

APPENDIX K

BEACH AND BORROW AREA INFAUNA SAMPLING REPORT AND SUPPLEMENT

SUB-APPENDIX K1

BEACH AND BORROW AREA INFAUNA SAMPLING REPORT



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Date: 31 January 2011

To: Ms. Kimberly Colstad, Coastal Technology Corporation

From: Mr. Keith Spring, CSA International, Inc.

Re: St. Lucie Beach and Borrow Area Infaunal Report

CSA International, Inc. (CSA) was contracted through Coastal Technology Corporation (CTC) to investigate infaunal communities at the borrow area and nearby beach sites associated with the baseline characterization study for the St. Lucie County South Beach Project. The proposed borrow area was located at the south end of the St. Lucie Shoal within Florida State waters. This study provides information to assist in understanding impacts, including changes and recovery rates, to infaunal communities at the proposed offshore borrow area and the nourished beaches.

Methods

CSA conducted pre-construction infaunal biomass surveys for secondary productivity estimates by establishing 14 sample sites within the shoal borrow area and 24 sample sites within the intertidal and subtidal areas of the project extent. On the receiving beach, the sampling sites were positioned along a total of eight transects, with four transects established within the fill area and two transects established both to the north and to the south of the area to be nourished to serve as reference sites. Individual sampling sites were positioned along each of the eight beach transects at the MHWL, at -2 ft MHWL, and -4 ft MHWL (**Figure 1**). Within the borrow area, five sample sites (Sites 6, 8, 9, 11, and 13) were positioned within the area of sediments proposed for placement on the beach, five sample sites (Sites 2, 3, 4, 5, and 10) were placed within the proposed "refuge patch" within the borrow area but to be left undisturbed during dredging operations, and four sample sites (Sites 1, 7, 12, and 14) were positioned outside of the borrow area borders to serve as reference sites (**Figure 2**).

The infaunal surveys were conducted in 4 days, during acceptable weather windows, between 22 October and 24 November 2010. Differential Global Positioning System (DGPS) coordinates were collected and documented for each sampling site. At each sampling site, three replicate core samples were collected by divers or by wading using 12.5 cm x 12.5 cm x 15 cm deep stainless steel corers. The top of each corer was covered with 0.5-mm mesh screen to prevent the loss of organisms. Samples at the borrow area sites were collected by scientific divers on SCUBA and placed in cotton bags in the water. The bags were tied shut and brought to the surface for sample processing on board the vessel. Sample cores collected along the beach were carried to shore and processed. Samples were individually placed within a 0.5-mm mesh sieve bucket and gently sieved to remove fine sediments. The material remaining in the bucket was placed in a 1-L labeled plastic jar (1 gal. for large samples) and preserved using 10% buffered formalin with Rose Bengal stain. Forty-two samples were collected at the borrow area (14 sample sites with three replicates each) and 72 samples (eight transects, each with three sample sites and three replicates for each site) were collected at the beach area during the pre-construction survey, for a total of 114 samples. Following the collection and preservation of the infaunal samples, they were transported to the laboratory for processing.

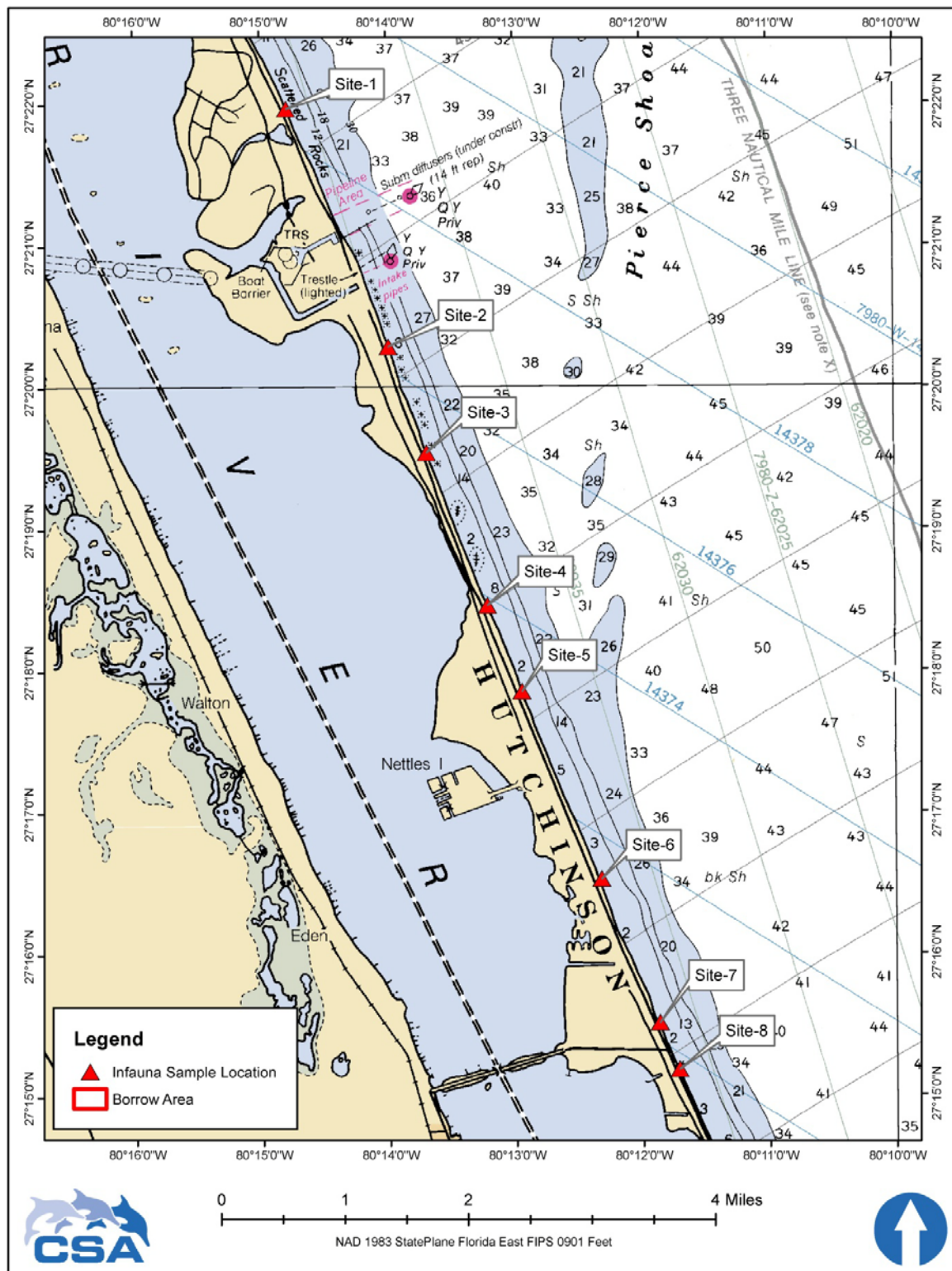


Figure 1. Beach infaunal biomass sampling sites.

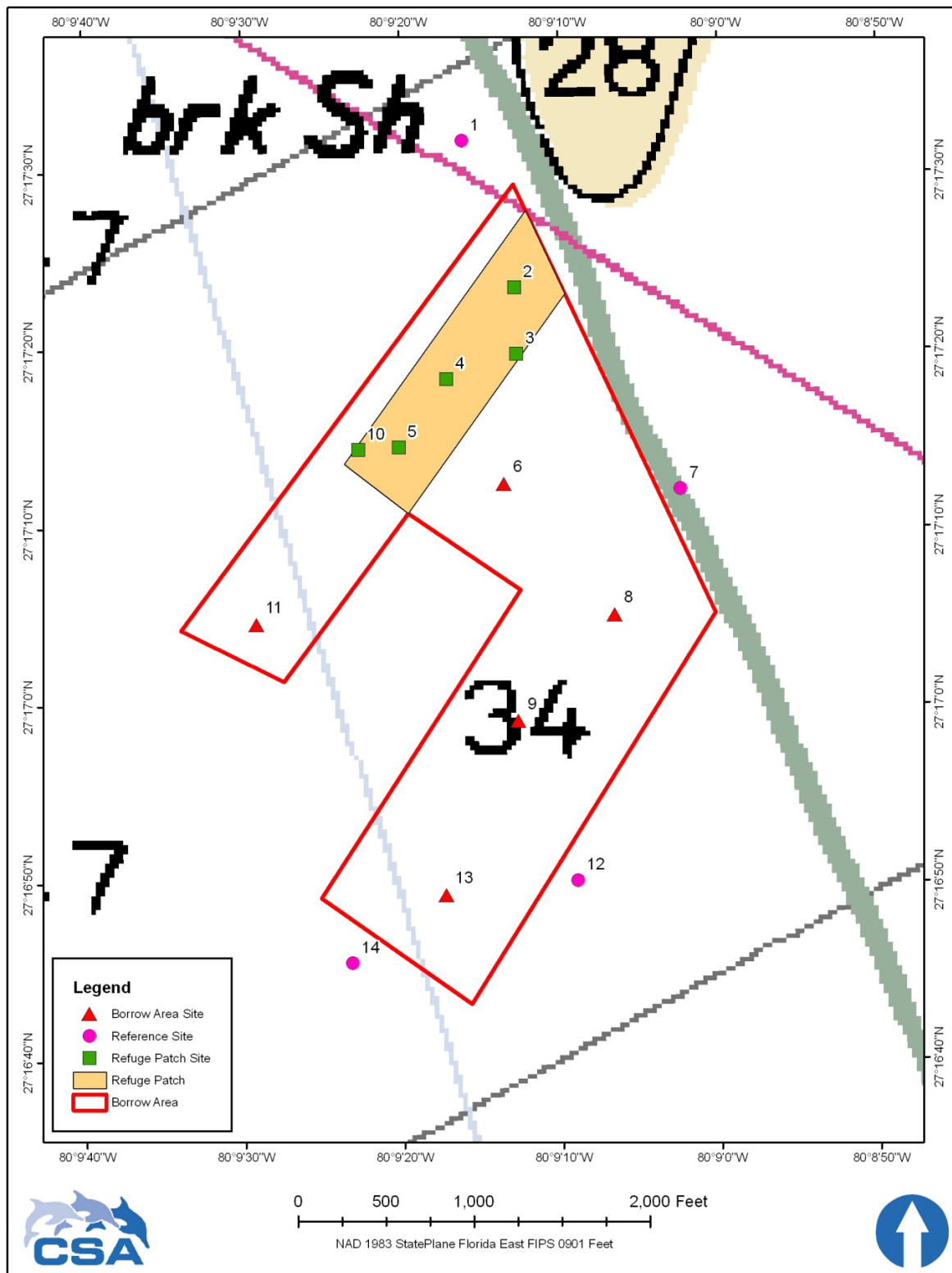


Figure 2. Infaunal biomass sampling sites associated with the proposed borrow area off St. Lucie County.

