

## 2002 Parameter Data: Nitrate-Nitrogen

### 2002 Nitrate-Nitrogen Data for Lakes, Ponds, and Reservoirs

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 uses to measure this nutrient. 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; it is the nutrient that stimulates plant and algae growth there.

| LOCATION                      | MAY                        | JUNE | JULY | AUG. | SEPT. | OCT. | MEAN       |
|-------------------------------|----------------------------|------|------|------|-------|------|------------|
| <b>Concentration at 1M</b>    | <b>-- (ug/l or ppb) --</b> |      |      |      |       |      |            |
| ALMY POND (NEWPORT)           | ND                         | 80   | ND   | -    | -     | -    | <b>35</b>  |
| ALTON POND                    | 80                         | -    | 220  | -    | -     | 270  | <b>190</b> |
| BARBER POND                   | 190                        | -    | ND   | -    | -     | ND   | <b>70</b>  |
| BELLEVILLE POND - LOWER       | 420                        | -    | ND   | -    | -     | ND   | <b>150</b> |
| BELLEVILLE POND - UPPER       | 100                        | -    | -    | -    | -     | -    | <b>-</b>   |
| BLACKAMORE POND               | 990                        | -    | ND   | -    | -     | -    | <b>500</b> |
| BOONE LAKE                    | 430                        | -    | -    | -    | -     | -    | <b>-</b>   |
| BOWDISH RESERVOIR             | 40                         | -    | ND   | -    | -     | 50   | <b>35</b>  |
| BREAKHEART POND               | -                          | 50   | ND   | -    | -     | ND   | <b>25</b>  |
| CARBUNCLE POND                | 110                        | -    | ND   | -    | -     | -    | <b>60</b>  |
| CARR POND (NK)                | 410                        | -    | 70   | -    | -     | 80   | <b>190</b> |
| CARR POND (WG)                | 60                         | -    | ND   | -    | -     | ND   | <b>30</b>  |
| CHAPMAN POND                  | 70                         | -    | ND   | -    | -     | ND   | <b>30</b>  |
| COOMBER'S RESERVOIR           | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>  |
| DEEP POND                     | ND                         | -    | 70   | -    | -     | ND   | <b>30</b>  |
| ECHO LAKE - BARRINGTON        | ND                         | -    | ND   | -    | -     | 170  | <b>65</b>  |
| FLAT RIVER RESERVOIR          | 110                        | -    | ND   | -    | -     | 100  | <b>75</b>  |
| GEORGIAVILLE POND             | 40                         | -    | ND   | -    | -     | 60   | <b>40</b>  |
| HAWKINS POND                  | 210                        | -    | ND   | -    | -     | 30   | <b>85</b>  |
| HUNDRED ACRE POND             | 290                        | -    | ND   | -    | -     | ND   | <b>105</b> |
| INDIAN LAKE                   | ND                         | -    | ND   | -    | -     | 50   | <b>25</b>  |
| JILLSON RESERVOIR (ALMY POND) | 540                        | -    | ND   | -    | -     | 110  | <b>220</b> |
| KEECH POND                    | 70                         | -    | ND   | -    | -     | 30   | <b>40</b>  |
| LAKE WASHINGTON               | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>  |
| LAKE WILLIAM                  | -                          | ND   | ND   | -    | -     | ND   | <b>ND</b>  |
| LITTLE POND                   | 100                        | -    | ND   | -    | -     | ND   | <b>40</b>  |
| LOCUSTVILLE POND              | -                          | -    | ND   | -    | -     | 50   | <b>30</b>  |
| LONG POND (HOPKINTON)         | ND                         | -    | ND   | -    | -     | 30   | <b>20</b>  |
| LONG POND (SK)                | 80                         | -    | -    | -    | -     | ND   | <b>45</b>  |
| LOWER SPRAGUE RESERVOIR       | 170                        | -    | ND   | -    | -     | 120  | <b>100</b> |
| MASHAUG POND                  | 200                        | -    | ND   | -    | -     | 20   | <b>80</b>  |
| MEADOWBROOK POND              | 120                        | -    | ND   | -    | -     | ND   | <b>50</b>  |
| MELVILLE POND - UPPER         | 1310                       | -    | -    | -    | -     | ND   | <b>660</b> |
| MISHNOCK LAKE                 | 370                        | -    | 50   | -    | -     | -    | <b>210</b> |
| NANAQUAKET POND               | 20                         | -    | ND   | -    | -     | 90   | <b>40</b>  |
| OAK SWAMP RESERVOIR           | 260                        | -    | ND   | -    | -     | ND   | <b>95</b>  |

