Appendix 4-3: Water Year 2010 Supplemental Evaluations for Regulatory Source Control Programs in Non-Everglades Construction Project Basins

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INTRODUCTION

For the seven non-Everglades Construction Project (non-ECP) basins, the Florida Department of Environmental Protection (FDEP) permit No. 06,502590709 requires that the South Florida Water Management District (SFWMD or District) report on the status of required water quality monitoring to evaluate progress toward achieving established water quality standards and the effectiveness of the source control strategies. The data collection requirements for structures associated with the non-ECP basins are outlined in the non-ECP permit. Chapter 3A of this volume and Volume III, Appendix 3-2, provide the Water Year 2010 (WY2010) (May 1, 2009–April 30, 2010) update on the District's data collection efforts for non-ECP structures. This appendix summarizes the flow, total phosphorus (TP) load, and flow-weighted mean (FWM) TP concentration at each non-ECP Basin discharge structure for WY1998 through WY2010.

NON-ECP BASIN SUPPLEMENTAL EVALUATION

BASIN-LEVEL MONITORING DATA

During WY2010, eight structures served as direct or indirect discharge points from the non-ECP basins into the Everglades Protection Area (EPA). While seven of these structures are within the control of the District and are referred to as "into" structures under the non-ECP permit, this appendix also incorporates flow and TP data for the remaining private structure, NSID1. It should be noted that due to the incorporation of a more accurate flow calculation equation, the S-190 flow data were revised for the period from January 1, 1984─May 9, 2010. Historic TP concentration and flow data presented in this appendix now reflect the revised flow values. Since December 2006, all runoff from the Acme Improvement District (Acme) Basin has been discharged into the C-51 West canal and is then generally directed to Stormwater Treatment Area 1E (STA 1-E). Direct untreated flows from the ACME1 and ACME2 structures into Water Conservation Area 1 (WCA-1) no longer occur. The Acme Basin is now designated as an ECP basin; however, this appendix includes the historic discharge information for this basin.

Volume III, Appendix 3-2, presents WY2010 water quality sampling statistics for these non-ECP Basin discharge structures. **Table 1** of this appendix summarizes the annual total flow,

total TP load, and FWM TP concentration for each structure. The individual structure summaries have also been aggregated to represent the collective discharge into the receiving water body. The receiving water bodies include WCA-1, Water Conservation Area 2A (WCA-2A), Water Conservation Area 3A (WCA-3A), and Everglades National Park. The individual and aggregated structure summaries for non-ECP basins are presented for each water year and for the period of record.

Table 1. Water Years 1998 through 2010 (WY1998–WY2010) (May 1, 1998–April 30, 2010) non-Everglades Construction Project (non-ECP) basin structure total flow volume, total phosphorus (TP) load, and flow-weighted mean (FWM) TP concentration to the Everglades Protection Area (EPA) by tributary basin.

Non-ECP Basin Structures into Water Conservation Area 1 (WCA-1)															
	WY	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008***	**2009***	**2010***	**Total**
ACME1	Flow Vol. (kac-ft)	26.39	19.79	19.22	6.25	15.67	8.81	10.02	12.32	14.16	13.61	0	0	0	146.25
	TP Load (mt)	2.87	3.66	3.63	0.50	1.72	0.87	0.96	2.02	1.40	1.97	0	0	0	19.59
	TP FWMC (ppb)	88	150	153	65	89	80	77	133	80	117	NF	NF	NF	*109*
ACME2	Flow Vol. (kac-ft)	20.90	16.94	19.79	7.70	17.52	9.47	9.87	11.25	12.77	12.71	0	0	0	138.91
	TP Load (mt)	2.60	3.62	3.32	1.11	3.29	1.39	1.23	2.95	1.83	2.22	0	0	0	23.55
	TP FWMC (ppb)	101	173	136	117	152	119	101	212	116	141	NF	NF	NF	*137*
Total (WCA-1)	Flow Vol. (kac-ft)	47.29	36.73	39.01	13.95	33.19	18.28	19.89	23.56	26.93	26.32	0	0	0	285.16
	TP Load (mt)	5.47	7.28	6.95	1.61	5.01	2.25	2.18	4.97	3.24	4.18	0	0	0	43.14
	TP FWMC (ppb)	94	161	144	94	122	100	89	171	97	129	NF	NF	NF	*123*

Non-ECP Basin Structures into Water Conservation Area 2A (WCA-2A)															
	WY	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
NSID1 Total (WCA-2A)	Flow Vol. (kac-ft)	7.36	6.76	9.88	2.41	2.49	0.69	0	0.354	0	0	0	0	0	29.96
	TP Load (mt)	0.30	0.15	0.33	0.05	0.05	0.025**	0	0.009	0	0	0	0	0	0.91
	TP FWMC (ppb)	33	18	27	16	16	NDF	NF	20	NF	NF	NF	NF	NF	25

* Pump stations ACME1 and ACME 2 stopped operation in December 2006
** Load calculated from arithmetic mean concentration
kac-ft thousands of acre-feet
mt metric ton
NDF No data with flow
NF No flow for period
ppb parts per billion

Table 1. Continued.

Non-ECP Basin Structures into Water Conservation Area 3 (WCA-3A)															
	WY	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
S-190	Flow Vol. (kac-ft)	66.89	44.99	92.47	35.32	81.22	83.47	111.50	89.58	142.47	67.03	24.02	83.09	84.76	1,006.82
	TP Load (mt)	6.64	4.22	12.55	7.01	8.86	8.99	13.65	10.69	27.20	17.77	2.99	14.06	7.62	142.23
	TP FWMC (ppb)	80	76	110	161	88	87	99	97	155	215	101	137	73	115
S-140	Flow Vol. (kac-ft)	155.85	94.54	180.01	62.97	109.99	136.42	136.15	137.98	203.58	88.52	90.34	136.31	136.94	1,669.59
	TP Load (mt)	6.92	6.41	15.54	11.19	6.46	10.44	7.02	7.22	12.51	5.12	4.05	6.65	9.21	108.73
	TP FWMC (ppb)	36	55	70	144	48	62	42	42	50	47	36	40	55	53
G-123	Flow Vol. (kac-ft)	ND	ND	ND	38.38	52.05	0.00	2.30	0	0	0	0	0	0	92.73
	TP Load (mt)	ND	ND	ND	0.62	1.06	0.00	0.05	0	0	0	0	0	0	1.72
	TP FWMC (ppb)	ND	ND	ND	13	16	NF	16	NF	NF	NF	NF	NF	NF	15
S-9	Flow Vol. (kac-ft)	250.35	221.59	273.61	172.05	283.62	264.30	149.71	93.40	128.47	42.46	52.63	54.68	119.30	2,106.16
	TP Load (mt)	5.25	5.19	10.13	4.88	6.72	5.58	3.39	2.14	3.06	1.00	1.28	1.30	2.95	52.86
	TP FWMC (ppb)	17	19	30	23	19	17	18	19	19	19	20	19	20	20
S-9A	Flow Vol. (kac-ft)	NO	NO	NO	NO	NO	NO	107.61	56.58	61.35	81.35	87.80	88.50	56.05	539.24
	TP Load (mt)	NO	NO	NO	NO	NO	NO	1.74	0.83	1.21	1.31	1.52	1.26	0.91	8.77
	TP FWMC (ppb)	NO	NO	NO	NO	NO	NO	13	12	16	13	14	12	13	13
Total (WCA-3A)	Flow Vol. (kac-ft)	476.52	363.63	551.21	310.68	530.64	488.69	513.47	382.54	543.75	279.36	254.79	362.57	397.04	5,454.90
	TP Load (mt)	19.20	16.06	38.91	24.82	23.56	25.13	26.60	21.48	45.49	25.19	9.84	23.27	20.70	320.23
	TP FWMC (ppb)	33	36	57	65	36	42	42	46	68	73	31	52	42	48

Table 1. Continued.

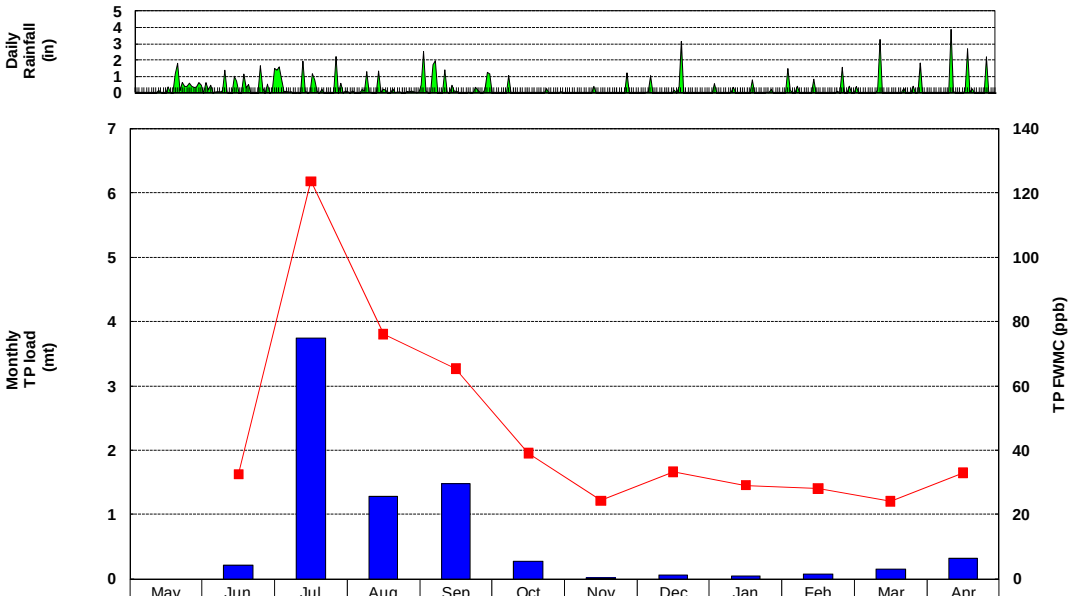
Non-ECP Basin Structures into Everglades National Park (ENP)															
	WY	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Total**
S-174	Flow Vol. (kac-ft)	NA	NA	NA	8.92	13.97	6.34	5.48	30.06	9.20	0.001	0*	0*	0*	73.97
	TP Load (mt)	NA	NA	NA	0.08	0.12	0.07	0.04	0.45	0.16	0.00	0*	0*	0*	0.91
	TP FWMC (ppb)	NA	NA	NA	7	7	8	6	12	14	5	NF*	NF*	NF*	*10*
S-175	Flow Vol. (kac-ft)	28.49	17.05	97.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	143.07
	TP Load (mt)	0.28	0.13	0.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.37
	TP FWMC (ppb)	8	6	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*8*
S-18C	Flow Vol. (kac-ft)	226.42	127.27	193.26	151.70	172.84	134.93	158.81	100.69	188.51	80.36	124.38	173.10	249.36	2,081.61
	TP Load (mt)	2.79	1.88	1.91	1.68	1.53	1.20	1.85	0.99	3.30	0.69	1.16	1.55	1.95	22.49
	TP FWMC (ppb)	10	12	8	9	7	7	9	8	*14*	7	8	7	6	*9*
S-332	Flow Vol. (kac-ft)	160.03	107.19	199.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	467.17
	TP Load (mt)	1.38	0.93	1.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.03
	TP FWMC (ppb)	7	7	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*7*
S-332D	Flow Vol. (kac-ft)	NO	NO	NO	NO	144.18	90.24	128.00	76.48	153.80	45.05	32.69	144.49	181.20	996.13
	TP Load (mt)	NO	NO	NO	NO	0.94	0.68	0.91	0.59	2.06	0.30	0.26	1.28	1.82	8.82
	TP FWMC (ppb)	NO	NO	NO	NO	5	6	6	6	11	5	6	7	8	*7*
Total (ENP)	Flow Vol. (kac-ft)	414.94	251.50	490.74	160.61	330.99	231.51	292.30	207.23	351.51	125.41	157.07	317.59	430.55	3,761.95
	TP Load (mt)	4.46	2.94	4.60	1.76	2.58	1.94	2.79	2.02	5.51	0.99	1.42	2.83	3.77	37.62
	TP FWMC (ppb)	9	9	8	9	6	7	8	8	13	*6*	*7*	*7*	*7*	*8*

N/A Not applicable; flow and load calculation at S-175 and S-332 replaced in WY2001 with S-174 and S-332D
NO Structure not operational for period
* Structure S-174 was plugged in September 2007

BASIN-LEVEL WATER QUALITY SUMMARY

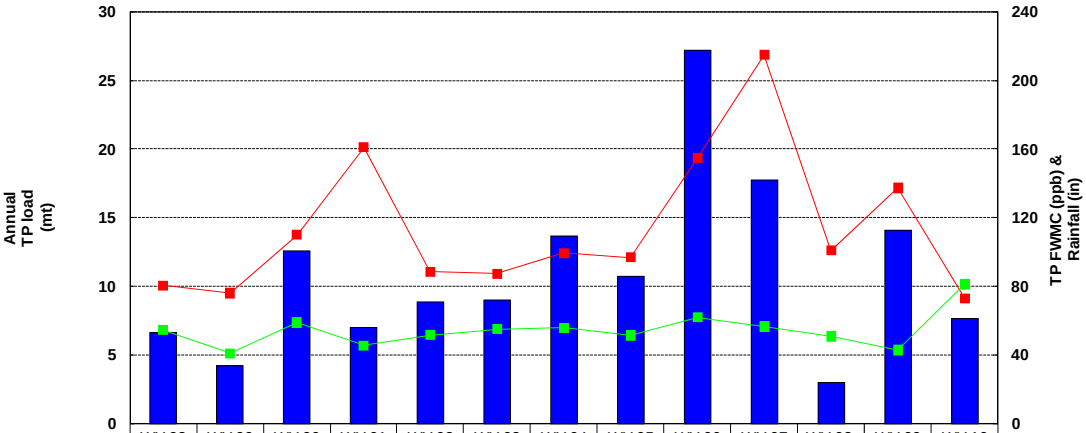
This section summarizes the water quality results for the non-ECP basins. These basins include the Feeder Canal, L-28, C-111, C-11 West, North New River Canal (NNRC), and North Springs Improvement District (NSID). This section also includes historical water quality results for the Acme Basin. Since December 2006, this basin has discharged to the C-51 West canal and is now designated as an ECP Basin. Each figure presented in this section includes two parts and represents daily, monthly, and annual data for each basin. **Figures 1a** through **7a** summarize the daily rainfall and the monthly TP load, FWM TP concentration, rainfall, and flow volume in WY2010. **Figures 1b** through **7b** summarize the annual TP load, FWM concentration, rainfall, and flow volume through WY2010 for each basin. The water quality summary for each basin is discussed in further detail in Chapter 4 of this volume.

Feeder Canal Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0	0.20	3.75	1.29	1.48	0.27	0.00	0.05	0.04	0.07	0.15	0.32
Flow Vol. (kac-ft)	0	5.06	24.56	13.72	18.36	5.62	0.09	1.20	1.14	2.01	5.18	7.83
TP FWMC (ppb)	NF	32	124	76	65	39	24	33	29	28	24	33
Rainfall (in)	9.0	12.0	10.6	7.9	9.7	1.6	1.7	5.0	2.2	5.2	6.6	9.5

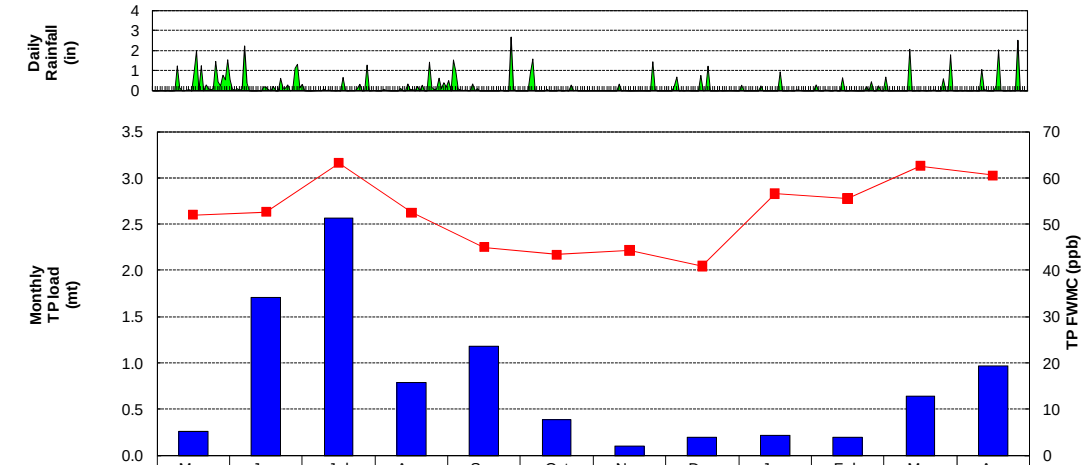
Figure 1a. Feeder Canal Basin daily rainfall (top) and monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom) (NF = no flow for period).



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	6.64	4.22	12.55	7.01	8.86	8.99	13.65	10.69	27.20	17.77	2.99	14.06	7.62
Flow Vol. (kac-ft)	66.89	44.99	92.47	35.32	81.22	83.47	111.50	89.58	142.47	67.03	24.02	83.09	84.76
TP FWMC (ppb)	80	76	110	161	88	87	99	97	155	215	101	137	73
Rainfall (in)	54.4	40.8	58.9	45.4	51.4	55.0	55.7	51.3	61.8	56.5	50.7	42.6	81.1

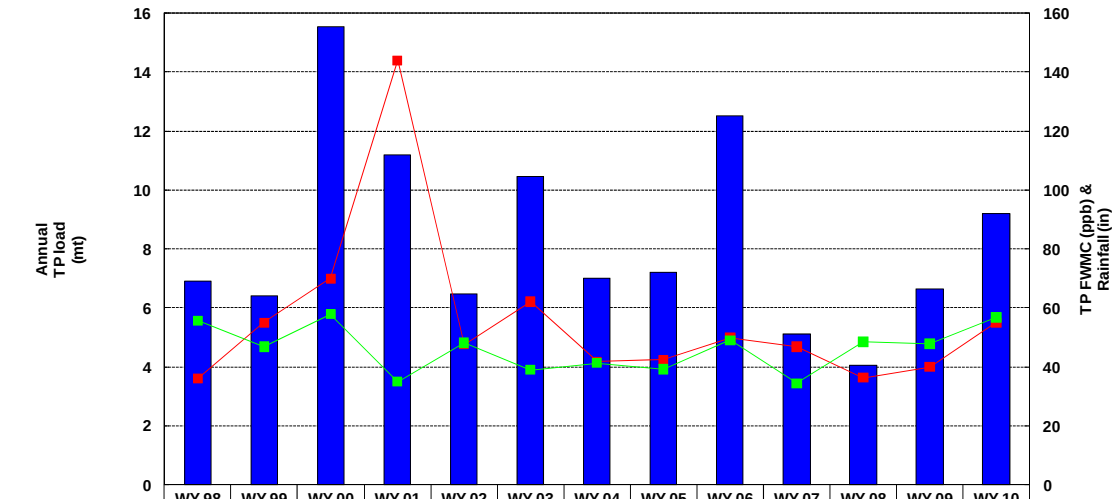
Figure 1b. Feeder Canal Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998–WY2010.

