

2005 Parameter Data: Total Nitrogen in River and Brook Sites, and Tributaries

Nitrogen is an important nutrient for plant and algae growth, but excess concentrations can cause cultural eutrophication, particularly in estuarine or marine systems. In saltwater, 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.

River sites arranged upstream to downstream when appropriate.

Watershed	RIVER & BROOK SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Code		-- (ug/l or ppb) --						
CE	Bailey's Brook	2890	-	2310	2070	-	2000	2318
NA	Buckeye Brook @ Novelty Rd	2010	2060	1660	1190	1290	740	1492
NA	Buckeye Brook @ Lockwood Brook	3950	3360	2690	2620	3330	1150	2850
NA	Buckeye Brook @ Warner Brook	3520	3470	4240	1890	5020	1280	3237
NA	Buckeye Brook @ Mill Cove	2720	2580	2180	1780	2040	1230	2088
WD	Falls River D - Step Stone Falls	410	930	680	540	900	510	662
WD	Falls River C - Austin Farm Rd.	340	580	540	300	640	470	478
WD	Falls River B - Sand Banks	320	450	410	130	250	860	403
WD	Falls River A - Twin Bridges	260	480	370	210	520	460	383
TH	Moosup River - Upstream	450	670	610	440	510	850	588
TH	Moosup River A - Fairbanks Bridge	490	880	720	940	440	1190	777
TH	Moosup River B - Trestle Trail	430	700	670	760	620	450	605
M	Moshassuck River - Collyer Field	160	-	220	-	200	400	245
PE	Narrow River 01- Gilbert Stuart	740	610	490	310	350	-	500
PE	Narrow River 02 - Upper Pond 0.5M	500	450	750	1260	630	-	718
PE	Narrow River 02 - Upper Pond 3.0M	590	530	670	1020	600	-	682
PE	Narrow River 03 - Lower Pond A 0.5M	520	300	730	680	710	-	588
PE	Narrow River 03 - Lower Pond A 3.0M	810	600	700	660	810	-	716
PE	Narrow River 04 - Lower Pond B 0.5M	620	340	730	720	670	-	616
PE	Narrow River 04 - Lower Pond B 3.0M	760	650	880	640	830	-	752
PE	Narrow River 05 - Lacey Bridge	540	450	850	650	650	-	628
PE	Narrow River 06 - Mettatuxet Beach	540	-	740	-	650	-	643
PE	Narrow River 07 - End of Narrows	590	400	690	670	700	-	610
PE	Narrow River 08 - Middlebridge	560	410	740	670	570	-	590
PE	Narrow River 09 - Pettaquamscutt	720	-	480	610	-	-	603
PE	Narrow River 10 - Sprague Bridge	520	2100	540	380	390	-	786
PE	Narrow River 11 - Mettatuxet Brook	680	2520	670	890	-	-	1190
PE	Narrow River 12 - Mumford Brook	1390	1190	1190	910	880	-	1112
PE	Narrow River 15 - Crooked Brook Farm	760	700	-	-	-	620	693
PE	Narrow River 16 - Crooked Brook School	870	2230	-	-	-	630	1243