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|----------------------------|----------------------------|------|------|------|-------|------|-------------|
| <b>Concentration at 1M</b> | <b>-- (ug/l or ppb) --</b> |      |      |      |       |      |             |
| PASCOAG RESERVOIR          | 60                         | -    | ND   | -    | -     | ND   | <b>30</b>   |
| PASQUIETT POND             | 220                        | -    | 170  | -    | -     | 120  | <b>170</b>  |
| PRINCE'S POND              | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| QUEEN - USQ. (GLEN ROCK)   | 120                        | -    | 390  | -    | -     | 60   | <b>190</b>  |
| RANDALL POND               | ND                         | -    | 60   | -    | -     | 50   | <b>40</b>   |
| ROGER WM PARK POND         | 370                        | -    | ND   | -    | -     | 70   | <b>150</b>  |
| SAND POND                  | 370                        | -    | 60   | -    | -     | ND   | <b>150</b>  |
| SAUGATUCKET POND           | 210                        | -    | 410  | -    | -     | 280  | <b>300</b>  |
| SCHOOLHOUSE P - LOWER      | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| SCHOOLHOUSE P - UPPER      | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| SECRET LAKE                | 950                        | -    | ND   | -    | -     | 490  | <b>485</b>  |
| SILVER LAKE                | ND                         | -    | ND   | -    | -     | 40   | <b>20</b>   |
| SILVER SPRING LAKE         | 1310                       | -    | 480  | -    | -     | 620  | <b>805</b>  |
| SLACK'S RESERVOIR          | 380                        | 40   | ND   | ND   | ND    | ND   | <b>80</b>   |
| SLATER POND                | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| SLATERSVILLE RES. - UPPER  | 170                        | -    | 250  | -    | -     | 290  | <b>235</b>  |
| SMITH & SAYLES RESERVOIR   | ND                         | -    | ND   | 30   | 30    | -    | <b>20</b>   |
| SPALDING POND              | ND                         | -    | ND   | -    | -     | 40   | <b>20</b>   |
| SPECTACLE POND             | 210                        | -    | ND   | -    | -     | 170  | <b>130</b>  |
| SPRING GROVE POND          | ND                         | -    | ND   | -    | -     | 50   | <b>25</b>   |
| SPRING LAKE                | ND                         | -    | ND   | -    | -     | 40   | <b>20</b>   |
| STAFFORD POND              | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| STILLWATER POND            | -                          | -    | ND   | -    | -     | 90   | <b>50</b>   |
| TARBOX POND                | 30                         | -    | ND   | -    | -     | 50   | <b>30</b>   |
| TARKILN POND               | 100                        | -    | -    | -    | -     | -    | <b>-</b>    |
| TIOGUE LAKE                | 600                        | -    | 190  | -    | -     | 140  | <b>310</b>  |
| TUCKER POND                | 20                         | -    | ND   | -    | -     | 50   | <b>30</b>   |
| TURNER RESERVIOR (LOWER)   | 940                        | -    | 980  | -    | -     | 2110 | <b>1345</b> |
| VALLEY FALLS POND          | 1080                       | -    | 780  | -    | -     | 1660 | <b>1175</b> |
| WALLUM LAKE                | 20                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| WARWICK POND               | 1050                       | -    | ND   | -    | -     | 210  | <b>425</b>  |
| WATCHAUG POND              | 80                         | -    | ND   | -    | -     | 50   | <b>50</b>   |
| WATERMAN RESERVOIR         | 150                        | -    | ND   | -    | -     | 40   | <b>70</b>   |
| WENSOTT RESERVOIR          | 90                         | -    | ND   | -    | -     | 50   | <b>50</b>   |
| WESQUAGE POND              | 100                        | -    | -    | -    | ND    | 40   | <b>50</b>   |
| WHITE POND                 | ND                         | -    | -    | -    | -     | ND   | <b>ND</b>   |
| WILSON RESERVOIR           | ND                         | -    | ND   | -    | -     | 60   | <b>30</b>   |
| WOONASQUATUCKET RES. STUMP | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| WYASSUP LAKE               | ND                         | -    | ND   | -    | -     | ND   | <b>ND</b>   |
| WYOMING POND               | -                          | 40   | -    | -    | -     | -    | <b>-</b>    |
| YAWGOO POND                | 450                        | ND   | ND   | ND   | ND    | ND   | <b>85</b>   |

ND = No Detect      Limit of Detection = 20 ppb

Mean calculated using half the limit of detection (10 ppb) for ND