

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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PRO ECP

November 15, 2004

Secretary Colleen Castille Florida Department of Environmental Protection 3900 Commonwealth Blvd. Tallahassee, Florida 32399

Subject: Request to Modify Everglades Permits Nos.: 503074709 (STA-1W EFA permit), FL0177962-001 (STA-1W NPDES permit), 0126704 (STA-2 EFA permit), FL0177946-001 (STA-2 NPDES permit), 0192895 (STA-3/4 EFA permit) and FL0300195 (STA-3/4 NPDES permit), 0131842 (STA-5 EFA permit), FL0177954 (STA-5 NPDES permit), 262918309 (STA-6 EFA permit), 06502590709 (non-ECP EFA permit), and application file no. 0195030 (STA-1E joint permits).

Dear Secretary Castille:

On December 19, 2003, the South Florida Water Management District (District) submitted to the Florida Department of Environmental Protection (FDEP) an application for permit modification, pursuant to the Everglades Forever Act, Section 373.4592(10)(a) Florida Statutes (EFA). This application contained the District's Everglades Protection Area Tributary Basins Long-Term Plan for Achieving Water Quality Goals, October 27, 2003 (Long Term Plan).

As part of the adaptive implementation process envisioned by the *Long-Term Plan*, it was anticipated that further refinements to the recommended water quality improvement measures would be made at the earliest achievable dates as more scientific and engineering information was obtained. The enclosed is a refinement to the Pre-2006 Projects for the Everglades Construction Project (ECP) basins. The refinements include expanded Stormwater Treatment Areas (STA), revised STA enhancements, and changes to the construction schedules. In addition, recreational facilities are proposed for each STA in accordance with the public access and recreation requirements of the Everglades Forever Act. These facilities shall be designed to ensure compatibility with the restoration goals of the Everglades Construction Project. The District is hereby amending its December 19, 2003, permit application to include these revisions.

These refinements are expected to improve the *Long-Term Plan* in achieving state water quality standards, including the phosphorus criterion and moderating provisions. District staff looks forward to working with the FDEP to develop appropriate TBELs consistent with the *Long-Term Plan*, as provided in s. 373.4592 subparagraph (4)(e)3, Florida Statutes for these permits.

GOVERNING BOARD

Executive Office

Henry Dean, Executive Director

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In accordance with the proposed revisions, we are also modifying the following text that appears on pages 6-92 and 6-93 of the *Long-Term Plan*:

In accordance with the proposed revisions, we are also modifying the following text that appears on pages 6-92 and 6-93:

To facilitate that adaptive implementation process and assure that additional steps are expeditiously implemented, it is recommended that a dedicated funding source be established. Its use would be limited to additional enhancements and modifications resulting from the PDE process that can be implemented within the existing footprints of the ECP STAs, or added to CERP projects as a locally preferred option to enhance their water quality performance. It is not intended that dedicated funding source be used for more substantive efforts similar to those discussed in Section 6.1 and 6.2 of this Part 6, which could include:

- ➤ In the ECP Basins, further expansion of the STAs post-2006 if needed to meet water quality standards, including the numeric phosphorus criterion, which could include:
 - Expansion of STA-2, either through addition of a fourth parallel flow path, or through development of a new STA potentially sited immediately north of the Hillsboro Canal and west of the Arthur R. Marshall Loxahatchee National Wildlife Refuge;
 - Expansion of STA 5, increasing its effective treatment area by as much as 50%;
 - Expansion of STA-1E to include lands in Section 24, Township 44 South, Range 40 East in Palm Beach County.

Also, we want to correct a mathematical error contained in the October 2003 *Long-Term Plan*. Table ES.3 (and the identical 4-3) and Table 4-1 had incorrect phosphorus load estimates for the upper range of loads shown in the columns labeled "ECP Basins" and All Basins." The estimated discharge phosphorus concentrations were correct as originally shown. The corrected estimates are contained in the following tables. These tables will be further revised based upon the new performance projections planned for later this fiscal year.

