

Appendix 3A-4: Annual Summary of Total Phosphorus Concentrations at Everglades Protection Area Monitoring Stations during Water Year 2010

Florida Department of Environmental Protection¹

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Table 1. Annual summary of total phosphorus concentrations [micrograms per liter ($\mu\text{g/L}$)] at the inflow, Rim Canal, interior marsh, and outflow monitoring stations in the Everglades Protection Area during Water Year 2010 (May 1, 2009–April 30, 2010).

Area	Class	Station	Count	Geometric Mean	Arithmetic Average	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
ENP	Inflow	S12A	52	12.7	16.5	14.4	5.1	7.4	11.4	17.2	61.1
ENP	Inflow	S12B	23	6.8	7.0	1.7	3.0	6.0	7.0	8.0	10.0
ENP	Inflow	S12C	26	7.8	8.0	1.9	5.0	6.0	7.5	9.0	12.0
ENP	Inflow	S12D	44	9.0	9.4	2.8	5.0	7.0	9.0	11.0	16.0
ENP	Inflow	S18C	52	5.4	5.9	4.2	3.0	4.5	5.0	6.0	34.0
ENP	Inflow	S333	52	13.6	15.6	9.2	6.6	9.5	11.6	20.1	44.1
ENP	Inflow	S355A	13	12.2	14.6	11.0	6.0	8.5	10.0	14.0	42.0
ENP	Inflow	S355B	13	16.2	19.2	13.0	8.0	10.0	15.0	24.5	51.0
ENP	Inflow	US41-25	16	16.3	20.1	19.7	9.0	11.3	15.0	20.8	91.0
ENP	Interior	EP	11	2.2	2.5	1.0	<2.0	2.0	2.0	3.0	4.0
ENP	Interior	NE1	11	4.5	4.6	1.3	3.0	4.0	4.0	5.0	8.0
ENP	Interior	NP201	11	3.6	4.0	2.4	2.0	3.0	3.0	4.0	11.0
ENP	Interior	P33	11	6.1	7.0	4.8	4.0	4.0	6.0	7.0	21.0
ENP	Interior	P34	9	4.9	5.7	3.9	3.0	3.0	4.0	7.0	15.0
ENP	Interior	P35	8	6.5	6.8	2.1	4.0	5.0	6.5	8.8	10.0
ENP	Interior	P36	11	5.5	5.8	2.3	3.0	4.0	6.0	7.0	11.0
ENP	Interior	P37	9	2.3	2.4	0.9	<2.0	2.0	2.0	3.0	4.0
ENP	Interior	S12C10	2	8.8	9.5	4.9	6.0	0.0	9.5	0.0	13.0
ENP	Interior	S12C2	1	4.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0
ENP	Interior	S12C6	2	6.0	6.5	3.5	4.0	0.0	6.5	0.0	9.0
ENP	Interior	T24	2	3.9	4.0	1.4	3.0	0.0	4.0	0.0	5.0
ENP	Interior	T33	2	5.5	5.5	0.7	5.0	0.0	5.5	0.0	6.0
ENP	Interior	TSB	9	4.4	4.7	1.7	3.0	3.5	4.0	6.0	8.0
Refuge	Inflow	ENR012	52	30.7	31.4	7.1	19.0	27.0	29.5	35.0	55.5
Refuge	Inflow	G300	52	131.0	144.7	81.9	71.0	100.0	115.5	172.8	586.0
Refuge	Inflow	G301	52	129.9	149.9	109.4	58.0	88.0	125.0	185.8	800.0
Refuge	Inflow	G310	52	36.5	39.2	16.6	19.0	28.0	35.5	47.4	95.0
Refuge	Inflow	S362	52	50.6	60.2	37.2	17.0	31.5	49.5	80.0	191.5
Refuge	Interior	LOX10	11	6.7	7.2	3.1	5.0	5.0	6.0	7.0	15.0
Refuge	Interior	LOX11	11	6.2	6.6	2.8	4.0	5.0	6.0	7.0	14.0
Refuge	Interior	LOX12	12	8.3	8.9	3.8	5.0	6.0	8.5	11.0	17.0
Refuge	Interior	LOX13	11	6.3	6.5	2.1	5.0	5.0	6.0	7.0	12.0
Refuge	Interior	LOX14	11	6.6	6.9	2.3	4.0	5.0	6.0	8.0	12.0
Refuge	Interior	LOX15	11	6.6	6.7	1.7	5.0	6.0	6.0	7.0	11.0
Refuge	Interior	LOX16	11	7.2	7.5	2.0	4.0	6.0	7.0	9.0	11.0
Refuge	Interior	LOX3	9	8.1	8.2	1.6	6.0	7.0	8.0	9.5	11.0

Table 1. Continued.

