

**Florida Power & Light Company
Biological Plan of Study Implementation
for St. Lucie Plant EPU
Baseline Event 3 Data Report**

**Report to
Florida Power & Light Company**

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**Submitted by
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INTRODUCTION

During December 2011 and January 2012, Ecological Associates, Inc. (EAI) conducted the third baseline field sampling event in accordance with the St. Lucie Plant EPU Biological Plan of Study. During this second event, sampling was conducted on four days between December 30, 2011 and January 9, 2012. Data collected included general environmental data; water quality data; numbers and sizes of fish and shellfish collected by gill net, trawl, and beach seine; numbers of fish eggs and larvae and commercially or recreationally important decapod crustacean larvae collected by plankton net; and, numbers and sizes of sea turtles observed. Results of the second sampling event are provided in this report. All data should be considered preliminary until quality assurance checks have been completed.

SAMPLING LOCATIONS

Sampling was conducted within three separate sampling sites: SL1 located midway between the St. Lucie Plant and the Ft. Pierce Inlet, SL2 located in the vicinity of the St. Lucie Plant cooling water discharge, and SL3 located midway between the St. Lucie Plant and the St. Lucie Inlet.

For the purposes of gill netting and trawling, three transects were established within each of the three sampling sites: Transect A was located approximately 600 ft from shore on the beach terrace in water depths of 8-32 ft, Transect B was located approximately 4,000 ft. from shore in water depths of 34-44 ft, and Transect C was located approximately 8,000 ft. from shore in water depths of 31-46 ft. Plankton samples were collected concurrently with trawl samples at all three sites but only on Transects A and C.

Three stations were also established within each of the three sampling sites for the purpose of beach seining: Station A was located 0.5 mi. north of the center of the site, Station B was located at the center of the site, and Station C was located 0.5 mi. south of the center of the site. At all stations, seines were pulled to the beach from a water depth of approximately 4 ft.

For the purpose of boat-based sea turtle surveys, one transect was established in each of the three sampling sites. The transects were located along nearshore hardbottom habitat in each site.

RESULTS

Environmental data were recorded at each station during each day of sampling. Data recorded included sea conditions, air temperature, wind speed and direction, and sky conditions. Environmental data are summarized by day in Table 1. Values reflect the range of values recorded throughout each day of sampling.

Water quality data were recorded at three locations and three depths along each of the nine transects established for trawl and gill net sampling. Data recorded included conductivity, water temperature, salinity, pH, and dissolved oxygen (DO). Water quality data are provided in Table 2.

Trawls were towed for 15 minutes along each of the nine transects. The numbers of fish and commercially or recreationally important shellfish collected in each 15-minute tow are presented in Table 3. Because of variations in tow speed, the distances the trawl traveled during a 15-minute tow varied (based on GPS readings). In order to compare abundances among stations in terms of catch per unit effort, the numbers collected per kilometer of bottom sampled were calculated and are presented in Table 4.

The numbers of fish and commercially or recreationally important shellfish collected by gill net on each of the nine transects is given in Table 5. At each transect the gill net began to be retrieved 30 minutes after it was set. However, the total soak time (time from when the net first entered the water until the time it was completely removed from the water) varied among transects because of differences in retrieval times associated with variations in the number of fish present in the net. In order to compare abundances among stations in terms of catch per unit effort, the numbers collected per hour of total soak time were calculated and are given in Table 6.

Beach seines were deployed at each of the nine stations previously described. The numbers of fish and commercially or recreationally important shellfish collected at each station are presented in Table 7.

A maximum of 25 representative specimens of each Representative Important Species (RIS) of fish collected at each transect/station by trawl, gill net, and beach seine were measured (total length) and a batch weight for those specimens was obtained. Average lengths and average weights of each RIS at each station/transect for each gear type are presented in Table 8.

Bongo nets were used to collect fish eggs and larvae as well as commercially or recreationally important decapod crustacean larvae at each of the six transects previously described. Nets were pulled for 15 minutes and the volume of water filtered determined by means of flow meters. Numbers of individuals per cubic meter of water filtered are given in Table 9.