Samples were received at Ecological Associates, Inc.'s (EAI's) laboratory along with chain-of-custody (CoC) forms. External labels on the sample containers were checked against the CoC forms to ensure all samples were present and undamaged as they were logged into EAI's Master Sample Inventory. As each sample was selected for processing, the internal label was removed and the Sample Identification Number (SIN), date of collection, station location, and replicate number were entered onto a Laboratory Bench Sheet along with the sorter's name, date, and time of processing.

The formalin in each sample was decanted through a 500- μ m mesh sieve, and a portion of the sediment was placed in a secondary container. Tap water was added to the secondary container, and the sample was gently swirled to lift lighter, stained organisms out of the sediments. The liquid was then poured through the sieve. This process was repeated several times until the majority of stained organisms had been removed from the subsample. The sediments in the secondary container were then transferred to a third labeled container for subsequent sorting, and another subsample was placed in the secondary container. This process was repeated several times until all material in the original sample container had been processed. The entire swirl portion of the sample was then carefully transferred from the sieve to another labeled container and preserved with 70% ethanol.

The material in the swirl portion of the sample was examined under a dissecting microscope, and organisms were separated from detritus and non-organic material. All organisms from the swirl were placed in a labeled container containing 70% ethanol.

Due to the large volume of sediments in most samples, it was decided that samples requiring more than 4 hours of sorting time would be sub-sampled using a sediment sample splitter. In some instances, samples had to be split several times to obtain a manageable portion for sorting. The number of splits was recorded on the Laboratory Bench Sheet. The unused portion of the sample was transferred to a labeled "bulk residue" container and preserved in 10% formalin. The remaining portion was examined under a dissecting microscope, and any remaining organisms were placed in a separate labeled container with 70% ethanol.

Once the entire sample had been sorted, a taxonomist separated organisms into five major taxonomic groups: crustaceans, mollusks, annelids, echinoderms, and others (miscellaneous). Organisms within the swirl and sediment fractions were kept separate to allow for numeric adjustments related to sample splitting. Organisms within each group were counted as they were placed in clean, tared, and numbered crucibles, and the total number was recorded on the Laboratory Bench Sheet. Each taxonomic group was placed in a separate crucible for a maximum of 10 biomass values (5 for swirl fraction and 5 for sediment fraction) per sample. The crucibles were dried at 100°C for 4 hours to determine dry weight. The crucibles were then returned to the muffle furnace and dried at 475°C for an additional 4 hours to determine ash-free dry weight. Biomass was determined using a digital analytical balance with an accuracy of ± 0.0001 g.

All data were entered into electronic spreadsheets that adjusted both numbers of individuals and biomass for the split portion of the sample, as applicable. Values for the swirl and split fractions were then summed by taxonomic group. All data entered into the spreadsheets were verified against the original Laboratory Bench Sheet to ensure accuracy.

Results

Ash-free dry weight and major taxonomic group counts by sample site are presented in the **Attachment**. Annelids were the dominant group by number in the beach samples, with a total of 8,737 individuals, followed by the category of “others” (or miscellaneous taxa not falling within the four primary taxonomic groups) with 3,176 individuals, crustaceans with 805 individuals, and mollusks with 593 individuals. Total ash-free dry weight of organisms from individual cores from the beach samples ranged from 0.0000 g up to 2.4702 g, with an average ash-free dry weight of 0.0596 g. When the 2.4702 g sample replicate outlier, caused by several larger bivalves in one sample, was not included, the average ash-free dry weight for the beach samples was 0.0256 g per sample.

Within the borrow area samples, “others” was the dominant group in total number of individuals with a total of 10,026, followed by 9,333 annelids, 4,727 crustaceans, and 4,105 mollusks. Total ash-free dry weight of organisms from individual cores from the borrow area samples ranged from 0.0017 g up to 45.0741 g, with an average ash-free dry weight of 2.3294 g. When sample outliers containing sand dollars and large bivalves were removed from the dataset, the upper ash-free dry weight was 0.1594 g and the average ash-free dry weight was 0.0722 g per sample core.

The borrow area had a much larger average number of organisms per core sample (678/core) compared to the beach samples (185/core). Each core sampler covered a surface area of 0.0156 m². This extrapolates to an average density of 43,424 organisms/m² for the borrow area samples versus 11,840 organisms/m² for beach samples. Within the beach sample dataset, cores taken at MHWL contained more total individuals (424/core) than those taken at -2 ft MHWL (93/core) and -4 ft MHWL (38.5/core).

Attachment

Beach Sites

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	42	4	0.1427	0.0665
	Decapoda		15		
Total Crustaceans			19	0.1427	0.0665
Molluscs	Gastropoda	31	6	0.0012	0.0005
Total Molluscs			6	0.0012	0.0005
Annelids	Polychaeta	46	22	0.0017	0.0018
	Polychaeta	48	16	0.0152	0.0056
Total Annelids			38	0.0169	0.0074
Others	Nemata	32	38	0.0026	0.0020
	Nemertea		46		
	Platyhelminthes		94		
	Nemata	22	8	0.0064	0.0056
	Platyhelminthes		8		
Total Others			194	0.0090	0.0076
Totals			257	0.1698	0.0820

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	1	1	0.2701	0.1181
	Decapoda		3		
Total Crustaceans			4	0.2701	0.1181
Annelids	Polychaeta	36	823	0.0035	0.0006
Total Annelids			823	0.0035	0.0006
Others	Nemata	22	6	0.0024	0.0004
	Nemertea		14		
	Platyhelminthes		65		
Total Others			85	0.0024	0.0004
Totals			912	0.2760	0.1191

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	39	1	0.6564	0.3168
	Copepoda		1		
	Decapoda		18		
Total Crustaceans			20	0.6564	0.3168
Annelids	Polychaeta	59	3086	0.0074	0.0008
	Polychaeta	47	512	0.0176	0.0120
Total Annelids			3598	0.0250	0.0128
Others	Nemata	47	52	0.0031	0.0013
	Nemertea		60		
	Platyhelminthes		62		
	Nemata	65	32	0.0280	0.0120
	Nemertea		96		
Total Others			302	0.0311	0.0133
Totals			3920	0.7125	0.3429

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	51	11	0.0004	0.0001
Total Crustaceans			11	0.0004	0.0001
Annelids	Polychaeta	62	24	0.0017	0.0011
Total Annelids			24	0.0017	0.0011
Others	Platyhelminthes	68	4	0.0021	0.0014
	Unknown		2		
Total Others			6	0.0021	0.0014
Totals			41	0.0042	0.0026

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Annelids	Polychaeta	30	20	0.0027	0.0007
	Polychaeta	35	16	0.0048	0.0016
Total Annelids			36	0.0075	0.0023
Others	Platyhelminthes	28	3	0.0003	0.0001
Total Others			3	0.0003	0.0001
Totals			39	0.0078	0.0024

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	66	7	0.0033	0.0027
Total Crustaceans			7	0.0033	0.0027
Annelids	Polychaeta	59	65	0.0090	0.0016
Total Annelids			65	0.0090	0.0016
Others	Platyhelminthes	50	3	0.0001	<0.0001
Total Others			3	0.0001	<0.0001
Totals			75	0.0124	0.0043

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	46	2	0.0005	0.0001
	Copepoda		2		
	Mysida		1		
Total Crustaceans			5	0.0005	0.0001
Molluscs	Bivalvia	52	4	0.0013	0.0010
Total Molluscs			4	0.0013	0.0010
Totals			9	0.0018	0.0011

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	29	4	0.0004	<0.0001
	Copepoda		3		
	Cumacea		1		
	Decapoda		1		
	Isopoda		2		
Total Crustaceans			11	0.0004	<0.0001
Molluscs	Bivalvia	14	6	0.0178	0.0159
Total Molluscs			6	0.0178	0.0159
Annelids	Polychaeta	21	1	<0.0001	<0.0001
Total Annelids			1	<0.0001	<0.0001
Others	Hydrozoa	13	1	0.0006	0.0001
Total Others			1	0.0006	0.0001
Totals			19	0.0188	0.0160

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-01-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	16	2	0.0006	0.0002
	Copepoda		1		
	Isopoda		1		
	Mysida		1		
Total Crustaceans			5	0.0006	0.0002
Molluscs	Bivalvia	15	12	0.0067	0.0057
Total Molluscs			12	0.0067	0.0057
Annelids	Polychaeta	31	1	<0.0001	<0.0001
Total Annelids			1	<0.0001	<0.0001
Others	Platyhelminthes	18	1	<0.0001	<0.0001
Total Others			1	<0.0001	<0.0001
Totals			19	0.0073	0.0059

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	12	2	0.0006	0.0004
	Decapoda		11		
Total Crustaceans			13	0.0006	0.0004
Annelids	Polychaeta	54	21	0.0026	0.0021
Total Annelids			21	0.0026	0.0021
Echinoderms		14	1	<0.0001	<0.0001
Total Echinoderms			1	<0.0001	<0.0001
Others	Nemertea	18	3	<0.0001	<0.0001
	Nemata	31	8	0.0020	0.0012
	Nemertea		8		
Total Others			19	0.0020	0.0012
Totals			54	0.0052	0.0037

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	11	2	0.0053	0.0015
	Copepoda		3		
	Decapoda		10		
	Mysida		1		
Total Crustaceans			16	0.0053	0.0015
Annelids	Polychaeta	16	9	0.0016	0.0005
Total Annelids			9	0.0016	0.0005
Echinoderms		46	1	0.0002	<0.0001
Total Echinoderms			1	0.0002	<0.0001
Others	Nemata	27	2	0.0007	0.0002
	Nemertea		5		
	Platyhelminthes		1		
	Nemata	32	12	0.0012	<0.0001
	Nemertea		16		
Total Others			36	0.0019	0.0002
Totals			62	0.0090	0.0022

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	26	2	0.0030	0.0009
	Copepoda		12		
	Decapoda		4		
Total Crustaceans			18	0.0030	0.0009
Annelids	Polychaeta	17	273	0.0019	0.0004
Total Annelids			273	0.0019	0.0004
Others	Nemata	11	13	0.0011	0.0003
	Nemertea		38		
	Platyhelminthes		5		
Total Others			56	0.0011	0.0003
Totals			347	0.0060	0.0016

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	43	2	<0.0001	<0.0001
	Cirripedia		1		
	Copepoda		8		
	Copepoda	49	8	<0.0001	<0.0001
Total Crustaceans			19	<0.0001	<0.0001
Annelids	Polychaeta	37	28	<0.0001	<0.0001
	Polychaeta	42	4	0.0012	<0.0001
Total Annelids			32	0.0012	<0.0001
Others*	Nemertea	67	13	0.0008	0.0003
	Platyhelminthes		57		
	Platyhelminthes	48	20	0.0016	0.0004
	Tunicata		4		
Total Others			94	0.0024	0.0007
Totals			145	0.0036	0.0007

*Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	43	12	0.0008	<0.0001
Total Crustaceans			12	0.0008	<0.0001
Molluscs	Gastropoda	41	4	<0.0001	<0.0001
Total Molluscs			4	<0.0001	<0.0001
Annelids	Polychaeta	47	18	0.0002	<0.0001
	Polychaeta	42	4	0.0032	0.0012
Total Annelids			22	0.0034	0.0012
Others	Actiniaria	49	1	0.0013	<0.0001
	Nemata		5		
	Nemertea		3		
	Platyhelminthes		62		
	Unknown		1		
	Platyhelminthes	51	12	<0.0001	<0.0001
Total Others			84	0.0013	<0.0001
Totals			122	0.0055	0.0012

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	26	4	0.0008	0.0002
	Unknown		1		
Total Crustaceans			5	0.0008	0.0002
Annelids	Polychaeta	58	85	0.0019	0.0004
	Polychaeta	63	60	0.0012	<0.0001
Total Annelids			145	0.0031	0.0004
Others*	Nemata	28	10	0.0014	0.0003
	Nemertea		10		
	Platyhelminthes		62		
	Unknown		1		
	Nemertea	55	12	0.0020	0.0008
	Platyhelminthes		8		
Total Others			103	0.0034	0.0011
Totals			253	0.0073	0.0017

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	34	4	0.0041	0.0015
	Cirripedia		2		
	Decapoda		1		
	Isopoda		2		
	Mysida		1		
Total Crustaceans			10	0.0041	0.0015
Molluscs	Bivalvia	28	2	0.0006	0.0002
	Gastropoda		2		
Total Molluscs			4	0.0006	0.0002
Other*	Bryzoans	NA	0	0.0000	
Total Others			0	0.0000	
Totals			14	0.0047	0.0017

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-04-B

Sample 121 Beach 02 01E					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	40	14	0.0045	0.0001
	Decapoda		3		
	Isopoda		5		
	Mysida		4		
	Ostracoda		1		
Total Crustaceans			27	0.0045	0.0001
Molluscs	Bivalvia	64	4	0.0019	0.0015
	Gastropoda		2		
Total Molluscs			6	0.0019	0.0015
Others	Unknown	39	1	0.0002	<0.0001
Total Others			1	0.0002	<0.0001
Totals			34	0.0066	0.0016

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-02-04-C

Sample 12: Beach 02-04-C					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	30	87	0.0199	0.0068
	Copepoda		12		
	Decapoda		5		
	Isopoda		11		
	Amphipoda	42	2	0.0008	0.0004
Total Crustaceans			117	0.0207	0.0072
Molluscs	Bivalvia	20	2	0.0096	0.0076
Total Molluscs			2	0.0096	0.0076
Others	Nemertea	29	2	0.0009	0.0007
	Platyhelminthes		1		
Total Others			3	0.0009	0.0007
Totals			122	0.0312	0.0155

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Isopoda	58	1	0.0053	0.0014
Total Crustaceans			1	0.0053	0.0014
Others	Nemertea	55	3	0.0001	0.0001
	Platyhelminthes		3		
Total Others			6	0.0001	0.0001
Totals			7	0.0054	0.0015

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-00-B

Sample 121 Beach 00-00-E					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	27	2	0.0010	0.0007
Total Crustaceans			2	0.0010	0.0007
Others	Nemata	36	1	0.0010	0.0008
	Nemata	20	2	0.0036	0.0026
	Platyhelminthes		6		
Total Others			9	0.0046	0.0034
Totals			11	0.0056	0.0041

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-00-C

Sample 12: Beach 55-55 °C					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	60	1	0.0061	0.0014
	Decapoda		1		
	Isopoda		1		
Total Crustaceans			3	0.0061	0.0014
Others	Platyhelminthes	53	19	<0.0001	<0.0001
	Platyhelminthes	65	10	0.0040	0.0014
Total Others			29	0.0040	0.0014
Totals			32	0.0101	0.0028

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	52	21	0.0126	0.0027
	Isopoda		1		
Total Crustaceans			22	0.0126	0.0027
Molluscs	Gastropoda	55	1	0.0003	<0.0001
Total Molluscs			1	0.0003	<0.0001
Annelids	Polychaeta	56	13	0.0068	0.0009
Total Annelids			13	0.0068	0.0009
Others	Nemertea	58	15	0.0008	0.0003
	Platyhelminthes		7		
	Nemertea	44	4	0.0016	<0.0001
	Platyhelminthes		4		
Total Others			30	0.0024	0.0003
Totals			66	0.0221	0.0039

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	68	1	0.0153	0.0073
	Decapoda		10		
	Unknown		1		
Total Crustaceans			12	0.0153	0.0073
Molluscs	Bivalvia	64	4	2.5580	2.4592
Total Molluscs			4	2.5580	2.4592
Annelids	Polychaeta	38	3	0.0042	0.0023
Total Annelids			3	0.0042	0.0023
Others	Nemata	61	5	0.0023	0.0014
	Nemertea		7		
	Platyhelminthes		7		
Total Others			19	0.0023	0.0014
Totals			38	2.5798	2.4702

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Grouping	Taxon	Vial Number	Extrapolated Sample Total	Extrapolated Organisms Dry Weight	Extrapolated Organisms Ash-free Dry Weight
Crustaceans	Copepoda	13	4	0.0050	0.0011
	Decapoda		6		
Total Crustaceans			10	0.0050	0.0011
Annelids	Polychaeta	11	13	0.0044	0.0005
Total Annelids			13	0.0044	0.0005
Others	Nemata	12	22	0.0032	0.0002
	Nemertea		7		
	Platyhelminthes		6		
	Foraminiferida	40	12	0.0040	0.0020
Total Others			47	0.0072	0.0022
Totals			70	0.0166	0.0038

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	46	1	0.0002	<0.0001
Total Crustaceans			1	0.0002	<0.0001
Annelids	Polychaeta	59	1	<0.0001	<0.0001
Total Annelids			1	<0.0001	<0.0001
Others	Nemata	38	1	0.0003	0.0002
	Nemertea		87		
	Platyhelminthes		2		
Total Others			90	0.0003	0.0002
Totals			92	0.0005	0.0002

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	22	1	0.0034	0.0011
	Copepoda		7		
	Decapoda		2		
	Mysida		2		
Total Crustaceans			12	0.0034	0.0011
Molluscs	Bivalvia	55	4	0.0200	0.0168
Total Molluscs			4	0.0200	0.0168
Others	Nemertea	26	11	0.0018	0.0007
	Platyhelminthes		2		
Total Others			13	0.0018	0.0007
Totals			29	0.0252	0.0186

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-03-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Molluscs	Gastropoda	22	4	0.0092	0.0056
Total Molluscs			4	0.0092	0.0056
Annelids	Polychaeta	21	1	0.0016	Crucible broke, sample lost.
Total Annelids			1	0.0016	
Others	Nemertea	55	8	0.0007	0.0004
	Platyhelminthes	56	4	0.0004	<0.0001
Total Others			12	0.0011	0.0004
Totals			17	0.0119	0.0060

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	43	2	0.0330	0.0132
	Decapoda		23		
Total Crustaceans			25	0.0330	0.0132
Annelids	Polychaeta	12	887	0.0042	0.0025
	Polychaeta	68	116	0.0116	0.0048
Total Annelids			1003	0.0158	0.0073
Others	Nemata	49	2	0.0055	0.0022
	Nemertea		36		
	Platyhelminthes		5		
Total Others			43	0.0055	0.0022
Totals			1071	0.0543	0.0227

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-00-B

Sample 12: Beach 0100 E

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	61	1	0.0342	0.0133
	Decapoda		42		
	Mysida		1		
Total Crustaceans			44	0.0342	0.0133
Annelids	Polychaeta	59	591	0.0065	0.0014
	Polychaeta	67	708	0.0060	0.0016
Total Annelids			1299	0.0125	0.0030
Others	Nemata	51	8	0.0009	0.0002
	Nemertea		75		
	Platyhelminthes		4		
	Nemertea	50	16	0.0004	<0.0001
Total Others			103	0.0013	0.0002
Totals			1446	0.0480	0.0165

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	44	2	0.0134	0.0070
	Copepoda		1		
	Decapoda		17		
Total Crustaceans			20	0.0134	0.0070
Annelids	Polychaeta	25	178	0.0056	0.0036
	Polychaeta	13	96	0.0096	0.0024
Total Annelids			274	0.0152	0.0060
Others	Nemata	64	5	0.0057	0.0035
	Nemertea		59		
	Nemertea	17	8	0.0056	0.0040
Total Others			72	0.0113	0.0075
Totals			366	0.0399	0.0205

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Isopoda	54	1	<0.0001	<0.0001
Total Crustaceans			1	<0.0001	<0.0001
Molluscs	Bivalvia	56	1	0.0010	0.0001
Total Molluscs			1	0.0010	0.0001
Totals			2	0.0010	0.0001

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	16	4	0.0008	0.0005
	Isopoda		2		
Total Crustaceans			6	0.0008	0.0005
Molluscs	Bivalvia	34	4	0.0088	0.0080
Total Molluscs			4	0.0088	0.0080
Others	Chordata	58	2	0.0002	<0.0001
	Nemata		1		
	Nemertea		7		
Total Others			10	0.0002	<0.0001
Totals			20	0.0098	0.0085

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	22	1	0.0001	<0.0001
Total Crustaceans			1	0.0001	<0.0001
Molluscs	Bivalvia	19	4	0.0048	0.0040
Total Molluscs			4	0.0048	0.0040
Totals			5	0.0049	0.0040

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	66	20	0.0002	<0.0001
Total Crustaceans			20	0.0002	<0.0001
Molluscs	Bivalvia	67	1	0.0524	0.0480
Total Molluscs			1	0.0524	0.0480
Totals			21	0.0526	0.0480

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Isopoda	68	1	<0.0001	<0.0001
	Mysida		2		
Total Crustaceans			3	<0.0001	<0.0001
Molluscs	Bivalvia	65	36	0.0325	0.0296
Total Molluscs			36	0.0325	0.0296
Totals			39	0.0325	0.0296

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-04-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	62	3	0.0012	0.0002
	Isopoda		3		
	Mysida		5		
Total Crustaceans			11	0.0012	0.0002
Molluscs	Bivalvia	53	42	0.0422	0.0390
Total Molluscs			42	0.0422	0.0390
Totals			53	0.0434	0.0392

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Molluscs	Bivalvia	24	4	0.0116	0.0072
Total Molluscs			4	0.0116	0.0072
Annelids	Polychaeta	52	10	0.0074	0.0007
	Polychaeta	56	24	0.0080	0.0044
Total Annelids			34	0.0154	0.0051
Others	Nemata	18	51	0.0011	0.0004
	Nemertea		2		
Total Others			53	0.0011	0.0004
Totals			91	0.0281	0.0127

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	65	2	0.0073	0.0012
Total Crustaceans			2	0.0073	0.0012
Annelids	Polychaeta	64	30	0.0104	0.0009
Total Annelids			30	0.0104	0.0009
Echinoderms		53	4	0.0104	0.0080
Total Echinoderms			4	0.0104	0.0080
Others	Nemata	63	17	0.0014	0.0007
	Nemertea		1		
Total Others			18	0.0014	0.0007
Totals			54	0.0295	0.0108

