

Appendix Vc. Means and coefficients of variation (CV) for bioassessment metrics from samples collected in November 1998 within the San Diego watershed, San Diego County, California.

Site:	Aliso Creek		Aliso Creek		Arroyo Trabuco Cr.		San Juan Ceek		Murrieta Creek		Temecula Creek		Santa Margarita		Rainbow Creek	
	AC-PPD		AC-CCR		ATC-AP		SJC-74		MC-GS		TC-I-15		SMR-WGR		RC-WGR	
	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV
Taxa Richness	18	44	14	38	18	26	19	28	24	31	24	6	26	21	24	6
Percent Dominant Taxon	35	30	51	22	28	13	50	32	39	55	51	28	36	28	33	18
Ephemeropteran Taxa	2	25	2	0	3	17	3	0	3	17	3	0	2	25	3	22
Plecopteran Taxa	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--
Trichopteran Taxa	2	69	1	--	4	0	4	35	4	13	2	35	3	0	1	0
EPT Taxa	4	25	3	43	7	8	7	21	8	15	5	12	5	11	4	16
EPT Index (%)	61	28	54	31	56	12	68	14	28	3	48	52	49	29	20	71
Sensitive EPT Index	0	--	0	--	1	69	3	83	1	114	0	--	2	82	0	--
Percent Baetidae	53	34	53	27	28	27	53	28	15	15	4	45	10	61	3	41
Percent Hydropsychidae	0	--	0	--	25	42	7	99	3	45	41	71	36	28	16	78
Dipteran Taxa	6	60	6	66	3	35	6	27	7	61	8	15	5	20	9	7
Percent Dipteran	28	56	20	42	3	9	9	65	50	39	37	78	7	59	15	30
Non-Insect Taxa	6	57	4	69	5	29	4	35	5	47	5	12	7	29	9	19
Percent Non-Insect	9	28	25	90	37	13	21	19	21	98	7	55	25	53	60	29
Percent Chironomidae	7	44	12	58	1	87	2	55	8	43	19	45	4	95	7	16
Shannon Diversity	1.8	24	1.5	20	2.1	6	1.8	25	2.1	26	1.8	18	2.2	15	2.3	5
Tolerance Value	5.4	8	5.6	9	4.5	4	4.5	5	5.3	5	4.9	10	4.3	4	4.8	7
Percent Intolerant (0-2)	0	--	0	--	0	118	0	--	0	125	0	--	13	20	0	--
Percent Tolerant (8-10)	7	12	24	88	2	126	1	69	12	106	2	20	2	37	13	68
Percent Collectors	83	8	88	10	35	26	66	19	50	48	27	41	30	10	25	39
Percent Filterers	1	--	6	114	25	40	9	66	38	76	59	17	40	23	25	56
Percent Grazers	8	41	1	150	5	74	3	70	2	53	0	--	4	65	5	72
Percent Predators	7	41	4	61	34	12	22	20	10	50	13	24	25	50	45	9
Percent Shredders	0	--	0	--	0	104	0	--	1	78	1	92	0	87	1	91
Abundance (#/ sample)	702	141	654	60	1640	17	3040	36	3195	78	7486	82	3192	61	589	34