L-28 Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0.26	1.70	2.57	0.79	1.18	0.39	0.11	0.20	0.22	0.19	0.65	0.96
Flow Vol. (kac-ft)	3.98	26.25	32.95	12.17	21.16	7.27	1.93	3.95	3.16	2.85	8.36	12.92
TP FWMC (ppb)	52	53	63	52	45	43	44	41	57	56	63	61
Rainfall (in)	10.0	9.6	3.2	4.4	6.6	3.0	1.9	3.1	1.6	2.0	5.4	6.2

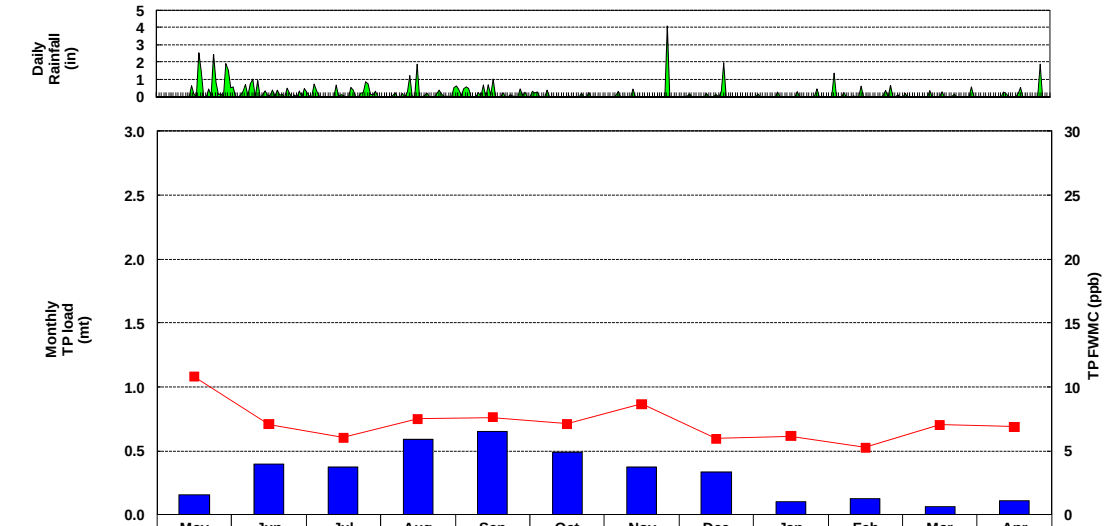
Figure 2a. L-28 Basin daily rainfall (top) and monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom).



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	6.92	6.41	15.54	11.19	6.46	10.44	7.02	7.22	12.51	5.12	4.05	6.65	9.21
Flow Vol. (kac-ft)	155.85	94.54	180.01	62.97	109.99	136.42	136.15	137.98	203.58	88.52	90.34	136.31	136.94
TP FWMC (ppb)	36	55	70	144	48	62	42	42	50	47	36	40	55
Rainfall (in)	55.7	46.8	58.0	35.0	48.2	39.0	41.3	39.2	49.0	34.5	48.5	47.8	56.8

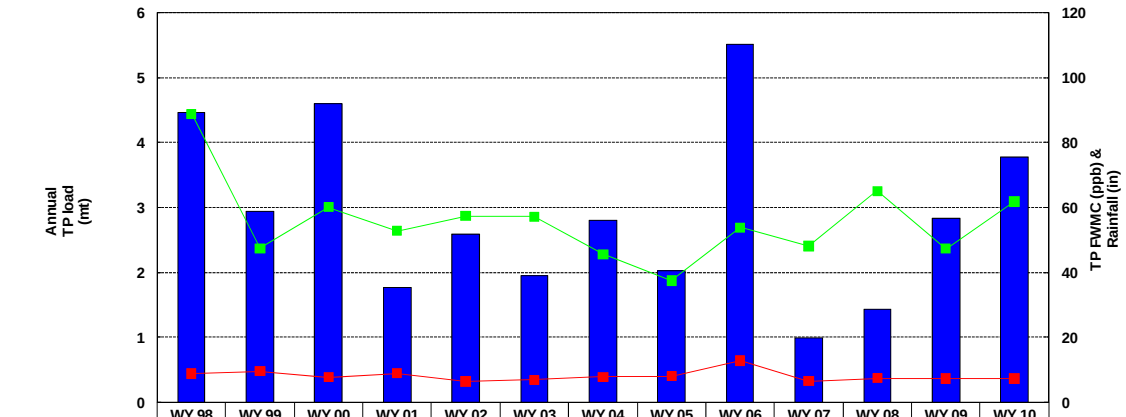
Figure 2b. L-28 Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998–WY2010.

C-111 Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0.16	0.40	0.38	0.59	0.65	0.49	0.37	0.33	0.10	0.13	0.07	0.11
Flow Vol. (kac-ft)	11.73	45.42	50.53	63.80	69.24	55.53	34.87	45.56	13.38	19.57	7.83	13.09
TP FWMC (ppb)	11	7	6	8	8	7	9	6	6	5	7	7
Rainfall (in)	13.2	8.3	6.5	6.7	6.6	1.9	5.1	3.1	1.4	3.8	1.8	3.4

Figure 3a. C-111 Basin daily rainfall (top) and the monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom).

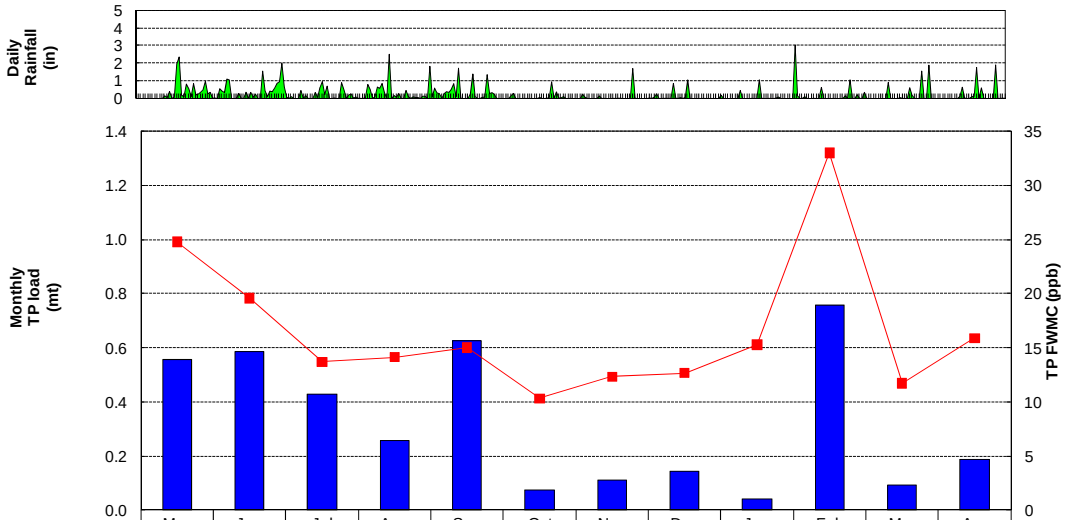


	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	4.46	2.94	4.60	1.76	2.58	1.94	2.79	2.02	5.51	0.99	1.42	2.83	3.77
Flow Vol. (kac-ft)	414.94	251.50	490.74	160.61	330.99	231.51	292.30	207.23	351.51	125.41	157.07	317.59	430.55
TP FWMC (ppb)	9	9	8	9	6	7	8	8	13	6	7	7	7
Rainfall (in)	88.8	47.4	60.1	52.8	57.3	57.1	45.5	37.4	53.8	48.1	65.0	47.3	61.9

Notes: WY1998–WY2000 represented by structures S-18C, S-175, and S-332.
WY2001–WY2009 represented by structures S-18C, S-174, and S-332D.
Structure S-174 was plugged in September 2007.

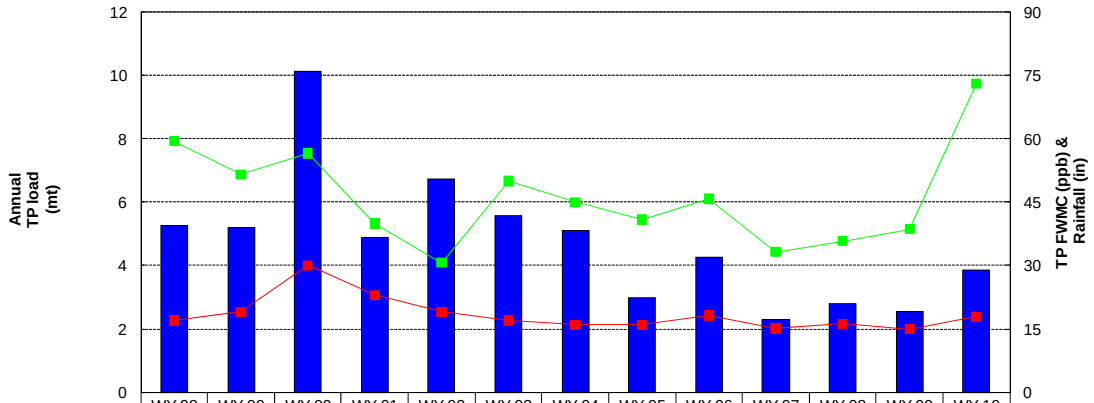
Figure 3b. C-111 Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998–WY2010.

C-11 West Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0.56	0.59	0.43	0.26	0.63	0.07	0.11	0.14	0.04	0.76	0.09	0.19
Flow Vol. (kac-ft)	18.21	24.32	25.35	14.70	33.79	5.76	7.32	9.22	2.17	18.60	6.40	9.50
TP FWMC (ppb)	25	20	14	14	15	10	12	13	15	33	12	16
Rainfall (in)	10.155	10.455	8.29	8.02	11.445	2.0435	2.195	2.42	1.805	5.385	5.555	5.365

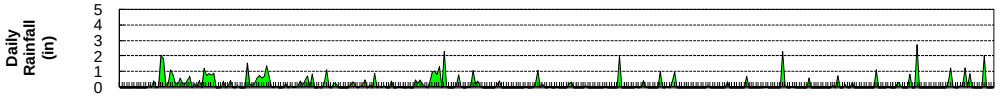
Figure 4a. C-11 West Basin daily rainfall (top) and the monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom).



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	5.25	5.19	10.13	4.88	6.72	5.58	5.12	2.97	4.26	2.31	2.80	2.56	3.86
Flow Vol. (kac-ft)	250.35	221.59	273.61	172.05	283.62	264.30	257.32	149.99	189.82	123.81	140.43	143.18	175.34
TP FWMC (ppb)	17	19	30	23	19	17	16	16	18	15	16	15	18
Rainfall (in)	59.5	51.6	56.6	39.9	30.7	50.0	45.0	40.9	45.8	33.3	35.8	38.6	73.1

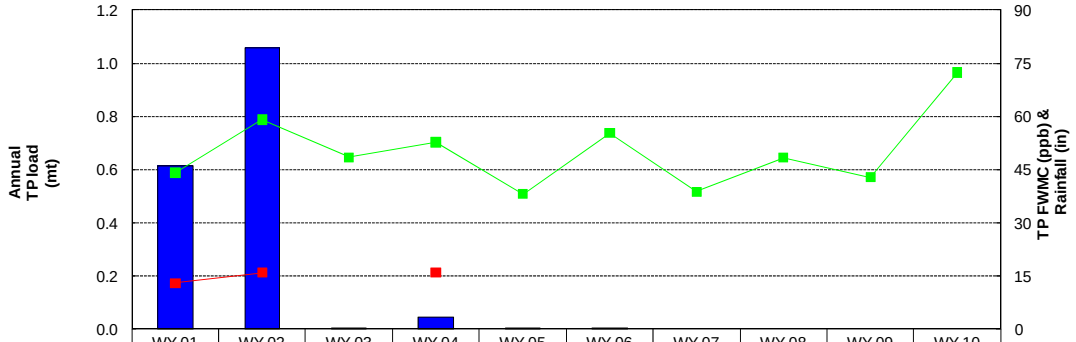
Figure 4b. C-11 West Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998–WY2010.

North New River Canal Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0	0	0	0	0	0	0	0	0	0	0	0
Flow Vol. (kac-ft)	0	0	0	0	0	0	0	0	0	0	0	0
TP FWMC (ppb)	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Rainfall (in)	10.2	12.0	8.0	3.5	12.0	2.5	2.9	3.2	1.4	4.5	5.8	6.4

Figure 5a. North New River Canal (NNRC) Basin daily rainfall (top) and monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom) (NF = no flow for period).

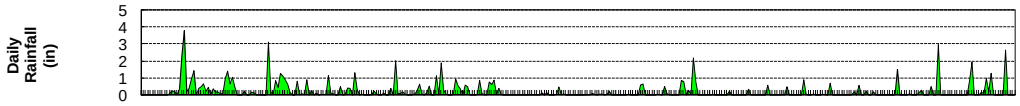


	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	0.62	1.06	0	0.05	0	0	0	0	0	0
Flow Vol. (kac-ft)	38.38	52.05	0	2.30	0	0	0	0	0	0
TP FWMC (ppb)	13	16	NF	16	NF	NF	NF	NF	NF	NF
Rainfall (in)	44.1	59.1	48.5	52.8	38.2	55.3	38.8	48.4	42.8	72.4

Note: G-123 flow and water quality data incomplete prior to WY2001.

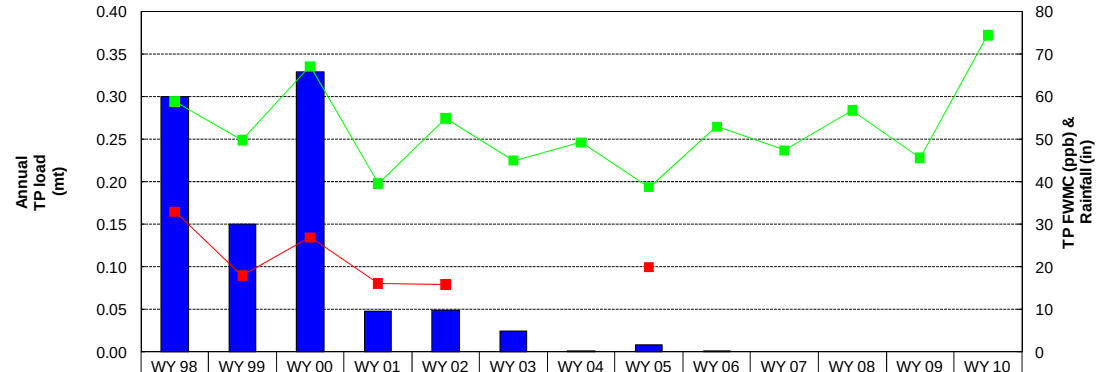
Figure 5b. NNRC Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2001–WY2010 (NF = no flow for period).

North Springs Improvement District Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0	0	0	0	0	0	0	0	0	0	0	0
Flow Vol. (kac-ft)	0	0	0	0	0	0	0	0	0	0	0	0
TP FWMC (ppb)	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Rainfall (in)	12.6	13.4	7.3	4.9	10.0	0.8	1.7	5.6	1.6	2.7	5.6	8.1

Figure 6a. North Springs Improvement District (NSID) Basin daily rainfall (top) and monthly TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY2010 (bottom) (NF = no flow for period).

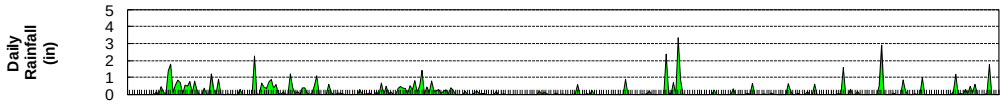


	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	0.30	0.15	0.33	0.05	0.05	0.03 *	0	0.01	0	0	0	0	0
Flow Vol. (kac-ft)	7.36	6.76	9.88	2.41	2.49	0.69	0	0.35	0	0	0	0	0
TP FWMC (ppb)	33	18	27	16	16	NDF	NF	20	NF	NF	NF	NF	NF
Rainfall (in)	58.8	49.8	67.1	39.6	54.9	45.0	49.2	38.7	53.0	47.4	56.7	45.6	74.4

* calculated with annual flow and arithmetic mean concentration

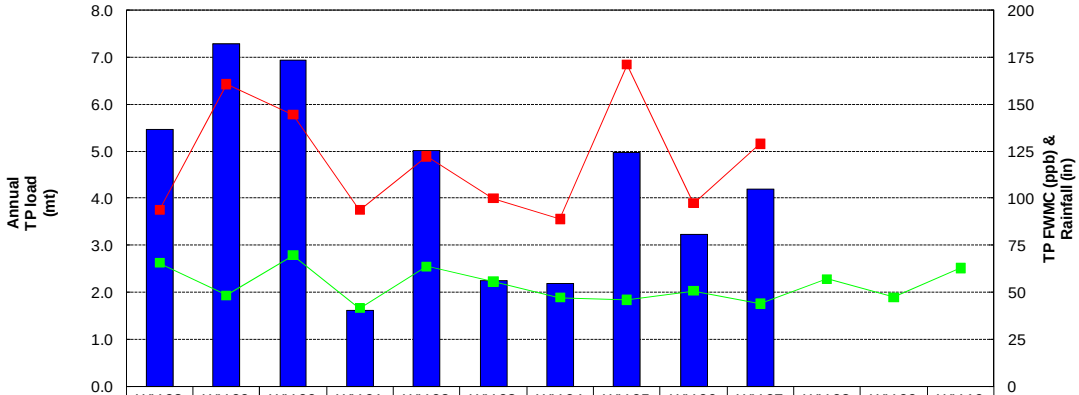
Figure 6b. NSID Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998–WY2010 (NF = no flow for period; NDF = no data with flow available).

