

Appendix 5.14 - Summary of Otay Watershed Source Water Constituents 2016 - 2020

CSD

			Basin Plan Inland Surface Waters Quality ¹		Jamul Creek JAM4				Proctor Valley Creek PVR2				Rolling Hills Ranch Creek RHR2				Upper Otay Creek UOR1			
Group/Constituents	Units	CSD MDL	Criteria	Objectives	No. of Samples	Min	Max	Mean	No. of Samples	Min	Max	Mean	No. of Samples	Min	Max	Mean	No. of Samples	Min	Max	Mean
General Physical																				
Flow	ft ³ /s				52	0.00	24.9	0.00	149	0.00	16.7	0.00	52	0.03	24.2	0.80	52	0.00	5.63	0.34
pH	PH		6.5-8.5 ²		18	7.01	7.65	7.37	12	5.76	7.36	6.51	50	7.22	8.22	7.64	51	6.86	8.1	7.47
Specific Conductance (E.C.)	US/CM				18	733	2930	1500	12	657	1430	948	50	414	10400	5390	51	45.7	11200	8240
Total Filterable Residue @ 180 C (TDS)	MG/L	10	300	500	18	435	1680	910	11	380	761	516	50	168	4040	2980	50	976	6970	5070
Total Suspended Solids (TSS)	MG/L	1			18	< 1	40.9	3.82	11	< 1	2.1	1.3	48	< 1	62.4	6.01	48	< 1	138	8.25
Microbiological																				
Enterococcus	/100 ML	1	60 ³		19	10	1100	183	12	3	1400	202	53	190	> 2400	1140	53	190	> 2400	1100
Escherichia Coli	/100 ML	1	190 ³		19	< 100	1700	195	12	< 100	630	187	53	< 100	19000	1280	53	< 100	8900	616
Total Coliform	/100 ML	1			19	100	65000	10100	12	520	28000	6630	53	7900	170000	38600	53	3300	240000	67500
Inorganic Constituents																				
Ammonia-N	MG/L	0.031	0.025		18	ND	0.175	0.018	11	ND	0.057	0.013	44	ND	0.466	0.026	44	ND	0.055	0.01
Bromide	MG/L	0.1			17	0.355	1.12	0.697	11	0.342	0.72	0.554	50	ND	8.08	3.56	50	ND	9.24	6.5
Chloride	MG/L	0.5	250	250	17	138	616	296	11	146	361	221	49	48.6	6410	1560	45	141	4950	2630
Fluoride	MG/L	0.02	1.0	1.0	17	0.33	0.551	0.427	10	0.06	0.109	0.084	50	0.212	2.92	1.86	49	0.643	2.9	1.79
Nitrate (as NO3)	MG/L		5		19	ND	12.6	4.24	12	ND	29.7	7.3	53	1.43	65.2	40.7	53	4.43	42	13.7
Nitrite (NO2)	MG/L				19	ND	0.129	0.021	12	ND	0.039	0.005	53	ND	0.109	0.038	53	ND	0.068	0.013
Phosphate, Ortho (as PO4)	MG/L	0.2			14	ND	0.553	0.04	9	ND	0.534	0.067	39	ND	4.47	0.271	38	ND	7.87	0.481
Phosphorus	MG/L	0.078	0.025 ⁴	0.025 ⁴	15	0.027	0.119	0.07	10	0.036	0.226	0.086	44	0.033	0.25	0.143	45	0.022	0.198	0.108
Sulfate (SO4)	MG/L		65	250	17	47.3	338	133	11	42.5	70.5	54.2	50	11.6	384	254	49	71.9	414	288
Total Nitrogen	MG/L	0.156		0.25 ⁴	15	0.292	3.43	1.37	10	ND	8.56	1.87	43	1.2	15.3	10.6	46	1.76	7.92	4.03

End Notes:

CSD MDL: City of San Diego Water Quality Laboratory minimum detection level, DLR: detection level for reporting, MCL: maximum contaminant level, SMCL: Secondary MCL, ND: not detected. Calculated mean below CSD MDL reported as ND.

¹ Water Quality Control Plan for the San Diego Basin (9) with amendments effective on or before May 17, 2016. Water Quality Objectives concentrations not to be exceeded more than 10% of the time during any one year period.

² Waters designated Fresh or Warm changes in normal ambient pH levels shall not exceed 0.5 units

³ Beach Action Values (BAV): Amendment to the Domestic Water Permit issued by SWRCB to CSD, August 27, 2018

⁴ P= 0.025 mg/L in any standing body of water. Nitrogen threshold determined by monitoring or if data are lacking, ratio of N:P = 10:1 is used. These values not to be exceeded more than 10% of the time.