Chapter 307 Draft Rule Language
Water Quality Standards Workgroup –May 5, 2008
TCEQ Staff DRAFT

Appendix F: Site-Specific Nutrient Criteria.

Excerpt from §307.10
TCEQ Staff Draft 10/25/07

In the following table, nutrient criteria for selected reservoirs are specified in terms of concentrations of chlorophyll *a* in water as a measure of the density of phytoplankton (suspended microscopic algae). Nutrient criteria are expressed as averages over at least an annual period, and the criteria are applicable to the main pool of each reservoir (see §307.9 (c)(2) and §307.9(e)(7)).

[Criteria formulations were based on the following steps and assumptions:
(1) Available data from 1970 through 2003.
(2) Selected sampling stations represent the deep pool of each reservoir near the dam.
(3) Criteria represent average conditions with an allowance for statistical variability.
(4) Criteria are calculated as the upper confidence interval of the mean (0.01 confidence level), with the assumption that a sample size of 10 is used to assess a statistically significant departure from the mean.]

Segment No.	Lake Name	Site ID	Chl criteria (µg/L)	TPscreening (mg/L)	TN screening (mg/L)
-	Buffalo Springs Lake	11529	83.77	0.330	-
-	Lake Theo	10079	2.00	-	-
-	Millers Creek Reservoir	11679	18.48	0.175	-
-	Oak Creek Reservoir	12180	6.11	0.033	-
-	Twin Buttes Reservoir	12422	12.92	0.051	-
0102	Lake Meredith	10036	3.56	0.050	-
0199	Palo Duro Reservoir	10005	17.51	0.266	-
0203	Lake Texoma	10128	10.01	0.065	-
0208	Lake Crook	10137	6.80	0.246	-
0209	Pat Mayse Reservoir	10138	13.36	0.055	-
0210	Farmers Creek Reservoir	10139	6.1	0.037	-
0212	Lake Arrowhead	10142	10.19	0.146	-
0213	Lake Kickapoo	10143	6.06	0.089	-
0215	Diversion Lake	10157	10.3	0.043	-
0217	Lake Kemp	10159	8.37	0.043	-
0219	Lake Wichita	10163	42.50	0.182	-
0223	Greenbelt Reservoir	10173	3.78	0.025	-
0228	Lake Mackenzie	10188	4.85	0.027	-
0229	Lake Tanglewood	10192	30.38	1.468	-
0302	Wright Patman Lake	10213	21.4	0.103	1.384
0401	Caddo Lake	10283	15.6	0.065	0.764

Segment No.	Lake Name	Site ID	Chl criteria (µg/L)	TPscreening (mg/L)	TN screening (mg/L)
0403	Lake O'The Pines	10296	11.21	0.079	_
0404	Ellison Creek Reservoir	14473	5.77	0.032	_
0405	Lake Cypress Springs	10312	11.5	0.040	_
0408	Lake Bob Sandlin	10329	8.0	0.034	_
0504	Toledo Bend Reservoir	10402	9.51	0.040	_
0507	Lake Tawakoni	10434	17.89	0.058	_
0509	Lake Murvaul	10444	33.	0.073	_
0510	Lake Cherokee	10445	8.23	0.057	_
0512	Lake Fork Reservoir	10458	13.63	0.039	_
0602	B. A. Steinhagen Reservoir	10582	9.3	0.094	_
0605	Lake Palestine	16159	15.57	0.031	_
0610	Sam Rayburn Reservoir	14906	4.32	0.097	_
0613	Lake Tyler	10637	7.9	0.035	_
0613	Lake Tyler Midlake east	10638		0.040	_
0614	Lake Jacksonville	10639	4.6	0.019	_
0803	Lake Livingston	10899	24.95	0.178	_
0807	Lake Worth	10942	17.20	0.050	_
0809	Eagle Mountain Reservoir	10945	14.83	0.067	_
0811	Lake Bridgeport	10970	6.3	0.044	0.468
0813	Houston County Lake	10973	10.2	0.033	_
0815	Bardwell Reservoir	10979	16.07	0.054	_
0816	Lake Waxahachie	10980	6.06	0.053	_
0817	Navarro Mills Reservoir	10981	12.25	0.065	_
0818	Cedar Creek Reservoir	10982	23.47	0.068	0.995
0821	Lake Lavon	11020	10.31	0.075	_
0823	Lewisville Lake	11027	17.11	0.079	_
0826	Grapevine Lake	16113	11.91	_	_
0827	White Rock Lake	11038	31.78	0.103	_
0828	Lake Arlington	11040	15.00	0.039	_
0830	Benbrook Lake	15151	21.19	0.062	_
0832	Lake Weatherford	11061	10.93	0.059	_
0834	Lake Amon G. Carter	11063	9.7	0.072	_
0836	Richland-Chambers Reservoir	15168	15.03	0.037	_
0838	Joe Pool Lake	11073	3.38	0.026	_
0840	Lake Ray Roberts	11075		_	0.929
1002	Lake Houston	11204	8.85	0.208	_
1012	Lake Conroe	11342	18.77	0.052	_
1203	Lake Whitney	11851	7.20	0.021	_
1205	Lake Granbury	11860	11.60	0.035	_
1207	Possum Kingdom Reservoir	11865	6.35	0.059	_
1209	Country Club Lake	11792		0.977	_
1209	Fin Feather Lake	11798	16.83	0.750	_
1210	Lake Mexia	14238	26.38	0.221	_
1212	Somerville Lake	11881	30.10	0.061	_
1216	Stillhouse Hollow Lake	11894	1.9	0.018	0.595
1220	Belton Reservoir	11921	4.27	0.024	_

