Appendix 3-1a: Water Year 2005 Permit-Level Data

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INTRODUCTION

This appendix presents phosphorus concentrations and load data for individual farms within the Everglades Agricultural Area (EAA) basin for Water Year 2005 (WY2005) (May 1, 2004 through April 30, 2005) in both tabular form and as a spatial distribution.

Tables 1a and **1b** identify separate hydraulic drainage areas (e.g., individual farms) within permits issued in accordance with 40E-63, Florida Administrative Code (F.A.C.). Drainage areas are identified according to the unit area or basin identification (ID). The tables provide for WY2005 the area flow-weighted mean total phosphorus (TP) concentration, observed unit area phosphorus load, and the rainfall adjusted unit area load. **Table 1a** also indicates the area percent reduction for the water year compared to a baseline year. **Table 1a** includes lands that originally discharged to the Everglades and **Table 1b** includes five basins that historically discharged to Lake Okeechobee and that recently initiated diversion of the majority of their discharges to the Everglades in accordance with EFA requirements.

Permit-level data are useful for making relative comparisons between farms or between water years for the same farm when they are used in conjunction with in-depth knowledge of unique farm characteristics. The South Florida Water Management District (SFWMD or District) currently uses such relative comparisons when discussing individual farm performance and BMP optimization with permittees. Factors that affect permit-level concentrations and loads are discussed in Chapter 3 of the *2006 South Florida Environmental Report – Volume I* (see *EAA Basin Permit-Level Monitoring Results* section).

The permit-level data will only be used for compliance determination if the EAA basin does not meet the 25 percent TP load reduction requirement. The permit-level results are not used to calculate TP reduction at the EAA basin level. EAA basin-level monitoring is conducted by the District.

Tables 1a and **1b** list the phosphorus data using the following column designations:

- **Basin ID** is a unique identifier for each hydraulic drainage area within a permit. It may represent one or more farms.

- **Early Baseline** indicates whether a farm qualifies for early baseline status by having implemented Best Management Practices (BMPs) since January 1, 1994, initiated a discharge monitoring plan since January 1, 1993, and submitted specific information at the initial application period in 1992. A “Y” indicates an early baseline farm; “N” indicates that a farm does not qualify for early baseline status. The methodology applied to assess compliance at

the farm-level, if the EAA basin as a whole would fall out of compliance, is different for early baseline and non early baseline farms. These methodologies are described in Rule 40E-63, F.A.C.

- **Baseline Year** is the water year for which a farm established its base period load. For early baseline farms, the base period load is based on data collected between May 1, 1993 and April 30, 1994.

- **Rainfall Adjusted Unit Area Load (pounds per acre, or lbs/ac):**
  - Farm baseline is the TP load per unit area measured for the baseline year for a farm (includes sub-basin rainfall adjustment factor). A baseline has not been calculated for the five Lake Okeechobee diversion basins, as the methodology to evaluate compliance at the permit-level similar to that for the historical EAA areas does not exist.
  - WY2005 is the TP load per unit area for the current water year for a farm (includes sub-basin rainfall adjustment factor).

- **WY2005 Percent (%) TP Reduction** is the WY2005 load reduction for the farm compared to the baseline year. **WY2005 TP Concentration** (parts per billion, or ppb) is the flow-weighted mean concentration for the farm for WY2005.**WY2005 TP Unit Area Load (pounds per acre, or lbs/ac)** is the observed TP load per unit area for the current water year for a farm.

Table 2 provides a description of BMPs that can be implemented in the EAA and C-139 basins to meet permit requirements, and their equivalent points.

Table 3 lists the Everglades Agricultural Privilege area-wide incentive credit schedule and tax credits earned to date for the EAA.

Figures 1, 2, and **3** depict the spatial distribution of TP concentrations, rainfall adjusted unit area loads, and observed unit area loads found in the EAA. These figures are graphical representations of the data provided by individual permit holders and listed in **Table 1a**. Each Basin ID is mapped as a whole and no information is available to account for localized variations within a basin.

Table 1a. Permit-level data for the Everglades Agricultural Area (EAA) basin.

