

2006 Parameter Data: Nitrate-nitrogen, River, Brook and Tributary Sites

Nitrate-nitrogen is typically the most common form of inorganic nitrogen in lakes and streams. Nitrate-nitrogen concentrations are monitored in fresh water systems to collect baseline information to document health risks due to consumption of water. The drinking water standard for nitrate-nitrogen is 10 parts per million (ppm). This is equivalent to 10,000 parts per billion (ppb), the units URI Watershed Watch reports this nutrient in. Nitrate-nitrogen levels above 1000 ppb indicate human impact of some sort; from home or agricultural fertilizers, human or animal waste. Nitrate-nitrogen is of particular concern in estuarine or salt water systems as it is the nutrient that stimulates plant and algae growth there, often called the limiting nutrient.

| Watershed | LOCATION | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | MEAN |
|-------------|----------------------------------|----------------------------|------|------|------|-------|------|-------------|
| Code | RIVERS | -- (ug/l or ppb) -- | | | | | | |
| CE | Bailey's Brook - Upstream | 1350 | - | 860 | 1040 | 690 | 1230 | 1034 |
| NA | Buckeye Brook #1 @ Novelty Rd | 790 | 1300 | 1220 | 970 | 700 | 840 | 970 |
| NA | Buckeye Brook #2 @ Lockwood Brk | 3180 | 3940 | 2610 | 1910 | 2690 | 1760 | 2682 |
| NA | Buckeye Brook #3 @ Warner Brook | 2470 | 3450 | 2070 | 3960 | 2920 | 1810 | 2780 |
| NA | Buckeye Brook #4 @ Mill Cove | 1680 | 2260 | 1560 | 1370 | 1350 | 1000 | 1537 |
| WD | Falls River D - Step Stone Falls | ND | ND | 50 | ND | 40 | ND | 28 |
| WD | Falls River C - Austin Farm Rd. | 50 | 70 | 120 | 100 | 100 | 40 | 80 |
| WD | Falls River B - Sand Banks | 50 | 70 | 90 | 70 | 50 | ND | 58 |
| WD | Falls River A - Twin Bridges | 50 | 70 | 90 | 70 | 40 | ND | 57 |
| TH | Moosup River - Upstream | 100 | 110 | 270 | 230 | 170 | 150 | 172 |
| TH | Moosup River A - Fairbanks | 50 | 80 | 110 | 90 | 90 | 60 | 80 |
| TH | Moosup River B - Trestle Trail | 50 | 70 | 130 | 110 | 120 | 80 | 93 |
| M | Moshassuck River - Collyer Field | 340 | 440 | 600 | 640 | 540 | 110 | 445 |
| PE | NR 01- Gilbert Stuart | 360 | 260 | 60 | 70 | 130 | - | 176 |
| PE | NR 02 - Upper Pond 0.5M | 220 | 80 | ND | ND | ND | - | 72 |
| PE | NR 02 - Upper Pond 3.0M | 40 | 30 | ND | ND | ND | - | 26 |
| PE | NR 03 - Lower Pond A 0.5M | 180 | 90 | ND | ND | ND | - | 66 |
| PE | NR 03 - Lower Pond A 3.0M | 70 | 70 | ND | ND | ND | - | 40 |
| PE | NR 04 - Lower Pond B 0.5M | 170 | 80 | ND | ND | ND | - | 62 |
| PE | NR 04 - Lower Pond B 3.0M | 40 | 80 | ND | ND | ND | - | 36 |
| PE | NR 05 - Lacey Bridge | 150 | 70 | ND | ND | ND | - | 56 |
| PE | NR 06 - Mettatuxet Beach | 360 | 90 | ND | ND | ND | - | 102 |
| PE | NR 07 - End of Narrows | 160 | 90 | ND | - | ND | - | 73 |
| PE | NR 08 - Middlebridge | 110 | 60 | ND | ND | ND | - | 46 |
| PE | NR 09 - Pettaquamscutt | - | - | - | - | - | - | - |
| PE | NR 10 - Sprague Bridge | 120 | 30 | ND | ND | ND | - | 42 |
| PE | NR 11 - Mettatuxet Brook | - | 2740 | 1940 | 1640 | 1800 | - | 2030 |
| PE | NR 12 - Mumford Brook | 690 | 1080 | 670 | 670 | 410 | - | 704 |
| PE | NR 13 - Near Lakeside Dr | - | - | - | - | ND | 40 | 30 |
| PE | NR 14 - Lakeside Drive outfall | - | - | - | - | 1830 | 2200 | 2015 |
| PE | NR 15 - Crooked Brook Farm | 40 | ND | 30 | 40 | 70 | ND | 37 |
| PE | NR 16 - Crooked Brook School | 140 | 250 | ND | dry | ND | ND | 90 |