Area	Class	Station	Count	Geometric Mean	Arithmetic Average	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
ENP	Interior	S12C10	2	8.8	9.5	4.9	6.0	0.0	9.5	0.0	13.0
ENP	Interior	S12C2	1	4.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0
ENP	Interior	S12C6	2	6.0	6.5	3.5	4.0	0.0	6.5	0.0	9.0
ENP	Interior	T24	2	3.9	4.0	1.4	3.0	0.0	4.0	0.0	5.0
ENP	Interior	T33	2	5.5	5.5	0.7	5.0	0.0	5.5	0.0	6.0
ENP	Interior	TSB	9	4.4	4.7	1.7	3.0	3.5	4.0	6.0	8.0
Refuge	Inflow	ENR012	52	30.7	31.4	7.1	19.0	27.0	29.5	35.0	55.5
Refuge	Inflow	G300	52	131.0	144.7	81.9	71.0	100.0	115.5	172.8	586.0
Refuge	Inflow	G301	52	129.9	149.9	109.4	58.0	88.0	125.0	185.8	800.0
Refuge	Inflow	G310	52	36.5	39.2	16.6	19.0	28.0	35.5	47.4	95.0
Refuge	Inflow	S362	52	50.6	60.2	37.2	17.0	31.5	49.5	80.0	191.5
Refuge	Interior	LOX10	11	6.7	7.2	3.1	5.0	5.0	6.0	7.0	15.0
Refuge	Interior	LOX11	11	6.2	6.6	2.8	4.0	5.0	6.0	7.0	14.0
Refuge	Interior	LOX12	12	8.3	8.9	3.8	5.0	6.0	8.5	11.0	17.0
Refuge	Interior	LOX13	11	6.3	6.5	2.1	5.0	5.0	6.0	7.0	12.0
Refuge	Interior	LOX14	11	6.6	6.9	2.3	4.0	5.0	6.0	8.0	12.0
Refuge	Interior	LOX15	11	6.6	6.7	1.7	5.0	6.0	6.0	7.0	11.0
Refuge	Interior	LOX16	11	7.2	7.5	2.0	4.0	6.0	7.0	9.0	11.0
Refuge	Interior	LOX3	9	8.1	8.2	1.6	6.0	7.0	8.0	9.5	11.0
Refuge	Interior	LOX4	11	10.2	11.5	6.2	5.0	8.0	8.0	16.0	25.0
Refuge	Interior	LOX5	9	7.7	7.9	1.9	6.0	6.5	7.0	10.0	11.0
Refuge	Interior	LOX6	11	5.2	5.8	3.2	<2.0	4.0	5.0	7.0	14.0
Refuge	Interior	LOX7	11	7.5	7.6	1.4	5.0	7.0	8.0	8.0	10.0
Refuge	Interior	LOX8	11	9.8	10.2	3.5	8.0	8.0	9.0	10.0	20.0
Refuge	Interior	LOX9	11	6.6	6.7	1.3	5.0	6.0	6.0	7.0	10.0
Refuge	Interior	LOXA101	11	13.0	15.4	12.4	8.0	9.0	11.0	18.0	51.0
Refuge	Interior	LOXA105	11	12.1	12.9	5.1	7.0	8.0	13.0	15.0	25.0
Refuge	Interior	LOXA106	11	9.0	9.5	4.3	6.0	7.0	9.0	9.0	22.0
Refuge	Interior	LOXA107	7	8.7	9.4	4.6	6.0	6.0	8.0	11.0	19.0
Refuge	Interior	LOXA108	11	8.0	8.2	2.0	6.0	7.0	7.0	11.0	11.0
Refuge	Interior	LOXA124	11	12.5	15.3	10.9	4.0	8.0	12.0	17.0	40.0
Refuge	Interior	LOXA130	11	10.3	10.6	2.9	8.0	9.0	9.0	12.0	18.0
Refuge	Interior	LOXA136	11	16.4	19.5	15.1	9.0	11.0	14.0	20.0	62.0
Refuge	Interior	LOXA137	11	10.7	12.4	8.3	4.0	9.0	10.0	13.0	36.0
Refuge	Interior	LOXA138	10	6.3	6.5	1.5	4.0	5.8	6.0	8.0	9.0
Refuge	Interior	LOXA139	9	8.6	8.9	2.8	7.0	7.5	8.0	9.0	16.0
Refuge	Interior	LOXA140	11	10.8	11.5	4.4	6.0	7.0	11.0	17.0	18.0

Table 1. Continued.