Basin ID	Basin Acreage	Early Baseline	Baseline Year	Rain Adjusted Unit Area Load (lbs/ac)		WY05 % TP Reduction	WY05 Unit Area Load (lbs/ac)	WY05 TP Conc. (ppb)	Comments
				Baseline	WY05				
26-001-01	767.8	Y	1994	2.12	0.38	82%	0.84	144.5	
26-002-01	897.8	N	2001	Unable to Calculate	0.00	Unable to Calculate	0.00	N/A	Pasture area with no recorded flows
26-003-01	599.2	N	1999	0.27	0.07	73%	0.16	112.7	
26-004-01	4501.6	N	1999	1.22	0.11	91%	0.24	92.4	
26-006-01	1198.4	N	1998	1.19	0.71	40%	1.59	221.9	
26-007-01	653.3	N	1999	2.07	0.37	82%	0.83	152.4	
26-008-01	120.0	Y	1994	2.12	0.38	82%	0.84	144.5	
26-009-01	159.8	N	1999	0.74	0.23	69%	0.51	119.6	
26-010-01	1231.0	N	1995	1.81	0.83	54%	1.85	134.0	
26-010-02	9961.3	N	1995	5.83	0.59	90%	1.31	192.4	
50-002-01	5656.4	Y	1994	3.21	0.69	79%	1.74	188.4	
50-002-02	9285.4	Y	1994	2.90	0.57	80%	1.43	171.6	
50-003-01	242.0	Y	1994	0.40	0.42	-5%	0.69	176.2	
50-003-02	520.0	Y	1994	0.62	0.41	33%	0.68	91.8	
50-003-03	117.6	N	1995	0.22	0.75	-236%	1.49	198.0	
50-003-04	320.0	Y	1994	0.91	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (46.8% Sampled)
50-004-01	908.9	Y	1994	3.68	0.54	85%	1.36	255.5	
50-005-01	319.8	Y	1994	0.91	0.28	70%	0.45	62.0	
50-005-02	232.9	Y	1994	0.06	3.71	-5865%	6.13	1491.2	
50-005-03	320.0	Y	1994	0.26	0.14	46%	0.23	49.8	
50-005-04	309.6	Y	1994	1.49	0.40	73%	0.66	203.2	
50-005-05	747.0	Y	1994	1.95	0.73	63%	1.62	411.0	
50-005-06	502.0	Y	1994	1.56	0.27	83%	0.44	128.1	
50-006-01	397.2	Y	1994	4.53	0.55	88%	1.37	132.8	
50-006-02	359.3	Y	1994	5.50	0.54	90%	1.08	130.1	
50-006-03	640.3	Y	1994	3.55	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (72.7% Sampled)
50-007-01	6472.6	Y	1994	1.56	0.10	93%	0.21	20.9	
50-007-02	5716.7	Y	1994	15.11	1.17	92%	2.95	209.9	
50-008-01	7261.2	Y	1994	0.34	0.20	42%	0.44	90.3	
50-009-02	4271.8	Y	1994	3.57	2.10	41%	3.47	70.9	
50-009-03	965.3	Y	1994	4.15	0.75	82%	1.24	96.8	
50-009-04	317.0	N	1999	5.19	1.07	79%	2.13	129.8	
50-009-05	1479.4	Y	1994	1.54	1.12	27%	1.85	95.6	
50-010-01	784.2	N	1995	2.42	0.43	82%	0.86	154.2	
50-010-02	5327.1	N	1994	1.80	2.07	-15%	3.63	224.7	
50-010-03	5851.6	Y	1994	1.31	0.25	81%	0.48	68.0	
50-010-04	7159.0	Y	1994	4.76	1.33	72%	2.64	178.6	
50-010-05	2111.3	N	2001	1.31	0.05	96%	0.11	34.0	
50-011-01	1747.7	Y	1994	2.76	0.40	86%	0.80	161.9	
50-011-03	14337.8	Y	1994	5.79	1.89	67%	3.76	438.1	
50-011-04	4066.0	Y	1994	5.21	0.80	85%	1.58	183.1	
50-011-06	638.0	N	1999	0.02	0.31	-1958%	0.69	99.3	
50-012-01	1021.5	Y	1994	4.06	3.17	22%	6.31	210.0	
50-013-01	1362.6	Y	1994	24.22	0.93	96%	2.34	301.1	
50-014-01	1520.4	Y	1994	1.37	0.27	80%	0.45	111.0	
50-015-01	3276.4	Y	1994	2.62	0.75	72%	1.88	177.9	
50-015-02	2554.5	Y	1994	5.28	0.57	89%	1.43	220.9	
50-016-01	1497.3	Y	1994	15.11	1.11	93%	2.79	256.7	
50-017-01	895.0	Y	1994	3.22	0.84	74%	1.38	151.2	
50-018-01	5901.5	Y	1994	2.82	1.21	57%	3.05	265.5	
50-018-02	6594.0	Y	1994	3.54	1.23	65%	3.11	236.5	
50-018-03	9062.3	Y	1994	1.98	0.65	67%	1.64	156.7	
50-018-04	1913.1	Y	1994	3.88	0.48	88%	1.06	86.5	
50-018-05	1827.1	N	1995	3.64	3.07	16%	6.85	676.8	
50-018-06	1255.1	Y	1994	1.46	0.49	67%	1.09	115.1	
50-018-07	1117.4	Y	1994	2.12	0.38	82%	0.84	144.5	
50-018-08	3208.6	Y	1994	2.28	0.49	78%	1.10	125.0	
50-018-09	1736.6	Y	1994	4.22	0.57	86%	1.28	118.9	
50-018-10	8254.4	Y	1994	3.05	0.80	74%	1.59	183.7	
50-018-11	1871.1	Y	1994	19.73	1.76	91%	3.50	253.4	
50-018-12	1655.2	Y	1994	1.78	1.39	22%	3.50	212.9	
50-018-13	594.3	Y	1994	0.40	1.28	-219%	3.22	246.6	
50-018-14	569.9	N	1994	2.21	1.03	54%	1.69	81.6	
50-018-15	757.3	Y	1994	1.12	0.46	59%	0.76	151.6	
50-018-16	240.0	Y	1994	4.11	0.53	87%	0.88	64.3	
50-018-17	488.1	Y	1994	3.10	0.84	73%	1.38	187.3	
50-018-18	357.7	Y	1994	0.64	1.14	-78%	1.88	101.8	

