

## 2006 Parameter Data: Total Nitrogen, River, Brook and Tributary Sites

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. However, in waters with high concentrations of phosphorus, the usual limiting nutrient in freshwater, nitrogen plays a more important role in eutrophication. 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

Watershed	LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>	<b>RIVERS</b>	<b>-- (ug/l or ppb) --</b>						
CE	Bailey's Brook - Upstream	2190	-	1250	1310	1080	1500	<b>1466</b>
NA	Buckeye Brook #1 @ Novelty Rd	1670	1710	1650	1300	1140	1450	<b>1487</b>
NA	Buckeye Brook #2 @ Lockwood Brk	3800	4010	3030	2420	2730	2070	<b>3010</b>
NA	Buckeye Brook #3 @ Warner Brook	2865	3080	2530	3970	2980	2110	<b>2923</b>
NA	Buckeye Brook #4 @ Mill Cove	2330	2080	1920	1640	1600	1460	<b>1838</b>
WD	Falls River D - Step Stone Falls	450	720	690	540	590	590	<b>597</b>
WD	Falls River C - Austin Farm Rd.	400	520	550	430	430	520	<b>475</b>
WD	Falls River B - Sand Banks	420	480	470	320	470	480	<b>440</b>
WD	Falls River A - Twin Bridges	390	530	460	310	320	460	<b>412</b>
TH	Moosup River - Upstream	440	580	1130	690	580	470	<b>648</b>
TH	Moosup River A - Fairbanks	600	460	620	490	390	400	<b>493</b>
TH	Moosup River B - Trestle Trail	350	430	540	390	340	360	<b>402</b>
M	Moshassuck River - Collyer Field	750	800	1230	1160	1310	1030	<b>1047</b>
PE	NR 01- Gilbert Stuart	720	690	470	410	440	-	<b>546</b>
PE	NR 02 - Upper Pond 0.5M	680	550	460	560	940	-	<b>638</b>
PE	NR 02 - Upper Pond 3.0M	650	740	780	590	500	-	<b>652</b>
PE	NR 03 - Lower Pond A 0.5M	650	1000	670	560	440	-	<b>664</b>
PE	NR 03 - Lower Pond A 3.0M	510	930	550	480	470	-	<b>588</b>
PE	NR 04 - Lower Pond B 0.5M	660	1170	650	520	660	-	<b>732</b>
PE	NR 04 - Lower Pond B 3.0M	610	620	640	600	490	-	<b>592</b>
PE	NR 05 - Lacey Bridge	560	420	530	650	380	-	<b>508</b>
PE	NR 06 - Mettatuxet Beach	460	590	420	630	410	-	<b>502</b>
PE	NR 07 - End of Narrows	520	550	580	-	400	-	<b>513</b>
PE	NR 08 - Middlebridge	450	510	510	640	330	-	<b>488</b>
PE	NR 09 - Pettaquamscutt	-	-	-	-	-	-	
PE	NR 10 - Sprague Bridge	530	510	570	450	410	-	<b>494</b>
PE	NR 11 - Mettatuxet Brook	-	2570	2450	1940	1830	-	<b>2198</b>
PE	NR 12 - Mumford Brook	1000	1240	1010	940	840	-	<b>1006</b>
PE	NR 13 - Near Lakeside Dr	-	-	-	-	400	370	<b>385</b>
PE	NR 14 - Lakeside Drive outfall	-	-	-	-	1850	2310	<b>2080</b>
PE	NR 15 - Crooked Brook Farm	920	1040	1650	1780	1100	750	<b>1207</b>
PE	NR 16 - Crooked Brook School	790	1090	1640	DRY	1120	740	<b>1076</b>

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<b>Code</b>	<b>RIVERS (continued)</b>	<b>-- (ug/l or ppb) --</b>						
WD	Pawcatuck R - Bradford 0.5M	510	790	-	1030	910	-	<b>810</b>
WD	Pawcatuck R - Avondale 0.5M	640	750	920	730	780	460	<b>713</b>
WD	Pawcatuck R - Avondale 3.0M	530	430	470	750	740	610	<b>588</b>
WD	Queen River @ Sand Bridge (TNC)	470	570	790	680	560	770	<b>640</b>
WD	Queen River @ Locke Brk	330	380	1180	320	220	360	<b>465</b>
WD	Queen River @ Sherman Brk	270	250	400	350	200	320	<b>298</b>
H	Saw Mill Inlet (Sandhill Brook)	-	-	1090	860	960	480	<b>848</b>
WD	Shickasheen @ Rte 2	340	530	970	1040	660	-	<b>708</b>
WD	Shickasheen @ Miskiania Road	490	550	750	630	450	-	<b>574</b>
WD	Shickasheen @ Barber Pond Outlet	450	480	500	890	420	-	<b>548</b>
WD	Shickasheen @ Rte 138	430	540	590	970	820	-	<b>670</b>
WO	Woonasquatucket R. @ Cricket Park	520	640	850	1530	1200	510	<b>875</b>
WO	Woonasquatucket River @ Donigian	640	850	830	910	990	540	<b>793</b>

