.96	0.0273
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	10	227.2	0.0182
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	15	340.8	0.0182
Arthropoda : Cirripedia	Balanidae	Balanidae	1	22.72	0.0068
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	1	22.72	0.2658
Arthropoda : Decapoda	Porcellanidae	Euceramus praelongus	1	22.72	0.1318
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	14	340.8	5.5891
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	3	113.6	0.3862
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	7	159.04	0.184
Mollusca : Bivalvia	Arcidae	Anadara transversa	7	159.04	0.2499
Mollusca : Bivalvia	Nuculidae	Nucula proxima	13	295.36	0.1477
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.1681
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0114
Mollusca : Bivalvia	Veneridae	Gemma gemma	3	68.16	0.0136
Mollusca : Gastropoda	Caecidae	Caecum regulare	2	45.44	0.0045
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	1	22.72	0.0114
Mollusca : Gastropoda	Nassariidae	Nassarius vibex	1	22.72	0.6339
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	1	22.72	0.0045
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	4	90.88	0.0091
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	2	45.44	0.0186
		<b>Total</b>	<b>1767</b>	<b>40237</b>	<b>14.7066</b>
		<b># Taxa</b>	<b>41</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-15-2

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	10	227.2	0.0045
Annelida : Polychaeta	Arabellidae	Drilonereis longa	1	22.72	0.0045
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	6	136.32	0.0159
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	3	68.16	0.0114
Annelida : Polychaeta	Eunicidae	Marphysa belli	1	22.72	0.1113
Annelida : Polychaeta	Hesionidae	Podarke obscura	3	68.16	0.0114
Annelida : Polychaeta	Nephtyidae	Nephtys picta	1	22.72	0.1068
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	7	159.04	0.0636
Annelida : Polychaeta	Nereididae	Alitta succinea	9	204.48	0.1113
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0136
Annelida : Polychaeta	Polynoidae	Polynoidae	4	90.88	0.0295
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	197	4475.84	0.468
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	1	22.72	0.0091
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	4	90.88	0.1204
Annelida : Polychaeta	Spionidae	Dipolydora socialis	4	90.88	0.0091
Annelida : Polychaeta	Syllidae	Exogone dispar	3	68.16	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	65	1476.8	0.7861
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	8	181.76	0.0227
Arthropoda : Amphipoda	Aoridae	Unciola serrata	32	727.04	0.0841
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	72	1635.84	0.2636
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	2	45.44	0.0045
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	2	45.44	0.0011
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	9	204.48	0.025
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	3	68.16	0.0068
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	13	295.36	0.0273
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	1	22.72	0.3204
Arthropoda : Mysidacea	Mysidae	Mysidae	1	22.72	0.0045
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	5	159.04	0.7475
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.0204
Mollusca : Bivalvia	Nuculidae	Nucula proxima	14	318.08	1.5813
Mollusca : Gastropoda	Calyptaeidae	Crepidula plana	1	22.72	0.0114
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	21	477.12	1.704
		<b>Total</b>	<b>505</b>	<b>11519</b>	<b>6.7022</b>
		<b># Taxa</b>	<b>32</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-15-3

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	90.88	0.0023
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	9	204.48	0.0341
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0182
Annelida : Polychaeta	Eunicidae	Marphysa belli	5	136.32	0.5407
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	2	45.44	0.0045
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0045
Annelida : Polychaeta	Maldanidae	Clymenella zonalis	1	22.72	0.0227
Annelida : Polychaeta	Nereididae	Alitta succinea	16	363.52	0.0886
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalmia	11	249.92	0.0386
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	105	2385.6	0.5021
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	3	68.16	0.0295
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	2	45.44	0.0068
Annelida : Polychaeta	Spionidae	Dipolydora socialis	7	159.04	0.0182
Annelida : Polychaeta	Syllidae	Exogone dispar	9	204.48	0.0045
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	181.76	0.0818
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	30	681.6	0.1999
Arthropoda : Amphipoda	Aoridae	Unciola serrata	5	113.6	0.0114
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	9	204.48	0.0318
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	9	204.48	0.025
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	15	340.8	0.0182
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	15	340.8	0.075
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	3	68.16	0.0091
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3	68.16	0.0091
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	2	45.44	0.0011
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	6	136.32	1.3109
Cnidaria : Anthozoa	Sagartidae	Actinothoe sp.	3	68.16	0.0182
Mollusca : Bivalvia	Arcidae	Anadara transversa	2	45.44	0.0114
Mollusca : Bivalvia	Nuculidae	Nucula proxima	9	204.48	0.4203
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis	9	204.48	0.0318
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.2272
Mollusca : Bivalvia	Veneridae	Mercenaria mercenaria	1	22.72	0.0159
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	12	272.64	0.2227
Mollusca : Gastropoda	Columbellidae	Astyril lunata	5	113.6	0.0523
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	5	113.6	0.0795
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	2	45.44	0.0023
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	2	45.44	0.0068
Nemertina	Tubulanidae	Carinomella lactea	3	68.16	0.0068
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0045
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0045
		<b>Total</b>	<b>338</b>	<b>7702.1</b>	<b>4.1928</b>
		<b># Taxa</b>	<b>39</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-16-1

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	45	1022.4	0.0273
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	2	45.44	0.0023
Annelida : Polychaeta	Eunicidae	Marphysa belli	1	22.72	0.0318
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	4*	90.88	0.0114
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Hesionidae	Podarke obscura	26	590.72	0.0454
Annelida : Polychaeta	Nereididae	Alitta succinea	30	681.6	0.1022
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	10	227.2	0.0454
Annelida : Polychaeta	Polygordiidae	Polygordius jouinae	1	22.72	0.0011
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	2	45.44	0.0011
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	19	431.68	0.2817
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	8	181.76	0.0204
Annelida : Polychaeta	Syllidae	Erinaceusyllis erinaceus	2	45.44	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	10	227.2	0.1091
Arthropoda : Amphipoda	Aoridae	Unciola serrata	22	499.84	0.0341
Arthropoda : Decapoda	Paguridae	Pagurus longicarpus	2	45.44	0.2227
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	16	658.88	2.4651
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	3	68.16	0.0068
Mollusca : Bivalvia	Crassatellidae	Crassinella lunulata	6	136.32	0.0432
Mollusca : Bivalvia	Lyonsiidae	Lyonsia sp.	1	22.72	0.0023
Mollusca : Bivalvia	Nuculidae	Nucula proxima	7	159.04	0.0659
Mollusca : Bivalvia	Veneridae	Gemma gemma	5	113.6	0.0011
Mollusca : Gastropoda	Columbellidae	Astyris lunata	1	22.72	0.0091
Nemertina	Amphiporidae	Amphiporus bioculatus	2	45.44	0.0068
			<b>Total</b>	<b>226</b>	<b>5430.1</b>
			<b># Taxa</b>	<b>23</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-16-2

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	90.88	0.0011
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	1	22.72	0.0023
Annelida : Polychaeta	Paraonidae	Paraonis fulgens	1	22.72	0.0011
Annelida : Polychaeta	Paraonidae	Aricidea wassi	1	22.72	0.0023
Annelida : Polychaeta	Polygordiidae	Polygordius jouinae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	6	136.32	0.0341
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0023
Arthropoda : Amphipoda	Ampeliscaidae	Ampelisca vadorum	1	22.72	0.0045
Arthropoda : Amphipoda	Aoridae	Unciola serrata	1	22.72	0.0045
Arthropoda : Decapoda	Paguridae	Pagurus sp.	3	68.16	0.0227
Chordata : Ascidiacea	Unidentified	Ascidiacea	1	22.72	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	9	272.64	0.6316
Mollusca : Bivalvia	Nuculidae	Nucula proxima	12	272.64	0.1659
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	5	113.6	0.1272
Mollusca : Bivalvia	Veneridae	Gemma gemma	11	249.92	0.0136
Mollusca : Gastropoda	Caecidae	Caecum regulare	1	22.72	0.0023
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	22.72	0.0068
Nemertina	Cephalothricidae	Cephalothrix spiralis	2	45.44	0.0023
			<b>Total</b>	<b>62</b>	<b>1476.8</b>
			<b># Taxa</b>	<b>18</b>	

SampleID: 17-16-3

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	178	4044.16	0.0591
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	7	159.04	0.0045
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	4	90.88	0.0068
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	2	45.44	0.0045
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0045
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	3	68.16	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	13	295.36	0.0159
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	1	22.72	0.0011
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	2	45.44	0.0045
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	2	45.44	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	14	386.24	0.8952
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	1	22.72	0.0011
Mollusca : Bivalvia	Nuculidae	Nucula proxima	20	454.4	0.4158
Mollusca : Bivalvia	Veneridae	Mercenaria mercenaria	1	22.72	0.0364
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0045
			<b>Total</b>	<b>250</b>	<b>5748.2</b>
			<b># Taxa</b>	<b>15</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-17-1

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	5	113.6	0.0011
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	9	204.48	0.0068
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0023
Annelida : Polychaeta	Dorvilleidae	Schistomeringos ruddolphi	1	22.72	0.0182
Annelida : Polychaeta	Glyceridae	Glycera sp.	1	22.72	0.0182
Annelida : Polychaeta	Hesionidae	Podarke obscura	3	68.16	0.0011
Annelida : Polychaeta	Nereididae	Alitta succinea	12	272.64	0.0386
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	1	22.72	0.0068
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	341	7747.52	1.7494
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	5	113.6	0.0023
Annelida : Polychaeta	Syllidae	Exogone dispar	4	90.88	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	6	136.32	0.0477
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	3	68.16	0.025
Arthropoda : Amphipoda	Aoridae	Unciola serrata	28	636.16	0.0795
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	113	2567.36	0.4203
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1	22.72	0.0011
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	22.72	0.0011
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	4	90.88	0.0045
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	13	295.36	0.0545
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	3	68.16	0.0011
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	17	386.24	0.0273
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	2	45.44	0.0023
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	4	90.88	0.4658
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	1	45.44	0.209
Echinodermata : Holothuroidea	Phylloporidae	Pentamera pulcherrima	1	22.72	0.0863
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.0045
Mollusca : Bivalvia	Lucinidae	Parvulucina crenella	2	45.44	0.0011
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0011
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis	19	431.68	0.2636
Mollusca : Bivalvia	Veneridae	Gemma gemma	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Astyris lunata	5	113.6	0.0613
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	10	227.2	1.7426
Mollusca : Gastropoda	Nassariidae	Nassarius vibex	2	45.44	1.5813
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	1	22.72	0.0023
Nemertina	Amphiporidae	Amphiporus bioculatus	3	68.16	0.0068
			<b>Total</b>	<b>627</b>	<b>14268</b>
			<b># Taxa</b>	<b>35</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-17-2

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	12	272.64	0.0045
Annelida : Polychaeta	Arabellidae	Arabella iricolor	0	45.44	2.0175
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	11	249.92	0.0159
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	2	45.44	0.0182
Annelida : Polychaeta	Eunicidae	Marphysa belli	2	45.44	0.1068
Annelida : Polychaeta	Gonjadiae	Glycinde multidentis	1	22.72	0.0011
Annelida : Polychaeta	Hesionidae	Podarke obscura	4	90.88	0.025
Annelida : Polychaeta	Maldanidae	Maldanidae	1	22.72	0.0011
Annelida : Polychaeta	Nereididae	Alitta succinea	26	590.72	0.209
Annelida : Polychaeta	Polynoidae	Polynoidae	1	22.72	0.0204
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	161	3657.92	0.568
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	41	931.52	1.2905
Annelida : Polychaeta	Spionidae	Dipolydora socialis	2	45.44	0.0011
Annelida : Polychaeta	Spionidae	Dipolydora commensalis	4	90.88	0.0045
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0136
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	12	272.64	0.0273
Arthropoda : Amphipoda	Aoridae	Unciola serrata	54	1226.88	0.1113
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	13	295.36	0.0159
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	17	386.24	0.0182
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	8	181.76	0.0136
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	17	386.24	0.0227
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	22.72	0.0023
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0045
Arthropoda : Decapoda	Unidentified	Caridea	3	68.16	0.6316
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	10	227.2	0.5748
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	2	45.44	0.0159
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	22.72	0.0045
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis	17	386.24	0.0795
Mollusca : Bivalvia	Pholadidae	Barnea truncata	5	113.6	0.0045
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	3	68.16	0.05
Mollusca : Gastropoda	Columbellidae	Astyris lunata	7	159.04	0.0636
Mollusca : Gastropoda	Corambidae	Corambe obscura	1	22.72	0.0011
Mollusca : Gastropoda	Nassariidae	Ilyanassa trivittata	1	22.72	0.3476
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	2	45.44	0.0058
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	2	45.44	0.0045
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0364
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0068
			<b>Total</b>	<b>448</b>	<b>10224</b>
			<b># Taxa</b>	<b>37</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-17-3

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Arabellidae	Arabella iricolor	0	22.72	1.6563
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	7	159.04	0.0091
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0091
Annelida : Polychaeta	Dorvilleidae	Schistomeringos ruddolphi	2	45.44	0.0045
Annelida : Polychaeta	Eunicidae	Marphysa belli	2	113.6	1.5586
Annelida : Polychaeta	Goniatidae	Glycinde multident	1	22.72	0.0011
Annelida : Polychaeta	Hesionidae	Podarke obscura	4	90.88	0.0204
Annelida : Polychaeta	Nereididae	Allitta succinea	22	499.84	0.1295
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	1	22.72	0.0011
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	3	68.16	0.0114
Annelida : Polychaeta	Phyllodoceidae	Eteone heteropoda	1	22.72	0.0023
Annelida : Polychaeta	Polynoidae	Polynoidae	5	113.6	0.1022
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	2	45.44	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	385	8747.2	1.4086
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	36	817.92	0.1749
Annelida : Polychaeta	Syllidae	Exogone dispar	1	22.72	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	7	159.04	0.1
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	43	976.96	0.2726
Arthropoda : Amphipoda	Aoridae	Unciola serrata	73	1658.56	0.1886
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	36	817.92	0.1272
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	45.44	0.0091
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	5	113.6	0.0114
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	4	90.88	0.0045
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	22.72	0.0011
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	4	90.88	0.6952
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	3	68.16	0.0409
Mollusca : Bivalvia	Anomiidae	Anomia simplex	0	22.72	0.6771
Mollusca : Bivalvia	Arcidae	Anadara transversa	4	90.88	0.8111
Mollusca : Bivalvia	Nuculidae	Nucula proxima	20	454.4	0.7838
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	2	68.16	1.5768
Mollusca : Gastropoda	Calyptraeidae	Crepidula plana	1	22.72	0.0011
Mollusca : Gastropoda	Columbellidae	Astyris lunata	15	340.8	0.1636
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	13	295.36	0.2545
Mollusca : Gastropoda	Newtoniellidae	Retilaskyea emersonii	8	181.76	0.0932
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	10	227.2	0.0227
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	6	136.32	0.0114
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0045
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0159
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0114
			<b>Total</b>	<b>733</b>	<b>16790</b>
			<b># Taxa</b>	<b>39</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-18

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	5	113.6	0.0011
Annelida : Polychaeta	Arabellidae	Arabella iricolor	0	22.72	0.7202
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	12	272.64	0.0114
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0091
Annelida : Polychaeta	Nereididae	Alitta succinea	9	204.48	0.0613
Annelida : Polychaeta	Onuphidae	Diopatra cuprea	0	22.72	0.4771
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	1	22.72	0.0114
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	1	22.72	0.0182
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	2	45.44	0.025
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	307	6975.04	1.4268
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	9	204.48	0.0954
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	38	863.36	0.4476
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	7	159.04	0.0636
Arthropoda : Amphipoda	Aoridae	Unciola serrata	74	1681.28	0.1908
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	57	1295.04	0.2476
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	4	90.88	0.0091
Arthropoda : Decapoda	Unidentified	Caridea	2	45.44	0.2931
Arthropoda : Decapoda	Xanthidae	Xanthidae	3	68.16	0.359
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	8	181.76	0.5612
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	4	90.88	0.0386
Mollusca : Bivalvia	Arcidae	Anadara transversa	6	136.32	0.2726
Mollusca : Bivalvia	Nuculidae	Nucula proxima	33	749.76	0.443
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.159
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0091
Mollusca : Gastropoda	Columbellidae	Costoanachis avara	14	318.08	0.5498
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	9	204.48	0.1045
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	7	159.04	0.0863
Mollusca : Gastropoda	Nassariidae	Nassarjuss vibex	1	22.72	0.7111
Phoronida	Phoronidae	Phoronis sp.	1	22.72	0.0045
		<b>Total</b>	<b>617</b>	<b>14064</b>	<b>7,4075</b>
		<b># Taxa</b>	<b>29</b>		