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	38	1	0.0085	0.0054
Total Crustaceans			1	0.0085	0.0054
Annelids	Polychaeta	62	27	0.0120	0.0015
Total Annelids			27	0.0120	0.0015
Others	Nemata	45	57	0.0013	0.0003
	Nemertea		6		
Total Others			63	0.0013	0.0003
Totals			91	0.0218	0.0072

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	47	59	0.2476	0.1111
Total Crustaceans			59	0.2476	0.1111
Molluscs	Gastropoda	37	22	0.0035	0.0026
Total Molluscs			22	0.0035	0.0026
Annelids	Polychaeta	57	44	0.0045	0.0015
Total Annelids			44	0.0045	0.0015
Others	Nemata	41	2	0.0032	0.0019
	Nemertea		1		
	Platyhelminthes		70		
Total Others			73	0.0032	0.0019
Totals			198	0.2588	0.1171

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	48	2	0.0791	0.0332
	Decapoda		49		
Total Crustaceans			51	0.0791	0.0332
Annelids	Polychaeta	34	124	0.0043	0.0006
	Polychaeta	35	16	0.0008	<0.0001
Total Annelids			140	0.0051	0.0006
Others	Nemata	31	1	0.0047	0.0028
	Nemertea		1		
	Platyhelminthes		201		
	Unknown		2		
Total Others			205	0.0047	0.0028
Totals			396	0.0889	0.0366

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-02-C

Sample ID: Beach 05-02-C					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	41	1	0.0496	0.0204
	Decapoda		26		
	Copepoda	61	8	0.0040	0.0024
Total Crustaceans			35	0.0536	0.0228
Molluscs	Bivalvia	60	1	0.0057	0.0037
	Gastropoda		26		
	Bivalvia	53	8	0.2768	0.2520
Total Molluscs			35	0.2825	0.2557
Annelids	Polychaeta	64	65	0.0037	0.0007
Total Annelids			65	0.0037	0.0007
Others	Nemata	57	1	0.0042	0.0027
	Nemertea		4		
	Platyhelminthes		125		
	Unknown		1		
Total Others			131	0.0042	0.0027
Totals			266	0.3440	0.2819

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Mysida	26	1	0.0001	<0.0001
Total Crustaceans			1	0.0001	<0.0001
Molluscs	Bivalvia	32	44	0.0168	0.0150
Total Molluscs			44	0.0168	0.0150
Others	Nemertea	25	3	0.0002	<0.0001
Total Others			3	0.0002	<0.0001
Totals			48	0.0171	0.0150

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	15	3	0.0026	0.0018
	Cumacea		1		
	Isopoda		1		
Total Crustaceans			5	0.0026	0.0018
Molluscs	Bivalvia	17	31	0.0079	0.0060
	Gastropoda		1		
Total Molluscs			32	0.0079	0.0060
Annelids	Polychaeta	20	1	0.0010	0.0007
Total Annelids			1	0.0010	0.0007
Others	Platyhelminthes	58	1	0.0002	0.0003
Total Others			1	0.0002	0.0003
Totals			39	0.0117	0.0088

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-05-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Isopoda	35	6	0.0002	<0.0001
	Mysida		1		
Total Crustaceans			7	0.0002	<0.0001
Molluscs	Bivalvia	44	90	0.0472	0.0432
Total Molluscs			90	0.0472	0.0432
Others	Hydrozoa	52	1	0.0003	0.0001
Total Others			1	0.0003	0.0001
Totals			98	0.0477	0.0433

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	28	2	0.0067	0.0011
	Copepoda		1		
	Cumacea		1		
	Decapoda		1		
Total Crustaceans			5	0.0067	0.0011
Annelids	Polychaeta	18	73	0.0011	0.0002
	Polychaeta	27	56	0.0068	0.0044
Total Annelids			129	0.0079	0.0046
Others	Nemata	19	15	0.0016	0.0003
	Nemertea		71		
	Platyhelminthes		2		
	Nemertea	34	4	0.0020	0.0016
Total Others			92	0.0036	0.0019
Totals			226	0.0182	0.0076

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	13	1	<0.0001	<0.0001
Total Crustaceans			1	<0.0001	<0.0001
Annelids	Polychaeta	15	17	0.0011	0.0007
	Polychaeta	29	40	0.0024	0.0016
Total Annelids			57	0.0035	0.0023
Others	Nemata	35	22	0.0010	0.0008
	Nemertea		66		
	Platyhelminthes		4		
	Nemata	52	48	0.0072	0.0056
	Nemertea		152		
	Platyhelminthes		8		
Total Others			300	0.0082	0.0064
Totals			358	0.0117	0.0087

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-00-C

Sample 12: Beach 00 00 0					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	11	1	0.0014	0.0012
	Copepoda		1		
	Copepoda	44	4	0.0008	0.0004
	Decapoda		4		
Total Crustaceans			10	0.0022	0.0016
Annelids	Polychaeta	32	111	0.0012	0.0008
	Polychaeta	19	224	0.0036	0.0020
Total Annelids			335	0.0048	0.0028
Others	Nemata	28	15	0.0008	0.0005
	Nemertea		81		
	Platyhelminthes		3		
	Nemata	33	24	0.0016	0.0016
	Nemertea		48		
	Platyhelminthes		12		
Total Others			183	0.0024	0.0021
Totals			528	0.0094	0.0065

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	49	22	0.0133	0.0050
Total Crustaceans			22	0.0133	0.0050
Annelids	Polychaeta	42	10	0.0013	0.0004
Total Annelids			10	0.0013	0.0004
Others	Nemata	48	46	0.0016	0.0005
	Nemertea		30		
	Platyhelminthes		4		
Total Others			80	0.0016	0.0005
Totals			112	0.0162	0.0059

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	45	3	0.0078	0.0014
	Decapoda		15		
Total Crustaceans			18	0.0078	0.0014
Annelids	Polychaeta	50	14	0.0001	<0.0001
Total Annelids			14	0.0001	<0.0001
Others	Nemata	51	24	0.0010	0.0006
	Nemertea		61		
Total Others			85	0.0010	0.0006
Totals			117	0.0089	0.0020

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	60	3	<0.0001	<0.0001
	Decapoda		2		
	Mysida		1		
Total Crustaceans			6	<0.0001	<0.0001
Molluscs	Bivalvia	50	1	0.0612	0.0562
Total Molluscs			1	0.0612	0.0562
Annelids	Polychaeta	63	1	0.0001	<0.0001
Total Annelids			1	0.0001	<0.0001
Echinoderms	Unknown	57	1	<0.0001	<0.0001
Total Echinoderms			1	<0.0001	<0.0001
Others	Nemata	61	19	0.0011	0.0002
	Nemertea		17		
	Unknown	48	4	0.0028	0.0004
Total Others			40	0.0039	0.0006
Totals			49	0.0652	0.0568

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Mysida	20	2	0.0010	0.0002
Total Crustaceans			2	0.0010	0.0002
Molluscs	Bivalvia	40	70	0.0120	0.0074
Total Molluscs			70	0.0120	0.0074
Totals			72	0.0130	0.0076

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Molluscs	Bivalvia	36	64	0.0244	0.0218
Total Molluscs			64	0.0244	0.0218
Totals			64	0.0244	0.0218

Project: St. Lucie County Beach Nourishment
Sample Date: 10/22/2010
Sample ID: Beach-06-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	29	1	0.0010	0.0004
Total Crustaceans			1	0.0010	0.0004
Molluscs	Bivalvia	35	60	0.0360	0.0296
Total Molluscs			60	0.0360	0.0296
Totals			61	0.0370	0.0300

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	44	1	0.0020	0.0006
	Decapoda		1		
Total Crustaceans			2	0.0020	0.0006
Others	Chaetognatha	25	1	0.0001	<0.0001
	Chordata		1		
	Nemata		1		
	Nemertea		8		
	Platyhelminthes		1		
Total Others			12	0.0001	<0.0001
Totals			14	0.0021	0.0006

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	16	5	0.0173	0.0062
Total Crustaceans			5	0.0173	0.0062
Annelids	Polychaeta	32	11	0.0005	0.0002
Total Annelids			11	0.0005	0.0002
Others	Nemata	31	10	0.0003	0.0002
	Nemertea		27		
	Platyhelminthes		2		
Total Others			39	0.0003	0.0002
Totals			55	0.0181	0.0066

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	67	7	0.0023	0.0007
Total Crustaceans			7	0.0023	0.0007
Annelids	Polychaeta	37	1	0.0025	0.0005
Total Annelids			1	0.0025	0.0005
Others	Nemata	41	2	0.0002	<0.0001
	Nemertea		5		
Total Others			7	0.0002	<0.0001
Totals			15	0.0050	0.0012

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	54	2	0.0009	0.0004
Total Crustaceans			2	0.0009	0.0004
Annelids	Polychaeta	19	52	0.0029	0.0004
	Polychaeta	14	40	0.0092	0.0060
Total Annelids			92	0.0121	0.0064
Others	Nemata	15	6	0.0015	0.0003
	Nemertea		29		
	Nemertea	33	8	0.0092	0.0056
Total Others			43	0.0107	0.0059
Totals			137	0.0237	0.0127

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	30	1	0.0020	0.0005
	Decapoda		1		
Total Crustaceans			2	0.0020	0.0005
Others	Nemata	24	4	0.0001	<0.0001
	Nemertea		6		
	Platyhelminthes		1		
Total Others			11	0.0001	<0.0001
Totals			13	0.0021	0.0005

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-02-C

Sample ID: Beach-07-02-C					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Annelids	Polychaeta	45	1	<0.0001	<0.0001
Total Annelids			1	<0.0001	<0.0001
Others	Actiniaria	37	1	0.0004	<0.0001
	Nemata		4		
	Nemertea		24		
	Platyhelminthes		1		
Total Others			30	0.0004	<0.0001
Totals			31	0.0004	0.0001

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	56	1	<0.0001	<0.0001
Total Crustaceans			1	<0.0001	<0.0001
Others	Platyhelminthes	14	3	<0.0001	<0.0001
Total Others			3	<0.0001	<0.0001
Totals			4	<0.0001	<0.0001

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	60	3	0.0114	0.0046
Total Crustaceans			3	0.0114	0.0046
Annelids	Polychaeta	39	3	0.0026	0.0023
Total Annelids			3	0.0026	0.0023
Totals			6	0.0140	0.0069

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-07-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	66	1	0.0011	0.0002
	Decapoda		1		
Total Crustaceans			2	0.0011	0.0002
Molluscs	Bivalvia	57	4	0.0384	0.0356
Total Molluscs			4	0.0384	0.0356
Annelidis	Polychaeta	43	10	0.0016	0.0005
	Polychaeta	63	4	<0.0001	<0.0001
Total Annelids			14	0.0016	0.0005
Others	Nemertea	62	1	0.0030	0.0023
	Platyhelminthes		2		
Total Others			3	0.0030	0.0023
Totals			23	0.0441	0.0386

