Appendix 5.1 - Summary of Raw Water Quality San Diego River Watershed[1] 2011-2015									
Parameters	**Units**	**DLR*/MDL**	**Drinking Water Standards[2]**		**No. of Samples**	**Raw Water Quality****			
General Physical			**MCL**	**SMCL**		**Min**	**Max**	**Mean**	**Median**
pH	PH				173	5.5	9.92	7.69	7.76
Specific Conductance (E.C.)	US/CM			1600	191	279	5950	1320	1130
Total Filterable Residue @ 180 C (TDS)	MG/L	10		1000	183	173	3980	839	726
Total Suspended Solids (TSS)	MG/L	10			182	1	1190	12.4	2.1
Microbiological			MCL	SMCL		Min	Max	Mean	Median
Enterococcus	/100 ML				173	<1	>2400	173	48
Escherichia Coli	/100 ML				173	<10	5900	258	<100
Total Coliform	/100 ML				173	<100	98000	5160	2800
Metals[3]			MCL	SMCL		Min	Max	Mean	Median
Aluminum (Al)	UG/L	50	1000	200	5	ND	ND	ND	ND
Antimony	UG/L	6	6		5	ND	ND	ND	ND
Arsenic	UG/L	2	10		5	ND	ND	ND	ND
Barium (Ba)	UG/L	100	1000		5	ND	ND	ND	ND
Beryllium	UG/L	1	4		5	ND	ND	ND	ND
Boron	UG/L	100			5	ND	ND	ND	ND
Cadmium (Cd)	UG/L	1	5		5	ND	ND	ND	ND
Calcium (Ca)	MG/L				1	69.6	69.6	69.6	69.6
Chromium (Total Cr)	UG/L	10	50		5	ND	ND	ND	ND
Copper (Cu)	UG/L	50	1300	1000	5	ND	ND	ND	ND
Iron (Fe)	UG/L	100		300	1	713	713	713	713
Lead (Pb)	UG/L	5	15		5	ND	ND	ND	ND
Magnesium (Mg)	MG/L				1	36.4	36.4	36.4	36.4
Manganese (Mn)	UG/L	20		50	6	ND	323	82.2	ND
Nickel	UG/L	10	100		5	ND	ND	ND	ND
Potassium (K)	MG/L	5			1	8.26	8.26	8.26	8.26
Selenium (Se)	UG/L	5	50		5	ND	ND	ND	ND
Silver	UG/L	10		100	5	ND	ND	ND	ND
Sodium (Na)	MG/L	20			1	117	117	117	117
Thallium	UG/L	1	2		5	ND	ND	ND	ND
Vanadium	UG/L	3			5	ND	32.9	18.4	25.2
Zinc (Zn)	UG/L	50		5000	5	ND	ND	ND	ND
Inorganic Constituents			MCL	SMCL		Min	Max	Mean	Median
Ammonia-N	MG/L	0.031			182	ND	0.202	ND	ND
Bromide	MG/L	0.1			19	ND	0.643	0.184	ND
Chloride	MG/L	1		500	20	49.6	1120	369	224
Fluoride	MG/L	0.1	2		19	0.128	0.608	0.353	0.352
Nitrate (as NO3)	MG/L	2	45		184	ND	30.1	3.39	ND
Nitrite (NO2)	MG/L	1.31	3.42		181	ND	ND	ND	ND
Phosphate, Ortho (as PO4)	MG/L	0.2			171	ND	3.25	ND	ND
Phosphorus	MG/L	0.078			177	ND	2.2	ND	ND
Sulfate (SO4)	MG/L	0.5		500	20	58.7	1380	415	293
Total Nitrogen	MG/L	0.156			182	ND	7.4	0.838	ND
Organic Constituents, Regulated			MCL	SMCL		Min	Max	Mean	Median
1,1,1-Trichloroethane (1,1,1-TCA)	UG/L	0.5	200		11	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	UG/L	0.5	1		11	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	UG/L	0.5	5		11	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	UG/L	0.5	5		11	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	UG/L	0.5	6		11	ND	ND	ND	ND
1,2,4-Trichlorobenzene	UG/L	0.5	5		11	ND	ND	ND	ND
1,2-Dichlorobenzene (o-DCB)	UG/L	0.5	600		11	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	UG/L	0.5	0.5		11	ND	ND	ND	ND
1,2-Dichloropropane	UG/L	0.5	5		11	ND	ND	ND	ND
1,4-Dichlorobenzene (p-DCB)	UG/L	0.5	5		11	ND	ND	ND	ND
2,4,5-TP (SILVEX)	UG/L	1	50		5	ND	ND	ND	ND
2,4-D	UG/L	10	70		5	ND	ND	ND	ND
Bentazon (BASAGRAN)	UG/L	2	18		5	ND	ND	ND	ND
Benzene	UG/L	0.5	1		11	ND	ND	ND	ND
Bromodichloromethane	UG/L	1			11	ND	ND	ND	ND
Bromoform	UG/L	1			11	ND	ND	ND	ND
Carbofuran (FURADAN)	UG/L	5	18		11	ND	ND	ND	ND
Carbon Tetrachloride	UG/L	0.5	0.5		11	ND	ND	ND	ND
Chlorodibromomethane	UG/L	1			11	ND	ND	ND	ND
Chloroform (Trichloromethane)	UG/L	1			11	ND	ND	ND	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	UG/L	0.5	6		11	ND	ND	ND	ND