Acme Improvement District Basin



	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TP Load (mt)	0	0	0	0	0	0	0	0	0	0	0	0
Flow Vol. (kac-ft)	0	0	0	0	0	0	0	0	0	0	0	0
TP FWMC (ppb)	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Rainfall (in)	9.3	8.7	6.7	6.0	5.5	0.8	1.9	7.8	1.5	3.7	5.9	4.9

Figure 7a. Acme Improvement District (Acme) Basin daily rainfall (top) and monthly TP load, FWM TP concentration, rainfall, and flow volume to EPA for WY2010 (bottom) (NF = no flow for period).



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	5.47	7.28	6.95	1.61	5.01	2.25	2.18	4.97	3.24	4.18	0	0	0
Flow Vol. (kac-ft)	47.29	36.73	39.01	13.95	33.19	18.28	19.89	23.56	26.93	26.32	0	0	0
TP FWMC (ppb)	94	161	144	94	122	100	89	171	97	129	NF	NF	NF
Rainfall (in)	65.6	48.3	69.7	41.6	63.7	55.6	47.1	45.9	50.8	43.9	57.0	47.3	62.9

Figure 7b. Acme Basin annual TP load, FWM TP concentration, rainfall, and flow volume to the EPA for WY1998-WY2010 (NF = no flow for period). Pump stations ACME1 and ACME2 stopped operation in December 2006.

UPSTREAM (SUB-BASIN) LEVEL WATER QUALITY SUMMARY

Water quality, particularly TP concentration, in Everglades non-ECP basins and the Acme Basin (an ECP Basin since all basin flows were directed to the C-51 West canal in December 2006) is monitored at the upstream sampling sites to identify high phosphorus areas within each basin. The non-ECP basins include North Springs Improvement District (NSID) Basin; C-11 West Basin consisting of South Broward Drainage District (SBDD), Central Broward Water Control District (CBWCD), and Indian Trace Development District (ITDD); North New River Canal (NNRC) Basin; Boynton Farms Basin; Feeder Canal Basin (West Feeder sites, PC-17A, G-108, and WWeir); and L-28 Basin (USSO and L-28U). This section summarizes the water quality data for grab and auto-sampler sampling sites and maps for each basin. **Tables 2** through **7** summarize the TP concentration and average TP concentration for each sampling site. **Figures 8**, **9**, **10**, **11**, **12a, 12b, 15, 16,** and **17** show the annual TP load, FWM TP concentration, and flow volume for upstream structures in the NSID, C-11 West (SBDD, CBWCD, and ITDD), NNRC (west and east), Boynton Farms, C-111, and Acme basins, respectively. **Figures 13a** through **14c** show the annual TP load, FWM TP concentration, and flow volume for upstream structures in the Feeder Canal and L-28 basins.

Table 2. NSID Basin upstream monitoring sites: summary of TP data (parts per billion or ppb).

North Springs Improvement District	NSIDEC02	NSIDNC01	NSIDNP02	NSIDNW03	NSIDNW05	NSIDWC06	NSIDWC07	NSIDEA01	NSIDEA03
06/26/2001			32	27	122	30	38		
07/25/2001			48	26	172	35	48		
09/13/2001	27	35	42	130	91	28	39		
09/27/2001			42						
09/28/2001	31	75	41	74	271	33	41		
10/22/2001		33	49	135	265	39			
11/06/2001	25	73	54	135	235	31	43		
03/08/2002			36						
08/11/2003		42				28	40		
08/27/2003		34	27			23	34		
09/26/2003		28	22			18	24		
07/21/2004	17	35	26			27	36	23	27
09/22/2004	24	16	18			35	25	24	24
10/22/2004	19	30	25			22	38	14	34
06/02/2005	22	33	37			32	39	28	23
06/22/2005	26	23	39			58	39	39	26
07/20/2005	16	15	20			16	18	19	17
08/09/2005	33	15	22			22	32	31	32
09/08/2005	22	22	24			23	29	14	22
10/07/2005	14	14	14			14	13	14	15
11/03/2005	26	28	39			31	52	22	70
06/02/2006	21	26	24			30	32	25	33
06/29/2006	15	41	28			26	26	50	22
07/25/2006	13	29	22			23	21	15	27
09/01/2006	9	17	11			10	14	22	15
06/05/2007	8	17	23			17	23	22	16
07/10/2007	3	11	20			3	9	3	15
08/04/2007	11	23	21			21	20	18	13
08/28/2007	8	16	16			1	22	15	17
09/25/2007	17	22	23			19	28	13	22
10/31/2007	10	19	15			14	20	8	14
04/07/2008	1	17	17			13	18	10	13
05/28/2009	35	52	62			51	50	43	64
06/24/2009	11	8	16			10	19	1	28
08/19/2009	1	7	1			11	1	1	11
09/02/2009	2	2	2			2	7	2	2
09/16/2009	7	8	16			10	23	4	22
09/29/2009	11	2	2			2	2	2	2

Table 2. Continued.

North Springs Improvement District	NSIDEC02	NSIDNC01	NSIDNP02	NSIDNW03	NSIDNW05	NSIDWC06	NSIDWC07	NSIDEA01	NSIDEA03
11/25/2009	16					24	34	15	5
11/27/2009		6	2						
12/21/2009	14	31	18			34	24	12	55
Average	**16**	**25**	**26**	**88**	**193**	**23**	**28**	**18**	**24**
N	*32*	*36*	*39*	*6*	*6*	*38*	*37*	*29*	*29*
Water Years(May 1 to April 30) *N: number of sample for WY*									
WY2002	**28**	**54**	**43**	**88**	**193**	**33**	**42**		
N	*3*	*4*	*8*	*6*	*6*	*6*	*5*		
WY2004		**35**	**25**			**23**	**33**		
N		*3*	*2*			*3*	*3*		
WY2005	**20**	**27**	**23**			**28**	**33**	**20**	**28**
N	*3*	*3*	*3*			*3*	*3*	*3*	*3*
WY2006	**23**	**21**	**28**			**28**	**32**	**24**	**29**
N	*7*	*7*	*7*			*7*	*7*	*7*	*7*
WY2007	**15**	**28**	**21**			**22**	**23**	**28**	**24**
N	*4*	*4*	*4*			*4*	*4*	*4*	*4*
WY2008	**8**	**18**	**19**			**13**	**20**	**13**	**16**
N	*7*	*7*	*7*			*7*	*7*	*7*	*7*
WY2010	**12**	**15**	**15**			**18**	**20**	**10**	**24**
N	*8*	*8*	*8*			*8*	*8*	*8*	*8*

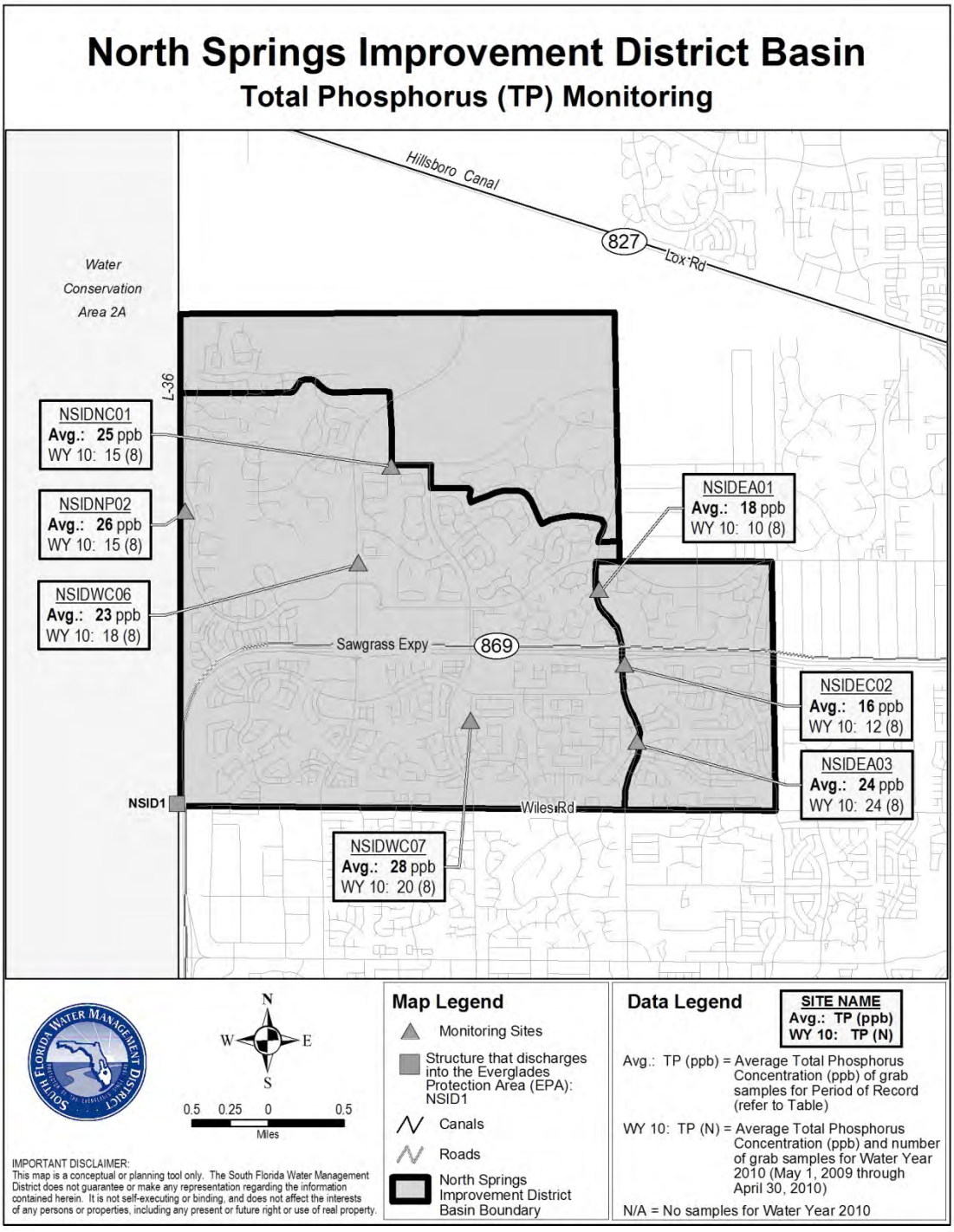


Figure 8. NSID Basin upstream monitoring sites: summary of TP data (ppb).

Table 3a. South Broward Drainage District (SBDD) upstream monitoring sites: summary of TP data (ppb).

South Broward Drainage District	C110.0TS1	C1100.8TS	C1101.0TS	C1101.3TS	C1101.7TS	C1102.0TS	C1102.1TS	C1102.8TS	C1103.3TS	C1103.5TS	C1104.3TS	C1104.6TS	C1104.9TS	C111.3TS1	C112.0TS1	C112.0TS2	C112.8TS1	C112.8TS2	C113.3TS1	C114.3TS1	C114.9TS1
07/14/2000		7		15		19		108	119			27	40								
07/28/2000								22			24						13				
08/03/2000	13	8		21		17		29	121		20				20		12				
03/20/2001						34		90													
05/25/2001		7	648	46		50	630	139	138		111	23	101								
06/26/2001		8		15		33		35	190			19	50								
07/11/2001	22	8	170	17		27	200	45	220	51	34	23	73		14		11			13	
08/02/2001	18		280						160		28				20		12				
09/10/2001															31						
10/01/2001									130												
10/22/2001	20	2	660	13		11	300	33	140		32	13	26		2		2			13	
11/05/2001	14	6	180	8		10		13	54		39	13	18		10		6			10	
02/11/2002	2	5		10		10		19	14			9	16		10		10			13	
05/20/2002	27	3		25		16		22	24	20					18		11			21	
06/14/2002	20	2	310	290		2		51	87	230					12		6			26	
07/18/2002				13		8		30	100			23	51	8		13		19	170		41
08/23/2002				11		12	270	33	110			16	33	15		16		10	320		44
09/12/2002				16		15		22	71		17	16	37	15		13		38	250		23
12/09/2002			540	17		26		23	250		15	15	17	20		14		56			39
03/17/2003			410	17		21		84	110		27	23	34	14				49	300		23
05/14/2003			120					180	92									95	370		56
05/28/2003			630	33		88	540	210	300	140	120	30	140	26		45		65	120		210
08/21/2003			440	22		17		110	190		25	18	45	25		14		16	210		130
09/26/2003			110	9		4		110	32	26	24	5	17	10		4		42	340		20
11/03/2003			1100	16		12		40	45		21	14	32	22		11		25	590		59
07/20/2004			170	28		26		68	41		69	36		20		21		250	470		

Table 3a. Continued.

South Broward Drainage District	C110.0TS1	C1100.8TS	C1101.0TS	C1101.3TS	C1101.7TS	C1102.0TS	C1102.1TS	C1102.8TS	C1103.3TS	C1103.5TS	C1104.3TS	C1104.6TS	C1104.9TS	C111.3TS1	C112.0TS1	C112.0TS2	C112.8TS1	C112.8TS2	C113.3TS1	C114.3TS1	C114.9TS1
08/03/2004			480	29		20		140	190		34	20		25		15		34	390		
08/23/2004			260	22		14		57	120		42	29		16		13		34	130		
09/27/2004			140	16		10		46	65		21	12		15		10		11	72		
03/04/2005			140	12		15		14	14		12			12		9		56	73		16
03/18/2005			410	29		7		74	98		24			5		2		90	59		
04/08/2005			280	11		17		25	21		34			10		9		99	300		
05/04/2005			330	21		34		42	14		33			15		15		92	40		
06/01/2005			150	16		15		23	14		16			12		16		60	71		
06/17/2005			64	34		20		41	54		34	27		16		15		83	350		39
08/08/2005			130	14		11		33	100		12	14		15		13		55	130		35
10/03/2005			220	22		14		63	250		27	18		14		16		43	280		64
07/12/2006			210	54		20	1300	180	150		43	25	120	22		22		45	590		100
08/17/2006			54	12		12	19	21	25		12			15		13		18	17		27
06/07/2007						17		218	201		72			17		18		36	101		86
07/17/2007						3	59	3	12		3			15		3		3	34		58
09/10/2007						13	45	65	20		17	16				11		23	497		
10/30/2007						7	197	25	39		3	8				9		91	27		
07/28/2008						7	231	50	44		63	15		10		29		41	285		
09/02/2008					3	3	245	14	51		6	3				3		3	43		3
03/20/2009					52	1	1	1			1	1				51			79		
07/02/2009					47	1	492	11	69		20	1				30		15	132		41
08/17/2009					11	1	581	26	40		1	32				1		1	218		1
Average	**17**	**6**	**320**	**28**	**28**	**17**	**341**	**60**	**98**	**93**	**31**	**18**	**50**	**16**	**15**	**15**	**9**	**50**	**221**	**16**	**53**
N	*8*	*10*	*27*	*33*	*4*	*43*	*15*	*45*	*44*	*5*	*37*	*31*	*17*	*26*	*9*	*31*	*9*	*32*	*32*	*6*	*21*

Table 3a. Continued.

South Broward Drainage District	C110.0TS1	C1100.8TS	C1101.0TS	C1101.3TS	C1101.7TS	C1102.0TS	C1102.1TS	C1102.8TS	C1103.3TS	C1103.5TS	C1104.3TS	C1104.6TS	C1104.9TS	C111.3TS1	C112.0TS1	C112.0TS2	C112.8TS1	C112.8TS2	C113.3TS1	C114.3TS1	C114.9TS1
Water Years(May 1 to April 30) *N: number of sample for WY*																					
WY2001	**13**	**8**		**18**		**23**		**62**	**120**		**22**	**27**	**40**		**20**		**13**				
N	*1*	*2*		*2*		*3*		*4*	*2*		*2*	*1*	*1*		*1*		*2*				
WY2002	**15**	**6**	**388**	**18**		**23**	**377**	**47**	**131**	**51**	**49**	**17**	**47**		**14**		**8**			**12**	
N	*5*	*6*	*5*	*6*		*6*	*3*	*6*	*8*	*1*	*5*	*6*	*6*		*6*		*5*			*4*	
WY2003	**24**	**3**	**420**	**56**		**14**	**270**	**38**	**107**	**125**	**20**	**19**	**34**	**14**	**15**	**14**	**9**	**34**	**260**	**24**	**34**
N	*2*	*2*	*3*	*7*		*7*	*1*	*7*	*7*	*2*	*3*	*5*	*5*	*5*	*2*	*4*	*2*	*5*	*4*	*2*	*5*
WY2004			**480**	**20**		**30**	**540**	**130**	**132**	**83**	**48**	**17**	**59**	**21**		**19**		**49**	**326**		**95**
N			*5*	*4*		*4*	*1*	*5*	*5*	*2*	*4*	*4*	*4*	*4*		*4*		*5*	*5*		*5*
WY2005			**269**	**21**		**16**		**61**	**78**		**34**	**24**		**15**		**11**		**82**	**213**		**16**
N			*7*	*7*		*7*		*7*	*7*		*7*	*4*		*7*		*7*		*7*	*7*		*1*
WY2006			**179**	**21**		**19**		**40**	**86**		**24**	**20**		**14**		**15**		**67**	**174**		**46**
N			*5*	*5*		*5*		*5*	*5*		*5*	*3*		*5*		*5*		*5*	*5*		*3*
WY2007			**132**	**33**		**16**	**660**	**101**	**88**		**28**	**25**	**120**	**19**		**18**		**32**	**304**		**64**
N			*2*	*2*		*2*	*2*	*2*	*2*		*2*	*1*	*1*	*2*		*2*		*2*	*2*		*2*
WY2008						**10**	**100**	**78**	**68**		**24**	**12**		**16**		**10**		**38**	**165**		**72**
N						*4*	*3*	*4*	*4*		*4*	*2*		*2*		*4*		*4*	*4*		*2*
WY2009					**28**	**4**	**159**	**22**	**48**		**23**	**6**		**10**		**28**		**22**	**136**		**3**
N					*2*	*3*	*3*	*3*	*2*		*3*	*3*		*1*		*3*		*2*	*3*		*1*
WY2010					**29**	**1**	**537**	**19**	**55**		**11**	**17**				**16**		**8**	**175**		**21**
N					*2*	*2*	*2*	*2*	*2*		*2*	*2*				*2*		*2*	*2*		*2*

Table 3b. Central Broward Water Control District (CBWCD) upstream monitoring sites: summary of TP data (ppb).

