Appendix 5-2: Individual Performance Time-Series Plots and Period of Record Flow and Total Phosphorus Load Estimates for the STAs

Kathleen Pietro

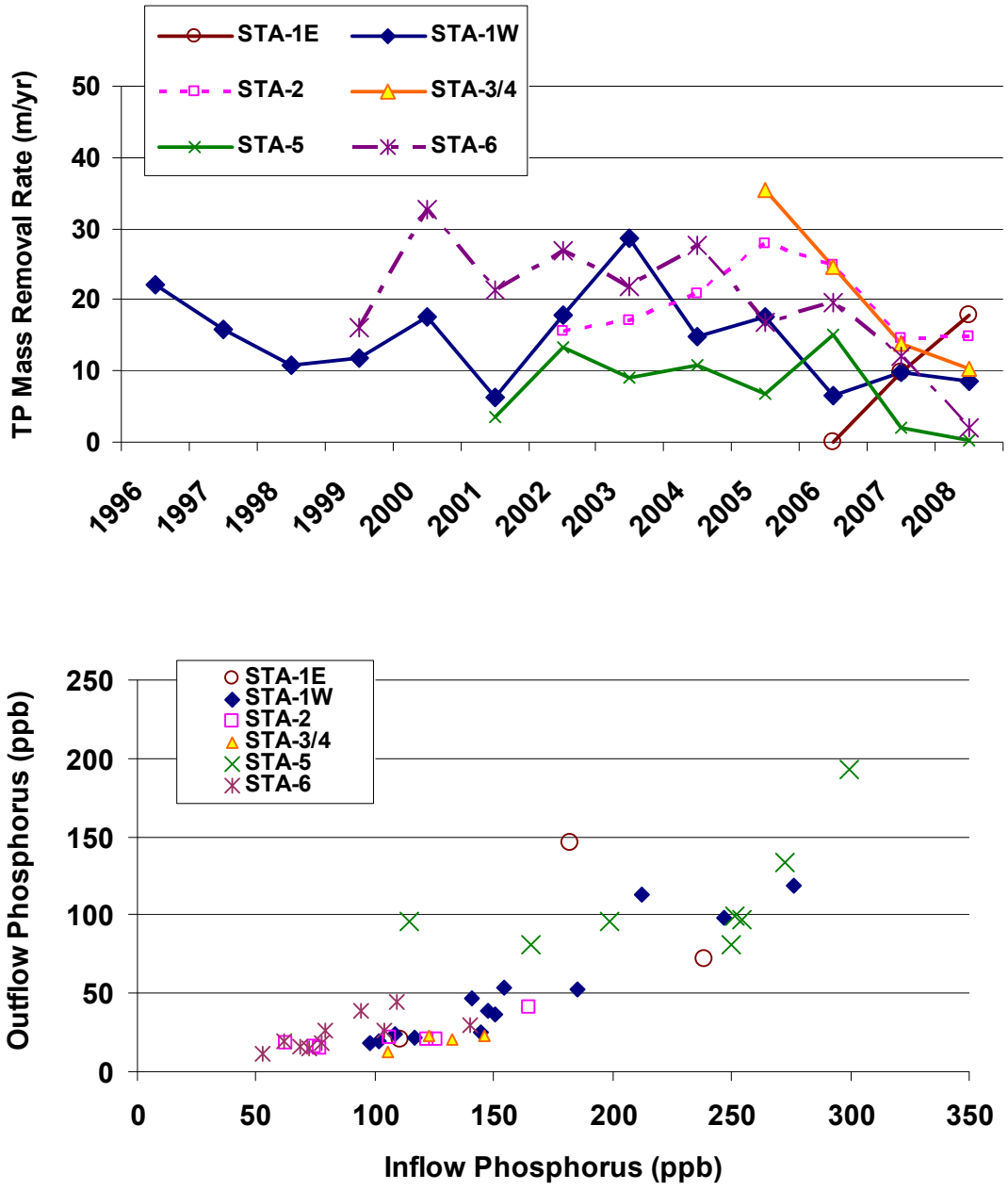


Figure 1. Estimated total phosphorus (TP) mass removal rates and the relationship of TP flow-weighted mean concentration for the six Everglades Construction Project (ECP) Stormwater Treatment Areas (STAs) (STA-1E, STA-1W, STA-2, STA-3/4, STA-5, and STA-6) for the period of record.

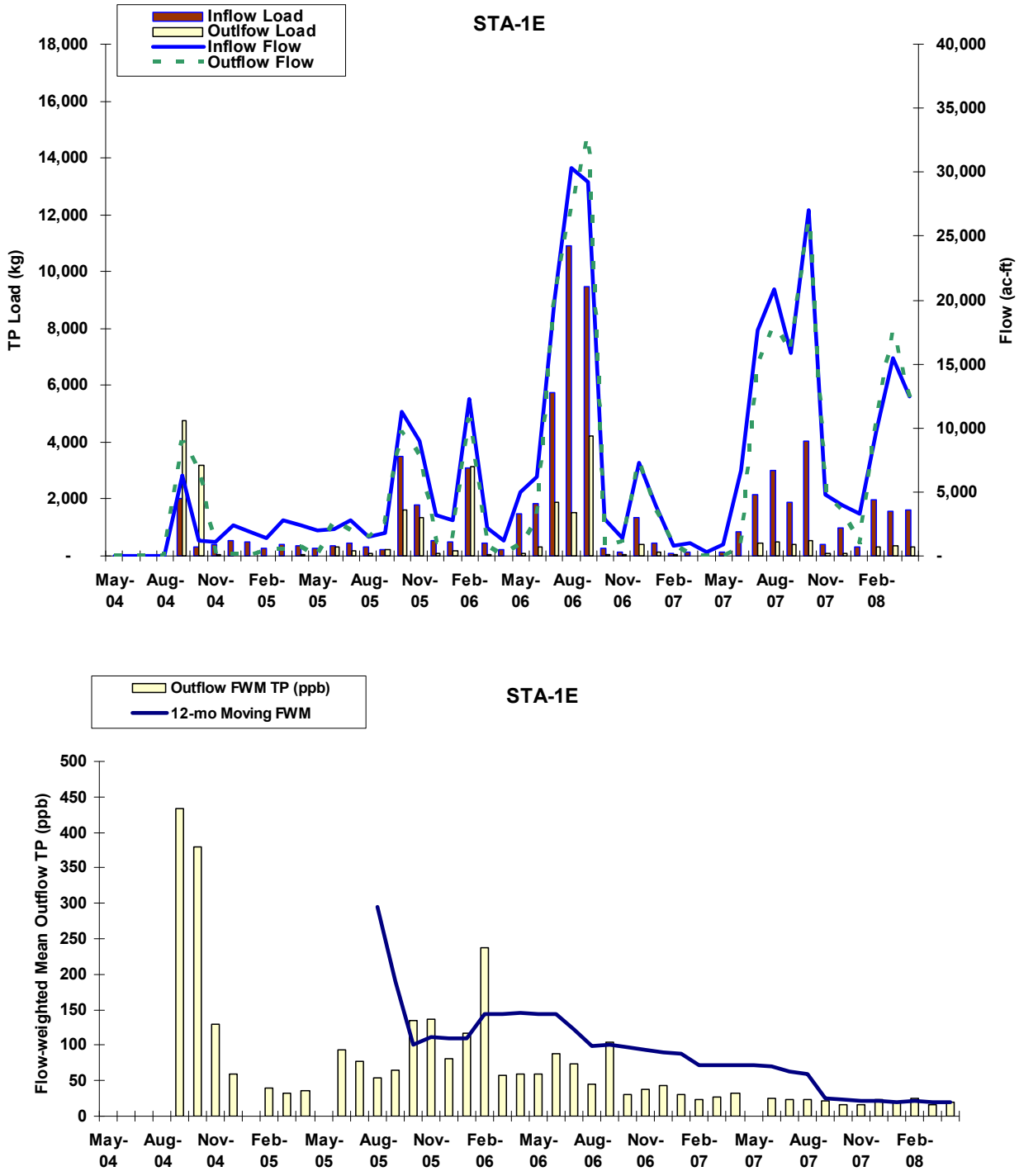


Figure 2. Flow, TP load, and flow-weighted mean TP concentrations at STA-1E during Water Years 2004–2008 (WY2004–WY2008). Sections of STA-1E were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.

