

Figure 1. Monthly total phosphorus geometric mean concentrations for the A.R.M. Loxahatchee National Wildlife Refuge compared to the interim and long-term levels. The calculated level concentrations are adjusted for fluctuations in stage.

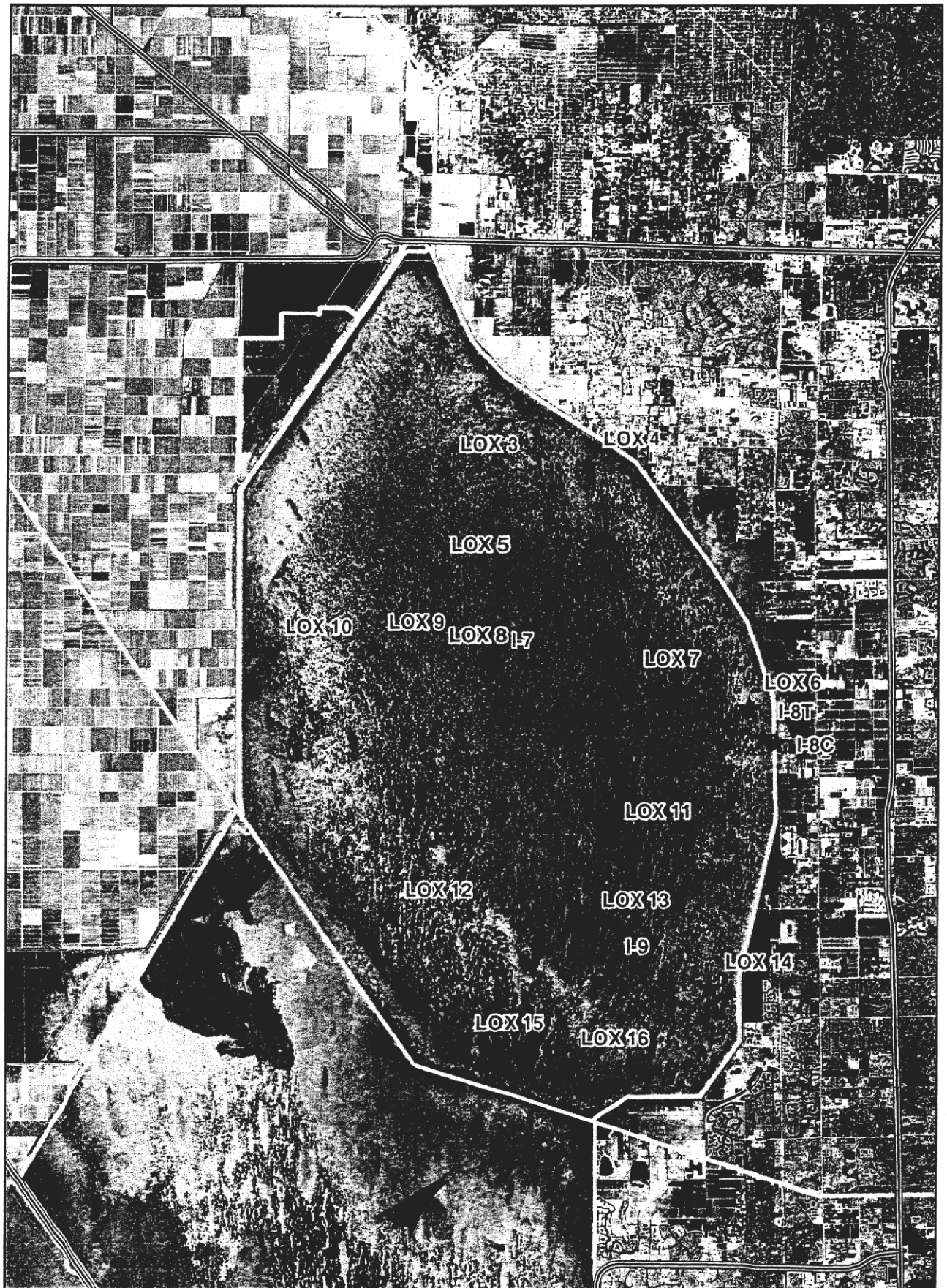
Table 1. Loxahatchee National Wildlife Refuge Total Phosphorus Compliance Tracking.