Central Broward Water Control District	C1105.40TN	C1106.30TN	C1106.3TN1	C1107.50TN	C1107.50TS	C1108.50TN	C1108.50TS	C1109.00TN	C1109.00TS	C1109.0TN1	C1109.30TS	C1109.60TN	C1110.10TN	C1110.60TS
03/21/2000		46		29							15		24	23
03/28/2000	18				25	24	29	23	26			16		
07/27/2000	35	94		113		48		59				28	25	42
07/28/2000					17		28		195		16			
10/04/2000	59	151		94		164		312	94					172
03/20/2001		99		38									11	
05/04/2001	16	78		92	12	35	16	66	15			98	16	17
05/24/2001		101						89				27	23	
05/25/2001	16			35	12	54	18		28		14			18
06/29/2001	12	84		18	21	41	11		22		8	17	19	14
07/11/2001	24	93		30	14	57	28		59		17	21	14	17
08/03/2001	22	83		61	17	81	120	22	23		20	39	42	17
09/07/2001	5	16		9	2		11	11	7		6	2	2	2
10/23/2001	42	75		41	15	54	9	120	8		87	53	29	37
05/20/2002	11	40		21	4	27	20	19	23		13	4	8	22
07/19/2002	2	44		13	6	6	15	16	6		5	13	43	23
08/27/2002	19	13		32	14		22	22	19		12	20	19	9
09/13/2002	18	28		19	17		24	24	19		12	22	19	28
12/10/2002	13	52		13	8	23	13	18	9		44	16	10	13
03/28/2003	9	37	13	14		14	14	18	12	28		16	13	11
05/23/2003	15	69	50	34		27	18	27	25	56		29	11	15
08/21/2003	16	79	23	30		52	18	62		65		43	22	21
09/30/2003	10	71	16	15		23	7	30	65	30		17	25	31
11/07/2003	8	85	19	20		56	14	18				24	13	43
05/04/2004		90	29	20		33	24	26	29	64		20	24	
07/20/2004	29	23	120	57		42	50	47	63	32		42	34	30

Table 3b. Continued.

Central Broward Water Control District	C1105.40TN	C1106.30TN	C1106.3TN1	C1107.50TN	C1107.50TS	C1108.50TN	C1108.50TS	C1109.00TN	C1109.00TS	C1109.0TN1	C1109.30TS	C1109.60TN	C1110.10TN	C1110.60TS
05/05/2005	31	68	27	12		14	13	22	29	42		15	14	14
06/17/2005	13	20	36	16		21	16	23	22	24		17	14	44
08/09/2005	13	100	42	23		28	20	87	36	72		28	40	20
09/29/2006	22	56	40	29		16	19	30	17	44		36	35	18
02/14/2008	21		59	57		25		28	7	73		13	1	23
05/29/2009	31	79	34	49	44			139	66	187		101	43	79
06/29/2009		24	1	21	17		21	41	31	80		43	18	11
08/21/2009	4		45	16	13		15	16	14	80		16	14	11
Average	**19**	**65**	**37**	**35**	**15**	**40**	**23**	**51**	**35**	**63**	**21**	**29**	**21**	**28**
N	*28*	*29*	*15*	*31*	*17*	*24*	*27*	*28*	*28*	*14*	*13*	*29*	*30*	*29*
Water Years(May 1 to April 30) *N: number of sample for WY*														
WY2000	**18**	**46**		**29**	**25**	**24**	**29**	**23**	**26**		**15**	**16**	**24**	**23**
N	*1*	*1*		*1*	*1*	*1*	*1*	*1*	*1*		*1*	*1*	*1*	*1*
WY2001	**47**	**115**		**82**	**17**	**106**	**28**	**186**	**145**		**16**	**28**	**18**	**107**
N	*2*	*3*		*3*	*1*	*2*	*1*	*2*	*2*		*1*	*1*	*2*	*2*
WY2002	**20**	**76**		**41**	**13**	**54**	**30**	**62**	**23**		**25**	**37**	**21**	**17**
N	*7*	*7*		*7*	*7*	*6*	*7*	*5*	*7*		*6*	*7*	*7*	*7*
WY2003	**12**	**36**	**13**	**19**	**10**	**17**	**18**	**20**	**15**	**28**	**17**	**15**	**19**	**18**
N	*6*	*6*	*1*	*6*	*5*	*4*	*6*	*6*	*6*	*1*	*5*	*6*	*6*	*6*
WY2004	**12**	**76**	**27**	**25**		**40**	**14**	**34**	**45**	**50**		**28**	**18**	**28**
N	*4*	*4*	*4*	*4*		*4*	*4*	*4*	*2*	*3*		*4*	*4*	*4*
WY2005	**29**	**57**	**75**	**39**		**38**	**37**	**37**	**46**	**48**		**31**	**29**	**30**
N	*1*	*2*	*2*	*2*		*2*	*2*	*2*	*2*	*2*		*2*	*2*	*1*

Table 3b. Continued.

Central Broward Water Control District	C1105.40TN	C1106.30TN	C1106.3TN1	C1107.50TN	C1107.50TS	C1108.50TN	C1108.50TS	C1109.00TN	C1109.00TS	C1109.0TN1	C1109.30TS	C1109.60TN	C1110.10TN	C1110.60TS
WY2006	**19**	**63**	**35**	**17**		**21**	**16**	**44**	**29**	**46**		**20**	**23**	**26**
N	*3*	*3*	*3*	*3*		*3*	*3*	*3*	*3*	*3*		*3*	*3*	*3*
WY2007	**22**	**56**	**40**	**29**		**16**	**19**	**30**	**17**	**44**		**36**	**35**	**18**
N	*1*	*1*	*1*	*1*		*1*	*1*	*1*	*1*	*1*		*1*	*1*	*1*
WY2008	**21**		**59**	**57**		**25**		**28**	**7**	**73**		**13**	**1**	**23**
N	*1*		*1*	*1*		*1*		*1*	*1*	*1*		*1*	*1*	*1*
WY2010	**18**	**52**	**27**	**29**	**25**		**18**	**65**	**37**	**116**		**53**	**25**	**34**
N	*2*	*2*	*3*	*3*	*3*		*2*	*3*	*3*	*3*		*3*	*3*	*3*

Table 3c. Indian Trace Development District (ITDD) upstream monitoring sites: summary of TP data (ppb).

Indian Trace Drainage District	C1101.0TN	C1101.5TN	C1102.1TN	C1102.7TN	C1104.3TN	C111.7TN1
10/04/2000			53	29	23	
05/24/2001				21	21	
08/02/2001	25	9	21	26	15	
09/14/2001	20	12	16	18	13	11
10/23/2001	14	8	19	21	14	9
02/12/2002	7	7	8	14	11	7
05/20/2002	11	12	14	21	18	11
08/05/2002	6	8	57	31	14	9
09/12/2002			28	19	17	
10/16/2002			35	21		
11/18/2002	8	9	31	41	16	12
03/17/2003			15	13	18	
03/19/2003	7	7	16	18	14	11
04/28/2003			21	18	12	
05/23/2003	9	7	27	25	16	10
06/10/2003			58	39	15	
08/14/2003	6	7	23	19	12	11
08/21/2003	8	7	16	14	9	15
09/26/2003			6	14	5	
09/29/2003	37	16	36	26	15	8
11/06/2003	30	9	21	15	14	9
02/02/2004	13	8	20	13	14	11
04/13/2004			15		21	
04/14/2004	14	12	21	14	13	9
07/20/2004			18	13	27	
08/02/2004	12	7	15	50	16	9
06/17/2005			27	41	9	
07/13/2006			32	23	14	
09/08/2006			15	20	15	
05/22/2009				19	19	
07/02/2009				40	19	
08/14/2009				13	5	
10/23/2009				25	5	
Average	**14**	**9**	**24**	**23**	**15**	**10**
N	*16*	*16*	*28*	*32*	*32*	*15*

Table 3c. Continued.

Indian Trace Drainage District	C1101.0TN	C1101.5TN	C1102.1TN	C1102.7TN	C1104.3TN	C111.7TN1
Water Years(May 1 to April 30) *N: number of sample for WY*						
WY2001			**53**	**29**	**23**	
N			*1*	*1*	*1*	
WY2002	**17**	**9**	**16**	**20**	**15**	**9**
N	*4*	*4*	*4*	*5*	*5*	*3*
WY2003	**8**	**9**	**27**	**23**	**16**	**11**
N	*4*	*4*	*8*	*8*	*7*	*4*
WY2004	**17**	**9**	**24**	**20**	**13**	**10**
N	*7*	*7*	*10*	*9*	*10*	*7*
WY2005	**12**	**7**	**17**	**32**	**22**	**9**
N	*1*	*1*	*2*	*2*	*2*	*1*
WY2006			**27**	**41**	**9**	
N			*1*	*1*	*1*	
WY2007			**24**	**22**	**15**	
N			*2*	*2*	*2*	
WY2010				**24**	**12**	
N				*4*	*4*	

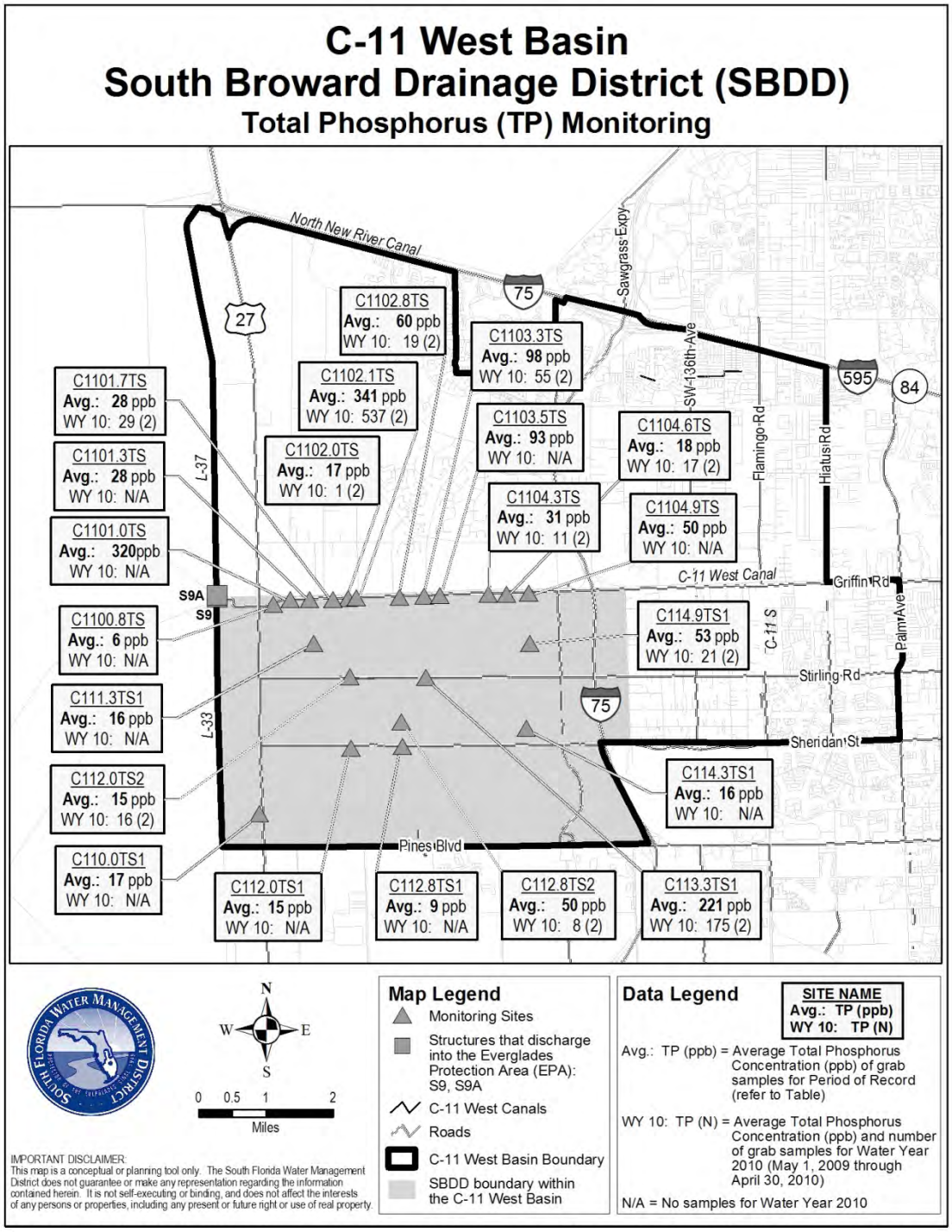


Figure 9. SBDD upstream monitoring sites: summary of TP data (ppb).

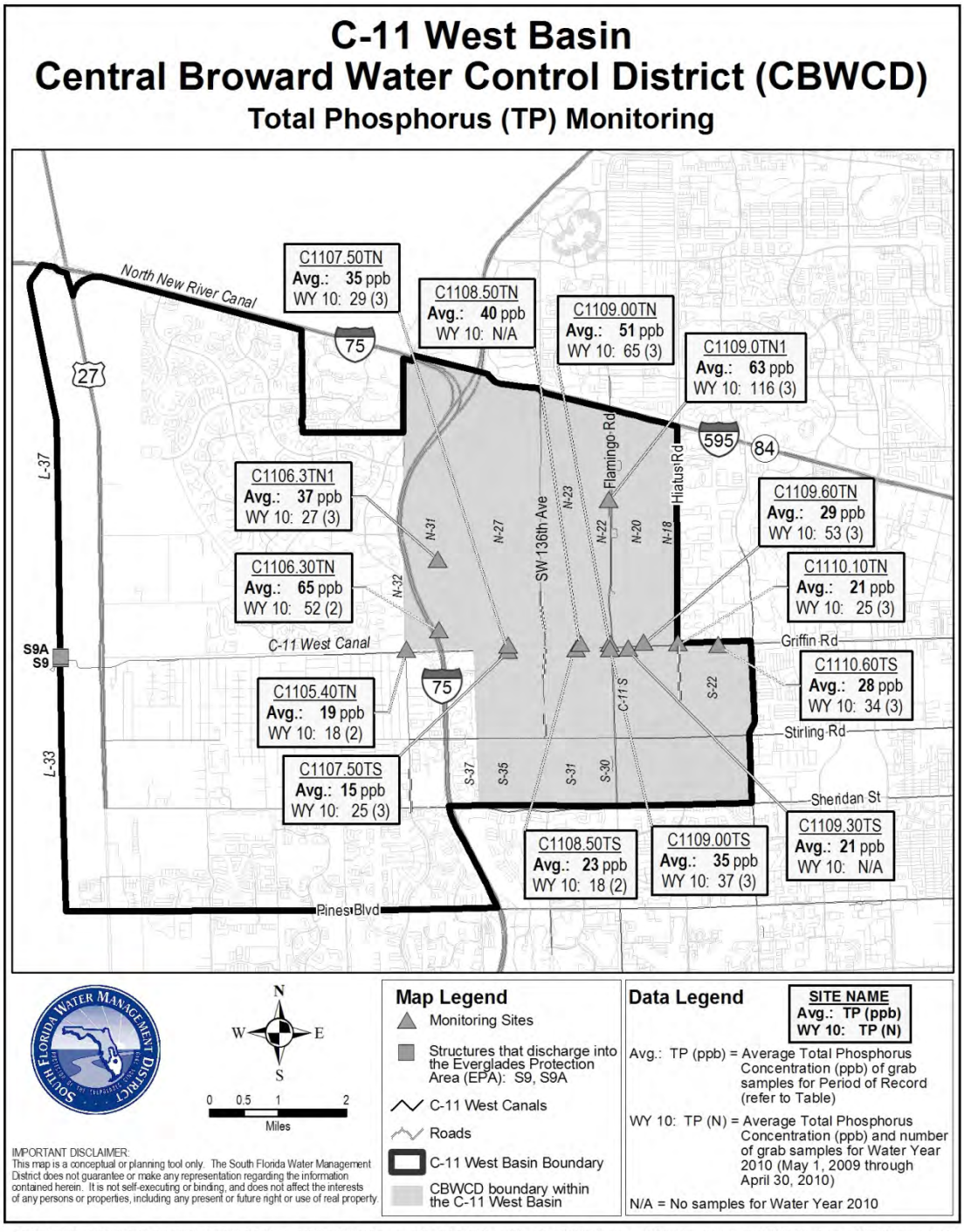


Figure 10. CBWCD upstream monitoring sites: summary of TP data (ppb).

