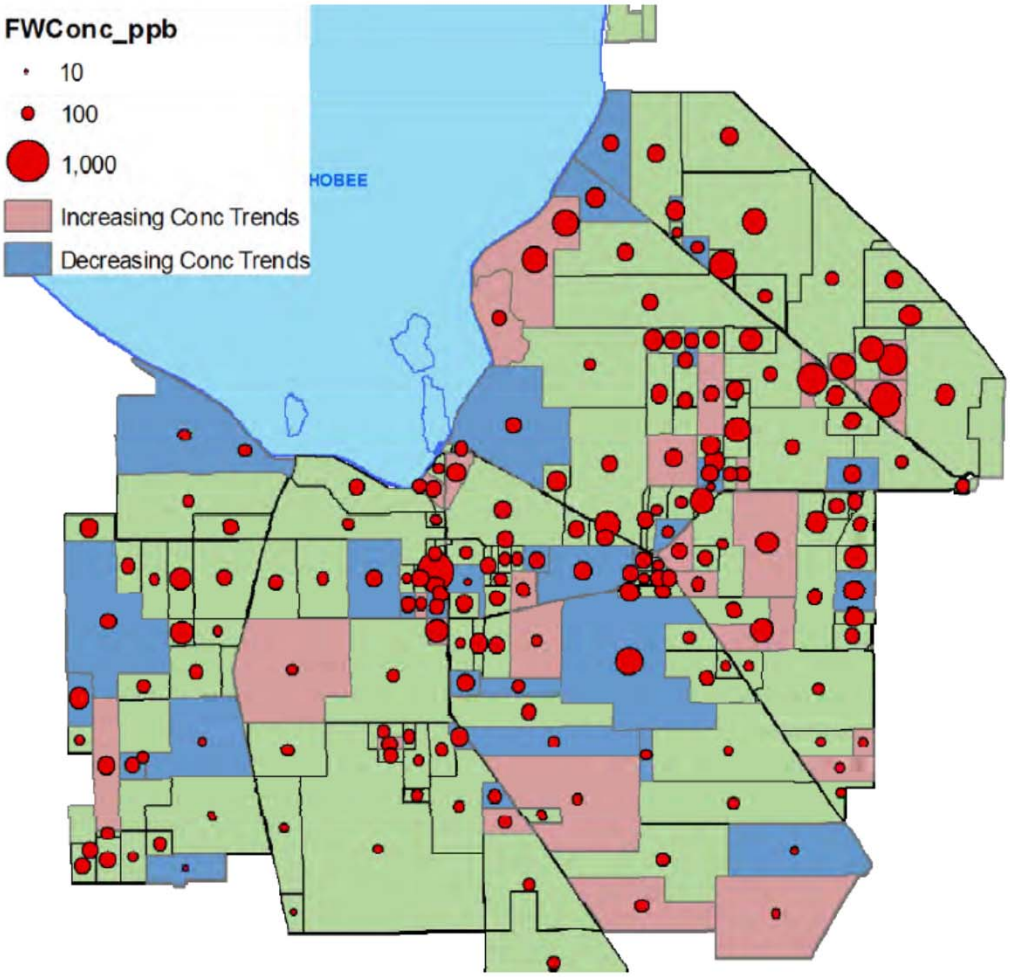
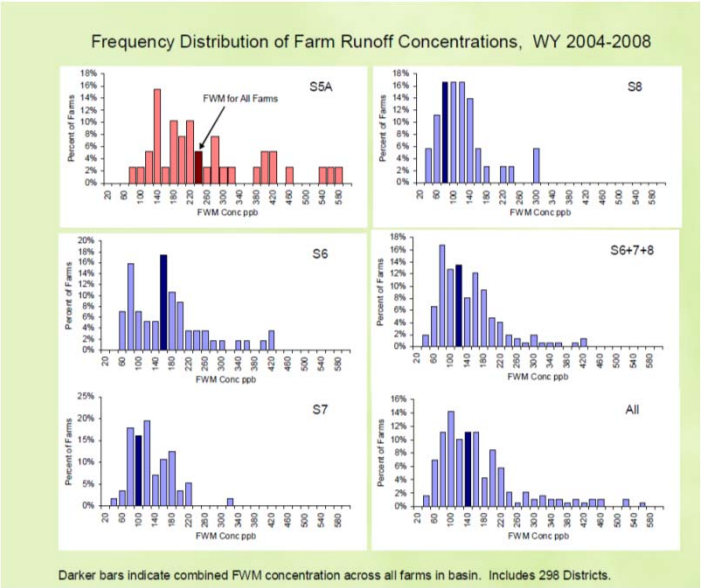
TP Concentrations & Trends in Runoff from Individual Farms





Summary of EAA Farm & Basin Monitoring Results by Basin — Water Years 1994-2009 — From EAA Regulatory Rule Calculations

Water Year		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2005-09	1996-2009	Trend
Summary for Entire EAA																				
Structure with Adequate Data		117	184	237	250	245	246	244	235	240	249	244	238	244	233	233	234	236	241	
Structure Drainage Area	acres	210870	360064	378807	423671	435155	447760	459458	466103	450014	442292	449729	452278	454327	445014	446759	448017	449079	441396	
Structure With Complete Rainfall Data		112	130	122	120	206	243	251	250	247	250	246	235	242	231	236	227	234	221	
Structure Rainfall	inches	53.1	72.7	54.0	51.8	57.2	40.2	54.2	34.7	49.2	46.9	45.7	53.8	53.5	41.8	50.6	49.3	49.8	49	
SFWMD Rainfall	inches	56.5	67.0	56.9	52.0	56.5	40.4	57.5	37.3	49.1	45.5	46.8	51.0	50.1	37.2	47.0	43.7	45.8	48	
Rainfall Adjustment Factors		1.3	0.5	0.4	0.8	0.8	0.8	0.5	1.0	0.8	1.5	0.8	0.4	0.7	1.0	1.1	0.4	0.7	0.8	
Total Flow	kac-ft	646.8	1473.9	1524.2	1277.8	1679.9	1088.0	1456.9	854.8	1402.0	1502.1	1238.3	1522.1	1526.5	1026.0	955.3	1193.7	1250.1	1205	
Total Load	mtons	145.4	335.7	267.2	217.1	226.4	236.7	340.5	164.8	220.3	172.4	171.3	300.6	282.2	203.7	157.2	209.0	230.5	227	
Adjusted Load	mtons	204.5	177.2	116.1	209.7	198.0	218.2	184.8	191.4	177.6	248.8	164.0	140.0	248.4	206.9	187.9	98.4	176.2	185	
Flow-Wtd-Mean Conc	ppb	176.5	184.4	141.9	137.5	109.4	176.1	166.3	157.5	127.2	107.1	112.0	156.8	149.6	160.7	133.2	142.0	149.4	140.6	
Runoff	inches	27.9	58.9	48.3	34.2	46.2	29.2	43.3	23.0	37.4	35.3	33.0	41.4	40.3	27.7	35.7	31.8	33.4	36	
Unit Area Load	lbs/acre	1.52	2.46	1.55	1.13	1.14	1.16	1.63	0.82	1.08	0.86	0.84	1.47	1.37	1.01	0.77	1.02	1.13	1.13	
Adjusted Unit Area Load	lbs/acre	2.13	1.30	0.68	1.09	1.00	1.08	0.88	0.94	0.87	1.23	0.80	0.68	1.20	1.02	0.93	0.48	0.86	0.92	
Summary for S-5A Basin																				
