Appendix 5.7 - Summary of San Vicente Watershed Source Water Constituents 2016 - 2020

CSD

			Basin Plan Inland Surface Waters Quality [1]		Barona Creek BAR4				Kimball Creek KIM4				Aqueduct Creek AQA3				Tollroad Creek TOL2				San Vicente Creek SNC4			
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**	**No. of Samples**	**Min**	**Max**	**Mean**
General Physical																								
Flow	ft^3/s				53	0	92.7	4.59	55	0	58.3	2.93	53	0	22.9	0.94	53	0	30.7	1.20	53	0	332	21.4
pH	PH		6.5-8.5 [2]		12	6.02	8.12	7.28	21	6.58	7.73	7.21	14	6.53	8.15	7.33	15	6.41	7.6	7.12	27	6.46	7.86	7.24
Specific Conductance (E.C.)	US/CM				12	233	765	458	21	203	2070	978	14	208	823	489	15	166	639	388	27	298	2300	1390
Total Filterable Residue @ 180 C (TDS)	MG/L	10		300	12	177	464	293	19	190	1280	585	14	180	486	309	15	140	369	240	24	242	1400	837
Total Suspended Solids (TSS)	MG/L	1			12	< 1	66	17.9	19	< 1	250	17	14	< 1	70.7	11.2	15	< 1	11.5	2.11	24	< 1	626	40.4
Microbiological																								
Enterococcus	/100 ML	1	60 [3]		12	3	1700	276	19	4	820	173	14	5	1100	219	15	1	330	87.1	24	< 1	> 2400	441
Escherichia Coli	/100 ML	1	190 [3]		12	< 100	1200	251	19	< 100	1600	362	14	< 100	630	181	15	< 100	100	< 100	24	100	41000	2330
Total Coliform	/100 ML	1			12	2000	31000	9990	19	< 100	37000	6490	14	630	52000	11800	15	1100	29000	6950	24	310	160000	19800
Inorganic Constituents																								
Ammonia-N	MG/L	0.031	0.025		10	ND	0.115	0.029	16	ND	0.202	0.038	14	ND	0.088	0.015	15	ND	0.058	0.013	20	ND	1.89	0.164
Bromide	MG/L	0.1			13	ND	0.531	0.173	20	ND	0.873	0.371	15	ND	0.514	0.242	16	ND	0.376	0.195	24	ND	0.588	0.313
Chloride	MG/L	0.5	250	50	13	38.5	189	86.6	20	26.9	438	167	15	33.8	131	80	16	12.2	141	77.3	24	36.1	447	237
Fluoride	MG/L	0.02	1	1	13	0.107	0.187	0.137	20	0.069	0.341	0.223	15	0.107	0.61	0.322	16	ND	0.12	0.082	24	0.11	0.374	0.269
Nitrate (as NO3)	MG/L		5		13	0.303	21.7	7.27	21	ND	14.4	3.48	15	ND	23.6	6.00	16	ND	32.2	5.31	26	ND	30.4	5.18
Nitrite (NO2)	MG/L				13	ND	0.141	0.038	19	ND	0.099	0.03	15	ND	0.139	0.028	16	ND	0.069	0.013	24	ND	0.473	0.1
Phosphate, Ortho (as PO4)	MG/L	0.2			11	ND	0.309	0.028	16	ND	0.316	0.036	13	ND	0.126	0.01	14	ND	0.087	0.006	18	ND	0.774	0.08
Phosphorus	MG/L	0.078	0.025 [4]	0.025 [4]	11	0.048	0.261	0.119	18	0.061	0.234	0.11	12	0.062	0.248	0.103	13	0.014	0.183	0.072	22	0.069	0.315	0.158
Sulfate (SO4)	MG/L			65	13	15.8	59.5	31.0	20	17.4	483	94.5	15	11.8	64.2	34.6	16	2.58	28.5	15.8	24	33.7	324	172
Total Nitrogen	MG/L	0.156		0.25 [4]	10	0.444	3.79	1.89	19	0.238	4.23	1.44	11	ND	6.25	1.77	13	ND	9.07	1.91	23	0.185	8.94	2.03

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.