Watershed	LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>	<b>TRIBUTARIES</b>	<b>-- (ug/l or ppb) --</b>						
WD	Asseconk Swamp	520	-	865	-	-	600	<b>662</b>
WD	Barber - Mud Brook	360	400	360	310	300	-	<b>346</b>
A	Belleville @ RR Xing	790	-	650	630	840	1050	<b>792</b>
A	Belleville @ Sluiceway	1280	-	1040	1190	1200	1350	<b>1212</b>
PE	Carr Inlet (NK)	990	-	790	-	-	1060	<b>947</b>
WO	Georgiaville @ Capron Pond	410	-	420	-	-	360	<b>397</b>
WO	Georgeville @ Harris	420	-	520	-	-	270	<b>403</b>
GB	Greenwich Bay - 01 (Maskerchugg River)	1010	1010	1040	830	870	590	<b>892</b>
GB	Greenwich Bay - 02 (Gorton Pond outflow)	1250	1120	980	760	850	690	<b>942</b>
GB	Greenwich Bay - 03 (Hardig @ Rte 115)	1140	1330	1290	1120	1140	1080	<b>1183</b>
GB	Greenwich Bay - 04 (Mill Creek)	2200	2720	2540	2100	2200	810	<b>2095</b>
GB	Greenwich Bay - 05 (Hardig @ Health Ctr)	1450	1640	1540	1300	1340	1540	<b>1468</b>
GB	Greenwich Bay - 06 (Tuscatucket Brk)	2600	3010	2570	2340	2170	1420	<b>2352</b>
GB	Greenwich Bay - 07 (Southern Creek)	4610	4580	4040	3960	4300	1430	<b>3820</b>
NA	Nanaqua. Trib @ Quaket Brorok	480	-	660	-	-	640	<b>593</b>
NA	Nanaqua. Trib @ Sin & Flesh Brk	580	-	800	-	-	600	<b>660</b>
NA	Nanaqua. Trib @ White Wine Brk	900	-	1080	-	-	1340	<b>1107</b>
WD	Pasquisett Tributary	520	-	860	-	-	770	<b>717</b>
A	Secret - Oak Hill Brook West	1770	-	2090	-	-	1850	<b>1903</b>
A	Secret - Oak Hill Brook East	1700	-	2100	-	-	1700	<b>1833</b>
A	Secret - Shore Dr.	560	-	540	-	-	640	<b>580</b>
WD	Shunock River @ Hewitt	390	-	670	-	-	540	<b>533</b>

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<b>Code</b>	<b>TRIBUTARIES (continued)</b>	<b>-- (ug/l or ppb) --</b>						
WO	Slack's Tributary #1 / A	-	-	600	-	-	-	-
WO	Slack's Tributary #2 / B	-	-	500	-	-	-	-
WO	Slack's Tributary #3 / C	-	-	2090	-	-	-	-
WO	Slack's Tributary #4 / D	-	-	510	-	-	-	-
B	Smith & Sayles @ Keech Brook	-	-	-	-	-	-	-
B	Smith & Sayles @ Balcom Brk	-	-	-	-	-	-	-
B	Smith & Sayles @ O'Donnel Brk	-	-	-	-	-	-	-
TA	Staf Inlet - Downstream	-	1500	1260	-	-	-	<b>1380</b>
TA	Stafford - NE Cove	-	330	390	440	-	460	<b>405</b>
WD	Watchaug - Perry Healy	450	-	660	-	-	480	<b>530</b>
WO	Waterman @ Rte 44	510	-	860	-	-	710	<b>693</b>
WO	Waterman @ Saw Mill	380	-	560	-	-	750	<b>563</b>
WO	Waterman @ Golf Course	380	-	560	-	-	520	<b>487</b>
WO	Waterman @ Aldrich	370	-	480	-	-	600	<b>483</b>
WD	White Brook Pond Inlet	2230	-	2580	2350	-	2500	<b>2415</b>

Watershed	LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>	<b>WPWA - TRIBUTARIES</b>	<b>-- (ug/l or ppb) --</b>						
WD	Chipuxet River @ Rte 138	1030	980	1100	530	650	660	<b>825</b>
WD	Glen Rock Brook	450	170	440	430	390	520	<b>400</b>
WD	Pawcatuck R @ Biscuit City Rd	-	-	870	710	790	660	<b>758</b>
WD	Pawcatuck R @ Burdickville Rd	540	650	900	930	1010	-	<b>806</b>
WD	Pawcatuck R @ Chase Hill Rd.	630	700	-	990	940	-	<b>815</b>
WD	P'tuck below Kenyon Ind.	570	840	1560	1460	1290	760	<b>1080</b>
WD	Pawcatuck R @ Rte 91	830	830	1140	810	1230	970	<b>968</b>
WD	Pawcatuck R below Bradford (DA)	530	-	1010	1150	1180	-	<b>968</b>
WD	Queen River @ Mail Rd	380	490	700	680	560	530	<b>557</b>
WD	Queen River @ Rte 102	280	240	550	520	450	410	<b>408</b>
WD	Usquepaugh River @ Rte 2	460	570	850	630	1230	73	<b>636</b>

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