

Appendix 4-2: Water Year 2006 Permit-Level Data

Stuart Van Horn (editor), Doug Pescatore

Contributors: Jose Vega and Jon Madden

INTRODUCTION

This appendix presents phosphorus concentrations and load data for individual farms within the Everglades Agricultural Area (EAA) basin for Water Year 2006 (WY2006) (May 1, 2005–April 30, 2006) in both tabular form and as a spatial distribution. Individual farms within the EAA are required to submit these permit-level data for any discharge structure as a condition of a Best Management Practices (BMP) permit issued in accordance with Chapter 40E-63, Part 1 (Rule 40E-63), Florida Administrative Code (F.A.C.). For the C-139 basin, submittal of permit-level data is not currently a mandatory requirement, but rather an optional method for individual farms to show farm-level compliance with phosphorus loads when the basin as a whole is out of compliance. The optional farm-level monitoring and farm-level compliance methodology for the C-139 basin is described in Part III of Rule 40E-63. Since the C-139 regulatory program began in WY2003, BMP permit holders in the basin have not requested the optional farm-level compliance method and therefore no data have been submitted.

Table 1 identifies separate hydraulic drainage areas (e.g., individual farms) within the EAA basin. Drainage areas are identified according to the unit area or basin identification (ID) number. The table summarizes the area flow-weighted mean (FWM) total phosphorus (TP) concentration, observed unit area phosphorus load, and the rainfall adjusted unit area load for WY2006. **Table 1** has been updated to include five basins (East Beach Water Control District, East Shore Water Control District, Closter Farms, South Shore Drainage District, and South Florida Conservancy District) that historically discharged to Lake Okeechobee and where diversion of the majority of discharges to the Everglades was recently initiated in accordance with Everglades Forever Act requirements.

Permit-level data allows relative comparisons between farms, between water years for a single farm, and between water years and a baseline for a single farm. The South Florida Water Management District (SFWMD or District) uses such relative comparisons when considering individual farm Best Management Practices (BMP) performance with permittees. Factors that affect permit-level concentrations and loads were discussed in Chapter 3 of the *2006 South Florida Environmental Report – Volume I* (refer to *EAA Basin Permit-Level Monitoring Results*).

Permit-level data are used for compliance determination only if the EAA basin as a whole 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 and detailed results are presented in Appendix 4-1 of this volume.

Table 1 lists 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 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. If the EAA basin as a whole falls out of compliance, then the methodology applied to assess compliance at the farm level 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):
 - Baseline is the TP load per unit area measured for the baseline year for a farm (includes 10-year base period rainfall adjustment). A baseline has not been calculated for two of the five Lake Okeechobee diversion basins. Three of the five Lake Okeechobee diversion basins have baselines remaining from the portions of those basins that have historically discharged into the EAA and were originally tracked in the permit level data. A methodology to evaluate compliance at the permit level for the Lake Okeechobee diversion basins similar to that for the historic EAA areas does not exist. Development of a compliance methodology is planned for WY2007 (see Chapter 4 for detail on WY2007 EAA source control activities).
 - WY2006 is the TP load per unit area for the current water year for a farm (includes 10-year base period rainfall adjustment).
- *WY2006 Percent (%) TP Reduction* is the WY2006 load reduction for the farm compared to the baseline year.
- *WY2006 TP Concentration* (parts per billion, or ppb) is the FWM concentration for the farm for WY2006.
- *WY2006 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 **Table 1** data from individual permit holders. Each basin ID is mapped as a whole, and no information is available to account for localized variations within a basin.