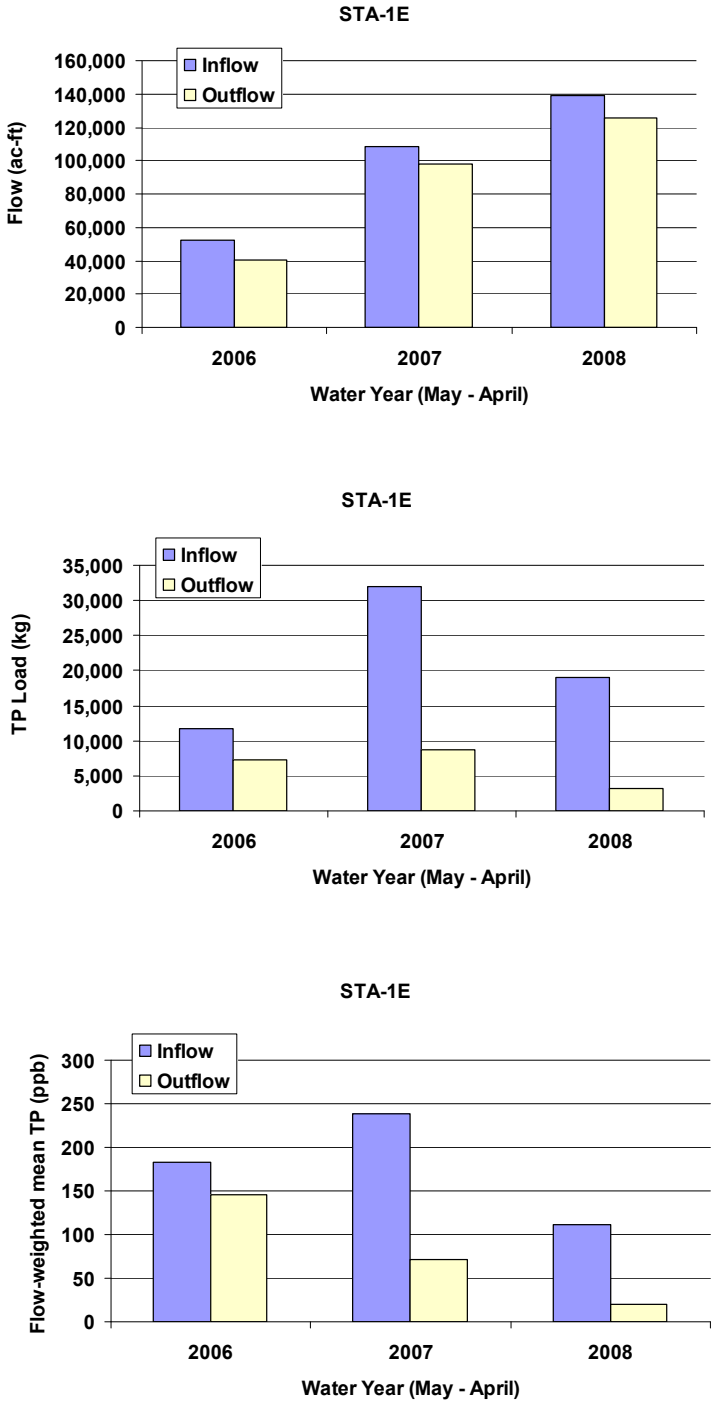


Figure 3. Flow, TP load, and TP flow-weighted mean concentrations at STA-1E for the period of record. Sections of this STA were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status.

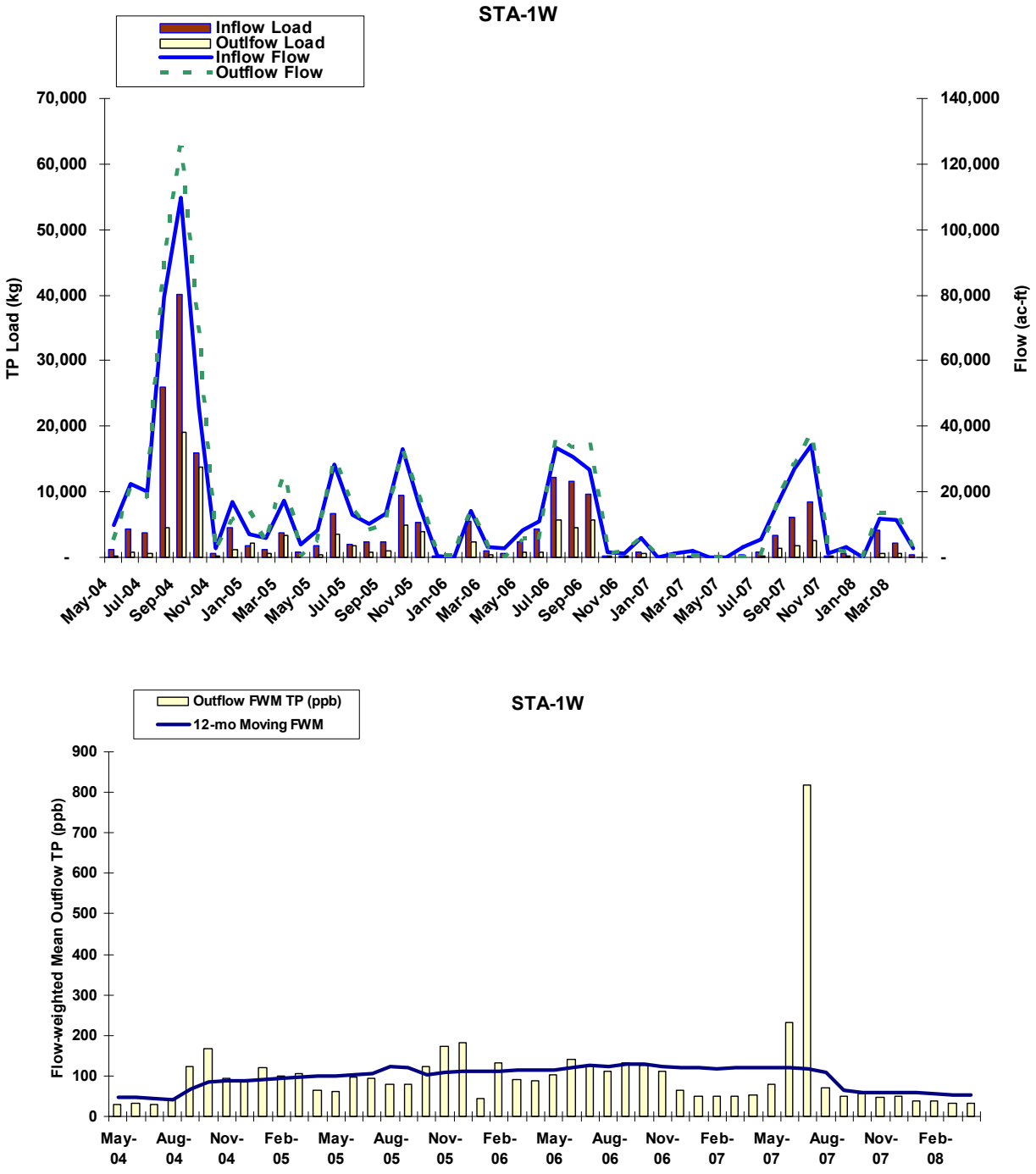


Figure 4. Flow, TP load, and flow-weighted mean TP concentrations at STA-1W during Water Years 2004–2008 (WY2004–WY2008). Sections of STA-1W were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.