Basin ID	Basin Acreage	Early Baseline	Baseline Year	Rain Adjusted Unit Area Load (lbs/ac)		WY05 % TP Reduction	WY05 Unit Area Load (lbs/ac)	WY05 TP Conc. (ppb)	Comments
				Baseline	WY05				
50-018-19	314.3	Y	1994	35.32	3.09	91%	5.10	187.9	
50-018-20	380.6	Y	1994	3.59	1.21	66%	2.00	144.4	
50-018-21	10416.5	N	1998	1.06	0.33	69%	0.74	77.7	
50-018-22	4481.2	Y	1994	8.18	0.44	95%	0.98	109.7	
50-018-23	2946.0	Y	1994	2.22	0.56	75%	1.25	115.3	
50-018-24	3800.3	Y	1994	1.96	0.35	82%	0.77	92.1	
50-018-25	3808.4	Y	1994	4.99	0.66	87%	1.10	171.4	
50-019-01	568.4	Y	1994	1.54	0.10	94%	0.16	43.6	
50-019-02	1210.0	Y	1994	1.38	0.94	32%	1.56	203.4	
50-019-03	1051.4	Y	1994	0.58	0.17	70%	0.28	107.8	
50-020-01	320.0	Y	1994	3.32	1.66	50%	3.30	222.0	
50-021-01	2558.0	Y	1994	8.92	1.98	78%	3.95	350.2	
50-022-01	320.0	Y	1994	0.80	0.02	97%	0.03	37.9	
50-023-01	278.0	Y	1994	11.83	0.93	92%	1.85	315.2	
50-024-01	574.0	N	1995	6.43	0.59	91%	0.98	94.3	
50-025-01	823.7	Y	1994	3.68	1.64	55%	4.14	653.0	
50-027-01	2771.8	Y	1994	2.40	0.54	78%	1.07	131.9	
50-027-02	798.5	Y	1994	1.22	0.57	53%	1.14	104.3	
50-027-03	1353.1	Y	1994	2.32	0.50	78%	1.01	212.6	
50-027-04	2520.0	Y	1994	2.10	0.34	84%	0.68	191.8	
50-028-01	220.0	Y	1994	14.54	0.55	96%	1.10	64.6	
50-029-01	530.6	Y	1994	4.30	1.07	75%	1.77	109.1	
50-030-01	446.1	Y	1994	14.14	1.98	86%	3.95	229.0	
50-031-01	1608.9	Y	1994	2.56	0.60	77%	1.19	81.7	
50-031-02	1387.0	Y	1994	5.48	1.81	67%	3.60	336.5	
50-031-03	602.4	Y	1994	8.57	1.57	82%	3.13	254.7	
50-032-01	305.7	Y	1994	0.84	0.57	32%	0.94	117.7	
50-033-02	1158.8	Y	1994	12.52	2.05	84%	5.18	443.2	Acreage represents the portion of 50-033-02 that falls within the EAA basin baseline boundaries.
50-034-01	7897.1	Y	1994	1.68	0.20	88%	0.40	59.6	
50-034-02	600.5	Y	1994	3.37	0.15	96%	0.30	66.9	
50-034-03	4611.8	Y	1994	4.08	0.36	91%	0.59	64.6	
50-034-04	4138.0	Y	1994	1.54	0.40	74%	0.66	95.6	
50-035-01	478.5	Y	1994	5.74	1.14	80%	2.28	144.0	
50-035-02	1634.3	Y	1994	5.40	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (28.1% Sampled)
50-035-03	205.5	N	1999	8.71	2.80	68%	7.06	101.6	
50-037-01	1663.4	Y	1994	6.70	0.00	100%	0.00	N/A	Did not discharge offsite consistent with ERP permit
50-038-01	1285.0	Y	1994	3.71	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (45.8% Sampled)
50-039-01	62.5	N	1995	4.01	0.54	86%	1.09	143.6	
50-039-02	143.1	N	1995	4.25	0.93	78%	1.85	77.0	
50-040-01	216.2	N	1995	1.40	0.48	66%	1.20	105.4	
50-040-02	498.6	N	1995	3.61	0.33	91%	0.83	125.4	
50-041-01	108.8	N	1998	2.69	0.53	80%	1.05	141.1	
50-041-02	300.4	N	1998	2.44	1.46	40%	2.41	71.2	
50-042-01	320.0	N	1995	0.14	0.27	-89%	0.45	79.9	
50-044-01	2168.8	N	1996	5.02	1.34	73%	3.38	338.3	
50-045-01	281.8	N	1995	4.35	0.82	81%	1.63	215.2	
50-045-02	160.6	N	1995	1.41	1.10	22%	2.20	262.5	
50-046-01	35.0	N	1994	2.21	1.03	54%	1.69	81.6	
50-047-01	630.3	N	1996	1.46	0.70	52%	1.40	166.6	
50-047-02	640.0	N	1995	0.84	1.68	-99%	3.35	305.8	
50-047-03	1832.0	N	1997	0.44	0.42	4%	0.83	122.3	
50-047-04	198.5	N	1996	0.68	0.07	89%	0.14	41.2	
50-047-05	314.0	N	1997	0.55	1.16	-111%	2.32	138.9	
50-047-07	3494.2	N	1996	0.67	0.56	17%	1.40	161.2	
50-047-08	1557.7	N	1996	0.96	0.88	9%	1.76	138.2	
50-048-01	1185.1	N	1995	1.25	0.42	66%	0.84	94.1	
50-048-02	640.0	N	1995	0.36	1.23	-240%	2.03	242.1	
50-049-01	1909.0	N	1996	2.35	1.61	31%	4.06	349.7	
50-051-01	811.4	N	1995	0.97	0.20	79%	0.40	71.6	
50-053-01	148.9	N	1995	5.16	0.36	93%	0.71	271.8	
50-054-01	7599.7	N	1996	0.84	0.38	55%	0.95	214.5	
50-054-02	960.0	N	1996	0.50	1.91	-286%	4.82	607.3	
50-054-03	1227.2	N	1996	0.35	0.03	91%	0.08	66.1	
50-054-04	3684.3	N	1996	0.82	0.94	-14%	2.37	177.7	
50-055-01	392.9	N	1997	0.86	0.14	84%	0.28	78.3	
50-055-02	810.4	N	1999	0.45	0.30	33%	0.61	51.7	