Corrected Table ES.3 and 4.3:

Period		Estimated Average Annual Discharges											
From	Thru	All ECP Basins				All ESP Basins			All Basins				
		Volume	Load	TP Conc. (ppb)		Volume	TP Load	FW TP	Volume	Load	FW TP		
			(metric	F.W.	Geo.		(metric	Conc		(metric	Conc		
		(ac-ft)	`tons)	Mean	Mean	(ac-ft)	tons)	(ppb)	(ac-ft)	tons)	(ppb)		
2004	12/30/06	1,344,700	57.9 - 61.2	35 - 37	20 - 36	395,100	26.0	53	1,739,800	83.9 - 87.2	39 - 41		
12/31/06	12/31/07	1,362,700	25.8 - 39.9	15 - 24	10 - 14	186,100	9.5	42	1,548,800	35.3 - 49.4	18 - 26		
2008	2010	1,362,700	25.8 - 39.9	15 - 24	10 - 14	179,300	9.2	42	1,542,000	35.0 - 49.1	18 - 26		
2011	2014	1,362,700	25.8 - 39.9	15 - 24	10 - 14	102,300	1,9	15	1,465,000	27.7 - 41.8	15 - 23		
2015	2036	1,327,500	24.4 - 37.7	15 - 23	10 - 15	102,300	1.9	15	1,429,800	26.3 - 39.6	15 - 22		
2037	2056	1,327,500	24.4 - 37.7	15 - 23	10 - 15	84,900	1.5	14	1,412,400	25.9 - 39.1	15 - 22		

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Corrected Table 4.1:

Basin	Period		Est. Ave. Annual Discharge		Estimated TP Co	oncentrations	Remarks	
	From	Through	Volume (ac-ft)	TP Load (metric tons)	Flow-Weight Mean (ppb)	Geometric Mean (ppb)		
STA-1E	2004	2006	148,400	7.03	38	34	For Current Design of STA-1E	
		1		. ,			After Enhancement of STA-1E and	
	2007	2056	175,000	3.31 - 5.30	15 - 24	10 - 11	Diversion of Acme Basin B	
STA-1W	2004	2006	188,100	5.65 - 7.07	24 - 30	24 - 26	For Existing STA-1W	
	2007	2056	183,300	3.15 - 4.95	14 - 22	10 - 13	After Enhancement of STA-1W	
STA-2	2004	2006	223,300	9.08 - 10.18	33 - 37	33 - 35	For Existing STA-2	
	2007	2014	222,600	4.59 - 7.55	17 - 28	10 - 14	After Enhancement of STA-2	
	2014	2056	197,500	3.52 - 6.04	14 - 24	10 - 13	After Full Completion of CERP	
STA-3/4	2004	2006	623,700	28.01	36	36	For Current Design of STA-3/4	
	2007	2014	621,200	10.98 - 16.47	14 - 21	10 - 14	After Enhancement of STA-3/4	
	2015	2056	588,600	10.19 - 15.28	14 - 21	10 - 15	After Full Completion of CERP	
STA-5	2004	2006	125,900	6.93 - 7.70	45 - 50	32 - 34	For Existing STA-5	
	2007	2014	125,500	3.03 - 4.55	20 - 30	10 - 13	After Enhancement of STA-5	
	2015	2056	125,500	3.03 - 4.55	20 - 30	10 - 13	After Full Completion of CERP	
	1						For Existing STA-6 (With Section 2	
STA-6	2004	2006	35,300	1.23	28	20	Completed)	
	2007	2014	35,100	0.75 - 1.05	17 - 24	10 - 13	After Enhancement of STA-5	
	2015	2056	57,600	1.20 - 1.55	17 - 22	10 - 12	After Full Completion of CERP	
All	2004	2006	1.344.700	57.93 - 61.22	35 - 37	20 - 36	Existing (No Project) Conditions	
ECP	2007	2014	1,362,700	25.80 - 39.87	15 - 24	10 - 14	After STA Enhancements	
Basins	2015	2056	1,327,500	24.40 - 37.66	15 - 23	10 - 15	After Full Completion of CERP	

If you or your staff has questions on this permit application, please direct them to Chip Merriam, Deputy Executive Director at Suncom 229-6597.

Sincerely,

Henry Dean

Executive Director

South Florida Water Management District

HD/pav Attachment

CC:

Ernie Barnett, FDEP
Jerry Brooks, FDEP
Richard Harvey, USEPA
Philip Mancusi-Ungaro, USEPA
Temperince Morgan, FDEP
Kevin Neal, FDEP
Frank Nearhoof, FDEP

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bcc:

Ken Ammon, w/o att. Ron Bearzotti, w/o att. Kirk Burns, w/o att. Kathy Collins, w/o att. Larry Gerry, w/o att. Gary Goforth, w/o att. Damon Meiers, w/o att. Chip Merriam, w/o att. Jack Maloy, w/o att. John Mitnik, w/o att. John Morgan, w/o att. Tracey Piccone, w/o att. Dean Powell, w/o att. Steve Reel, w/o att. Pam Sievers, w/o att. Tom Teets, w/o att. Cled Weldon, w/o att. Craig Wilson, w/o att.