

Appendix 3-2a: Non-ECP Water Quality Sampling Sites, Monitoring Schedule, and Flow Volumes

Table 1. Water quality monitoring schedule for non-Everglades Construction Project (non-ECP) discharge structures and additional upstream monitoring locations.

AREA	Non-ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	WATER QUALITY MONITORING SCHEDULE						WATER QUALITY COMMENTS
			Physical	Nutrients	Major Ions	Trace Metals	Pesticides Water	Pesticides Sediment	
INTO	ACME1DS	ACME1DS	BWF/M	BWF/M	QTR	SA	QTR	SA	
	ACME1 + (Upstream of ACME1DS)	VOW1		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.
	G-94D	G94D	BWF/M	BWF/M	QTR	SA	QTR	SA	
	ACME2 + (Upstream of G94D)	VOW2		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.
	G-123	G123	BWF/M	BWF/M (autosampler)	QTR	SA	QTR	SA	
	S-9	S9	BWF/M	Weekly Flowing (autosampler)	QTR	SA	QTR	SA	TP collected by autosampler.
	S-9A	S9A	BWF/M	BWF/M except TP-WF/M Grab (autosampler)	QTR				Sampling started in WY2003
	S-14	S14	BWF	BWF	QTRF	SAF			
	S-18C	S18C	BWF/M	BWF/M (autosampler)	QTR	SA	QTR	SA	
	S-140	S140	BWF/M	BWF/M (autosampler)	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by grab
	S-175	S175	BWF/M	BWF/M	QTR	SA			
	S-190	S190	BWF/M	BWF/M (autosampler)	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by grab
	S-332	S332	BWF/M	BWF/M	QTR	SA	QTR	SA	
WITHIN	NSIDSP01	NSID1	BWF	BWF	QTRF	SAF	QTRF	SAF	TP collected by autosampler
		S38B	BWF	BWF	QTRF	SAF	QTRF	SAF	
	G-64	G64	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *
	G-69	G69	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *
	G-71, S-346, S-347	S12D	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-10E	S10E	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-141	S34	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-142	S142	BWF/M	BWF/M	QTR *		QTRF	SAF	Monitoring Fe, Mg, Ca phased out *
	S-143	S11A	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-144	S145							Discontinued sampling in favor of surrogate location at S-145 *
FROM	S-145	S145	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-146	S145							Discontinued sampling in favor of surrogate location at S-145 *
	S-151	S151	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-339, S-340	C123SR84	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	G-94A, G-94B, G-94C	G94B	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-31	S31	BWF/M	BWF/M	QTR *		QTR	SA	Monitoring Fe, Mg, Ca phased out *
	S-34	S34	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-38	S38	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-39	S39	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-197	S197	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *
C-111 BASIN	S-333	S333	BWF/M	BWF/M	QTR	SA			
	S-334	S334	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-337	S31	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-343A, S-343B	US41-25	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-344	S344	QTR	QTR	QTR *				Monitoring Fe, Mg, Ca phased out *
	S-174 +	S176	BWF/M	BWF/M	QTR	SA	QTR	SA	
	S-177 +	S177	BWF/M	BWF/M	QTR	SA	QTR	SA	
S-178 +	S178	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S331-173	BWF/M	BWF/M	QTR	SA				
	S-331 +, S-173 +	S331					QTR	SA	S173 is not listed in Permit, but is adjacent to and flows in same direction as S331
	S332B	S332B	BWF	BWF			QTR		
	Berm B3	BermB3	BWF	BWF			QTR		
S-332C	S332C	S332C	BWF	BWF			QTR		
	S-332D	S332D & S332DAS	BWF	BWF			QTR		
									S-332B, Berm B3, S332C and S332D is not listed in Non-ECP permit, but it is in Emergency Order Number 9.

Notes: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different representative sampling location.

2) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations.

3) * indicates monitoring requirement eliminated in the November 1999 Non-ECP Permit Modification.

