

2007 Total-nitrogen Data - South Shore, including Salt Pond Coalition Sites

Nitrogen is an important nutrient for plant and algae growth, but excess concentrations can cause cultural eutrophication, particularly in saltwater systems. Nitrogen is typically the nutrient that limits plant and algae growth, known as the limiting nutrient. When eutrophication occurs, algal and plant growth is over stimulated, water clarity is decreased, deep waters become depleted of dissolved oxygen, and fish and shellfish death may result. Precipitation, agricultural, lawn and garden fertilizer, animal wastes, and human waste from sewage treatment plants or septic systems are sources of nitrogen. Measurements of total nitrogen include all forms of dissolved and particulate nitrogen, i.e., nitrate-nitrogen, ammonium-nitrogen, and also organic forms of nitrogen. Levels below 350 ppb are characteristic of low nutrients, and above 700 ppb typically considered nutrient enriched.

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	660	530	620	830	720	490	642
Green Hill - In Pond 1.5 m	730	610	580	630	610	730	648
Green Hill - Indigo Pt	1130	650	880	860	660	580	793
Green Hill - Sea Lea	770	560	410	460	680	400	547
Green Hill - Teal Rd	630	610	690	840	870	720	727
Little Maschaug Pond	1180	740	900	1100	1150	1240	1052
Ninigret Pond - Crawford Dock	500	390	500	690	580	470	522
Ninigret Pond - Stumpy Pt 0.5 m	550	260	470	520	480	430	452
Ninigret Pond - Stumpy Pt 1.5 m	560	250	330	860	690	640	555
Ninigret Pond - Vigna's Dock	600	670	720	1010	440	420	643
Ninigret Pond - Western Basin 0.5 m	440	390	380	590	320	360	413
Ninigret Pond - Western Basin 1.5 m	370	-	370	820	720	630	582
Pt Judith Pond - Champlin's Cove	-	830	730	770	380	560	654
Pt Judith Pond - Gardiner Island 0.5 m	-	420	580	480	360	480	464
Pt Judith Pond - Gardiner Island 1.5 m	-	-	520	560	420	390	473
Pt Judith Pond - Ram Point 0.5 m	760	480	940	790	840	470	713
Pt Judith Pond - Ram Point 1.5 m	-	460	980	860	920	370	718
Quonnie Pond - Harmonic Cove Channel 0.5 m	190	340	300	390	570	330	353
Quonnie Pond - Harmonic Cove Channel 0.5 m	520	470	1320	680	580	360	655
Quonnie Pond - Harmonic Cove	260	380	270	440	595	690	439
Quonnie Pond - Harmonic Cove Buoy 0.5 m	300	310	330	470	550	440	400
Quonnie Pond - Harmonic Cove Buoy 1.5 m	380	520	470	550	865	590	563
Quonnie Pond - Judge's Rock 0.5 m	280	360	310	550	450	450	424
Quonnie Pond - Judge's Rock 1.5 m	550	-	450	460	590	620	534
Quonnie Pond - Mud Cove	380	570	650	590	740	510	573
Quonnie Pond - N. of Bill's Is. 0.5 m	200	390	480	430	380	220	350
Quonnie Pond - N. of Bill's Is. 1.5 m	460	600	260	630	500	320	462
Quonnie Pond - Shady Harbor Brk	340	260	370	430	390	430	370
Quonnie Pond - Yacht Basin	410	410	550	670	570	230	486
Saugatucket River - Caleb's Dock	-	1160	1070	1080	1130	1170	1122
Winnapaug Pond - Aquaculture	-	-	310	400	380	650	435
Winnapaug Pond - Breachway	490	400	370	260	240	310	345
Winnapaug Pond - Golf Course Cove	740	660	270	510	480	1240	650
Winnapaug Pond - SWest Corner	-	-	560	610	470	440	520
Watch Hill Conservancy Sites	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Napatree Point - Bayside	-	-	280	410	490	250	358
Napatree Point - Oceanside	-	-	250	270	290	430	310