

## 2005 Parameter Data: Nitrate-nitrogen in River and Brook Sites, and Tributaries

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.

*River sites arranged upstream to downstream when appropriate.*

Watershed	RIVER & BROOK SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>		<b>-- (ug/l or ppb) --</b>						
CE	Bailey's Brook	2720	-	1980	2010	-	1750	<b>2115</b>
NA	Buckeye Brook @ Novelty Rd	1110	1710	1270	1120	840	330	<b>1063</b>
NA	Buckeye Brook @ Lockwood Brook	3870	3530	2270	1870	3010	810	<b>2560</b>
NA	Buckeye Brook @ Warner Brook	3240	3810	4180	1300	4850	710	<b>3015</b>
NA	Buckeye Brook @ Mill Cove	2120	2420	1530	1580	1590	430	<b>1612</b>
WD	Falls River D - Step Stone Falls	ND	190	80	160	ND	110	<b>97</b>
WD	Falls River C - Austin Farm Rd.	60	220	170	200	90	100	<b>120</b>
WD	Falls River B - Sand Banks	50	180	110	50	ND	90	<b>83</b>
WD	Falls River A - Twin Bridges	50	150	70	40	ND	80	<b>68</b>
TH	Moosup River - Upstream	50	170	180	260	230	160	<b>175</b>
TH	Moosup River A - Fairbanks Bridge	130	370	190	80	70	480	<b>220</b>
TH	Moosup River B - Trestle Trail	50	170	150	190	260	130	<b>158</b>
M	Moshassuck River - Collyer Field	160	-	220	-	200	400	<b>245</b>
PE	Narrow River 01- Gilbert Stuart	430	300	100	50	ND	-	<b>180</b>
PE	Narrow River 02 - Upper Pond 0.5M	170	110	ND	40	ND	-	<b>72</b>
PE	Narrow River 02 - Upper Pond 3.0M	100	60	ND	ND	ND	-	<b>44</b>
PE	Narrow River 03 - Lower Pond A 0.5M	170	100	ND	ND	ND	-	<b>66</b>
PE	Narrow River 03 - Lower Pond A 3.0M	120	60	ND	ND	ND	-	<b>48</b>
PE	Narrow River 04 - Lower Pond B 0.5M	170	130	ND	ND	ND	-	<b>72</b>
PE	Narrow River 04 - Lower Pond B 3.0M	180	50	ND	ND	ND	-	<b>58</b>
PE	Narrow River 05 - Lacey Bridge	180	90	ND	ND	ND	-	<b>66</b>
PE	Narrow River 06 - Mettatuxet Beach	200	-	ND	-	ND	-	<b>80</b>
PE	Narrow River 07 - End of Narrows	190	100	ND	ND	ND	-	<b>70</b>
PE	Narrow River 08 - Middlebridge	140	70	ND	ND	ND	-	<b>54</b>
PE	Narrow River 09 - Pettaquamscutt	80	-	ND	ND	-	-	<b>40</b>
PE	Narrow River 10 - Sprague Bridge	80	40	ND	ND	ND	-	<b>36</b>
PE	Narrow River 11 - Mettatuxet Brook	80	1140	ND	150	ND	-	<b>282</b>
PE	Narrow River 12 - Mumford Brook	330	1080	860	720	720	-	<b>742</b>
PE	Narrow River 15 - Crooked Brook Farm	50	50	-	-	-	60	<b>53</b>
PE	Narrow River 16 - Crooked Brook School	50	60	-	-	-	40	<b>50</b>