Area	Class	Station	Count	Geometric Mean	Arithmetic Average	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
Refuge	Interior	WCA1MESO	4	8.7	9.0	2.7	7.0	7.3	8.0	11.8	13.0
Refuge	Interior	X1	15	39.4	46.9	30.4	14.0	23.0	42.0	55.0	127.0
Refuge	Interior	X2	4	15.3	16.0	6.0	12.5	12.5	13.3	22.3	25.0
Refuge	Interior	X3	4	10.9	11.0	1.4	9.0	9.5	11.5	12.0	12.0
Refuge	Interior	X4	15	9.3	9.5	2.0	6.0	8.0	9.0	11.0	13.0
Refuge	Interior	Y4	4	10.8	10.9	1.7	9.0	9.4	10.8	12.5	13.0
Refuge	Interior	Z1	15	27.8	33.2	21.6	10.0	18.0	26.5	45.0	80.0
Refuge	Interior	Z2	4	17.9	18.0	2.7	16.0	16.3	17.0	20.8	22.0
Refuge	Interior	Z3	4	10.7	11.8	6.3	7.0	7.5	9.5	18.3	21.0
Refuge	Interior	Z4	5	14.7	26.7	38.8	7.0	7.5	11.0	53.8	96.0
Refuge	Outflow	G94B	13	44.8	52.2	37.7	18.0	34.0	42.0	57.0	170.0
Refuge	Outflow	S10A	14	17.9	20.5	13.6	11.0	12.0	17.0	22.5	62.0
Refuge	Outflow	S10C	15	15.6	16.2	4.9	11.0	12.0	15.0	19.0	26.0
Refuge	Outflow	S10D	17	26.3	27.2	7.5	17.0	20.0	25.0	34.5	39.0
Refuge	Outflow	S39	16	24.0	27.7	17.1	13.0	16.0	21.0	37.3	76.0
Refuge	Rim	LOXA104	12	34.8	36.0	10.2	22.0	31.0	32.0	40.3	59.0
Refuge	Rim	LOXA135	12	54.1	61.5	34.2	19.0	42.3	46.0	82.8	145.0
Refuge	Rim	X0	5	32.8	33.4	7.4	27.0	28.5	31.0	39.5	46.0
Refuge	Rim	Z0	5	32.1	33.0	8.8	24.0	24.5	32.0	42.0	43.0
WCA-2	Inflow	E0	5	24.4	26.0	9.9	14.0	17.0	24.0	36.0	38.0
WCA-2	Inflow	F0	5	32.2	35.4	14.3	13.0	22.0	40.0	46.5	50.0
WCA-2	Inflow	G335	52	18.4	21.5	18.7	10.0	14.3	16.8	20.5	125.5
WCA-2	Inflow	S10A	14	17.9	20.5	13.6	11.0	12.0	17.0	22.5	62.0
WCA-2	Inflow	S10C	15	15.6	16.2	4.9	11.0	12.0	15.0	19.0	26.0
WCA-2	Inflow	S10D	17	26.3	27.2	7.5	17.0	20.0	25.0	34.5	39.0
WCA-2	Inflow	S7	50	16.8	18.1	8.9	9.0	13.0	15.8	20.5	64.0
WCA-2	Interior	404C2	9	9.8	11.4	9.0	6.0	7.0	8.0	11.0	35.0
WCA-2	Interior	404Z1	10	20.8	22.9	11.8	12.0	15.8	19.0	26.0	52.0
WCA-2	Interior	CA217	11	4.5	4.6	1.0	3.0	4.0	5.0	5.0	7.0
WCA-2	Interior	CA222	11	4.8	4.9	1.3	3.0	4.0	5.0	6.0	7.0
WCA-2	Interior	CA223	8	21.1	22.4	8.5	14.0	16.3	19.5	28.5	39.0
WCA-2	Interior	CA224	11	6.6	6.7	1.2	5.0	6.0	6.0	8.0	9.0
WCA-2	Interior	CA26	10	4.5	4.5	0.7	4.0	4.0	4.0	5.0	6.0
WCA-2	Interior	CA27	11	6.6	6.7	1.7	5.0	6.0	6.0	8.0	11.0
WCA-2	Interior	CA28	11	21.9	23.6	9.1	12.0	14.0	27.0	32.0	38.0
WCA-2	Interior	CA29	11	4.7	4.7	0.9	4.0	4.0	5.0	5.0	7.0
WCA-2	Interior	E1	3	22.1	22.3	4.0	18.0	18.0	23.0	26.0	26.0

Table 1. Continued.

