Table 4-10

Correlation Analysis of all Constituents vs.Total Suspended Solids (TSS) 2006 - 2009

	Ballona Creek		Malibu Creek		Los Angeles River		Coyote Creek		San Gabriel River		Dominguez Channel		Santa Clara River	
	S01-Dry	S01-Wet	S02-Dry	S02-Wet	S10-Dry	S10-Wet	S13-Dry	S13-Wet	S14-Dry	S14-Wet	S28-Dry	S28-Wet	S29-Dry	S29-Wet
Oil and Grease	-	.42	-	-	-	.16	-	.05	-	-	-	.21	-	-
Total Phenols	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide	-	-	-	-	**.87**	.05	.17	-	.18	.19	-	**.98**	-	-
pH	.26	.06	.25	.08	.19	.04	.02	.08	.00	.33	.42	.02	-	.11
Dissolved Oxygen	.01	.41	.24	.12	.00	.10	.00	.03	.31	.01	**.50**	**.54**	-	.04
Total Coliform	.49	.01	.02	.03	**.78**	.00	.11	.20	.02	.11	.22	.03	-	.01
Fecal Coliform	.05	.01	.07	**.65**	**.75**	.02	.01	.20	**.69**	.17	.20	.01	-	.09
Fecal Enterococcus	.10	.02	.03	.00	.08	.02	.21	.18	.06	.01	.18	.43	-	.00
Fecal Streptococcus	.10	.02	.01	.00	.09	.02	.11	.18	.06	.00	.34	.50	-	.00
Chloride	.00	.07	.16	.02	.06	.32	.00	.04	.05	.00	**.74**	.00	-	.00
Fluoride	.10	.00	.08	.05	.10	.15	.00	.04	.09	.11	**.52**	.36	-	.10
Nitrate (NO3)	-	.47	-	.27	-	.14	-	.05	-	.30	-	.03	-	.04
Sulfate	.09	.11	.30	.08	.31	.14	.27	.05	.09	.01	**.61**	.10	-	.00
Alkalinity as CaCO3	.01	.02	.40	.05	.05	**.72**	.00	.09	.26	.01	.38	.13	-	.02
Hardness as CaCO3	.07	.01	**.58**	.29	.01	**.61**	.09	.01	.23	.06	**.53**	.13	-	.01
Chemical Oxygen Demand	.12	**.58**	.24	**.70**	.31	**.52**	.11	.41	.07	.04	.13	**.54**	-	.01
Total Petroleum Hydrocarbons	-	.13	-	-	-	.11	-	.01	-	-	-	.19	-	-
Specific Conductance	.07	.02	**.56**	.05	.06	.44	.23	.01	.04	.04	**.62**	.03	-	.01
Total Dissolved Solids	.12	.02	**.52**	.06	.02	.43	.18	.00	.00	.00	.40	.11	-	.02
Turbidity	**.51**	.12	.30	.00	.01	.00	.16	.00	**.56**	.00	.40	.00	-	.21
Volatile Suspended Solids	**.93**	**.95**	.01	**.98**	**.74**	**.95**	**.67**	**.98**	**.99**	**.92**	**.77**	**.94**	-	**.64**
Methylene Blue Active Substances (MBAS)	-	.11	-	.00	.13	.06	**.70**	.37	.05	.03	.38	.20	-	.32
Total Organic Carbon	**.65**	**.90**	.26	**.89**	.15	**.81**	.04	.36	.25	.08	.01	**.90**	-	.09
BioChemical Oxygen Demand- Five-Day	.25	**.72**	-	.04	.01	.37	.04	**.68**	.05	.04	.30	**.76**	-	.11
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Phosphorus	.13	.15	.50	.00	.47	**.85**	-	.23	-	.00	.04	.38	-	.04
Total Phosphorus	.02	.40	.17	.10	.00	**.81**	-	**.58**	**.65**	.00	.01	**.51**	-	.17
NH3-N	-	**.94**	-	.00	**.68**	**.84**	-	**.63**	.38	.00	.04	**.78**	-	.00
Nitrate-N	-	.47	-	.27	-	.14	-	.05	-	.30	-	.03	-	.05
Nitrite-N	-	-	-	-	.02	**.67**	-	-	-	.01	-	-	-	-
Kjeldahl-N	.01	**.85**	.18	.45	.01	**.82**	.02	**.61**	**.54**	.04	.00	**.71**	-	.00
Dissolved Aluminum	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Aluminum	-	.43	-	**.93**	-	.24	-	**.53**	.03	.23	.08	**.65**	-	.01