Month - Year	Geometric Mean Concentration	Interim Level (ppb)	Long Term Level (ppb)	Average Stage	Number of TP Samples	Number of Stage Measurements
	(ppb)	Effective 2/1/99	Effective 12/31/06	(ft,NGVD)		
Oct-2000	8.8	8.3	7.2	17.49	13	3
Nov-2000	7.5	8.8	7.6	17.01	14	3
Dec-2000	6.0	11.2	9.4	16.55	9	3
Jan-2001	7.2	14.3	11.7	16.13	8	3
Feb-2001	9.6	17.2	13.8	15.82	9	3
Mar-2001	19.3	0.0	0.0	15.08	2	3
Apr-2001	11.5	21.4	16.9	15.48	6	3
May-2001	18.3	0.0	0.0	14.88	2	3
Jun-2001	15.1	0.0	0.0	15.42	9	3
Jul-2001	11.4	17.2	13.8	15.82	11	3
Aug-2001	10.0	10.1	8.6	16.74	14	3
Sep-2001	9.6	11.1	9.3	16.57	14	3
Oct-2001	8.8	8.3	7.2	17.24	14	3
Nov-2001	6.6	8.3	7.2	17.46	14	3
Dec-2001	7.5	8.9	7.7	16.99	14	3
Jan-2002	6.4	10.4	8.8	16.69	14	3
Feb-2002	7.8	10.7	9.1	16.63	14	3
Mar-2002	7.3	11.5	9.7	16.50	14	3
Apr-2002	7.5	15.6	12.7	15.98	11	3
May-2002	10.0	0.0	0.0	15.04	3	3
Jun-2002	13.4	16.0	12.9	15.94	10	3
Jul-2002	11.2	9.7	8.3	16.82	14	3
Aug-2002	9.0	13.5	11.1	16.22	12	3
Sep-2002	8.2	10.6	8.9	16.66	12	3

Notes:

- (1) Average Stage is calculated using stage elevations at three stations on the sampling date.
- (2) Highlighted values indicate months when exceedances occurred. (The geomean concentration must be greater than the interim level two or more times within a 12-month period to constitute an exceedance.)
- (3) Levels do not apply when the stage is less than 15.42 feet.