Table 1. WY2006 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)		WY06 % TP Reduction	WY06 Unit Area Load (lbs/ac)	WY06 TP Conc. (ppb)	Comments
				Baseline	WY06				
26-001-01	767.8	Y	1994	2.12	0.91	57%	2.36	279.9	
26-002-01	897.8	N	2001	Unable to Calculate	0.00	Unable to Calculate	0.00	0.0	Pasture area with no recorded flows
26-003-01	599.2	N	1999	0.27	0.10	63%	0.25	49.7	
26-004-01	4501.6	N	1999	1.22	0.28	77%	0.71	99.6	
26-006-01	1198.4	N	1998	1.19	0.92	23%	2.38	357.1	
26-007-01	653.3	N	1999	2.07	0.08	96%	0.21	65.7	
26-008-01	120.0	Y	1994	2.12	0.91	57%	2.36	279.9	
26-009-01	159.8	N	1999	0.74	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (5% Sampled)
26-010-01	1231.0	N	1995	1.81	0.97	47%	2.49	369.4	
26-010-02	9961.3	N	1995	5.83	0.48	92%	1.25	151.2	
50-002-01	5656.4	Y	1994	3.21	1.83	43%	1.34	229.4	
50-002-02	9285.4	Y	1994	2.90	0.90	69%	0.66	139.2	
50-003-01	242.0	Y	1994	0.40	0.42	-6%	0.76	126.6	
50-003-02	520.0	Y	1994	0.62	0.64	-3%	1.13	79.4	
50-003-03	117.6	N	1995	0.22	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (51% Sampled)
50-003-04	320.0	Y	1994	0.91	0.87	4%	1.56	127.1	
50-004-01	908.9	Y	1994	3.68	0.48	87%	0.35	116.8	
50-005-01	319.8	Y	1994	0.91	1.67	-84%	2.97	171.6	
50-005-02	232.9	Y	1994	0.06	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (66% Sampled)
50-005-03	320.0	Y	1994	0.26	0.45	-75%	0.80	405.8	
50-005-04	309.6	Y	1994	1.49	0.24	84%	0.42	171.7	
50-005-05	747.0	Y	1994	1.95	1.31	33%	3.38	327.1	
50-005-06	502.0	Y	1994	1.56	0.33	79%	0.59	154.5	
50-006-01	397.2	Y	1994	4.53	0.78	83%	0.57	105.1	
50-006-02	359.3	Y	1994	5.50	1.01	82%	0.96	169.3	
50-006-03	640.3	Y	1994	3.55	0.58	84%	0.55	113.0	
50-007-01	6472.6	Y	1994	1.56	0.54	66%	0.51	51.5	
50-007-02	5716.7	Y	1994	15.11	5.18	66%	3.78	390.1	
50-008-01	7261.2	Y	1994	0.34	0.33	5%	0.84	124.7	
50-009-02	4271.8	Y	1994	3.57	2.39	33%	4.27	84.4	
50-009-03	965.3	Y	1994	4.15	0.42	90%	0.75	83.9	
50-009-04	317.0	N	1999	5.19	1.46	72%	1.39	119.0	
50-009-05	1479.4	Y	1994	1.54	1.49	3%	2.66	140.8	
50-010-01	784.2	N	1995	2.42	1.70	30%	1.62	145.6	
50-010-02	5327.1	N	1994	1.80	2.08	-15%	2.59	197.4	
50-010-03	5826.3	Y	1994	1.31	0.54	58%	1.16	126.5	
50-010-04	7159.0	Y	1994	4.76	2.20	54%	2.10	174.0	
50-010-06	10487.3	N	2001	1.31	0.21	84%	0.54	106.3	South Florida Conservancy District
50-011-01	1747.7	Y	1994	2.76	0.17	94%	0.17	79.3	
50-011-03	14337.8	Y	1994	5.79	1.28	78%	1.22	267.2	
50-011-04	4066.0	Y	1994	5.21	2.03	61%	1.94	183.6	
50-011-06	638.0	N	1999	0.02	1.13	-7391%	2.92	221.9	
50-012-01	1021.5	Y	1994	4.06	3.01	26%	2.87	160.6	
50-013-01	1362.6	Y	1994	24.22	0.68	97%	0.50	165.1	
50-014-01	1520.4	Y	1994	1.37	0.29	79%	0.52	113.2	
50-015-01	3276.4	Y	1994	2.62	1.68	36%	1.23	178.8	
50-015-02	2554.5	Y	1994	5.28	1.02	81%	0.75	214.8	
50-016-01	1497.3	Y	1994	15.11	1.59	90%	1.16	220.1	
50-017-01	895.0	Y	1994	3.22	0.74	77%	1.32	169.8	
50-018-01	5901.5	Y	1994	2.82	2.30	18%	1.68	214.8	
50-018-02	6594.0	Y	1994	3.54	3.69	-4%	2.69	267.0	
50-018-03	9062.3	Y	1994	1.98	1.22	38%	0.89	122.3	
50-018-04	1913.1	Y	1994	3.88	0.52	86%	1.35	110.1	
50-018-05	1827.1	N	1995	3.64	0.82	78%	2.11	174.9	
50-018-06	1255.1	Y	1994	1.46	0.72	51%	1.86	152.0	
50-018-07	1117.4	Y	1994	2.12	0.91	57%	2.36	279.9	
50-018-08	3208.6	Y	1994	2.28	0.91	60%	2.35	231.6	
50-018-09	1736.6	Y	1994	4.22	1.30	69%	3.35	187.7	
50-018-10	8254.4	Y	1994	3.05	0.93	69%	0.89	165.4	
50-018-11	1871.1	Y	1994	19.73	3.83	81%	3.65	144.5	
50-018-12	1655.2	Y	1994	1.78	2.40	-34%	1.75	142.4	
50-018-13	594.3	Y	1994	0.40	2.95	-636%	2.15	207.0	
50-018-14	569.9	N	1994	2.21	2.24	-1%	3.99	189.0	
50-018-15	757.3	Y	1994	1.12	0.93	17%	1.66	257.1	
50-018-16	240.0	Y	1994	4.11	1.29	69%	2.29	114.9	

Notes: A small portion of the South Florida Conservancy District was capable of discharging to the Everglades. However, a majority of the area historically discharged only to Lake Okeechobee and is now discharging to the Everglades. A BMP Permit issued under Rule 40E-63 is required as is permit level monitoring.