Basin ID	Basin Acreage	Early Baseline	Baseline Year	Rain Adjusted Unit Area Load (lbs/ac)		WY05 % TP Reduction	WY05 Unit Area Load (lbs/ac)	WY05 TP Conc. (ppb)	Comments
				Baseline	WY05				
50-055-03	2871.2	N	1996	0.74	0.33	55%	0.66	103.0	
50-056-01	849.8	N	1996	0.98	0.69	30%	1.26	93.8	
50-058-01	157.0	N	1995	0.02	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (0% Sampled)
50-059-01	9613.9	N	1996	2.35	1.61	31%	4.06	349.7	
50-059-02	1767.6	N	1997	1.07	0.78	28%	1.95	141.7	
50-059-03	709.5	N	1996	1.65	2.47	-50%	6.23	587.4	
50-059-04	306.1	N	1996	1.14	1.93	-69%	4.85	296.9	
50-060-01	8137.2	N	1995	0.18	0.07	60%	0.14	29.2	
50-060-02	7613.8	N	1995	0.75	0.23	69%	0.46	69.7	
50-061-01	639.5	N	1995	1.44	0.12	92%	0.24	182.3	
50-061-03	3434.3	N	1995	0.76	0.42	45%	0.70	74.4	
50-061-05	313.7	N	1995	1.89	0.33	83%	0.54	62.9	
50-061-06	237.0	N	1995	1.68	0.15	91%	0.24	121.2	
50-061-07	318.2	N	1995	1.24	0.74	40%	1.22	85.2	
50-061-08	375.2	N	1999	1.76	0.53	70%	1.34	111.0	
50-061-10	23044.0	N	1996	0.49	0.13	74%	0.28	46.0	
50-061-11	12372.5	N	1995	0.95	0.14	85%	0.24	96.4	
50-061-12	730.0	N	1995	2.55	0.33	87%	0.54	112.9	
50-061-13	1059.6	N	1995	1.16	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (66.8% Sampled)
50-061-15	6760.2	N	1995	1.91	1.19	38%	1.19	190.4	
50-061-17	1598.1	N	1995	12.22	3.43	72%	8.64	459.1	
50-061-18	1555.1	N	1995	9.82	0.42	96%	0.84	60.8	
50-061-20	156.1	N	1994	1.80	2.07	-15%	3.63	224.7	
50-062-01	4625.8	N	1996	0.20	0.21	-7%	0.35	66.5	
50-062-02	10754.2	N	1996	0.46	0.35	23%	0.58	82.4	
50-062-03	1188.3	N	1996	0.54	0.29	46%	0.48	69.4	
50-062-04	901.2	N	1996	0.26	0.43	-67%	0.71	113.6	
50-062-05	5249.6	N	1996	0.41	0.54	-30%	0.88	111.2	
50-062-07	4041.6	N	1996	1.41	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (0% Sampled)
50-062-08	9119.9	N	1996	0.51	0.12	75%	0.20	35.3	
50-062-09	7658.9	N	1997	0.22	0.36	-61%	0.59	155.1	
50-062-10	8772.4	N	1997	0.72	0.16	78%	0.32	40.7	
50-062-11	1276.6	N	1996	0.44	0.28	36%	0.47	58.1	
50-063-01	9792.2	N	1996	0.45	0.22	51%	0.36	65.1	
50-064-01	898.7	N	1997	2.98	0.73	76%	1.84	173.6	
50-064-03	145.0	N	1997	2.98	0.73	76%	1.84	173.6	
50-064-04	1150.4	N	1997	2.98	0.73	76%	1.84	173.6	
50-065-02	938.1	N	1995	3.64	0.29	92%	0.58	103.1	
50-065-03	3751.7	N	1997	2.98	0.73	76%	1.84	173.6	
50-065-05	929.8	N	1997	2.98	0.70	76%	1.77	305.0	
50-065-06	453.9	N	1997	2.98	0.35	88%	0.87	264.0	
50-065-07	513.0	N	1995	3.92	0.98	75%	1.95	190.6	
50-065-08	628.0	N	1997	2.98	0.73	76%	1.84	173.6	
50-065-10	792.3	N	1995	1.55	0.31	80%	0.63	105.6	
50-067-01	1143.9	N	1996	0.40	0.07	83%	0.15	35.6	
50-067-02	10257.1	N	1996	0.94	0.21	77%	0.47	54.1	
50-067-03	681.6	N	1996	1.02	0.25	76%	0.55	24.4	
50-067-04	3819.5	N	1996	0.55	0.47	16%	1.04	96.2	
50-067-05	7322.6	N	1996	0.42	0.15	65%	0.33	35.6	
50-067-06	1277.2	N	1999	0.49	0.14	72%	0.31	25.4	
50-067-07	1975.5	N	1999	0.54	0.09	83%	0.21	17.3	
50-067-09	1277.7	N	1999	0.54	0.03	95%	0.06	36.0	
50-067-10	2551.8	N	1999	1.21	0.50	59%	1.12	111.5	
50-067-11	6179.0	N	1999	0.85	0.16	82%	0.35	37.4	
50-067-13	685.3	N	1997	2.29	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (0% Sampled)
50-068-01	2615.8	N	1996	1.13	0.57	50%	1.44	189.2	
50-068-02	1998.1	N	1997	2.30	1.06	54%	2.67	327.4	
50-069-01	317.5	N	1996	1.06	0.60	43%	1.00	126.8	
50-070-01	245.0	N	1995	3.82	1.47	62%	2.92	225.0	
50-070-02	244.0	N	1995	3.09	1.66	46%	3.31	382.5	
50-073-01	67.8	N	2001	Unable to Calculate	0.00	Unable to Calculate	0.00	N/A	Not used for agriculture; has onsite retention area and does not discharge
50-078-01	71.6	N	1999	8.71	2.33	73%	3.84	136.0	
50-081-01	210.0	N	2004	Baseline Year	0.49	Unable to Calculate	0.81	87.5	
50-082-01	484.5	N	1995	9.82	0.15	98%	0.25	30.6	