ND = No Detect; Limit of Detection = 40 ug/L

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<b>Code</b>	<b>(continued)</b>	<b>-- (ug/l or ppb) --</b>						
WD	Pawcatuck River @ Avondale 0.5M	280	90	ND	ND	160	320	<b>148</b>
WD	Pawcatuck River @ Avondale 3.0M	100	470	ND	40	ND	140	<b>132</b>
WD	Queen Riv. @ Wm Reynolds Rd. (Brownell's)	360	440	1410	1110	-	-	<b>830</b>
WD	Queen River @ Sand Bridge (TNC)	420	520	520	550	710	70	<b>465</b>
WD	Queen River @ Locke Brk	-	210	180	170	150	ND	<b>146</b>
WD	Queen River @ Sherman Brk	70	200	220	170	100	100	<b>143</b>
WD	Shunock River @ Babcock	1710	-	1710	-	-	150	<b>1190</b>
WD	Shunock River @ Hewitt	1820	-	1690	-	-	150	<b>1220</b>
WO	Woonasquatucket R. @ Cricket Park	-	480	1320	1530	1240	280	<b>970</b>
WO	Woonasquatucket R @ Donigian Park	620	1120	960	1120	1180	880	<b>980</b>
Watershed	TRIBUTARY SITES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>		<b>-- (ug/l or ppb) --</b>						
WD	Asseconk Swamp	-	-	ND	-	-	570	<b>295</b>
WD	Barber - Mud Brook	270	230	190	110	-	100	<b>180</b>
A	Belleville @ RR Xing	400	-	420	-	-	420	<b>413</b>
A	Belleville @ Sluiceway	980	-	530	-	-	820	<b>777</b>
PE	Carr Inlet (NK)	850	-	600	-	420	-	<b>623</b>
WO	Georgiaville @ Capron Pond	40	60	-	100	-	150	<b>88</b>
WO	Georgeville @ Harris	330	360	-	ND	-	180	<b>223</b>
GB	Greenwich Bay - 01 (Maskerchugg River)	920	950	1410	1310	1490	1360	<b>1240</b>
GB	Greenwich Bay - 02 (Gorton Pond outflow)	1210	890	630	1010	330	920	<b>832</b>
GB	Greenwich Bay - 03 (Hardig Brook @ Rte 115)	1250	1170	950	990	1090	1050	<b>1083</b>
GB	Greenwich Bay - 04 (Mill Creek)	3200	2730	2370	2860	2790	470	<b>2403</b>
GB	Greenwich Bay - 05 (Hardig Brk @ Health Ctr)	1370	1460	1330	1360	1310	620	<b>1242</b>
GB	Greenwich Bay - 06 (Tuscatucket Brook)	3380	2800	2450	2200	2340	3280	<b>2742</b>
GB	Greenwich Bay - 07 (Southern Creek)	4620	4850	4700	4910	4810	890	<b>4130</b>
WD	Locv – Brushy Brook @ Sawmill	190	-	760	-	-	-	<b>475</b>
WD	Locv – Brushy Brook @ Woody	ND	-	40	-	-	-	<b>30</b>
WD	Locv – Moscow Brook @ Sawmill	ND	-	90	-	-	-	<b>55</b>
SK	Nanaqua. Trib @ Quaket Brook	ND	ND	150	ND	-	ND	<b>46</b>
SK	Nanaqua. Trib @ Sin & Flesh Brook	100	220	ND	ND	-	340	<b>20</b>
SK	Nanaqua. Trib @ White Wine Brook	260	230	100	50	-	1330	<b>394</b>
WD	Pasquisset Tributary	130	-	70	-	-	60	<b>87</b>
H	Saw Mill Tributary (Sandhill Brook)	630	-	-	1040	-	110	<b>593</b>

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A	Secret - Oak Hill Brook West	-	-	60	-	-	-	<b>60</b>
A	Secret - Oak Hill Brook East	-	-	ND	-	-	-	-
A	Secret - Shore Dr.	-	-	ND	-	-	-	-
WD	Shickasheen @ Rte 2	50	-	480	-	-	-	<b>265</b>
WD	Shickasheen @ Miskiania Road	ND	-	ND	ND	ND	-	<b>15</b>
WD	Shickasheen @ Potter Road	30	-	70	ND	70	110	<b>59</b>
WD	Shickasheen @ Barber Pond outlet	-	-	60	ND	-	-	<b>38</b>
B	Smith & Sayles - Keech Brook	-	-	40	-	-	-	-
B	Smith & Sayles - Balcom Brook	-	-	50	-	-	-	-
B	Smith & Sayles - O'Donnel Brook	-	-	40	-	-	-	-
TA	Stafford Inlet - Downstream	-	-	810	-	-	-	-
TA	Stafford Pond - NE Cove	-	-	40	-	50	-	<b>45</b>
WD	Watchaug - Perry Healy	90	-	90	-	-	40	<b>73</b>
WD	Waterman @ Rte 44	40	-	80	-	-	90	<b>70</b>
WO	Waterman @ Saw Mill	40	-	150	-	-	50	<b>80</b>
WO	Waterman @ Golf Course	30	-	ND	-	-	40	<b>28</b>
WO	Waterman @ Aldrich	50	-	ND	-	-	50	<b>38</b>
WD	White Brook Pond Inlet	-	-	390	-	-	-	-

Watershed	WPWA - TRIBUTARIES	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
<b>Code</b>		<b>-- (ug/l or ppb) --</b>						
WD	Ashaway River @ Rte 216	-	-	100	70	40	90	<b>75</b>
WD	Chipuxet Brook @ Rte 138	ND	-	50	40	40	70	<b>43</b>
WD	Fisherville Brook	40	-	ND	ND	ND	60	<b>29</b>
WD	Glen Rock Brook	ND	-	ND	ND	40	80	<b>33</b>
WD	Pawcatuck River @ Biscuit City Rd.	-	-	40	50	ND	-	<b>35</b>
WD	Pawcatuck River @ Burdickville Rd	50	-	40	50	50	60	<b>50</b>
WD	Pawcatuck River below Kenyon Ind.	100	-	70	120	90	50	<b>86</b>
WD	Pawcatuck River @ Rte 91	50	-	ND	50	50	60	<b>45</b>
WD	Queen River @ Mail Rd	-	-	ND	ND	ND	40	<b>21</b>
WD	Queen River @ Rte 102	ND	-	ND	50	40	50	<b>34</b>
WD	Taney Brook	ND	-	ND	100	60	40	<b>46</b>
WD	Tomaquag Brook @ Woodville Rd.	ND	-	90	-	-	40	<b>48</b>
WD	Usquepaugh River @ Rte 2	ND	-	50	ND	40	100	<b>44</b>

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