Table 1. Continued

Basin ID	Basin Acreage	Early Baseline	Baseline Year	Rain Adjusted Unit Area Load (lbs/ac)		WY06 % TP Reduction	WY06 Unit Area Load (lbs/ac)	WY06 TP Conc. (ppb)	Comments
				Baseline	WY06				
50-018-17	488.1	Y	1994	3.10	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (66% Sampled)
50-018-18	357.7	Y	1994	0.64	1.66	-159%	2.95	132.7	
50-018-19	314.3	Y	1994	35.32	3.44	90%	6.13	158.7	
50-018-20	380.6	Y	1994	3.59	1.25	65%	2.23	132.9	
50-018-22	4481.2	Y	1994	8.18	0.90	89%	2.33	191.0	
50-018-23	2946.0	Y	1994	2.22	1.12	50%	2.89	132.4	
50-018-24	3800.3	Y	1994	1.96	0.84	57%	2.18	129.6	
50-018-25	3808.4	Y	1994	4.99	1.16	77%	2.06	208.1	
50-019-01	568.4	Y	1994	1.54	0.27	82%	0.48	84.5	
50-019-02	1210.0	Y	1994	1.38	0.65	53%	1.16	127.8	
50-019-03	1051.4	Y	1994	0.58	0.15	74%	0.27	88.4	
50-020-01	320.0	Y	1994	3.32	2.93	12%	2.79	238.8	
50-021-01	2558.0	Y	1994	8.92	1.52	83%	1.45	284.2	
50-022-01	320.0	Y	1994	0.80	0.23	71%	0.41	70.3	
50-023-01	278.0	Y	1994	11.83	1.37	88%	1.31	317.5	
50-024-01	574.0	N	1995	6.43	0.48	93%	0.85	162.4	
50-025-01	823.7	Y	1994	3.68	1.50	59%	1.09	413.3	
50-027-01	2771.8	Y	1994	2.40	0.85	64%	0.81	135.8	
50-027-02	798.5	Y	1994	1.22	0.83	32%	0.79	118.3	
50-027-03	1353.1	Y	1994	2.32	0.74	68%	0.70	260.4	
50-027-04	2520.0	Y	1994	2.10	0.97	54%	0.92	229.6	
50-028-01	220.0	Y	1994	14.54	0.99	93%	0.95	73.2	
50-029-01	530.6	Y	1994	4.30	2.00	54%	3.56	148.6	
50-030-01	446.1	Y	1994	14.14	1.27	91%	1.21	308.7	
50-031-01	1608.9	Y	1994	2.56	2.32	9%	2.21	91.2	
50-031-02	1387.0	Y	1994	5.48	4.85	12%	4.62	476.2	
50-031-03	602.4	Y	1994	8.57	2.56	70%	2.44	219.8	
50-032-01	305.7	Y	1994	0.84	0.73	13%	1.30	79.2	
50-033-02	6196.8	Y	1994	12.52	5.27	58%	3.85	482.9	East Beach Drainage District
50-034-01	7897.1	Y	1994	1.68	0.89	47%	0.85	114.4	
50-034-02	600.5	Y	1994	3.37	0.19	94%	0.18	37.9	
50-034-03	4611.8	Y	1994	4.08	0.41	90%	0.73	77.7	
50-034-04	4138.0	Y	1994	1.54	1.36	11%	2.43	158.3	
50-035-01	478.5	Y	1994	5.74	2.82	51%	2.68	240.3	
50-035-02	1634.3	Y	1994	5.40	2.42	55%	1.76	376.5	
50-035-03	205.5	N	1999	8.71	4.66	46%	3.40	71.9	
50-037-01	1584.3	Y	1994	6.70	0.00	100%	0.00	0.0	Reported no offsite discharges consistent with ERP Permit.
50-038-01	1285.0	Y	1994	3.71	1.81	51%	1.32	629.0	
50-039-01	62.5	N	1995	4.01	0.34	91%	0.33	163.1	
50-039-02	143.1	N	1995	4.25	0.42	90%	0.40	42.4	
50-040-01	216.2	N	1995	1.40	0.27	81%	0.20	55.2	
50-040-02	498.6	N	1995	3.61	0.22	94%	0.16	69.1	
50-041-01	108.8	N	1998	2.69	0.92	66%	0.87	140.5	
50-041-02	300.4	N	1998	2.44	1.08	56%	1.92	55.2	
50-042-01	320.0	N	1995	0.14	0.12	13%	0.22	73.2	
50-044-01	2168.8	N	1996	5.02	1.71	66%	1.25	238.1	
50-045-01	281.8	N	1995	4.35	0.43	90%	0.41	119.6	
50-045-02	160.6	N	1995	1.41	1.34	5%	1.27	119.8	
50-046-01	35.0	N	1994	2.21	2.24	-1%	3.99	189.0	
50-047-01	630.3	N	1996	1.46	2.05	-40%	1.96	225.8	
50-047-02	640.0	N	1995	0.84	0.84	1%	0.80	140.2	
50-047-03	1832.0	N	1997	0.44	1.29	-195%	1.23	272.6	
50-047-04	198.5	N	1996	0.68	0.19	71%	0.18	55.2	
50-047-05	314.0	N	1997	0.55	1.42	-158%	1.36	138.5	
50-047-07	3494.2	N	1996	0.67	1.15	-71%	0.84	125.9	
50-047-08	1557.7	N	1996	0.96	1.95	-102%	1.86	174.0	
50-048-01	1185.1	N	1995	1.25	0.98	21%	0.93	81.6	
50-048-02	640.0	N	1995	0.36	0.51	-42%	0.92	179.0	
50-051-01	811.4	N	1995	0.97	0.21	78%	0.20	49.8	
50-053-01	148.9	N	1995	5.16	0.78	85%	0.75	435.3	
50-054-01	9338.5	N	1996	0.84	0.89	-6%	0.65	200.2	
50-054-02	960.0	N	1996	0.50	7.94	-1500%	5.79	909.4	
50-054-03	1227.2	N	1996	0.35	0.08	77%	0.06	78.3	
50-054-04	3684.3	N	1996	0.82	1.92	-133%	1.40	116.8	
50-055-01	392.9	N	1997	0.86	0.24	72%	0.23	97.9	
50-055-02	810.4	N	1999	0.45	0.92	-103%	0.88	101.9	
50-055-03	2871.2	N	1996	0.74	0.26	66%	0.24	76.1	
50-056-01	849.8	N	1996	0.98	2.93	-197%	3.30	315.6	
50-058-01	157.0	N	1995	0.02	0.00	100%	0.00	0.0	