Loxahatchee Refuge Water Quality Sample Sites



Legend

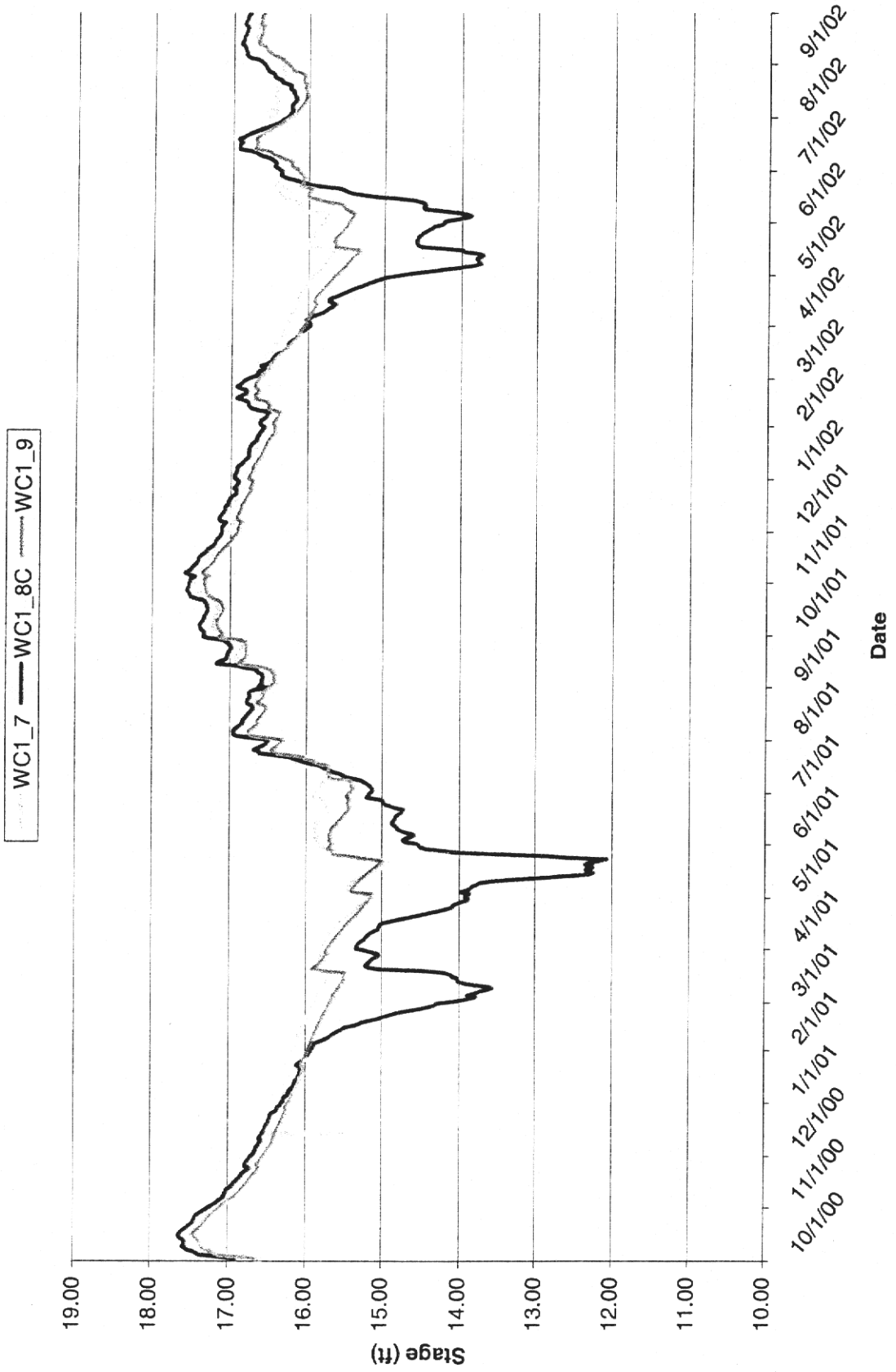
★ Station Location

0 3 6 Miles



June - July 2002 Data Summary of Loxahatchee Refuge Sampling									
Station	Sampling Depth (cm)			Depth	TP Conc. (ppb)			Conc.	Date
	Date	Depth	Date		Date	Conc.	Date		
LOX 3	June	n.s.	15-Jul	13	June	n.s.	15-Jul	14	
LOX 4	17-Jun	5	15-Jul	24	17-Jun	20	15-Jul	21	
LOX 5	June	n.s.	15-Jul	14	June	n.s.	15-Jul	11	
LOX 6	18-Jun	9	16-Jul	26	18-Jun	12	16-Jul	9	
LOX 7	17-Jun	11	15-Jul	25	17-Jun	14	15-Jul	10	
LOX 8	17-Jun	19	15-Jul	25	17-Jun	13	15-Jul	10	
LOX 9	June	n.s.	15-Jul	18	June	n.s.	15-Jul	12	
LOX 10	June	n.s.	15-Jul	22	June	n.s.	15-Jul	11	
LOX 11	18-Jun	15	16-Jul	32	18-Jun	13	16-Jul	13	
LOX 12	18-Jun	29	16-Jul	46	18-Jun	9	16-Jul	9	
LOX 13	18-Jun	9	16-Jul	15	18-Jun	14	16-Jul	11	
LOX 14	18-Jun	9	16-Jul	36	18-Jun	15	16-Jul	14	
LOX 15	18-Jun	28	16-Jul	48	18-Jun	10	16-Jul	6	
LOX 16	18-Jun	20	16-Jul	39	18-Jun	17	16-Jul	12	