4) Table Legend:

BWF/M = Biweekly if Flowing/Otherwise Monthly

SA = Semiannually

BWF = Biweekly if Flowing

SAF = Semiannually if Flowing

QTR = Quarterly

1 WS - 1 DS = 1 Wet Season and 1 Dry Season

QTRF = Quarterly if Flowing

Table 2. Flow volume and annual flow-weighted mean total phosphorus (TP) concentrations for non-ECP structures during Water Year 2005 (WY2005) (May 1, 2004 through April 30, 2005).

AREA	NON-ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 2004 - April 30, 2005)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)			
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr					
ACME1DS																		n/a 126			
ACME1 + (Upstream of ACME1DS) VOW1 ACME1 OH647 134 0 0 1,189 7,188 2,306 231 0 0 0 986 284 12,317 133																					
G-94D G94D n/a n/a See flow data from ACME 1																		n/a 213			
G-94D G94D n/a n/a See flow data from ACME 2																		212			
INTO	ACME2 + (Upstream of G94D) VOW2 ACME2 OH648 421 75 0 1,089 6,152 2,027 306 0 0 0 1,032 144 11,246		N/F																		
	G-123 G123_P K5481 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		19																		
	S-9 S9_P K5483 1,673 1,959 4,847 35,775 31,054 7,708 0 0 400 1,669 8,006 311 93,403		12																		
	S-9A S9A TA415 739 1,912 5,497 7,240 4,043 14,963 3,669 1,168 6,395 1,996 6,528 2,415 56,584		N/F																		
	S-14 S14_S14_C K5485 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		N/F																		
	S-18C S18C_S 15760 90 335 5,154 21,124 18,460 25,174 21,506 5,846 16,008 756 384 251 100,689		9																		
	S-140 S140_S140_TOT 06754 6 11,863 13,988 46,048 34,668 14,857 4,035 0 985 401 8,469 2,657 137,976		42																		
	S-175 S175_C 15752 0 1 0 0 0 366 1 0 0 5 0 0 374 0 0 0		5																		
	S-190 S190_S K5501 7 2,034 4,387 45,730 33,401 6,995 284 50 21 4 1,613 54 94,581		97																		
	S-332 S332_P 15753 0 0 0 0 0 1 0 1 39 1 2 0 44 nd		nd																		
	NSIDSP01 NSPRNG_C2A PS225 0 0 0 0 354 0 0 0 0 0 0 0 0 0 0 354 20																				
	S38B n/a n/a See flow data from NSPRNG_C2A																	nd			
WITHIN	G-64 G64_C n/a		nd																		
	G-69 G69_C K5480 276 397 381 281 334 503 498 145 146 92 113 57 3,224		N/F																		
	G-71, S-346, S-347 S12D_S FE774 4,445 0 0 12,373 44,154 69,245 46,352 37,031 2,803 0 270 5,837 222,510		11																		
	S-10E S10E_C K5484 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		N/F																		
	S-141 S34_S141_W K5493 0 0 0 0 0 300 182 0 0 0 0 0 0 0 0 0 482		15																		
	S-142 S142_C K5494 2,245 4,015 2,853 1,824 1,370 19,031 19,833 10,643 3,326 2,886 2,481 13,803 84,310		20																		
	S-143 S11A_S143_C K5495 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		N/F																		
	S-144 S144_C K5497 0 0 583 7,148 3,454 6,885 5,583 5,922 2,210 0 318 2,368 30,270		8																		
	S-145 S145_C K5498 0 0 1,496 8,475 4,137 7,681 1,723 7,508 4,872 33 528 3,159 39,611		8																		
	S-146 S146_C K5499 0 0 0 6,338 3,591 6,904 1,528 5,131 1,662 0 244 168 25,567		7																		
	S-151 S151_C K5500 7,714 48,778 19,953 82 62 24,624 41,621 16,991 0 0 5,776 31,721 197,321		22																		
	S-333 S333_S 15042 4,573 3 0 4,212 4,290 9,960 36,940 21,666 2,817 24,306 27,702 46,859 183,327		12																		
	S-339 C123SR84 S339_S K5506 0 556 11,723 0 37,710 30,677 11,722 0 0 0 0 4,476 96,863		23																		
	S-340 C123SR84 S340_S K5507 0 1,665 17,741 0 23,211 25,996 19,514 0 19,497 22,568 14,922 4,886 150,002		26																		

Notes: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location.