Notes: A small portion of the East Beach Water Control District was capable of discharging to the Everglades. However, a majority of the area historically discharged only to Lake Okeechobee and is now discharging to the Everglades. A BMP Permit issued under Rule 40E-63 is required as is permit level monitoring.

Table 1. Continued

Basin ID	Basin Acreage	Early Baseline	Baseline Year	Rain Adjusted Unit Area Load (lbs/ac)		WY06 % TP Reduction	WY06 Unit Area Load (lbs/ac)	WY06 TP Conc. (ppb)	Comments
				Baseline	WY06				
50-059-01	11522.9	N	1996	2.19	4.28	-95%	3.12	544.6	
50-059-02	1767.6	N	1997	1.07	2.58	-141%	1.88	265.3	
50-059-03	709.5	N	1996	1.65	3.48	-111%	2.54	275.6	
50-059-04	306.1	N	1996	1.14	1.74	-53%	1.27	166.4	
50-060-01	8137.2	N	1995	0.18	0.30	-72%	0.29	60.1	
50-060-02	7613.8	N	1995	0.75	0.49	35%	0.46	69.7	
50-061-01	639.5	N	1995	1.44	0.08	95%	0.07	105.6	
50-061-03	3434.3	N	1995	0.76	0.47	39%	0.83	97.2	
50-061-05	313.7	N	1995	1.89	0.76	60%	1.36	83.8	
50-061-06	237.0	N	1995	1.68	0.26	84%	0.47	162.1	
50-061-07	318.2	N	1995	1.24	1.54	-24%	2.74	126.9	
50-061-08	375.2	N	1999	1.76	1.26	29%	0.92	196.9	
50-061-10	19929.2	N	1996	0.49	0.21	57%	0.54	62.2	
50-061-11	13235.2	N	1995	0.95	0.82	13%	1.47	250.7	
50-061-12	730.0	N	1995	2.55	0.71	72%	1.26	209.2	
50-061-13	1059.6	N	1995	1.16	0.73	37%	1.30	48.2	
50-061-15	6760.2	N	1995	1.91	0.70	63%	0.70	180.3	
50-061-17	1598.1	N	1995	12.22	5.64	54%	4.12	519.1	
50-061-18	1555.1	N	1995	9.82	1.07	89%	1.02	57.6	
50-061-20	156.1	N	1994	1.80	2.08	-15%	2.59	197.4	
50-061-22	3739.3	Y	1994	0.34	0.33	5%	0.84	124.7	
50-062-01	4625.8	N	1996	0.20	0.25	-26%	0.44	101.9	
50-062-02	10754.2	N	1996	0.46	0.29	36%	0.52	77.3	
50-062-03	1188.3	N	1996	0.54	0.30	45%	0.53	66.0	
50-062-04	901.2	N	1996	0.26	0.36	-38%	0.64	144.8	
50-062-05	5249.6	N	1996	0.41	0.37	11%	0.65	87.2	
50-062-08	8134.7	N	1996	0.51	0.42	17%	0.75	61.7	
50-062-09	7658.9	N	1997	0.22	0.32	-47%	0.58	172.3	
50-062-10	8772.4	N	1997	0.72	0.27	63%	0.26	52.8	
50-062-11	1276.6	N	1996	0.44	0.35	21%	0.62	79.4	
50-063-01	9792.2	N	1996	0.45	0.33	27%	0.58	89.9	
50-064-01	898.7	N	1997	2.98	2.52	16%	1.84	188.2	
50-064-03	145.0	N	1997	2.98	2.52	16%	1.84	188.2	
50-064-04	1150.4	N	1997	2.98	2.52	16%	1.84	188.2	
50-065-02	938.1	N	1995	3.64	0.33	91%	0.31	110.7	
50-065-03	3751.7	N	1997	2.98	2.52	16%	1.84	188.2	
50-065-05	929.8	N	1997	2.98	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (67% Sampled)
50-065-06	453.9	N	1997	2.98	0.14	95%	0.10	159.0	
50-065-07	513.0	N	1995	3.92	1.01	74%	0.96	167.7	
50-065-08	628.0	N	1997	2.98	2.52	16%	1.84	188.2	
50-065-10	792.3	N	1995	1.55	1.07	31%	1.02	101.7	
50-067-01	1143.9	N	1996	0.40	0.63	-58%	1.62	109.0	
50-067-02	10257.1	N	1996	0.94	0.37	61%	0.95	77.1	
50-067-03	681.6	N	1996	1.02	0.30	71%	0.78	26.0	
50-067-04	3819.5	N	1996	0.55	0.21	62%	0.55	38.5	
50-067-05	7322.6	N	1996	0.42	0.26	38%	0.66	58.6	
50-067-06	1277.2	N	1999	0.49	0.60	-21%	1.54	100.2	