Daily Stage



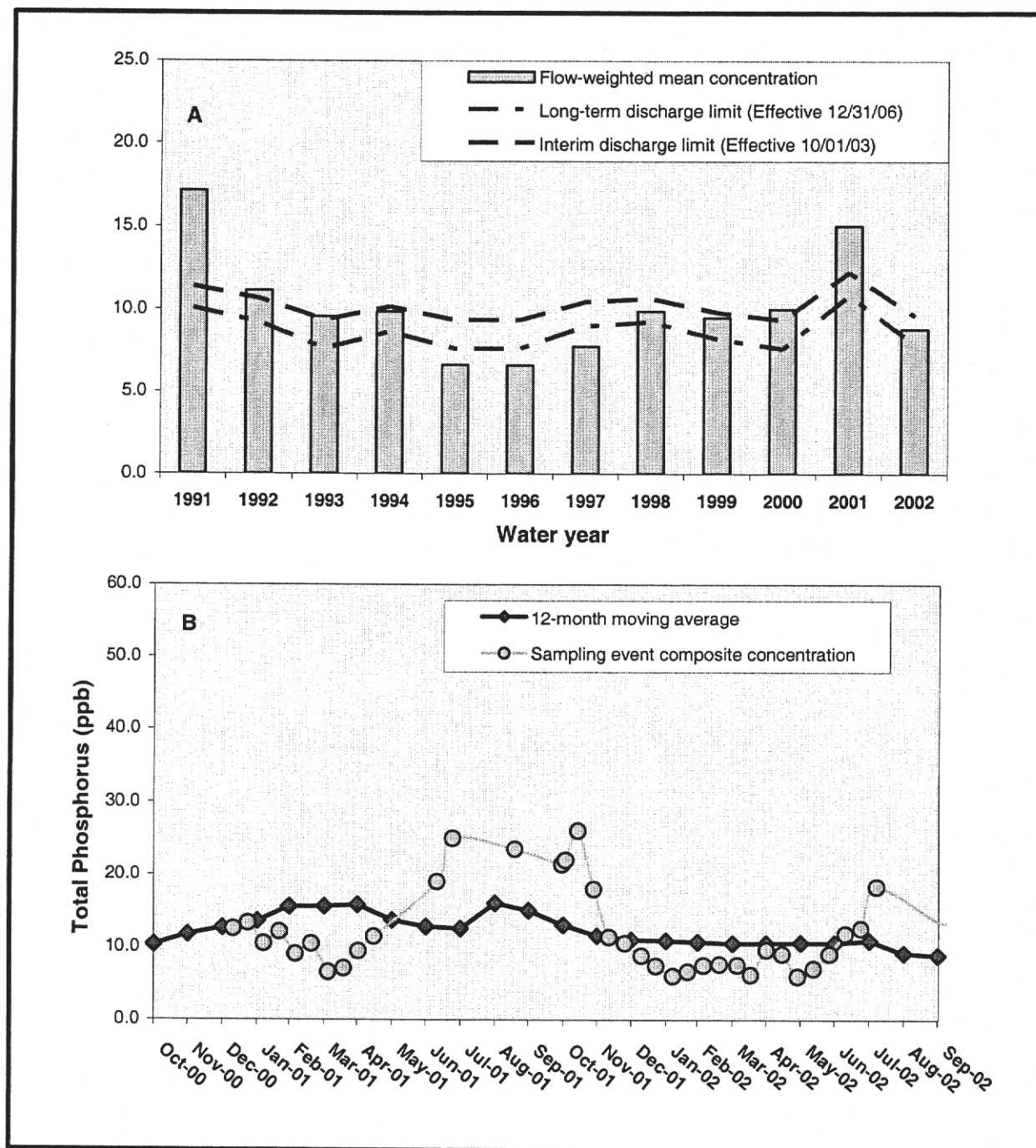


Figure 2. Total phosphorus flow-weighted mean concentrations (fwmc) in inflows to Everglades National Park through Shark River Slough.
A. The 12-month moving average fwmc at the end of each water year compared to the total phosphorus interim and long-term limits.
B. The 12-month moving average fwmc at the end of each month and the composite total phosphorus concentration for each sampling event.
 *(star): denotes arithmetic average for biweekly samples in May and June 2002 as there was no flow on the sampling dates.

Table 2. Shark River Slough Total Phosphorus Concentration Compliance Tracking.

12-Month Period Ending On	Total Period Flow (Kac-ft)	Flow Weighted Mean Total Phosphorus (ppb)	Interim Limit (ppb)	Long Term Limit (ppb)	Percent of Sampling Events Greater than 10 ppb	
			Effective	Effective	(%)	
			10/1/2003	12/31/2006	Guideline	Observed
31-Oct-00	925.0	10.3	9.9	8.3	43.2	72.4
30-Nov-00	642.1	11.7	11.1	9.8	50.8	79.3
31-Dec-00	464.0	12.7	12.0	10.8	56.4	82.8
31-Jan-01	367.0	13.5	12.5	11.3	59.8	80.0
28-Feb-01	298.4	15.5	12.9	11.7	62.2	85.7
31-Mar-01	275.9	15.6	13.0	11.9	63.1	84.6
30-Apr-01	250.4	15.8	13.2	12.0	64.0	84.6
31-May-01	230.9	13.7	13.3	12.1	64.7	81.8
30-Jun-01	221.0	12.8	13.3	12.2	65.1	80.0
31-Jul-01	212.8	12.5	13.4	12.2	65.4	78.9
31-Aug-01	324.0	16.0	12.8	11.6	61.3	78.9
30-Sep-01	419.7	15.0	12.2	11.0	57.9	78.9
31-Oct-01	502.4	13.0	11.8	10.5	55.2	68.4
30-Nov-01	599.2	11.5	11.3	10.0	52.1	57.9
31-Dec-01	677.9	11.0	10.9	9.6	49.8	52.6
31-Jan-02	695.1	10.9	10.8	9.5	49.3	52.6
28-Feb-02	728.3	10.7	10.7	9.3	48.3	45.0
31-Mar-02	779.2	10.5	10.5	9.0	46.9	40.9
30-Apr-02	797.1	10.5	10.4	8.9	46.4	40.9
31-May-02	800.7	10.6	10.4	8.9	46.3	43.5
30-Jun-02	806.8	10.5	10.4	8.9	46.2	40.9
31-Jul-02	925.7	10.9	9.9	8.3	43.2	45.8
31-Aug-02	956.7	9.1	9.7	8.1	42.5	39.1
30-Sep-02	996.3	8.8	9.6	7.9	41.6	30.4