To quantify the number of sea turtles present in each of the three sampling sites, one one-kilometer-long transect in each sampling site was traversed by boat twice. The numbers of sea turtles sighted during each pass along each transect are presented in Table 10.

Table 1. Environmental Data, Baseline Sampling Event 3 (December 2011 - January 2012), St. Lucie Plant EPU Biological Study. Values reflect the range of values recorded throughout each day of sampling.

Sampling	Date	Sea Conditions	Air Temp	Wind Speed/Direction	Sky Conditions
Trawls/ Ichthyoplankton	1/8/2012	1-3 ft swell	21.0-22.0°C	5-8 mph/E to ENE	Clear
Trawls/ Ichthyoplankton	1/9/2012	1-3 ft swell, some chop	20.8-22.0°C	5-12 mph/E	Clear
Gill Nets	1/7/2012	Calm to 1 ft swell	17.8-25.5°C	1-5 mph/E to N	Clear to Partly Cloudy
Gill Nets	1/8/2012	1-2 ft swell	21.4-21.9°C	3-5 mph/NW to NE	Clear
Beach Seines	1/9/2012	1-3 ft swell, some chop	22.0°C	5-12 mph/SE	Partly Cloudy
Sea Turtle Transects	12/30/2011	2-3 ft swell, slight chop	16.7-20.0°C	5-7 mph/N to NNE	Partly to Mostly Cloudy

Table 2. Water Quality Data, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study. NR = not recorded

Transect	Station	Depth	Conductivity (mS/cm)	Water Temp (°C)	Salinity (PSU)	pH	DO (mg/l)
Trawl SL1 A	North	Surface	54.2	20.15	35.54	7.66	7.02
		Mid-Depth	54.2	20.16	35.55	7.66	6.94
		Bottom	54.2	20.17	35.55	7.66	7.06
	Middle	Surface	54.2	20.31	35.56	7.66	6.74
		Mid-Depth	NR	NR	NR	NR	NR
		Bottom	54.2	20.32	35.56	7.66	6.98
	South	Surface	54.2	20.44	35.56	7.65	6.60
		Mid-Depth	54.2	20.45	35.56	7.64	6.65
		Bottom	54.2	20.45	35.56	7.62	6.97
Trawl SL1 B	North	Surface	54.5	20.71	35.80	7.70	6.77
		Mid-Depth	54.5	20.73	35.80	7.69	6.69
		Bottom	54.3	20.03	35.63	7.69	6.48
	Middle	Surface	54.4	20.59	35.72	7.70	6.67
		Mid-Depth	54.4	20.60	35.72	7.70	6.65
		Bottom	54.4	20.58	35.72	7.70	6.62
	South	Surface	54.5	20.58	35.79	7.69	6.54
		Mid-Depth	54.4	20.59	35.72	7.69	6.49
		Bottom	54.4	20.58	35.72	7.69	6.53
Trawl SL1 C	North	Surface	54.5	21.57	35.93	7.77	6.48
		Mid-Depth	54.5	21.54	35.85	7.78	6.44
		Bottom	54.4	20.76	35.73	7.78	6.61
	Middle	Surface	54.5	21.70	35.86	7.77	6.47
		Mid-Depth	54.5	21.68	35.86	7.77	6.45
		Bottom	54.4	20.87	35.74	7.77	6.57
	South	Surface	54.6	21.79	35.87	7.77	6.47
		Mid-Depth	54.5	21.77	35.86	7.77	6.50
		Bottom	54.6	21.47	35.85	7.76	6.56
Trawl SL2 A	North	Surface	54.5	21.55	35.85	7.72	6.60
		Mid-Depth	54.5	21.54	35.78	7.72	6.62
		Bottom	54.5	21.46	35.70	7.73	6.67
	Middle	Surface	54.4	21.60	35.85	7.72	6.49
		Mid-Depth	54.4	21.59	35.78	7.72	6.51
		Bottom	54.5	21.57	35.85	7.72	6.54
	South	Surface	54.5	21.58	35.85	7.72	6.38
		Mid-Depth	54.5	21.57	35.85	7.72	6.45
		Bottom	54.5	21.53	35.85	7.71	7.03

