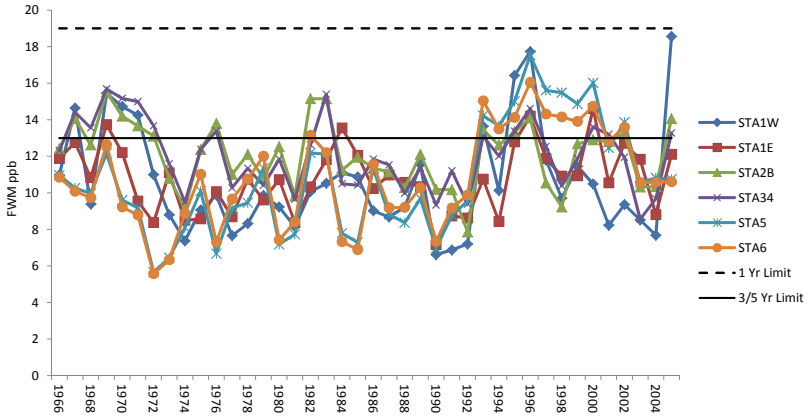
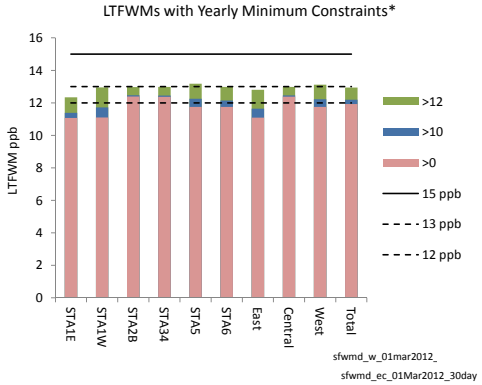
Performance Summary	DRAFT	Confidential	DMSTA calib	4/14/2012
East & Central Project	sfwmd_ec_01mar2	Min Depth = 5 ft (FEB_S5A), 0.5 ft (FEB34), Lake P, STA1WX = 5,900 ac, 80% SAV, A1 Emergent STA	SAV_3	
West Project	sfwmd_w_01mar2	C139 Conc 35% Reduc, C139A Not Treated in STA56, 2,800 ac Emergent FEB (400 ac with RES_3 treatment), STA56 PEW Calib	PEW_3	





STA	Total Area kac	New Area kac-ft	Inflows Flow kac-ft	Load mt	Conc ppb	Outflows Flow kac-ft	Load mt	Conc ppb	Hydraulic Loads Mean cm/d	30-d Max cm/d	CV	Depth Frequencies <10 cm %	<20 cm %	Depths Mean cm	Min cm	Max cm	Settling Rate m/yr	PLR g/m2-yr
STA1E	5.0		108	19.7	148	101	1.4	11.1	1.8	7.4	0.70	0%	0%	51	33	78	27	0.97
STA1W	12.4	5.9	313	67.1	174	306	4.2	11.1	2.1	11.3	0.70	0%	0%	70	34	113	34	1.33
STA2B	15.5		337	45.6	110	342	5.2	12.4	1.8	9.1	0.97	0%	0%	50	24	81	22	0.73
STA34	16.3		494	40.0	66	484	7.4	12.4	2.5	11.3	0.84	0%	1%	53	7	97	23	0.61
STA5	9.1	0.9	125	17.8	115	104	1.5	11.7	1.2	4.9	0.95	0%	2%	54	6	83	15	0.48
STA6	5.4		70	9.9	115	46	0.7	11.7	1.1	4.6	0.95	1%	12%	54	6	83	14	0.45
East	17.4	5.9	421	86.8	167	407	5.6	11.1	2.0	10.2	0.70	0%	0%	65	34	103	32	1.23
Central	31.8	0.0	830	85.6	83	826	12.6	12.4	2.2	10.2	0.90	0%	0%	51	15	89	23	0.66
West	14.5	0.9	195	27.6	115	150	2.2	11.7	1.1	4.8	0.95	1%	6%	54	6	83	14	0.47
Total	63.7	6.8	1446	200.0	112	1383	20.4	11.9	1.9	9.0	0.86	0%	2%	55	18	92	23	0.78

* LTFWM with Yearly FWM Constrained to Specified Minimum Value; Reflects Model Tendancy to Under-Predict TP in the Lower Ranges