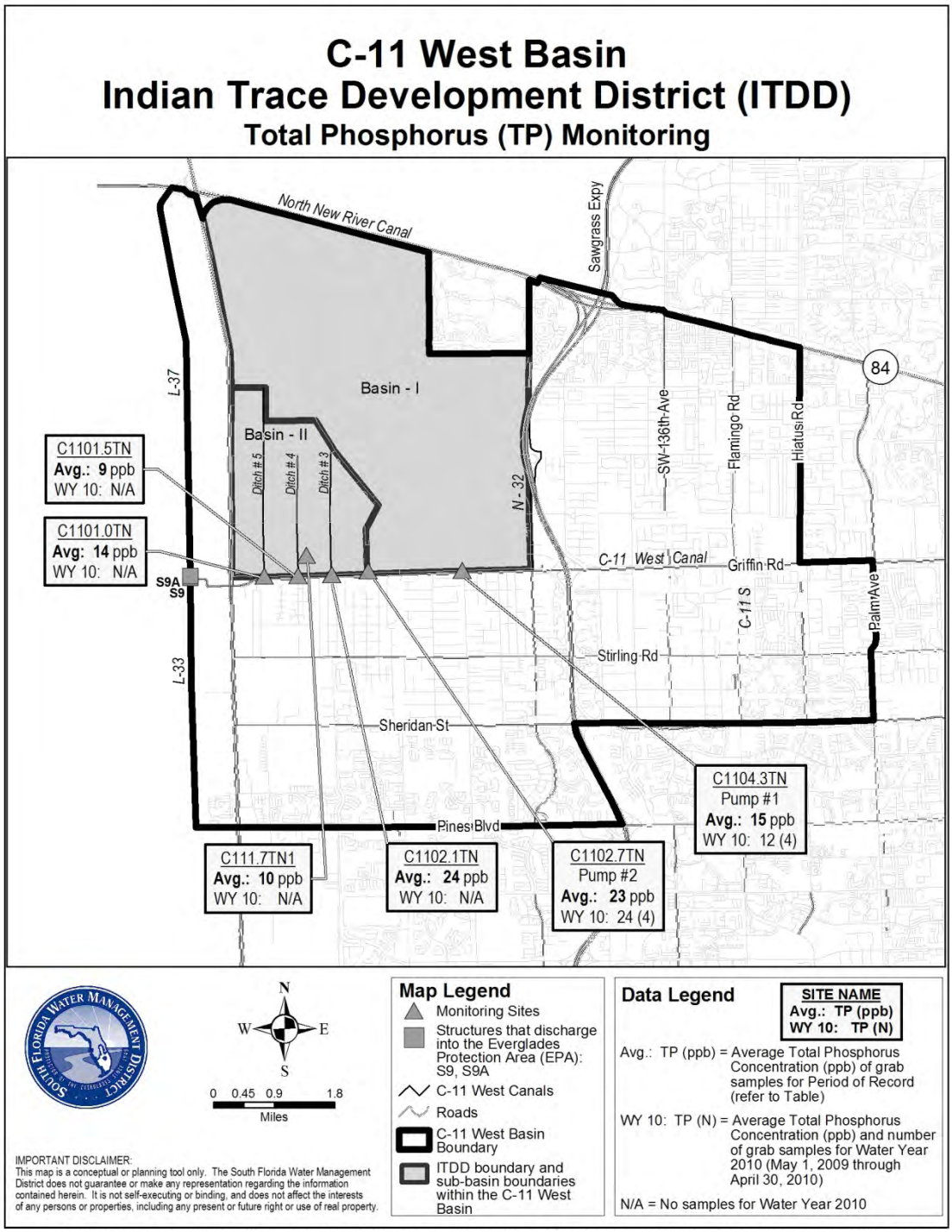


Figure 11. ITDD upstream monitoring sites: summary of TP data (ppb).

Table 4. NNRC Basin upstream monitoring sites: summary of TP data (ppb).

North New River Canal	NNRCPLA1	NNRCSUN1	NNRLMCC1	NNROPLA2	NNROPLA3	NNROPLF1	NNROUTF2	NNROUTF4	NNRPACR1	NNRPACR2	NNRPACR3	NNRPACR4	NNRPACR5	NNRPACR6	NNRPACRA	NNRPARK1	NNRWLAU1	NNRWLAU2
05/24/2001		103	75			18									30	15		
07/24/2001	130	27	43			34									18	14		
08/02/2001	25			59	48				62						25		24	54
09/13/2001		27	47	58	50	66		29	76						45	10	18	64
10/22/2001		40					74	59							31	13	24	81
03/08/2002		19				18	17								45	16		
06/24/2002		32	100	80	43	52		38								16		
06/25/2002				51	93	32												
07/02/2002									64	28		46	25	17				
08/21/2002	17					22	15		34						36	7		
09/04/2002									35	24	22	21	28	40				
09/12/2002	20	23						23							23	6	23	59
10/16/2002																		40
12/10/2002																	19	64
02/20/2003									66	18		15	13	220				
03/17/2003		29					79	34							37		24	32
04/28/2003																	17	36
05/23/2003																	27	76
05/28/2003	28	38	94	109	43	35	82	48	160						82		31	77
06/17/2003																	17	19
08/21/2003	26	24				34									34	9	17	7
09/26/2003																	5	16
11/06/2003																	27	8
02/02/2004	21	21	116			28	29	37								21	25	
04/14/2004	17	21				14		22								18		
07/20/2004																	25	60

Table 4. Continued.

North New River Canal	NNRCPLA1	NNRCSUN1	NNRLMCC1	NNROPLA2	NNROPLA3	NNROPLF1	NNROUTF2	NNROUTF4	NNRPACR1	NNRPACR2	NNRPACR3	NNRPACR4	NNRPACR5	NNRPACR6	NNRPACRA	NNRPARK1	NNRWLAU1	NNRWLAU2
08/03/2004		32	137	45				48	153						78	13	27	69
04/08/2005									17	8				24				
05/05/2005									110	22	29	46	98	29				
06/10/2005	30	22	33				32	73							35			
06/17/2005																	12	31
06/24/2005									72	36	39	24	48	79				
08/26/2005	32	26	25				20	62							76			
09/21/2005	35	24	41				21	33							38			
10/04/2005									23	12	21	20	22	44				
10/06/2005	29	20	34				26	44							20			
07/13/2006																	26	68
09/06/2006	15	18	32				25	25							27			
09/08/2006																	35	43
06/05/2007	17	43	24				19	17							15			
09/27/2007	19	18	34				26	15							38			
02/14/2008	18	23	36				20	21							57			
Average	**30**	**30**	**58**	**67**	**55**	**32**	**35**	**37**	**73**	**21**	**28**	**29**	**39**	**65**	**40**	**13**	**22**	**48**
N	*16*	*21*	*15*	*6*	*5*	*11*	*14*	*17*	*12*	*7*	*4*	*6*	*6*	*7*	*20*	*12*	*19*	*19*

Table 4. Continued.

North New River Canal	NNRCPLA1	NNRCSUN1	NNRLMCC1	NNROPLA2	NNROPLA3	NNROPLF1	NNROUTF2	NNROUTF4	NNRPACR1	NNRPACR2	NNRPACR3	NNRPACR4	NNRPACR5	NNRPACR6	NNRPACRA	NNRPARK1	NNRWLAU1	NNRWLAU2
Water Years(May 1 to April 30) *N: number of sample for WY*																		
WY2002	**78**	**43**	**55**	**59**	**49**	**34**	**46**	**44**	**69**						**32**	**14**	**22**	**66**
N	*2*	*5*	*3*	*2*	*2*	*4*	*2*	*2*	*2*						*6*	*5*	*3*	*3*
WY2003	**19**	**28**	**100**	**66**	**68**	**35**	**47**	**32**	**50**	**23**	**22**	**27**	**22**	**92**	**32**	**10**	**21**	**46**
N	*2*	*3*	*1*	*2*	*2*	*3*	*2*	*3*	*4*	*3*	*1*	*3*	*3*	*3*	*3*	*3*	*4*	*5*
WY2004	**23**	**26**	**105**	**109**	**43**	**28**	**56**	**36**	**160**						**58**	**16**	**21**	**34**
N	*4*	*4*	*2*	*1*	*1*	*4*	*2*	*3*	*1*						*2*	*3*	*7*	*6*
WY2005		**32**	**137**	**45**				**48**	**85**	**8**				**24**	**78**	**13**	**26**	**65**
N		*1*	*1*	*1*				*1*	*2*	*1*				*1*	*1*	*1*	*2*	*2*
WY2006	**32**	**23**	**33**				**25**	**53**	**68**	**23**	**30**	**30**	**56**	**51**	**42**		**12**	**31**
N	*4*	*4*	*4*				*4*	*4*	*3*	*3*	*3*	*3*	*3*	*3*	*4*		*1*	*1*
WY2007	**15**	**18**	**32**				**25**	**25**							**27**		**31**	**56**
N	*1*	*1*	*1*				*1*	*1*							*1*		*2*	*2*
WY2008	**18**	**28**	**31**				**22**	**18**							**37**			
N	*3*	*3*	*3*				*3*	*3*							*3*			

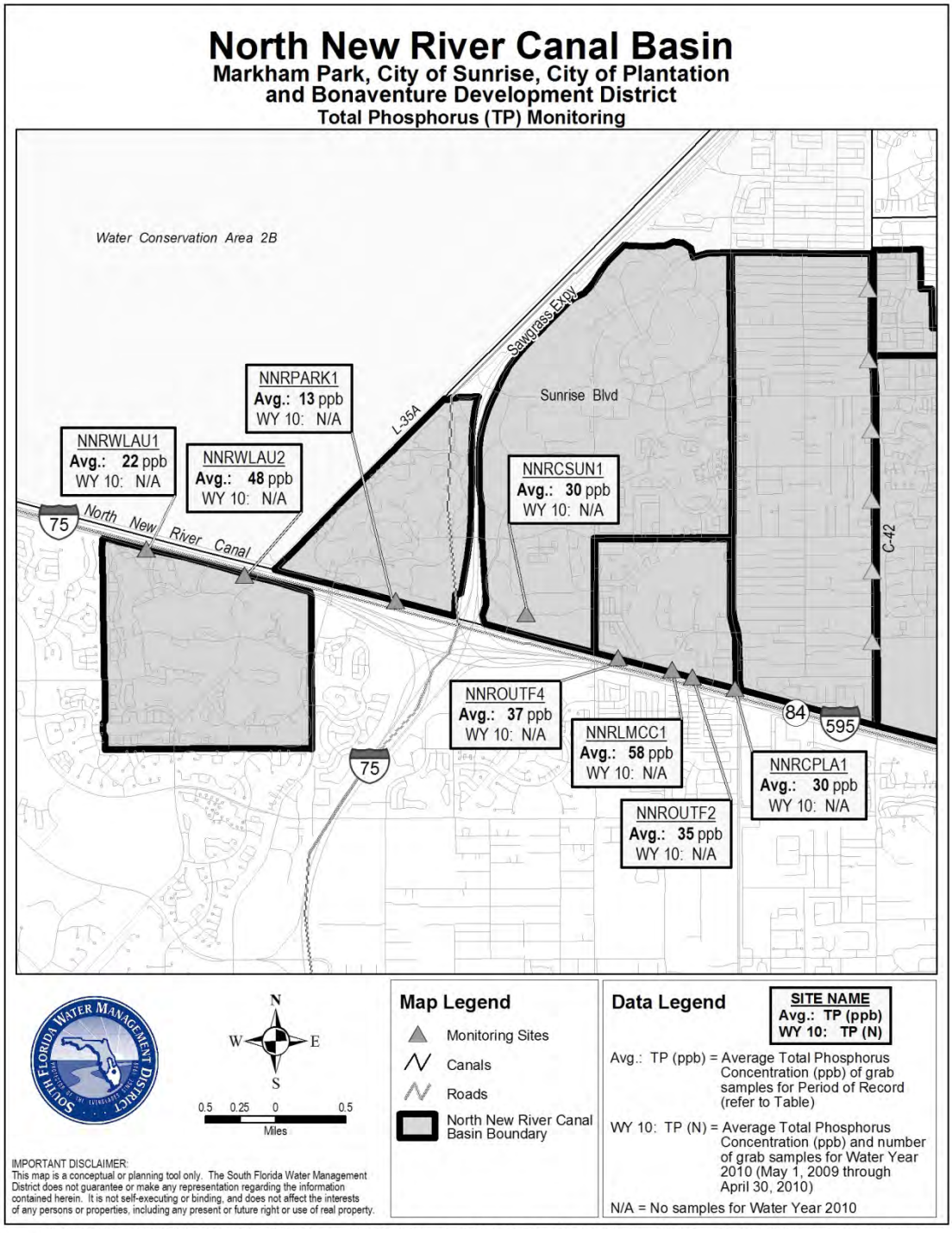


Figure 12a. NNRC Basin (west) upstream monitoring sites: summary of TP data (ppb).

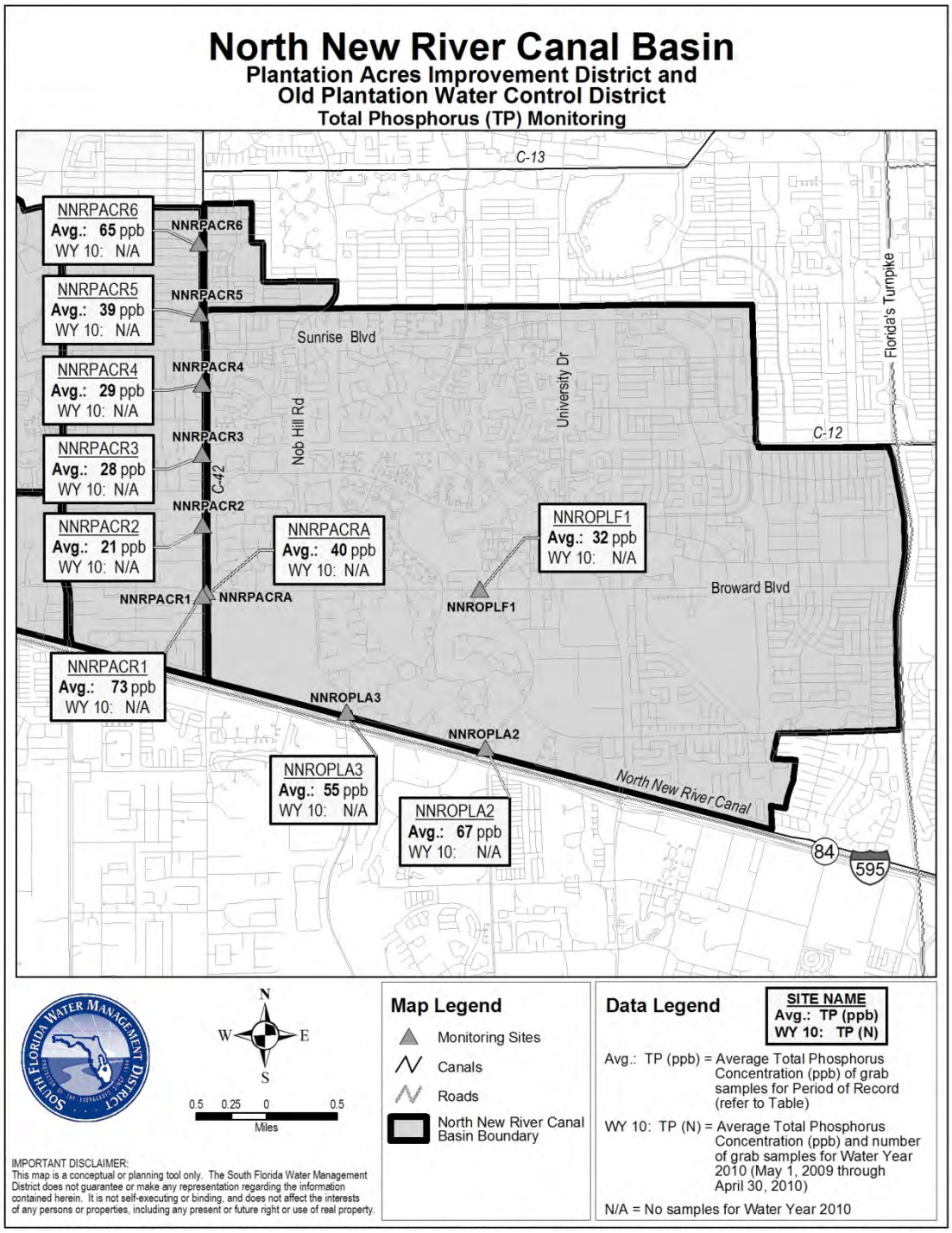


Figure 12b. NNRC Basin (east) upstream monitoring sites: summary of TP data (ppb).

Table 5. Feeder Canal Basin upstream monitoring sites: summary of TP data (ppb). Note: Synoptic survey data available in the 2006 SFER – Volume I, Appendix 3-2f.

West Feeder Canal	LC01.7TN	LC02.9TN	LC02.9TW	LC02.9TW01	LC03.0TN	LC03.0TN01	LC03.0TN03	WC01.11TN
08/13/2003		105					115	
09/03/2003		34					262	
09/18/2003		23		17			367	
10/02/2003				21			275	
10/23/2003				25				
09/29/2005	41		34	37	65	99		25
10/05/2005				38		188		
10/12/2005				33		293		
10/19/2005	74		28	27	169	167		
11/09/2005			41	33	181	205		
04/05/2006	39		293	40	27	47		
04/12/2006	23			51		40		21
04/19/2006	27			111	25	66		23
04/26/2006	41			91	32	102		24
05/03/2006	31			94	22	39		25
05/10/2006	34				31	72		29
05/17/2006	29				44	139		30
05/24/2006	42				45	112		28
05/31/2006	36				46	62		24
06/07/2006	40				44	66		27
06/14/2006	40				44	73		21
06/21/2006	36				51	70		20
06/28/2006	32				41	38		24
07/05/2006	22			168	43	43		23
07/12/2006	31		45	124	45	31		84
07/19/2006	53		75	60	35	37		19
07/26/2006			41	58		44		59
08/02/2006	28		28			32		22
08/09/2006	24		22			26		19
08/16/2006			31			21		
08/23/2006			245	56	124	267		21
09/06/2006			197	61	481	551		34
09/13/2006			103	51	200	238		69
09/20/2006			61	39	141	173		42
09/27/2006			55	38	193			29
10/04/2006			32	40	110	116		25
10/25/2006	61		54	40	80	457		28

Table 5. Continued.

West Feeder Canal	LC01.7TN	LC02.9TN	LC02.9TW	LC02.9TW01	LC03.0TN	LC03.0TN01	LC03.0TN03	WC01.11TN
04/04/2007	47				114	82		
04/11/2007	47				74	83		22
04/18/2007	44				35	42		19
04/25/2007	49				56	71		20
05/02/2007	51				45			22
05/09/2007	48				48	61		26
05/16/2007	53				57	143		31
05/23/2007	55				59	73		
05/30/2007	46				47	81		37
06/06/2007	41				142	108		39
06/13/2007	41				88	82		25
06/20/2007	32			41	46	55		21
06/27/2007	45				82	45		22
07/05/2007	35				67	42		26
07/11/2007	29				80	38		19
07/18/2007	33		164	131	69	26		24
07/25/2007	28		101	41	81	18		17
08/01/2007	28		102	24	86	19		12
08/08/2007	26		72	35	89	16		14
08/15/2007	25		85	20	50	45		18
08/22/2007	34		22	21	68	14		20
08/29/2007	32		22	26	61	12		17
09/05/2007	26		25	32	52	12		19
09/12/2007	27		22	28	47			20
09/19/2007	29		23	19	34	81		20
09/26/2007	56		32	24	159	229		20
10/03/2007	54		22	23	128	382		18
10/10/2007	164		27	21	219	270		17
10/17/2007	37		18	17	79	157		19
10/24/2007	44		17	16	88	145		25
10/31/2007	35		18	14	64	139		17
04/02/2008	24		20	11	98	34		9
04/09/2008	43		14	10	36	41		12
04/16/2008	36		23	9	22	15		10
04/23/2008	25		21	10	25	27		13
04/30/2008	32		50	19	38			14
05/07/2008	41				32	35		16
05/14/2008	50				25	27		19
05/21/2008	37				26	35		21
05/28/2008	26				26	29		20

Table 5. Continued.