Table 2 (Continued). Water Quality Data, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

Transect	Station	Depth	Conductivity (mS/cm)	Water Temp (°C)	Salinity (PSU)	pH	DO (mg/l)
Trawl SL2 B	North	Surface	54.6	21.60	35.93	7.74	6.60
		Mid-Depth	54.5	21.59	35.93	7.74	6.64
		Bottom	54.5	21.44	35.92	7.74	6.71
	Middle	Surface	54.6	21.58	35.93	7.75	6.50
		Mid-Depth	54.5	21.59	35.92	7.74	6.55
		Bottom	54.4	20.67	35.72	7.74	6.67
	South	Surface	54.6	21.46	35.92	7.74	6.48
		Mid-Depth	54.6	21.49	35.92	7.73	6.59
		Bottom	54.5	21.25	35.74	7.73	6.48
Trawl SL2 C	North	Surface	54.6	21.55	35.92	7.71	6.62
		Mid-Depth	54.6	21.50	35.92	7.71	6.65
		Bottom	54.5	21.01	35.89	7.73	6.77
	Middle	Surface	54.6	21.64	35.93	7.71	6.51
		Mid-Depth	54.6	21.57	35.93	7.70	6.53
		Bottom	54.6	21.00	35.89	7.73	6.59
	South	Surface	54.6	21.66	35.93	7.71	6.37
		Mid-Depth	54.6	21.65	35.93	7.71	6.39
		Bottom	54.6	20.91	35.81	7.70	6.51
Trawl SL3 A	North	Surface	54.5	21.20	35.83	7.68	6.66
		Mid-Depth	54.5	21.20	35.83	7.68	6.70
		Bottom	54.5	21.21	35.83	7.68	6.76
	Middle	Surface	54.5	21.21	35.83	7.68	6.40
		Mid-Depth	54.5	21.22	35.83	7.68	6.50
		Bottom	54.5	21.22	35.83	7.69	6.55
	South	Surface	54.5	21.30	35.84	7.69	6.38
		Mid-Depth	54.5	21.30	35.84	7.69	6.42
		Bottom	54.5	21.30	35.84	7.68	6.52
Trawl SL3 B	North	Surface	54.6	21.43	35.92	7.73	6.45
		Mid-Depth	54.6	21.45	35.92	7.73	6.45
		Bottom	54.6	21.45	35.92	7.72	6.61
	Middle	Surface	54.6	21.42	35.92	7.72	6.43
		Mid-Depth	54.6	21.42	35.92	7.72	6.41
		Bottom	54.6	21.42	35.84	7.71	6.42
	South	Surface	54.6	21.37	35.91	7.71	6.34
		Mid-Depth	54.5	21.39	35.92	7.71	6.40
		Bottom	54.6	21.39	35.84	7.70	6.68

Table 2 (Continued). Water Quality Data, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