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: 17-19

Collection Date: 9/14/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	1	22.72	0.0011
Annelida : Polychaeta	Nereididae	Alitta succinea	1	22.72	0.0204
Annelida : Polychaeta	Orbinidae	Leitoscoloplos sp.	10	227.2	0.025
Annelida : Polychaeta	Paraonidae	Paraonis fulgens	1	22.72	0.0023
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	3	68.16	0.0045
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Prionospio perkinsi	1	22.72	0.0023
Annelida : Polychaeta	Syllidae	Streptosyllis websteri	11	249.92	0.0045
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	1	22.72	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0068
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	1	22.72	0.0068
Arthropoda : Amphipoda	Haustoriidae	Bathyporeia parkeri	1	22.72	0.0023
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	1	22.72	0.0091
Arthropoda : Amphipoda	Phoxocephalidae	Eobrolgus spinosus	1	22.72	0.0011
Arthropoda : Cumacea	Diastylidae	Oxyrostylis smithi	3	68.16	0.0159
Arthropoda : Tanaidacea	Nototanaididae	Tanaissus psammophilus	1	22.72	0.0011
Chordata : Ascidiacea	Unidentified	Ascidiacea	10	227.2	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	3	522.56	1.6517
Mollusca : Bivalvia	Nuculidae	Nucula proxima	1	22.72	0.0045
Mollusca : Bivalvia	Tellinidae	Tellinidae	3	68.16	0.0045
Mollusca : Bivalvia	Veneridae	Gemma gemma	11	249.92	0.0068
Mollusca : Gastropoda	Caecidae	Caecum regulare	3	68.16	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0011
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0068
Nemertina	Unidentified	Monostilifera	1	22.72	0.0011
			<b>Total</b>	<b>73</b>	<b>2113</b>
			<b># Taxa</b>	<b>25</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-20

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	0	22.72	0.2022
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0136
Annelida : Polychaeta	Paraonidae	Aricidea wassi	1	22.72	0.0023
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	2	45.44	0.0011
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius intermedius	3	68.16	0.0227
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3	68.16	0.0364
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0068
Arthropoda : Mysidacea	Mysidae	Mysidae	1	22.72	0.0068
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	2	227.2	0.4771
Mollusca : Bivalvia	Veneridae	Gemma gemma	2	45.44	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0045
Phoronida	Phoronidae	Phoronis sp.	7	159.04	0.0409
			<b>Total</b>	<b>772.48</b>	<b>0.8155</b>
			<b># Taxa</b>	<b>12</b>	

SampleID: 17-21

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	90.88	0.0011
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0068
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	14	318.08	0.0295
Annelida : Polychaeta	Paraonidae	Paraonis fulgens	9	204.48	0.0091
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	21	477.12	0.0136
Annelida : Polychaeta	Spionidae	Scolecopsis texana	3	68.16	0.0045
Annelida : Polychaeta	Syllidae	Exogone dispar	1	22.72	0.0011
Annelida : Polychaeta	Syllidae	Syllidae	1	22.72	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0045
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius intermedius	9	204.48	0.0477
Arthropoda : Tanaidacea	Nototanaididae	Tanaissus psammophilus	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	5	477.12	2.2107
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	3	68.16	0.0318
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.0023
Mollusca : Bivalvia	Veneridae	Gemma gemma	7	159.04	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0023
			<b>Total</b>	<b>2272</b>	<b>2.3695</b>
			<b># Taxa</b>	<b>16</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-22

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	2	45.44	0.0114
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	3	68.16	0.0159
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0045
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	3	68.16	0.0068
Annelida : Polychaeta	Opheliidae	Opheliidae	2	45.44	0.0045
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	2	45.44	0.0023
Annelida : Polychaeta	Syllidae	Streptosyllis websteri	1	22.72	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	13	295.36	0.0523
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	10	386.24	3.0558
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	1	22.72	0.0045
Mollusca : Bivalvia	Nuculidae	Nucula proxima	12	272.64	0.0159
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0011
Mollusca : Bivalvia	Veneridae	Gemma gemma	9	204.48	0.0045
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0011
Phoronida	Phoronidae	Phoronis sp.	12	363.52	0.1454
			<b>Total</b>	<b>73</b>	<b>1908.5</b>
			<b># Taxa</b>	<b>15</b>	

SampleID: 17-23

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0011
Annelida : Polychaeta	Cirratulidae	Caulieriella venefica	1	22.72	0.0068
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	1	22.72	0.0045
Annelida : Polychaeta	Orbiniidae	Leitoscoloplos sp.	8	181.76	0.0454
Annelida : Polychaeta	Paraonidae	Cirrophorus sp. B Morris	20	454.4	0.0364
Annelida : Polychaeta	Syllidae	Erinaceusyllis erinaceus	1	22.72	0.0023
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	22.72	0.0011
Arthropoda : Amphipoda	Haustoriidae	Acanthohaustorius intermedius	1	22.72	0.0011
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	3	68.16	0.0023
Arthropoda : Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	1	22.72	0.0114
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0011
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	28	976.96	4.619
Cnidaria : Anthozoa	Edwardsiidae	Edwardsia elegans	1	22.72	0.0613
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	3	68.16	0.0045
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	1	22.72	0.0068
Mollusca : Bivalvia	Veneridae	Gemma gemma	2	45.44	0.0023
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.0023
Phoronida	Phoronidae	Phoronis sp.	16	477.12	0.1363
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	22.72	0.0068
			<b>Total</b>	<b>92</b>	<b>2544.6</b>
			<b># Taxa</b>	<b>19</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-24

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	2	45.44	0.0011
Annelida : Polychaeta	Chaetopteridae	Spirochaetopterus oculatus	4	90.88	0.075
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0023
Annelida : Polychaeta	Cirratulidae	Caulleriella venefica	1	22.72	0.0011
Annelida : Polychaeta	Glyceridae	Glycera dibranchiata	1	22.72	0.0273
Annelida : Polychaeta	Goniadidae	Glycinde multidentis	4	90.88	0.0091
Annelida : Polychaeta	Maldanidae	Maldanidae	11	249.92	0.409
Annelida : Polychaeta	Phyllodoceidae	Phyllodoce arenae	1	22.72	0.0011
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	45.44	0.0613
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	4	90.88	0.0068
Arthropoda : Amphipoda	Aoridae	Unciola serrata	4	90.88	0.0011
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	22.72	0.0011
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	1	22.72	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	10	227.2	0.0182
Arthropoda : Amphipoda	Oedicerotidae	Americhelidium americanum	1	22.72	0.0045
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0011
Arthropoda : Decapoda	Portunidae	Callinectes sapidus	1	22.72	0.0204
Arthropoda : Isopoda	Idoteidae	Edotia triloba	1	22.72	0.0045
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	2	45.44	0.0023
Arthropoda : Mysidacea	Mysidae	Americamysis bahia	1	22.72	0.0023
Chordata : Cephalochordata	Branchiostomidae	Branchiostoma caribaeum	0	22.72	0.075
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	2	45.44	0.0068
Mollusca : Bivalvia	Kelliidae	Kelliopsis elevata	1	22.72	0.0011
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	8	181.76	0.6634
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0023
Mollusca : Gastropoda	Acteonidae	Japonactaeon punctostriatus	2	45.44	0.0011
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	1	22.72	0.0091
Mollusca : Gastropoda	Columbellidae	Paryanachis obesa	4	90.88	0.0545
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	12	272.64	0.0204
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	7	159.04	0.0568
Nemertina	Tubulanidae	Carinomella lactea	1	22.72	0.0136
Phoronida	Phoronidae	Phoronis sp	16	431.68	0.1022
			<b>Total</b>	<b>109</b>	<b>2590.1</b>
			<b># Taxa</b>	<b>32</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-25

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	7	159.04	0.0011
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	35	795.2	0.0204
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	1	22.72	0.1908
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	18	568	0.0023
Annelida : Polychaeta	Maldanidae	Maldanidae	3	68.16	0.0886
Annelida : Polychaeta	Nephtyidae	Nephtys picta	2	68.16	0.125
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	6	136.32	0.0636
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	22	499.84	0.1227
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus	1	22.72	0.0011
Annelida : Polychaeta	Syllidae	Exogone dispar	1	22.72	0.0011
Annelida : Polychaeta	Terebellidae	Loimia viridis	2	45.44	0.0159
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	3	68.16	0.0045
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	29	658.88	0.0409
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	2	45.44	0.0023
Arthropoda : Cumacea	Diastylidae	Oxyurostylis smithi	1	22.72	0.0011
Arthropoda : Decapoda	Pinnotheridae	Pinnixa sp.	1	22.72	0.0011
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis	1	22.72	0.1431
Cnidaria : Anthozoa	Sagartiidae	Actinothoe sp.	1	22.72	0.0045
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	1	22.72	0.0977
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	8	181.76	0.0114
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	1	22.72	0.3976
Mollusca : Bivalvia	Solemyidae	Solemya velum	1	22.72	0.3294
Mollusca : Bivalvia	Tellinidae	Macopoma tenta	5	113.6	0.4908
Mollusca : Bivalvia	Tellinidae	Limecola balthica	1	22.72	0.1522
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	4	90.88	0.0477
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	7	159.04	0.025
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	4	90.88	0.0364
Nemertina	Amphiporidae	Amphiporus bioculatus	2	45.44	0.0045
Nemertina	Tubulanidae	Carinomella lactea	12	272.64	0.0273
Phoronida	Phoronidae	Phoronis sp.	2	45.44	0.0068
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	3	68.16	0.0068
			<b>Total</b>	<b>187</b>	<b>4430.4</b>
			<b># Taxa</b>	<b>31</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-26

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0023
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	20	454.4	0.0091
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	11	363.52	0.0659
Annelida : Polychaeta	Goniatidae	Glycinde multidentis	4	90.88	0.0091
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	3	136.32	0.443
Annelida : Polychaeta	Nephtyidae	Nephtys incisa	1	22.72	0.0613
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	2	45.44	0.0068
Annelida : Polychaeta	Polynoidae	Malmgreniella maccroryae	1	22.72	0.0091
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	24	545.28	0.1431
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0091
Annelida : Polychaeta	Spionidae	Prionospio perkinsi	5	113.6	0.0011
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	6	136.32	0.0295
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	11	249.92	0.0227
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	22.72	0.0023
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	2	45.44	0.0011
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	1	22.72	0.0045
Arthropoda : Cumacea	Diastylidae	Oxyrostylis smithi	1	22.72	0.0023
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0204
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	3	136.32	0.1772
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	16	363.52	0.6112
Mollusca : Bivalvia	Solecurtidae	Tagelus divisus	2	45.44	0.5794
Mollusca : Bivalvia	Tellinidae	Ameritella agilis	2	45.44	0.1318
Mollusca : Bivalvia	Tellinidae	Macoploma tenta	2	45.44	0.1
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	2	45.44	0.0114
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	2	45.44	0.0114
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	1	22.72	0.025
Nemertina	Amphiporidae	Amphiporus bioculatus	1	22.72	0.0091
Nemertina	Tubulanidae	Carinomella lactea	5	113.6	0.0114
Phoronida	Phoronidae	Phoronis sp	8	181.76	0.025
			<b>Total</b>	<b>140</b>	<b>3430.7</b>
			<b># Taxa</b>	<b>29</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-27

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	1	22.72	0.0023
Annelida : Polychaeta	Arabellidae	Arabella iricolor	0	45.44	1.7585
Annelida : Polychaeta	Capitellidae	Notomastus sp. A Ewing	3	90.88	0.8156
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	10	227.2	0.0091
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	9	295.36	0.125
Annelida : Polychaeta	Gonjadiae	Glycinde multident	1	22.72	0.0045
Annelida : Polychaeta	Hesionidae	Podarke obscura	1	22.72	0.0045
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	2	113.6	0.5657
Annelida : Polychaeta	Onuphidae	Diopatra cuprea	0	22.72	0.1613
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	7	159.04	0.1286
Annelida : Polychaeta	Pilargidae	Sigambra tentaculata	1	22.72	0.0011
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	22.72	0.0068
Annelida : Polychaeta	Spionidae	Prionospio pygmaeus	5	113.6	0.0068
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	28	636.16	0.1204
Annelida : Polychaeta	Spionidae	Polydora cornuta	1	22.72	0.0023
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	4	113.6	0.0454
Annelida : Polychaeta	Terebellidae	Loimia viridis	1	45.44	0.0932
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	12	272.64	0.0364
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0091
Arthropoda : Amphipoda	Ischyroceridae	Cerapus sp C LeCroy 2007	48	1090.56	0.0841
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	4	90.88	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella barnardi	1	22.72	0.0023
Arthropoda : Isopoda	Anthuridae	Ptilanthura tenuis	1	22.72	0.0114
Echinodermata : Holothuroidea	Synaptidae	Leptosynapta tenuis	1	22.72	0.0023
Echinodermata : Ophiuroidea	Amphiuridae	Microphiopholis atra	2	159.04	0.543
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	8	181.76	0.0114
Mollusca : Bivalvia	Nuculidae	Nucula proxima	2	45.44	0.0727
Mollusca : Bivalvia	Solenidae	Ensis directus	0	22.72	0.1954
Mollusca : Bivalvia	Tellinidae	Limecola balthica	1	22.72	0.0636
Mollusca : Gastropoda	Columbellidae	Paryanachis obesa	2	45.44	0.0204
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	1	22.72	0.0011
Mollusca : Gastropoda	Scaphandridae	Acteocina canalculata	3	68.16	0.025
Nemertina	Tubulanidae	Carinomella lactea	6	136.32	0.0136
Phoronida	Phoronidae	Phoronis sp.	2	45.44	0.0011
Platyhelminthes : Turbellaria	Unidentified	Polycladida	1	22.72	0.0011
			<b>Total</b>	<b>171</b>	<b>4316.8</b>
			<b># Taxa</b>	<b>35</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: 17-28

Collection Date: 9/13/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	70	1590.4	0.0227
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	4	90.88	0.0068
Annelida : Polychaeta	Chaetopteridae	Spiochaetopterus oculatus	6	136.32	0.0295
Annelida : Polychaeta	Cirratulidae	Caulerella venefica	1	22.72	0.0023
Annelida : Polychaeta	Cirratulidae	Tharyx sp.	1	22.72	0.0045
Annelida : Polychaeta	Hesionidae	Podarkeopsis levifuscina	1	22.72	0.0023
Annelida : Polychaeta	Nephtyidae	Aglaophamus verrilli	1	22.72	0.0068
Annelida : Polychaeta	Nereididae	Allitta succinea	2	45.44	0.0068
Annelida : Polychaeta	Nereididae	Neanthes arenaceodentata	1	22.72	0.0023
Annelida : Polychaeta	Pectinariidae	Pectinaria gouldii	3	68.16	0.0318
Annelida : Polychaeta	Pilargidae	Sigambra tentaculata	1	22.72	0.0011
Annelida : Polychaeta	Pilargidae	Ancistrosyllis hartmanae	1	22.72	0.0023
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	2	45.44	0.0023
Annelida : Polychaeta	Spionidae	Paraprionospio pinnata	2	45.44	0.0091
Annelida : Polychaeta	Spionidae	Spiophanes bombyx	1	22.72	0.0068
Annelida : Polychaeta	Syllidae	Exogone dispar	5	113.6	0.0023
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	8	181.76	0.0011
Annelida : Polychaeta	Terebellidae	Loimia viridis	2	45.44	0.1386
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca verrilli	1	22.72	0.0023
Arthropoda : Amphipoda	Aoridae	Unciola serrata	3	68.16	0.0023
Arthropoda : Amphipoda	Liljeborgiidae	Idunella clymenellae	2	45.44	0.0011
Arthropoda : Decapoda	Pinnotheridae	Pinnixa sp.	1	22.72	0.0045
Arthropoda : Isopoda	Idoteidae	Synidotea laevidorsalis	1	22.72	0.0023
Arthropoda : Mysidacea	Mysidae	Chlamydopleon sp.	1	22.72	0.0023
Mollusca : Bivalvia	Lucinidae	Parvulucina crenella	1	22.72	0.0045
Mollusca : Gastropoda	Acteonidae	Japonactaeon punctostriatus	1	22.72	0.0023
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	2	45.44	0.0318
Mollusca : Gastropoda	Corambidae	Corambe obscura	1	22.72	0.0045
Mollusca : Gastropoda	Pyramidellidae	Turbonilla interrupta	1	22.72	0.0023
Mollusca : Gastropoda	Scaphandridae	Acteocina canaliculata	3	68.16	0.0295
Nemertina	Tubulanidae	Carinomella lactea	5	113.6	0.0136
Phoronida	Phoronidae	Phoronis sp.	30	681.6	0.1545
		<b>Total</b>	<b>165</b>	<b>3748.8</b>	<b>0.5372</b>
		<b># Taxa</b>	<b>32</b>		