Notes: *Italicized values exceeded allowed percentage*

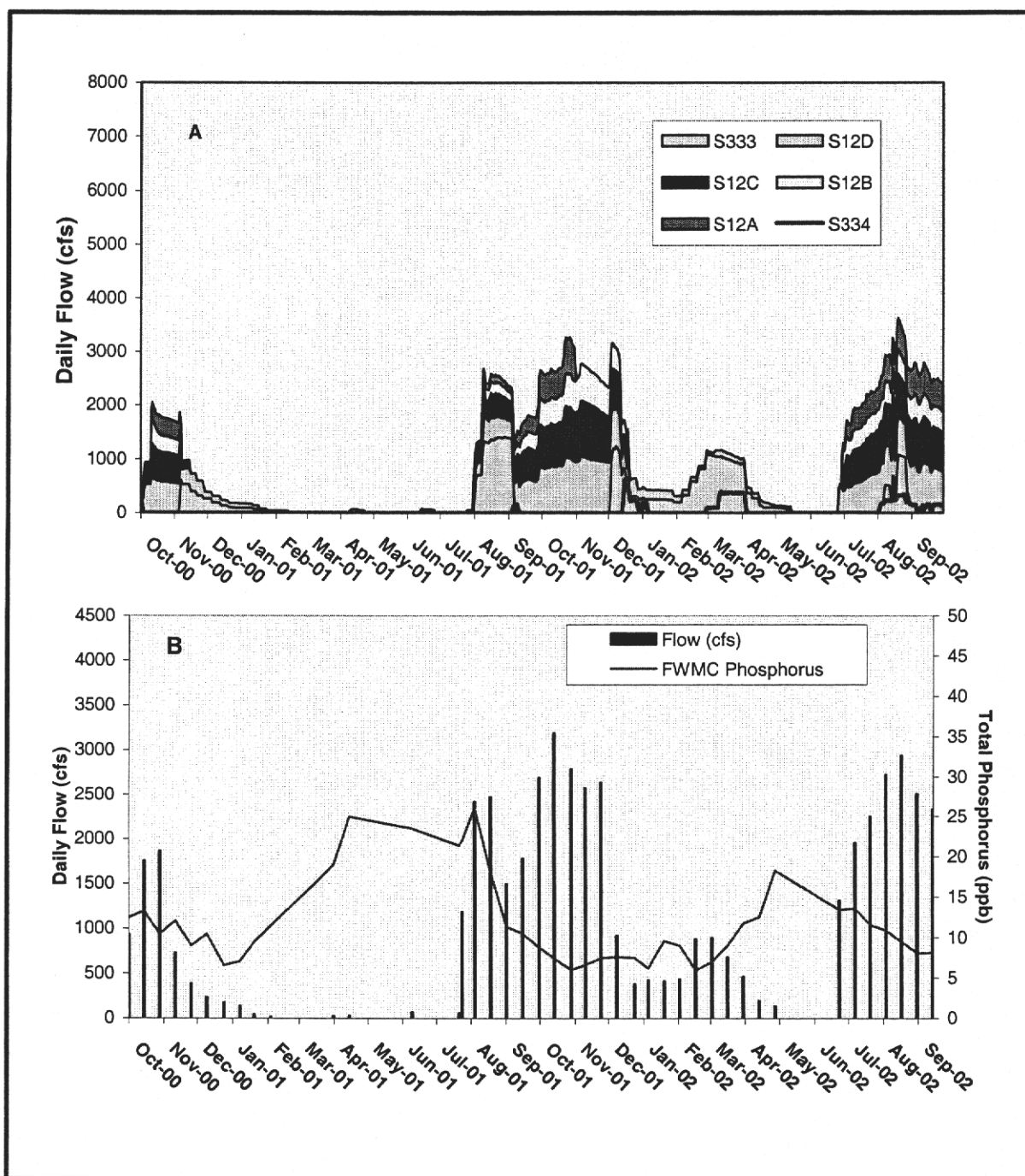
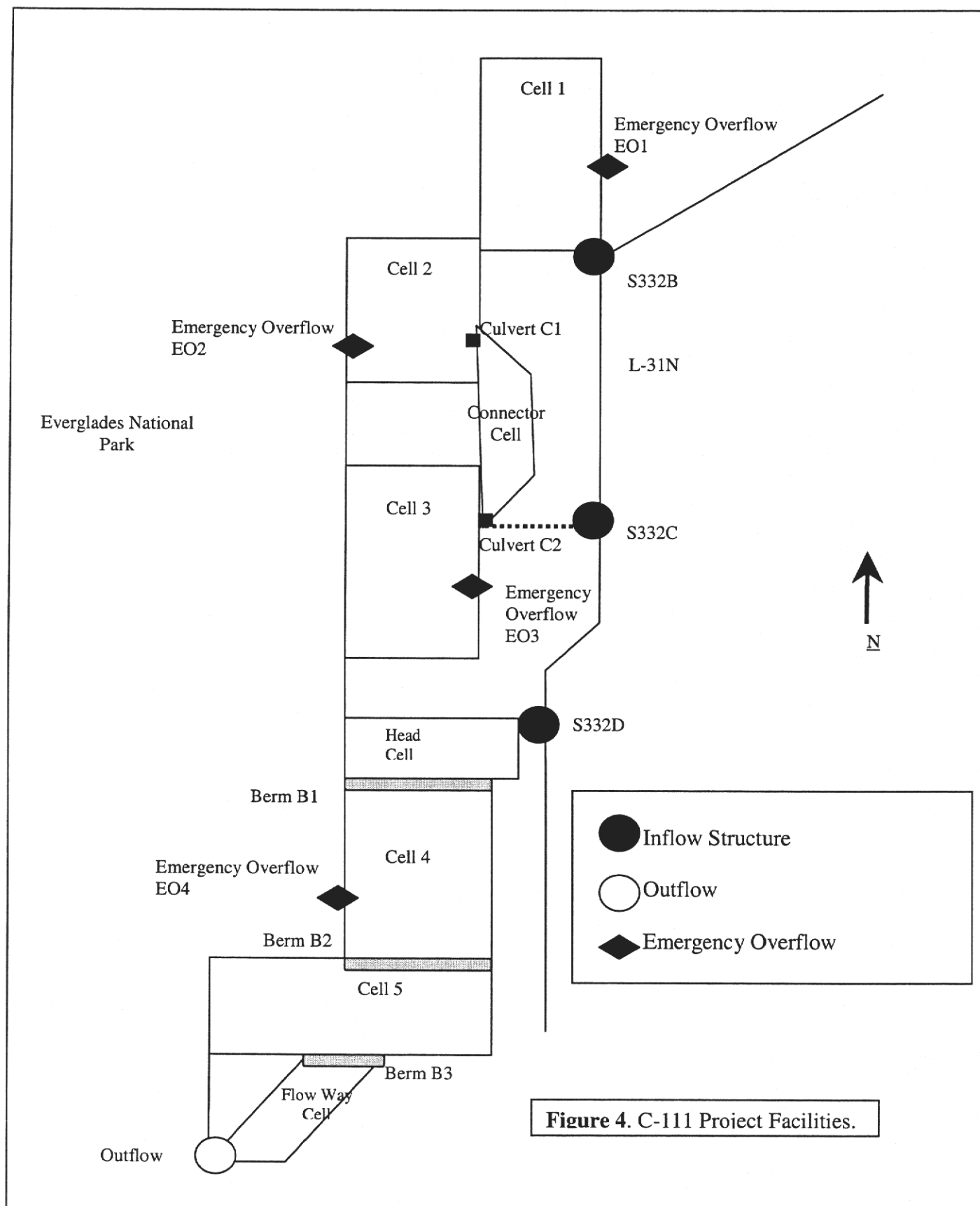