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| Code | RIVERS (continued) | -- (ug/l or ppb) -- | | | | | | |
| WD | Pawcatuck R - Bradford 0.5M | 130 | 310 | - | 660 | 560 | - | 358 |
| WD | Pawcatuck R - Avondale 0.5M | 160 | 90 | 130 | 30 | 100 | 100 | 102 |
| WD | Pawcatuck R - Avondale 3.0M | 140 | 220 | 30 | 30 | 60 | 80 | 93 |
| WD | Queen River @ Sand Bridge (TNC) | 110 | 140 | 490 | 450 | 410 | 560 | 360 |
| WD | Queen River @ Locke Brk | 110 | 90 | 160 | 140 | 90 | 60 | 108 |
| WD | Queen River @ Sherman Brk | 90 | - | 110 | 130 | 80 | ND | 86 |
| H | Saw Mill Inlet (Sandhill Brook) | - | - | 660 | 530 | 450 | 60 | 425 |
| WD | Shickasheen @ Rte 2 | ND | 60 | ND | 30 | ND | ND | 28 |
| WD | Shickasheen @ Miskiania Road | 50 | ND | 80 | 70 | 60 | ND | 50 |
| WD | Shickasheen @ Barber Pond Outlet | 90 | 60 | 50 | ND | ND | 70 | 52 |
| WD | Shickasheen @ Rte 138 | 90 | 110 | 140 | 550 | 410 | 150 | 242 |
| WO | Woonasquatucket R. @ Cricket Park | 200 | 270 | 490 | 1130 | 1080 | 240 | 568 |
| WO | Woonasquatucket River @ Donigian | 280 | 440 | 490 | 580 | 740 | 300 | 472 |

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| Code | TRIBUTARIES | -- (ug/l or ppb) -- | | | | | | |
| WD | Asseconk Swamp | ND | - | ND | - | - | 180 | 73 |
| WD | Barber - Mud Brook | 180 | 170 | 160 | 130 | 110 | 210 | 160 |
| A | Belleville @ RR Xing | 490 | - | 430 | 430 | 600 | 780 | 546 |
| A | Belleville @ Sluiceway | 840 | - | 720 | 870 | 920 | 940 | 858 |
| PE | Carr Inlet (NK) | 610 | - | 540 | - | - | 830 | 660 |
| WO | Georgiaville @ Capron Pond | 130 | - | 60 | - | - | 70 | 87 |
| WO | Georgeville @ Harris | 230 | - | 170 | - | - | 200 | 200 |
| GB | Greenwich Bay - 01 (Maskerchugg River) | 660 | 860 | 710 | 550 | 540 | 300 | 603 |
| GB | Greenwich Bay - 02 (Gorton Pond outflow) | 810 | 920 | 610 | 490 | 550 | 320 | 617 |
| GB | Greenwich Bay - 03 (Hardig @ Rte 115) | 800 | 1280 | 1030 | 950 | 1010 | 830 | 983 |
| GB | Greenwich Bay - 04 (Mill Creek) | 1900 | 2800 | 2410 | 1930 | 2220 | 270 | 1922 |
| GB | Greenwich Bay - 05 (Hardig @ Health Ctr) | 1130 | 1390 | 1340 | 1160 | 1160 | 1060 | 1207 |
| GB | Greenwich Bay - 06 (Tuscatucket Brk) | 1910 | 2830 | 2330 | 1760 | 1620 | 1190 | 1940 |
| GB | Greenwich Bay - 07 (Southern Creek) | 4020 | 4300 | 4070 | 3970 | 4340 | 890 | 3598 |
| NA | Nanaqua. Trib @ Quaket Brorok | ND | - | ND | - | - | ND | ND |
| NA | Nanaqua. Trib @ Sin & Flesh Brk | 250 | - | 210 | - | - | 120 | 193 |
| NA | Nanaqua. Trib @ White Wine Brk | 730 | - | 600 | - | - | 1190 | 840 |
| WD | Pasquisett Tributary | 120 | - | 100 | - | - | 170 | 130 |
| A | Secret - Oak Hill Brook West | 1490 | - | 1850 | - | - | 1640 | 1660 |
| A | Secret - Oak Hill Brook East | 1490 | - | 1910 | - | - | 1670 | 1690 |
| A | Secret - Shore Dr. | 100 | - | ND | - | - | 190 | 103 |

