

Appendix D -

Table D1. Nitrite vs TSS linear regression results.

Location	Date	N	Slope	Intercept	R ²	P-value	Min Salinity	Max Salinity
all	all	728	0.007	0.296	0.011	0.004	26.828	33.445
top 5m	all	626	0.007	0.302	0.010	0.011	26.828	33.400
top 5m	2004	376	0.008	0.258	0.011	0.045	26.828	33.400
top 5m	2005	250	0.006	0.363	0.014	0.060	27.626	33.248
Santa Clara River ¹	2004	15	0.002	0.235	0.522	0.002	32.569	33.227
Santa Clara River	24-Mar-05	14	0.000	0.514	0.011	0.724	31.654	33.248
Santa Clara River	25-Mar-05	14	0.005	0.483	0.339	0.029	32.175	33.194
Santa Clara River	26-Mar-05	14	-0.002	0.517	0.006	0.789	31.416	33.143
Santa Clara River	2005	42	0.001	0.504	0.013	0.480	31.416	33.248
Ballona Creek	27-Feb-04	7	0.058	0.062	0.459	0.095	29.684	33.045
Ballona Creek	28-Feb-04	21	0.013	0.216	0.136	0.100	28.265	33.033
Ballona Creek	1-Mar-04	21	-0.004	0.381	0.004	0.792	30.903	33.089
Ballona Creek	2004	49	0.006	0.313	0.011	0.468	28.265	33.089
Ballona Creek	23-Mar-05	10	0.103	-0.097	0.768	0.001	27.636	32.841
Ballona Creek	24-Mar-05	21	0.019	0.249	0.101	0.161	31.665	32.952
Ballona Creek	26-Mar-05	21	-0.005	0.282	0.071	0.243	32.430	33.037
Ballona Creek	2005	52	0.020	0.244	0.127	0.010	27.636	33.037
LA/San Gabriel Rivers	27-Feb-04	32	0.061	0.103	0.721	<0.0001	27.041	33.113
LA/San Gabriel Rivers	28-Feb-04	36	0.260	-0.585	0.283	0.001	26.963	33.189
LA/San Gabriel Rivers	1-Mar-04	38	0.272	-0.469	0.252	0.001	26.828	33.137
LA/San Gabriel Rivers	2004	106	0.086	0.153	0.163	<0.0001	26.828	33.189
LA/San Gabriel Rivers	23-Mar-05	22	0.016	0.396	0.030	0.440	30.928	33.239
LA/San Gabriel Rivers	25-Mar-05	22	0.347	-0.548	0.094	0.166	31.816	33.124
LA/San Gabriel Rivers	2005	44	-0.013	0.760	0.001	0.870	30.928	33.239
Santa Ana River	27-Feb-04	only three sites					31.835	32.283
Santa Ana River	28-Feb-04	20	0.000	0.168	0.000	0.973	32.235	33.060
Santa Ana River	1-Mar-04	21	0.000	0.092	0.001	0.902	32.197	33.102
Santa Ana River	2004	44	-0.001	0.139	0.002	0.790	31.835	33.102
Santa Ana River	23-Mar-05	14	0.011	0.059	0.742	<0.0001	28.513	32.816
Santa Ana River	24-Mar-05	16	0.024	0.193	0.445	0.005	29.427	33.186
Santa Ana River	25-Mar-05	16	0.059	0.119	0.296	0.029	31.063	33.154
Santa Ana River	2005	46	0.005	0.247	0.050	0.135	28.513	33.186
Newport Harbor	28-Feb-04	12	0.002	0.102	0.002	0.904	28.259	32.754
Newport Harbor	1-Mar-04	12	0.031	0.086	0.195	0.151	27.980	33.131
Newport Harbor	2004	24	-0.004	0.169	0.007	0.688	27.980	33.131
Newport Harbor	23-Mar-05	9	0.029	0.118	0.107	0.391	27.626	32.662
Newport Harbor	24-Mar-05	9	-0.142	0.865	0.157	0.291	29.498	33.027
Newport Harbor	25-Mar-05	9	-0.073	0.513	0.207	0.218	32.353	32.833
Newport Harbor	2005	27	-0.006	0.360	0.006	0.706	27.626	33.027
San Diego River	24-Feb-04	15	0.031	0.059	0.121	0.204	32.164	33.141
San Diego River	28-Feb-04	15	0.044	0.010	0.867	<0.0001	---	---
San Diego River	29-Feb-04	15	0.028	0.077	0.780	<0.0001	---	---
San Diego River ²	2004	45	0.034	0.049	0.511	<0.0001	32.164	33.141
Tijuana River	24-Feb-04	14	0.002	0.256	0.004	0.835	31.795	33.400
Tijuana River	25-Feb-04	16	-0.001	0.298	0.002	0.868	32.994	33.193
Tijuana River	28-Feb-04	31	0.007	0.079	0.237	0.006	32.750	33.185
Tijuana River	29-Feb-04	32	0.002	0.089	0.014	0.522	32.360	33.166
Tijuana River	2004	93	0.005	0.129	0.051	0.029	31.795	33.400
Tijuana River	13-Feb-05	13	0.008	0.196	0.127	0.231	30.040	33.103
Tijuana River	14-Feb-05	13	0.080	-0.126	0.591	0.002	31.510	33.111
Tijuana River	15-Feb-05	13	0.029	0.070	0.088	0.325	30.803	33.112
Tijuana River	2005	39	0.016	0.157	0.152	0.014	30.040	33.112