West Feeder Canal	LC01.7TN	LC02.9TN	LC02.9TW	LC02.9TW01	LC03.0TN	LC03.0TN01	LC03.0TN03	WC01.11TN
06/04/2008	31				26	24		18
06/11/2008	44				22	12		18
06/18/2008	30				36	25		15
06/25/2008	30		17	30	63	81		14
07/02/2008	28		19	32	24	65		19
07/09/2008	61		23	29	81	248		21
07/16/2008	60		16	20	86	327		8
07/23/2008	95		31	26	131	205		11
07/30/2008	65		44	24	93	131		9
08/06/2008	52		67	24	76			16
08/13/2008	71		64	30	88	138		14
08/20/2008	169		223	88	167	149		26
08/27/2008	272		200	132	319	379		60
09/03/2008	199		88	56	283	303		48
09/10/2008	135		84	52	206	191		41
09/17/2008	81		51	29	152	155		33
09/24/2008	49		29	23	85	151		23
10/01/2008	40		34	21	75	179		23
10/08/2008	156		51	23	252	387		21
10/15/2008	146		50	23	205	336		19
10/22/2008	62		22	27	169	237		21
10/29/2008	50		21	20	97	188		16
04/07/2009	31				47	166		40
04/14/2009	28				49	253		34
04/21/2009	30				45			34
04/28/2009	23				41			39
05/05/2009	25				48			50
05/12/2009	71				71			46
05/19/2009	32				50			51
05/26/2009	21				62			35
06/02/2009	37							21
06/09/2009	28			32	94	118		18
06/16/2009	35			33		128		15
06/23/2009	38		23	40		206		17
06/30/2009	37			23				19
07/07/2009	316		232	289		619		61
07/14/2009	280		248	208	350	392		
07/21/2009	188		125	91	244	193		38
07/28/2009	151		91	95	168	200		30

Table 5. Continued.

West Feeder Canal	LC01.7TN	LC02.9TN	LC02.9TW	LC02.9TW01	LC03.0TN	LC03.0TN01	LC03.0TN03	WC01.11TN
08/04/2009	184		140	166	215	186		28
08/11/2009	134		136	173		211		78
08/18/2009	114		145	158				30
08/25/2009	109		107	92	123	126		45
09/01/2009	171		135	83	185	167		28
09/08/2009	168		100	67	187	200		30
09/15/2009	135		113	84	185	142		27
09/22/2009	83		73	67	150	157		
09/29/2009	81		115	80	109	194		42
10/06/2009	60		62	59		125		18
10/13/2009	61		82	68	80	118		22
10/20/2009	30			51	36	68		19
10/27/2009								26
Average	**63**	**54**	**73**	**54**	**96**	**134**	**255**	**26**
N	*112*	*3*	*73*	*85*	*108*	*109*	*4*	*114*
Water Years(May 1 to April 30)								
N: number of sample for WY								
WY2004		**54**		**21**			**255**	
N		*3*		*3*			*4*	
WY2006	**41**		**99**	**51**	**83**	**134**		**23**
N	*6*		*4*	*9*	*6*	*9*		*4*
WY2007	**38**		**76**	**69**	**91**	**115**		**31**
N	*19*		*13*	*12*	*23*	*26*		*25*
WY2008	**41**		**43**	**27**	**74**	**83**		**20**
N	*32*		*21*	*22*	*32*	*29*		*31*
WY2009	**73**		**60**	**37**	**101**	**165**		**24**
N	*30*		*19*	*19*	*30*	*27*		*30*
WY2010	**104**		**120**	**98**	**139**	**197**		**33**
N	*25*		*16*	*20*	*17*	*18*		*24*

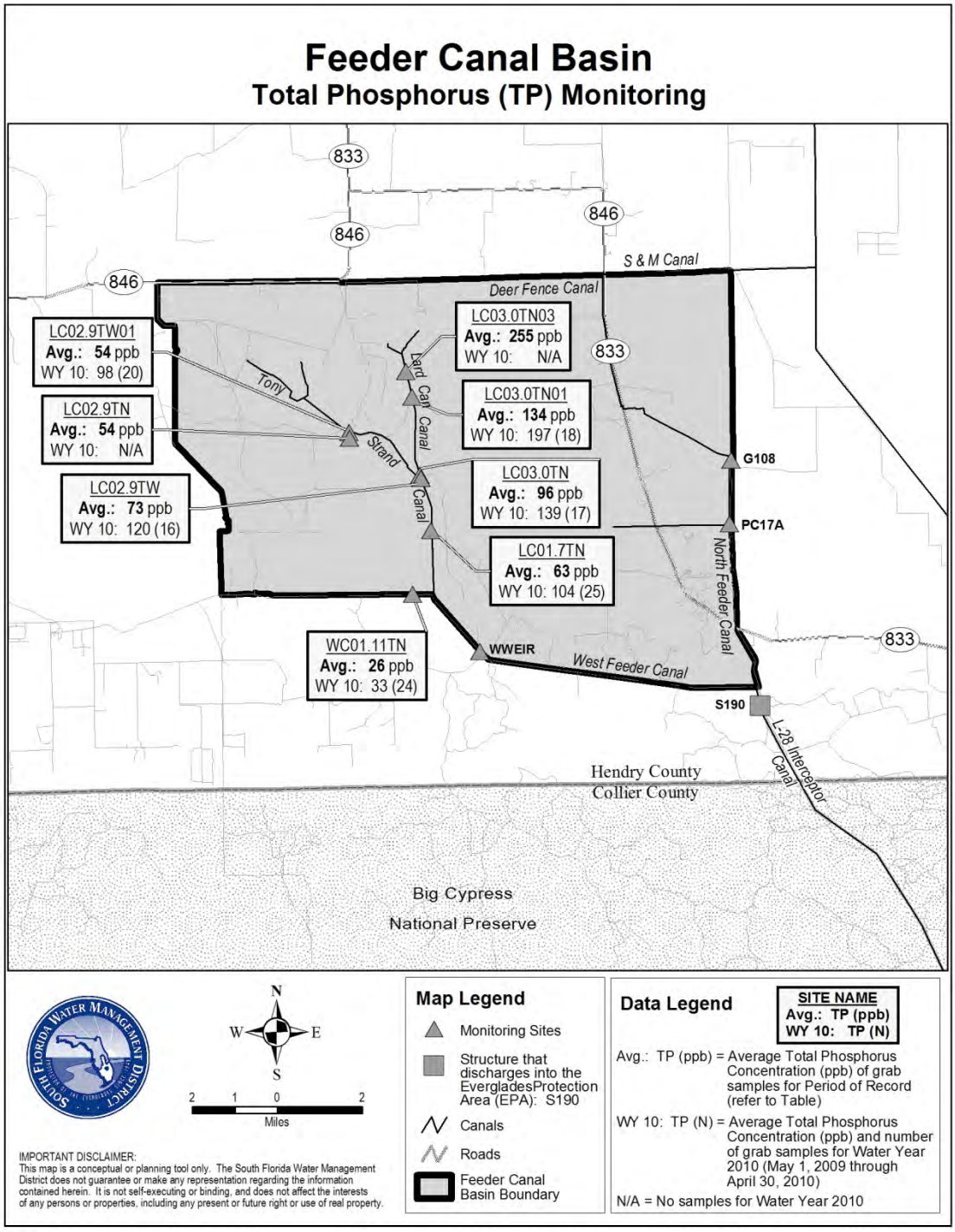
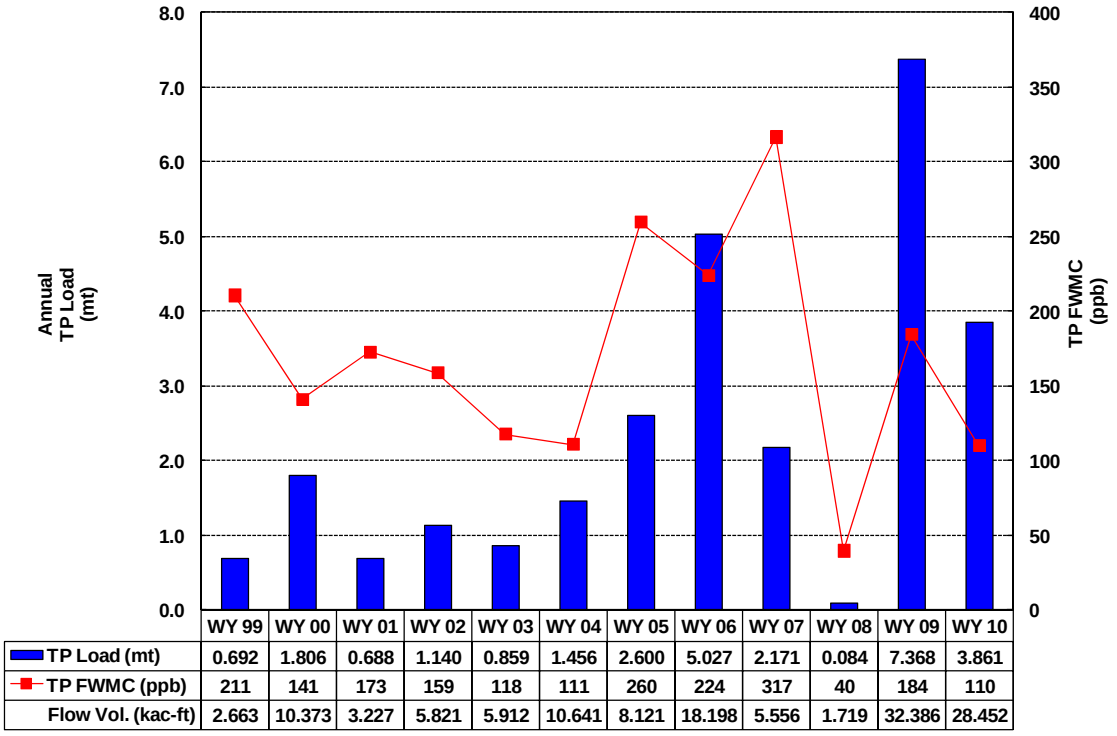
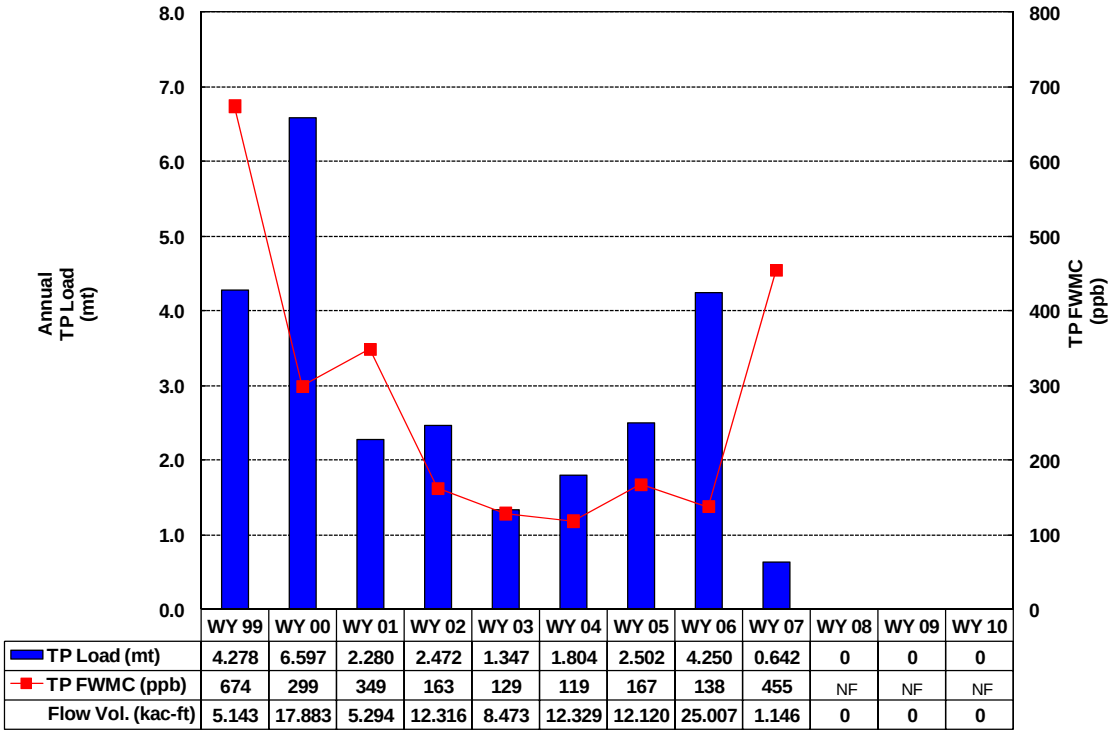


Figure 13a. Feeder Canal Basin upstream monitoring sites: summary of TP data (ppb). [Note: Synoptic survey data available in the 2006 SFER – Volume I, Appendix 3-2f.]



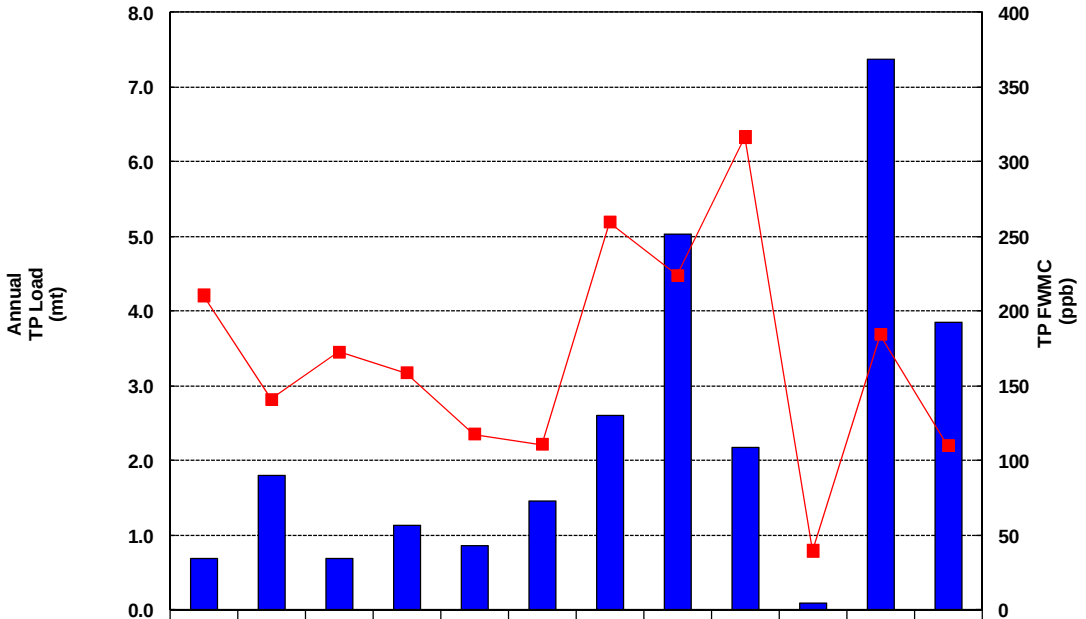
	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	0.692	1.806	0.688	1.140	0.859	1.456	2.600	5.027	2.171	0.084	7.368	3.861
TP FWMC (ppb)	211	141	173	159	118	111	260	224	317	40	184	110
Flow Vol. (kac-ft)	2.663	10.373	3.227	5.821	5.912	10.641	8.121	18.198	5.556	1.719	32.386	28.452

Figure 13b. Upstream structure PC-17A (Feeder Canal Basin) WY1999 through WY2010 – TP load, TP FWMC, and flow volume.



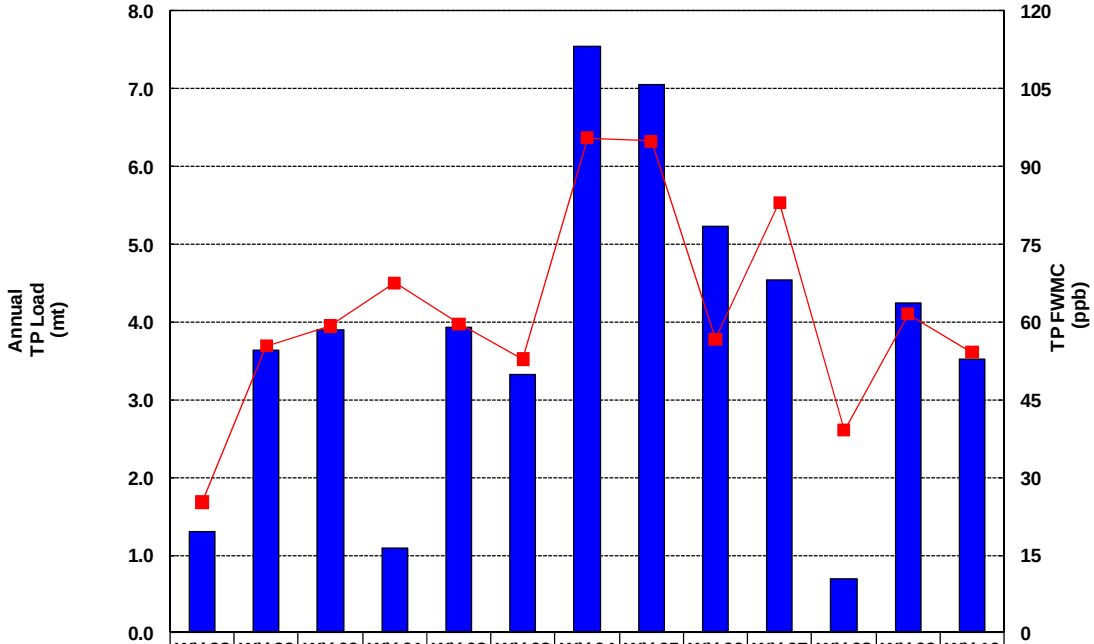
	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	4.278	6.597	2.280	2.472	1.347	1.804	2.502	4.250	0.642	0	0	0
TP FWMC (ppb)	674	299	349	163	129	119	167	138	455	NF	NF	NF
Flow Vol. (kac-ft)	5.143	17.883	5.294	12.316	8.473	12.329	12.120	25.007	1.146	0	0	0

Figure 13c. Upstream structure G-108 (Feeder Canal Basin) WY1999 through WY2010 – TP load, TP FWMC, and flow volume (NF = no flow for period).