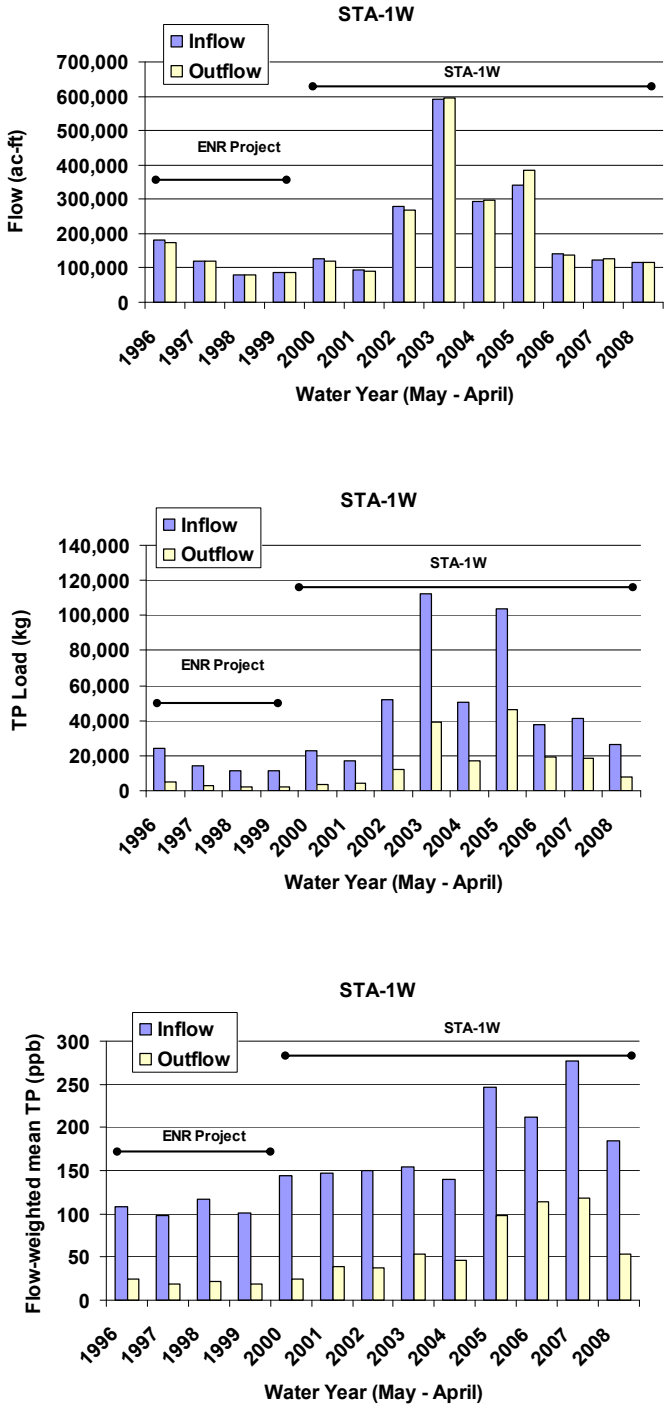


Figure 5. Flow, TP load, and TP flow-weighted mean concentrations at STA-1W for the period of record. Sections of this STA were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status. From 1994–1999, only Cells 1–4 were on-line and they were referred to as the Everglades Nutrient Removal (ENR) Project. In 1999, Cell 5 became operational and the STA became known as STA-1W.

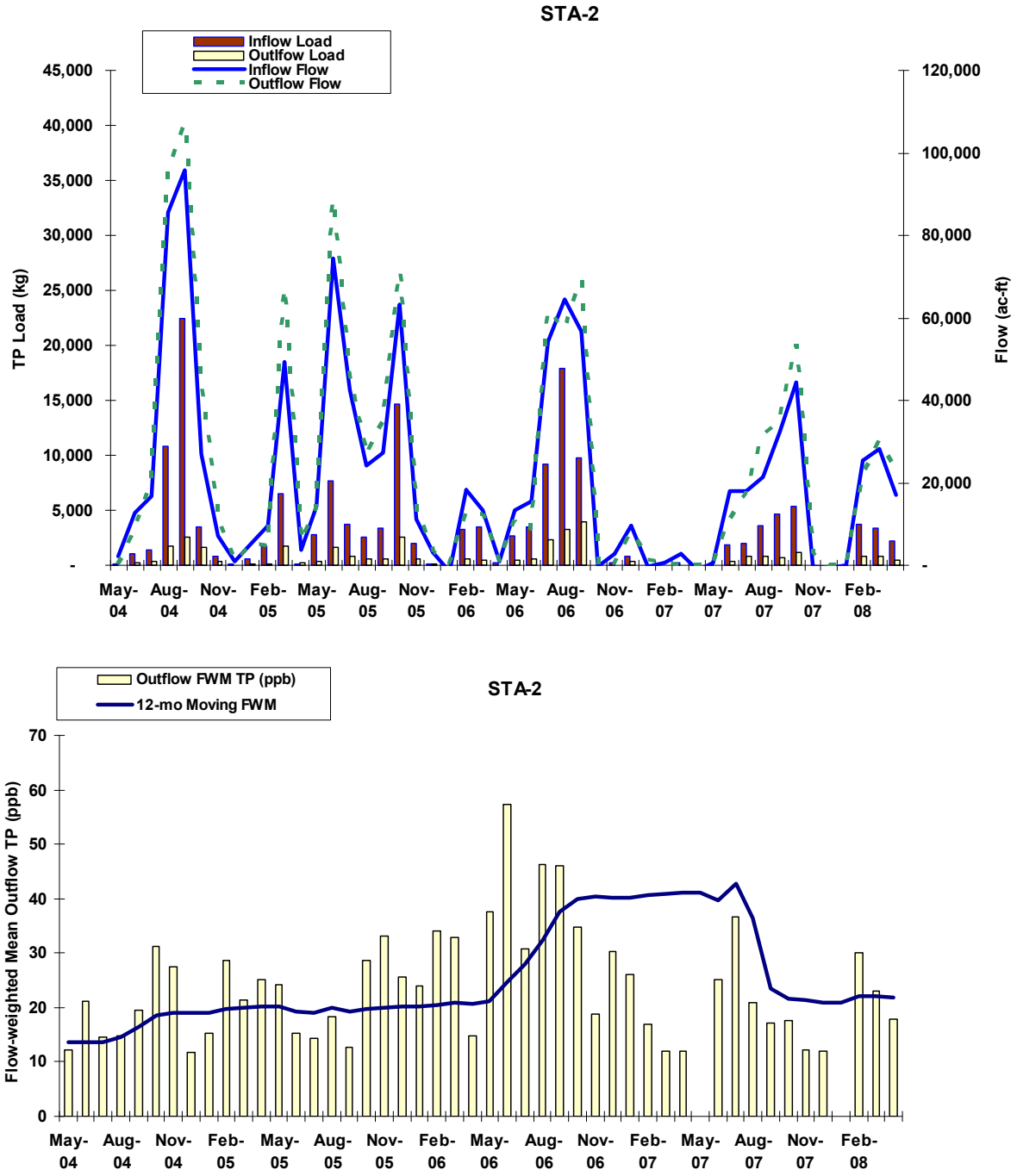
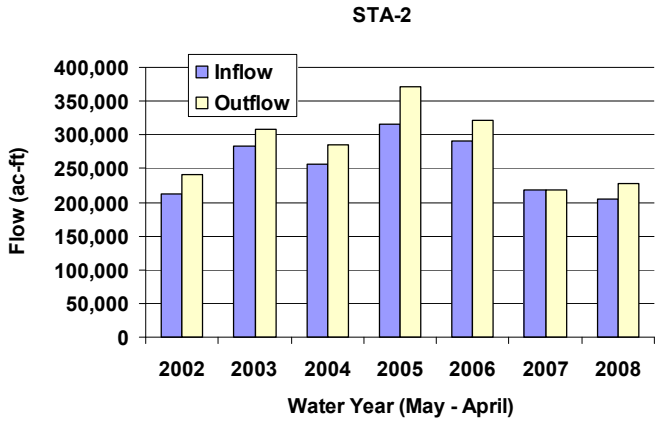
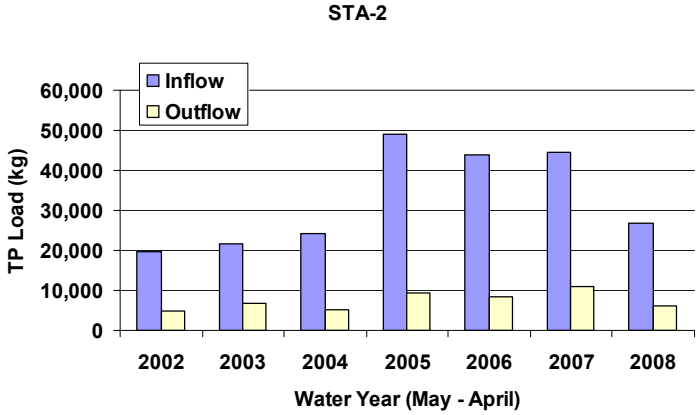


Figure 6. Flow, TP load, and flow-weighted mean TP concentrations at STA-2 during WY2004–WY2008. Sections of STA-2 were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.





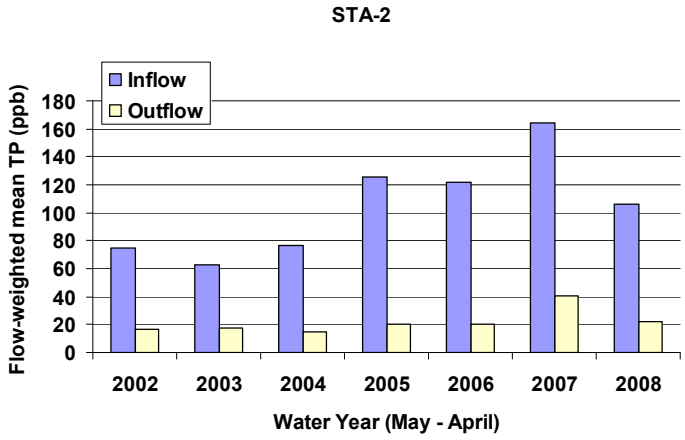


Figure 7. Flow, TP load, and TP flow-weighted mean concentrations at STA-2 for the period of record. Sections of this STA were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status.