2) n/a indicates that flow and/or stage data is not available, or that structure is not appropriately instrumented to capture information.

3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations or are listed in Emergency Order Number 9.

4) N/F indicated no positive flow

5) S-331 and S-173 flow records were combined to determine the annual flow-weighted mean TP.

6) nd indicates no data or no positive flow was recorded on sampling date, therefore a flow-weighted mean could not be calculated.

Table 2. Continued.

AREA	NON-ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 2004 - April 30, 2005)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr		
FROM	G-94A	G94B	G94A_C	TA422	4,926	7,719	7,240	0	0	0	0	1,094	2,643	4,816	0	1	28,439	289
	G-94B	G94B	G94A_C	TA423	0	0	0	0	0	0	0	0	0	0	296	2,814	2,910	30
	G-94C	G94B	G94C_C	TA424	0	0	0	0	0	0	0	5,735	6,025	2,925	1,231	2,697	18,614	227
	S-31	S31	S31_C	K5486	0	2	0	0	0	18,619	30,824	13,812	0	0	5,501	27,105	95,862	12
	S-34	S34	S34_C	K5487	1,859	4,941	3,342	0	1,133	18,709	20,637	12,953	4,420	3,381	1,824	17,986	91,185	18
	S-38	S38	S38_C	K5488	8,862	10,852	8,418	1	1,149	24,948	28,842	19,297	6,332	5,543	4,289	19,044	137,578	18
	S-39	S39	S39_S	K5489	7,158	6,665	3,510	2	1,331	13,977	825	2,337	540	2,570	5,635	7,278	51,828	54
	S-197	S197	S197_C	15763	0	0	0	0	0	2,359	0	0	0	0	0	0	2,359	6
	S-334	S334	S334_S	FB752	17	22	27	34	0	9,453	37,018	17,270	2,690	19,419	23,365	37,205	146,520	12
	S-337	S31	S337_C	K5505	5,318	12,313	21,006	0	0	0	0	0	0	0	0	3,352	41,589	16
	S-343A	US41-25	S343A_C	K5508	0	0	0	2,088	3,163	13,597	206	0	0	0	0	0	19,054	10
	S-343B	US41-25	S343B_C	K5509	0	0	0	2,635	3,255	13,383	208	0	0	0	0	0	19,480	10
	S-344	S344	S344_C	K5511	0	0	0	1,191	1,778	7,901	112	0	0	0	0	0	10,982	11
C-111 BASIN	S-174 +	S176	S174_S	15769	1534	1142	904	0	0	0	45	4747	6472	7136	8079	30,059	9	
	S-177 +	S177	S177_S	15772	525	766	5,763	14,570	14,082	17,482	15,130	4,919	2,409	4,456	4,332	2,188	86,621	6
	S-178 +	S178	S178_C	03952	0	0	0	0	0	2,615	0	0	0	0	0	0	2,615	57
	S-331 +	S331-173	S331_P	P6935	2,143	19	72	9,143	16,974	29,149	47,016	24,909	40	143	156	49	129,814	7
	S-173 +	S331-173	S173_C	FB759	5,428	7,881	5,439	0	0	0	0	2,073	6,565	7,194	8,016	9,007	51,604	10
	S-332B +	S332B	S-332B	PK929	20	17	19	4,045	3,073	7,457	8,185	6,431	2,711	7	40	44	32,050	8
	S-332D +	S332D	S-332D	MS947	11	0	554	7,706	15,211	20,373	20,991	10,197	1,437	0	0	0	76,480	14

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