	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	0.692	1.806	0.688	1.140	0.859	1.456	2.600	5.027	2.171	0.084	7.368	3.861
TP FWMC (ppb)	211	141	173	159	118	111	260	224	317	40	184	110
Flow Vol. (kac-ft)	2.663	10.373	3.227	5.821	5.912	10.641	8.121	18.198	5.556	1.719	32.386	28.452

Figure 13d. Upstream combined structures PC-17A and G-108 (Feeder Canal Basin) WY1999 through WY2010 – TP Load, TP FWMC, and flow volume.



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	1.297	3.640	3.904	1.089	3.932	3.320	7.544	7.057	5.236	4.534	0.694	4.251	3.530
TP FWMC (ppb)	25	55	59	68	60	53	96	95	57	83	39	62	54
Flow Vol. (kac-ft)	41.740	53.304	53.399	13.066	53.420	50.953	64.011	60.299	74.861	44.266	14.389	56.008	52.809

Figure 13e. Upstream structures WWEIR (Feeder Canal Basin) WY1998 through WY2010 – TP Load, TP FWMC, and flow volume.

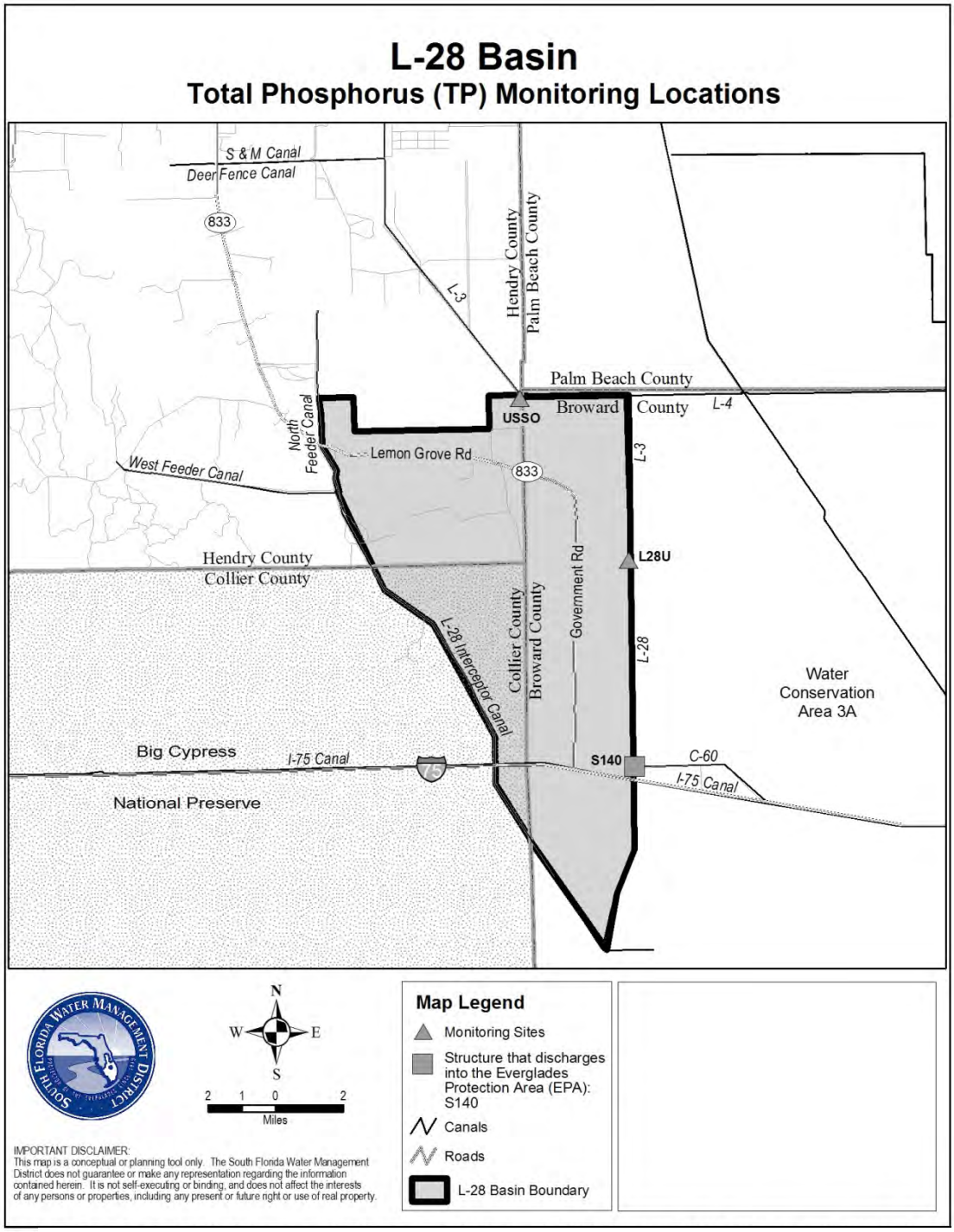
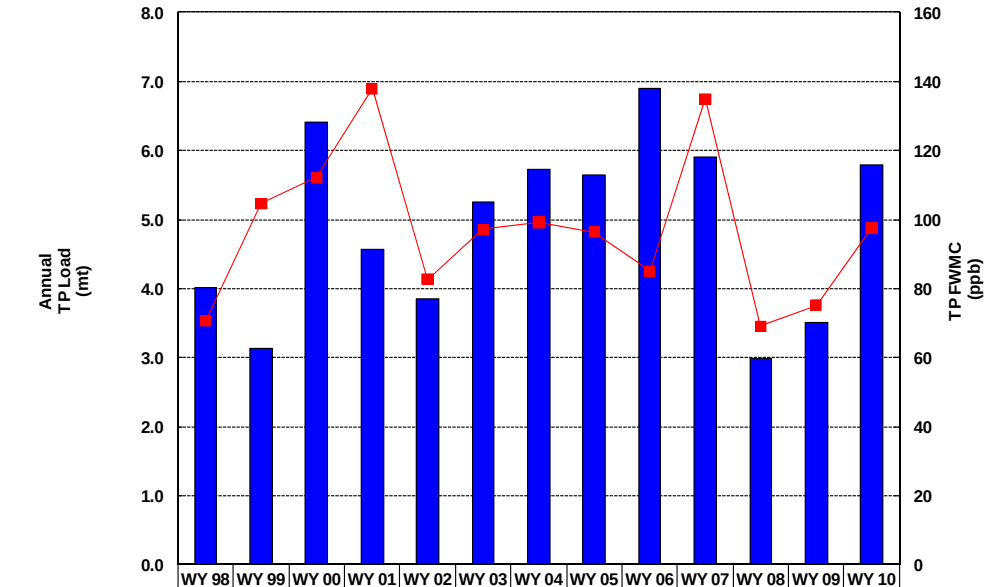
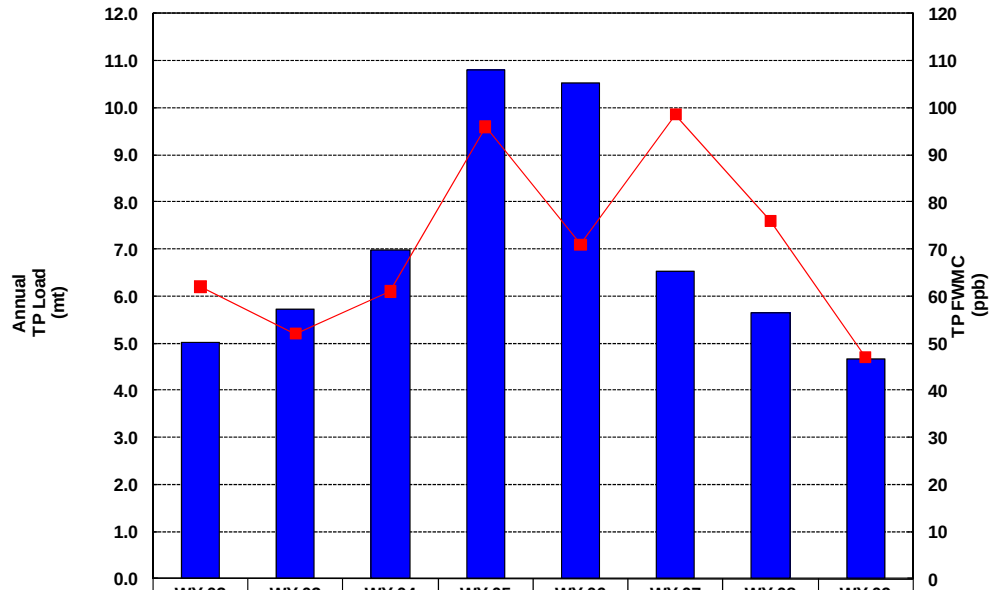


Figure 14a. L-28 Basin upstream monitoring sites: location map.



	WY 98	WY 99	WY 00	WY 01	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09	WY 10
TP Load (mt)	4.020	3.131	6.416	4.564	3.846	5.261	5.731	5.651	6.901	5.911	2.992	3.511	5.786
TP FWMC (ppb)	71	105	112	138	83	97	99	96	85	135	69	75	98
Flow Vol. (kac-ft)	46.081	24.270	46.365	26.831	37.722	43.921	46.858	47.518	65.731	35.574	35.120	37.840	48.068

Figure 14b. Upstream structures USSO (L-28 Basin)
WY1998 through WY2010 – TP load, TP FWMC, and flow volume.



	WY 02	WY 03	WY 04	WY 05	WY 06	WY 07	WY 08	WY 09
TP Load (mt)	5.017	5.717	6.976	10.805	10.540	6.523	5.651	4.667
TP FWMC (ppb)	62	52	61	96	71	99	76	47
Flow Vol. (kac-ft)	67.000	90.000	93.000	91.547	119.522	53.664	60.035	80.51

Figure 14c. Upstream structures L28U (L-28 Basin)
WY2002 through WY2009 – TP load, TP FWMC, and flow volume.

Table 6. Boynton Farms Basin upstream monitoring sites: summary of TP data (ppb).

Boynton Farms	BFBAFCP	BFBAFNP	BFBAFSP	BFBDFCP	BFBDFNP	BFBDFSP	BFBDFWP	BFBMFCP	BFBMFNP	BFBMFSP	BFBWNCP
04/26/2000		1651	1013								252
05/11/2000		1073	381								398
09/18/2000		389	710								294
10/05/2000											344
11/28/2000											303
03/21/2001	1045	1144	690								270
09/17/2001	1372		1901		1171	807	1476			1749	339
10/22/2001	2926	1624	1723								357
11/06/2001											287
02/11/2002			822	1115				1086	1419		254
09/09/2002								1336	1428		
12/09/2002			1273					1289			
12/10/2002	2595		1591					1760			
03/17/2003		754	581	1114		928		579	720		
04/28/2003		483	827								
05/23/2003	343	559	448	2193	1330	1173	965	957	355	798	
09/29/2003					1000						
11/06/2003	1160	1200						973	976	1140	
09/06/2006	1610	1650	1540	1340	1690	1290	1720			1610	
12/15/2006	1250	995	609	1435	1804	1303	1729			1345	
06/05/2007	129	209	135	1094	1302	819	858			1072	
09/27/2007	976	1150	597	2116	1531	2034	2024			1542	
Average	**1341**	**991**	**928**	**1487**	**1404**	**1193**	**1462**	**1140**	**980**	**1322**	**310**
N	*10*	*13*	*16*	*7*	*7*	*7*	*6*	*7*	*5*	*7*	*10*

Water Years(May 1 to April 30)
N: number of sample for WY

WY2000		**1651**	**1013**								**252**
N		*1*	*1*								*1*
WY2001	**1045**	**869**	**594**								**322**
N	*1*	*3*	*3*								*5*
WY2002	**2149**	**1624**	**1482**	**1115**	**1171**	**807**	**1476**	**1086**	**1419**	**1749**	**309**
N	*2*	*1*	*3*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*4*
WY2003	**2595**	**619**	**1068**	**1114**		**928**		**1241**	**1074**		
N	*1*	*2*	*4*	*1*		*1*		*4*	*2*		
WY2004	**752**	**880**	**448**	**2193**	**1165**	**1173**	**965**	**965**	**666**	**969**	
N	*2*	*2*	*1*	*1*	*2*	*1*	*1*	*2*	*2*	*2*	
WY2007	**1430**	**1323**	**1075**	**1388**	**1747**	**1297**	**1725**			**1478**	
N	*2*	*2*	*2*	*2*	*2*	*2*	*2*			*2*	
WY2008	**553**	**680**	**366**	**1605**	**1417**	**1427**	**1441**			**1307**	
N	*2*	*2*	*2*	*2*	*2*	*2*	*2*			*2*	

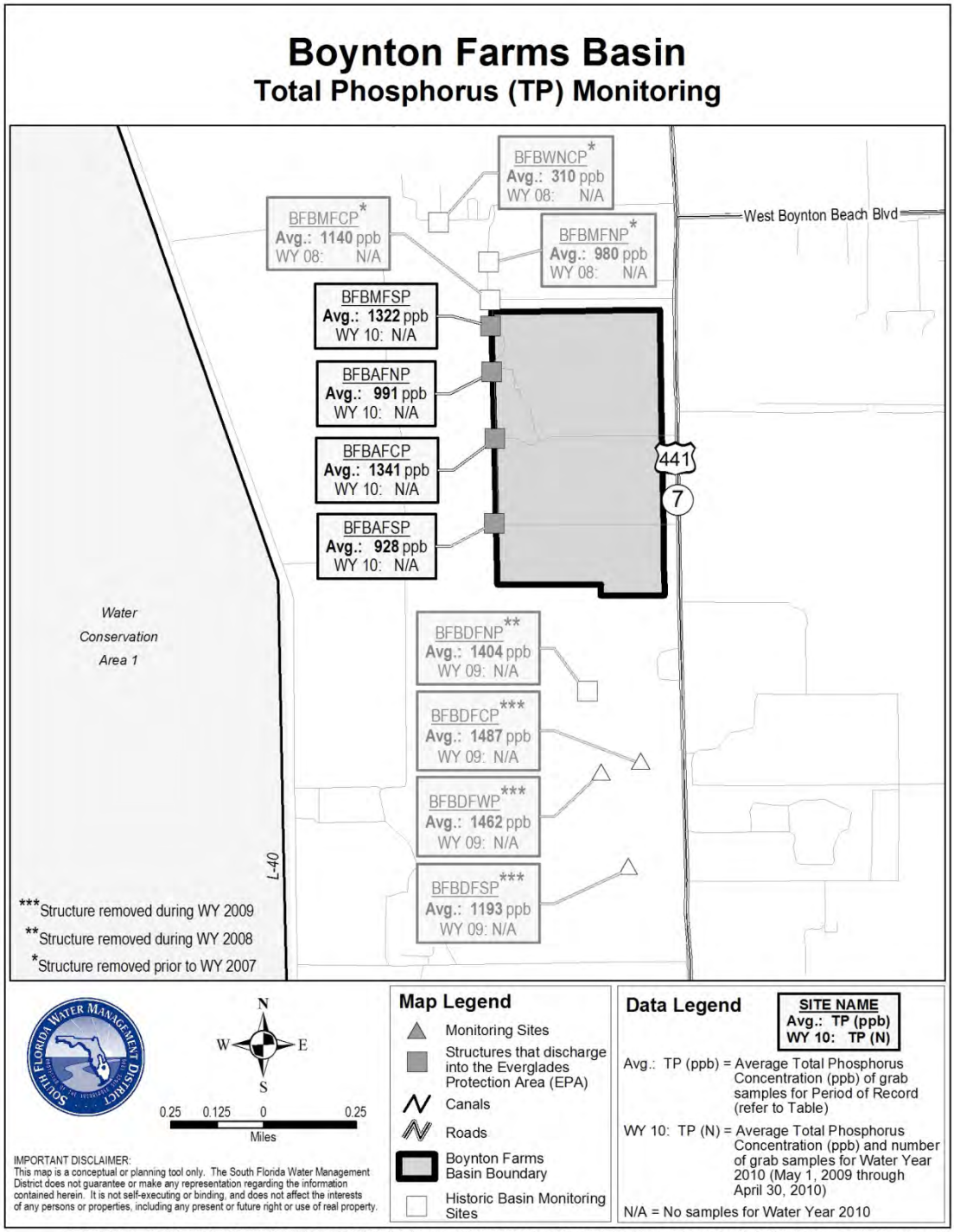


Figure 15. Boynton Farms Basin monitoring sites: summary of TP data (ppb).