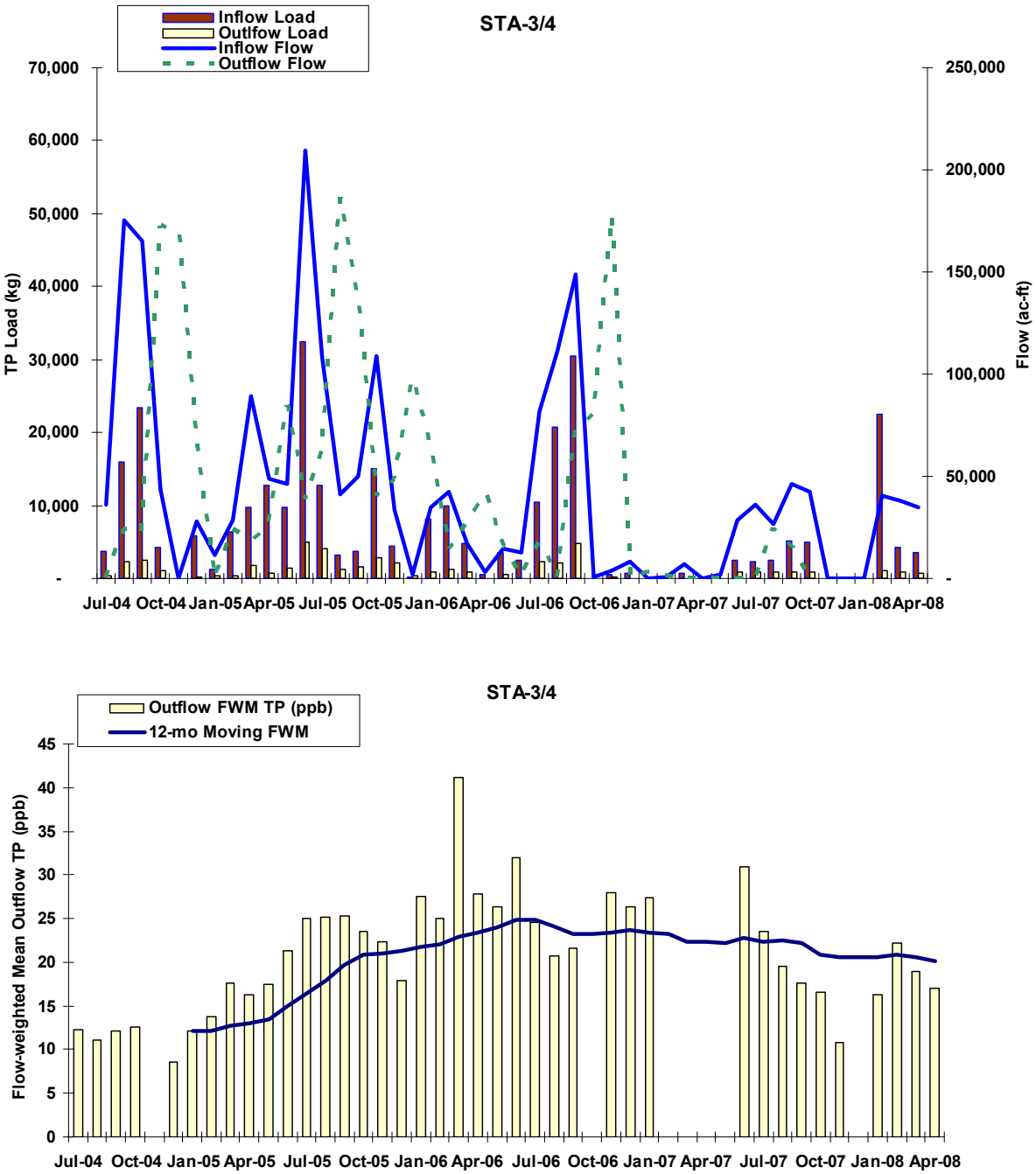
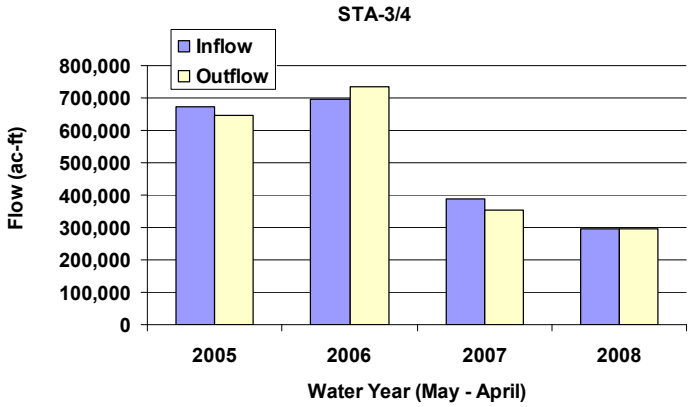
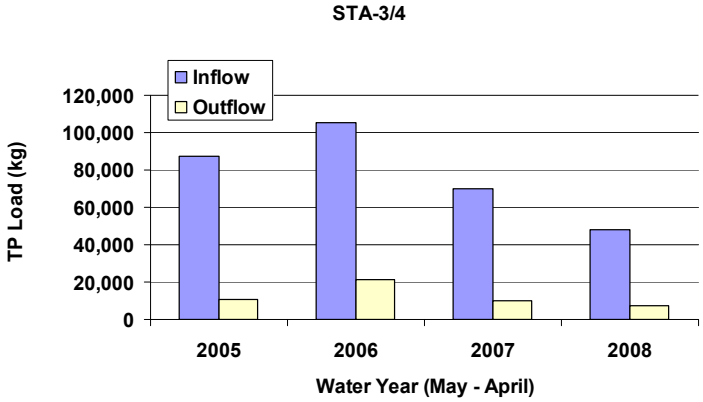


Figure 8. Flow, TP load, and flow-weighted mean TP concentrations at STA-3/4 during WY2004–WY2008. Sections of STA-3/4 were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.





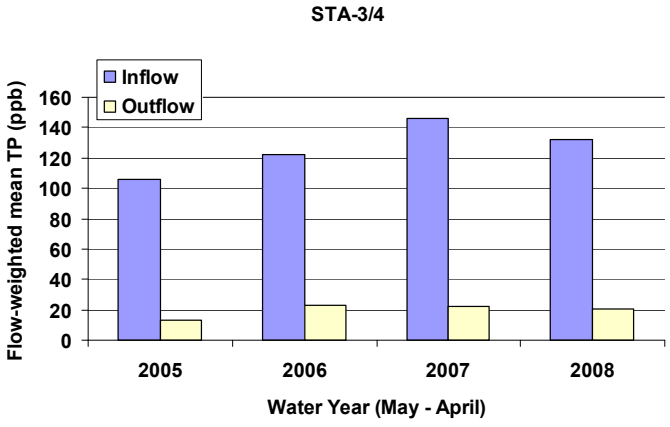


Figure 9. Flow, TP load, and TP flow-weighted mean concentrations at STA-3/4 for the period of record. Sections of this STA were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status.