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-00-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	65	1	0.0120	0.0052
	Decapoda		9		
Total Crustaceans			10	0.0120	0.0052
Annelids	Polychaeta	40	7	0.0016	0.0006
Total Annelids			7	0.0016	0.0006
Others	Nemata	53	8	0.0005	0.0001
	Nemertea		40		
Total Others			48	0.0005	0.0001
Totals			65	0.0141	0.0059

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-00-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	13	6	0.0032	0.0010
Total Crustaceans			6	0.0032	0.0010
Annelids	Polychaeta	16	3	0.0013	0.0001
Total Annelids			3	0.0013	0.0001
Others	Nemata	18	8	0.0003	0.0001
	Nemertea		44		
	Nemata	25	8	0.0096	0.0092
	Nemertea		52		
Total Others			112	0.0099	0.0093
Totals			121	0.0144	0.0104

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-00-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	25	3	0.0085	0.0072
Total Crustaceans			3	0.0085	0.0072
Molluscs	Gastropoda	30	1	0.0003	0.0001
	Bivalvia	26	8	0.0320	0.0288
Total Molluscs			9	0.0323	0.0289
Annelids	Polychaeta	17	2	<0.0001	<0.0001
Total Annelids			2	<0.0001	<0.0001
Others	Nemata	24	23	0.0011	0.0007
	Nemertea		30		
	Platyhelminthes		1		
Total Others			54	0.0011	0.0007
Totals			68	0.0419	0.0368

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
No organisms present.					
Totals			0	0.0000	0.0000

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	63	5	0.0036	0.0020
Total Crustaceans			5	0.0036	0.0020
Molluscs	Bivalvia	45	4	0.0648	0.0580
Total Molluscs			4	0.0648	0.0580
Annelids	Polychaeta	38	2	<0.0001	<0.0001
Total Annelids			2	<0.0001	<0.0001
Totals			11	0.0684	0.0600

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Isopoda	27	1	0.0013	0.0007
Total Crustaceans			1	0.0013	0.0007
Molluscs	Gastropoda	12	1	0.0009	0.0003
Total Molluscs			1	0.0009	0.0003
Annelids	Polychaeta	11	7	0.0005	0.0001
Total Annelids			7	0.0005	0.0001
Others	Nemata	33	1	<0.0001	<0.0001
	Nemertea		10		
	Platyhelminthes		1		
Total Others			12	<0.0001	<0.0001
Totals			21	0.0027	0.0011

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	27	4	0.0012	<0.0001
Total Crustaceans			4	0.0012	<0.0001
Annelids	Polychaeta	29	5	0.0007	0.0001
	Polychaeta	36	4	0.0012	<0.0001
Total Annelids			9	0.0019	0.0001
Others	Nemertea	24	1	0.0002	<0.0001
Total Others			1	0.0002	<0.0001
Totals			14	0.0033	0.0001

Project: St. Lucie County Beach Nourishment
Sample Date: 10/27/2010
Sample ID: Beach-08-04-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	54	1	0.0034	0.0014
Total Crustaceans			1	0.0034	0.0014
Molluscs	Bivalvia	36	2	0.0692	0.0632
Total Molluscs			2	0.0692	0.0632
Others	Platyhelminthes	33	1	0.0003	0.0003
Total Others			1	0.0003	0.0003
Totals			4	0.0729	0.0649

Project: St. Lucie County Beach Nourishment**Sample Date:** 10/27/2010**Sample ID:** Beach-08-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Decapoda	30	4	0.0018	0.0007
	Isopoda		1		
Total Crustaceans			5	0.0018	0.0007
Molluscs	Bivalvia	17	14	0.0582	0.0548
Total Molluscs			14	0.0582	0.0548
Annelids	Polychaeta	24	3	0.0008	0.0001
Total Annelids			3	0.0008	0.0001
Others	Platyhelminthes	20	1	0.0004	0.0001
Total Others			1	0.0004	0.0001
Totals			23	0.0612	0.0557

Borrow Area

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-01-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	41	19	0.0010	0.0008
	Ostracoda		1		
Total Crustaceans			20	0.0010	0.0008
Molluscs	Bivalvia	39	36	0.0320	0.0296
Total Molluscs			36	0.0320	0.0296
Annelids	Polychaeta	62	95	0.0059	0.0024
Total Annelids			95	0.0059	0.0024
Echinoderms	Echinoidea	15	1	0.0008	0.0005
Total Echinoderms			1	0.0008	0.0005
Others*	Nemata	12	112	0.0014	0.0011
	Nemertea		26		
Total Others			138	0.0014	0.0011
Totals			290	0.0411	0.0344

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-01-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	27	4	0.0004	0.0001
Total Crustaceans			4	0.0004	0.0001
Molluscs	Bivalvia	44	2	0.0012	0.0007
	Bivalvia	19	50	0.0346	0.0320
	Gastropoda		2		
Total Molluscs			54	0.0358	0.0327
Annelids	Polychaeta	48	17	0.0064	0.0011
	Polychaeta	60	6	0.0024	0.0010
Total Annelids			23	0.0088	0.0021
Echinoderms	Echinoidea	26	4	0.0311	0.0283
	Holothuroidea		6		
Total Echinoderms			10	0.0311	0.0283
Others*	Nemata	55	91	0.0005	0.0003
	Nemertea		4		
Total Others			95	0.0005	0.0003
Totals			184	0.0766	0.0635

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-01-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	35	1	0.0003	<0.0001
	Copepoda		10		
	Decapoda		1		
	Ostracoda		2		
Total Crustaceans			14	0.0003	<0.0001
Molluscs	Bivalvia	55	2	0.0006	0.0002
	Bivalvia	27	32	0.1158	0.1088
	Gastropoda		4		
Total Molluscs			38	0.1164	0.1090
Annelids	Polychaeta	16	119	0.0057	0.0004
Total Annelids			119	0.0057	0.0004
Echinoderms	Echinoidea	20	4	0.0007	0.0003
Total Echinoderms			4	0.0007	0.0003
Others	Nemata	18	142	0.0010	0.0001
	Nemertea		35		
	Platyhelminthes		1		
	Salpida		3		
	Nemertea	29	12	0.0034	0.0008
Total Others			193	0.0044	0.0009
Totals			368	0.1275	0.1106

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-02-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	17	7	0.0002	0.0002
Total Crustaceans			7	0.0002	0.0002
Molluscs	Bivalvia	18	2	0.0003	0.0001
	Gastropoda		1		
	Bivalvia	25	68	0.0382	0.0348
	Gastropoda		2		
Total Molluscs			73	0.0385	0.0349
Annelids	Polychaeta	29	29	0.0011	0.0002
Total Annelids			29	0.0011	0.0002
Others*	Nemata	40	43	<0.0001	<0.0001
	Nemertea		1		
	Nemata	34	6	0.0018	0.0010
Total Others			50	0.0018	0.0010
Totals			159	0.0416	0.0363

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-02-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	30	2	0.0052	0.0027
	Decapoda		1		
	Isopoda		1		
	Mysida		6		
	Ostracoda		1		
Total Crustaceans			11	0.0052	0.0027
Molluscs	Bivalvia	52	10	0.0151	0.0135
	Gastropoda		2		
	Bivalvia	7	1	23.0000	21.1200
	Bivalvia	11	132	0.2068	0.1944
	Gastropoda		4		
Total Molluscs			149	23.2219	21.3279
Annelids	Polychaeta	33	83	0.0037	0.0006
Total Annelids			83	0.0037	0.0006
Others	Nemata	49	123	0.0020	0.0005
	Nemertea		25		
	Osteichthyes		1		
	Platyhelminthes		1		
Total Others			150	0.0020	0.0005
Totals			393	23.2328	21.3317

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-02-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	50	1	0.0003	0.0003
Total Crustaceans			1	0.0003	0.0003
Molluscs	Bivalvia	54	2	0.0014	0.0007
	Gastropoda		2		
	Bivalvia	63	84	0.0372	0.0352
Total Molluscs			88	0.0386	0.0359
Annelids	Polychaeta	25	117	0.0047	0.0027
	Polychaeta	42	4	0.0040	0.0020
Total Annelids			121	0.0087	0.0047
Echinoderms	Echinoidea	62	2	0.0013	0.0005
Total Echinoderms			2	0.0013	0.0005
Others*	Nemata	51	62	0.0284	0.0023
	Nemertea		18		
	Osteichthyes		1		
	Nemata	68	4	0.0028	0.0012
Total Others			85	0.0312	0.0035
Totals			297	0.0801	0.0449

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained fragmented hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/18/2010**Sample ID:** Borrow-03-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	30	2	0.0049	0.0010
	Cirripedia		87		
	Copepoda		105		
	Decapoda		1		
	Cirripedia	55	4	0.0040	0.0028
	Copepoda		32		
Total Crustaceans			231	0.0089	0.0038
Molluscs	Bivalvia	31	11	0.0134	0.0115
	Gastropoda		3		
	Bivalvia	16	60	0.0600	0.0572
	Gastropoda		4		
Total Molluscs			78	0.0734	0.0687
Annelids	Polychaeta	65	102	0.0125	0.0084
	Polychaeta	64	20	0.0048	0.0036
Total Annelids			122	0.0173	0.0120
Echinoderms	Echinoidea	46	7	0.0011	0.0011
Total Echinoderms			7	0.0011	0.0011
Others*	Nemata	58	97	0.0010	0.0003
	Nemertea		5		
	Nemata	20	12	0.0032	0.0020
	Nemertea		4		
Total Others			118	0.0042	0.0023
Totals			556	0.1049	0.0879

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/18/2010**Sample ID:** Borrow-03-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	47	1	0.0074	0.0041
	Copepoda		35		
	Cirripedia		22		
	Ostracoda		7		
Total Crustaceans			65	0.0074	0.0041
Molluscs	Bivalvia	59	9	0.0004	0.0003
	Gastropoda		1		
	Bivalvia	61	72	0.0680	0.0640
	Gastropoda		4		
	Scaphopoda		8		
Total Molluscs			94	0.0684	0.0643
Annelids	Polychaeta	57	193	0.0229	0.0016
Total Annelids			193	0.0229	0.0016
Others	Insecta	67	1	0.0019	0.0002
	Nemata		258		
	Nemertea		7		
	Osteichthyes		1		
Total Others			267	0.0019	0.0002
Totals			619	0.1006	0.0702

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-03-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	52	2	0.0031	0.0001
	Cirripedia		52		
	Copepoda		465		
	Ostracoda		1		
	Cirripedia	59	10	0.0038	0.0002
	Copepoda		84		
	Decapoda		2		
Total Crustaceans			616	0.0069	0.0003
Molluscs	Bivalvia	46	5	0.0018	0.0001
	Gastropoda		1		
	Bivalvia	40	52	0.0572	0.0416
	Gastropoda		6		
Total Molluscs			64	0.0590	0.0417
Annelids	Polychaeta	33	65	0.0014	<0.0001
	Polychaeta	68	12	0.0012	<0.0001
Total Annelids			77	0.0026	<0.0001
Others*	Nemata	56	69	0.0010	0.0002
	Nemertea		3		
	Osteichthyes		2		
	Nemata	32	16	0.0004	0.0002
	Nemertea		2		
Total Others			92	0.0014	0.0004
Total			849	0.0699	0.0424