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Watershed	RIVER & BROOK SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Code	(continued)	-- (ug/l or ppb) --						
WD	Pawcatuck River @ Avondale 0.5M	300	840	480	370	760	940	615
WD	Pawcatuck River @ Avondale 3.0M	550	660	500	400	690	640	573
WD	Queen Riv. @ Wm Reynolds Rd. (Brownell's)	690	720	1780	1340	-	-	1133
WD	Queen River @ Sand Bridge (TNC)	670	760	840	750	960	440	737
WD	Queen River @ Locke Brk	-	360	450	330	270	740	430
WD	Queen River @ Sherman Brk	230	800	530	310	340	870	513
WD	Shunock River @ Babcock	2050	-	2090	-	-	740	1627
WD	Shunock River @ Hewitt	2010	-	2320	-	-	6700	3677
WO	Woonasquatucket R. @ Cricket Park	-	1450	3115	6370	4370	890	3239
WO	Woonasquatucket R @ Donigian Park	980	2930	1440	1410	1510	1240	1585
Watershed	TRIBUTARY SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Code		-- (ug/l or ppb) --						
WD	Asseconk Swamp	-	-	920	-	-	890	905
WD	Barber - Mud Brook	530	420	430	370	-	270	404
A	Belleville @ RR Xing	680	-	710	-	-	610	667
A	Belleville @ Sluiceway	1350	-	1020	-	-	1130	1167
PE	Carr Inlet (NK)	1160	-	830	-	610	-	867
WO	Georgiaville @ Capron Pond	370	340	-	410	-	620	435
WO	Georgeville @ Harris	500	670	-	350	-	600	530
GB	Greenwich Bay - 01 (Maskerchugg River)	1150	1230	1690	1560	1880	1690	1533
GB	Greenwich Bay - 02 (Gorton Pond outflow)	1590	1320	1000	1440	680	1230	1210
GB	Greenwich Bay - 03 (Hardig Brook @ Rte 115)	1330	1310	1190	1180	1330	1360	1283
GB	Greenwich Bay - 04 (Mill Creek)	3050	2390	2510	2920	2900	1180	2492
GB	Greenwich Bay - 05 (Hardig Brk @ Health Ctr)	-	1690	1910	1650	1520	1170	1588
GB	Greenwich Bay - 06 (Tuscatucket Brook)	3350	2970	2870	2530	2490	3250	2910
GB	Greenwich Bay - 07 (Southern Creek)	4600	4520	4980	5270	5010	1420	4300
WD	Locv – Brushy Brook @ Sawmill	440	-	1120	-	-	-	780
WD	Locv – Brushy Brook @ Woody	300	-	460	-	-	-	380
WD	Locv – Moscow Brook @ Sawmill	330	-	510	-	-	-	420
SK	Nanaqua. Trib @ Quaket Brook	480	860	1110	1020	-	630	820
SK	Nanaqua. Trib @ Sin & Flesh Brook	420	710	570	490	-	810	600
SK	Nanaqua. Trib @ White Wine Brook	560	790	930	490	-	1630	880
WD	Pasquisset Tributary	150	-	560	-	-	440	383
H	Saw Mill Tributary (Sandhill Brook)	1110	-	-	1230	-	480	940

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Watershed	TRIBUTARY SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Code	(continued)	-- (ug/l or ppb) --						
A	Secret - Oak Hill Brook West	330	-	550	-	-	940	607
A	Secret - Oak Hill Brook East	-	-	930	-	-	700	815
A	Secret - Shore Dr.	-	-	860	-	-	740	800
WD	Shickasheen @ Rte 2	500	760	1160	-	-	-	807
WD	Shickasheen @ Miskiania Road	570	930	790	1090	940	500	803
WD	Shickasheen @ Potter Road	530	580	650	720	440	660	597
WD	Shickasheen @ Barber Pond outlet	-	450	440	460	-	-	450
B	Smith & Sayles - Keech Brook	-	-	360	-	-	-	-
B	Smith & Sayles - Balcom Brook	-	-	460	-	-	-	-
B	Smith & Sayles - O'Donnel Brook	-	-	630	-	-	-	-
TA	Stafford Inlet - Downstream	-	1420	1330	-	-	-	1375
TA	Stafford Pond - NE Cove	-	410	550	-	590	-	517
WD	Watchaug - Perry Healy	460	-	820	-	-	680	653
WD	Waterman @ Rte 44	530	-	550	-	-	580	553
WO	Waterman @ Saw Mill	540	-	820	-	-	810	723
WO	Waterman @ Golf Course	500	-	600	-	-	420	507
WO	Waterman @ Aldrich	410	-	590	-	-	450	483
WD	White Brook Pond Inlet	-	1580	2140	-	-	-	1860

Watershed	WPWA - TRIBUTARIES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Code		-- (ug/l or ppb) --						
WD	Ashaway River @ Rte 216	-	1660	1900	2230	2370	1550	1942
WD	Chipuxet Brook @ Rte 138	890	1030	1740	740	510	380	882
WD	Fisherville Brook	320	470	550	570	650	480	507
WD	Glen Rock Brook	370	610	570	380	440	590	493
WD	Pawcatuck River @ Biscuit City Rd.	-	960	860	1050	1160	-	1008
WD	Pawcatuck River @ Burdickville Rd	510	910	1100	1180	1240	470	902
WD	Pawcatuck River below Kenyon Ind.	700	1120	1270	1810	1870	510	1213
WD	Pawcatuck River @ Rte 91	710	1100	1300	1570	1570	910	1193
WD	Queen River @ Mail Rd	-	1330	910	610	670	510	806
WD	Queen River @ Rte 102	330	380	720	510	710	420	512
WD	Taney Brook	750	1430	1720	2150	2150	450	1442
WD	Tomaquag Brook @ Woodville Rd.	240	760	1010	-	-	900	728
WD	Usquepaugh River @ Rte 2	690	800	1020	2140	1180	450	1047