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Site:	Sandia Creek		Santa Margarita R.		Santa Margarita R.		San Luis Rey R.		San Luis Rey R.		San Luis Rey R.		San Luis Rey R.		Keys Creek		Lon
	SC-SCR		SMR-DP		SMR-CP		SLRR-PG		SLRR-395		SLRR-MR		SLRR-FR		KC-LR		L
	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean
Taxa Richness	24	14	19	19	19	14	19	16	25	12	24	11	24	13	21	8	16
Percent Dominant Taxon	30	26	50	20	30	36	27	19	33	38	21	29	29	19	44	21	37
Ephemeropteran Taxa	3	19	3	0	4	16	2	0	3	0	2	25	1	87	1	0	0
Plecopteran Taxa	0	--	0	--	0	--	1	87	0	--	0	--	0	--	0	--	0
Trichopteran Taxa	1	58	2	0	2	0	3	33	2	49	3	33	1	--	5	12	1
EPT Taxa	4	25	5	0	6	10	6	10	5	22	5	11	2	100	6	0	1
EPT Index (%)	17	50	71	11	33	36	59	17	21	22	31	26	1	95	35	31	0
Sensitive EPT Index	0	--	0	100	1	99	0	54	0	--	0	113	0	--	2	65	0
Percent Baetidae	3	213	17	27	27	49	31	31	15	34	10	54	0	106	13	59	0
Percent Hydropsychidae	14	57	50	20	3	88	28	12	1	89	11	57	0	--	19	18	0
Dipteran Taxa	9	12	6	27	7	9	5	12	9	22	8	7	9	11	6	18	8
Percent Dipteran	16	40	11	23	43	17	15	55	64	13	37	28	19	39	50	18	36
Non-Insect Taxa	9	18	5	45	5	20	5	22	10	10	9	11	11	14	6	17	7
Percent Non-Insect	63	3	13	46	19	44	23	4	15	35	31	51	77	12	8	26	64
Percent Chironomidae	8	12	9	33	9	32	14	52	19	62	14	14	11	48	4	20	31
Shannon Diversity	2.3	11	1.8	16	2.4	11	2.0	8	2.2	8	2.5	9	2.2	7	2.0	3	1.9
Tolerance Value	4.9	6	4.4	4	5.4	3	5.2	8	5.7	4	5.3	6	5.9	20	5.4	3	7.5
Percent Intolerant (0-2)	0	--	2	67	2	124	1	60	0	--	0	--	0	--	2	43	0
Percent Tolerant (8-10)	16	1	2	90	8	49	12	63	12	46	12	57	39	39	5	48	60
Percent Collectors	28	14	34	28	40	46	57	14	52	19	45	7	40	17	19	26	67
Percent Filterers	23	39	52	16	35	35	30	9	34	44	32	38	12	73	65	8	16
Percent Grazers	4	253	1	110	3	--	0	90	2	86	0	--	5	81	3	78	11
Percent Predators	43	4	12	44	17	56	12	59	2	38	20	49	43	14	12	8	6
Percent Shredders	1	111	0	--	5	27	0	--	10	75	3	70	0	11	2	56	0
Abundance (#/ sample)	657	69	3111	84	68	41	3018	31	1260	23	530	46	319	37	802	20	4383

Appendix Vc. Means and coefficients of variation (CV) for bioassessment metrics from samples collected in November 1998 within the San Diego watershed, San Diego County, California.