Appendix 5.1 - Summary of Raw Water Quality San Diego River Watershed[1] 2011-2015									
Parameters	**Units**	**DLR*/MDL**	**Drinking Water Standards[2]**		**No. of Samples**	**Raw Water Quality****			
Dibromochloropropane (DBCP)	UG/L	0.01	0.2		11	ND	ND	ND	ND
Dichloromethane (Methylene Chloride)	UG/L	0.5	5		11	ND	ND	ND	ND
Dinoseb (DNBP)	UG/L	2	7		5	ND	ND	ND	ND
Ethyl Benzene	UG/L	0.5	300		11	ND	ND	ND	ND
Ethylene Dibromide (EDB)	UG/L	0.02	0.05		11	ND	ND	ND	ND
meta,para xylenes	UG/L	0.5			11	ND	ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	UG/L	3	13	5	11	ND	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	UG/L	0.5	70		11	ND	ND	ND	ND
Oxamyl (Vydate)	UG/L	20	50		11	ND	ND	ND	ND
o-Xylene	UG/L	0.5			11	ND	ND	ND	ND
Pentachlorophenol (PCP)	UG/L	0.2	1		5	ND	ND	ND	ND
Picloram	UG/L	1	500		5	ND	ND	ND	ND
Styrene	UG/L	0.5	100		11	ND	ND	ND	ND
Tetrachloroethylene (PCE)	UG/L	0.5	5		11	ND	ND	ND	ND
Toluene	UG/L	0.5	150		11	ND	ND	ND	ND
Total Organic Carbon (TOC)	MG/L	0.3			183	1.81	26.8	5.9	5.07
trans-1,2-Dichloroethylene (t-1,2-DCE)	UG/L	0.5	10		11	ND	ND	ND	ND
Trichloroethylene (TCE)	UG/L	0.5	5		11	ND	ND	ND	ND
Trichlorofluoromethane (FREON 11)	UG/L	5	150		11	ND	ND	ND	ND
Trichlorotrifluoroethane (FREON 113)	UG/L	10	1200		11	ND	ND	ND	ND
Vinyl Chloride (VC)	UG/L	0.5	0.5		11	ND	ND	ND	ND
Organic Constituents, Unregulated			MCL	SMCL		Min	Max	Mean	Median
1,1,1,2-Tetrachloroethane	UG/L	0.5			11	ND	ND	ND	ND
1,1-Dichloropropene	UG/L	0.5			11	ND	ND	ND	ND
1,2,3-Trichlorobenzene	UG/L	0.5			11	ND	ND	ND	ND
1,2,4-Trimethylbenzene	UG/L	0.4			11	ND	ND	ND	ND
1,3,5-Trimethylbenzene	UG/L	0.5			11	ND	ND	ND	ND
1,3-Dichlorobenzene (m-DCB)	UG/L	0.5			11	ND	ND	ND	ND
1,3-Dichloropropane	UG/L	0.5			11	ND	ND	ND	ND
2,2-Dichloropropane	UG/L	0.5			11	ND	ND	ND	ND
2,4,5-T	UG/L	3			5	ND	ND	ND	ND
2,4-DB	UG/L	3			5	ND	ND	ND	ND
2-Chlorotoluene	UG/L	0.5			11	ND	ND	ND	ND
3,5-Dichlorobenzoic Acid	UG/L	3			5	ND	ND	ND	ND
3-Hydroxycarbofuran	UG/L	3			11	ND	ND	ND	ND
4-Chlorotoluene	UG/L	0.5			11	ND	ND	ND	ND
4-Nitrophenol	UG/L	5			5	ND	ND	ND	ND
Acifluorfen	UG/L	3			5	ND	ND	ND	ND