Transect	Station	Depth	Conductivity (mS/cm)	Water Temp (°C)	Salinity (PSU)	pH	DO (mg/l)
Trawl SL3 C	North	Surface	54.6	21.44	35.92	7.69	6.53
		Mid-Depth	54.6	21.45	35.92	7.69	6.49
		Bottom	54.6	21.46	35.92	7.68	6.51
	Middle	Surface	54.6	21.43	35.92	7.69	6.44
		Mid-Depth	54.6	21.43	35.92	7.70	6.43
		Bottom	54.6	21.42	35.92	7.68	6.48
	South	Surface	54.4	21.43	35.77	7.70	6.46
		Mid-Depth	54.4	21.43	35.77	7.68	6.49
		Bottom	54.6	21.38	35.92	7.70	6.71
Gill Net SL1 A	West	Surface	54.1	20.32	35.56	7.83	6.67
		Mid-Depth	54.1	19.83	35.53	7.84	6.62
		Bottom	54.1	19.47	35.43	7.84	6.79
	Middle	Surface	54.2	20.36	35.56	7.85	6.31
		Mid-Depth	54.2	19.80	35.52	7.85	6.44
		Bottom	54.2	19.47	35.43	7.86	6.46
	East	Surface	54.2	20.14	35.55	7.82	6.70
		Mid-Depth	54.2	19.77	35.52	7.85	6.39
		Bottom	54.1	19.46	35.43	7.85	6.37
Gill Net SL1 B	West	Surface	54.2	20.45	35.56	7.81	6.54
		Mid-Depth	54.2	19.88	35.53	7.81	6.53
		Bottom	54.2	19.88	35.53	7.81	6.45
	Middle	Surface	54.2	20.15	35.55	7.81	6.61
		Mid-Depth	54.2	19.91	35.53	7.81	6.39
		Bottom	54.2	19.88	35.53	7.82	6.40
	East	Surface	54.2	20.14	35.54	7.80	6.50
		Mid-Depth	54.2	19.91	35.53	7.82	6.28
		Bottom	54.2	19.90	35.46	7.82	6.23
Gill Net SL1 C	West	Surface	54.5	20.90	35.81	7.90	6.55
		Mid-Depth	54.6	20.62	35.87	7.91	6.53
		Bottom	54.6	20.65	35.87	7.89	6.52
	Middle	Surface	54.6	20.92	35.89	7.88	6.11
		Mid-Depth	54.7	20.70	35.87	7.90	6.38
		Bottom	54.6	20.69	35.87	7.90	6.41
	East	Surface	54.7	21.26	35.98	7.87	6.74
		Mid-Depth	54.6	20.75	35.88	7.90	6.42
		Bottom	54.6	20.72	35.88	7.90	6.38

Table 2 (Continued). Water Quality Data, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

Transect	Station	Depth	Conductivity (mS/cm)	Water Temp (°C)	Salinity (PSU)	pH	DO (mg/l)
Gill Net SL2 A	West	Surface	54.2	19.57	35.51	7.72	6.61
		Mid-Depth	54.2	19.39	35.50	7.72	6.51
		Bottom	54.1	19.13	35.41	7.72	6.59
	Middle	Surface	54.2	19.52	35.51	7.73	6.65
		Mid-Depth	54.2	19.39	35.43	7.72	6.47
		Bottom	54.1	19.07	35.40	7.72	6.52
	East	Surface	54.2	19.60	35.51	7.73	6.86
		Mid-Depth	54.2	19.63	35.59	7.73	6.41
		Bottom	54.1	19.52	35.51	7.73	6.31
Gill Net SL2 B	West	Surface	54.4	20.30	35.70	7.72	6.73
		Mid-Depth	54.4	20.30	35.70	7.71	6.35
		Bottom	54.4	20.30	35.70	7.73	6.28
	Middle	Surface	54.5	20.35	35.70	7.70	6.49
		Mid-Depth	54.4	20.35	35.71	7.71	6.27
		Bottom	54.4	20.36	35.71	7.71	6.27
	East	Surface	54.5	20.44	35.78	7.70	6.76
		Mid-Depth	54.4	20.45	35.71	7.71	6.19
		Bottom	54.4	20.45	35.71	7.71	6.20
Gill Net SL2 C	West	Surface	54.6	21.00	35.89	7.78	6.35
		Mid-Depth	54.5	20.81	35.81	7.80	6.31
		Bottom	54.5	20.80	35.81	7.79	6.32
	Middle	Surface	54.6	21.10	35.90	7.81	6.44
		Mid-Depth	54.6	20.86	35.88	7.82	6.41
		Bottom	54.5	20.82	35.81	7.82	6.36
	East	Surface	54.6	21.10	35.90	7.82	6.22
		Mid-Depth	54.6	20.90	35.88	7.82	6.22
		Bottom	54.5	20.83	35.81	7.82	6.25
Gill Net SL3 A	West	Surface	54.4	20.42	35.78	7.69	6.59
		Mid-Depth	54.5	20.37	35.78	7.70	6.37
		Bottom	54.5	20.33	35.78	7.71	6.40
	Middle	Surface	54.4	20.33	35.70	7.70	6.47
		Mid-Depth	54.4	20.27	35.70	7.70	6.32
		Bottom	54.4	20.21	35.70	7.70	6.29
	East	Surface	54.4	20.43	35.71	7.68	7.24
		Mid-Depth	54.4	20.34	35.70	7.69	6.37
		Bottom	54.4	20.26	35.70	7.69	6.27