Structure with Adequate Data		23	37	54	60	59	56	52	48	49	54	54	51	54	49	49	49	50	51	
Structure Drainage Area	acres	56374	73865	105134	116904	120248	117648	115626	115757	111154	112170	111121	110211	111736	111620	110073	110035	112235	113353	
Structure With Complete Rainfall Data		24	24	25	25	40	47	53	53	51	54	50	51	55	46	49	43	49	46	
Structure Rainfall	inches	57.6	77.5	54.7	55.1	59.8	40.9	56.5	31.5	51.8	47.6	47.2	58.6	47.8	43.0	53.3	52.2	51.0	50	
SFWMD Rainfall	inches	51.6	73.0	53.9	52.7	61.5	42.2	60.1	37.6	52.1	50.3	50.2	54.7	42.9	37.3	44.2	46.5	45.5	49	
Rainfall Adjustment Factors		1.3	0.4	0.5	1.2	0.8	1.3	0.6	1.1	0.9	1.3	0.8	0.4	1.4	1.0	1.8	0.5	1.0	1.0	
Total Flow	kac-ft	200.6	349.9	312.4	288.1	387.6	231.6	372.2	164.5	346.2	296.7	285.6	425.3	288.7	260.0	218.2	301.6	298.8	301	
Total Load	mtons	57.7	87.5	77.4	64.2	72.2	60.1	94.7	43.7	69.2	63.6	52.8	130.3	91.1	89.5	56.2	79.1	89.2	75	
Adjusted Load	mtons	77.7	39.2	42.6	78.3	59.3	75.7	57.6	50.1	59.1	82.3	44.8	51.7	124.8	87.1	100.1	38.5	80.4	68	
Flow-Wtd-Mean Conc	ppb	233	202	177	180	151	210	206	232	162	174	150	248	255	279	208	212	242	200	
Runoff	inches	42.7	56.8	40.3	29.6	38.7	23.7	38.6	17.3	37.2	31.6	30.8	46.3	31.0	27.6	23.2	32.0	32.0	32	
Unit Area Load	lbs/acre	2.25	2.61	1.62	1.21	1.32	1.13	1.80	0.83	1.37	1.25	1.04	2.60	1.79	1.74	1.09	1.54	1.75	1.65	
Adjusted Unit Area Load	lbs/acre	3.03	1.17	0.89	1.47	1.09	1.42	1.10	0.95	1.17	1.61	0.89	1.03	2.46	1.69	1.95	0.75	1.58	1.32	
Summary for S-6 Basin																				
Structure with Adequate Data		41	68	76	80	77	77	73	75	74	70	71	73	73	73	73	73	73	74	
Structure Drainage Area	acres	68523	105819	94163	122141	116148	120266	117935	122567	120116	106360	121637	121636	121198	121391	120614	121637	121251	117487	
Structure With Complete Rainfall Data		38	40	43	43	64	78	77	76	72	74	73	71	74	72	75	75	74	70	
Structure Rainfall	inches	50.5	74.8	51.0	48.3	55.5	39.9	50.4	35.6	47.8	42.9	45.1	56.5	50.0	46.1	50.6	45.5	49.3	47	