Performance Measures

STA	LTFWM ppb	90% CL ppb	Freq > 19 ppb ** Mean	90% CL	Constrained LTFWMs ppb* >10	>12	>14
STA1E	11.1	13.3	5%	13%	11.4	12.3	14.0
STA1W	11.1	13.3	5%	13%	11.7	12.9	14.4
STA2B	12.4	14.9	10%	21%	12.5	13.0	14.1
STA34	12.4	14.8	9%	21%	12.4	13.0	14.2
STA5	11.7	14.1	7%	17%	12.2	13.2	14.4
STA6	11.7	14.1	7%	17%	12.1	13.0	14.2
East	11.1	13.3	5%	13%	11.6	12.8	14.3
Central	12.4	14.9	9%	21%	12.5	13.0	14.2
West	11.7	14.1	7%	17%	12.2	13.1	14.4
Total	11.9	14.3	8%	18%	12.2	12.9	14.3

**Frequencies Yearly FWM > 19 ppb. From WQBEL Derivation; Log-normal distribution, CV = 0.33

FEB Results FEBs	Total Source Flow kac-ft	Load mt	Conc ppb	FEB Bypass Flow kac-ft	Load mt	Conc ppb	FEB Inflow Flow kac-ft	Load mt	Conc ppb	FEB Outflow Flow kac-ft	Load mt	Conc ppb	FEB Release Flow kac-ft	Load mt	Conc ppb	FEB Outflow + Release Flow kac-ft	Load mt	Conc ppb	P Load g/m2-yr
FEB_S5A	311	67	174	150	32	170	161	35.2	178	0	0.0	#N/A	161	35.3	178	161	35.3	178	11.1
FEB_34	483	60	101	118	17	119	365	43.0	96	363	15.5	35	0	0.0	#N/A	363	15.5	35	0.8
FEB_56	198	37	150	116	22	154	82	14.5	144	79	5.6	58	0	0.0	#N/A	79	5.6	58	1.3
Total FEB	991	164	134	384	71	150	607	93	124	442	21	39	161	35	178	603	56	76	1.3

FEBs	Area kac	Total Bypass+Bypass+Release Flow kac-ft	Load mt	Conc ppb	Reduction within FEB Flow kac-ft	Load mt	Conc ppb	Reduction within FEB Flow %	Load %	Conc %	Net Reduction to STA Flow %	Load %	Conc %	Bypass Flow %	Load %	FEB Depths (feet) Mean	Min	Depth Frequency % Max	< 10 cm
FEB_S5A	0.8	311	67	174	0	0	0	0%	0%	0%	0%	0%	0%	48%	47%	24.1	4.0	58.7	0%
FEB_34	13.5	481	33	55	-2	27	61	0%	64%	64%	0%	46%	60%	24%	29%	1.7	0.2	3.2	0%
FEB_56	2.8	195	28	115	-3	9	86	-3%	61%	60%	-1%	24%	58%	59%	60%	2.6	0.1	4.1	1%
Total FEB	17.1	987	127	105	-5	36	48	-1%	39%	39%	0%	22%	36%	39%	43%				

Basin	Sources Flow kac-ft	Load mt	Conc ppb	FEB Reduction Flow kac-ft	Load mt	Conc ppb	STA Inflows Flow kac-ft	Load mt	Conc ppb	STA Outflows Flow kac-ft	Load mt	Conc ppb	Overall Reduction Flow %	Load %	Conc %	Net Reduction % Flow %	Load %	Conc %
East	421	87	167	0	0	0	421	87	167	407	5.6	11	13	81	156	3%	94%	93%
Central	832	113	110	2	27	27	830	86	83	826	12.6	12	6	100	98	1%	89%	89%
West	198	36.5	150	3	9	35	195	28	115	150	2.2	12	48	34	138	24%	94%	92%
Total	1450	236	132	5	36	20	1446	200	112	1383	20.4	12	67	216	120	5%	91%	91%

Diagnostics | East & Central Project | sfwmd_ec_01mar2012 | Min Depth = 5 ft (FEB_S5A), 0.5 ft (FEB34), Lake P, STA1WX = 5,900 ac, 80% SAV, A1 Emergent STA | 04/14/12

West Project | sfwmd_w_01mar2012 | C139 Conc 35% Reduc, C139A Not Treated in STA56, 2,800 ac Emergent FEB (400 ac with RES_3 treatment), STA56 PEW Calib