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: EPI10-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	1	54.8201	0.0329
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	54.8201	0.0713
Annelida : Polychaeta	Spionidae	Polydora cornuta	1	54.8201	0.0219
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	21	1151.2221	0.1699
Arthropoda : Amphipoda	Aoridae	Unciola serrata	1	54.8201	0.0219
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	14	767.4814	0.1535
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	3*	164.4503	0.0219
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	38	2083.1638	0.0384
Arthropoda : Amphipoda	Corophiidae	Corophiidae	8*	438.5608	0.0439
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	5	274.1005	0.1261
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	9	493.3809	0.0493
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	1	54.8201	0.0219
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	711	38977.091	24.7219
Arthropoda : Cirripedia	Unidentified	Balanomorpha	74*	4056.6874	2.573
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0329
Arthropoda : Diptera	Unidentified	Diptera	14	767.4814	0.2028
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1	54.8201	0.0164
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	11	603.0211	0.1974
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	8	438.5608	1.6775
		<b>Total</b>	<b>923</b>	<b>50599</b>	<b>30.1948</b>
		<b># Taxa</b>	<b>16</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI10-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	0.3289
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0178
Annelida : Polychaeta	Nereididae	Alitta succinea	80	888.888	0.4267
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	16	177.7776	0.3289
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	8	88.8888	0.0178
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	136	1511.1096	0.4533
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	72	799.9992	0.9511
Annelida : Polychaeta	Spionidae	Boccardiella hamata	16	177.7776	0.0089
Annelida : Polychaeta	Spionidae	Polydora websteri	8	88.8888	0.0006
Annelida : Polychaeta	Spionidae	Polydora colonia	32	355.5552	0.0089
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	24	266.6664	0.0356
Arthropoda : Amphipoda	Aoridae	Unciola serrata	40	444.444	0.0267
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	32	355.5552	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1440	15999.984	0.9156
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	528*	5866.6608	0.0444
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	56	622.2216	0.0006
Arthropoda : Amphipoda	Corophiidae	Corophiidae	32*	355.5552	0.0006
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	32	355.5552	0.0178
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	128	1422.2208	0.0444
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	216	2399.9976	0.0711
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	8	88.8888	0.0089
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	104	1155.5544	0.0889
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	16	177.7776	0.0006
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	152	1688.8872	0.3733
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	136	1511.1096	0.5511
Mollusca : Gastropoda	Cerithiidae	Bittiolium alteatum	24	266.6664	0.0178
Mollusca : Gastropoda	Columbellidae	Astyris lunata	32	355.5552	0.2311
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	8	88.8888	0.0089
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	8	88.8888	0.0006
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocineta	8	88.8888	0.0356
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	8	88.8888	0.0089
		<b>Total</b>	<b>3432</b>	<b>38133</b>	<b>5.0521</b>
		<b># Taxa</b>	<b>30</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI10-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0006	
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	56	622.2216	0.0006	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0444	
Annelida : Polychaeta	Nereididae	Alitta succinea	80	888.888	0.0444	
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	16	177.7776	0.2933	
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1328	14755.541	0.9956	
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	8	88.8888	0.0006	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	136	1511.1096	1.1556	
Annelida : Polychaeta	Spionidae	Polydora cornuta	48	533.3328	0.0178	
Annelida : Polychaeta	Spionidae	Polydora websteri	24	266.6664	0.0089	
Annelida : Polychaeta	Spionidae	Polydora colonia	80	888.888	0.0089	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	272	3022.2192	0.0711	
Annelida : Polychaeta	Syllidae	Syllis alternata	32	355.5552	0.0006	
Annelida : Polychaeta	Syllidae	Syllidae	152*	1688.8872	0.0089	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	112	1244.4432	0.0622	
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	8	88.8888	0.0178	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	232	2577.7752	0.1333	
Arthropoda : Amphipoda	Aoridae	Grandidierella sp.	8	88.8888	0.0089	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1656	18399.982	1.4578	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	680*	7555.548	0.0622	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	24	266.6664	0.0089	
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	16	177.7776	0.0089	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	24*	266.6664	0.0006	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	144	1599.9984	0.08	
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	576	6399.9936	0.1956	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	16	177.7776	0.0178	
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.1867	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	696	7733.3256	3.0311	
Arthropoda : Isopoda	Idoteidae	Idotea balthica	8	88.8888	0.0089	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	240	2666.664	0.1778	
Mollusca : Bivalvia	Unidentified	Bivalvia	8*	88.8888	0.0178	
Mollusca : Gastropoda	Columbellidae	Astyris lunata	48	533.3328	0.3111	
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	16	177.7776	0.0178	
Mollusca : Gastropoda	Unidentified	Gastropoda	8*	88.8888	0.0444	
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0178	
			<b>Total</b>	<b>6816</b>	<b>75733</b>	<b>8.5187</b>
			<b># Taxa</b>	<b>30</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI10-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	16	177.7776	0.1067
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	56	622.2216	0.0178
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0267
Annelida : Polychaeta	Nereididae	Alitta succinea	112	1244.4432	0.0978
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	24	266.6664	0.5956
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	24	266.6664	0.0267
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	472	5244.4392	1.0667
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	144	1599.9984	0.7911
Annelida : Polychaeta	Spionidae	Polydora colonia	40	444.444	0.0006
Annelida : Polychaeta	Spionidae	Polydora cornuta	32	355.5552	0.0006
Annelida : Polychaeta	Spionidae	Boccardiella hamata	56	622.2216	0.0267
Annelida : Polychaeta	Syllidae	Syllidae	8*	88.8888	0.0089
Annelida : Polychaeta	Syllidae	Syllis alternata	32	355.5552	0.0089
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	24	266.6664	0.0267
Arthropoda : Amphipoda	Aoridae	Unciola serrata	24	266.6664	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	360	3999.996	0.3822
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	152*	1688.8872	0.0267
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	80	888.888	0.0178
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0006
Arthropoda : Amphipoda	Corophiidae	Corophiidae	8*	88.8888	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	80	888.888	0.1422
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	56	622.2216	0.0267
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	40	444.444	0.1156
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	32	355.5552	0.1067
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	16	177.7776	0.0178
Mollusca : Gastropoda	Columbellidae	Astyris lunata	40	444.444	0.24
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	40	444.444	3.92
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	56	622.2216	0.0533
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	8	88.8888	0.08
			<b>Total</b>	<b>2080</b>	<b>23111</b>
			<b># Taxa</b>	<b>27</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI11-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	4	219.2804	0.4605
Annelida : Polychaeta	Phyllodoctidae	Paranaitis speciosa	3	164.4603	0.2631
Annelida : Polychaeta	Spionidae	Polydora cornuta	1	54.8201	0.0055
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	1	54.8201	0.0439
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	118	6468.7718	1.0909
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	6	328.9206	0.0219
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	17	931.9417	0.0493
Arthropoda : Amphipoda	Corophiidae	Corophiidae	39*	2137.9839	0.0329
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	56	3069.9256	0.1096
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	180	9867.618	2.7136
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	474	25984.727	0.9374
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	21	1151.2221	0.0164
Arthropoda : Cirripedia	Balanidae	Balanidae	39*	2137.9839	2.7134
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	140	7674.814	9.7403
Arthropoda : Cirripedia	Unidentified	Balanomorpha	187*	10251.359	13.0103
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	3	164.4603	0.0329
Arthropoda : Diptera	Unidentified	Diptera	30	1644.603	0.4989
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	26	1425.3226	1.0964
Mollusca : Bivalvia	Mytilidae	Geukensia demissa	3	164.4603	0.148
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	28	1534.9628	3.4482
			<b>Total</b>	<b>1376</b>	<b>75432</b>
			<b># Taxa</b>	<b>17</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI11-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	20	222.222	0.0578
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	100	1111.11	0.0644
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	2	22.2222	0.0022
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	6	66.6666	0.0133
Annelida : Polychaeta	Spionidae	Polydora cornuta	2	22.2222	0.0044
Annelida : Polychaeta	Spionidae	Polydora colonia	2	22.2222	0.0006
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	2	22.2222	0.0022
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	36	399.9996	0.0422
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	24	266.6664	0.02
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	326	3622.2186	0.1644
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	134*	1488.8874	0.0133
Arthropoda : Amphipoda	Corophiidae	Corophiidae	162*	1799.9982	0.0111
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	182	2022.2202	0.0467
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	34	377.7774	0.0156
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	30	333.333	0.0244
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	2	22.2222	0.0022
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	392	4355.5512	0.1467
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	262	2911.1082	0.0644
Arthropoda : Cirripedia	Unidentified	Balanomorpha	4	44.4444	0.0022
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	6	66.6666	0.0067
Arthropoda : Isopoda	Idoteidae	Idotea balthica	10	111.111	0.0067
Arthropoda : Pycnogonida	Callipallenidae	Callipallene brevirostris	2	22.2222	0.0006
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	2	22.2222	0.0006
Chordata : Ascidiacea	Molgulidae	Molgula manhattensis	2	22.2222	0.0111
Chordata : Ascidiacea	Unidentified	Ascidiacea	402	4466.6622	0.0844
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	2	22.2222	0.0022
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	11	122.2221	1.2456
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	4	44.4444	0.0022
Mollusca : Gastropoda	Columbellidae	Astyris lunata	10	111.111	0.0222
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	2	22.2222	0.0222
Mollusca : Gastropoda	Municidae	Urosalpinx cinerea	2	22.2222	0.3422
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	2	22.2222	0.0022
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	2	22.2222	0.0133
			<b>Total</b>	<b>2181</b>	<b>24233</b>
			<b># Taxa</b>	<b>31</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI11-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	52	577.7772	0.0044
Annelida : Polychaeta	Nereididae	Alitta succinea	16	177.7776	0.0667
Annelida : Polychaeta	Sabellariidae	Parasabella micropthalma	16	177.7776	0.1689
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	176	1955.5536	0.4222
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	84	933.3324	0.8756
Annelida : Polychaeta	Spionidae	Polydora colonia	20	222.222	0.0006
Annelida : Polychaeta	Spionidae	Polydora cornuta	8	88.8888	0.0089
Annelida : Polychaeta	Spionidae	Boccardiella hamata	16	177.7776	0.0178
Annelida : Polychaeta	Syllidae	Syllidae	4	44.4444	0.0044
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0222
Arthropoda : Amphipoda	Aoridae	Unciola serrata	32	355.5552	0.0356
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	956*	10622.212	0.0844
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	12	133.3332	0.0133
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2056	22844.422	2.2711
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	48	533.3328	0.0089
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	40	444.444	0.0356
Arthropoda : Amphipoda	Corophiidae	Corophiidae	8*	88.8888	0.0044
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	4	44.4444	0.0044
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	56	622.2216	0.04
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	8	88.8888	0.0006
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	264	2933.3304	0.1022
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	8	88.8888	0.0044
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	56	622.2216	0.0267
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	52	577.7772	0.3244
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	4	44.4444	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolela	8	88.8888	0.0089
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	3	33.3333	0.7911
Mollusca : Bivalvia	Unidentified	Bivalvia	4*	44.4444	0.0178
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	4	44.4444	0.0711
Mollusca : Gastropoda	Columbellidae	Astyris lunata	4	44.4444	0.0356
Mollusca : Gastropoda	Unidentified	Gastropoda	4*	44.4444	0.0667
			<b>Total</b>	<b>4031</b>	<b>44789</b>
			<b># Taxa</b>	<b>27</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI11-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	64	711.1104	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	40	444.444	0.3111
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	264	2933.3304	0.0267
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	8	88.8888	0.0267
Annelida : Polychaeta	Nereididae	Alitta succinea	104	1155.5544	0.2311
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.24
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	296	3288.8856	0.5956
Annelida : Polychaeta	Sabellariidae	Parasabella micropthalma	64	711.1104	0.0711
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	32	355.5552	0.3378
Annelida : Polychaeta	Spionidae	Boccardiella hamata	32	355.5552	0.0267
Annelida : Polychaeta	Spionidae	Polydora colonia	184	2044.4424	0.0444
Annelida : Polychaeta	Spionidae	Polydora cornuta	104	1155.5544	0.0444
Annelida : Polychaeta	Spionidae	Dipolydora socialis	24	266.6664	0.0089
Annelida : Polychaeta	Syllidae	Syllidae	240	2666.664	0.0356
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	16	177.7776	0.0178
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	16	177.7776	0.0089
Arthropoda : Amphipoda	Aoridae	Unciola serrata	112	1244.4432	0.0711
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	24	266.6664	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	408*	4533.3288	0.0356
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	32	355.5552	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1160	12888.876	0.7467
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	96	1066.6656	0.0089
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	144	1599.9984	0.08
Arthropoda : Amphipoda	Corophiidae	Corophiidae	120*	1333.332	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	80	888.888	0.0711
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	144	1599.9984	0.0444
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	24	266.6664	0.0089
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	40	444.444	0.0178
Arthropoda : Cirripedia	Unidentified	Balanomorpha	8	88.8888	0.0089
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.0444
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	80	888.888	0.3467
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	8	88.8888	0.0178
Chordata : Ascidiacea	Unidentified	Ascidiacea	240	2666.664	0.0267
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	8	88.8888	0.0267
Mollusca : Bivalvia	Arcidae	Anadara transversa	16	177.7776	0.1244
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	2	22.2222	1.8011
Mollusca : Gastropoda	Columbellidae	Astyris lunata	112	1244.4432	0.6044
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	16	177.7776	0.1156
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	88	977.7768	0.0622
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	8	88.8888	0.08
Nemertina	Amphiporidae	Zygonemertes virescans	8	88.8888	0.0267
Platyhelminthes : Turbellana	Prosthodontomidae	Euplana gracilis	24	266.6664	0.0006
		<b>Total</b>	<b>4514</b>	<b>50156</b>	<b>6.4254</b>
		<b># Taxa</b>	<b>40</b>		

