

2005 Parameter Data: 2005 Greenwich Bay Total Phosphorus

In most estuaries nitrogen is the primary nutrient that controls algal growth. However like nitrogen, phosphorus is also essential for life, and thus in salt water environments phosphorus levels must be considered in relationship to nitrogen levels. In estuaries the recommended level of total phosphorus is 10 to 100 ppb with 100 to 1000 ppb of total nitrogen (a 10:1 ratio of nitrogen to phosphorus). Under these conditions, most algal blooms may be avoided. Like nitrogen, phosphorus also occurs in the total form which includes phosphorus bound in particulate matter and soluble or dissolved form which is readily used by algae.

Watershed code	LOCATION	Sample Depth (m)	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
			-- (ug/l or ppb) --						
NA	Greenwich Bay #1 - Middle Ground Buoy	1	-	-	43	62	88	67	65
NA	Greenwich Bay #1 - Middle Ground Buoy	DEEP	-	-	39	91	95	81	77
NA	Greenwich Bay #2 - Sally Rock	1	-	-	-	-	-	72	-
NA	Greenwich Bay #2 - Sally Rock	DEEP	-	-	-	-	-	84	-
NA	Greenwich Bay #3 - The Brothers	1	-	-	97	116	116	68	99
NA	Greenwich Bay #3 - The Brothers	DEEP	-	-	120	137	118	72	112
NA	Greenwich Bay #4 - Greenwich Bay Marina	0.5	-	-	110	136	136	76	115
NA	Greenwich Bay #4 - Greenwich Bay Marina	DEEP	-	-	-	150	132	89	124
NA	Greenwich Bay #6 - Ponaug Marina	0.5	-	-	46	-	-	-	-
NA	Greenwich Bay #6 - Ponaug Marina	DEEP	-	-	96	-	-	-	-
NA	Greenwich Bay #8 - Little Rhody Boat Club	0.5	-	-	92	104	119	59	94
NA	Greenwich Bay #8 - Little Rhody Boat Club	DEEP	-	-	68	101	136	83	97
NA	Greenwich Bay #9 - Warwick Cove Marina	0.5	-	-	85	75	108	64	83
NA	Greenwich Bay #9 - Warwick Cove Marina	DEEP	-	-	68	95	96	83	86
NA	Greenwich Bay #10 - Greenwich Bay North Marina	0.5	-	-	87	124	134	84	107
NA	Greenwich Bay #10 - Greenwich Bay North Marina	DEEP	-	-	102	98	114	104	105
NA	Greenwich Bay #13 - EG Town Dock	0.5	-	-	150	184	166	67	142
NA	Greenwich Bay #13 - EG Town Dock	DEEP	-	-	179	152	153	123	152
NA	Greenwich Bay #14 - Wharf Marina	0.5	-	-	-	163	136	61	120
NA	Greenwich Bay #14 - Wharf Marina	DEEP	-	-	-	109	138	76	108

Recommended level of total phosphorus in estuaries is 10 to 100 ppb.