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-04-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	40	479	0.0040	0.0037
	Copepoda		29		
	Decapoda		1		
Total Crustaceans			509	0.0040	0.0037
Molluscs	Bivalvia	41	5	0.0021	0.0018
	Bivalvia	28	32	0.0210	0.0180
Total Molluscs			37	0.0231	0.0198
Annelids	Polychaeta	54	129	0.0027	0.0021
Total Annelids			129	0.0027	0.0021
Others*	Nemata	67	146	0.0020	0.0007
	Osteichthyes		2		
Total Others			148	0.0020	0.0007
Totals			823	0.0318	0.0263

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-04-B

Sample ID: Benthic 04 B					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	65	1	0.0030	0.0009
	Cirripedia		13		
	Copepoda		309		
	Decapoda		4		
	Ostracoda		1		
Total Crustaceans			328	0.0030	0.0009
Molluscs	Bivalvia	56	76	0.1152	0.1108
Total Molluscs			76	0.1152	0.1108
Annelids	Polychaeta	28	351	0.0129	0.0019
	Polychaeta	39	24	0.0010	0.0004
Total Annelids			375	0.0139	0.0023
Echinoderms	Echinoidea	7	1	*Oven temp. set too high - no dry weight.	44.9600
Total Echinoderms			1		44.9600
Others	Nemata	41	71	0.0012	0.0001
	Nemertea		11		
	Platyhelminthes		3		
Total Others			85	0.0012	0.0001
Totals			865	N/A	45.0741

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-04-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	58	20	0.0030	0.0005
	Copepoda		221		
	Decapoda		4		
	Ostracoda		2		
Total Crustaceans			247	0.0030	0.0005
Molluscs	Bivalvia	64	11	0.0020	0.0010
	Gastropoda		2		
	Polyplacophora		1		
	Bivalvia	28	64	0.0188	0.0152
Total Molluscs			78	0.0208	0.0162
Annelids	Polychaeta	65	231	0.0143	0.0024
Total Annelids			231	0.0143	0.0024
Echinoderms	Echinoidea	67	6	0.0009	0.0002
	Holothuroidea		1		
Total Echinoderms			7	0.0009	0.0002
Others*	Nemata	26	137	0.0011	0.0003
	Nemertea		36		
	Osteichthyes		2		
	Platyhelminthes		2		
	Salpida		2		
Total Others			179	0.0011	0.0003
Totals			741	0.0401	0.0196

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-05-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	24	7	0.0103	0.0036
	Cirripedia		58		
	Copepoda		212		
	Insecta		1		
	Ostracoda		3		
	Cirripedia	47	40	0.0016	0.0004
	Copepoda		264		
Total Crustaceans			585	0.0119	0.0040
Molluscs	Bivalvia	57	37	0.0122	0.0097
	Gastropoda		2		
	Polyplacophora		1		
	Bivalvia	59	4	0.0012	0.0004
Total Molluscs			44	0.0134	0.0101
Annelids	Polychaeta	18	178	0.0082	0.0012
	Polychaeta	34	88	0.0036	0.0016
Total Annelids			266	0.0118	0.0028
Echinoderms	Echinoidea	17	1	0.0032	0.0022
Total Echinoderms			1	0.0032	0.0022
Others*	Nemata	40	98	0.0042	0.0017
	Nemertea		24		
	Osteichthyes		2		
	Platyhelminthes		1		
	Nemata	38	120	0.0052	0.0028
Total Others			245	0.0094	0.0045
Totals			1,141	0.0497	0.0236

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: 2318-05-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	42	3	0.0016	0.0009
	Cirripedia		88		
	Copepoda		128		
	Decapoda		10		
Total Crustaceans			229	0.0016	0.0009
Molluscs	Bivalvia	52	74	0.0330	0.0304
Total Molluscs			74	0.0330	0.0304
Annelids	Polychaeta	36	45	0.0010	0.0003
Total Annelids			45	0.0010	0.0003
Others	Nemata	56	58	0.0007	0.0004
	Nemertea		8		
	Osteichthyes		1		
Total Others			67	0.0007	0.0004
Totals			415	0.0363	0.0320

Project: St. Lucie County Beach Nourishment
Sample Date: 11/18/2010
Sample ID: Borrow-05-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	59	42	0.0010	0.0007
	Copepoda		109		
	Decapoda		4		
	Ostracoda		2		
	Cirripedia	12	36	0.0076	0.0056
	Copepoda		24		
	Isopoda		4		
	Mysida		4		
Total Crustaceans			225	0.0086	0.0063
Molluscs	Bivalvia	39	55	0.0121	0.0112
	Gastropoda		3		
	Polyplocophora		1		
Total Molluscs			59	0.0121	0.0112
Annelids	Polychaeta	43	122	0.0019	0.0010
Total Annelids			122	0.0019	0.0010
Echinoderms	Echinoidea	34	2	0.0121	0.0118
	Ophiuroidea		1		
Total Echinoderms			3	0.0121	0.0118
Others	Nemata	50	96	0.0010	0.0007
	Nemertea		14		
	Salpida		5		
	Unknown		1		
	Nemata	14	68	0.0004	0.0004
	Nemertea		4		
Total Others			188	0.0014	0.0011
Totals			596	0.0361	0.0314

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-06-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	36	2	0.0015	0.0004
	Copepoda		6		
	Decapoda		2		
	Ostracoda		1		
Total Crustaceans			11	0.0015	0.0004
Molluscs	Bivalvia	17	7	0.0509	0.0442
	Gastropoda		1		
	Bivalvia	11	92	0.0464	0.0424
Total Molluscs			100	0.0973	0.0866
Annelids	Polychaeta	61	166	0.0065	<0.0001
Total Annelids			166	0.0065	<0.0001
Echinoderms	Echinoidea	15	1	0.0010	0.0001
Total Echinoderms			1	0.0010	0.0001
Others*	Nemata	24	112	0.0010	0.0002
	Nemertea		24		
	Osteichthyes		2		
	Tunicata		2		
Total Others			140	0.0010	0.0002
Totals			418	0.1073	0.0873

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-06-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	44	1	0.0001	<0.0001
	Copepoda		3		
	Ostracoda		1		
Total Crustaceans			5	0.0001	<0.0001
Molluscs	Bivalvia	56	6	0.0080	0.0062
	Bivalvia	48	8	0.0344	0.0276
	Gastropoda		40		
Total Molluscs			54	0.0424	0.0338
Annelids	Polychaeta	39	139	0.0077	0.0016
Total Annelids			139	0.0077	0.0016
Echinoderms	Echinoidea	60	7	0.0026	0.0016
Total Echinoderms			7	0.0026	0.0016
Others*	Nemata	12	192	0.0006	0.0001
	Nemertea		37		
Total Others			229	0.0006	0.0001
Totals			434	0.0534	0.0371

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-06-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	61	5	0.0029	0.0019
	Copepoda		1		
	Mysida		1		
	Ostracoda		1		
Total Crustaceans			8	0.0029	0.0019
Molluscs	Bivalvia	38	11	0.0099	0.0092
	Gastropoda		1		
	Bivalvia	47	80	0.0984	0.0940
	Gastropoda		24		
Total Molluscs			116	0.1083	0.1032
Worms	Polychaeta	49	528	0.0088	0.0041
Total Worms			528	0.0088	0.0041
Echinoderms	Echinoidea	33	4	0.0035	0.0031
Total Echinoderms			4	0.0035	0.0031
Others*	Nemata	45	216	0.0009	0.0006
	Nemertea		13		
	Nemata	24	144	0.0008	0.0008
Total Others			373	0.0017	0.0014
Totals			1,029	0.1252	0.1137

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-07-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	36	1	* Oven temperature set too high - no dry weight available.	0.0005
	Cirripedia		2		
	Copepoda		73		
	Decapoda		1		
	Copepoda	64	12		0.0008
	Ostracoda	4			
Total Crustaceans			93		0.0013
Molluscs	Bivalvia	16	1	* Oven temperature set too high - no dry weight available.	0.0062
	Bivalvia	62	104		0.0420
	Gastropoda		4		
Total Molluscs			109		0.0482
Annelids	Polychaeta	20	232	* Oven temperature set too high - no dry weight available.	0.0006
	Polychaeta	57	8		<0.0001
Total Annelids			240		0.0006
Echinoderms	Echinoidea	42	3	* Oven temperature set too high - no dry weight available.	0.0003
	Echinoidea	31	4		0.0004
Total Echinoderms			7		0.0007
Others*	Nemata	15	135	*Oven temperature set too high - no dry weight available.	0.0004
	Nemertea		15		
	Tunicata		1		
	Nemata	12	32		0.0016
Total Others			183		0.0020
Totals			632		0.0528

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-07-B

Sample ID: B00067-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	39	3	0.0038	0.0009
	Cirripedia		5		
	Copepoda		157		
	Decapoda		6		
	Ostracoda		2		
	Copepoda	12	6	0.0018	0.0004
Total Crustaceans			179	0.0056	0.0013
Molluscs	Bivalvia	33	3	0.0013	0.0007
	Bivalvia	28	58	0.0282	0.0234
	Gastropoda		2		
Total Molluscs			63	0.0295	0.0241
Annelids	Polychaeta	29	49	0.0329	0.0218
	Polychaeta	26	2	0.0004	<0.0001
Total Annelids			51	0.0333	0.0218
Echinoderms	Holothuroidea	49	1	0.0030	0.0011
Total Echinoderms			1	0.0030	0.0011
Others	Nemata	14	98	0.0026	0.0003
	Nemertea		22		
	Nemata	67	14	0.0022	0.0004
	Nemertea		8		
Total Others			142	0.0048	0.0007
Totals			436	0.0762	0.0490

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-07-C

Sample ID: B01W-07-C					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	11	1	0.0029	0.0010
	Isopoda		2		
Total Crustaceans			3	0.0029	0.0010
Annelids	Polychaeta	28	119	0.0032	0.0004
Total Annelids			119	0.0032	0.0004
Others	Nemata	24	107	0.0007	0.0003
	Nemertea		13		
	Nemata	68	12	0.0004	<0.0001
	Nemertea		20		
Total Others			152	0.0011	0.0003
Totals			274	0.0072	0.0017

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-08-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	43	3	0.0015	0.0004
	Copepoda		3		
	Cumacea		1		
	Decapoda		2		
Total Crustaceans			9	0.0015	0.0004
Molluscs	Bivalvia	33	116	0.1120	0.0968
	Scaphopoda		4		
Total Molluscs			120	0.1120	0.0968
Annelids	Polychaeta	54	33	0.0018	0.0004
Total Annelids			33	0.0018	0.0004
Others	Nemata	19	10	0.0002	<0.0001
	Nemertea		3		
	Osteichthyes		1		
Total Others			14	0.0002	<0.0001
Totals			176	0.1155	0.0976