¹Santa Clara River only sampled on 29 February in 2004

²Salinity measurements only available on 24 Feb 2004

Table D2. Nitrate vs TSS linear regression results.

Location	Date	N	Slope	Intercept	R ²	P-value	Min Salinity	Max Salinity
all	all	728	0.248	2.176	0.126	<0.0001	26.828	33.445
top 5m	all	626	0.257	2.085	0.122	<0.0001	26.828	33.400
top 5m	2004	376	0.193	1.982	0.064	<0.0001	26.828	33.400
top 5m	2005	250	0.354	2.283	0.272	<0.0001	27.626	33.248
Santa Clara River ¹	2004	15	0.188	3.074	0.938	<0.0001	32.569	33.227
Santa Clara River	24-Mar-05	14	0.091	8.921	0.653	<0.0001	31.654	33.248
Santa Clara River	25-Mar-05	14	0.167	10.786	0.196	0.112	32.175	33.194
Santa Clara River	26-Mar-05	14	0.167	6.469	0.159	0.157	31.416	33.143
Santa Clara River	2005	42	0.119	8.922	0.149	0.012	31.416	33.248
Ballona Creek	27-Feb-04	7	1.755	-8.034	0.621	0.035	29.684	33.045
Ballona Creek	28-Feb-04	21	0.332	0.579	0.168	0.065	28.265	33.033
Ballona Creek	1-Mar-04	21	-0.051	3.230	0.003	0.802	30.903	33.089
Ballona Creek	2004	49	0.179	1.990	0.036	0.192	28.265	33.089
Ballona Creek	23-Mar-05	10	1.398	-4.510	0.773	0.001	27.636	32.841
Ballona Creek	24-Mar-05	21	0.143	0.160	0.242	0.024	31.665	32.952
Ballona Creek	26-Mar-05	21	-0.004	0.185	0.009	0.686	32.430	33.037
Ballona Creek	2005	52	0.245	-0.055	0.212	0.001	27.636	33.037
LA/San Gabriel Rivers	27-Feb-04	32	1.006	-1.130	0.764	<0.0001	27.041	33.113
LA/San Gabriel Rivers	28-Feb-04	36	2.101	-3.147	0.259	0.002	26.963	33.189
LA/San Gabriel Rivers	1-Mar-04	38	1.640	-1.371	0.233	0.002	26.828	33.137
LA/San Gabriel Rivers	2004	106	1.080	0.374	0.342	<0.0001	26.828	33.189
LA/San Gabriel Rivers	23-Mar-05	22	-0.467	7.367	0.037	0.393	30.928	33.239
LA/San Gabriel Rivers	25-Mar-05	22	2.145	-3.485	0.124	0.108	31.816	33.124
LA/San Gabriel Rivers	2005	44	0.019	5.054	0.000	0.970	30.928	33.239
Santa Ana River	27-Feb-04		only three sites				31.835	32.283
Santa Ana River	28-Feb-04	20	-0.015	1.600	0.003	0.809	32.235	33.060
Santa Ana River	1-Mar-04	21	0.029	0.860	0.017	0.575	32.197	33.102
Santa Ana River	2004	44	0.021	1.174	0.008	0.564	31.835	33.102
Santa Ana River	23-Mar-05	14	0.710	-3.487	0.857	<0.0001	28.513	32.816
Santa Ana River	24-Mar-05	16	0.767	-0.525	0.435	0.005	29.427	33.186
Santa Ana River	25-Mar-05	16	1.607	-2.390	0.180	0.101	31.063	33.154
Santa Ana River	2005	46	0.580	-0.037	0.491	<0.0001	28.513	33.186
Newport Harbor	28-Feb-04	12	-0.035	1.512	0.004	0.855	28.259	32.754
Newport Harbor	1-Mar-04	12	1.534	-2.516	0.326	0.052	27.980	33.131
Newport Harbor	2004	24	0.200	0.952	0.019	0.519	27.980	33.131
Newport Harbor	23-Mar-05	9	1.808	-3.099	0.460	0.045	27.626	32.662
Newport Harbor	24-Mar-05	9	-1.268	9.495	0.028	0.669	29.498	33.027
Newport Harbor	25-Mar-05	9	-1.683	7.843	0.456	0.046	32.353	32.833
Newport Harbor	2005	27	1.336	-0.072	0.349	0.001	27.626	33.027
San Diego River	24-Feb-04	15	0.422	-0.609	0.429	0.008	32.164	33.141
San Diego River	28-Feb-04	15	0.488	-1.035	0.768	<0.0001	---	---
San Diego River	29-Feb-04	15	0.407	-0.824	0.870	<0.0001	---	---
San Diego River ²	2004	45	0.436	-0.824	0.732	<0.0001	32.164	33.141
Tijuana River	24-Feb-04	14	-0.048	4.894	0.020	0.630	31.795	33.400
Tijuana River	25-Feb-04	16	-0.023	3.221	0.003	0.833	32.994	33.193
Tijuana River	28-Feb-04	31	0.079	1.027	0.423	<0.0001	32.750	33.185
Tijuana River	29-Feb-04	32	-0.079	2.888	0.024	0.394	32.360	33.166
Tijuana River	2004	93	0.005	2.530	0.000	0.888	31.795	33.400
Tijuana River	13-Feb-05	13	0.145	1.883	0.268	0.070	30.040	33.103
Tijuana River	14-Feb-05	13	0.666	-0.562	0.492	0.008	31.510	33.111
Tijuana River	15-Feb-05	13	0.074	1.604	0.012	0.724	30.803	33.112
Tijuana River	2005	39	0.208	1.477	0.256	0.001	30.040	33.112