Table 2 (Continued). Water Quality Data, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

Transect	Station	Depth	Conductivity (mS/cm)	Water Temp (°C)	Salinity (PSU)	pH	DO (mg/l)
Gill Net SL3 B	West	Surface	54.6	20.81	35.88	7.66	6.57
		Mid-Depth	54.5	20.80	35.81	7.67	6.49
		Bottom	54.3	20.10	35.62	7.67	6.51
	Middle	Surface	54.6	20.85	35.88	7.66	6.43
		Mid-Depth	54.5	20.88	35.81	7.66	6.44
		Bottom	54.3	20.10	35.62	7.66	6.51
	East	Surface	54.5	20.88	35.88	7.65	6.37
		Mid-Depth	54.5	20.89	35.81	7.65	6.37
		Bottom	54.3	20.10	35.62	7.64	6.42
Gill Net SL3 C	West	Surface	54.6	21.24	35.91	7.76	6.38
		Mid-Depth	54.6	21.14	35.90	7.76	6.35
		Bottom	54.4	20.24	35.70	7.76	6.37
	Middle	Surface	54.7	21.24	35.91	7.75	6.61
		Mid-Depth	54.6	21.16	35.90	7.76	6.44
		Bottom	54.3	20.27	35.70	7.75	6.40
	East	Surface	54.6	21.21	35.90	7.74	6.31
		Mid-Depth	54.6	21.09	35.90	7.75	6.28
		Bottom	54.4	20.28	35.70	7.75	6.29

Table 3. Number of Individuals of Each Taxon of Fish and Commercially or Recreationally Important Shellfish Captured by Trawl during One 15-minute Tow at Each Station, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

TAXON	SL1			SL2			SL3			TOTAL
	A	B	C	A	B	C	A	B	C	
<i>Rimapenaeus sp.</i>		2								2
<i>Centropristis striata</i> (black sea bass)		1								1
<i>Chloroscombrus chrysurus</i> (Atlantic bumper)	1									1
<i>Lagodon rhomboides</i> (pinfish)	1									1
<i>Leiostomus xanthurus</i> (spot)		1								1
<i>Micropogonias undulatus</i> (Atlantic croaker)		1								1
<i>Orthopristis chrysoptera</i> (pigfish)		1								1
<i>Prionotus scitulus</i> (leopard searobin)		2			1			2	3	8
<i>Raja eglanteria</i> (clearnose skate)						1				1
<i>Synodus foetens</i> (inshore lizardfish)		4				1		2	2	9
TOTAL	2	12	0	0	1	2	0	4	5	26

Table 4. Number of Individuals of Each Taxon of Fish and Commercially or Recreationally Important Shellfish Captured per Kilometer by Trawl at Each Station, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study. (Note: Totals in the right column represent the number of individuals captured per kilometer for all nine transects.)

TAXON	SL1			SL2			SL3			TOTAL
	A	B	C	A	B	C	A	B	C	
<i>Rimapenaeus sp.</i>		1.8								0.2
<i>Centropristis striata</i> (black sea bass)		0.9								0.1
<i>Chloroscombrus chrysurus</i> (Atlantic bumper)	0.9									0.1
<i>Lagodon rhomboides</i> (pinfish)	0.9									0.1
<i>Leiostomus xanthurus</i> (spot)		0.9								0.1
<i>Micropogonias undulatus</i> (Atlantic croaker)		0.9								0.1
<i>Orthopristis chrysoptera</i> (pigfish)		0.9								0.1
<i>Prionotus scitulus</i> (leopard searobin)		1.8			1.1			1.6	2.8	0.9
<i>Raja eglanteria</i> (clearnose skate)						1.0				0.1
<i>Synodus foetens</i> (inshore lizardfish)		3.6				1.0		1.6	1.8	1.0
TOTAL	1.8	10.7	0.0	0.0	1.1	2.0	0.0	3.2	4.7	3.0