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-08-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	46	4	0.0025	0.0015
	Copepoda		1		
	Cumacea		1		
	Mysida		1		
Total Crustaceans			7	0.0025	0.0015
Molluscs	Bivalvia	18	1	0.0011	0.0008
	Bivalvia	49	52	0.0338	0.0330
Total Molluscs			53	0.0349	0.0338
Annelids	Polychaeta	29	78	0.0017	0.0001
Total Annelids			78	0.0017	0.0001
Others	Nemata	37	56	0.0013	0.0007
	Nemertea		4		
	Osteichthyes		1		
	Platyhelminthes		1		
Total Others			62	0.0013	0.0007
Totals			200	0.0404	0.0361

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-08-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	61	2	0.0027	0.0016
	Copepoda		17		
	Ostracoda		2		
Total Crustaceans			21	0.0027	0.0016
Molluscs	Bivalvia	19	1	0.0006	<0.0001
	Bivalvia	45	64	0.0316	0.0208
	Gastropoda		4		
Total Molluscs			69	0.0322	0.0208
Annelids	Polychaeta	13	32	0.0075	0.0028
	Polychaeta	22	4	0.0032	0.0012
Total Annelids			36	0.0107	0.0040
Echinoderms	Echinoidea	43	3	0.0013	0.0005
Total Echinoderms			3	0.0013	0.0005
Others	Nemata	41	85	0.0010	0.0003
	Nemertea		6		
Total Others			91	0.0010	0.0003
Totals			220	0.0479	0.0272

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-09-A

Grouping	Taxon	Vial Number	Total Organism	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	14	1	0.0016	0.0003
	Copepoda		21		
	Decapoda		3		
	Ostracoda		3		
	Copepoda	63	48	0.0024	<0.0001
Total Crustaceans			76	0.0040	0.0003
Molluscs	Bivalvia	12	15	0.0037	0.0027
	Gastropoda		1		
	Bivalvia	31	104	0.0896	0.0752
	Gastropoda		12		
	Polyplacophora		4		
Total Molluscs			136	0.0933	0.0779
Annelidx	Polychaeta	45	348	0.0132	0.0019
	Polychaeta	64	36	0.0016	<0.0001
Total Annelids			384	0.0148	0.0019
Echinoderms	Echinoidea	62	2	0.0005	0.0001
	Holothuroidea		1		
Total Echinoderms			3	0.0005	0.0001
Others*	Chaetognath	53	1	0.0295	0.0005
	Nemata		545		
	Nemertea		30		
	Osteichthyes		2		
	Salpida		4		
	Tunicata		3		
	Nemata	42	64	0.0024	<0.0001
Total Others			649	0.0319	0.0005
Totals			1,248	0.1445	0.0807

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-09-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	30	10	0.0102	0.0017
	Copepoda		28		
	Decapoda		1		
	Copepoda	52	20	0.0052	0.0020
	Ostracoda		4		
Total Crustaceans			63	0.0154	0.0037
	Bivalvia	31	200	0.1116	0.0980
	Gastropoda		36		
Total Molluscs			236	0.1116	0.0980
Annelids	Polychaeta	36	98	0.0079	0.0006
	Polychaeta	32	20	0.0040	0.0016
Total Annelids			118	0.0119	0.0022
Echinoderms	Echinoidea	15	1	0.0014	0.0006
Total Echinoderms			1	0.0014	0.0006
Others*	Nemata	20	288	0.0023	0.0010
	Nemertea		27		
	Nemata	35	60	0.0036	0.0020
	Nemertea		8		
Total Others			383	0.0059	0.0030
Totals			801	0.1462	0.1075

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-09-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	51	3	* Oven temperature set too high - no dry weight available.	0.0019
	Copepoda		9		
	Ostracoda		2		
Total Crustaceans			14		0.0019
Molluscs	Bivalvia	61	7	* Oven temperature set too high - no dry weight available.	0.0012
	Bivalvia	52	76		0.0332
	Gastropoda		8		
Total Molluscs			91		0.0344
Annelids	Polychaeta	54	616	* Oven temperature set too high - no dry weight available.	0.0020
	Polychaeta	59	52		0.0048
Total Annelids			668		0.0068
Echinoderms	Echinoidea	33	8	* Oven temperature set too high - no dry weight available.	0.0024
Total Echinoderms			8		0.0024
Others*	Nemata	34	131	* Oven temperature set too high - no dry weight available.	0.0010
	Nemertea		22		
	Osteichthyes		2		
Total Others			155		0.0010
Total			936		0.0465

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-10-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Copepoda	16	27	0.0024	0.0016
	Isopoda		1		
	Ostracoda		2		
Total Crustaceans			30	0.0024	0.0016
Molluscs	Bivalvia	43	3	0.0023	0.0020
	Gastropoda		1		
	Bivalvia	38	60	1.6792	1.6004
	Gastropoda		8		
	Polyplacophora		4		
Total Molluscs			76	1.6815	1.6024
Annelids	Polychaeta	22	192	0.0086	0.0026
	Polychaeta	25	60	0.0064	0.0020
Total Annelids			252	0.0150	0.0046
Echinoderms	Echinoidea	20	1	0.0004	0.0001
	Holothuroidea		2		
Total Echinoderms			3	0.0004	0.0001
Others	Hydrachnidae	59	1	0.0034	0.0022
	Nemata		329		
	Nemertea		73		
	Platyhelminthes		2		
	Salpida		1		
	Tunicata		4		
	Nemata	68	132	0.0080	0.0060
	Nemertea		8		
Total Others			550	0.0114	0.0082
Totals			911	1.7107	1.6169

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-10-B

Grouping	Taxon	Vial Number	Total Organism	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	58	2	0.0008	0.0005
	Copepoda		50		
	Ostracoda		2		
	Cirripedia	33	4	0.0012	0.0008
	Copepoda		24		
Total Crustaceans			82	0.0020	0.0013
Molluscs	Polyplacophora	57	1	0.0003	0.0002
	Bivalvia	30	32	0.0200	0.0172
	Gastropoda		4		
Total Molluscs			37	0.0203	0.0174
Annelids	Polychaeta	52	193	0.0082	0.0034
	Polychaeta	34	24	0.0020	0.0008
Total Annelids			217	0.0102	0.0042
Echinoderms	Echinoidea	50	8	0.0028	0.0024
Total Echinoderms			8	0.0028	0.0024
Others	Nemata	51	303	0.0277	0.0015
	Nemertea		45		
	Osteichthyes		1		
	Tunicata		2		
	Nemata	32	36	0.0072	0.0056
	Nemertea		4		
Total Others			391	0.0349	0.0071
Totals			735	0.0702	0.0324

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-10-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	14	1	* Oven temperature set too high - no dry weight available.	0.0008
	Copepoda		232		
	Ostracoda		1		
	Copepoda	30	16		0.0024
Total Crustaceans			250		0.0032
Molluscs	Bivalvia	50	9	* Oven temperature set too high - no dry weight available.	0.0087
	Gastropoda		2		
	Bivalvia	22	32		0.0256
Total Molluscs			43		0.0343
Annelids	Polychaeta	45	139	* Oven temperature set too high - no dry weight available.	0.0011
	Polychaeta	25	8		0.0024
Total Annelids			147		0.0035
Echinoderms	Echinoidea	58	1	Oven temperature set too high - no dry weight available.	0.0004
Total Echinoderms			1		0.0004
Others*	Hydrachnidae	17	3	* Oven temperature set too high - no dry weight available.	0.0021
	Nemata		945		
	Nemertea		131		
	Osteichthyes		3		
	Tunicata		8		
	Nemata	38	48		0.0056
Total Others			1138		0.0077
Totals			1,579		0.0491

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-11-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Cirripedia	13	5	0.0270	0.0048
	Copepoda		120		
	Decapoda		1		
	Ostracoda		4		
Total Crustaceans			130	0.0270	0.0048
Molluscs	Bivalvia	25	3	0.0070	0.0065
	Gastropoda		3		
	Polyplocophora		2		
	Bivalvia	22	16	0.0064	0.0052
Total Molluscs			24	0.0134	0.0117
Annelids	Polychaeta	62	184	0.0245	0.0067
Total Annelids			184	0.0245	0.0067
Echinoderms	Ophiuroidea	57	3	0.0093	0.0083
Total Echinoderms			3	0.0093	0.0083
Others	Nemata	51	303	0.0024	0.0020
	Nemertea		59		
	Osteichthyes		1		
	Platyhelminthes		5		
	Salpida		9		
	Nemata	26	20	0.0020	0.0016
	Nemertea		12		
Total Others			409	0.0044	0.0036
Totals			750	0.0786	0.0351

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-11-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	37	12	0.0088	0.0047
	Cirripedia		9		
	Copepoda		83		
	Decapoda		1		
	Ostracoda		1		
Total Crustaceans			106	0.0088	0.0047
Molluscs	Bivalvia	27	1	0.0045	0.0039
	Gastropoda		4		
	Polyplacophora		1		
	Bivalvia	48	20	0.1468	0.1384
	Gastropoda		8		
Total Molluscs			34	0.1513	0.1423
Annelids	Polychaeta	44	189	0.0083	0.0028
Total Annelids			189	0.0083	0.0028
Echinoderms	Echinoidea	2	1	28.4800	27.1000
	Holothuroidea	64	10	0.0011	0.0004
	Ophiuroidea		9		
Total Echinoderms			20	28.4811	27.1004
Others*	Nemata	53	143	0.0051	0.0026
	Nemertea		41		
	Osteichthyes		2		
	Platyhelminthes		12		
	Salpida		9		
	Nemertea	58	8	0.0188	0.0132
	Sipuncula		4		
Total Others			219	0.0239	0.0158
Totals			568	28.6734	27.2660

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-11-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	19	9	0.0055	0.0014
	Cirripedia		38		
	Copepoda		155		
	Decapoda		8		
	Ostracoda		8		
	Cirripedia	49	4	0.0036	0.0028
	Copepoda		12		
Total Crustaceans			234	0.0091	0.0042
Molluscs	Bivalvia	54	7	0.0015	0.0010
	Gastropoda		1		
	Bivalvia	39	124	0.1368	0.1240
	Gastropoda		16		
Total Molluscs			148	0.1383	0.1250
Annelids	Polychaeta	44	570	0.0094	0.0025
	Polychaeta	25	24	0.0036	0.0004
Total Annelids			594	0.0130	0.0029
Echinoderms	Echinoidea	38	15	0.0016	0.0010
	Echinoidea	48	4	0.0024	0.0012
Total Echinoderms			19	0.0040	0.0022
Others*	Hydrachnidae	50	9	0.0050	0.0004
	Nemata		459		
	Nemertea		16		
	Tunicata		1		
	Nemata	35	28	0.0040	0.0024
Total Others			513	0.0090	0.0028
Totals			1,508	0.1734	0.1371

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-12-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	38	1	0.0022	0.0004
	Copepoda		4		
	Mysida		1		
Total Crustaceans			6	0.0022	0.0004
Molluscs	Gastropoda	45	1	0.0027	0.0024
	Bivalvia	49	196	0.1684	0.1552
	Gastropoda		4		
	Scaphopoda		36		
Total Molluscs			237	0.1711	0.1576
Annelids	Polychaeta	14	163	0.0039	0.0012
	Polychaeta	37	20	0.0004	<0.0001
Total Annelids			183	0.0043	0.0012
Others*	Nemata	51	60	0.0008	0.0002
	Nemertea		10		
	Nemata	50	12	<0.0001	<0.0001
	Nemertea		4		
Total Others			86	0.0008	0.0002
Totals			512	0.1784	0.1594

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained foraminiferida, not weighed.