50-067-07	1975.5	N	1999	0.54	0.13	75%	0.35	23.5	
50-067-09	1277.7	N	1999	0.54	0.92	-72%	2.37	164.3	
50-067-10	2551.8	N	1999	1.21	0.91	25%	2.35	151.4	
50-067-11	6179.0	N	1999	0.85	0.32	63%	0.82	70.7	
50-068-01	2615.8	N	1996	1.13	1.19	-5%	0.87	155.6	
50-068-02	328.5	N	1997	2.30	2.49	-9%	1.82	358.6	
50-069-01	317.5	N	1996	1.06	Unable to Calculate	Unable to Calculate	Unable to Calculate	Unable to Calculate	<75% annual load sampled (59% Sampled)
50-070-01	245.0	N	1995	3.82	2.92	24%	2.79	179.9	
50-070-02	244.0	N	1995	3.09	1.34	57%	1.27	213.6	
50-073-01	67.8	N	2001	Unable to Calculate	0.00	Unable to Calculate	0.00	0.0	Not used for agriculture; has onsite retention area and does not discharge
50-077-01	3168.0				1.06		1.90	165.0	715 Farms (Closter Farms)
50-078-01	71.6	N	1999	8.71	1.54	82%	2.74	184.6	
50-080-01	8108.5				0.65		1.15	242.7	East Shore Drainage District
50-081-01	210.0	N	2004	0.66	0.59	11%	1.05	88.6	
50-081-02	4845.5	N	1994	1.31	0.43	67%	1.11	131.2	South Shore Drainage District
50-082-01	484.5	N	1995	9.82	1.26	87%	2.24	65.2	

Notes: Closter Farms (a.k.a. 715 Farms), East Shore Water Control District, and the South Shore Drainage District historically discharged only to Lake Okeechobee and are now discharging to the Everglades. A BMP Permit issued under Rule 40E-63 is required as is permit level monitoring.

Table 2. BMP summary and “BMP equivalent” points for the EAA and C-139 basins.

BMP	Points	Description
<i>Nutrient Control Practice</i>		<i>Minimizes the Movement of Nutrients Off-Site</i>
Nutrient Application Control	2 ½	Controlled application of nutrients with a 4-foot 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 phosphorus (P)/low P demand crops to avoid P build-up and no successive P application.
Plant Tissue Analysis	2 ½	Determines plant nutrient requirements next growing season (crop specific).
	5	Citrus only — because plant tissue analysis provides information on current season, additional points are allowed.
Nutrient Application Control	5	Determines 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.
<i>Water management practices</i>		<i>Minimizes the volume of off-site discharges</i>
½ Inch Detained	5	Delay discharge (based on measuring daily rain events using a rain gauge).
1 Inch Detained	10	
Improved Infrastructure	5	Recirculate water inside farm boundaries to improve water quality prior to offsite discharge (e.g., rice and vegetables); fallow field floodwater 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	Optimizing drainage and irrigation schedules and/or using low volume irrigation methods to decrease discharge.
Approved and Operational Surface Water Reservoir	35	Properly permitted, constructed, and maintained storage system meeting specified Environmental Resource Permit 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, F.A.C.) with a properly constructed and permitted temporary holding pond.