¹Santa Clara River only sampled on 29 February in 2004²Salinity measurements only available on 24 Feb 2004

Table D3. Phosphate vs TSS linear regression results.

Location	Date	N	Slope	Intercept	R ²	P-value	Min Salinity	Max Salinity
all	all	728	0.029	0.605	0.134	<0.0001	26.828	33.445
top 5m	all	626	0.032	0.599	0.134	<0.0001	26.828	33.400
top 5m	2004	376	0.034	0.582	0.114	<0.0001	26.828	33.400
top 5m	2005	250	0.029	0.620	0.211	<0.0001	27.626	33.248
Santa Clara River ¹	2004	15	0.008	0.654	0.670	<0.0001	32.569	33.227
Santa Clara River	24-Mar-05	14	0.004	1.156	0.120	0.225	31.654	33.248
Santa Clara River	25-Mar-05	14	0.011	1.103	0.330	0.032	32.175	33.194
Santa Clara River	26-Mar-05	14	0.008	0.819	0.092	0.293	31.416	33.143
Santa Clara River	2005	42	0.008	1.019	0.135	0.017	31.416	33.248
Ballona Creek	27-Feb-04	7	0.163	-0.393	0.619	0.036	29.684	33.045
Ballona Creek	28-Feb-04	21	0.043	0.271	0.203	0.041	28.265	33.033
Ballona Creek	1-Mar-04	21	-0.007	0.551	0.006	0.735	30.903	33.089
Ballona Creek	2004	49	0.022	0.431	0.050	0.121	28.265	33.089
Ballona Creek	23-Mar-05	10	0.187	-0.332	0.826	<0.0001	27.636	32.841
Ballona Creek	24-Mar-05	21	0.016	0.298	0.369	0.003	31.665	32.952
Ballona Creek	26-Mar-05	21	-0.003	0.256	0.017	0.579	32.430	33.037
Ballona Creek	2005	52	0.032	0.246	0.209	0.001	27.636	33.037
LA/San Gabriel Rivers	27-Feb-04	32	0.137	0.792	0.705	<0.0001	27.041	33.113
LA/San Gabriel Rivers	28-Feb-04	36	0.265	-0.166	0.513	<0.0001	26.963	33.189
LA/San Gabriel Rivers	1-Mar-04	38	0.272	-0.186	0.385	<0.0001	26.828	33.137
LA/San Gabriel Rivers	2004	106	0.170	0.341	0.556	<0.0001	26.828	33.189
LA/San Gabriel Rivers	23-Mar-05	22	-0.005	0.781	0.001	0.911	30.928	33.239
LA/San Gabriel Rivers	25-Mar-05	22	0.303	-0.373	0.209	0.033	31.816	33.124
LA/San Gabriel Rivers	2005	44	0.025	0.702	0.006	0.629	30.928	33.239
Santa Ana River	27-Feb-04		only three sites				31.835	32.283