Table 5. Number of Individuals of Each Taxon of Fish and Commercially or Recreationally Important Shellfish Captured by Gill Net at Each Station, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

TAXON	SL1			SL2			SL3			TOTAL
	A	B	C	A	B	C	A	B	C	
<i>Brevoortia smithi</i> (yellowfin menhaden)	3			1				1		5
<i>Caranx crysos</i> (blue runner)			1				6	1		8
<i>Caranx latus</i> (horse-eye jack)	1									1
<i>Carcharhinus brevipinna</i> (spinner shark)									2	2
<i>Centropristis striata</i> (black sea bass)	5									5
<i>Chloroscombrus chrysurus</i> (Atlantic bumper)				15						15
<i>Mustelus canis</i> (smooth dogfish)					2	1				3
<i>Peprilus burti</i> (Gulf butterfly)				1						1
<i>Pomatomus saltatrix</i> (bluefish)	10			7						17
<i>Rachycentron canadum</i> (cobia)							1			1
<i>Rhizoprionodon terraenovae</i> (Atlantic sharpnose shark)			1					5		6
<i>Scomberomorus maculatus</i> (Spanish mackerel)	17			1						18
<i>Scorpaena plumieri</i> (spotted scorpionfish)				1						1
<i>Sphyrna tiburo</i> (bonnethead)	47	8		5	7	1				68
<i>Synodus foetens</i> (inshore lizardfish)				1						1
TOTAL	83	8	2	32	9	2	7	7	2	152

Table 6. Catch Per Unit Effort (Number of Individuals Per Hour of Soak Time) for Each Taxon of Fish and Commercially or Recreationally Important Shellfish Captured by Gill Net at Each Station, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study. (Note: Totals in the right column represent the number of individuals captured per hour for all nine transects.)

TAXON	SL1			SL2			SL3			TOTAL
	A	B	C	A	B	C	A	B	C	
<i>Brevoortia smithi</i> (yellowfin menhaden)	2.73			1.36				1.11		0.72
<i>Caranx crysos</i> (blue runner)			1.33				7.83	1.11		1.15
<i>Caranx latus</i> (horse-eye jack)	0.91									0.14
<i>Carcharhinus brevipinna</i> (spinner shark)									3.08	0.29
<i>Centropristis striata</i> (black sea bass)	4.55									0.72
<i>Chloroscombrus chrysurus</i> (Atlantic bumper)				20.45						2.15
<i>Mustelus canis</i> (smooth dogfish)					2.61	1.58				0.43
<i>Peprilus burti</i> (Gulf butterfish)				1.36						0.14
<i>Pomatomus saltatrix</i> (bluefish)	9.09			9.55						2.44
<i>Rachycentron canadum</i> (cobia)							1.30			0.14
<i>Rhizoprionodon terraenovae</i> (Atlantic sharpnose shark)			1.33					5.56		0.86
<i>Scomberomorus maculatus</i> (Spanish mackerel)	15.45			1.36						2.58
<i>Scorpaena plumieri</i> (spotted scorpionfish)				1.36						0.14
<i>Sphyrna tiburo</i> (bonnethead)	42.73	12.00		6.82	9.13	1.58				9.76
<i>Synodus foetens</i> (inshore lizardfish)				1.36						0.14
	75.45	12.00	2.67	43.64	11.74	3.16	9.13	7.78	3.08	21.81

Table 7. Number of Individuals of Each Taxon of Fish and Commercially or Recreationally Important Shellfish Captured by Beach Seine at Each Station, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study.