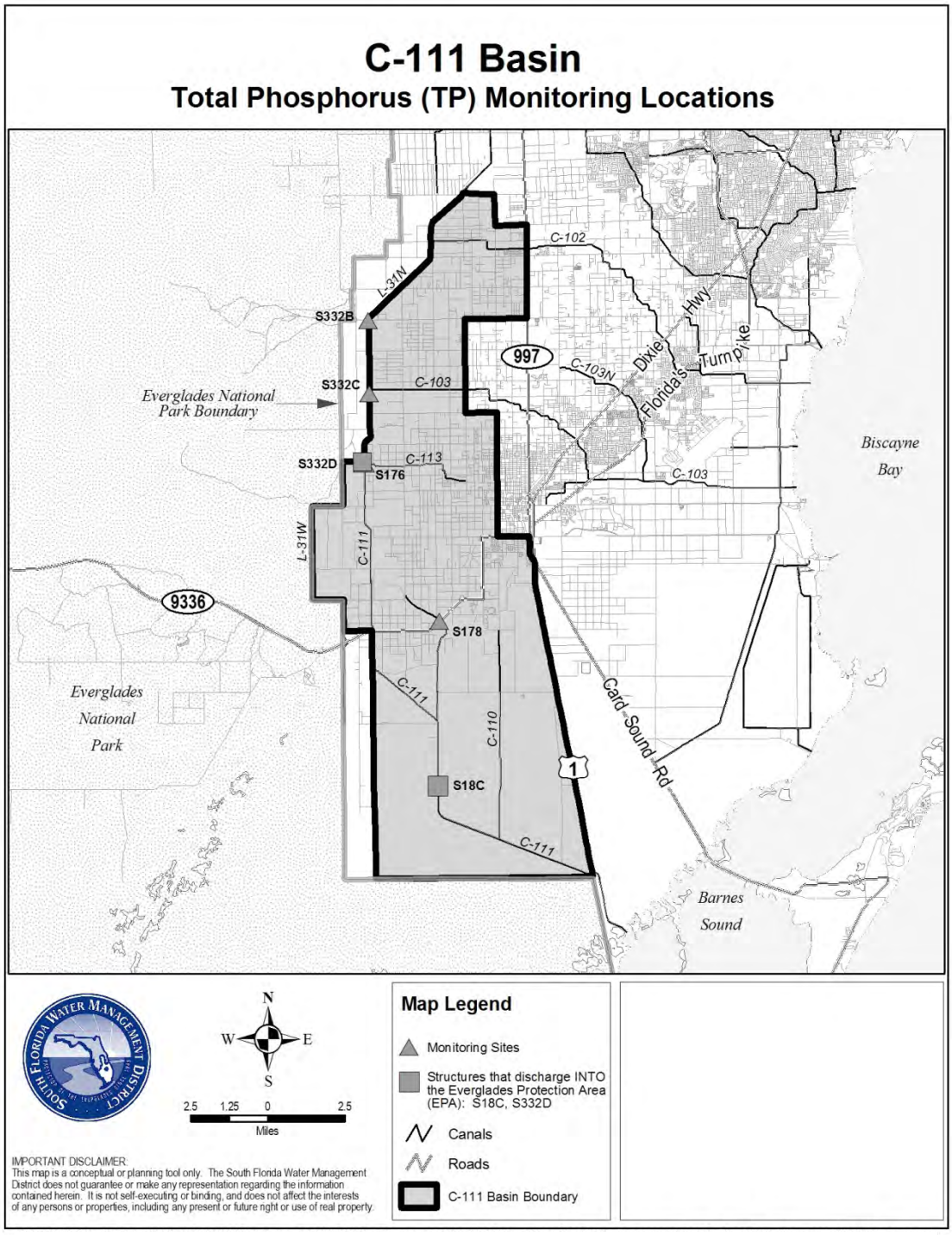


Figure 16. C-111 Basin monitoring sites
(see Appendix 3A-7 of this volume for upstream data).

Table 7. Village of Wellington upstream monitoring sites: summary of TP data (ppb).

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
07/10/2000						29																
07/11/2000	110				110	39	34	48													51	
07/25/2000	55				130	42															9	
08/01/2000	49				68																	
08/03/2000	59				62	46	36														49	
08/07/2000	34				62																	
08/10/2000	42				69																	
08/16/2000	34				56	30	30														4	
08/17/2000	60				74																	
08/24/2000	51				88																	
08/25/2000	49				120																	
08/31/2000	55				95																	
09/15/2000	4				14																	
09/19/2000					40	22	15	29													4	
09/21/2000	63				89																	
09/28/2000	54				70	52	43	36													52	
09/29/2000	51				83	44	63	47													28	
10/04/2000	78				160																	
10/09/2000	100				150	82	80	95									370				89	
10/23/2000	37				75																	
10/26/2000						54	40														28	
10/31/2000					61																	
11/29/2000	35				44	17								26					97			
12/11/2000	46				57	69	62	35													110	
12/14/2000	22				30																	
12/21/2000	23				41																	
03/20/2001	170	280	28	40	380	24	28	4	37	110	290	460	53			300	370			4	26	

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
03/21/2001														13					95			
03/22/2001	120				27																	
03/29/2001	35																					
06/02/2001	140				140	43	56														33	
06/08/2001	37				120																	
06/13/2001	67				240	43	46	68													44	
06/22/2001	48				120																	
07/09/2001	58																					
07/13/2001	58				200	56	75	68													65	
07/20/2001	240				240																	
07/24/2001														56		490	330		210			
07/27/2001	97				250	94	140	160													100	
08/02/2001	82				190																	
08/10/2001					140																	
08/21/2001	71				120																	
09/07/2001	81				120																	
09/10/2001	48				130	99	98							23			110		120		61	
09/13/2001								38														
09/25/2001	90				130	74	76	75						19			110				42	
10/03/2001	120				160																	
10/09/2001	77				100																	
10/22/2001	87				150	75	89	62						23			190				76	
11/01/2001	57				110																	
12/07/2001	55				79	28	28	24													48	
12/31/2001	43				62	25	32														43	
01/03/2002					99																	
02/11/2002	69				120	53	44							25			280		40		68	

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
02/20/2002	46				94																	
06/14/2002						21	21	73													72	
06/28/2002						72	53	98													61	
07/15/2002	100				240	63	82	130													110	
08/19/2002	52				100	46	59														51	
09/03/2002						51	74														400	
12/10/2002	54				89	39	26	26									180		110		36	
03/24/2003	54	120			75								130	34			180		75			
03/28/2003								82														
04/28/2003						28	38	38											73		37	
04/29/2003	41	88	29		76								130				170					
05/23/2003						90	25														21	
05/27/2003	59	210			84								110	32			210		60			
05/28/2003								86														
06/07/2003						37	33														57	
06/12/2003	120	190			76									22			190		71			
07/31/2003	57	110	27		69	51	50	57						23			92		37			
08/14/2003	96				150																	
08/21/2003	57				150	62	60						92	24			140		155			
08/28/2003	84				150			86														
09/11/2003	78				160																	
09/26/2003	73	120			100	36	25						75				130		83			
11/05/2003	220	130			71	33	22						57				220					
11/06/2003	63		43		69			49														
12/11/2003	34	64	20		40	16	18										99		41			54
01/30/2004	38				40																	
02/01/2004	49	210	23		61			37		50	110	150	95		35	96	110		58	32		60
02/26/2004	64	190	27		92												170		110			53

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
05/13/2004	42				61																	
06/08/2004							26						180		29							
06/09/2004					65												110		48			
08/09/2004					46		48								19							
08/11/2004	48							160														
08/12/2004	44				57																	
08/19/2004					43																	
08/25/2004	70	93	51		92			29					84				130		110			58
09/09/2004	200				350																	
09/16/2004	160				120																	
09/21/2004	110	360	59		140	72		73					110		90		250		120			200
09/23/2004	130				160																	
09/30/2004	130				270																	
10/14/2004	150				160																	
11/23/2004	58				97	62											110		100			67
03/10/2005	100	83	38		140	36	48								37		350		87			100
03/17/2005	58				150																	
03/28/2005	44				79												210					52
05/31/2005	43	340	34		110	24		56							38		210		56			65
06/02/2005	48				110																	
06/09/2005	73				120																	
06/16/2005	77				77	29									71							
06/20/2005	85		43		130	43		130							95		150		73			140
06/23/2005	93				65																	
06/30/2005	160				160																	
07/07/2005	76				150	35	43	90							58		210					180
07/21/2005	54				72																	
08/08/2005	55				67	61									52		290					65

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
08/25/2005	49				77	66									52							
08/31/2005	64	90	48		91	57							95		55		130		61			78
09/29/2005	48	100			96	210									66		70		50			
10/20/2005	60				67	60									48							82
10/27/2005	87					57	74								85							
11/03/2005	66																					
11/10/2005	58				100																	
11/23/2005	40				48																	
11/30/2005		130			76	53									59		120					
12/22/2005					72																	
01/17/2006	40	94			55												47		31			48
02/04/2006		270			97	56											68					64
02/08/2006	39				58		29								68							
05/22/2006	51				39	45																
05/29/2006	50	400			100	140	61	73					220		60							
05/31/2006	72				210																	
06/28/2006	49		41		130	42		66							46		370		250			58
07/12/2006	50	180			120	37		93	96						45				100			100
07/19/2006	66																					
07/28/2006	58				130	38		110							58							
08/09/2006	52				86																	
08/16/2006	66	440			79	44		67							240		340		83			130
08/23/2006	95				190																	
08/29/2006	110				150																	
08/31/2006					110	61		670							150		280					
09/06/2006	180				410																	
09/13/2006	120	260	68		230	65	110	110							95							240
09/20/2006	99				110																	

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
09/27/2006	67				160																	
10/04/2006	65	190			190		56								58		230					110
10/27/2006	55				91																	
11/02/2006	52				77	33	43	42							42							
12/14/2006	120	470			150	40	42	54							120		360		240			
12/19/2006	110				120																	
06/15/2007							34	54	20	58					25							
06/18/2007											170	120	58							37		
07/02/2007							31	53	46	130	230	140	70		48							
07/16/2007						38	29	71	70	87	160	140	70		33							
07/30/2007						51	50	75	45	94	110	95	61		390			44		43		
08/20/2007						70	50	77	50	76					210							
09/17/2007							55	53	40	76					37							
09/18/2007											290	66	58					35		40		
10/02/2007						95		130	120	180	430	170	85		140			94		78		
10/17/2007						82	96	71	82	130	300	210	72					69				
10/18/2007																				70		
11/01/2007						110	81	41	75	67	170	120	86		75			56		100		
11/28/2007						51									35			30				
12/13/2007						83		40							22			26				
12/14/2007						110	40	51	48	92	140	390	75		98			69		46		
01/23/2008						42		30	18	42					36							
02/12/2008						57		33	30	58			78		120							
02/13/2008							37				330	120						100		53		
02/27/2008						56	17	32	43	86			110		41			31				
03/23/2008						48	35	74	74	140	300	140	68		94			79		49		
04/07/2008						51	19	35	52	120	220	120	65		85			47		42		
06/03/2008										84	190	110	43									

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
06/19/2008						43		40	22	66	97	100	50		51			47				
07/16/2008						37		39	32				61		38			29				
08/15/2008						37		46	46	89					48			30				
08/20/2008						76	64	110	45	120	310	150	66		120			73		40		
09/05/2008						98	120	120	88	290	350	220	78		130			120		71		
09/30/2008						58	58	61	89						44			49				
10/08/2008						70	74	59	60		130	96	67		46			45				
10/23/2008						64	76		48	70	82		69		45			37				
06/10/2009						91	50	59	77	190	290	100	82		240			63		120		
07/10/2009						70	40	69	130	120	290	170	50					98				
03/29/2010						43	33	18	29	120					49			13		50		
Average	**73**	**200**	**39**	**40**	**113**	**56**	**51**	**74**	**58**	**106**	**227**	**161**	**84**	**27**	**79**	**295**	**197**	**56**	**95**	**55**	**63**	**95**
N	*119*	*26*	*15*	*1*	*124*	*87*	*66*	*66*	*28*	*26*	*22*	*21*	*35*	*12*	*53*	*3*	*39*	*23*	*30*	*16*	*30*	*21*
Water Years(May 1 to April 30) *N: number of sample for WY*																						
WY2001	**57**	**280**	**28**	**40**	**87**	**42**	**43**	**42**	**37**	**110**	**290**	**460**	**53**	**20**		**300**	**370**		**96**	**4**	**41**	
N	*25*	*1*	*1*	*1*	*26*	*13*	*10*	*7*	*1*	*1*	*1*	*1*	*1*	*2*		*1*	*2*		*2*	*1*	*11*	
WY2002	**80**				**142**	**59**	**68**	**71**						**29**		**490**	**204**		**123**		**58**	
N	*21*				*22*	*10*	*10*	*7*						*5*		*1*	*5*		*3*		*10*	
WY2003	**60**	**104**	**29**		**116**	**46**	**50**	**75**					**130**	**34**			**177**		**86**		**110**	
N	*5*	*2*	*1*		*5*	*7*	*7*	*6*					*2*	*1*			*3*		*3*		*7*	
WY2004	**78**	**153**	**28**		**94**	**46**	**33**	**63**		**50**	**110**	**150**	**86**	**25**	**35**	**96**	**151**		**77**	**32**	**39**	**56**
N	*14*	*8*	*5*		*14*	*7*	*7*	*5*		*1*	*1*	*1*	*5*	*4*	*1*	*1*	*9*		*8*	*1*	*2*	*3*
WY2005	**96**	**179**	**49**		**127**	**57**	**41**	**87**					**125**		**44**		**193**		**93**			**95**
N	*14*	*3*	*3*		*16*	*3*	*3*	*3*					*3*		*4*		*6*		*5*			*5*

Table 7. Continued.

Village of Wellington	VOW1	VOW117	VOW152	VOW1A	VOW2	VOW3	VOW35	VOW4	VOW40	VOW42	VOW43	VOW44	VOW45	VOW46	VOW6	VOW63P	VOW63R	VOW7	VOW70	VOW72	VOW85	VOWB2
Water Years(May 1 to April 30) *N: number of sample for WY*																						
WY2006	**66**	**171**	**42**		**90**	**63**	**49**	**92**					**95**		**62**		**144**		**54**			**90**
N	*20*	*6*	*3*		*21*	*12*	*3*	*3*					*1*		*12*		*9*		*5*			*8*
WY2007	**79**	**323**	**55**		**144**	**55**	**62**	**143**	**96**				**220**		**91**		**316**		**168**			**128**
N	*20*	*6*	*2*		*20*	*10*	*5*	*9*	*1*				*1*		*10*		*5*		*4*			*5*
WY2008						**67**	**44**	**58**	**54**	**96**	**238**	**153**	**74**		**93**			**57**		**56**		
N						*14*	*13*	*16*	*15*	*15*	*12*	*12*	*13*		*16*			*12*		*10*		
WY2009						**60**	**78**	**68**	**54**	**120**	**193**	**135**	**62**		**65**			**54**		**56**		
N						*8*	*5*	*7*	*8*	*6*	*6*	*5*	*7*		*8*			*8*		*2*		
WY2010						**68**	**41**	**49**	**79**	**143**	**290**	**135**	**66**		**145**			**58**		**85**		
N						*3*	*3*	*3*	*3*	*3*	*2*	*2*	*2*		*2*			*3*		*2*		

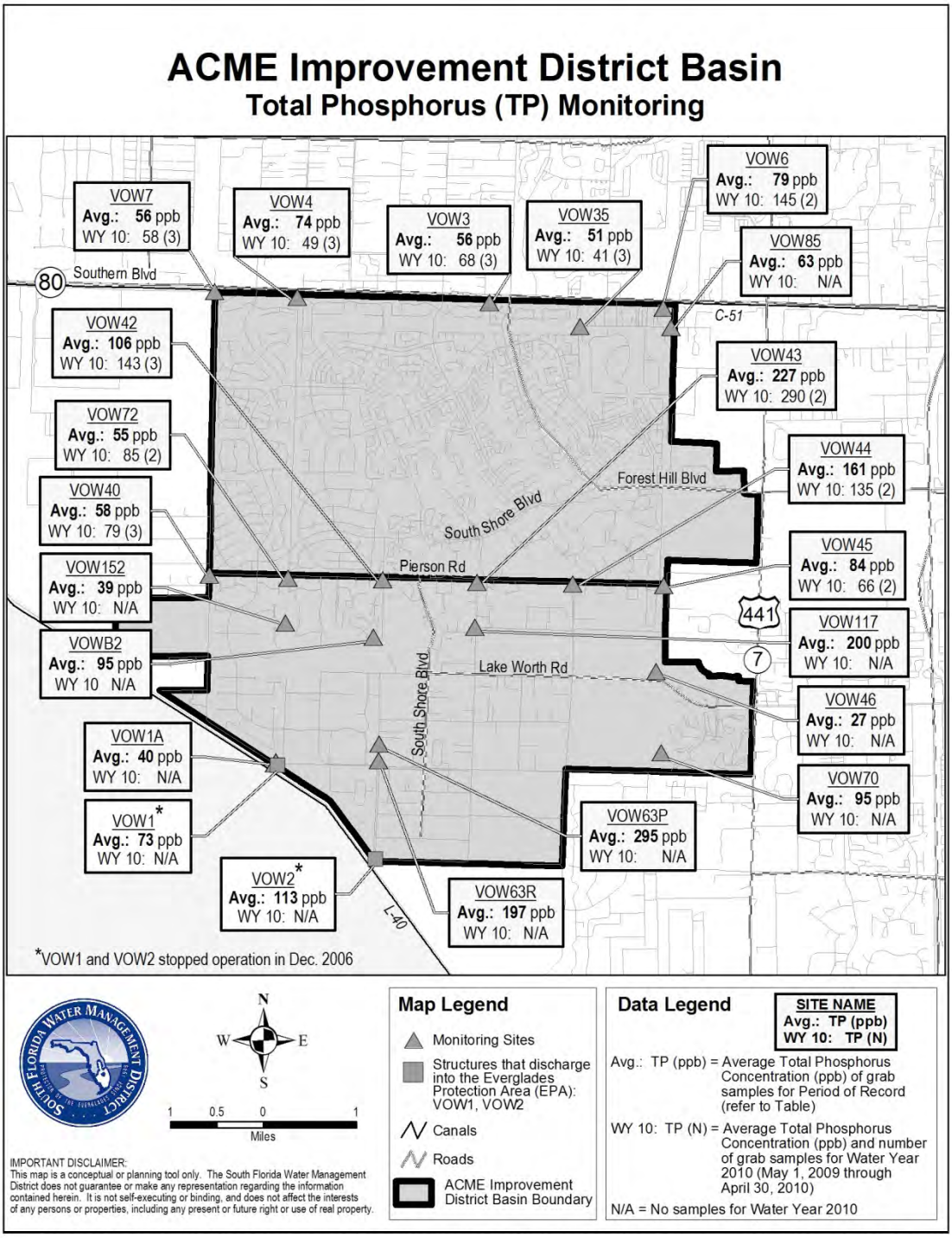


Figure 17. Village of Wellington upstream monitoring sites: summary of TP data (ppb).