Area	Class	Station	Count	Geometric Mean	Arithmetic Average	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
WCA-2	Interior	E2	4	23.3	24.0	6.6	17.0	18.5	23.0	30.5	33.0
WCA-2	Interior	E3	4	19.6	21.8	12.8	15.0	15.0	15.5	34.8	41.0
WCA-2	Interior	E4	4	10.9	11.0	2.2	9.0	9.3	10.5	13.3	14.0
WCA-2	Interior	E5	15	6.2	7.7	7.6	4.0	4.0	6.0	6.0	34.0
WCA-2	Interior	F1	14	24.1	26.3	13.2	16.0	16.8	22.5	34.3	65.0
WCA-2	Interior	F2	14	19.8	22.7	14.8	11.0	13.0	18.5	22.3	63.0
WCA-2	Interior	F3	13	12.5	13.0	3.6	8.0	9.5	13.0	14.5	20.0
WCA-2	Interior	F4	15	11.3	12.1	4.8	6.0	8.0	11.0	14.5	23.0
WCA-2	Interior	F5	15	5.9	6.6	3.9	4.0	5.0	5.0	7.0	20.0
WCA-2	Interior	N1	11	22.2	26.2	20.9	11.0	16.0	20.0	29.0	87.0
WCA-2	Interior	S145	22	9.1	11.2	9.8	5.0	5.8	8.0	14.3	50.0
WCA-2	Interior	U1	15	6.2	6.4	2.1	4.0	5.0	6.0	8.0	12.0
WCA-2	Interior	U2	4	7.2	7.5	2.6	5.0	5.3	7.0	10.3	11.0
WCA-2	Interior	U3	15	4.9	5.1	1.8	3.0	4.0	4.0	6.0	9.0
WCA-2	Outflow	S11A	23	10.9	12.8	8.9	3.0	8.0	10.0	17.0	47.0
WCA-2	Outflow	S11B	12	10.4	11.2	4.9	7.0	8.0	9.5	14.8	22.0
WCA-2	Outflow	S11C	14	13.8	15.3	8.8	9.0	10.0	13.0	14.3	37.0
WCA-2	Outflow	S34	19	11.2	11.6	3.6	8.0	9.0	11.0	12.0	22.0
WCA-2	Outflow	S38	22	11.4	14.8	14.9	6.0	7.0	9.0	17.0	72.0
WCA-3	Inflow	3AW0	5	65.2	69.8	29.3	42.0	44.8	60.0	99.8	111.5
WCA-3	Inflow	C123SR84	12	21.9	25.3	14.9	11.0	12.8	20.0	36.0	56.0
WCA-3	Inflow	G123	12	14.4	15.5	7.0	9.0	11.0	13.0	21.0	32.0
WCA-3	Inflow	G204	4	140.7	301.5	433.3	33.0	51.8	112.0	740.8	949.0
WCA-3	Inflow	G205	4	86.9	159.3	211.4	26.0	35.8	68.0	374.0	475.0
WCA-3	Inflow	G206	3	33.8	48.7	51.4	17.0	17.0	21.0	108.0	108.0
WCA-3	Inflow	L3BRS	39	31.9	35.6	19.2	16.0	21.0	32.0	38.0	106.0
WCA-3	Inflow	S11A	23	10.9	12.8	8.9	3.0	8.0	10.0	17.0	47.0
WCA-3	Inflow	S11B	12	10.4	11.2	4.9	7.0	8.0	9.5	14.8	22.0
WCA-3	Inflow	S11C	14	13.8	15.3	8.8	9.0	10.0	13.0	14.3	37.0
WCA-3	Inflow	S140	51	48.7	49.8	10.5	29.0	41.5	50.5	57.0	77.5
WCA-3	Inflow	S142	11	12.7	14.8	9.9	7.0	9.0	11.0	21.0	39.0
WCA-3	Inflow	S150	31	15.2	15.6	3.7	10.0	13.0	16.0	17.0	30.0
WCA-3	Inflow	S151	20	12.6	14.9	11.1	7.0	9.0	10.5	14.8	52.0
WCA-3	Inflow	S190	52	35.5	42.7	33.8	19.0	25.0	29.0	47.4	173.0
WCA-3	Inflow	S8	52	22.9	24.8	10.9	11.0	17.0	22.5	28.9	67.0
WCA-3	Inflow	S9	52	12.9	13.8	7.1	8.0	10.0	11.5	15.0	55.0

Table 1. Continued.