Segment No.	Lake Name	Site ID	Chl criteria (µg/L)	TPscreening (mg/L)	TN screening (mg/L)
1222	Proctor Lake	11935	29.58	0.063	_
1224	Leon Reservoir	11939	9.06	0.034	_
1225	Lake Waco	11942	9.85	0.094	_
1228	Pat Cleburne Reservoir	11974	12.65	0.149	_
1230	Lake Palo Pinto	11977	5.1	0.080	_
1231	Lake Graham	11979	5.41	0.083	_
1233	Hubbard Creek Reservoir	12002	5.5	0.091	0.719
1234	Lake Cisco	12005	2.9	0.019	_
1235	Lake Stamford	12006	15.65	0.068	_
1236	Lake Fort Phantom Hill	12010	8.48	0.066	_
1237	Lake Sweetwater	12021	18.11	0.040	_
1240	White River Lake	12027	3.93	0.031	_
1247	Granger Lake	12095	7.53	0.051	_
1249	Lake Georgetown	12111	5.1	0.032	0.788
1252	Lake Limestone	12123	18.5	0.044	0.958
1254	Aquilla Reservoir	12127	9.52	0.058	_
1403	Lake Austin	12294	4.05	0.029	_
1404	Lake Travis	12302	4.1	0.048	0.426
1405	Lake Marble Falls	12319	8.6	0.036	0.592
1406	Lake Lyndon B. Johnson	12324	8.02	0.053	0.769
1407	Inks Lake	12336	11.7	0.033	0.699
1408	Lake Buchanan	12344	7.5	0.043	0.637
1411	E.V. Spence Reservoir	12359	9.94	0.025	_
1412	Lake Colorado City	12167	15.71	0.046	_
1416	Brady Creek Reservoir	12179	19.60	0.039	_
1418	Lake Brownwood	12395	4.94	0.021	_
1419	Lake Coleman	12398	6.08	0.019	_
1422	Lake Nasworthy	12418	18.07	0.051	_
1425	O.C. Fisher Reservoir	12429	27.2	0.089	_
1429	Town Lake	12476	6.86	0.049	_
1433	O.H. Ivie Reservoir	12511	8.87	0.035	_
1604	Lake Texana	12529	4.78	0.227	1.259
1805	Canyon Lake	12598	3.1	0.054	0.841
1904	Medina Lake	12826	4.0	0.027	0.320
2103	Lake Corpus Christi	12967	14.6	0.190	_
2116	Choke Canyon Reservoir	13019	12.0	0.064	_
2303	Falcon Lake	13189	11.23	0.046	_
2305	Amistad Reservoir	13211	3.02	0.036	_
2312	Red Bluff Reservoir	13267	20.3	0.044	_
2454	Cox Lake	12514	14.77	0.462	_

*Nutrient criteria were calculated for reservoirs using the formula in Moore & McCabe, Pooled two-sample *t* procedures. pp 542-549. *In* Introduction to the practice of statistics. W. H. Freeman and Company, New York. Degrees of freedom are (n_1+n_2 -2). $n_1$is the count of the baseline data, n_2 is always 10.