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: EPI12-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	109.6402	0.0055
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	1	54.8201	0.0055
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	7	383.7407	0.011
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	1	54.8201	0.011
Arthropoda : Cirripedia	Chthamallidae	Chthamalus fragilis	486	26642.569	54.7982
Arthropoda : Diptera	Unidentified	Diptera	95	5207.9095	1.2883
		<b>Total</b>	<b>592</b>	<b>32453</b>	<b>56.1195</b>
		<b># Taxa</b>	<b>6</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI12-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0044
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	16	177.7776	0.0133
Annelida : Polychaeta	Maldanidae	Maldanidae	20	222.222	0.0133
Annelida : Polychaeta	Nereididae	Alitta succinea	36	399.9996	0.0889
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	8	88.8888	0.0133
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	8	88.8888	0.0844
Annelida : Polychaeta	Spionidae	Polydora cornuta	172	1911.1092	0.0267
Annelida : Polychaeta	Spionidae	Polydora websteri	12	133.3332	0.0089
Annelida : Polychaeta	Spionidae	Boccardiella hamata	24	266.6664	0.0178
Annelida : Polychaeta	Syllidae	Syllidae	8	88.8888	0.0006
Arthropoda : Amphipoda	Amphithoidae	Amphithoe valida	48	533.3328	0.0933
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1900	21111.09	3.0889
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1848*	20533.313	0.1556
Arthropoda : Amphipoda	Corophiidae	Corophiidae	6752*	75022.147	0.5689
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	4044	44933.288	1.7333
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	852	9466.6572	0.3822
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	32	355.5552	0.0222
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	4	44.4444	0.0178
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	692	7688.8812	0.5422
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	720	7999.992	0.2356
Arthropoda : Decapoda	Panopeidae	Panopeidae	4	44.4444	0.2311
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	4	44.4444	0.0044
Arthropoda : Diptera	Unidentified	Diptera	4	44.4444	0.0222
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	16	177.7776	0.1333
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	140	1555.554	0.1822
Mollusca : Bivalvia	Arcidae	Anadara transversa	12	133.3332	0.4622
Mollusca : Bivalvia	Mytilidae	Geukensia demissa	56	622.2216	0.0311
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	3	33.3333	0.3333
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis	28	311.1108	0.0006
Mollusca : Bivalvia	Unidentified	Bivalvia	12*	133.3332	0.0178
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	20	222.222	1.1289
Mollusca : Gastropoda	Columbellidae	Astyris lunata	8	88.8888	0.0622
Mollusca : Gastropoda	Epitonidae	Epitonium humphreysii	4	44.4444	0.0089
Nemertina	Amphiporidae	Amphiporus bioculatus	4	44.4444	0.0133
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0133
Platyhelminthes : Turbellaria	Prosthlostomidae	Euplana gracilis	64	711.1104	0.0178
			<b>Total</b>	<b>17591</b>	<b>195455</b>
			<b># Taxa</b>	<b>33</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI12-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	64	711.1104	0.0178
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	80	888.888	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0356
Annelida : Polychaeta	Nereididae	Alitta succinea	272	3022.2192	0.2844
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	16	177.7776	0.0889
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	448	4977.7728	0.9422
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	64	711.1104	0.1067
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	144	1599.9984	1.6178
Annelida : Polychaeta	Spionidae	Polydora colonia	304	3377.7744	0.0533
Annelida : Polychaeta	Spionidae	Polydora cornuta	144	1599.9984	0.0356
Annelida : Polychaeta	Spionidae	Boccardiella hamata	32	355.5552	0.0178
Annelida : Polychaeta	Syllidae	Syllidae	96	1066.6656	0.0006
Annelida : Polychaeta	Syllidae	Proceraea cornuta	16	177.7776	0.0178
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	32	355.5552	0.0178
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	16	177.7776	0.0533
Arthropoda : Amphipoda	Aoridae	Unciola serrata	128	1422.2208	0.1244
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	16	177.7776	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	11232	124799.88	8
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	4400*	48888.84	0.32
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	240	2666.664	0.1422
Arthropoda : Amphipoda	Corophiidae	Corophiidae	112*	1244.4432	0.0178
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	272	3022.2192	0.1067
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	32	355.5552	0.0178
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	64	711.1104	0.0178
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	320	3555.552	0.16
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	80	888.888	0.0356
Arthropoda : Cirripedia	Balanidae	Balanidae	16	177.7776	0.0178
Arthropoda : Crustacea	Leptocheiliidae	Leptocheiliidae	16	177.7776	0.0178
Arthropoda : Decapoda	Panopeidae	Panopeidae	32	355.5552	0.32
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	160	1777.776	0.1244
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolela	96	1066.6656	0.1956
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	2.8367
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	16	177.7776	0.2667
			<b>Total</b>	<b>18993</b>	<b>211033</b>
			<b># Taxa</b>	<b>31</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI12-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	32	355.5552	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	16	177.7776	0.8356
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	80	888.888	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0178
Annelida : Polychaeta	Nereididae	Alitta succinea	288	3199.9968	0.3378
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	32	355.5552	0.6756
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	192	2133.3312	0.3289
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	1560	17333.316	2.1778
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	200	2222.22	2.0978
Annelida : Polychaeta	Spionidae	Polydora cornuta	184	2044.4424	0.0267
Annelida : Polychaeta	Spionidae	Polydora colonia	264	2933.3304	0.0356
Annelida : Polychaeta	Spionidae	Boccardiella hamata	104	1155.5544	0.0711
Annelida : Polychaeta	Spionidae	Polydora websteri	16	177.7776	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	72*	799.9992	0.0006
Annelida : Polychaeta	Syllidae	Procersea cornuta	16	177.7776	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	32	355.5552	0.0356
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	32	355.5552	0.0533
Arthropoda : Amphipoda	Aoridae	Unciola serrata	128	1422.2208	0.1333
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	8	88.8888	0.0089
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1080*	11999.988	0.1156
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	160	1777.776	0.0533
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	16	177.7776	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	984	10933.322	0.88
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	160	1777.776	0.0006
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	224	2488.8864	0.1156
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0006
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0089
Arthropoda : Amphipoda	Corophiidae	Corophiidae	248*	2755.5528	0.0444
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	128	1422.2208	0.0889
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	392	4355.5512	0.1422
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	72	799.9992	0.0356
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	120	1333.332	0.0178
Arthropoda : Decapoda	Panopeidae	Panopeidae	24	266.6664	1.0667
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	56	622.2216	0.1778
Arthropoda : Isopoda	Idoteidae	Synidotea laticauda	16	177.7776	0.24
Arthropoda : Pycnogonida	Phoxichilidiidae	Anoplodactylus petiolatus	8	88.8888	0.0006
Chordata : Ascidiacea	Unidentified	Ascidiacea	256	2844.4416	0.0267
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	264	2933.3304	0.6667
Mollusca : Bivalvia	Arcidae	Anadara transversa	8	88.8888	0.0356
Mollusca : Gastropoda	Columbellidae	Astyris lunata	8	88.8888	0.0267
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	0.8533
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0089
Platyhelminthes : Turbellaria	Prosthodontidae	Euplana gracilis	8	88.8888	0.0089
		<b>Total</b>	<b>7584</b>	<b>84267</b>	<b>11.472</b>
		<b># Taxa</b>	<b>40</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI1-INT1

Collection Date: 10/2/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Capitella teleta	11	603.0211	0.011
Annelida : Polychaeta	Nereididae	Alitta succinea	46	2521.7246	3.9306
Annelida : Polychaeta	Phyllodoctidae	Paranaitis speciosa	1	54.8201	0.0877
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	1	54.8201	0.1425
Annelida : Polychaeta	Spionidae	Polydora websteri	5	274.1005	0.0384
Annelida : Polychaeta	Spionidae	Polydora cornuta	4	219.2804	0.0027
Annelida : Polychaeta	Spionidae	Streblospio benedicti	6	328.9206	0.0164
Annelida : Polychaeta	Syllidae	Salvatoria clavata	1	54.8201	0.0055
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1*	54.8201	0.0027
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	109.6402	0.0055
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	1	54.8201	0.0027
Arthropoda : Amphipoda	Corophiidae	Corophiidae	1*	54.8201	0.0027
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	3	164.4603	0.0027
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	1	54.8201	0.0055
Arthropoda : Amphipoda	Ischyroceridae	Enicthonius brasiliensis	1	54.8201	0.0027
Arthropoda : Amphipoda	Melitidae	Melita nitida	162	8880.8562	0.2905
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	54.8201	0.0055
Arthropoda : Decapoda	Panopeidae	Panopeidae	9	493.3809	0.1042
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0164
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	4	219.2804	2.2093
Arthropoda : Diptera	Unidentified	Diptera	2	109.6402	0.0274
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolela	20	1096.402	0.2577
Mollusca : Bivalvia	Mytilidae	Geukensia demissa	59	3234.3859	80.8377
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	91	4988.6291	698.9782
Mollusca : Gastropoda	Pyramidellidae	Boonea impressa	1	54.8201	0.0329
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	54.8201	0.0055
<b>Total</b>			<b>436</b>	<b>23902</b>	<b>787.025</b>
<b># Taxa</b>			<b>24</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI1-SUB1

Collection Date: 10/2/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	96	1066.6656	0.0711	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0356	
Annelida : Polychaeta	Nereididae	Alitta succinea	256	2844.4416	1.0311	
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalmia	512	5688.8832	3.9111	
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	256	2844.4416	1.4578	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	96	1066.6656	4.5156	
Annelida : Polychaeta	Spionidae	Polydora cornuta	128	1422.2208	0.0356	
Annelida : Polychaeta	Spionidae	Polydora colonia	224	2488.8864	0.0711	
Annelida : Polychaeta	Spionidae	Streblospio benedicti	32	355.5552	0.0356	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	192	2133.3312	0.4978	
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	32	355.5552	0.0006	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	4224	46933.286	3.0578	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	2624*	29155.526	0.1778	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	224	2488.8864	0.0711	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	128	1422.2208	0.0356	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	64*	711.1104	0.0006	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	832	9244.4352	0.5689	
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	320	3555.552	0.1778	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	192	2133.3312	0.1067	
Arthropoda : Amphipoda	Melitidae	Melita nitida	32	355.5552	0.0356	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	96	1066.6656	0.0356	
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	32	355.5552	0.32	
Arthropoda : Decapoda	Panopeidae	Panopeidae	96	1066.6656	0.4267	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	992	11022.211	2.9511	
Chordata : Ascidiacea	Unidentified	Ascidiacea	192	2133.3312	0.0711	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	32	355.5552	0.0711	
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	4	44.4444	0.9556	
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	96	1066.6656	0.0711	
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	96	1066.6656	3.4133	
			<b>Total</b>	<b>12132</b>	<b>134800</b>	<b>24.2105</b>
			<b># Taxa</b>	<b>27</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI1-SUB2

Collection Date: 10/2/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0089	
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	16	177.7776	0.24	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	8	88.8888	0.0267	
Annelida : Polychaeta	Nereididae	Alitta succinea	216	2399.9976	0.5689	
Annelida : Polychaeta	Phyllodoctidae	Paranaitis speciosa	16	177.7776	0.1244	
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalmia	352	3911.1072	2.4622	
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	160	1777.776	0.5156	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	8	88.8888	0.2044	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	8	88.8888	0.0006	
Annelida : Polychaeta	Spionidae	Polydora cornuta	616	6844.4376	0.0711	
Annelida : Polychaeta	Spionidae	Dipolydora socialis	16	177.7776	0.0006	
Annelida : Polychaeta	Spionidae	Polydora colonia	376	4177.7736	0.0356	
Annelida : Polychaeta	Syllidae	Syllidae	56	622.2216	0.0089	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0889	
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	8	88.8888	0.0089	
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	8	88.8888	0.0006	
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	8	88.8888	0.0178	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	336*	3733.3296	0.0267	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	464	5155.5504	0.0006	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	168	1866.6648	0.0089	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	240*	2666.664	0.0089	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	160	1777.776	0.0711	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	208	2311.1088	0.1244	
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	64	711.1104	0.0178	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	64	711.1104	0.0444	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	432	4799.9952	0.0711	
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	16	177.7776	0.0533	
Arthropoda : Decapoda	Panopeidae	Panopeidae	8	88.8888	0.1156	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	32	355.5552	0.1511	
Chordata : Ascidiacea	Unidentified	Ascidiacea	168	1866.6648	0.0267	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolela	8	88.8888	0.1689	
Mollusca : Bivalvia	Arcidae	Anadara transversa	8	88.8888	0.0444	
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	24.05	
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	24	266.6664	0.0356	
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	32	355.5552	0.2578	
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	16	177.7776	0.0089	
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	8	88.8888	0.0006	
			<b>Total</b>	<b>4345</b>	<b>48278</b>	<b>29.6709</b>
			<b># Taxa</b>	<b>35</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI1-SUB3

Collection Date: 10/2/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	2	22.2222	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	7	77.7777	0.0144
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	3	33.3333	0.0089
Annelida : Polychaeta	Nereididae	Alitta succinea	53	588.8885	0.1678
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	32	355.5552	0.3144
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	24	266.6664	0.1367
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	14	155.5554	0.2278
Annelida : Polychaeta	Spionidae	Polydora cornuta	17	188.8887	0.0011
Annelida : Polychaeta	Spionidae	Polydora websteri	5	55.5555	0.0011
Annelida : Polychaeta	Spionidae	Polydora colonia	13	144.4443	0.0022
Annelida : Polychaeta	Syllidae	Opisthodonta longocirrata	1	11.1111	0.0011
Annelida : Polychaeta	Syllidae	Proceraea cornuta	2	22.2222	0.0011
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	11.1111	0.0033
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	4	44.4444	0.0111
Arthropoda : Amphipoda	Aoridae	Microdeutopus gryllotalpa	23	255.5553	0.0078
Arthropoda : Amphipoda	Aoridae	Unciola serrata	1	11.1111	0.0011
Arthropoda : Amphipoda	Aoridae	Grandidierella sp.	1	11.1111	0.0011
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	1	11.1111	0.0011
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	53*	588.8883	0.0033
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	13	144.4443	0.0044
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	13	144.4443	0.0033
Arthropoda : Amphipoda	Caprellidae	Caprella panantis	98	1088.8878	0.0656
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	27	299.9997	0.0033
Arthropoda : Amphipoda	Corophiidae	Corophiidae	49*	544.4439	0.6278
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	63	699.9993	0.0311
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	52	577.7772	0.0311
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	2	22.2222	0.0022
Arthropoda : Amphipoda	Ischyroceridae	Erichthonia brasiliensis	67	744.4437	0.0256
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	62	688.8882	0.0333
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	78	866.6658	0.0133
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	3	33.3333	0.0078
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	5	55.5555	0.0844
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	7	77.7777	0.0178
Chordata : Ascidiacea	Unidentified	Ascidiacea	1	11.1111	0.0011
Mollusca : Bivalvia	Mytilidae	Geukensia demissa	1	11.1111	0.0011
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	5	55.5555	22.1422
Mollusca : Bivalvia	Unidentified	Bivalvia	1*	11.1111	0.0544
Mollusca : Gastropoda	Cerithiidae	Bittiolium alternatum	7	77.7777	0.0022
Mollusca : Gastropoda	Columbellidae	Astiris lunata	34	377.7774	0.1633
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	1	11.1111	0.0033
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	17	188.8887	0.1556
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	2	22.2222	0.0144
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	2	22.2222	0.0006
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	14	155.5554	0.0144
			<b>Total</b>	<b>881</b>	<b>9788.9</b>
			<b># Taxa</b>	<b>41</b>	

\* denotes not included in total number of taxa

**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: EPI2-INT1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	1	54.8201	0.5975
Annelida : Polychaeta	Nereididae	Alitta succinea	1	54.8201	0.011
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	65	3563.3065	0.5811
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	1	54.8201	0.0055
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	1	54.8201	0.0027
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	9	493.3809	0.0658
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	31	1699.4231	0.1096
Arthropoda : Amphipoda	Corophiidae	Corophiidae	9*	493.3809	0.011
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	2	109.6402	0.0055
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	1	54.8201	0.0055
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	1	54.8201	0.0027
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	165	9045.3165	6.5949
Arthropoda : Diptera	Unidentified	Diptera	31	1699.4231	0.3673
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1	54.8201	0.011
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	2	109.6402	0.0055
Mollusca : Gastropoda	Columbellidae	Astyris lunata	1	54.8201	0.0329
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	1	54.8201	0.0274
Nemertina	Amphiporidae	Zygonemertes virescens	1	54.8201	0.011
			<b>Total</b>	<b>324</b>	<b>17762</b>
			<b># Taxa</b>	<b>17</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI2-SUB1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	32	355.5552	0.0356
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	16	177.7776	0.2655
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	4.0109
Annelida : Polychaeta	Nereididae	Alitta succinea	192	2133.3312	0.7738
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	304	3377.7744	0.0433
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalmia	32	355.5552	1.0773
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	160	1777.776	0.0469
Annelida : Polychaeta	Spionidae	Polydora cornuta	176	1955.5536	0.0082
Annelida : Polychaeta	Spionidae	Dipolydora socialis	32	355.5552	0.4699
Annelida : Polychaeta	Spionidae	Polydora websteri	80	888.888	0.0827
Annelida : Polychaeta	Spionidae	Polydora colonia	64	711.1104	0.176
Annelida : Polychaeta	Syllidae	Salvatoria clavata	16	177.7776	0.8329
Annelida : Polychaeta	Terabellidae	Polycirrus eximius	48	533.3328	0.0958
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	224	2488.8864	0.2822
Arthropoda : Amphipoda	Aoridae	Unciola serrata	320	3555.552	0.0068
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	32	355.5552	0.0326
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	9232	102577.68	8.4009
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	4752*	52799.947	0.5351
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	640	7111.104	0.0904
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	32	355.5552	0.0192
Arthropoda : Amphipoda	Corophiidae	Corophiidae	48*	533.3328	0.0268
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	800	8888.88	0.0382
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	128	1422.2208	1.7248
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	448	4977.7728	1.1959
Arthropoda : Amphipoda	Melitidae	Dulichieilla appendiculata	48	533.3328	0.0213
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	16	177.7776	0.0036
Arthropoda : Decapoda	Panopeidae	Panopeidae	80	888.888	0.0536
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	352	3911.1072	0.6247
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	96	1066.6656	144.8767
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	5	55.5555	22.1422
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	272	3022.2192	0.2581
Mollusca : Gastropoda	Columbellidae	Astyris lunata	192	2133.3312	1.29
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	160	1777.776	0.0192
Mollusca : Gastropoda	Newtoniellidae	Retilaskyea emersonii	16	177.7776	0.0574
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	48	533.3328	0.0222
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	16	177.7776	0.0933
			<b>Total</b>	<b>19141</b>	<b>212678</b>
			<b># Taxa</b>	<b>34</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI2-SUB2