	Loma Alta Cr. Site: AC-CB CV	Loma Alta Cr. LAC-ECR Mean CV	Buena Vista Cr. BVR-ED Mean CV	Buena Vista Cr. BVR-SVW Mean CV	Agua Hedionda Cr. AHC-ECR Mean CV	San Marcos Cr. SMC-SP Mean CV	San Marcos Cr. SMC-M Mean CV	San Marcos Cr. SMC-RSFR Mean CV	San Marcos Cr. SMC-RSFR Mean CV
Taxa Richness	4	23 7	7 43	17 9	30 27	15 18	15 10	22 21	21
Percent Dominant Taxon	30	44 33	52 24	44 31	17 14	41 29	48 36	33 27	28
Ephemeropteran Taxa	--	1 87	2 0	1 100	3 0	2 0	2 0	2 0	2
Plecopteran Taxa	--	0 --	0 --	0 --	0 --	0 --	0 --	0 --	0
Trichopteran Taxa	87	1 --	0 --	1 43	2 0	1 100	1 100	3 46	3
EPT Taxa	87	1 115	2 0	2 65	5 0	3 33	3 33	5 29	5
EPT Index (%)	87	1 160	52 45	2 79	13 15	29 17	57 32	26 77	25
Sensitive EPT Index	--	0 --	0 --	0 --	0 --	0 --	0 101	1 --	1
Percent Baetidae	--	0 92	52 45	1 114	11 10	29 19	56 32	18 76	19
Percent Hydropsychidae	--	0 --	0 --	0 --	1 11	0 --	0 --	2 20	1
Dipteran Taxa	13	11 22	3 62	4 13	11 43	4 50	3 33	6 10	7
Percent Dipteran	35	35 75	43 64	18 29	34 24	44 33	22 35	38 31	37
Non-Insect Taxa	23	10 10	2 69	10 22	13 18	6 0	8 18	9 22	8
Percent Non-Insect	20	64 43	5 84	80 8	52 17	20 62	21 57	35 74	35
Percent Chironomidae	42	29 81	41 66	17 32	11 40	42 29	15 72	16 41	24
Shannon Diversity	8	1.8 13	1.2 15	1.6 11	2.8 6	1.7 13	1.7 17	2.2 11	2.2
Tolerance Value	5	7.2 10	4.9 3	7.1 4	6.3 5	5.4 6	5.3 6	6.1 11	5.5
Percent Intolerant (0-2)	--	0 --	0 --	0 --	0 --	0 --	0 --	1 --	1
Percent Tolerant (8-10)	22	61 42	3 --	71 11	31 19	11 63	14 74	30 70	14
Percent Collectors	14	89 3	96 1	88 8	54 20	83 4	85 6	60 3	53
Percent Filterers	60	4 64	0 --	1 24	20 53	0 --	11 57	27 30	19
Percent Grazers	23	2 111	0 --	2 11	4 49	1 25	1 --	5 99	3
Percent Predators	43	6 60	3 44	9 72	21 18	16 25	3 11	7 82	24
Percent Shredders	--	0 --	0 --	0 --	0 --	0 --	0 --	1 --	1
Abundance (#/ sample)	38	6497 59	133 9	2093 66	536 25	606 94	360 86	2023 114	1037

Appendix Vc. Means and coefficients of variation (CV) for bioassessment metrics from samples collected in November 1998 within the San Diego watershed, San Diego County, California.

	Marcos Cr.	Encinitas Creek		Escondido Creek		Escondido Creek		Rattlesnake Creek		Los Penasquitos Cr.		Los Penasquitos Cr.		Carroll Canyon Cr.		San J
	Site: C-LCCC CV	EC-GVR		EC-HRB		EC-EF		RC-HP		LPC-CCR		LPC-BMR		CCC-805		S:
		Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean
Taxa Richness	7	17	14	20	23	11	5	18	19	21	0	23	5	18	3	23
Percent Dominant Taxon	6	41	28	56	17	53	11	44	38	39	23	28	27	67	6	32
Ephemeropteran Taxa	0	1	87	2	50	2	0	1	43	2	35	2	0	2	0	1
Plecopteran Taxa	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0
Trichopteran Taxa	22	1	87	2	35	2	25	1	0	3	17	2	25	2	0	1
EPT Taxa	12	2	50	4	16	4	13	2	25	5	20	4	13	4	0	2
EPT Index (%)	20	5	96	60	18	94	3	16	85	45	80	37	25	75	5	2
Sensitive EPT Index	--	0	--	0	87	0	--	0	--	0	--	0	--	0	--	0
Percent Baetidae	26	4	109	57	18	17	80	15	95	23	99	28	24	73	5	1
Percent Hydropsychidae	133	0	--	0	--	77	18	0	--	21	78	9	51	1	16	0
Dipteran Taxa	17	6	9	7	31	2	50	7	8	5	29	6	0	7	14	6
Percent Dipteran	51	66	2	14	55	1	33	26	61	12	40	16	29	11	11	24
Non-Insect Taxa	8	8	18	7	29	4	0	8	40	8	22	10	11	6	0	14
Percent Non-Insect	44	29	12	25	44	4	57	57	30	37	79	42	25	12	40	74
Percent Chironomidae	49	40	31	6	26	1	1	21	73	4	21	12	25	6	13	12
Shannon Diversity	5	1.7	15	1.5	25	1.2	20	1.8	15	2.0	7	2.3	9	1.5	7	2.1
Tolerance Value	15	6.1	2	5.3	7	4.4	1	6.1	19	6.0	29	6.2	8	4.7	3	7.9
Percent Intolerant (0-2)	--	0	--	0	87	0	--	0	--	0	--	0	--	0	--	0
Percent Tolerant (8-10)	106	26	14	22	55	1	100	40	86	27	104	32	30	8	57	68
Percent Collectors	29	70	17	90	7	19	71	73	26	31	65	47	10	88	2	63
Percent Filterers	94	24	51	1	105	77	18	1	104	49	31	36	21	4	5	30
Percent Grazers	61	0	107	3	73	0	--	2	87	1	136	2	27	0	--	1
Percent Predators	28	5	27	5	64	4	60	24	72	18	45	14	51	9	19	5
Percent Shredders	--	0	--	0	87	0	--	0	--	0	66	0	--	0	--	0
Abundance (#/ sample)	36	674	84	6275	7	3486	77	2593	21	3139	97	1479	29	980	79	3404

