

2007 Dissolved Phosphorus Data - South Shore, including Salt Pond Coalition Sites

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. To maintain those ratios, instream total phosphorus should not exceed 100 ppb. Like nitrogen, phosphorus also occurs in the total form which includes phosphorus bound in particulate matter and the soluble or dissolved form which is readily used by algae. High levels of dissolved phosphorus are an indication of excess phosphorus (over enrichment) and/or limitation by nitrogen.

Monitoring Locations

2007 Data

	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Salt Pond Coalition Sites	-- (ug/l or ppb) --						
Green Hill - In Pond 0.5 m	7	4	18	21	-	3	11
Green Hill - In Pond 1.5 m	4	5	-	20	-	3	8
Green Hill - Indigo Pt	-	4	-	27	-	ND	11
Green Hill - Sea Lea	-	5	-	23	-	3	10
Green Hill - Teal Rd	-	ND	-	14	-	3	6
Little Maschaug Pond	-	-	-	11	-	ND	6
Ninigret Pond - Crawford Dock	-	13	-	22	-	ND	12
Ninigret Pond - Stumpy Pt 0.5 m	-	11	-	12	-	ND	8
Ninigret Pond - Stumpy Pt 1.5 m	-	21	-	11	-	ND	11
Ninigret Pond - Vigna's Dock	-	6	-	16	-	ND	8
Ninigret Pond - Western Basin 0.5 m	-	9	-	13	-	ND	8
Ninigret Pond - Western Basin 1.5 m	-	-	-	17	-	ND	9
Pt Judith Pond - Champlin's Cove	-	15	15	28	-	27	21
Pt Judith Pond - Gardiner Island 0.5 m	-	14	6	50	-	20	23
Pt Judith Pond - Gardiner Island 1.5 m	-	14	4	43	-	18	20
Pt Judith Pond - Ram Point 0.5 m	-	10	13	25	-	18	17
Pt Judith Pond - Ram Point 1.5 m	-	12	8	21	-	25	17
Quonnie Pond - Harmonic Cove Channel 0.5 m	-	17	15	23	-	27	21
Quonnie Pond - Harmonic Cove Channel 0.5 m	-	14	9	30	-	24	19
Quonnie Pond - Harmonic Cove	-	63	17	30	-	32	36
Quonnie Pond - Harmonic Cove Buoy 0.5 m	-	16	22	-	-	33	24
Quonnie Pond - Harmonic Cove Buoy 1.5 m	-	19	18	-	-	12	16
Quonnie Pond - Judge's Rock 0.5 m	-	17	14	-	-	22	18
Quonnie Pond - Judge's Rock 1.5 m	-	16	12	-	-	27	18
Quonnie Pond - Mud Cove	-	ND	8	-	-	32	14
Quonnie Pond - N. of Bill's Is. 0.5 m	-	8	12	-	-	11	10
Quonnie Pond - N. of Bill's Is. 1.5 m	-	ND	12	-	-	20	11
Quonnie Pond - Shady Harbor Brk	-	4	22	-	-	15	14
Quonnie Pond - Yacht Basin	-	10	28	-	-	13	17
Saugatucket River - Caleb's Dock	-	ND	4	9	-	ND	4
Winnapaug Pond - Aquaculture	-	-	13	-	-	10	12
Winnapaug Pond - Breachway	-	7	10	34	-	11	16
Winnapaug Pond - Golf Course Cove	-	ND	5	24	-	12	11
Winnapaug Pond - SWest Corner	-	-	23	-	-	27	25
Watch Hill Conservancy Sites	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Napatree Point - Bayside	-	-	12	32	-	21	22
Napatree Point - Oceanside	-	-	19	34	-	21	25