Table 1b. 298 and 715 Farms data for the EAA basin.

Basin ID	Basin Acreage	WY05 Unit Area Load (lbs/ac)	WY05 TP Conc. (ppb)	Comments
50-077-01	3168.0	2.68	171.4	715 Farms (Closter Farms)
50-080-01	8108.5	0.41	151.7	East Shore Water Control District
50-033-02	1158.8	5.18	443.2	East Beach Water Control District
50-081-02	4018.2	1.19	160.1	South Shore Drainage District

Note: East Shore Water Control District has contributions from Closter Farms that can not be fully separated out in the farm scale model because of a hydrologic interconnection between the two areas. Slight differences in load calculation algorithms may cause farm scale values to differ from other values reported by the District.

South Shore Drainage District data does not represent a full water year and South Florida Conservancy District did not begin diverting flows into the EAA until after WY2005 ended.

Table 2. Best Management Practice (BMP) summary and "BMP equivalent" points for the EAA and C-139 basins.

BMP	PTS[1]	DESCRIPTION
NUTRIENT CONTROL PRACTICES		**MINIMIZES THE MOVEMENT OF NUTRIENTS OFF-SITE**
Nutrient Application Control	2 ½	Controlled application of nutrients with a 4' setback from canals: banding, pneumatic application - AIRMAX; fertigation; and fertilization placement near root under plastic.
Nutrient Spill Prevention	2 ½	Formal spill prevention protocols (storage, handling, transfer, and education/instruction).
Successive Vegetable Planting to Minimize P	2 ½	Successive planting of high P/low P demand crops to avoid P build up and no successive P application.
Plant Tissue Analysis	2 ½ 5	Determines plant nutrient requirements next growing season (crop specific). Citrus only – because plant tissue analysis provides information on current season, additional points are allowed.
Nutrient Application Control	5	Determine the P requirements of the soil and follow standard recommendations for application rates (crop specific).
Split Nutrient Application	5	Applying small portions of P at various times without exceeding the total recommendation.
Slow Release P Fertilizer	5	Specially treated fertilizer.
Reduced P Fertilization	5	P application rate is at least 30% below the recommendation.
No Nutrients Imported Via Direct Land Application	15	No application of P in any form. Native and semi-improved range may apply fertilizer at maintenance levels every 6-8 years.
No Nutrients Imported Indirectly Through Cattle Feed	15	No P import to the basin through cattle feed (Note: native range is not excluded by use of mineral supplements or molasses).
Nutrient Management Plan	Up to 35	Managing the amount, source, placement, form, and timing of the application of nutrients on lands with cattle operations.
WATER MANAGEMENT PRACTICES		**MINIMIZES THE VOLUME OF OFF-SITE DISCHARGES**
½ Inch Detained 1 Inch Detained	5 10	Delay discharge (based on measuring daily rain events using a rain gauge).
Improved Infrastructure	5	Recirculate water inside farm boundaries to improve water quality prior to offsite discharge (e.g., rice and vegetables); fallow field flood water with no direct discharge (instead allow to "drain" via evapotranspiration, seepage, use as irrigation water); or increasing water detention using properly constructed canal berms.
Water Table Management	5	Optimize drainage and irrigation schedules and/or by using low volume irrigation methods to decrease discharge.
Approved and Operational Surface Water Reservoir	35	Properly permitted, constructed, and maintained storage system meeting specified ERP Basis of Review criteria (version in effect at the time of permitting or in effect at the time of permit modification for modified systems):
Temporary Holding Pond	15	Temporary agricultural activities (as described in Chapter 40E-400, FAC.) with a properly constructed and permitted temporary holding pond.