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-12-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	43	1	* Oven temperature set too high - no dry weight available.	0.0007
	Cirripedia		6		
	Copepoda		62		
	Ostracoda		1		
	Ostracoda	32	4		0.0008
Total Crustaceans			74		0.0015
Molluscs	Bivalvia	63	29	* Oven temperature set too high - no dry weight available.	0.0093
	Gastropoda		1		
	Bivalvia	24	272		0.1180
	Gastropoda		24		
Total Molluscs			326		0.1273
Annelids	Polychaeta	68	598	* Oven temperature set too high - no dry weight available.	0.0051
	Polychaeta	53	32		0.0008
Total Annelids			630		0.0059
Echinoderms	Echinoidea	11	1	* Oven temperature set too high - no dry weight available.	0.0004
Total Echinoderms			1		0.0004
Others	Nemata	40	83	* Oven temperature set too high - no dry weight available.	0.0009
	Nemertea		19		
	Osteichthyes		1		
Total Others			103		0.0009
Totals			1,134		0.1360

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

* Sample contained hydrozoa, not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-12-C

Sample 12: Benthic

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	43	6	0.0094	0.0019
	Copepoda		23		
	Decapoda		4		
	Isopoda		1		
	Mysida		1		
	Copepoda	28	4	0.0028	0.0004
Total Crustaceans			39	0.0122	0.0023
Molluscs	Bivalvia	47	48	0.0704	0.0640
Total Molluscs			48	0.0704	0.0640
Annelids	Polychaeta	26	67	0.0059	0.0011
	Polychaeta	29	4	0.0024	0.0008
Total Annelids			71	0.0083	0.0019
Others	Hydrachnidae	30	1	0.0025	0.0003
	Nemata		222		
	Nemertea		27		
	Tunicata		2		
Total Others			252	0.0025	0.0003
Totals			410	0.0934	0.0685

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-13-A

Sample 12: Benthic Infa					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	16	6	0.0047	0.0040
	Copepoda		13		
	Mysida		1		
	Ostracoda		1		
Total Crustaceans			21	0.0047	0.0040
Molluscs	Bivalvia	46	5	0.0098	0.0077
	Gastropoda		4		
	Polyplacophora		1		
	Bivalvia	55	184	0.0952	0.0884
	Gastropoda		12		
Total Molluscs			206	0.1050	0.0961
Annelids	Polychaeta	56	93	0.0162	0.0062
Total Annelids			93	0.0162	0.0062
Echinoderms	Echinoidea	65	4	0.0200	0.0172
Total Echinoderms			4	0.0200	0.0172
Others	Nemata	60	350	0.0050	0.0030
	Nemertea		13		
Total Others			363	0.0050	0.0030
Totals			687	0.1509	0.1265

Project: St. Lucie County Beach Nourishment**Sample Date:** 11/24/2010**Sample ID:** Borrow-13-B

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	27	6	0.0063	0.0025
	Cirripedia		1		
	Copepoda		17		
	Decapoda		1		
	Mysida		4		
	Ostracoda		1		
Total Crustaceans			30	0.0063	0.0025
Molluscs	Bivalvia	32	12	0.0038	0.0035
	Gastropoda		2		
	Bivalvia	63	148	0.0360	0.0324
Total Molluscs			162	0.0398	0.0359
Annelids	Polychaeta	35	340	0.0114	0.0032
	Polychaeta	60	28	0.0044	0.0008
Total Annelids			368	0.0158	0.0040
Echinoderms	Echinozoa	44	10	0.0028	0.0022
Total Echinoderms			10	0.0028	0.0022
Others*	Nemata	48	114	0.0030	0.0017
	Nemertea		10		
	Unknown		2		
	Nemata	53	4	0.0004	<0.0001
	Nemertea		4		
Total Others			134	0.0034	0.0017
Totals			704	0.0681	0.0463

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-13-C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	37	1	0.0004	0.0001
	Copepoda		40		
	Ostracoda		2		
Total Crustaceans			43	0.0004	0.0001
Molluscs	Bivalvia	15	18	0.0115	0.0097
	Gastropoda		2		
	Bivalvia	61	112	0.0980	0.0934
	Gastropoda		10		
Total Molluscs			142	0.1095	0.1031
Annelids	Polychaeta	31	1099	0.0106	0.0009
	Polychaeta	36	26	0.0018	0.0006
Total Annelids			1125	0.0124	0.0015
Echinoderms	Echinoidea	46	6	0.0003	<0.0001
	Holothuroidea		1		
Total Echinoderms			6	0.0003	<0.0001
Others	Nemata	57	430	0.0061	0.0011
	Nemertea		96		
	Salpida		1		
	Nemata	32	28	0.0016	0.0006
	Nemertea		2		
Total Others			557	0.0077	0.0017
Totals			1,873	0.1303	0.1064

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-14-A

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	18	6	0.0033	0.0027
	Copepoda		16		
	Cumacea		1		
	Decapoda		1		
	Mysida		1		
Total Crustaceans			25	0.0033	0.0027
Molluscs	Bivalvia	19	10	0.0084	0.0072
	Gastropoda		3		
	Bivalvia	29	108	0.0772	0.0732
	Gastropoda		8		
Total Molluscs			129	0.0856	0.0804
Annelids	Polychaeta	17	202	0.0051	0.0035
Total Annelids			202	0.0051	0.0035
Others	Nemata	11	197	0.0021	0.0018
	Nemertea		21		
	Salpida		3		
Total Others			221	0.0021	0.0018
Totals			577	0.0961	0.0884

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-14-B

Sample 1B: Benthic Invertebrates					
Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	47	4	0.0019	0.0012
	Copepoda		7		
	Isopoda		1		
Total Crustaceans			12	0.0019	0.0012
Molluscs	Bivalvia	35	14	0.0021	0.0014
	Bivalvia	40	116	0.1172	0.1104
	Gastropoda		4		
Total Molluscs			134	0.1193	0.1118
Annelids	Polychaeta	13	187	0.0070	0.0015
Total Annelids			187	0.0070	0.0015
Echinoderms	Echinoidea	54	5	0.0008	0.0001
Total Echinoderms			5	0.0008	0.0001
Others	Hydrachnidae	67	1	0.0012	0.0009
	Nemata		172		
	Nemertea		66		
	Platyhelminthes		1		
	Salpida		2		
	Tunicata		1		
Total Others			243	0.0012	0.0009
Totals			581	0.1302	0.1155

Project: St. Lucie County Beach Nourishment
Sample Date: 11/24/2010
Sample ID: Borrow-14-C

Sample 12: Benthic 14 C

Grouping	Taxon	Vial Number	Total Organisms	Total Dry Weight (g)	Total Ash-free Dry Weight (g)
Crustaceans	Amphipoda	41	2	0.0019	0.0010
	Cirripedia		1		
	Copepoda		94		
	Ostracoda		2		
Total Crustaceans			99	0.0019	0.0010
Molluscs	Bivalvia	42	24	0.0222	0.0189
	Gastropoda		2		
	Bivalvia	13	136	0.0832	0.0564
	Gastropoda		8		
Total Molluscs			170	0.1054	0.0753
Annelids	Polychaeta	47	277	0.0151	0.0030
	Polychaeta	62	24	0.0060	0.0028
Total Annelids			301	0.0211	0.0058
Echinoderms	Echinoidea	36	4	0.0003	0.0001
	Holothuroidea		1		
Total Echinoderms			4	0.0003	0.0001
Others*	Nemata	49	214	0.0019	0.0005
	Nemertea		47		
	Osteichthyes		3		
	Salpida		1		
	Nemata	19	28	0.0056	0.0020
Total Others			293	0.0075	0.0025
Totals			867	0.1362	0.0847

* Sample also contained algae encrusted with bryozoans. Bryozoans could not be easily removed and were not weighed.

SUB-APPENDIX

BEACH AND BORROW AREA INFAUNA SAMPLING SUPPLEMENTAL TABLE

Provided by Kim Olsen, CSA International, Inc. Email to David Stites, Taylor Engineering. August 29, 2011.

Table 1. St Lucie Shoal Infaunal Sampling Summary data table with overall density calculation.

Organism Grouping	Taxon	Reference Sites		Borrow Area Sites		Refuge Patch Sites	
		Number of individuals	% of Total individuals	Number of individuals	% of Total individuals	Number of individuals	% of Total individuals
CRUSTACEANS	Copepoda	491		597		2374	
	Ostracoda	16		31		22	
	Amphipoda	26		62		21	
	Decapoda	13		19		27	
	Cirripedia	14		60		955	
	Isopoda	4		-		6	
	Mysida	3		7		10	
	Cumacea	1		2		-	
	Insecta	-		-		1	
	<i>Subtotal</i>	<i>568</i>	<i>9.06</i>	<i>778</i>	<i>6.73</i>	<i>3416</i>	<i>31.99</i>
MOLLUSCS	Bivalvia	1241		1490		1002	
	Gastropoda	67		189		52	
	Scaphopoda	36		4		8	
	Polyplacophora	-		8		8	
<i>Subtotal</i>		<i>1344</i>	<i>21.44</i>	<i>1691</i>	<i>14.64</i>	<i>1070</i>	<i>10.02</i>
ANNELIDS	Plycheata	2221		4703		2409	
<i>Subtotal</i>		<i>2221</i>	<i>35.43</i>	<i>4703</i>	<i>40.71</i>	<i>2409</i>	<i>22.56</i>
ECHINODERMS	Echinoidea	26		56		29	
	Holothuroidea	8		12		3	
	Ophiuroidea	-		12		1	
	Echinozoa	-		10		-	
<i>Subtotal</i>		<i>34</i>	<i>0.54</i>	<i>90</i>	<i>0.78</i>	<i>33</i>	<i>0.31</i>
OTHERS	Nemata	1731		3782		3277	
	Nemertea	349		435		423	
	Osteichthyes	4		11		16	
	Hydrachnidae	2		9		4	
	Platyhelminthes	2		18		9	
	Salpida	9		23		8	
	Tunicata	4		6		14	
	Chaetognath	-		1		-	
	Sipuncula	-		4		-	
	Unknown	-		2		1	
<i>Subtotal</i>		<i>2,101</i>	<i>33.52</i>	<i>4,291</i>	<i>37.14</i>	<i>3,752</i>	<i>35.13</i>
TOTAL ORGANISMS		6,268		11,553		10,680	
Density (organisms/m²)		33,483		49,372		45,641	