Table 2. Continued.

BMP	Points	Description
Particulate Matter & Sediment Controls		Minimizes the Movement of Particulate Matter and Sediments
Any 2	2 ½	<ul style="list-style-type: none"> Leveling fields Soil stabilization through infrastructure improvements
Any 4	5	<ul style="list-style-type: none"> Grassed swales/field ditch connections Culvert bottoms above ditch bottoms Cover crops
Any 6	10	<ul style="list-style-type: none"> Ditch bank berms Vegetated ditch banks Slow drainage velocity near pumps
Any 8	15	<ul style="list-style-type: none"> Aquatic weed control Canal cleaning program Field ditch drainage sumps Ditch bank stabilization
Pasture Management		On-Farm Site Operation and Management Practices
	2 ½	<ul style="list-style-type: none"> Restricted placement of feeders, cowpens, or feed and water to reduce "hot spots" near drainage ditches (2 ½ points each)
	2 ½	<ul style="list-style-type: none"> Provide shade structures to prevent cattle in waterways
	5	<ul style="list-style-type: none"> Low cattle density (1 head/2 acres, non-irrigated pasture)
	5	<ul style="list-style-type: none"> Reduced P in feed (by a minimum of 20%)
	10	<ul style="list-style-type: none"> 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	BMPs proposed by permittee and accepted by SFWMD.

Note:

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

TBD = To Be Determined.

Table 3. Everglades Agricultural Privilege Tax area-wide incentive credits for the EAA basin.

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	44	19	263.73	15.55	248.18	FY08
2008	2007	25			248.18	15.55	232.63	FY09
2009	2008	25			232.63	15.55	217.08	FY10
2010	2009	25			217.08	15.55	201.53	FY11
2011	2010	25			201.53	15.55	185.98	FY12
2012	2011	25			185.98	15.55	170.43	FY13
2013	2012	25			170.43	15.55	154.88	FY14

Notes:

- Water Year 2005 (Calendar Year 2006 / FY2007) received Governing Board approval at 8/9/06 public meeting.
- Water Year 2006 (Calendar Year 2007 / FY2008) subject to Governing Board approval at Aug. or Sept. 2007 public meeting.
- Water Year 2006 = May 1, 2005 to April 30, 2006

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 be 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	$\$35.00 - \$24.89 = \$10.11 / .65 = 15.55$