Figure 3. **A.** Daily flows into Shark River Slough by structure. **B.** The relationship between daily flow at Shark River Slough structures and the corresponding flow-weighted mean total phosphorus concentrations for individual sampling events.



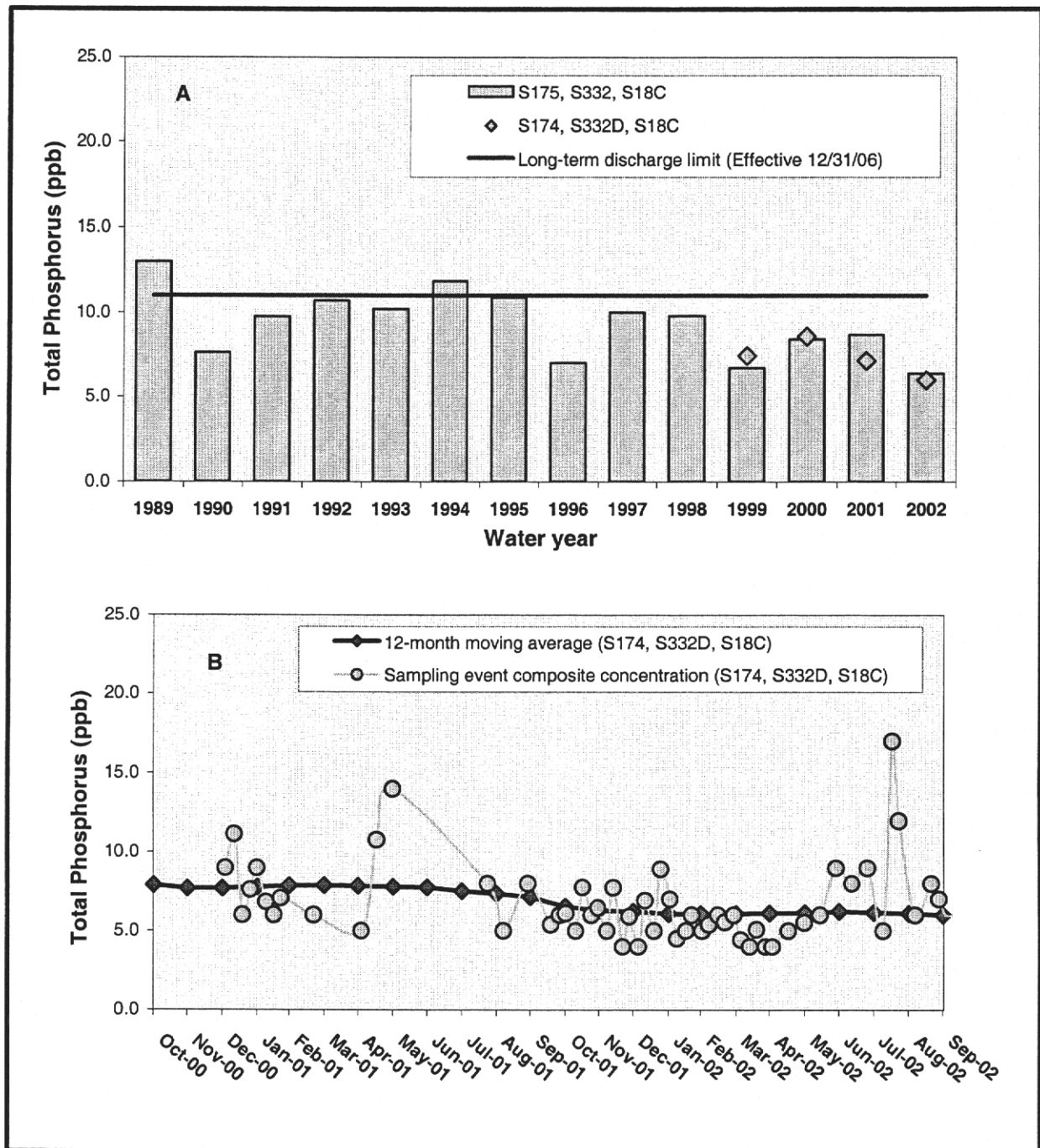


Figure 5. Total phosphorus flow-weighted mean concentrations (fwmc) in inflows to Everglades National Park through Taylor Slough and the Coastal Basins. **A.** The 12-month moving average fwmc at the end of each water year compared to the 11 ppb long-term total phosphorus limit. **B.** The 12-month moving average fwmc at the end of each month and the composite total phosphorus concentration for each sampling event.

Table 3. Taylor Slough and the Coastal Basins Total Phosphorus Concentration Compliance Tracking

12-Month Period Ending On	Total Period Flow	Flow Weighted Mean Total Phosphorus	Limit (Effective 12/31/06)	Percent of Sampling Events Greater than 10 ppb	
			(ppb)	(%)	
	(Kac-ft)	(ppb)	Long Term	Guideline	Observed
31-Oct-00	399.0	7.9	11.0	53.1	16.3
30-Nov-00	375.0	7.7	11.0	53.1	14.6
31-Dec-00	351.0	7.7	11.0	53.1	15.0
31-Jan-01	307.9	7.8	11.0	53.1	15.4
28-Feb-01	281.6	7.9	11.0	53.1	21.6
31-Mar-01	269.5	7.9	11.0	53.1	22.9
30-Apr-01	260.1	7.9	11.0	53.1	20.6
31-May-01	254.1	7.8	11.0	53.1	12.9
30-Jun-01	249.0	7.8	11.0	53.1	10.0
31-Jul-01	243.0	7.5	11.0	53.1	10.7
31-Aug-01	237.1	7.3	11.0	53.1	11.5
30-Sep-01	235.1	7.2	11.0	53.1	11.5
31-Oct-01	235.2	6.5	11.0	53.1	8.0
30-Nov-01	269.7	6.3	11.0	53.1	7.4
31-Dec-01	296.5	6.2	11.0	53.1	6.7
31-Jan-02	316.0	6.1	11.0	53.1	5.9
28-Feb-02	320.6	6.1	11.0	53.1	0.0
31-Mar-02	325.9	6.1	11.0	53.1	0.0
30-Apr-02	331.1	6.1	11.0	53.1	0.0
31-May-02	336.4	6.1	11.0	53.1	5.0
30-Jun-02	364.3	6.2	11.0	53.1	4.9
31-Jul-02	392.1	6.1	11.0	53.1	4.7
31-Aug-02	388.3	6.1	11.0	53.1	4.7
30-Sep-02	357.1	6.0	11.0	53.1	4.9