TAXON	SL1			SL2			SL3			TOTAL
	A	B	C	A	B	C	A	B	C	
<i>Emerita sp.</i>									4	4
<i>Centropomus undecimalis</i> (common snook)		2	2							4
<i>Harengula jaguana</i> (scaled sardine)				1						1
<i>Menticirrhus littoralis</i> (Gulf kingfish)			1		1		4	23		29
<i>Micropogonias undulates</i> (Atlantic croaker)							1	1		2
<i>Selene vomer</i> (lookdown)					1					1
<i>Umbrina coroides</i> (sand drum)			1				5	4		10
TOTAL	0	2	4	1	2	0	10	28	4	51

Table 8. Average total length (TL) and average weight (W) of each Representative Important Species Captured by Gill Net, Trawl, and Beach Seine, Baseline Sampling Event 3 (October-November 2011), St. Lucie Plant EPU Biological Study. For each species the number weighed/measured (n) and the total number collected (N) are given.

TAXON	Gill Net				Trawl				Beach Seine			
	TL (mm)	W (g)	n	N	TL (mm)	W (g)	n	N	TL (mm)	W (g)	n	N
<i>Brevoortia smithi</i> (yellowfin menhaden)	323.0	437.6	5	5								
<i>Leiostomus xanthurus</i> (spot)					178.0	65.0	1	1				
<i>Harengula jaguana</i> (scaled sardine)									117.0	14.0	1	1
<i>Menticirrhus littoralis</i> (Gulf kingfish)									80.5	7.8	29	29
<i>Micropogonias undulates</i> (Atlantic croaker)					248.0	167.0	1	1	168.5	58.5	2	2
<i>Orthopristis chrysoptera</i> (pigfish)					230.0	160.0	1	1				
<i>Pomatomus saltatrix</i> (bluefish)	411.9	668.2	17	17								
<i>Prionotus scitulus</i> (leopard searobin)					199.8	60.2	8	8				
<i>Scomberomorus maculatus</i> (Spanish mackerel)	429.4	442.2	18	18								
<i>Umbrina coroides</i> (sand drum)									63.6	5.4	8/10 ¹	10

¹ Total length could only be determined for eight individuals (two individuals had tail damage). Weight was determined for all ten individuals.

Table 9. Number of Individuals of Each Taxon of Fish Eggs and Larvae and Commercially or Recreationally Important Decapod Crustacean Larvae Captured Per Cubic Meter of Water Filtered During One 15-minute Bongo-Net Tow at Each Transect, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study. (Note: Totals in the right column represent numbers captured per cubic meter of water filtered at all six transects.)

TAXON	SL 1		SL 2		SL 3		TOTAL
	A	C	A	C	A	C	
Atherinopsidae spp., post yolk-sac larvae			0.017				0.002
Blenniidae spp., post yolk-sac larvae	0.014			0.016		0.058	0.015
Bregmacerotidae spp., post yolk-sac larvae						0.014	0.002
<i>Brevoortia smithi</i> , post yolk-sac larvae	0.135	0.013	0.034		0.297	0.087	0.094
Clupeidae spp., post yolk-sac larvae	0.054					0.043	0.017
Clupeiformes spp., post yolk-sac larvae					0.063	0.087	0.025
Clupeiformes spp., yolk-sac larvae					0.031		0.005
<i>Cynoscion nebulosus</i> , post yolk-sac larvae				0.032		0.014	0.007
<i>Cynoscion regalis</i> , post yolk-sac larvae		0.026					0.005
Engraulidae spp., post yolk-sac larvae					0.016		0.002
<i>Eucinostomus</i> spp., post yolk-sac larvae	0.041						0.007
<i>Gobiesox strumosus</i> , post yolk-sac larvae			0.017				0.002
Gobiidae spp., post yolk-sac larvae		0.038	0.052			0.043	0.022
Haemulidae spp., post yolk-sac larvae				0.016			0.002
<i>Haemulon</i> spp., post yolk-sac larvae	0.014						0.002
<i>Leiostomus xanthurus</i> , post yolk-sac larvae	0.014						0.002
<i>Menticirrhus americanus</i> , post yolk-sac larvae		0.051		0.016			0.012
<i>Microgobius gulosus</i> , post yolk-sac larvae	0.081	0.462	0.034	0.065	0.031	0.261	0.168
<i>Microgobius thalassinus</i> , post yolk-sac larvae						0.014	0.002
<i>Micropogonias furnieri</i> , post yolk-sac larvae		0.064					0.012
<i>Micropogonias undulates</i> , post yolk-sac larvae		0.090					0.017
Perciformes spp., post yolk-sac larvae		0.026			0.016		0.007
Phosichthyidae spp., post yolk-sac larvae				0.016			0.002
Pomacentridae spp., post yolk-sac larvae			0.017				0.002
<i>Prionotus</i> spp., post yolk-sac larvae						0.014	0.002
Sciaenidae spp., post yolk-sac larvae				0.081	0.047	0.391	0.086
Sciaenidae spp., yolk-sac larvae					0.016		0.002
<i>Sciaenops ocellatus</i> , post yolk-sac larvae	0.014						0.002