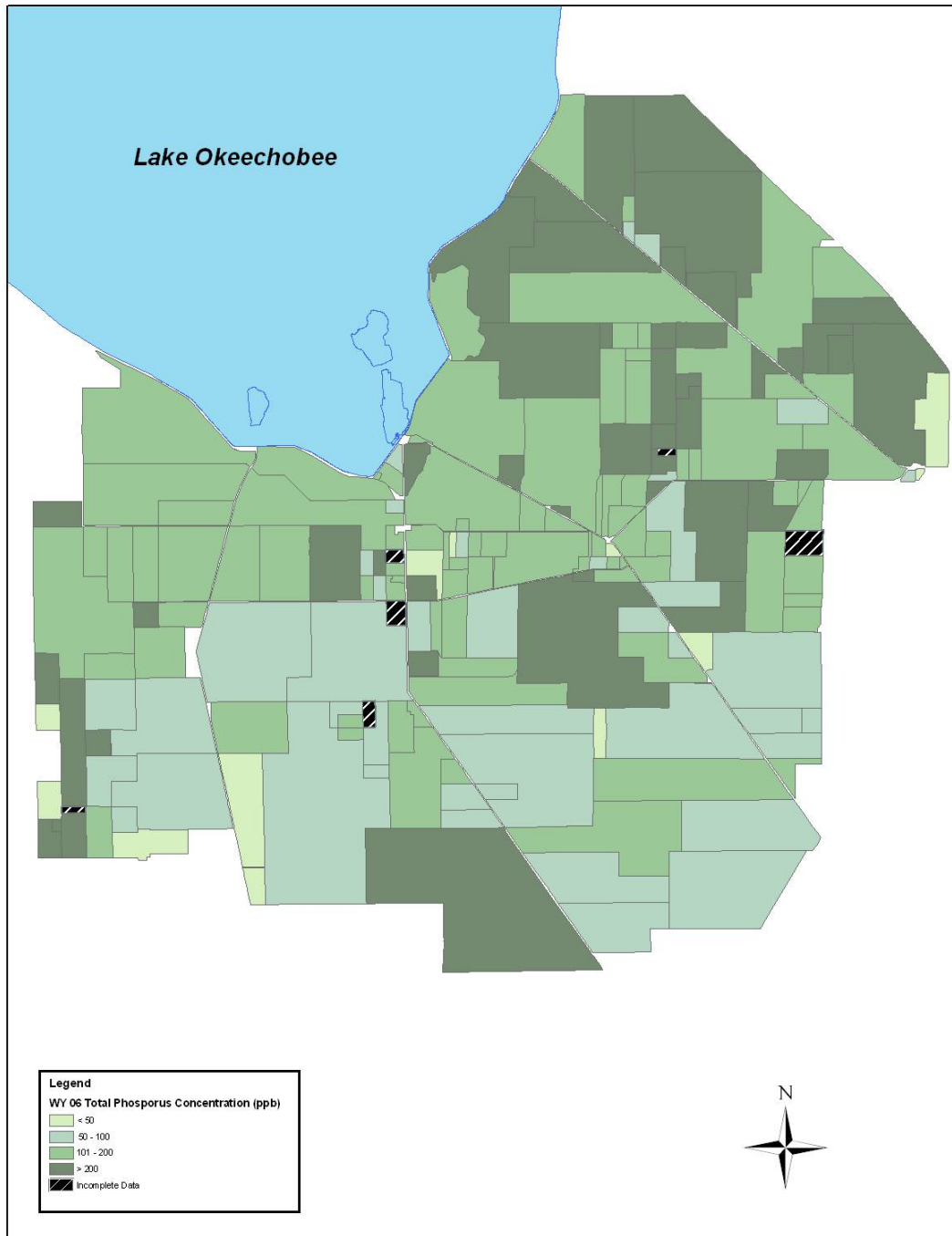


Figure 1. WY2006 total phosphorus (TP) flow-weighted mean concentrations (ppb) in the EAA.