Yearly Variations

	Maximum Yearly					Coefficients of Variation					Geometric Means				
STA	Flow kaf	Load mt	FWM ppb	GM ppb	HLR cm/d	Min	Flow kaf	Load mt	FWM ppb	GM ppb	HLR cm/d	Flow kaf	Load mt	FWM ppb	GM ppb	HLR cm/d
STA1E	156	2.5	14.6	11.2	2.6	1.0	0.27	0.52	0.26	0.25	0.27	98.0	1.3	10.6	8.6	1.6
STA1W	526	10.7	18.6	12.7	3.5	1.2	0.27	0.51	0.28	0.25	0.27	296.4	3.7	10.2	8.0	2.0
STA2B	583	10.5	15.5	10.4	3.1	1.1	0.29	0.40	0.15	0.18	0.29	329.0	4.9	12.0	7.4	1.8
STA34	829	15.5	15.7	12.1	4.2	1.3	0.30	0.42	0.15	0.17	0.30	463.5	6.8	11.9	8.4	2.4
STA5	236	4.4	17.5	14.4	2.2	0.3	0.49	0.72	0.28	0.32	0.49	91.9	1.2	10.3	7.7	0.8
STA6	116	2.0	16.0	13.4	1.8	0.1	0.56	0.74	0.25	0.28	0.56	39.0	0.5	10.4	7.7	0.6

Reductions = Inflows - Outflows

				Percent of Inflows				Removed
	Flow	Load	Conc	Flow	Load	Conc	Area	Load /Area
STA or FEB	kac-ft	mt	ppb	%	%	%	kac	g/m2-yr
STA1E	7	18	137	6%	93%	93%	5.0	0.9
STA1W	7	63	163	2%	94%	94%	12.4	1.2
STA2B	-5	40	97	-2%	89%	89%	15.5	0.6
STA34	10	33	53	2%	82%	81%	16.3	0.5
STA5	21	16	103	17%	92%	90%	9.1	0.4
STA6	23	9	103	34%	93%	90%	5.4	0.4
East	13	81	156	3%	94%	93%	17.4	1.2
Central	5	73	71	1%	85%	85%	31.8	0.6
West	45	25	103	23%	92%	90%	14.5	0.4
Total	63	180	100	4%	90%	89%	63.7	0.7
FEBS5A_N	0	0	#N/A	#DIV/0!	#DIV/0!	#N/A	0.0	#DIV/0!
FEB_S5A	0	0	0	0%	0%	0%	0.8	0.0
FEB_34	2	27	61	0%	64%	64%	13.5	0.5
FEB_56	3	9	86	3%	61%	60%	2.8	0.8
Total FEB	5	36	48	1%	39%	39%	17.1	0.5

Addiitonal Diagnostics

	Flow	Load	Conc	of Total Inflow	
	kac-ft	mt	ppb	Flow	Load
STA2 CB Sources					
S5A to Hillsboro C	0.0	0.0	0.0	0%	0%
NNR to Comp B	0.0	0.0	0.0	0%	0%
S6 to STA2B	204.1	28.5	113.3	61%	63%
S5A Runoff to STA2	44.5	11.7	213.0	13%	26%
Total from S6/S5A	248.6	40.2	131.1	74%	88%
From FEB34	88.1	5.3	49	26%	12%
STA2B Inflow	336.7	45.6	109.6	100%	100%

Audit Eastern Basin	Flow kac-ft	Load mt	Conc ppb	
TS_FEBS5A_N	0	0.0	0	
TS_FEBS5A	311	66.8	174	
TS_STA1DW	2	0.2	95	
TS_STA1W	0	0.0	0	
TS_STA1E	108	19.7	148	
TS_STA2B	249	40.2	131	
TS_FEB34	483	60.3	101	
TS_STA34	0	0.0	0	
FEB34_OUT	101	12.5	100	
TS Inflow East+Central	1253	199.8	129	
Network Input - From Yearly	1253	199.8	129	
Network Input - From Net	1253	199.8	129	
TS - Network In	0.0	0.0	0.0	
Max - Min	0.0	0.0	0.0	
STA Water Losses	18			
STA Outflows	1233	18	12	
L8 Diversion	41	7	140	
Total Outflow	1274	25	16	
TS In - Out + Div - Loss	2	182	113	
Network Inflow - Outflow	-21	175	113	???

Audit West Basin	Flow kac-ft	Load mt	Conc ppb
TS_FEB56	197.5	36.5	149.7
Network Input - Yr	197.5	36.5	149.7
Network Input - Net	197.5	36.5	149.7
TS -Network In	0.0	0.0	0.0
Max - Min	0.0	0.0	0.0
STA Outflows	150.0	2.2	11.7
STA / Water Losses	44.7		
TS - STA Out - Loss	2.9		
C139 Annex Diverted	43.9	5.9	109.5
Total Outflows	194.0	8.1	33.9

4/14/2012