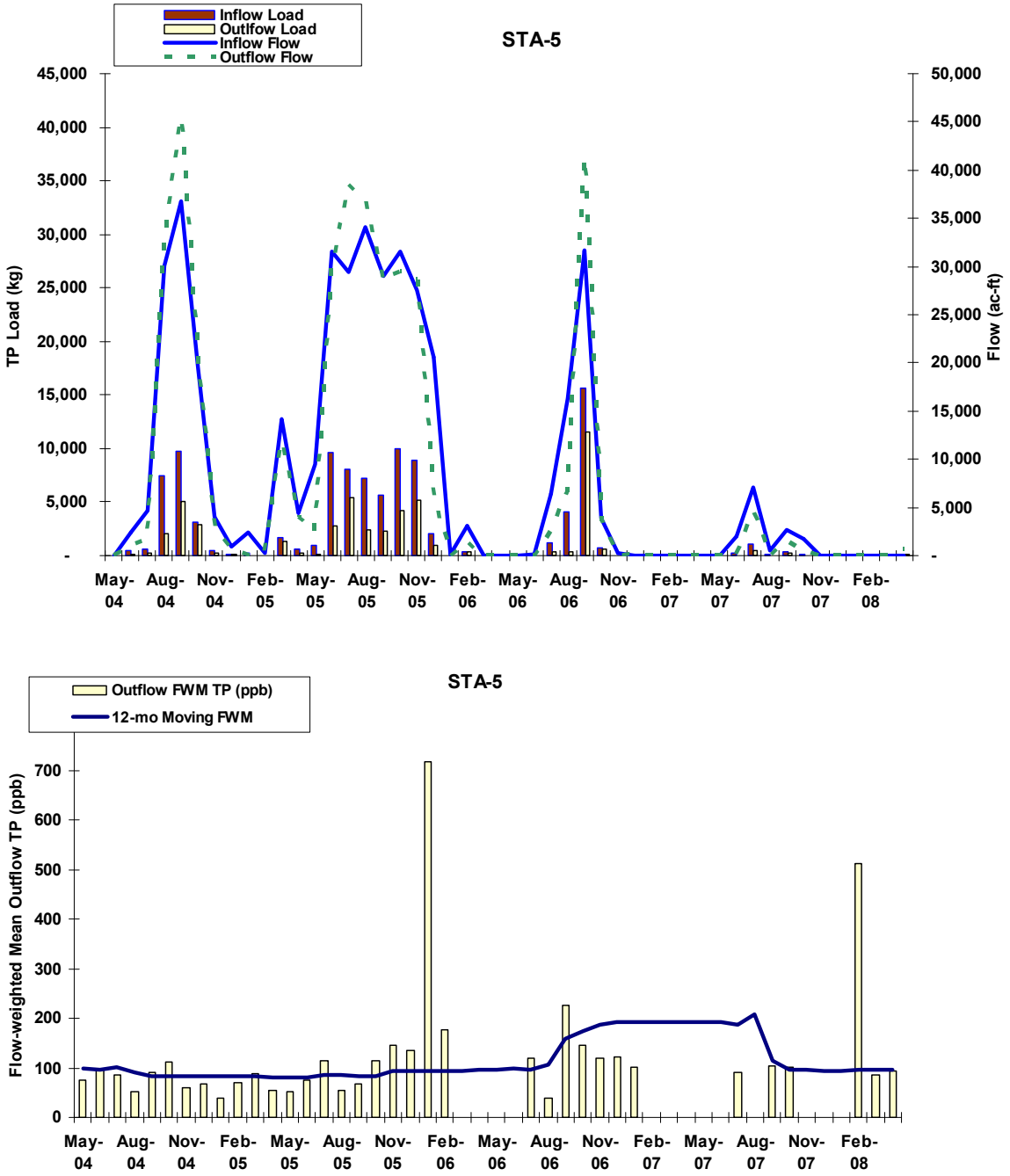


Figure 10. Flow, TP load, and flow-weighted mean TP concentrations at STA-5 during WY2004–WY2008. Sections of STA-5 were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.

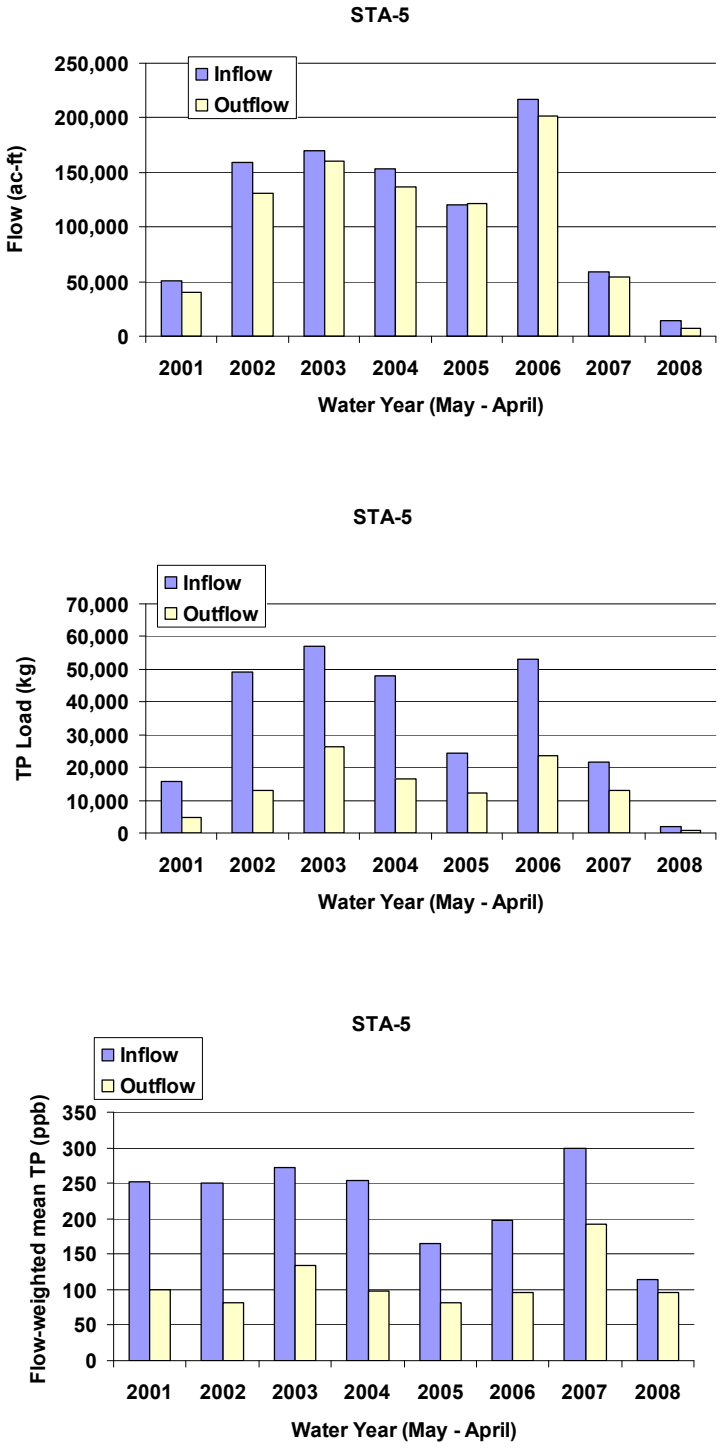


Figure 11. Flow, TP load, and TP flow-weighted mean concentrations at STA-5 for the period of record. Sections of this STA were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status.

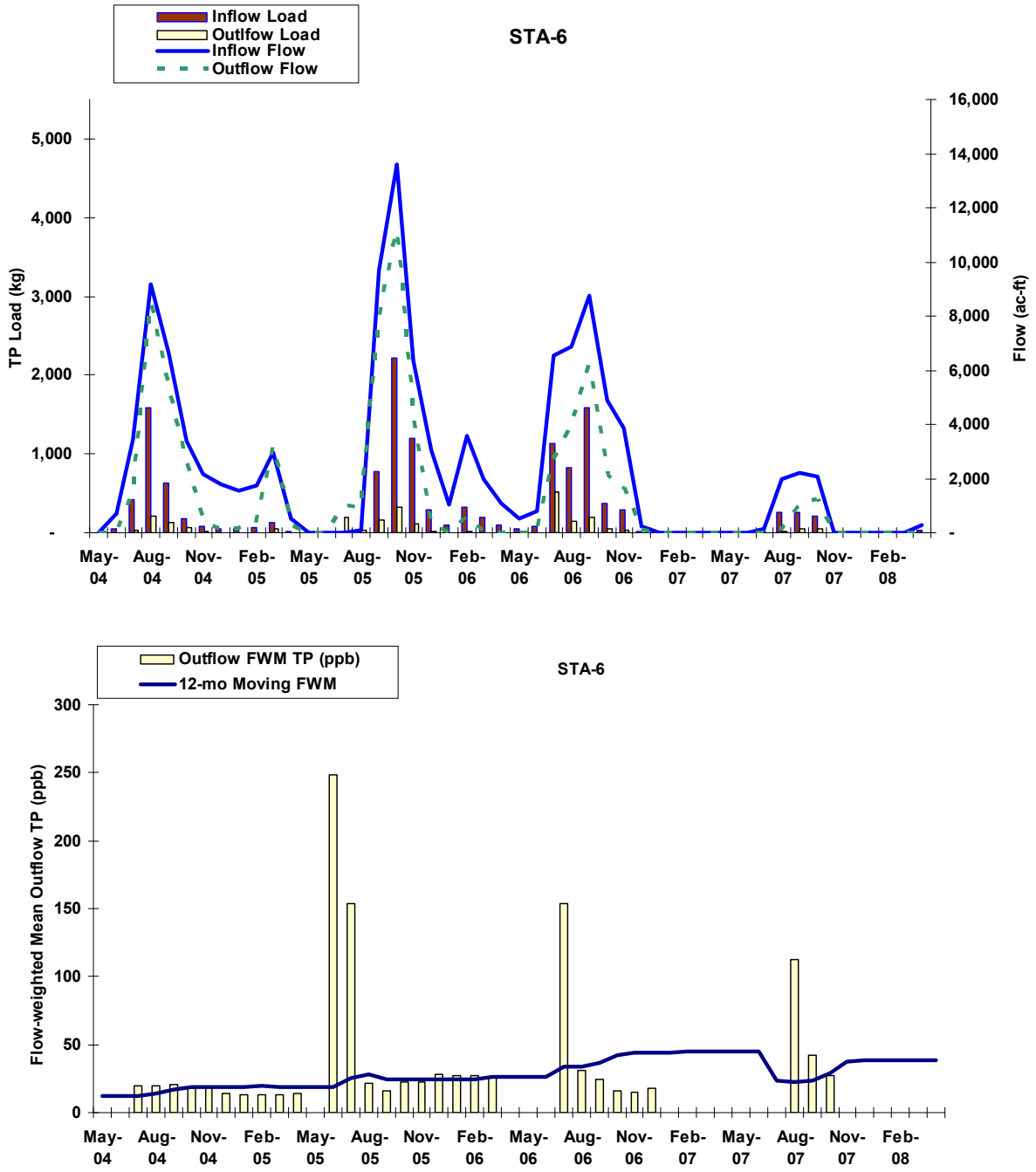


Figure 12. Flow, TP load, and flow-weighted mean TP concentrations at STA-6 during WY2004–WY2008. Sections of STA-6 were temporarily off-line during WY2004–WY2007. Refer to Table 2 of this appendix for information about treatment cell status.