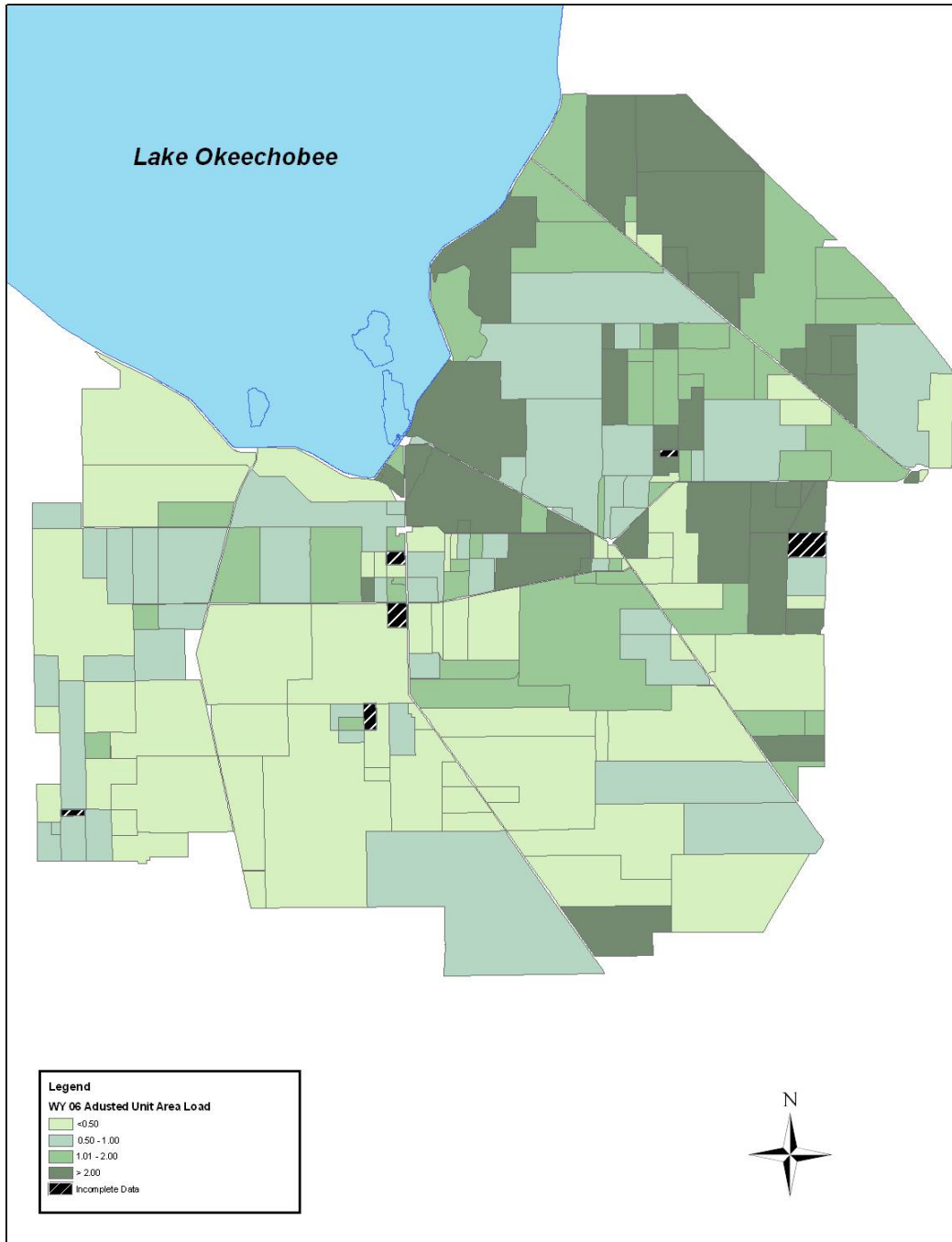


Figure 2. WY2006 rainfall-adjusted unit area TP load (lbs/acre) in the EAA basin.

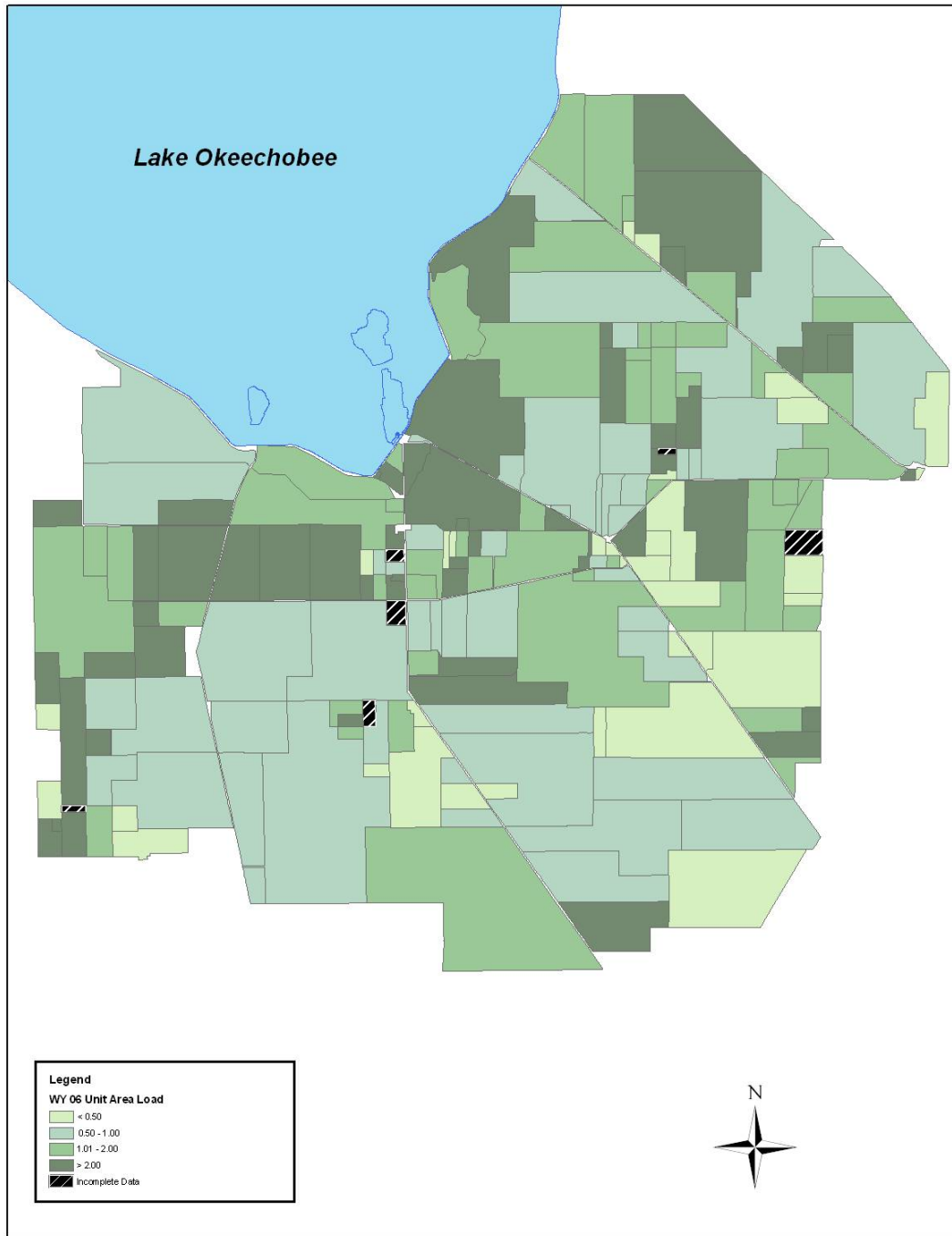


Figure 3. WY2006 observed unit area TP load (lbs/acre) in the EAA basin.