BMP	PTS[1]	DESCRIPTION
No Direct Discharge	15	Overland sheet flow; no direct discharge.
PARTICULATE MATTER AND SEDIMENT CONTROLS		**MINIMIZES THE MOVEMENT OF PARTICULATE MATTER AND SEDIMENTS**
Any 2	2 ½	• Leveling fields • Slow drainage velocity near pumps • Grassed swales/field ditch connections • Ditch bank berms • Canal cleaning program • Aquatic weed control • Field ditch drainage sumps
Any 4	5	• Barriers at discharge locations • Ditch bank stabilization • Sediment sump/trap in canals
Any 6	10	• Maintain forage to reduce soil erosion/range seedings • Soil stabilization through infrastructure improvements
Any 8	15	• Cover crops • Culvert bottoms above ditch bottoms • Vegetated ditch banks
PASTURE MANAGEMENT		**ON-FARM SITE OPERATION AND MANAGEMENT PRACTICES**
	2 ½ 2 ½ 5 5 10	• Restricted placement of feeders, cowpens, or feed and water to reduce "hot spots" near drainage ditches (2 ½ points each) • Provide shade structures to prevent cattle in waterways • Low cattle density (1 head/2 acres, non-irrigated pasture) • Reduced P in feed (by a minimum of 20%) • Restrict cattle from waterways through fencing of canals in a manner that protects the discharge water quality
Urban Xeriscape	5	Use of plants that required less water and fertilizer
Detention Pond Littoral Zone	5	Vegetative filtering area for on-site stormwater runoff.
Other BMPs	TBD[2]	BMPs proposed by permittee and accepted by SFWMD.

Notes:

A BMP plan is required for each land use or crop, and shall be implemented across the entire farm acreage (drainage area).

[1] For the EAA basin, a minimum of 25 points is required for each BMP plan.

For the C-139 basin, the minimum required points for each BMP plan are based on compliance status as follows:

- Level I: Initial phase 15 points for each BMP plan.
- Level II: First incidence out of compliance, no additional BMPs; however, onsite verification of BMPs begin. Frequency of visits based on compliance record.
- Level III: Second incidence out of compliance, 10 additional BMP points for each BMP plan (25 points total).
- Level IV: Third incidence out of compliance, 10 additional BMP points for each BMP plan (35 points total)

[2] TBD - To be determined.

Table 3. Everglades Agricultural Privilege Tax credits for the EAA basin.[1]

Everglades Agricultural Privilege Tax
Area-Wide Incentive Credit Schedule

Calendar Year	Water Year	Min. Phos. Reduction Required (%)	Actual Phos. Reduction Achieved (%)	Credits Earned	Total Credits (Cumulative)	Credits Used	Credit Balance	Fiscal Year
1994	1993	25	44	19	19.00	0.00	19.00	FY95
1995	1994	25	17	0	19.00	0.00	19.00	FY96
1996	1995	25	31	6	25.00	0.00	25.00	FY97
1997	1996	25	68	43	68.00	0.00	68.00	FY98
1998	1997	25	49	24	92.00	3.91	88.09	FY99
1999	1998	25	34	9	97.09	3.91	93.18	FY00
2000	1999	25	49	24	117.18	3.91	113.27	FY01
2001	2000	25	55	30	143.27	3.91	139.36	FY02
2002	2001	25	73	48	187.36	10.02	177.34	FY03
2003	2002	25	55	30	207.34	10.02	197.32	FY04
2004	2003	25	35	10	207.32	10.02	197.30	FY05
2005	2004	25	64	39	236.30	10.02	226.28	FY06
2006	2005	25	59	34	260.28	15.55	244.73	FY07
2007	2006	25			244.73	15.55	229.18	FY08
2008	2007	25			229.18	15.55	213.63	FY09
2009	2008	25			213.63	15.55	198.08	FY10
2010	2009	25			198.08	15.55	182.53	FY11
2011	2010	25			182.53	15.55	166.98	FY12
2012	2011	25			166.98	15.55	151.43	FY13
2013	2012	25			151.43	15.55	135.88	FY14

Note: Water Year 2005 (Calendar Year 2006 / FY2007) subject to Governing Board approval at 08/10/05 public hearing.

Water Year 2005 = May 1, 2004 to April 30, 2005

Additional Information of Interest

Per Acre Charge	Years	Area-Wide Incentive Credit	Min. Phos. Reduction Required
$24.89	1994 - 1997	0.33	25%
$27.00	1998 - 2001	0.54	25%
$31.00	2002 - 2005	0.61	25%
$35.00	2006 - 2013	0.65	25%
$25.00	2014 - 2016	N/A	N/A
$10.00	2017	N/A	N/A

Note:

1. Vegetable classified acreage is never charged more than $24.89 pre acre.
2. Vegetable classified acreage is not eligible for incentive credits.
3. The minimum per acre charge will never drop below $24.89 through Nov 2013. If incentive credits would cause the per acre charge to drop below $24.89, any earned, unused credits will we carried forward and applied to the following year.
4. Any unused or excess incentive credits remaining after certification of the Everglades agricultural privilege tax roll for the tax notices mailed in November 2013 shall be canceled.
5. The annual Everglades agricultural privilege tax for the tax notices mailed in November 2014 through November 2016 shall be $25 per acre and for tax notices mailed in November 2017 and thereafter shall be $10 per acre.

Florida Statute 373.4592, EFA

Calculating Credits:

1994 - 1997	N/A
1998 - 2001	$27.00 - $24.89 = $2.11 / .54 = 3.91
2002 - 2005	$31.00 - $24.89 = $6.11 / .61 = 10.02
2006 - 2013	$35.00 - $24.89 = $10.11 / .65 = 15.55

[1] Calculated in accordance with the Everglades Forever Act, Section 373.4592(6), Florida Statutes.