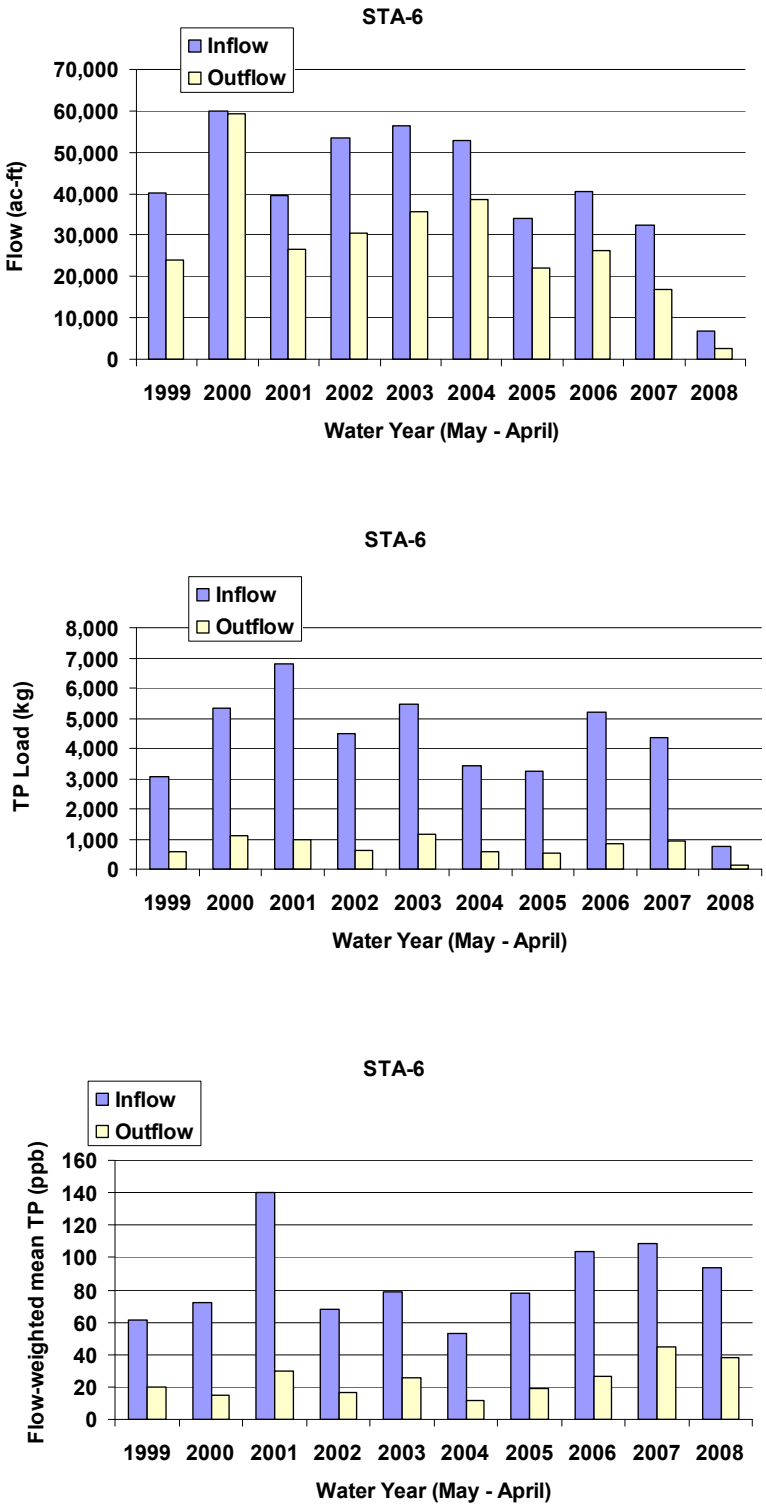


Figure 13. Flow, TP load, and TP flow-weighted mean concentrations at STA-6 for period of record. Sections of STA-6 were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status.

Table 1. Flow, TP load, and TP flow-weighted mean concentrations at the STAs. Sections of these STAs were temporarily off-line during this period. Refer to Table 2 of this appendix for information about treatment cell status. Yellow highlighted areas indicate data changes as reported from the 2008 SFER – Volume I, Chapter 5. Data changes can occur as modifications are made to the flow or water quality estimates.

STA-1E (Start-up 9/04, Permit issued 10/1/2005)

Inflow = S-319, G-311, S-361 Outflow = S-362

Water Year	Inflow acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
Hurricane response, start Sep. 2004 - April 2005	19,426	4,853	202	0.69	0.51	17,565	8,071	373	-3,219	-66%			4,024		
2006	52,113	11,729	182	1.08	0.72	40,572	7,295	146	4,434	38%	0.27		4,024	41	
2007	108,311	31,902	239	2.25	1.96	97,818	8,622	71	23,280	73%	1.43		4,024	23	10
2008	138,694	18,952	111	2.88	1.16	125,391	3,138	20	15,813	83%	0.97		4,024	23	18
Total	***318,544***	***67,435***	***172***	#DIV/0!	#DIV/0!	***281,346***	***27,127***	***78***	***40,308***	***60%***					

STA-1W (ENR Start-up 10/93, Flow-through: 8/1994; STA-1W 2000)

*Inflow: G250 for Water Year 94 - 6/99, G302 for remainder Outflow = G-251 for Water Year 95-99, G-251 + G-310 for remainder.

Water Year	Inflow* acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
1994*, partial, startup 10/93	0.00	-				0.53	0.01	20	0							
1995*, partial WY, start-up 5/94 - 7/94	0.60	0	148			0.00	0.00									
1995*, partial WY, start 8/94	92,364	15,452	136	3.47	1.72	95,333	2,718	23	12,735	13	82%	0.82	12,735	3,815	17.3	22
1996	182,670	24,464	109	4.00	1.58	172,414	5,079	24	19,385	19	79%	1.26	32,120	3,815	15.0	22
1997	118,780	14,391	98	2.60	0.93	119,198	2,750	19	11,642	12	81%	0.75	43,761	3,815	23.1	16
1998	80,304	11,536	116	1.76	0.75	80,986	2,125	21	9,410	9	82%	0.61	53,171	3,815	34.1	11
1999	88,532	11,096	102	1.94	0.72	86,376	2,045	19	9,051	9	82%	0.59	62,223	3,815	31.0	12
2000	125,863	22,477	145	2.76	1.46	121,229	3,753	25	18,724	19	83%	1.21	80,947	3,815	21.8	18
2001	94,522	17,171	147	1.27	0.68	90,517	4,319	39	12,852	13	75%	0.51	93,798	6,194	42.4	6
2002	278,857	51,767	150	3.49	1.92	267,624	12,200	37	39,567	40	76%	1.47	133,366	6,670	17.2	18
2003	591,845	112,172	154	7.41	4.16	595,999	39,234	53	72,937	73	65%	2.70	206,303	6,670	8.2	29
2004	292,690	50,733	141	3.66	1.88	297,603	17,073	47	33,661	34	66%	1.25	239,964	6,670	16.1	15
2005	341,094	103,872	247	5.24	4.72	383,365	46,489	98	57,384	57	55%	2.61	297,347	5,436	11.5	18
2006	142,678	37,415	213	2.85	2.21	137,890	19,265	113	18,150	18	49%	1.07	315,498	4,181	13.2	7
2007	121,698	41,511	277	3.21	3.24	126,246	18,493	119	23,019	23	55%	1.80	338,516	3,168	14.0	10
2008	116,291	26,574	185	1.84	1.24	117,002	7,611	53	18,963	19	71%	0.89	357,480	5,289	14.0	8
Total	***2,668,189***	***540,633***	***164***			***2,691,782***	***183,153***	***55***	***357,480***		***66%***					