Table 9 (continued). Number of Individuals of Each Taxon of Fish Eggs and Larvae and Commercially or Recreationally Important Decapod Crustacean Larvae Captured Per Cubic Meter of Water Filtered During One 15-minute Bongo-Net Tow at Each Transect, Baseline Sampling Event 3 (January 2012), St. Lucie Plant EPU Biological Study. (Note: Totals in the right column represent numbers captured per cubic meter of water filtered at all six transects.)

TAXON	SL 1		SL 2		SL 3		TOTAL
	A	C	A	C	A	C	
<i>Selene setapinnis</i> , post yolk-sac larvae				0.081			0.012
Serranidae spp., post yolk-sac larvae		0.013					0.002
<i>Stellifer lanceolatus</i> , post yolk-sac larvae				0.081			0.012
Stomiiformes spp., post yolk-sac larvae						0.029	0.005
Tetraodontidae spp., post yolk-sac larvae					0.016		0.002
Unidentified fish fragment, post yolk-sac larvae	0.014	0.051	0.034		0.016		0.020
Clupeidae spp., egg		0.551	6.741	0.048	14.828	1.652	3.704
Clupeiformes spp., egg	13.676						2.499
Sciaenidae spp., egg		0.269	0.328			0.493	0.183
Sparidae spp., egg	0.432						0.079
Synodontidae spp., egg		0.038		0.113	0.047		0.032
Unidentified fish eggs	1.311	1.179	13.276	1.323	8.156	3.594	4.472
<i>Albunea</i> sp., zoea		0.013				0.014	0.005
<i>Callinectes</i> spp., megalops	0.068		0.052	0.016	0.078	0.029	0.040
<i>Callinectes</i> spp., post larvae		0.013					0.002
<i>Callinectes</i> spp., zoea	0.068	0.372	0.103	0.306	0.078	0.478	0.240
<i>Farfantepenaeus</i> spp., post larvae	0.027	0.013		0.016			0.010
Loliginidae spp., juvenile						0.014	0.002
Penaeidae spp., mysis				0.306		0.826	0.188
Penaeidae spp., post larvae				0.032			0.005
Penaeidae sp. B, mysis				0.016		0.014	0.005
<i>Sicyonia</i> spp., mysis				0.016		0.029	0.007
<i>Sicyonia</i> spp., post larvae						0.014	0.002
TOTAL	15.959	3.282	20.707	2.597	23.734	8.217	12.062

Table 10. Number of Individuals of Each Species of Sea Turtle Sighted During Each of Two Passes Along Three One-Kilometer-Long Transects, Baseline Sampling Event 3 (December 2011), St. Lucie Plant EPU Biological Study.

SPECIES	SL 1		SL 2		SL 3	
	Pass 1	Pass 2	Pass 1	Pass 2	Pass 1	Pass 2
<i>Chelonia mydas</i> (green turtle)	0	0	1	0	0	0