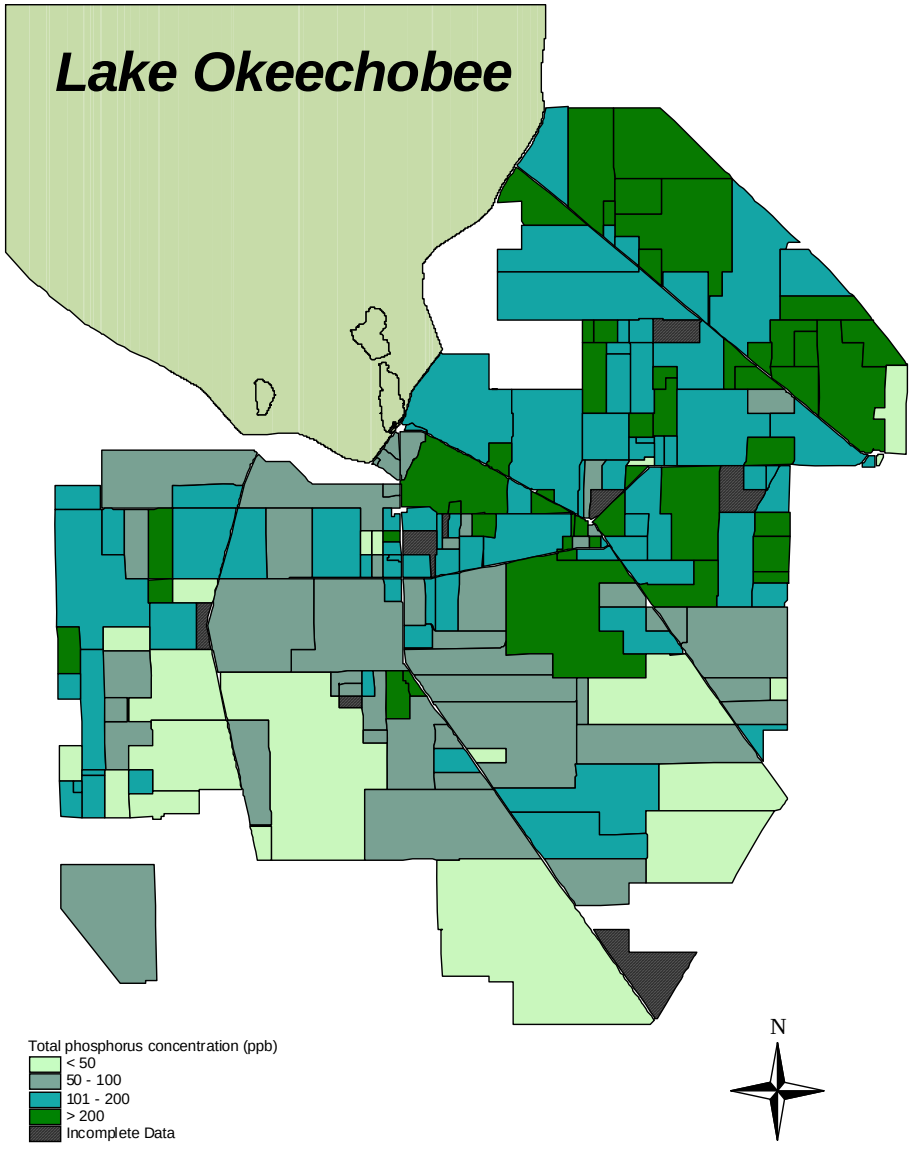

Figure 1. WY2005 total phosphorus (TP) concentrations (ppb) in the EAA.