Santa Ana River	28-Feb-04	20	0.019	0.387	0.229	0.033	32.235	33.060
Santa Ana River	1-Mar-04	21	0.003	0.421	0.013	0.628	32.197	33.102
Santa Ana River	2004	44	0.004	0.451	0.022	0.333	31.835	33.102
Santa Ana River	23-Mar-05	14	0.059	0.421	0.829	<0.0001	28.513	32.816
Santa Ana River	24-Mar-05	16	0.060	0.423	0.413	0.007	29.427	33.186
Santa Ana River	25-Mar-05	16	0.125	0.258	0.177	0.105	31.063	33.154
Santa Ana River	2005	46	0.057	0.462	0.650	<0.0001	28.513	33.186
Newport Harbor	28-Feb-04	12	0.010	0.436	0.008	0.784	28.259	32.754
Newport Harbor	1-Mar-04	12	0.250	-0.046	0.290	0.071	27.980	33.131
Newport Harbor	2004	24	0.022	0.527	0.007	0.689	27.980	33.131
Newport Harbor	23-Mar-05	9	0.220	-0.220	0.876	<0.0001	27.626	32.662
Newport Harbor	24-Mar-05	9	0.001	0.885	0.000	0.996	29.498	33.027
Newport Harbor	25-Mar-05	9	-0.127	1.014	0.311	0.118	32.353	32.833
Newport Harbor	2005	27	0.145	0.286	0.622	<0.0001	27.626	33.027
San Diego River	24-Feb-04	15	0.075	0.126	0.234	0.068	32.164	33.141
San Diego River	28-Feb-04	15	0.090	0.179	0.739	<0.0001	---	---
San Diego River	29-Feb-04	15	0.073	0.197	0.769	<0.0001	---	---
San Diego River ²	2004	45	0.075	0.184	0.547	<0.0001	32.164	33.141
Tijuana River	24-Feb-04	14	0.017	0.780	0.064	0.384	31.795	33.400
Tijuana River	25-Feb-04	16	0.006	1.048	0.024	0.571	32.994	33.193
Tijuana River	28-Feb-04	31	0.033	0.383	0.508	<0.0001	32.750	33.185
Tijuana River	29-Feb-04	32	0.025	0.533	0.170	0.019	32.360	33.166
Tijuana River	2004	93	0.027	0.568	0.260	<0.0001	31.795	33.400
Tijuana River	13-Feb-05	13	0.022	0.892	0.114	0.260	30.040	33.103
Tijuana River	14-Feb-05	13	0.167	0.112	0.528	0.005	31.510	33.111
Tijuana River	15-Feb-05	13	0.037	0.598	0.032	0.559	30.803	33.112
Tijuana River	2005	39	0.044	0.697	0.184	0.006	30.040	33.112

¹Santa Clara River only sampled on 29 February in 2004²Salinity measurements only available on 24 Feb 2004

Table D4. Silicate vs TSS linear regression results.