STA-2 Cells 1-3 (Start-up 6/99; Flow-through: 10/2000)

Inflow = S-6 + G-328 Outflow = G-335

Water Year	Inflow acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
2001* Partial WY, flow records start 7/00	158,012	22,355	115	4.16	1.74	0	0		22,355	22		0.87		6,338		
2002	212,808	19,656	75	2.80	0.77	240,685	4,871	16	14,786	15	75%	0.58	14,786	6,338	16.0	16
2003	282,731	21,765	62	3.73	0.85	308,297	6,757	18	15,008	15	69%	0.59	29,794	6,338	12.1	17
2004	256,938	24,330	77	3.39	0.95	284,780	5,036	14	19,294	19	79%	0.75	49,088	6,338	13.3	21
2005	316,273	49,048	126	4.17	1.91	371,023	9,228	20	39,821	40	81%	1.55	88,908	6,338	11.0	28
2006	291,136	43,764	122	3.84	1.71	322,303	8,238	21	35,527	36	81%	1.39	124,435	6,338	12.2	25
2007	218,566	44,383	165	2.88	1.73	217,572	11,008	41	33,375	33	75%	1.30	157,810	6,338	16.2	15
2008	204,381	26,850	106	2.54	0.99	227,003	6,089	22	20,761	21	77%	0.76	178,571	6,712	18.3	15
Total	***1,940,844***	***252,152***	***105***			***1,971,663***	***51,225***	***21***	***200,927***		***80%***					

STA-3/4 (E and C FW start-up 10/03, W FW start-up 11/03)

Flow-through: E FW 1/04, W FW 6/04, C FW 9/04 Inflow = G-370 + G-372

Water Year	Inflow acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
2004* Partial WY, start 10/03	23,303	1,392	48	0.09	0.02	25,811	481	15	910	1	65%	0.03	910	6,500		
2005	671,442	87,368	105	4.65	1.79	646,587	10,375	13	76,993	77	88%	1.58	77,904	12,059		36
2006	696,729	105,310	123	4.08	1.83	736,422	21,241	23	84,069	84	80%	1.46	161,973	14,253	13.8	25
2007	388,471	69,921	146	2.01	1.07	355,423	9,810	22	60,111	60	86%	0.92	222,084	16,161	21.0	14
2008	295,080	48,104	132	1.49	0.72	296,162	7,355	20	40,749	41	85%	0.61	262,833	16,543	21.0	10
Total	***2,075,025***	***312,095***	***122***			***2,060,405***	***49,262***	***19***	***262,833***		***84%***					

Table 1. Continued.

STA-5 North and Central Flow-way (Start-up 12/30/98; Flow-through: 10/1999)

Flow record starts in 9/99 | Inflow = G-342 A-D | Outflow = G-344 A-D

Water Year	Inflow acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
2000* Partial WY, start 9/99.	8,088	2,260	226	0.16	0.14	13,343	2,741	167	-481	0	-21%			4,110		
2001	50,459	15,669	252	1.03	0.94	39,978	4,898	99	10,771	11	69%	0.65	10,771	4,110	40.1	3
2002	159,258	49,071	250	3.24	2.95	131,005	13,095	81	35,976	36	73%	2.16	46,746	4,110	15.2	13
2003	170,203	57,207	272	3.46	3.44	160,518	26,456	134	30,751	31	54%	1.85	77,498	4,110	16.3	9
2004	153,080	48,078	255	3.11	2.89	136,466	16,407	97	31,671	32	66%	1.90	109,169	4,110	18.9	11
2005	119,910	24,457	165	2.63	1.59	121,427	12,220	82	12,237	12	50%	0.79	121,406	3,805	22.3	7
2006	216,514	53,027	199	5.61	4.07	201,096	23,710	96	29,317	29	55%	2.25	150,723	3,222	5.8	15
2007	58,690	21,682	299	1.30	1.42	54,163	12,857	192	8,825	9	41%	0.58	159,547	3,768	12.0	2
2008	13,919	1,968	115	0.28	0.12	7,075	836	96	1,132	1	58%	0.07	160,680	4,110	12.0	0
Total	**950,121**	**273,419**	***233***			**865,071**	**113,220**	***106***	***160,199***		***59%***					

STA-6 Section 1 (Start up 10/97, Flow-through Date: 12/97)

Inflow = G-600 | Outflow = G-393 and G-354

Water Year	Inflow acre feet	Inflow TP kg	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP kg	Outflow TP ppb	TP Retained kg	TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg	Effective Treatment Area acres	HRT Days	TP Mass Retained Coefficient m/yr
1998* Partial WY, startup, 10/97	4,121	190	37													
1998* Partial WY, flow-through 12/97	26,101	1,631	51	2.51	0.46	23,984	481	16	1,150	1	71%	0.98	1,150	870	18.0	10
1999	40,120	3,052	62	3.85	0.87	24,035	588	20	2,464	2	81%	2.10	3,614	870	6.8	16
2000	59,848	5,353	73	5.74	1.52	59,261	1,115	15	4,238	4	79%	3.61	7,853	870	6.6	33
2001	39,395	6,821	140	3.78	1.94	26,718	986	30	5,835	6	86%	4.97	13,688	870	8.1	21
2002	53,437	4,506	68	5.13	1.28	30,466	615	16	3,891	4	86%	3.32	17,579	870	9.3	27
2003	56,252	5,474	79	5.40	1.55	35,666	1,141	26	4,333	4	79%	3.69	21,912	870	9.3	22
2004	52,674	3,424	53	5.06	0.97	38,682	561	12	2,863	3	84%	2.44	24,775	870	11.1	28
2005	34,035	3,255	78	3.27	0.92	22,187	515	19	2,740	3	84%	2.34	27,515	870	17.1	17
2006	40,467	5,183	104	3.88	1.47	26,312	848	26	4,335	4	84%	3.69	31,851	870	12.2	20
2007	32,443	4,360	109	3.74	1.49	16,755	925	45	3,435	3	79%	3.51	35,286	725	5.0	12
2008	6,676	772	94	0.64	0.22	2,458	117	38	656	1	85%	0.56	35,941	870	5.0	2
Total	***445,569***	***44,023***	***80***			***306,525***	***7,891***	***21***	***36,132***		***82%***					

Total of all STAs

Operational STAs	Water Year May - April	Inflow Volume acre feet	Inflow TP kg	Inflow TP Load mt	Inflow TP ppb	HLR cm/day	PLR g/m2/yr	Outflow acre feet	Outflow TP Load kg	Outflow TP Load mt	Outflow TP ppb	Total Phosphorus TP Retained kg/yr	Total Phosphorus TP Retained mt	TP Retained %	TP Retained g/m2/yr	Cumulative Retained kg/yr	Avg Calc. Effective Treatment Area acres	Avg Reported HRT Days
1994(ENR section of STA-1W)	1994	0.00	-					1	0		20	0	0					
1995 (ENR section of STA-1W)	1995	92,364	15,452	15	136	3.47	1.72	95,333	2,718	3	23	12,735	13	82%	1.41	12,735	3,815	17.3
1996 (ENR Section of STA-1W)	1996	182,670	24,464	24	109	4.00	1.58	172,414	5,079	5	24	19,385	19	79%	1.26	32,120	3,815	15.0
1997 (ENR Section of STA-1W)	1997	118,780	14,391	14	98	2.60	0.93	119,198	2,750	3	19	11,642	12	81%	0.75	43,761	3,815	23.1
1998 (ENR Section of STA-1W, STA-6)	1998	110,527	13,357	13	98	1.87	0.70	104,970	2,606	3	20	10,751	11	80%	0.57	54,512	4,685	28.1
1999 (ENR Section of STA-1W, STA-6)	1999	128,652	14,148	14	89	2.53	0.75	110,411	2,633	3	19	11,516	12	81%	0.61	66,027	4,685	17.0
2000 (STA-1W, STA-5, STA-6)	2000	193,799	30,090	30	126	3.57	1.37	193,833	7,609	8	32	22,481	22	75%	0.63	88,509	8,795	13.8
2001 (STA-1W, STA-2, STA-5, STA-6)	2001	342,389	62,017	62	147	2.86	1.27	157,213	10,204	10	53	51,813	52	84%	0.73	140,322	17,512	14.7
2002 (STA-1W, STA-2, STA-5, STA-6)	2002	704,360	125,000	125	144	3.35	2.12	669,781	30,781	31	37	94,219	94	75%	1.29	234,541	17,988	15.1
2003 (STA-1W, STA-2, STA-5, STA-6)	2003	1,101,032	196,618	197	145	5.75	3.51	1,100,481	73,587	74	54	123,030	123	63%	1.69	357,571	17,988	9.2
2004 (STA-1W, STA-2, STA-3/4, STA-5, STA-6)	2004	778,684	127,958	128	133	3.45	2.04	783,342	39,558	40	41	88,400	88	69%	0.70	445,971	30,988	15.8
2005 (STA-1W, STA-2, STA-3/4, STA-5, STA-6)	2005	1,502,180	272,854	273	147	4.43	2.87	1,562,154	86,899	87	45	185,956	186	68%	1.61	631,926	28,509	12.5
2006 (STA-1E, STA-1W, STA-2, STA-3/4, STA-5, STA-6)	2006	1,439,636	256,428	256	144	4.03	2.27	1,464,596	80,596	81	45	175,832	176	69%	1.32	807,758	32,888	9.9
2007 (STA-1E, STA-1W, STA-2, STA-3/4, STA-5, STA-6)	2007	928,178	213,758	214	187	2.41	1.80	867,977	61,714	62	58	152,044	152	71%	1.10	959,803	34,184	
2008 (STA-1E, STA-1W, STA-2, STA-3/4, STA-5, STA-6)	2008	775,040	123,221	123	129	2.04	0.95	775,091	25,146	25	26	98,075	98	80%	0.65	1,057,877	37,548	
Total		***8,398,291***	***1,489,756***	1,490	***144***			***8,176,793***	***431,878***	432	***43***	***1,057,877***	***1,058***	***71%***				