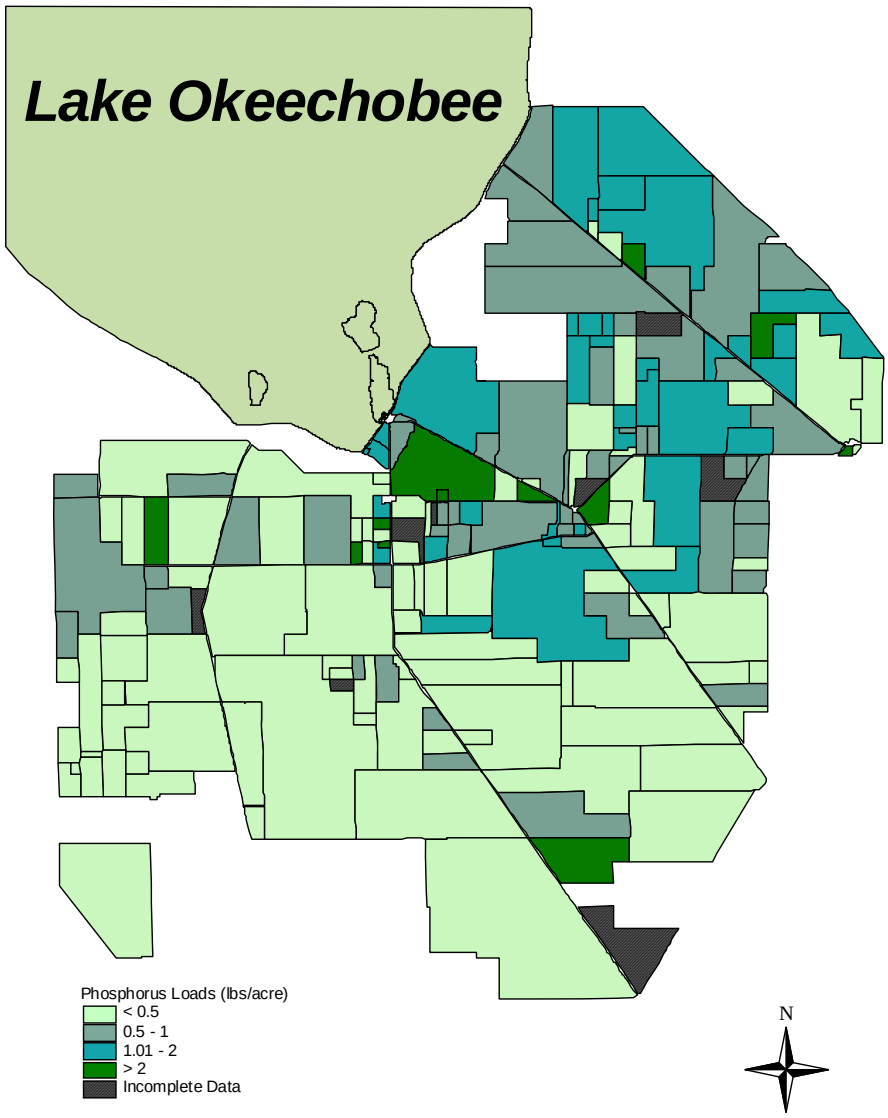

Figure 2. WY2005 rainfall adjusted unit area TP load (lbs/acre) in the EAA.

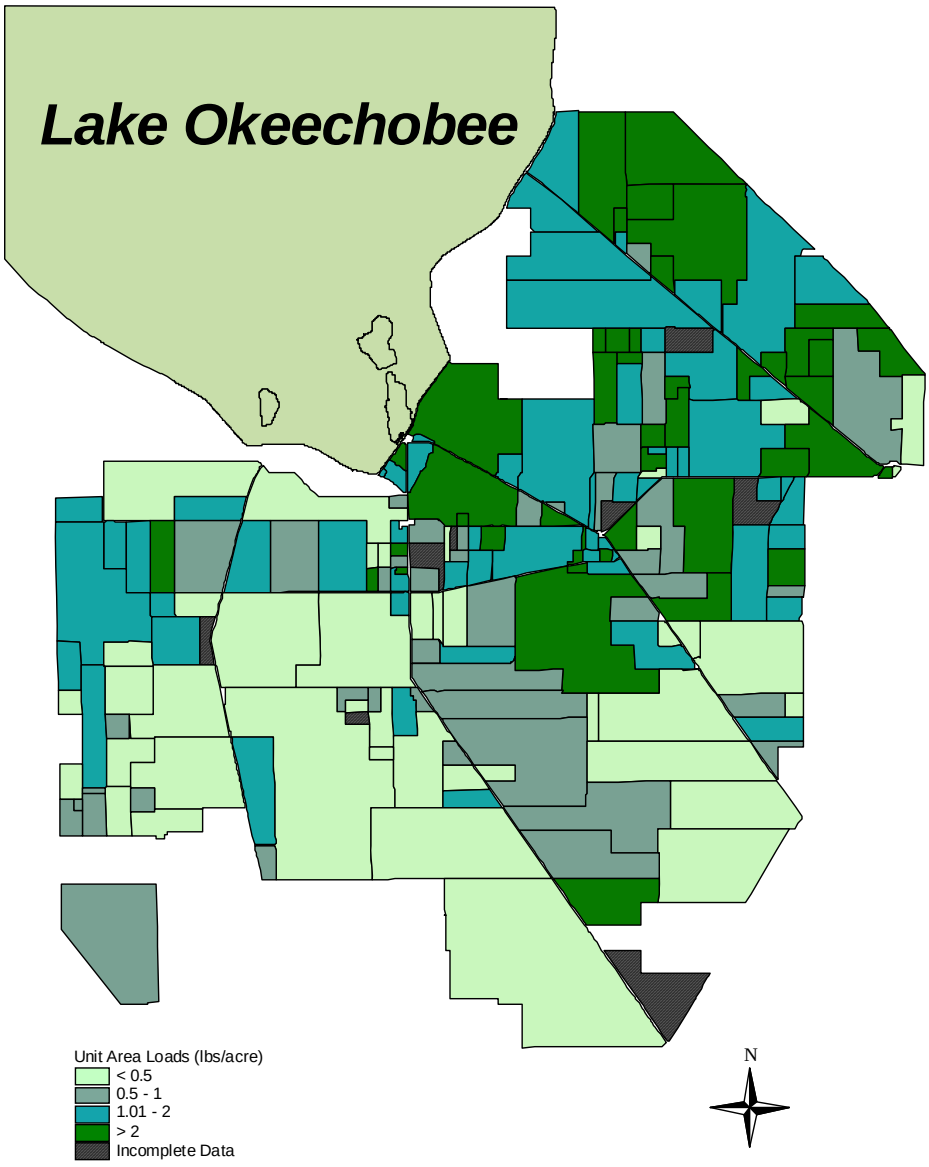

Figure 3. WY2005 observed unit area TP load (lbs/acre) in the EAA.