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

In most estuaries nitrogen is the primary nutrient that controls algal growth. Ammonium-nitrogen is the most reactive form of nitrogen present in aquatic systems, and is the preferred form for algae and plant growth. It can adhere to soils and sediment, but when dissolved oxygen (DO) is readily available, bacteria quickly oxidize ammonium-N to nitrate-N through a process known as nitrification. Other types of bacteria produce ammonia as they decompose dead plant and animal matter – indirectly reducing dissolved oxygen concentrations. While most sites monitored by URI Watershed Watch have low or no detectable levels of ammonium-nitrogen, many of our deep lakes had periods of quite ammonium-N levels from mid-summer until de-stratification in the fall, usually late September. In addition, high levels of ammonium-nitrogen in surface waters may indicate sewage outfalls,

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	230	170	270	270	150	100	**198**
Green Hill - In Pond 1.5 m	170	160	240	250	210	100	**188**
Green Hill - Indigo Pt	210	150	290	200	170	40	**177**
Green Hill - Sea Lea	200	190	230	260	250	70	**200**
Green Hill - Teal Rd	ND	130	150	190	250	70	**134**
Little Maschaug Pond	70	60	ND	60	50	ND	**45**
Ninigret Pond - Crawford Dock	230	180	150	310	220	70	**193**
Ninigret Pond - Stumpy Pt 0.5 m	70	150	220	220	140	ND	**136**
Ninigret Pond - Stumpy Pt 1.5 m	220	160	240	290	180	150	**207**
Ninigret Pond - Vigna's Dock	150	250	280	250	300	50	**213**
Ninigret Pond - Western Basin 0.5 m	180	240	230	230	130	ND	**171**
Ninigret Pond - Western Basin 1.5 m	150	-	300	510	140	80	**236**
Pt Judith Pond - Champlin's Cove	-	150	200	300	150	50	**170**
Pt Judith Pond - Gardiner Island 0.5 m	-	180	-	260	110	80	**158**
Pt Judith Pond - Gardiner Island 1.5 m	-	180	250	240	100	100	**174**
Pt Judith Pond - Ram Point 0.5 m	160	170	150	220	270	60	**172**
Pt Judith Pond - Ram Point 1.5 m	-	170	150	240	160	50	**154**
Quonnie Pond - Harmonic Cove Channel 0.5 m	160	150	240	200	230	60	**173**
Quonnie Pond - Harmonic Cove Channel 0.5 m	240	210	340	330	190	110	**237**
Quonnie Pond - Harmonic Cove	180	160	-	240	180	100	**172**
Quonnie Pond - Harmonic Cove Buoy 0.5 m	180	150	260	210	260	80	**190**
Quonnie Pond - Harmonic Cove Buoy 1.5 m	190	180	250	240	290	250	**233**
Quonnie Pond - Judge's Rock 0.5 m	170	160	210	270	300	70	**197**
Quonnie Pond - Judge's Rock 1.5 m	200	200	240	250	280	110	**213**
Quonnie Pond - Mud Cove	150	150	210	220	190	120	**173**
Quonnie Pond - N. of Bill's Is. 0.5 m	160	150	290	240	180	50	**178**
Quonnie Pond - N. of Bill's Is. 1.5 m	220	200	220	300	250	70	**210**
Quonnie Pond - Shady Harbor Brk	160	150	230	220	200	100	**177**
Quonnie Pond - Yacht Basin	160	150	250	230	360	60	**202**
Saugatucket River - Caleb's Dock	-	160	50	120	160	100	**118**
Winnapaug Pond - Aquaculture	-	-	210	240	140	50	**160**
Winnapaug Pond - Breachway	220	150	190	240	160	100	**177**
Winnapaug Pond - Golf Course Cove	190	200	190	200	190	130	**183**
Winnapaug Pond - SWest Corner	-	-	200	240	180	90	**178**
Watch Hill Conservancy Sites	**MAY**	**JUNE**	**JULY**	**AUG.**	**SEPT.**	**OCT.**	**MEAN**
Napatree Point - Bayside	-	-	370	150	150	110	**195**
Napatree Point - Oceanside	-	-	330	170	170	100	**193**