Location	Date	N	Slope	Intercept	R ²	P-value	Min Salinity	Max Salinity
all	all	728	0.322	3.981	0.100	<0.0001	26.828	33.445
top 5m	all	626	0.361	3.994	0.103	<0.0001	26.828	33.400
top 5m	2004	376	0.248	3.589	0.052	<0.0001	26.828	33.400
top 5m	2005	250	0.538	4.657	0.226	<0.0001	27.626	33.248
Santa Clara River	2004	15	0.203	3.294	0.903	<0.0001	32.569	33.227
Santa Clara River	24-Mar-05	14	0.230	11.036	0.689	<0.0001	31.654	33.248
Santa Clara River	25-Mar-05	14	0.419	14.905	0.360	0.023	32.175	33.194
Santa Clara River	26-Mar-05	14	0.280	9.791	0.114	0.239	31.416	33.143
Santa Clara River	2005	42	0.264	12.335	0.205	0.003	31.416	33.248
Ballona Creek	27-Feb-04	7	2.385	-11.707	0.653	0.028	29.684	33.045
Ballona Creek	28-Feb-04	21	0.342	1.077	0.103	0.157	28.265	33.033
Ballona Creek	1-Mar-04	21	-0.107	7.411	0.002	0.845	30.903	33.089
Ballona Creek	2004	49	0.091	4.511	0.002	0.760	28.265	33.089
Ballona Creek	23-Mar-05	10	2.273	-5.744	0.800	<0.0001	27.636	32.841
Ballona Creek	24-Mar-05	21	0.153	2.709	0.077	0.224	31.665	32.952
Ballona Creek	26-Mar-05	21	-0.034	2.234	0.024	0.500	32.430	33.037
Ballona Creek	2005	52	0.334	2.060	0.148	0.761	27.636	33.037
LA/San Gabriel Rivers	27-Feb-04	32	1.247	0.444	0.784	<0.0001	27.041	33.113
LA/San Gabriel Rivers	28-Feb-04	36	3.374	-5.963	0.385	<0.0001	26.963	33.189
LA/San Gabriel Rivers	1-Mar-04	38	3.532	-5.728	0.367	<0.0001	26.828	33.137
LA/San Gabriel Rivers	2004	106	1.508	1.348	0.349	0.849	26.828	33.189
LA/San Gabriel Rivers	23-Mar-05	22	0.286	5.568	0.020	0.527	30.928	33.239
LA/San Gabriel Rivers	25-Mar-05	22	6.351	-14.858	0.111	0.129	31.816	33.124
LA/San Gabriel Rivers	2005	44	0.409	7.441	0.002	0.001	30.928	33.239
Santa Ana River	27-Feb-04		only three sites				31.835	32.283
Santa Ana River	28-Feb-04	20	-0.012	3.297	0.001	0.917	32.235	33.060
Santa Ana River	1-Mar-04	21	0.031	1.958	0.008	0.693	32.197	33.102
Santa Ana River	2004	44	0.020	2.697	0.003	0.743	31.835	33.102
Santa Ana River	23-Mar-05	14	0.900	-1.968	0.919	<0.0001	28.513	32.816
Santa Ana River	24-Mar-05	16	1.172	-0.937	0.428	0.006	29.427	33.186
Santa Ana River	25-Mar-05	16	1.925	-0.128	0.092	0.253	31.063	33.154
Santa Ana River	2005	46	0.763	1.718	0.445	<0.0001	28.513	33.186
Newport Harbor	28-Feb-04	12	0.047	1.894	0.009	0.768	28.259	32.754
Newport Harbor	1-Mar-04	12	2.016	-2.542	0.396	0.028	27.980	33.131
Newport Harbor	2004	24	0.230	2.016	0.017	<0.0001	27.980	33.131
Newport Harbor	23-Mar-05	9	2.539	-2.756	0.505	0.032	27.626	32.662
Newport Harbor	24-Mar-05	9	-2.051	13.510	0.049	0.568	29.498	33.027
Newport Harbor	25-Mar-05	9	-1.605	9.600	0.381	0.077	32.353	32.833
Newport Harbor	2005	27	2.192	-0.798	0.494	<0.0001	27.626	33.027
San Diego River	24-Feb-04	15	0.881	-0.783	0.212	0.084	32.164	33.141
San Diego River	28-Feb-04	15	1.661	-2.986	0.746	<0.0001	---	---
San Diego River	29-Feb-04	15	1.472	-2.361	0.861	<0.0001	---	---
San Diego River	2004	45	1.434	-2.516	0.683	<0.0001	32.164	33.141
Tijuana River	24-Feb-04	14	0.120	3.149	0.109	0.250	31.795	33.400
Tijuana River	25-Feb-04	16	-0.013	3.903	0.001	0.900	32.994	33.193
Tijuana River	28-Feb-04	31	0.179	0.998	0.721	<0.0001	32.750	33.185
Tijuana River	29-Feb-04	32	0.114	2.776	0.056	0.192	32.360	33.166
Tijuana River	2004	93	0.112	2.408	0.129	<0.0001	31.795	33.400
Tijuana River	13-Feb-05	13	0.293	3.746	0.306	0.050	30.040	33.103
Tijuana River	14-Feb-05	13	1.585	-0.993	0.508	0.006	31.510	33.111
Tijuana River	15-Feb-05	13	0.458	2.932	0.050	0.465	30.803	33.112
Tijuana River	2005	39	0.415	3.760	0.204	0.004	30.040	33.112

¹ Santa Clara River only sampled on 29 February in 2004² Salinity measurements only available on 24 Feb 2004