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	16	177.7776	0.0267	
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	64	711.1104	0.0178	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0444	
Annelida : Polychaeta	Nereididae	Alitta succinea	104	1155.5544	0.5778	
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	248	2755.5528	1.2089	
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalmia	40	444.444	0.0089	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	48	533.3328	0.7556	
Annelida : Polychaeta	Spionidae	Polydora colonia	152	1688.8872	0.0267	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	48	533.3328	0.0444	
Annelida : Polychaeta	Spionidae	Polydora cornuta	136	1511.1096	0.0006	
Annelida : Polychaeta	Syllidae	Salvatoria clavata	32	355.5552	0.0006	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0089	
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	8	88.8888	0.0089	
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	32	355.5552	0.0267	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	48	533.3328	0.0089	
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	24	266.6664	0.0006	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1096*	12177.766	0.0622	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1648	18311.093	2.0533	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	120	1333.332	0.0178	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	56*	622.2216	0.0006	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	96	1066.6656	0.0444	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	72	799.9992	0.0711	
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	168	1866.6648	0.08	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	216	2399.9976	0.16	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	8	88.8888	0.0006	
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.1244	
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	8	88.8888	0.9511	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	280	3111.108	1.6711	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	16	177.7776	0.1333	
Mollusca : Bivalvia	Arcidae	Anadara transversa	8	88.8888	0.32	
Mollusca : Gastropoda	Cerithiidae	Bittiolum alternatum	64	711.1104	0.0978	
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	104	1155.5544	4.4	
Mollusca : Gastropoda	Columbellidae	Astyris lunata	152	1688.8872	0.9778	
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	16	177.7776	0.0267	
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	8	88.8888	0.0178	
Platyhelminthes : Turbellaria	Prosthlostomidae	Euplana gracilis	8	88.8888	0.0089	
			<b>Total</b>	<b>5200</b>	<b>57778</b>	<b>13.9853</b>
			<b># Taxa</b>	<b>34</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI2-SUB3

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	0.0711
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	8	88.8888	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0356
Annelida : Polychaeta	Nereididae	Alitta succinea	112	1244.4432	0.4
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.16
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	72	799.9992	0.3556
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	96	1066.6656	0.4
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	80	888.888	0.8978
Annelida : Polychaeta	Spionidae	Boccardiella hamata	48	533.3328	0.0267
Annelida : Polychaeta	Spionidae	Polydora cornuta	8	88.8888	0.0089
Annelida : Polychaeta	Spionidae	Streblospio benedicti	8	88.8888	0.0089
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	8	88.8888	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	8	88.8888	0.0006
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	64	711.1104	0.0267
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	96	1066.6656	0.0711
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	8*	88.8888	0.0006
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	8	88.8888	0.0178
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	32	355.5552	0.0178
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	8	88.8888	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	16	177.7776	0.0006
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	16	177.7776	0.0178
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	24	266.6664	0.0089
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	8	88.8888	0.0006
Arthropoda : Decapoda	Panopeidae	Panopeidae	32	355.5552	0.1156
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	8	88.8888	0.9156
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	24	266.6664	0.0978
Chordata : Ascidiacea	Unidentified	Ascidiacea	16	177.7776	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	8	88.8888	0.32
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	0.7089
Mollusca : Gastropoda	Calyptaeidae	Crepidula convexa	8	88.8888	0.16
Mollusca : Gastropoda	Certhiidae	Bittium alternatum	24	266.6664	0.0267
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	0.8711
Mollusca : Gastropoda	Columbellidae	Astyris lunata	56	622.2216	0.3022
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	8	88.8888	0.0267
Mollusca : Gastropoda	Newtoniellidae	Retilaskya emersonii	8	88.8888	0.0978
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	8	88.8888	0.0711
			<b>Total</b>	<b>1025</b>	<b>11389</b>
			<b># Taxa</b>	<b>36</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI3-INT1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	1	54.8201	0.1645
Annelida : Polychaeta	Nereididae	Alitta succinea	6	328.9206	0.0439
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	3	164.4603	0.2083
Annelida : Polychaeta	Spionidae	Polydora websteri	2	109.6402	0.011
Annelida : Polychaeta	Spionidae	Polydora cornuta	12	657.8412	0.0219
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	273	14965.887	1.4692
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	4	219.2804	0.0164
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	694	38045.149	1.6446
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	54.8201	0.011
Arthropoda : Amphipoda	Corophiidae	Corophiidae	121*	6633.2321	0.1699
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	1	54.8201	0.0055
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	76	4166.3276	0.2028
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	3	164.4603	0.0055
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	35	1918.7035	0.0767
Arthropoda : Cirripedia	Balanidae	Balanidae	7*	383.7407	0.5398
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	237	12992.364	18.2773
Arthropoda : Cirripedia	Unidentified	Balanomorpha	7*	383.7407	0.5398
Arthropoda : Decapoda	Panopeidae	Panopeidae	1	54.8201	0.0548
Arthropoda : Diptera	Unidentified	Diptera	14	767.4814	0.0767
Arthropoda : Isopoda	Idoteidae	Enichsonella filiformis	1	54.8201	0.0055
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	2	109.6402	0.0439
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	54.8201	0.0658
Platyhelminthes : Turbellaria	Prosthlostomidae	Euplana gracilis	4	219.2804	0.0274
			<b>Total</b>	<b>1506</b>	<b>82559</b>
			<b># Taxa</b>	<b>20</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI3-SUB1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	28	311.1108	0.0844
Annelida : Polychaeta	Nereididae	Alitta succinea	60	666.666	0.2
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	152	1688.8872	0.4133
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalmia	4	44.4444	0.0311
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	20	222.222	0.1644
Annelida : Polychaeta	Spionidae	Polydora websteri	16	177.7776	0.0311
Annelida : Polychaeta	Spionidae	Polydora cornuta	16	177.7776	0.0178
Annelida : Polychaeta	Syllidae	Syllidae	8	88.8888	0.0133
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	36	399.9996	0.04
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	8	88.8888	0.0044
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	684*	7599.9924	0.0578
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	956	10622.212	0.6178
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	16	177.7776	0.0006
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	36	399.9996	0.0311
Arthropoda : Amphipoda	Corophiidae	Corophiidae	28*	311.1108	0.0044
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	236	2622.2196	0.1067
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	12	133.3332	0.0006
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	92	1022.2212	0.0267
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	52	577.7772	0.0356
Arthropoda : Decapoda	Panopeidae	Panopeidae	20	222.222	0.1511
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	4	44.4444	0.2933
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	184	2044.4424	0.5644
Arthropoda : Isopoda	Idoteidae	Idotea balthica	8	88.8888	0.0044
Arthropoda : Pycnogonida	Callipallenidae	Callipallene brevirostris	4	44.4444	0.0044
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	4	44.4444	0.0178
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	24	266.6664	0.0667
Mollusca : Gastropoda	Cerithiidae	Bittiolium alternatum	492	5466.6612	0.4667
Mollusca : Gastropoda	Columbellidae	Astyris lunata	36	399.9996	0.2489
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	8	88.8888	0.0311
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	12	133.3332	0.0133
			<b>Total</b>	<b>3256</b>	<b>36178</b>
			<b># Taxa</b>	<b>28</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI3-SUB2

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	12	133.3332	0.0006
Annelida : Polychaeta	Capitellidae	Capitella teleta	32	355.5552	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	4	44.4444	0.0006
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	4	44.4444	0.0006
Annelida : Polychaeta	Nereididae	Alitta succinea	28	311.1108	0.0889
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	160	1777.776	0.5111
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	16	177.7776	0.08
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	8	88.8888	0.08
Annelida : Polychaeta	Spionidae	Boccardiella hamata	12	133.3332	0.0089
Annelida : Polychaeta	Spionidae	Streblospio benedicti	4	44.4444	0.0089
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia	8	88.8888	0.0133
Annelida : Polychaeta	Spionidae	Polydora cornuta	36	399.9996	0.0044
Annelida : Polychaeta	Syllidae	Syllidae	12	133.3332	0.0044
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0711
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	4	44.4444	0.0044
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	20	222.222	0.0222
Arthropoda : Amphipoda	Aoridae	Unciola serrata	44	488.8884	0.0133
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	4	44.4444	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1264*	14044.430	0.08
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1192	13244.431	0.6356
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	28	311.1108	0.0044
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	4	44.4444	0.0044
Arthropoda : Amphipoda	Corophiidae	Corophiidae	4*	44.4444	0.0006
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	364	4044.4404	0.2222
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	180	1999.998	0.0533
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	4	44.4444	0.0044
Arthropoda : Amphipoda	Phoxocephalidae	Eobrolgus spinosus	4	44.4444	0.0006
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	16	177.7776	0.0044
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	36	399.9996	0.08
Arthropoda : Decapoda	Panopeidae	Panopeidae	20	222.222	0.1022
Arthropoda : Decapoda	Portunidae	Callinectes sapidus	4	44.4444	0.2933
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	272	3022.2192	0.8
Arthropoda : Pycnogonida	Callipallenidae	Callipallene brevirostris	4	44.4444	0.0006
Chordata : Ascidiacea	Unidentified	Ascidiacea	4	44.4444	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolela	12	133.3332	0.0222
Mollusca : Bivalvia	Arcidae	Anadara transversa	8	88.8888	0.0889
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	16	177.7776	5.9722
Mollusca : Gastropoda	Calyptaeidae	Crepidula fornicata	4	44.4444	0.0222
Mollusca : Gastropoda	Cerithiidae	Bittiolium alternatum	1324	14711.096	1.0756
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	64	711.1104	1.1644
Mollusca : Gastropoda	Columbellidae	Astyris lunata	188	2088.8868	1.2533
Mollusca : Gastropoda	Columbellidae	Columbellidae	4*	44.4444	0.0267
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	8	88.8888	2.9556
Mollusca : Gastropoda	Newtoniellidae	Retilaskya emersonii	4	44.4444	0.0089
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	20	222.222	0.04
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	4	44.4444	0.0006
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocineta	4	44.4444	#Num1
Mollusca : Gastropoda	Unidentified	Gastropoda	4*	44.4444	0.0089
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	4	44.4444	0.0044

\* denotes not included in total number of taxa



**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

Total 5484 60933 15.8444  
# Taxa 45

SampleID: EPI3-SUB3

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	4	44.4444	0.0044
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	24	266.6664	0.0044
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	16	177.7776	0.1556
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	4	44.4444	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	8	88.8888	0.0006
Annelida : Polychaeta	Nereididae	Alitta succinea	60	666.666	0.1067
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	24	266.6664	0.0489
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	108	1199.9988	0.4844
Annelida : Polychaeta	Sabellidae	Sabellidae	4*	44.4444	0.0006
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	36	399.9996	0.4667
Annelida : Polychaeta	Spionidae	Polydora colonia	176	1955.5536	0.0089
Annelida : Polychaeta	Spionidae	Polydora cornuta	48	533.3328	0.0006
Annelida : Polychaeta	Spionidae	Polydora websteri	4	44.4444	0.0006
Annelida : Polychaeta	Spionidae	Boccardiella hamata	72	799.9992	0.0444
Annelida : Polychaeta	Spionidae	Dipolydora caulleryi	4	44.4444	0.0044
Annelida : Polychaeta	Syllidae	Salvatoria clavata	16	177.7776	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	24*	266.6664	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	16	177.7776	0.0444
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	4	44.4444	0.0044
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	16	177.7776	0.0044
Arthropoda : Amphipoda	Aoridae	Unciola serrata	24	266.6664	0.0133
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	12	133.3332	0.0133
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	284*	3155.5524	0.0222
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	660	7333.326	0.5289
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	72	799.9992	0.0006
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	20	222.222	0.0044
Arthropoda : Amphipoda	Corophiidae	Corophiidae	12*	133.3332	0.0006
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	56	622.2216	0.0267
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	140	1555.554	0.0356
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	120	1333.332	0.0578
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	4	44.4444	0.1067
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.32
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	112	1244.4432	0.3778
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	8	88.8888	0.0444
Mollusca : Bivalvia	Arcidae	Anadara transversa	4	44.4444	0.0044
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	0.0022
Mollusca : Gastropoda	Calyptraeidae	Crepidula plana	4	44.4444	0.0044
Mollusca : Gastropoda	Columbellidae	Astyris lunata	4	44.4444	0.0178
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0006
Platyhelminthes : Turbellaria	Prosthodontidae	Euplana gracilis	16	177.7776	0.0006
			<b>Total</b>	<b>2245</b>	<b>24944</b>
			<b># Taxa</b>	<b>36</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI4-INT1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Capitella teleta	1	54.8201	0.0027
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	1	54.8201	0.0384
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	2	109.6402	0.2412
Annelida : Polychaeta	Nereididae	Alitta succinea	8	438.5608	0.0932
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	2	109.6402	0.1316
Annelida : Polychaeta	Sabelliidae	Sabelliidae	1*	54.8201	0.0027
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	1	54.8201	0.2357
Annelida : Polychaeta	Spionidae	Polydora websteri	12	657.8412	0.1042
Annelida : Polychaeta	Spionidae	Polydora cornuta	8	438.5608	0.0164
Annelida : Polychaeta	Spionidae	Dipolydora socialis	1	54.8201	0.0055
Annelida : Polychaeta	Spionidae	Boccardiella hamata	1	54.8201	0.0055
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	200	10964.02	1.1128
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	4*	219.2804	0.0055
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	4	219.2804	0.0329
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	518	28396.812	1.0087
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	4	219.2804	0.0274
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	1	54.8201	0.0027
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	40	2192.804	0.1206
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	2	109.6402	0.011
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	15	822.3015	0.0329
Arthropoda : Cirripedia	Balanidae	Balanidae	20*	1096.402	0.3454
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	5	274.1005	0.2631
Arthropoda : Cirripedia	Unidentified	Balanomorpha	7*	383.7407	0.0219
Arthropoda : Decapoda	Panopeidae	Panopeidae	3	164.4603	0.0822
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0439
Arthropoda : Diptera	Unidentified	Diptera	4	219.2804	0.0329
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1	54.8201	0.0055
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	1	54.8201	0.0877
Arthropoda : Pycnogonida	Phoxichilidae	Anoplodactylus petiolatus	1	54.8201	0.0055
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	6	328.9206	0.0767
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	54.8201	0.0164
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	54.8201	24.998
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	3	164.4603	0.0055
			<b>Total</b>	<b>880</b>	<b>48242</b>
			<b># Taxa</b>	<b>29</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI4-SUB1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	48	533.3328	0.1244
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	40	444.444	0.1333
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	16	177.7776	0.0356
Annelida : Polychaeta	Spionidae	Dipolydora socialis	8	88.8888	0.0006
Annelida : Polychaeta	Spionidae	Polydora cornuta	16	177.7776	0.0006
Annelida : Polychaeta	Spirorbidae	Spirorbis sp.	8	88.8888	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	16	177.7776	0.0006
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	232	2577.7752	0.2578
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1176*	13066.654	0.0889
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1912	21244.423	1.7689
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0006
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0006
Arthropoda : Amphipoda	Corophiidae	Corophiidae	64*	711.1104	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	304	3377.7744	0.2311
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	560	6222.216	0.1867
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	8	88.8888	0.0006
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	80	888.888	0.0178
Arthropoda : Cirripedia	Balanidae	Balanidae	8	88.8888	0.0006
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	272	3022.2192	0.7644
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	24	266.6664	0.0444
Mollusca : Bivalvia	Arcidae	Anadara transversa	8	88.8888	0.0006
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	0.3989
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	360	3999.996	0.3644
Mollusca : Gastropoda	Columbellidae	Astyris lunata	136	1511.1096	1.0489
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	32	355.5552	0.2933
Mollusca : Gastropoda	Corambidae	Corambe obscura	8	88.8888	0.0533
Mollusca : Gastropoda	Muncidae	Urosalpinx cinerea	8	88.8888	2.2133
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	16	177.7776	0.0178
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	8	88.8888	0.0006
			<b>Total</b>	<b>5385</b>	<b>59833</b>
			<b># Taxa</b>	<b>27</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI4-SUB2