SFWMD Rainfall	inches	48.1	68.8	57.9	49.7	56.5	41.9	54.3	35.1	54.4	46.0	46.4	50.3	44.3	39.0	53.3	46.3	46.6	48	
Rainfall Adjustment Factors		1.7	0.5	0.5	1.1	1.0	0.9	0.7	1.3	0.7	1.6	1.1	0.5	1.0	1.1	0.8	0.5	0.8	1	
Total Flow	kac-ft	207.2	519.1	328.7	352.6	458.4	318.8	425.9	261.2	368.8	235.1	304.0	386.3	327.1	279.7	273.1	282.4	309.7	330	
Total Load	mtons	43.7	137.3	75.2	68.6	55.6	83.2	123.6	67.2	78.3	34.1	63.0	79.9	57.4	51.9	50.2	56.5	59.2	67	
Adjusted Load	mtons	75.4	71.0	34.3	72.5	53.8	74.1	81.4	87.1	51.0	53.0	68.6	40.1	60.2	58.8	40.5	25.6	45.0	57	
Flow-Wtd-Mean Conc	ppb	171	214	185	157	98	201	235	208	172	117	168	167	142	150	149	162	155	166	
Runoff	inches	36.3	58.9	41.9	34.6	47.8	33.4	43.3	25.6	36.8	26.5	30.0	38.1	32.4	27.7	27.2	27.9	30.6	34	
Unit Area Load	lbs/acre	1.40	2.86	1.76	1.23	1.05	1.52	2.31	1.21	1.43	0.70	1.14	1.45	1.04	0.94	0.92	1.02	1.07	1.27	
Adjusted Unit Area Load	lbs/acre	2.42	1.48	0.80	1.31	1.02	1.35	1.52	1.56	0.93	1.10	1.24	0.73	1.09	1.07	0.74	0.46	0.82	1.07	
Summary for S-7 Basin																				
Structure with Adequate Data		36	52	73	74	72	67	71	67	75	82	77	70	70	71	68	68	69	72	
Structure Drainage Area	acres	198638	419437	330392	350906	113211	110982	110218	109844	112853	110159	117796	113432	113773	108662	104383	104625	108875	111195	
Structure With Complete Rainfall Data		32	38	36	34	68	71	74	76	76	80	75	68	71	71	68	66	69	67	
Structure Rainfall	inches	53.7	70.5	52.4	50.3	57.8	40.4	53.9	34.5	51.2	48.3	45.5	52.7	54.5	39.8	48.9	48.7	49.3	49	
SFWMD Rainfall	inches	52.9	68.4	58.6	49.1	56.0	41.4	59.0	38.2	49.5	46.2	43.9	44.9	52.0	40.4	50.4	42.7	46.1	48	
Rainfall Adjustment Factors		1.0	0.5	0.3	0.8	0.7	0.8	0.4	0.9	0.7	1.5	1.0	0.6	0.6	0.9	0.8	0.4	0.7	1	
Total Flow	kac-ft	165.0	288.3	435.7	300.7	347.4	260.0	430.9	220.2	414.5	439.4	322.1	380.3	431.9	251.4	274.4	299.9	327.6	346	
Total Load	mtons	27.4	60.7	64.1	41.0	56.5	53.3	61.7	26.1	46.5	46.8	31.6	48.7	64.6	38.0	34.0	39.9	45.5	47	
Adjusted Load	mtons	28.4	26.6	19.9	32.8	40.0	42.8	22.3	23.3	32.3	68.2	31.7	29.5	37.4	32.6	27.6	17.2	28.9	33	