Area	Class	Station	Count	Geometric Mean	Arithmetic Average	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
WCA-3	Interior	3ANMESO	4	5.2	5.8	3.5	4.0	4.0	4.0	9.3	11.0
WCA-3	Interior	3ASMESO	15	4.4	4.8	2.4	3.0	3.0	4.0	6.0	10.0
WCA-3	Interior	CA311	10	4.0	4.2	1.5	3.0	3.0	4.0	4.3	8.0
WCA-3	Interior	CA314	12	4.5	4.8	2.1	3.0	4.0	4.0	5.0	10.0
WCA-3	Interior	CA315	10	4.3	4.7	2.3	<2.0	3.8	4.0	5.5	10.0
WCA-3	Interior	CA316	10	6.4	6.8	2.6	3.0	5.5	6.5	8.0	11.0
WCA-3	Interior	CA317	11	6.0	8.2	10.3	3.0	4.0	5.0	6.0	39.0
WCA-3	Interior	CA318	10	6.8	7.0	1.7	4.0	6.0	7.0	8.3	10.0
WCA-3	Interior	CA319	11	4.7	4.8	1.2	4.0	4.0	4.0	5.0	7.0
WCA-3	Interior	CA32	11	4.9	5.1	1.3	3.0	4.0	5.0	6.0	8.0
WCA-3	Interior	CA324	5	12.5	14.0	7.2	7.0	7.5	12.0	21.5	23.0
WCA-3	Interior	CA325	11	4.6	4.7	1.1	3.0	4.0	5.0	5.0	7.0
WCA-3	Interior	CA33	8	8.8	9.0	2.2	6.0	7.0	9.5	11.0	11.0
WCA-3	Interior	CA34	10	7.0	7.2	2.0	5.0	5.8	6.5	9.0	11.0
WCA-3	Interior	CA35	5	7.1	7.2	1.3	6.0	6.0	7.0	8.5	9.0
WCA-3	Interior	CA36	8	23.6	24.3	6.1	17.0	18.0	24.0	28.5	35.0
WCA-3	Interior	CA38	9	4.4	4.7	1.9	3.0	3.5	4.0	5.5	9.0
WCA-3	Interior	CA39	11	4.9	5.1	1.4	3.0	4.0	5.0	7.0	7.0
WCA-3	Interior	CA3B1	10	3.4	3.8	2.1	<2.0	2.0	3.5	4.3	9.0
WCA-3	Interior	CA3B2	11	4.4	4.5	1.4	3.0	4.0	4.0	5.0	7.0
WCA-3	Interior	S345B6	13	3.8	4.4	2.8	<2.0	3.0	4.0	5.0	13.0
WCA-3	Outflow	S12A	52	12.7	16.5	14.4	5.1	7.4	11.4	17.2	61.1
WCA-3	Outflow	S12B	23	6.8	7.0	1.7	3.0	6.0	7.0	8.0	10.0
WCA-3	Outflow	S12C	26	7.8	8.0	1.9	5.0	6.0	7.5	9.0	12.0
WCA-3	Outflow	S12D	44	9.0	9.4	2.8	5.0	7.0	9.0	11.0	16.0
WCA-3	Outflow	S197	7	4.7	5.3	2.8	<2.0	4.0	4.0	8.0	10.0
WCA-3	Outflow	S31	16	12.7	13.4	5.0	7.0	10.0	12.0	16.0	28.0
WCA-3	Outflow	S333	52	13.6	15.6	9.2	6.6	9.5	11.6	20.1	44.1
WCA-3	Outflow	S344	3	43.5	65.3	52.3	10.0	10.0	72.0	114.0	114.0
WCA-3	Outflow	S355A	13	12.2	14.6	11.0	6.0	8.5	10.0	14.0	42.0
WCA-3	Outflow	S355B	13	16.2	19.2	13.0	8.0	10.0	15.0	24.5	51.0
WCA-3	Outflow	US41-25	16	16.3	20.1	19.7	9.0	11.3	15.0	20.8	91.0