Aldicarb (TEMIK)	UG/L	3			11	ND	ND	ND	ND
Aldicarb Sulfone	UG/L	4			11	ND	ND	ND	ND
Aldicarb Sulfoxide	UG/L	3			11	ND	ND	ND	ND
Baygon	UG/L	0.4			11	ND	ND	ND	ND
Bromobenzene	UG/L	0.5			11	ND	ND	ND	ND
Bromochloromethane	UG/L	0.5			11	ND	ND	ND	ND
Bromomethane (Methyl Bromide)	UG/L	0.5			11	ND	ND	ND	ND
Carbaryl (Sevin)	UG/L	5			11	ND	ND	ND	ND
Chloramben	UG/L	3			5	ND	ND	ND	ND
Chloroethane	UG/L	0.5			11	ND	ND	ND	ND
Chloromethane (Methyl Chloride)	UG/L	0.5			11	ND	ND	ND	ND
cis-1,3-dichloropropene	UG/L	0.5			11	ND	ND	ND	ND
Dibromomethane	UG/L	0.5			11	ND	ND	ND	ND
Dicamba (BANVEL)	UG/L	1.5			5	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	UG/L	0.5			11	ND	ND	ND	ND
Dichlorprop	UG/L	3			5	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	UG/L	3			11	ND	ND	ND	ND
Ethyl-tert-Butyl Ether (ETBE)	UG/L	3			11	ND	ND	ND	ND
Hexachlorobutadiene	UG/L	0.5			11	ND	ND	ND	ND
Isopropylbenzene (Cumene)	UG/L	0.5			11	ND	ND	ND	ND
MCPA	UG/L	3			5	ND	ND	ND	ND
MCPP	UG/L	3			5	ND	ND	ND	ND
Methiocarb	UG/L	0.4			11	ND	ND	ND	ND
Methomyl	UG/L	2			11	ND	ND	ND	ND
Naphthalene	UG/L	0.5			11	ND	ND	ND	ND
n-Butylbenzene	UG/L	0.5			11	ND	ND	ND	ND
n-Propylbenzene	UG/L	0.5			11	ND	ND	ND	ND

Appendix 5.1 - Summary of Raw Water Quality
San Diego River Watershed[1] 2011-2015

Parameters	Units	DLR*/MDL	Drinking Water Standards[2]	No. of Samples	Raw Water Quality**			
p-Isopropyltoluene	UG/L	0.4		11	ND	ND	ND	ND
sec-Butylbenzene	UG/L	0.5		11	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	UG/L	3		11	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	UG/L	2		11	ND	ND	ND	ND
tert-Butylbenzene	UG/L	0.5		11	ND	ND	ND	ND
trans-1,3-dichloropropene	UG/L	0.5		11	ND	ND	ND	ND

NOTES:
* The State of California DLR values are used when available. Parameters without DLR values were reported as MDL levels.
** The acceptance criteria in this table apply to finished, potable water, and are for reference only.

(1) The sampling points summarized are: BAR4, CHC3, CON3, KIM4, PZC3, SDR3, SNC4, SNC5, SPC3
(2) State MCL and MCLG values may be more stringent than federal standards for treated water.