Flow-Wtd-Mean Conc	ppb	134	170	119	110	118	163	121	96	91	86	77	104	125	122	100	108	112	110	
Runoff	inches	49.7	55.8	52.1	33.8	41.1	28.4	41.7	24.2	44.1	40.5	33.8	40.2	45.6	27.9	31.1	34.4	35.9	37	
Unit Area Load	lbs/acre	1.51	2.15	1.60	0.84	1.10	1.05	1.15	0.57	0.91	0.79	0.59	0.95	1.29	0.77	0.72	0.84	0.91	0.93	
Adjusted Unit Area Load	lbs/acre	1.57	1.05	0.44	0.68	0.78	0.84	0.41	0.51	0.63	1.15	0.59	0.57	0.72	0.64	0.58	0.36	0.58	0.64	
Summary for S-8 Basin																				
Structure with Adequate Data		17	27	34	36	37	46	48	45	42	43	42	44	47	40	43	44	44	42	
Structure Drainage Area	acres	46137	58433	79128	77721	85738	98064	107079	106905	105493	94023	99277	104999	107019	102360	108689	109920	105713	99161	
Structure With Complete Rainfall Data		18	18	18	18	34	47	47	45	43	42	38	43	42	41	44	43	43	39	
Structure Rainfall	inches	51.3	66.6	61.3	58.8	55.9	39.4	58.5	37.4	45.0	50.3	45.4	44.9	62.3	39.4	50.3	54.2	50.2	50	
SFWMD Rainfall	inches	48.9	59.2	56.6	54.1	51.7	45.5	56.6	37.0	43.7	44.2	46.1	49.1	56.4	35.2	44.1	49.1	45.0	47	
Rainfall Adjustment Factors		1.4	0.7	0.4	0.6	1.1	0.7	0.6	1.0	1.3	1.4	0.8	0.4	0.4	1.2	1.1	0.5	0.7	1	
Total Flow	kac-ft	93.9	316.7	406.4	336.4	443.5	256.6	488.0	209.0	272.6	332.4	316.6	360.2	478.8	234.9	389.6	306.8	314.1	328	
Total Load	mtons	16.7	50.2	50.5	43.3	62.2	40.2	60.5	29.7	26.2	27.9	24.0	41.7	67.1	24.4	16.7	33.5	36.7	38	
Adjusted Load	mtons	22.9	37.2	39.5	26.1	44.8	26.7	23.5	30.9	35.2	45.2	18.9	18.7	26.0	28.4	19.8	17.1	22.0	27	
Flow-Wtd-Mean Conc	ppb	143	128	101	104	77	127	109	115	78	68	61	94	113	84	71	88	95	92	
Runoff	inches	24.4	65.0	61.6	51.9	61.8	31.4	49.9	23.5	31.0	42.2	38.2	41.2	53.4	27.5	20.9	33.5	35.3	41	
Unit Area Load	lbs/acre	0.79	1.89	1.60	1.23	1.08	0.90	1.24	0.61	0.55	0.65	0.53	0.87	1.37	0.52	0.34	0.67	0.76	0.85	
Adjusted Unit Area Load	lbs/acre	1.09	1.41	0.54	0.74	1.15	0.60	0.48	0.64	0.73	1.05	0.42	0.39	0.53	0.61	0.40	0.34	0.46	0.62	

Results by sub-basin based upon farm structure data (vs. farm mass balance)

03/30/2011 www