Dissolved Antimony	.43	.32	-	.48	.08	.10	**.64**	.26	.00	.00	.03	**.63**	-	.06
Total Antimony	**.71**	**.71**	-	.17	.01	**.63**	**.66**	**.72**	.11	.37	.03	**.87**	-	.03
Dissolved Arsenic	.13	.00	.09	.12	.02	.19	.12	.18	**.89**	.06	.03	.15	-	.01
Total Arsenic	.06	**.63**	.03	**.63**	.03	**.91**	.17	**.80**	**.85**	.22	.06	**.77**	-	.13
Dissolved Barium	.12	**.65**	.14	.04	.04	**.83**	.11	.30	.42	.00	**.55**	.39	-	.02
Total Barium	**.68**	**.70**	.38	**.74**	.24	**.84**	.03	**.89**	.28	.24	**.58**	**.84**	-	.41
Dissolved Beryllium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Beryllium	-	-	-	-	-	-	-	.42	-	-	-	-	-	**.61**
Dissolved Cadmium	-	-	-	**.68**	-	-	-	-	-	-	-	-	-	-
Total Cadmium	-	**.68**	-	**.84**	-	**.82**	-	**.68**	-	.08	-	**.85**	-	.09
Dissolved Chromium	.02	.25	**.51**	.30	.00	.00	.17	.03	.12	.09	.01	.15	-	.00
Total Chromium	.39	**.65**	.13	**.59**	.00	**.79**	.19	**.84**	.33	.16	.00	**.85**	-	.35
Dissolved Chromium +6	-	.32	-	-	-	-	-	.10	-	-	.11	.07	-	-
Total Chromium +6	.49	.06	-	-	-	.09	.02	.01	-	-	.09	.08	-	-
Dissolved Copper	.01	.16	.06	.42	.00	.31	**.61**	.02	.09	.02	.01	.04	-	.08
Total Copper	.06	**.69**	.03	**.75**	.03	**.64**	.06	**.90**	.49	.25	.00	**.84**	-	.08
Dissolved Iron	-	**.69**	-	-	-	**.78**	-	**.88**	-	.17	-	**.88**	-	.05
Total Iron	**.95**	**.71**	.26	**.66**	**.89**	.39	.22	**.73**	.00	.17	.00	**.82**	-	.33
Dissolved Lead	-	**.84**	-	-	-	.23	-	**.58**	-	.06	.17	**.72**	-	**.61**
Total Lead	**.93**	**.71**	-	**.89**	**.93**	.42	.09	**.89**	.46	.35	.00	.39	-	**.56**
Dissolved Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Nickel	.07	**.71**	.11	.07	.29	.37	**.75**	**.52**	.02	.00	.10	**.82**	-	.02
Total Nickel	.46	**.72**	.38	**.63**	.12	**.87**	.34	**.87**	.01	.21	.07	**.84**	-	.26
Dissolved Selenium	.01	-	.01	.07	.05	-	.11	.06	**.92**	.09	.40	-	-	-
Total Selenium	.06	.37	.16	.33	.06	.45	.13	.02	**.92**	.04	.35	-	-	**.52**
Dissolved Silver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Silver	-	**.56**	-	-	-	**.71**	-	**.76**	-	-	-	.49	-	.20
Dissolved Thallium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Thallium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Zinc	.00	.04	.01	.44	.16	.01	.19	.06	.40	.18	.02	.00	-	.01
Total Zinc	**.58**	**.73**	.00	.42	.22	**.61**	.14	**.87**	.03	**.58**	.04	**.74**	-	.16
Ammonia	.32	**.94**	-	.01	**.67**	**.84**	-	**.63**	.37	.05	.00	**.78**	-	.00

Table shows coefficient of determination (r^2) for each constituent when analyzed by simple linear regression for correlation with TSS

Correlations omit values censored as -99 (ND, BMDL, BRL, DNQ)

Bold shaded entries indicate significant correlation: (r^2 > 0.5)

- indicates fewer than five pairs of data points