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	Diego River		San Diego River		San Diego River		Tecolote Creek		Sweetwater River		Sweetwater River		Sweetwater River	
	Site: DR-MD		SDR-MT		SDR-1		TC-TCNP		SR-79		SR-94		SR-WS	
		CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV	Mean	CV
Taxa Richness	25		21	24	15	8	25	11	36	19	28	12	12	10
Percent Dominant Taxon	61		46	22	57	39	21	9	16	19	23	18	65	21
Ephemeropteran Taxa	0		2	35	1	87	1	100	4	31	2	25	1	87
Plecopteran Taxa	--		0	--	0	--	1	--	3	17	0	--	0	--
Trichopteran Taxa	43		3	0	0	--	2	69	6	29	1	87	0	--
EPT Taxa	25		5	12	1	87	3	17	13	15	3	33	1	87
EPT Index (%)	54		66	5	1	117	4	59	51	7	6	13	1	90
Sensitive EPT Index	--		0	--	0	--	0	--	24	15	0	--	0	--
Percent Baetidae	55		15	61	0	--	0	--	8	107	5	11	1	90
Percent Hydropsychidae	53		51	24	0	--	0	--	6	25	1	136	0	--
Dipteran Taxa	37		5	43	5	0	11	5	8	25	11	18	3	22
Percent Dipteran	39		5	67	61	34	49	17	21	30	23	9	76	16
Non-Insect Taxa	22		9	19	8	7	9	18	9	38	8	7	8	15
Percent Non-Insect	14		28	5	36	50	30	68	23	14	67	1	22	59
Percent Chironomidae	38		3	76	3	98	35	15	8	64	13	30	10	24
Shannon Diversity	25		1.9	18	1.4	36	2.5	2	2.9	3	2.4	5	1.2	28
Tolerance Value	11		4.9	6	6.3	6	6.6	2	4.6	8	5.2	9	5.8	3
Percent Intolerant (0-2)	--		0	--	0	--	0	--	25	21	0	--	0	--
Percent Tolerant (8-10)	18		12	40	21	57	25	33	17	21	21	21	6	25
Percent Collectors	13		24	51	10	46	52	13	40	11	50	23	17	29
Percent Filterers	29		60	17	76	17	7	14	16	20	7	62	66	21
Percent Grazers	110		3	103	2	142	4	75	21	16	1	72	0	--
Percent Predators	19		13	29	12	66	36	9	14	25	41	16	17	50
Percent Shredders	87		0	--	0	--	1	90	9	39	2	78	0	--
Abundance (#/ sample)	22		1974	38	1670	16	1250	32	628	55	800	43	3091	83