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	8	88.8888	0.0006
Annelida : Polychaeta	Capitellidae	Capitella teleta	8	88.8888	0.0006
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	64	711.1104	0.0089
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	0.1333
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	1664	18488.870	0.0889
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	48	533.3328	0.0533
Annelida : Polychaeta	Nereididae	Alitta succinea	96	1066.6656	0.0978
Annelida : Polychaeta	Phyllococidae	Paranaitis speciosa	8	88.8888	0.0533
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	824	9155.5464	1.8489
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalmia	88	977.7768	0.1422
Annelida : Polychaeta	Serpulidae	Hydroispio dianthus	104	1155.5544	0.5333
Annelida : Polychaeta	Spionidae	Polydora websteri	8	88.8888	0.0006
Annelida : Polychaeta	Spionidae	Boccardiella hamata	128	1422.2208	0.1067
Annelida : Polychaeta	Spionidae	Polydora cornuta	96	1066.6656	0.0178
Annelida : Polychaeta	Spionidae	Streblospio benedicti	8	88.8888	0.0089
Annelida : Polychaeta	Spionidae	Polydora colonia	272	3022.2192	0.0356
Annelida : Polychaeta	Syllidae	Syllidae	144	1599.9984	0.0089
Annelida : Polychaeta	Syllidae	Salvatoria clavata	32	355.5552	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	32	355.5552	0.0267
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	24	266.6664	0.0089
Arthropoda : Amphipoda	Aoridae	Unciola serrata	72	799.9992	0.0267
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	16	177.7776	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1432	15911.095	1.1644
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1096*	12177.766	0.0711
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	96	1066.6656	0.0089
Arthropoda : Amphipoda	Corophiidae	Corophiidae	72*	799.9992	0.0089
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	48	533.3328	0.0006
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	168	1866.6648	0.0711
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	400	4444.44	0.1244
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	64	711.1104	0.0533
Arthropoda : Cirripedia	Unidentified	Balanomorpha	8*	88.8888	0.0006
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	32	355.5552	0.0711
Arthropoda : Decapoda	Panopeidae	Panopeidae	24	266.6664	0.2222
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	240	2666.664	0.9422
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	112	1244.4432	0.2844
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	2	22.2222	0.8878
Mollusca : Gastropoda	Cerithiidae	Bittiolium altematum	384	4266.6624	0.3022
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	96	1066.6656	2.4267
Mollusca : Gastropoda	Columbellidae	Astyris lunata	88	977.7768	0.3378
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	56	622.2216	0.08
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	16	177.7776	0.0533
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0178
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	16	177.7776	0.0006
			<b>Total</b>	<b>8210</b>	<b>91222</b>
			<b># Taxa</b>	<b>40</b>	<b>10.3497</b>

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI4-SUB3

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	56	622.2216	0.0089
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	40	444.444	0.9956
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	440	4888.884	0.0178
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	8	88.8888	0.0178
Annelida : Polychaeta	Nereididae	Alitta succinea	56	622.2216	0.0356
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	352	3911.1072	0.3911
Annelida : Polychaeta	Sabellariidae	Parasabella micropthalma	48	533.3328	0.0267
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	32	355.5552	0.2489
Annelida : Polychaeta	Spionidae	Boccardiella hamata	120	1333.332	0.0533
Annelida : Polychaeta	Spionidae	Polydora cornuta	40	444.444	0.0178
Annelida : Polychaeta	Spionidae	Polydora colonia	96	1066.6656	0.0178
Annelida : Polychaeta	Spionidae	Dipolydora socialis	16	177.7776	0.0089
Annelida : Polychaeta	Syllidae	Syllidae	136	1511.1096	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	32	355.5552	0.0444
Arthropoda : Amphipoda	Amphilocheidae	Apolochus cresti	8	88.8888	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	88	977.7768	0.0533
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	8	88.8888	0.0089
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	624*	6933.3264	0.0444
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2864	31822.190	2.64
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	96	1066.6656	0.0178
Arthropoda : Amphipoda	Corophiidae	Corophiidae	32*	355.5552	0.0089
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	40	444.444	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	160	1777.776	0.0978
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	296	3288.8856	0.08
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	272	3022.2192	0.1511
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.3022
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	8	88.8888	0.4622
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	80	888.888	0.3733
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	8	88.8888	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	32	355.5552	0.0267
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	128	1422.2208	0.0978
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	0.8622
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	112	1244.4432	0.56
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	56	622.2216	0.0711
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	8	88.8888	0.0356
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	16	177.7776	0.1244
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	16	177.7776	0.0006
			<b>Total</b>	<b>6496</b>	<b>72178</b>
			<b># Taxa</b>	<b>35</b>	

\* denotes not included in total number of taxa

**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: EPI5-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	5	274.1005	0.0603
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	54.8201	0.011
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	1	54.8201	0.011
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	4	219.2804	0.0274
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	2	109.6402	0.0027
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	1	54.8201	0.0055
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	14	767.4814	0.0055
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	2	109.6402	0.0027
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	1	54.8201	0.0027
Arthropoda : Cirripedia	Balanidae	Balanidae	38*	2083.1638	6.1279
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	210	11512.221	33.8646
Arthropoda : Cirripedia	Unidentified	Balanomorpha	98*	5372.3698	15.8035
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0027
Arthropoda : Diptera	Unidentified	Diptera	118	6468.7718	2.6862
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	3	164.4603	0.0822
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	10	548.201	2.9164
Mollusca : Gastropoda	Calyptraeidae	Crepidula plana	1	54.8201	0.0027
Mollusca : Gastropoda	Columbellidae	Astyris lunata	1	54.8201	0.0329
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	1	54.8201	0.0548
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	1	54.8201	0.1206
			<b>Total</b>	<b>513</b>	<b>28123</b>
			<b># Taxa</b>	<b>18</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI5-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Arabellidae	Arabella sp.	8	88.8888	0.0444	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	16	177.7776	0.0089	
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	48	533.3328	0.8533	
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	1008	11199.989	0.0356	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0444	
Annelida : Polychaeta	Maldanidae	Maldanidae	8	88.8888	0.0089	
Annelida : Polychaeta	Nereididae	Alitta succinea	152	1688.8872	0.3911	
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.3467	
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	216	2399.9976	0.7733	
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	24	266.6664	0.0444	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	32	355.5552	0.5067	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	24	266.6664	0.0267	
Annelida : Polychaeta	Spionidae	Polydora cornuta	48	533.3328	0.0006	
Annelida : Polychaeta	Spionidae	Polydora websteri	8	88.8888	0.0089	
Annelida : Polychaeta	Syllidae	Syllidae	16	177.7776	0.0089	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	16	177.7776	0.0006	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	32	355.5552	0.0178	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1832	20355.535	1.8044	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1208*	13422.209	0.0711	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	88	977.7768	0.0089	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	40*	444.444	0.0006	
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0089	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	24	266.6664	0.0356	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	488	5422.2168	0.3022	
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	200	2222.22	0.0444	
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	16	177.7776	0.0178	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	72	799.9992	0.0444	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	16	177.7776	0.0006	
Arthropoda : Decapoda	Panopeidae	Panopeidae	16	177.7776	0.4267	
Arthropoda : Diptera	Unidentified	Diptera	8	88.8888	0.0006	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	240	2666.664	1.0489	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	8	88.8888	0.0356	
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	336	3733.3296	0.3556	
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	72	799.9992	1.7867	
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	64	711.1104	0.48	
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	8	88.8888	4.2756	
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	8	88.8888	0.0089	
			<b>Total</b>	<b>6432</b>	<b>71467</b>	<b>13.8787</b>
			<b># Taxa</b>	<b>35</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EP15-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	32	355.5552	0.0356	
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	88	977.7768	0.3289	
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	624	6933.3264	0.0178	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0356	
Annelida : Polychaeta	Nereididae	Alitta succinea	48	533.3328	0.0533	
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.3289	
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	32	355.5552	0.0444	
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	184	2044.4424	0.7644	
Annelida : Polychaeta	Spionidae	Polydora websteri	16	177.7776	0.0006	
Annelida : Polychaeta	Spionidae	Polydora cornuta	32	355.5552	0.0178	
Annelida : Polychaeta	Spionidae	Polydora colonia	48	533.3328	0.0089	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	8	88.8888	0.0089	
Annelida : Polychaeta	Syllidae	Syllidae	32	355.5552	0.0178	
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	40	444.444	0.0533	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	64	711.1104	0.0711	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1144	12711.098	1.12	
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	8	88.8888	0.0006	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	376*	4177.7736	0.0267	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	72	799.9992	0.0178	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	24*	266.6664	0.0089	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	72	799.9992	0.0267	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	216	2399.9976	0.1511	
Arthropoda : Amphipoda	Ischyroceridae	Erichsonella brasiliensis	64	711.1104	0.0267	
Arthropoda : Crustacea	Janiridae	Janiridae	8	88.8888	0.0006	
Arthropoda : Decapoda	Panopeidae	Panopeidae	8	88.8888	0.1689	
Arthropoda : Diptera	Unidentified	Diptera	8	88.8888	0.0006	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	56	622.2216	0.2933	
Chordata : Ascidiacea	Unidentified	Ascidiacea	64	711.1104	0.0006	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leuocolena	32	355.5552	0.16	
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	120	1333.332	0.08	
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	16	177.7776	0.1511	
Mollusca : Gastropoda	Columbellidae	Astyris lunata	64	711.1104	0.4	
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	8	88.8888	0.0089	
			<b>Total</b>	<b>3632</b>	<b>40356</b>	<b>4.4298</b>
			<b># Taxa</b>	<b>31</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI5-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	20	222.222	0.0178
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	4	44.4444	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	36	399.9996	0.3156
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	364	4044.4404	0.0267
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	16	177.7776	0.0222
Annelida : Polychaeta	Nereididae	Alitta succinea	76	844.4436	0.1511
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	40	444.444	0.08
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	112	1244.4432	0.4711
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	44	488.8884	0.6
Annelida : Polychaeta	Spionidae	Dipolydora socialis	8	88.8888	0.0133
Annelida : Polychaeta	Spionidae	Polydora websteri	4	44.4444	0.0044
Annelida : Polychaeta	Spionidae	Polydora cornuta	12	133.3332	0.0006
Annelida : Polychaeta	Spionidae	Polydora colonia	40	444.444	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	20	222.222	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	32	355.5552	0.0222
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	528*	5866.6608	0.0356
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1784	19822.202	1.8044
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	96	1066.6656	0.0044
Arthropoda : Amphipoda	Corophiidae	Corophiidae	12*	133.3332	0.0044
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	28	311.1108	0.0222
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	124	1377.7764	0.1022
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	8	88.8888	0.0006
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	56	622.2216	0.04
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	4	44.4444	0.0178
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	12	133.3332	0.0006
Arthropoda : Decapoda	Panopeidae	Panopeidae	24	266.6664	0.2756
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	172	1911.1092	0.8133
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	20	222.222	0.0578
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	12	133.3332	0.04
Mollusca : Gastropoda	Columbellidae	Astyris lunata	36	399.9996	0.2489
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	0.6311
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	8	88.8888	0.0044
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	8	88.8888	0.0267
			<b>Total</b>	<b>3816</b>	<b>42400</b>
			<b># Taxa</b>	<b>31</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI6-INT1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	1	54.8201	0.0055
Annelida : Polychaeta	Nereididae	Alitta succinea	28	1534.9628	1.069
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	93	5098.2693	1.0471
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	7	383.7407	0.0493
Arthropoda : Amphipoda	Corophiidae	Corophiidae	11*	603.0211	0.0027
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	2	109.6402	0.0055
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	31	1699.4231	0.0493
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	2	109.6402	0.011
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	18	986.7618	0.0384
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	1	54.8201	0.0055
Arthropoda : Cirripedia	Balanidae	Balanidae	113*	6194.6713	12.8763
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	56	3069.9256	6.3812
Arthropoda : Cirripedia	Unidentified	Balanomorpha	551*	30205.875	62.7863
Arthropoda : Diptera	Unidentified	Diptera	98	5372.3698	1.0525
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	50	2741.005	0.8442
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	4	219.2804	6.7484
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	2	109.6402	0.0219
		<b>Total</b>	<b>1068</b>	<b>58548</b>	<b>92.9941</b>
		<b># Taxa</b>	<b>14</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI6-SUB1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Nereididae	Alitta succinea	32	355.5552	0.0356	
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalmia	8	88.8888	0.0089	
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	40	444.444	0.0006	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	16	177.7776	0.0006	
Annelida : Polychaeta	Spionidae	Polydora cornuta	24	266.6664	0.0089	
Annelida : Polychaeta	Syllidae	Syllidae	16	177.7776	0.0178	
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	48	533.3328	0.08	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	9824	109155.45	12.7378	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	6304*	70044.374	0.2756	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	8	88.8888	0.0006	
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	24	266.6664	0.0178	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	8	88.8888	0.0006	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	64*	711.1104	0.0267	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	72	799.9992	0.0444	
Arthropoda : Amphipoda	Ischyroceridae	Encthonius brasiliensis	16	177.7776	0.0089	
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	144	1599.9984	0.0356	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	528	5866.6608	0.24	
Arthropoda : Decapoda	Panopeidae	Panopeidae	8	88.8888	0.0889	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	88	977.7768	0.1511	
Arthropoda : Isopoda	Idoteidae	Idotea balthica	80	888.888	0.1156	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	16	177.7776	0.0178	
Mollusca : Bivalvia	Anomiidae	Anomia simplex	8	88.8888	1.0756	
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	4	44.4444	0.8444	
Mollusca : Gastropoda	Carithiidae	Bittiolium alternatum	24	266.6664	0.0178	
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	8	88.8888	0.1956	
Mollusca : Gastropoda	Columbellidae	Astyris lunata	72	799.9992	0.5333	
Platyhelminthes : Turbellaria	Prosthlostomidae	Euplana gracilis	8	88.8888	0.0006	
			<b>Total</b>	<b>17492</b>	<b>194355</b>	<b>16.5811</b>
			<b># Taxa</b>	<b>25</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI6-SUB2

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	1	11.1111	0.0006
Annelida : Polychaeta	Nereididae	Alitta succinea	14	155.5554	0.0156
Annelida : Polychaeta	Phyllodoctidae	Paranaitis speciosa	2	22.2222	0.0189
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	1	11.1111	0.04
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	6	66.6666	0.02
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	4	44.4444	0.0267
Annelida : Polychaeta	Spionidae	Polydora cornuta	14	155.5554	0.0022
Annelida : Polychaeta	Syllidae	Proceraea cornuta	1	11.1111	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	1	11.1111	0.0044
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	9	99.9999	0.0044
Arthropoda : Amphipoda	Amphithoidae	Amphithoe valida	2	22.2222	0.0022
Arthropoda : Amphipoda	Aoridae	Unciola serrata	4	44.4444	0.0044
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	1	11.1111	0.0011
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	38*	422.2218	0.0044
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	137	1522.2207	0.0911
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	22	244.4442	0.0122
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	25	277.7775	0.0067
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	5	55.5555	0.0011
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	10	111.1111	0.0033
Arthropoda : Amphipoda	Corophiidae	Corophiidae	2*	22.2222	0.0011
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	91	1011.1101	0.0878
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	16	177.7776	0.0111
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	3	33.3333	0.0006
Arthropoda : Amphipoda	Melitidae	Melita nitida	8	88.8888	0.0078
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	27	299.9997	0.0222
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	36	399.9996	0.0111
Arthropoda : Decapoda	Panopeidae	Panopeidae	25	277.7775	0.2122
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1	11.1111	0.0006
Mollusca : Bivalvia	Arcidae	Anadara transversa	1	11.1111	0.0333
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	4	44.4444	2.1933
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	2	22.2222	0.0011
Mollusca : Gastropoda	Columbellidae	Astyrus lunata	127	1411.1097	1.0578
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	7	77.7777	0.0722
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	10	111.1111	0.1111
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	1	11.1111	0.0011
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	6	66.6666	0.0222
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	12	133.3332	0.0056
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	4	44.4444	0.0044
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	1	11.1111	0.01
			<b>Total</b>	<b>681</b>	<b>7566.7</b>
			<b># Taxa</b>	<b>37</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI6-SUB3