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| Code | TRIBUTARIES (continued) | -- (ug/l or ppb) -- | | | | | | |
| WD | Shunock River @ Hewitt | 130 | - | 280 | - | - | 110 | 173 |
| WO | Slack's Tributary #1 / A | - | - | 230 | - | - | - | - |
| WO | Slack's Tributary #2 / B | - | - | 350 | - | - | - | - |
| WO | Slack's Tributary #3 / C | - | - | 1920 | - | - | - | - |
| WO | Slack's Tributary #4 / D | - | - | 50 | - | - | - | - |
| B | Smith & Sayles @ Keech Brook | - | - | - | - | - | - | - |
| B | Smith & Sayles @ Balcom Brk | - | - | - | - | - | - | - |
| B | Smith & Sayles @ O'Donnel Brk | - | - | - | - | - | - | - |
| TA | Staf Inlet - Downstream | - | 1330 | 980 | - | - | - | 1155 |
| TA | Stafford - NE Cove | - | ND | ND | ND | - | ND | ND |
| WD | Watchaug - Perry Healy | 140 | - | 230 | - | - | 170 | 180 |
| WO | Waterman @ Rte 44 | 140 | - | 200 | - | - | 70 | 137 |
| WO | Waterman @ Saw Mill | 160 | - | 190 | - | - | 440 | 263 |
| WO | Waterman @ Golf Course | 100 | - | 140 | - | - | 60 | 100 |
| WO | Waterman @ Aldrich | 170 | - | 310 | - | - | 160 | 213 |
| WD | White Brook Pond Inlet | 2200 | - | 1690 | 2250 | - | 2200 | 2085 |

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| Code | WPWA - TRIBUTARIES | -- (ug/l or ppb) -- | | | | | | |
| WD | Chipuxet River @ Rte 138 | 570 | 540 | 690 | 130 | 250 | 310 | 415 |
| WD | Glen Rock Brook | 150 | 180 | 180 | 150 | 160 | 180 | 167 |
| WD | Pawcatuck R @ Biscuit City Rd | - | - | 270 | 120 | 360 | 220 | 243 |
| WD | Pawcatuck R @ Burdickville Rd | 110 | 230 | 480 | 590 | 560 | - | 394 |
| WD | Pawcatuck R @ Chase Hill Rd. | 130 | 220 | - | 630 | 540 | - | 380 |
| WD | P'tuck below Kenyon Ind. | 100 | 190 | 790 | 860 | 530 | 90 | 427 |
| WD | Pawcatuck R @ Rte 91 | - | 260 | 630 | 280 | 710 | 490 | 474 |
| WD | Pawcatuck R below Bradford (DA) | 130 | - | 460 | 690 | 650 | - | 483 |
| WD | Queen River @ Mail Rd | 140 | 260 | 360 | 380 | 400 | 50 | 265 |
| WD | Queen River @ Rte 102 | 50 | 40 | 130 | 110 | 100 | 80 | 85 |
| WD | Usquepaugh River @ Rte 2 | 140 | 250 | 560 | 190 | 680 | 420 | 373 |

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