Table 2. Status of the STA treatment cells from January 2004–April 2008.

STA-1E Operational Treatment Cells																	
2004					2005					2006			2007				2008
WY2004						WY2006							WY2008				
	WY2005										WY2007						
Jan - Mar	Apr - Jun	Jul - Aug	Sep *Hurricanes Frances and Jeanne*	Oct - Dec	Jan - Mar	Apr - Jul	Aug - Sep	Oct *Hurricane Wilma*	Nov - Dec	Jan - Apr	May - Jun	Jul - Dec	Jan - Apr	May	Jun - Sep	Sep - Dec	Jan - Apr
Treatment Cells On-line																	
Prior to operation			Emergency Operations, cell hydration					Central and Western Flow-ways Operational							Central and Western Flow-ways Operational, Eastern Flow-way hydrated and passed WQ start-up in Sep 2007	Central and Western Flow-ways Operational, Eastern Flow-way restricted during operation of the USACOE PSTA project	
Treatment Cells Off-line																	
								Eastern Flow-way off-line for PSTA project (construction completed Feb 2007, off-line until Jun 2007)									

Table 2. Continued.

STA-1W Operational Treatment Cells																				
2004							2005							2006				2007		2008
WY2004								WY2006										WY2008		
	WY2005													WY2007						
Jan - Mar	Apr - Jun	Jul - Jul	Aug	Sep *Hurricanes Frances and Jeanne*	Oct - Dec	Jan	Feb - Jun	Jul - Aug	Sep	Oct *Hurricane Wilma*	Nov	Dec	Jan - Mar	Apr - Jun	Jul - Aug	Sep - Dec	Jan - Apr	May - Aug	Sep - Dec	Jan - Apr
Treatment Cells On-Line																				
Northern and Eastern Flow-ways Operational			All Flow-ways Operational (Northern Flow-way restricted capacity (150 cfs) Nov. and Dec. because of hurricane damage).			Northern and Eastern Flow-way Operational	Eastern Flow-way Operational	Northern and Eastern Flow-ways Operational (Northern Flow-way restricted flow in Nov. and Dec. because of hurricane damage)					Eastern Flow-way Operational			Northern Flow-way Operational (July - Aug 2006 restiricted to 200 cfs and 10.7 target, Sep 2006 restricted to 500 cfs, Oct 2006 - Feb 2007 restricted to 750 cfs, Mar - Jul 2007 stage restricted to 10.8 during flow)		Northern Flow-way Operational, Western Flow-way restricted to 400 cfs, Eastern Flow-way restricted to 450 cfs	Northern and Western Flow-ways Operational, Eastern Flow-way restricted to 225 cfs
Treatment Cells Off-Line																				
Western Flow-way off-line to remove cattail tussocks in Cell 2 and plant rehabilitation in Cell 4						Western Flow-way off-line (Cell 2 divide levee and water control structures), Northern Flow-way off-line (starting in Feb.) to degrade the Limerock Berm and allow for hurricane repairs and plant re-establishment.		Western Flow-way re-hydrated, off-line for plant re-establishment					Northern Flow-way off-line (LTP enhancements construction and sediment and plant rehabilitation) and Western Flow-way restricted flow 200 cfs, 10.7 stage in July and Aug, then off-line (for plant re-establishment)			Eastern Flow-way off-line for LTP enhancements construction and vegetation conversion (Cell 3), Western Flow-way off-line for rehabilitation			

Table 2. Continued.

STA-2 Operational Treatment Cells

2004					2005					2006			2007			2008
Jan - Mar	Apr - Jun	Jul - Aug	Sep *Hurricanes Francis and Jeanne*	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct *Hurricane Wilma*	Nov - Dec	Jan - Apr	May - Jun	Jul - Dec	Jan - Apr	May - Nov	Dec	Jan - Apr
WY2004					WY2006									WY2008		
	WY2005										WY2007					
Treatment Cells On-Line																
Cells 1 - 3 Operational															Cells 1 - 3 Operational, Cell 4 on-line	
Treatment Cells Off-line																
									Cell 4 Flow-capable Dec 2006, non-operational (for WQ start-up compliance passed on 9/21/07)							

Table 2. Continued.

STA-3/4 Operational Treatment Cells

2004					2005					2006		2007		2008
WY2004							WY2006						WY2008	
	WY2005										WY2007			
Jan - Mar	Apr - Jun	Jul - Aug	Sep *Hurricanes Frances and Jeanne*	Oct - Dec	Jan - Feb	Mar - Jun	Jul - Sep	Oct *Hurricane Wilma*	Nov - Dec	Jan - May	Jun - Dec	Jan - April	May - Dec	Jan - Apr
Treatment Cells On-line														
Eastern and Western Flow-way Operational			All Flow-ways (Eastern, Central, Western) Operational		Eastern and Central Flow-way Operational		All Flow-ways Operational (Cell 3 restricted flow/stage)			Eastern and Central Flow-way Operational		All Flow-ways Operational		
Treatment Cells Off-line														
Central Flow-way off-line for vegetation conversion					Western Flow-way off-line for LTP enhancements construction		Western Flow-way re-hydrated, partial operation for plant re-establishment			Western Flow-way off-line for LTP enhancemenets construction				

Table 2. Continued.

STA-5 Operational Status of Treatment Cells

2004					2005					2006			2007	2008
WY2004						WY2006								WY2008
	WY2005										WY2007			
Jan - Mar	Apr - Jun	Jul - Aug	Sep *Hurricanes Frances and Jeanne*	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct *Hurricane Wilma*	Nov - Dec	Jan - Mar	Apr - Jun	Jul - Dec	Jan - Apr	May - Dec	Jan - Apr
Treatment Cells On-line															
Northern and Central Flow-ways Operational					Central Flow-way (Cells 2A and 2B) Operational; Cell 1A restricted capacity		Northern and Central Flow-ways Operational (Cell 1B restricted capacity to allow for plant establishment)			Northern Flow-way Operational		Northern and Central Flow-ways Operational			
Treatment Cells Off-line															
					Cell 1B off-line; LTP Enhancements construction in Northern Flow-way (Cell 1A and 1B)					Central Flow-way (Cells 2A and 2B) off-line; LTP Enhancements construction		Vegetation conversion Cell 2B, Southern Flow-way (Cells 3A and 3B) flow-capable Dec. 2006	Southern Flow-way off-line (drought, unable to hydrate)		

Table 2. Continued.

STA-6 Operational Treatment Cells

2004				2005				2006	2007					2008		
WY2004					WY2006								WY2008			
	WY2005								WY2007							
Jan -Apr	May - Aug	Sep *Hurricanes Francis and Jeanne*	Oct - Dec	Jan - Apr	May - Sep	Oct *Hurricane Wilma*	Nov - Dec	Jan - Apr	May - Nov	Dec	Jan	Feb - Mar	Apr	May - Nov	Dec	Jan - Apr
Treatment Cells On-line																
Section 1 (Cells 3 & 5) Operational													Section 1 Operational		Section 1 Operational, Section 2 on-line	
Treatment Cells Off-line																
										Section 2 flow-capable	Section 2 off-line (for start-up WQ compliance)	Section 1 off-line for LTP Construction, Section 2 off-line (start-up compliance)	Section 2 off-line (start-up WQ compliance passed Aug 14, 2007)			