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	8	88.8888	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	1.2089
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	8	88.8888	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	32	355.5552	0.0311
Annelida : Polychaeta	Nereididae	Alitta succinea	76	844.4436	0.0222
Annelida : Polychaeta	Sabellariidae	Parasabella micropthalma	32	355.5552	0.0089
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	140	1555.554	0.0844
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	28	311.1108	0.0311
Annelida : Polychaeta	Spionidae	Dipolydora socialis	4	44.4444	0.0044
Annelida : Polychaeta	Spionidae	Polydora cornuta	12	133.3332	0.0044
Annelida : Polychaeta	Spionidae	Polydora colonia	48	533.3328	0.0133
Annelida : Polychaeta	Syllidae	Proceraea cornuta	16	177.7776	0.0044
Annelida : Polychaeta	Syllidae	Syllidae	248*	2755.5528	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0356
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	4	44.4444	0.0006
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	4	44.4444	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	76	844.4436	0.0267
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	16	177.7776	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	344*	3822.2184	0.0222
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	436	4844.4396	0.28
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	60	666.666	0.0133
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	16	177.7776	0.0089
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	36	399.9996	0.0006
Arthropoda : Amphipoda	Corophiidae	Corophiidae	128*	1422.2208	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	20	222.222	0.0044
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	56	622.2216	0.0444
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0133
Arthropoda : Amphipoda	Gammaridae	Elasmopus leviss	184	2044.4424	0.0622
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	64	711.1104	0.0311
Arthropoda : Amphipoda	Melitidae	Dulichieella appendiculata	204	2266.6644	0.0756
Arthropoda : Amphipoda	Phoxocephalidae	Eobolus spinosus	12	133.3332	0.0044
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	48	533.3328	0.0044
Arthropoda : Crustacea	Janiridae	Janiridae	4	44.4444	0.0006
Arthropoda : Decapoda	Panopeidae	Panopeidae	24	266.6664	0.4844
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	20	222.222	0.0311
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	8	88.8888	0.0044
Mollusca : Bivalvia	Anomiidae	Anomia simplex	4	44.4444	0.2533
Mollusca : Gastropoda	Calyptaeidae	Crepidula plana	4	44.4444	0.0044
Mollusca : Gastropoda	Columbellidae	Astyris lunata	24	266.6664	0.1289
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	20	222.222	0.9333
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	4	44.4444	0.0044
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	4	44.4444	0.0044
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	8	88.8888	0.04
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0044
Platyhelminthes : Turbellaria	Prosthodontidae	Euplana gracilis	8	88.8888	0.0006
			<b>Total</b>	<b>2524</b>	<b>28044</b>
			<b># Taxa</b>	<b>42</b>	

\* denotes not included in total number of taxa

**Hampton Roads Bridge Tunnel Benthic Study  
Sample Taxonomy**

SampleID: EPI7-INT1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	1	54.8201	0.0027
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	1*	54.8201	0.0027
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2	109.6402	0.0219
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	438.5608	0.0274
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	1	54.8201	0.0055
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	342	18748.474	16.9833
Arthropoda : Diptera	Unidentified	Diptera	55	3015.1055	0.6743
		<b>Total</b>	<b>410</b>	<b>22476</b>	<b>17.7178</b>
		<b># Taxa</b>	<b>6</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI7-SUB1

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0089
Annelida : Polychaeta	Nereididae	Alitta succinea	44	488.8884	0.1911
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	4	44.4444	0.0133
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	24	266.6664	0.0844
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	4	44.4444	0.0489
Annelida : Polychaeta	Spionidae	Polydora cornuta	96	1066.6656	0.0089
Annelida : Polychaeta	Spionidae	Polydora websteri	4	44.4444	0.0044
Annelida : Polychaeta	Syllidae	Syllidae	16	177.7776	0.0133
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	4	44.4444	0.0006
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	100	1111.11	0.0756
Arthropoda : Amphipoda	Aoridae	Grandiderella sp.	4	44.4444	0.0044
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1244	13822.208	1.3911
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	808*	8977.7688	0.0711
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	12	133.3332	0.0006
Arthropoda : Amphipoda	Corophiidae	Corophiidae	16*	177.7776	0.0133
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	152	1688.8872	0.1244
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	84	933.3324	0.0311
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	4	44.4444	0.0044
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	12	133.3332	0.0133
Arthropoda : Cirripedia	Balanidae	Balanidae	4	44.4444	0.0006
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	4	44.4444	0.0622
Arthropoda : Diptera	Unidentified	Diptera	4	44.4444	0.0311
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1272	14133.319	5.68
Arthropoda : Isopoda	Idoteidae	Idotea balthica	12	133.3332	0.0178
Arthropoda : Isopoda	Idoteidae	Synidotea laticauda	4	44.4444	0.0267
Cnidaria : Anthozoa	Diadumenidae	Diadumene leuocolena	12	133.3332	0.0311
Mollusca : Bivalvia	Anomidae	Anomia simplex	12	133.3332	1.4711
Mollusca : Bivalvia	Arcidae	Anadara transversa	4	44.4444	0.0089
Mollusca : Bivalvia	Mactridae	Spisula solidissima	4	44.4444	0.0089
Mollusca : Bivalvia	Mytilidae	Geukensia demissa	4	44.4444	0.0006
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	0.1133
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	88	977.7768	0.0844
Mollusca : Gastropoda	Columbellidae	Astiris lunata	64	711.1104	0.44
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	24	266.6664	1.0622
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	4	44.4444	0.0044
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	8	88.8888	0.0133
Nemertina	Amphiporidae	Zygonemertes virescens	4	44.4444	0.0044
		<b>Total</b>	<b>4177</b>	<b>46411</b>	<b>11.173</b>
		<b># Taxa</b>	<b>36</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI7-SUB2

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)	
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0006	
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	64	711.1104	1.7156	
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	32	355.5552	0.0006	
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	64	711.1104	0.1244	
Annelida : Polychaeta	Nereididae	Alitta succinea	328	3644.4408	0.3644	
Annelida : Polychaeta	Phyllodocidae	Phyllodocidae	8	88.8888	0.0006	
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.0622	
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	160	1777.776	0.6044	
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	48	533.3328	0.0622	
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	72	799.9992	0.64	
Annelida : Polychaeta	Spionidae	Boccardiella hamata	40	444.444	0.0178	
Annelida : Polychaeta	Spionidae	Polydora cornuta	72	799.9992	0.0267	
Annelida : Polychaeta	Spionidae	Polydora colonia	56	622.2216	0.0089	
Annelida : Polychaeta	Syllidae	Syllidae	32	355.5552	0.0089	
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	8	88.8888	0.0089	
Arthropoda : Amphipoda	Aoridae	Unciola serrata	152	1688.8872	0.1067	
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	48	533.3328	0.0711	
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	232*	2577.7752	0.0267	
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	304	3377.7744	0.2222	
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	40	444.444	0.0267	
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	208	2311.1088	0.0178	
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	208	2311.1088	0.0178	
Arthropoda : Amphipoda	Corophiidae	Corophiidae	16*	177.7776	0.0089	
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	136	1511.1096	0.0533	
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0006	
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	104	1155.5544	0.0711	
Arthropoda : Amphipoda	Ischyroceridae	Erichonius brasiliensis	784	8711.1024	0.2311	
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	696	7733.3256	0.5067	
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	48	533.3328	0.0267	
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	16	177.7776	0.0711	
Arthropoda : Decapoda	Panopeidae	Panopeidae	8	88.8888	0.0267	
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	40	444.444	2.7467	
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	288	3199.9968	1.3244	
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	40	444.444	0.08	
Mollusca : Bivalvia	Anomiidae	Anomia simplex	8	88.8888	1.2178	
Mollusca : Bivalvia	Lucinidae	Parvilucina crenella	8	88.8888	0.0006	
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	3	33.3333	3.7011	
Mollusca : Gastropoda	Cerithiidae	Bittiolium alternatum	24	266.6664	0.0267	
Mollusca : Gastropoda	Columbellidae	Astyris lunata	80	888.888	0.4444	
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	0.8889	
Mollusca : Gastropoda	Newtoniellidae	Retilaskya emersonii	16	177.7776	0.0356	
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	40	444.444	0.0533	
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	8	88.8888	0.0006	
Mollusca : Gastropoda	Turridae	Pyrgocythara pilcosa	8	88.8888	0.0356	
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0267	
			<b>Total</b>	<b>4635</b>	<b>51500</b>	<b>15.7138</b>
			<b># Taxa</b>	<b>43</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI7-SUB3

Collection Date: 10/3/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Arabellidae	Arabella sp.	8	88.8888	0.0267
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	48	533.3328	0.0178
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	24	266.6664	0.9333
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	176	1955.5536	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	104	1155.5544	0.0978
Annelida : Polychaeta	Nereididae	Alitta succinea	152	1688.8872	0.1422
Annelida : Polychaeta	Sabelliidae	Parasabella microphthalma	104	1155.5544	0.1956
Annelida : Polychaeta	Sabelliidae	Sabellaria vulgaris	416	4622.2176	0.8533
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	272	3022.2192	1.8489
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia	8	88.8888	0.0006
Annelida : Polychaeta	Spionidae	Polydora colonia	72	799.9992	0.0006
Annelida : Polychaeta	Spionidae	Polydora cornuta	160	1777.776	0.0006
Annelida : Polychaeta	Spionidae	Boccardiella hamata	48	533.3328	0.0178
Annelida : Polychaeta	Spionidae	Dipolydora socialis	56	622.2216	0.0089
Annelida : Polychaeta	Syllidae	Salvatoria clavata	144	1599.9984	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	40*	444.444	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	16	177.7776	0.0089
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	8	88.8888	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	216	2399.9976	0.0889
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	168	1866.6648	0.0622
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	440	4888.884	0.4444
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	216*	2399.9976	0.0178
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	88	977.7768	0.0267
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	80	888.888	0.0178
Arthropoda : Amphipoda	Corophiidae	Corophiidae	80*	888.888	0.0178
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	160	1777.776	0.0622
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	80	888.888	0.0711
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	192	2133.3312	0.0889
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	48	533.3328	0.0267
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	56	622.2216	0.0089
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	16	177.7776	0.8978
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	56	622.2216	0.1956
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	8	88.8888	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	88	977.7768	0.3378
Mollusca : Gastropoda	Cerithiidae	Sella adamsii	8	88.8888	0.2311
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	16	177.7776	0.0178
Mollusca : Gastropoda	Columbellidae	Astyris lunata	40	444.444	0.2489
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	48	533.3328	1.0133
Mollusca : Gastropoda	Pyramidellidae	Boonea bisuturalis	8	88.8888	0.0089
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	56	622.2216	0.0444
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	16	177.7776	0.08
Platyhelminthes : Turbellaria	Prosthodontidae	Euplana gracilis	8	88.8888	0.0006
		<b>Total</b>	<b>4048</b>	<b>44978</b>	<b>8.1656</b>
		<b># Taxa</b>	<b>39</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EP18-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	1	54.8201	0.0027
Annelida : Polychaeta	Nereididae	Alitta succinea	22	1206.0422	1.1293
Annelida : Polychaeta	Phyllodoctidae	Paranaitis speciosa	2	109.6402	0.1809
Annelida : Polychaeta	Spionidae	Polydora cornuta	11	603.0211	0.0219
Annelida : Polychaeta	Spionidae	Polydora websteri	19	1041.5819	0.0055
Annelida : Polychaeta	Spionidae	Streblospio benedicti	1	54.8201	0.0027
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	202	11073.660	1.3212
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	5	274.1005	0.0164
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	12*	657.8412	0.0055
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	51	2795.8251	0.1645
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	125	6852.5125	0.2522
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	2	109.6402	0.0055
Arthropoda : Amphipoda	Corophiidae	Corophiidae	53*	2905.4653	0.0439
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	1	54.8201	0.0027
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	25	1370.5025	0.0658
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	34	1863.8834	0.0329
Arthropoda : Cirripedia	Balanidae	Balanidae	18*	986.7618	0.296
Arthropoda : Cirripedia	Chthamalidae	Chthamalus fragilis	14	767.4814	1.5514
Arthropoda : Cirripedia	Unidentified	Balanomorpha	16*	877.1216	0.0055
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0164
Arthropoda : Decapoda	Xanthidae	Eurypanopeus depressus	1	54.8201	0.5975
Arthropoda : Diptera	Unidentified	Diptera	7	383.7407	0.0932
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1	54.8201	0.0164
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	4	219.2804	0.2138
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	3	164.4603	0.3947
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	11	603.0211	28.183
Mollusca : Gastropoda	Muriceidae	Urosalpinx cinerea	2	109.6402	0.0548
Nemertina	Amphiporidae	Zygonemertes virescens	1	54.8201	0.0027
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	2	109.6402	0.0055
Platyhelminthes : Turbellaria	Stylochidae	Stylochus ellipticus	7	383.7407	0.3947
			<b>Total</b>	<b>654</b>	<b>35852</b>
			<b># Taxa</b>	<b>26</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI8-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	28	311.1108	0.0667
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	16	177.7776	0.0356
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	8	88.8888	0.0622
Annelida : Polychaeta	Spionidae	Polydora cornuta	36	399.9996	0.0044
Annelida : Polychaeta	Syllidae	Syllidae	4	44.4444	0.0006
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	168	1866.6648	0.2711
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	440*	4888.884	0.0267
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2792	31022.191	4.2489
Arthropoda : Amphipoda	Corophiidae	Corophiidae	96*	1066.6656	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	64	711.1104	0.0133
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	52	577.7772	0.0044
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	16	177.7776	0.0044
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	4	44.4444	0.0089
Arthropoda : Amphipoda	Ischyroceridae	Enicthonius brasiliensis	12	133.3332	0.0006
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	8	88.8888	0.0044
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	100	1111.11	0.0444
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	8	88.8888	0.0844
Arthropoda : Isopoda	Idoteidae	Idotea balthica	44	488.8884	0.0178
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	1120	12444.432	3.3778
Arthropoda : Pycnogonida	Tanystylidae	Tanystylum orbiculare	4	44.4444	0.0044
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	8	88.8888	0.0006
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	8	88.8888	0.0089
Mollusca : Gastropoda	Columbellidae	Astyris lunata	32	355.5552	0.3022
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	56	622.2216	3.4978
Nemertina	Amphiporidae	Zygonemertes virescens	4	44.4444	0.0006
		<b>Total</b>	<b>5128</b>	<b>56978</b>	<b>12.1</b>
		<b># Taxa</b>	<b>23</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI8-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0006
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	4	44.4444	0.2444
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	8	88.8888	0.0006
Annelida : Polychaeta	Nereididae	Alitta succinea	72	799.9992	0.2711
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.1511
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	80	888.888	0.0356
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	48	533.3328	0.1822
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	96	1066.6656	1.6489
Annelida : Polychaeta	Spionidae	Prionospio heterobranchia	4	44.4444	0.0006
Annelida : Polychaeta	Spionidae	Polydora cornuta	4	44.4444	0.0006
Annelida : Polychaeta	Syllidae	Brania sp.	4	44.4444	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	8	88.8888	0.0222
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca abdita	4	44.4444	0.0044
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	8	88.8888	0.0133
Arthropoda : Amphipoda	Aoridae	Unciola serrata	32	355.5552	0.0006
Arthropoda : Amphipoda	Aoridae	Grandidierella sp.	4	44.4444	0.0089
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	4	44.4444	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	1100	12222.21	0.9067
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	4	44.4444	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	100*	1111.11	0.0089
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	12	133.3332	0.0006
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	12	133.3332	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	4	44.4444	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	8	88.8888	0.0133
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	64	711.1104	0.0356
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	60	666.666	0.0356
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	24	266.6664	0.0089
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	4	44.4444	0.0311
Arthropoda : Decapoda	Panopeidae	Panopeidae	8	88.8888	0.0889
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	4	44.4444	0.0133
Arthropoda : Isopoda	Idoteidae	Idotea balthica	4	44.4444	0.0044
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	388	4311.1068	0.8844
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	52	577.7772	0.1111
Mollusca : Bivalvia	Arcidae	Anadara transversa	4	44.4444	0.0178
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	8	88.8888	2.0022
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	180	1999.998	0.1733
Mollusca : Gastropoda	Columbellidae	Astyris lunata	56	622.2216	0.2933
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	28	311.1108	0.2533
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	8	88.8888	0.0311
Mollusca : Gastropoda	Pyramidellidae	Boonea seminuda	4	44.4444	0.0006
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	48	533.3328	0.0267
Mollusca : Gastropoda	Turridae	Kurtziella atrostyla	8	88.8888	0.0622
Nemertina	Amphiporidae	Zygonemertes virescens	4	44.4444	0.0222
<b>Total</b>			<b>2592</b>	<b>28800</b>	<b>7.6302</b>
<b># Taxa</b>			<b>42</b>		