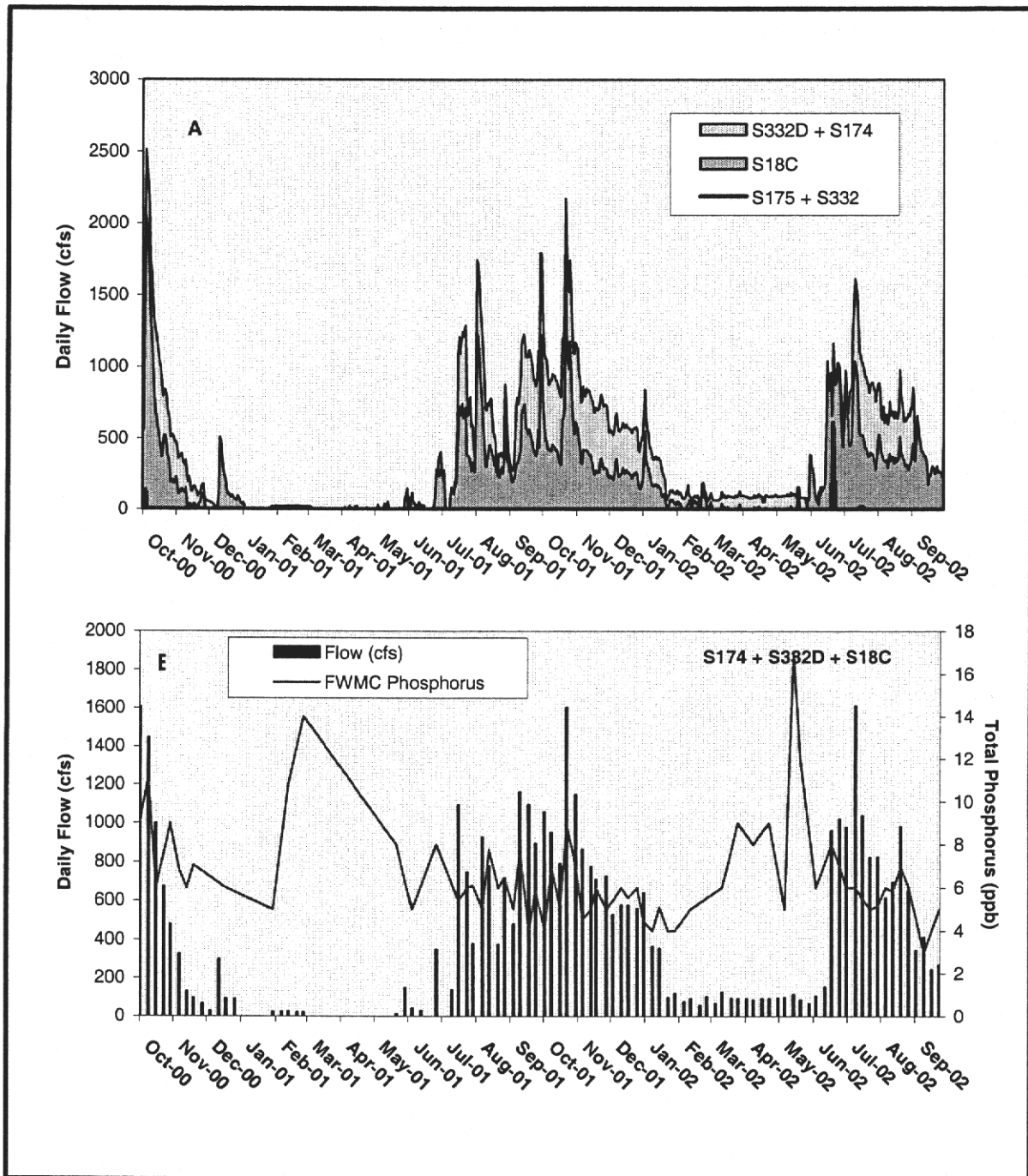


Figure 6. **A.** Daily flows into Everglades National Park through Taylor Slough and S18C. **B.** The relationship between daily flows at Taylor Slough structures and S18C and the corresponding flow-weighted mean total phosphorus concentrations for individual sampling events.