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI8-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	40	444.444	0.0089
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	32	355.5552	0.7111
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	120	1333.332	0.0006
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	72	799.9992	0.1511
Annelida : Polychaeta	Nereididae	Alitta succinea	392	4355.5512	0.9778
Annelida : Polychaeta	Phyllodocidae	Paranaitis speciosa	8	88.8888	0.0356
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	8	88.8888	0.16
Annelida : Polychaeta	Sabellariidae	Parasabella micropthalma	136	1511.1096	0.4178
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	336	3733.3296	0.9156
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	184	2044.4424	3.1111
Annelida : Polychaeta	Spionidae	Boccardiella hamata	64	711.1104	0.0533
Annelida : Polychaeta	Spionidae	Polydora colonia	640	7111.104	0.0533
Annelida : Polychaeta	Spionidae	Polydora cornuta	128	1422.2208	0.0089
Annelida : Polychaeta	Syllidae	Proceras cornuta	8	88.8888	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	240*	2666.664	0.0178
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	48	533.3328	0.16
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	16	177.7776	0.0089
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	16	177.7776	0.0089
Arthropoda : Amphipoda	Aoridae	Unciola serrata	128	1422.2208	0.1422
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	144	1599.9984	0.0622
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	384*	4266.6624	0.0444
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	88	977.7768	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	696	7733.3256	0.5689
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	184	2044.4424	0.0178
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	232	2577.7752	0.16
Arthropoda : Amphipoda	Corophiidae	Corophiidae	192*	2133.3312	0.0178
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	96	1066.6656	0.0889
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	128	1422.2208	0.0533
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	608	6755.5488	0.4267
Arthropoda : Decapoda	Hippolytidae	Hippolyte pleuracantha	48	533.3328	0.2133
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	352	3911.1072	1.2178
Chordata : Ascidiacea	Unidentified	Ascidiacea	120	1333.332	0.0356
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	312	3466.6632	1.0578
Mollusca : Bivalvia	Anomiidae	Anomia simplex	8	88.8888	0.64
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	72	799.9992	0.0622
Mollusca : Gastropoda	Columbellidae	Parvanachis obesa	8	88.8888	0.0889
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	64	711.1104	1.04
Mollusca : Gastropoda	Columbellidae	Astyris lunata	64	711.1104	0.2756
Mollusca : Gastropoda	Turridae	Pyrgocythara plicosa	32	355.5552	0.1067
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0006
Nemertina	Lineidae	Siphonenteron bicolor	16	177.7776	0.0089
Nemertina	Tetrastemmatidae	Tetrastemma candidum	8	88.8888	0.0006
		<b>Total</b>	<b>6480</b>	<b>72000</b>	<b>13.1493</b>
		<b># Taxa</b>	<b>39</b>		

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI9-INT1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Nereididae	Alitta succinea	49	2686.1849	3.2837
Annelida : Polychaeta	Phyllodoceidae	Paranaitis speciosa	2	109.6402	0.1974
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1	54.8201	0.0055
Annelida : Polychaeta	Spionidae	Polydora websteri	2	109.6402	0.011
Annelida : Polychaeta	Spionidae	Polydora cornuta	4	219.2804	0.0055
Arthropoda : Amphipoda	Ampithoidae	Ampithoe valida	103	5646.4703	0.2741
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	3*	164.4603	0.0027
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	3	164.4603	0.0219
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	6	328.9206	0.0055
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	284	15568.908	0.4989
Arthropoda : Amphipoda	Corophiidae	Corophiidae	97*	5317.5497	0.148
Arthropoda : Amphipoda	Hyalidae	Ptilohyale littoralis	21	1151.2221	0.0219
Arthropoda : Amphipoda	Ischyroceridae	Jassa marmorata	10	548.201	0.011
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	2	109.6402	0.0055
Arthropoda : Cirripedia	Balanidae	Balanidae	20*	1096.402	1.2737
Arthropoda : Cirripedia	Chthamallidae	Chthamalus fragilis	110	6030.211	7.0055
Arthropoda : Cirripedia	Unidentified	Balanomorpha	100*	5482.01	6.3687
Arthropoda : Decapoda	Panopeidae	Panopeidae	4	219.2804	0.1699
Arthropoda : Decapoda	Pinnotheridae	Pinnotheridae	1	54.8201	0.0219
Arthropoda : Diptera	Unidentified	Diptera	2	109.6402	0.0055
Arthropoda : Isopoda	Sphaeromatidae	Sphaeroma quadridentatum	10	548.201	0.0493
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	2	109.6402	0.0027
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	7	383.7407	78.2228
Mollusca : Bivalvia	Unidentified	Bivalvia	1*	54.8201	0.0329
Mollusca : Gastropoda	Cerithiidae	Bittium alternatum	2	109.6402	0.0027
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	1	54.8201	0.1535
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	1	54.8201	0.0055
Platyhelminthes : Turbellaria	Prosthiostomidae	Euplana gracilis	1	54.8201	0.0027
			<b>Total</b>	<b>849</b>	<b>46542</b>
			<b># Taxa</b>	<b>23</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI9-SUB1

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	8	88.8888	0.0356
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	0.0089
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	48	533.3328	0.0089
Annelida : Polychaeta	Maldanidae	Maldanidae	8	88.8888	0.0178
Annelida : Polychaeta	Nereididae	Alitta succinea	32	355.5552	0.6311
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	240	2666.664	0.6578
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	8	88.8888	0.0356
Annelida : Polychaeta	Spionidae	Boccardiella hamata	16	177.7776	0.0178
Annelida : Polychaeta	Spionidae	Polydora cornuta	32	355.5552	0.0089
Annelida : Polychaeta	Syllidae	Syllidae	48	533.3328	0.0006
Arthropoda : Amphipoda	Amphithoidae	Amphithoe valida	32	355.5552	0.0356
Arthropoda : Amphipoda	Aoridae	Unciola serrata	8	88.8888	0.0089
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	8	88.8888	0.0178
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	2832	31466.635	4.16
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	816*	9066.6576	0.0533
Arthropoda : Amphipoda	Corophiidae	Corophiidae	344*	3822.2184	0.0267
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	104	1155.5544	0.0267
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	32	355.5552	0.0178
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	104	1155.5544	0.08
Arthropoda : Amphipoda	Ischyroceridae	Enicthonius brasiliensis	96	1066.6656	0.0267
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	96	1066.6656	0.0444
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	16	177.7776	1.1467
Arthropoda : Isopoda	Idoteidae	Idotea balthica	16	177.7776	0.0178
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	264	2933.3304	1.5022
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolea	16	177.7776	0.0889
Mollusca : Bivalvia	Arcidae	Anadara transversa	16	177.7776	0.0089
Mollusca : Bivalvia	Ostreidae	Crassostrea virginica	1	11.1111	0.9793
Mollusca : Gastropoda	Cerithiidae	Bittiolum alternatum	40	444.444	0.0356
Mollusca : Gastropoda	Columbellidae	Astyris lunata	32	355.5552	0.3022
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	160	1777.776	4.7289
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	32	355.5552	0.0267
Nemertina	Amphiporidae	Zygonemertes virescens	8	88.8888	0.0178
			<b>Total</b>	<b>5521</b>	<b>61344</b>
			<b># Taxa</b>	<b>30</b>	

\* denotes not included in total number of taxa

## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI9-SUB2

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Oligochaeta	Unidentified	Oligochaeta	8	88.8888	0.0006
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	12	133.3332	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	8	88.8888	1.1644
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	744	8266.6584	0.0356
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	20	222.222	0.0178
Annelida : Polychaeta	Nereididae	Alitta succinea	88	977.7768	0.2
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	12	133.3332	0.0311
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	248	2755.5528	0.9911
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	20	222.222	0.44
Annelida : Polychaeta	Spionidae	Boccardiella hamata	12	133.3332	0.0089
Annelida : Polychaeta	Spionidae	Polydora colonia	156	1733.3316	0.0089
Annelida : Polychaeta	Spionidae	Polydora cornuta	28	311.1108	0.0006
Annelida : Polychaeta	Syllidae	Syllidae	48*	533.3328	0.0133
Annelida : Polychaeta	Syllidae	Proceras cornuta	4	44.4444	0.0089
Arthropoda : Amphipoda	Aoridae	Unciola serrata	80	888.888	0.08
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	32	355.5552	0.0222
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	844	9377.7684	0.6133
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	240*	2666.664	0.0133
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	8	88.8888	0.0006
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	8	88.8888	0.0089
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	44	488.8884	0.0044
Arthropoda : Amphipoda	Corophiidae	Corophiidae	308*	3422.2188	0.0222
Arthropoda : Amphipoda	Corophiidae	Monocorophium insidiosum	4	44.4444	0.0006
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	376	4177.7736	0.2356
Arthropoda : Amphipoda	Corophiidae	Monocorophium acherusicum	8	88.8888	0.0006
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	92	1022.2212	0.0489
Arthropoda : Amphipoda	Ischyroceridae	Ericthonius brasiliensis	128	1422.2208	0.0489
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	24	266.6664	0.0089
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	52	577.7772	0.0089
Arthropoda : Crustacea	Janiridae	Janiridae	28	311.1108	0.0006
Arthropoda : Decapoda	Panopeidae	Panopeidae	20	222.222	0.1378
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	4	44.4444	0.9511
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	28	311.1108	0.0533
Chordata : Ascidiacea	Unidentified	Ascidiacea	4	44.4444	0.0006
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	12	133.3332	0.08
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	116	1288.8876	2.0311
Mollusca : Gastropoda	Columbellidae	Astyris lunata	56	622.2216	0.3067
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	4	44.4444	0.0006
Platyhelminthes : Turbellaria	Prosthodontidae	Euplana gracilis	4	44.4444	0.0006
			<b>Total</b>	<b>3932</b>	<b>43689</b>
			<b># Taxa</b>	<b>36</b>	

\* denotes not included in total number of taxa



## Hampton Roads Bridge Tunnel Benthic Study Sample Taxonomy

SampleID: EPI9-SUB3

Collection Date: 10/4/2017

Group Name	Family	Taxon	Count	Abundance (# per sq m)	Biomass (AFDW)
Annelida : Polychaeta	Capitellidae	Mediomastus californiensis	64	711.1104	0.0267
Annelida : Polychaeta	Dorvilleidae	Schistomeringos rudolphi	8	88.8888	0.0006
Annelida : Polychaeta	Eunicidae	Marphysa sanguinea	32	355.5552	0.9867
Annelida : Polychaeta	Fabriciidae	Fabricinuda trilobata	8	88.8888	0.0089
Annelida : Polychaeta	Hesionidae	Oxydromus obscurus	88	977.7768	0.0889
Annelida : Polychaeta	Nereididae	Alitta succinea	320	3555.552	0.8267
Annelida : Polychaeta	Polynoidae	Lepidonotus sublevis	48	533.3328	1.0756
Annelida : Polychaeta	Sabellariidae	Sabellaria vulgaris	1064	11822.210	4.9067
Annelida : Polychaeta	Sabellariidae	Parasabella microphthalma	152	1688.8872	0.2756
Annelida : Polychaeta	Serpulidae	Hydroides dianthus	256	2844.4416	1.9289
Annelida : Polychaeta	Spionidae	Polydora cornuta	8	88.8888	0.0089
Annelida : Polychaeta	Spionidae	Boccardiella hamata	24	266.6664	0.0089
Annelida : Polychaeta	Syllidae	Exogone sp.	24	266.6664	0.0006
Annelida : Polychaeta	Syllidae	Proceras cornuta	8	88.8888	0.0006
Annelida : Polychaeta	Syllidae	Syllida sp.	56*	622.2216	0.0006
Annelida : Polychaeta	Terebellidae	Polycirrus eximius	32	355.5552	0.0267
Arthropoda : Amphipoda	Ampeliscidae	Ampelisca vadorum	8	88.8888	0.0006
Arthropoda : Amphipoda	Amphilochiidae	Apolochus cresti	8	88.8888	0.0006
Arthropoda : Amphipoda	Aoridae	Unciola serrata	544	6044.4384	0.5333
Arthropoda : Amphipoda	Bateidae	Batea catharinensis	120	1333.332	0.0711
Arthropoda : Amphipoda	Caprellidae	Caprella equilibra	8	88.8888	0.0006
Arthropoda : Amphipoda	Caprellidae	Paracaprella tenuis	136	1511.1096	0.0356
Arthropoda : Amphipoda	Caprellidae	Caprella penantis	640	7111.104	0.4
Arthropoda : Amphipoda	Caprellidae	Caprella sp.	232*	2577.7752	0.0178
Arthropoda : Amphipoda	Colomastigidae	Colomastix halichondriae	56	622.2216	0.0089
Arthropoda : Amphipoda	Corophiidae	Monocorophium tuberculatum	8	88.8888	0.0089
Arthropoda : Amphipoda	Corophiidae	Apocorophium simile	416	4622.2176	0.1778
Arthropoda : Amphipoda	Corophiidae	Corophiidae	8*	88.8888	0.0089
Arthropoda : Amphipoda	Gammaridae	Elasmopus levis	360	3999.996	0.24
Arthropoda : Amphipoda	Ischyroceridae	Erichthonius brasiliensis	616	6844.4376	0.3111
Arthropoda : Amphipoda	Melitidae	Dulichella appendiculata	248	2755.5528	0.1422
Arthropoda : Amphipoda	Phoxocephalidae	Eobrolgus spinosus	24	266.6664	0.0178
Arthropoda : Amphipoda	Stenothoidae	Stenothoe minuta	40	444.444	0.0089
Arthropoda : Crustacea	Janiridae	Janiridae	16	177.7776	0.0006
Arthropoda : Cumacea	Diastylidae	Oxyrostylis smithi	8	88.8888	0.0089
Arthropoda : Decapoda	Panopeidae	Panopeidae	104	1155.5544	1.1733
Arthropoda : Decapoda	Xanthidae	Dyspanopeus sayi	72	799.9992	6.4267
Arthropoda : Isopoda	Idoteidae	Erichsonella filiformis	40	444.444	0.2578
Cnidaria : Anthozoa	Diadumenidae	Diadumene leucolena	40	444.444	0.1156
Mollusca : Bivalvia	Arcidae	Anadara transversa	32	355.5552	0.4356
Mollusca : Bivalvia	Nuculidae	Nucula proxima	24	266.6664	0.0356
Mollusca : Bivalvia	Petricolidae	Petricolaria pholadiformis	8	88.8888	0.0089
Mollusca : Gastropoda	Cerithiidae	Bittiolium alternatum	48	533.3328	0.0356
Mollusca : Gastropoda	Columbellidae	Astyris lunata	72	799.9992	0.4444
Mollusca : Gastropoda	Columbellidae	Mitrella ocellata	376	4177.7736	15.1911
Mollusca : Gastropoda	Muricidae	Urosalpinx cinerea	16	177.7776	0.2933
Mollusca : Gastropoda	Newtoniellidae	Retilaskeya emersonii	16	177.7776	0.0178
Mollusca : Gastropoda	Pyramidellidae	Fargoa bushiana	64	711.1104	0.0622
Mollusca : Gastropoda	Triphoridae	Marshallora nigrocincta	32	355.5552	0.0356

\* denotes not included in total number of taxa

### Hampton Roads Bridge Tunnel Benthic Study

#### Sample Taxonomy

Nemertina	Amphiporidae	Zygonemertes virescens	24	266.6664	0.0267
Nemertina	Lineidae	Siphonenteron bicolor	8	88.8888	0.0533
<b>Total</b>			<b>6664</b>	<b>74044</b>	<b>36.7787</b>
<b># Taxa</b>			<b>48</b>		

\* denotes not included in total number of taxa



## **Appendix E: Additional Field Photos**

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Figure E-1. Rocky shoreline of the southern portal island of the HRBT. Intertidal samples were collected among the rocks during the portal island benthic survey



Figure E-2. Diver taking photographs of an intertidal site prior to sampling. The piece of PVC in this image was used to mark the sample areas to be scraped





Figure E-3. Diver scraping the rock and suctioning the sample into a collection bag at a subtidal site during the portal island benthic survey