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# Town of Sandown, NH

#### **Project Description:**

The Complex Systems Research Center at the University of New Hampshire conducted a characterization of 2<sup>nd</sup> order and higher streams within the Piscataqua/Coastal Basin of coastal New Hampshire. Existing GIS and remote sensing data were used to map a suite of anthropogenic factors, including land use, impervious surface coverage, and transportation infrastructure, within standard buffers around each stream segment. These factors were then analyzed to produce a categorical indicator representing the status of each stream.

hydrography data to identify perennial streams/rivers of order 2 or higher. Each stream segment was buffered by 150' to support water quality analyses and by 300' to support habitat analyses, and the buffers were then combined with land use data derived from 1998 USGS Digital Orthophotoquads (DOQs). Finally, the buffer/land use composites were categorized

based on the degree to which each buffer was impacted by human activity.

Specifically, the buffer categories reflect the percent of land area within each buffer mapped as either developed, transportation, or agriculture,

Decision Rule <10% impacted Mostly Intact 10-25% impacted Somewhat Modified 25-50% impacted >50% impacted

The buffer characterizations are depicted on the map and summarized by town in the tables below. The map also displays the 300' buffers based on the degree of imperviousness in 2005, and the townwide conservation lands data. Impervious surface coverage by town for 1990, 2000, and 2005, as well as conservation lands acreage by town, are also reported.

### **Stream Buffer** Characterization

Intact

Altered

Mostly Intact

Somewhat Modified

**Percent Impervious by** 

**300-ft Buffer Segment** 

Less Than 10%

Greater Than 10%

**Conservation Lands** 

Level 1, 2, or 2A

# 150-ft Buffer Stream Characterization

#### **Data Summary**

|                          |                | Land Area      |              | Surface W  | ater Area  | r Area 150' Buffer Area |            | Percent of Town Buffer Acreage Categorized a |               |            | orized as  |
|--------------------------|----------------|----------------|--------------|------------|------------|-------------------------|------------|--|---------------|------------|------------|
|                          |                |                | % of         |            | % of       |                         | % of       |  |               | Somewhat   |            |
| Town Name                | Total Acres    | Acres          | Town         | Acres      | Town       | Acres                   | Town       | Intact                                       | Mostly Intact | Modified   | Altered    |
| Alton                    | 53231          | 40629          | 76.3         | 12602      | 23.7       | 0                       | 0.0        | 0.0  | 0.0           | 0.0        | 0.0        |
| Barrington               | 31117          | 29719          | 95.5         | 1399       | 4.5        | 1580                    | 5.3        | 4.2  | 0.8           | 0.3        | 0.0        |
| Brentwood                | 10863          | 10741          | 98.9         | 122        | 1.1        | 481                     | 4.5        | 2.2  | 2.1           | 0.0        | 0.1        |
| Brookfield               | 14880          | 14593          | 98.1         | 287        | 1.9        | 323                     | 2.2        | 2.2  | 0.0           | 0.0        | 0.0        |
| Candia                   | 19557          | 19340          | 98.9         | 217        | 1.1        | 489                     | 2.5        | 2.1  | 0.2           | 0.2        | 0.0        |
| Chester                  | 16718          | 16618          | 99.4         | 100        | 0.6        | 579                     | 3.5        | 2.4  | 0.9           | 0.2        | 0.0        |
| Danville                 | 7569           | 7439           | 98.3         | 131        | 1.7        | 51                      | 0.7        | 0.3  | 0.4           | 0.0        | 0.0        |
| Deerfield                | 33348          | 32584          | 97.7         | 764        | 2.3        | 1038                    | 3.2        | 2.5  | 0.5           | 0.2        | 0.0        |
| Derry                    | 23226          | 22680          | 97.7         | 545        | 2.3        | 0                       | 0.0        | 0.0  | 0.0           | 0.0        | 0.0        |
| Dover                    | 18592          | 17100          | 92.0         | 1492       | 8.0        | 1086                    | 6.3        | 2.3  | 2.0           | 1.3        | 0.7        |
| Durham                   | 15852          | 14305          | 90.2         | 1548       | 9.8        | 690                     | 4.8        | 1.2  | 1.7           | 1.5        | 0.4        |
| East Kingston            | 6381           | 6318           | 99.0         | 63         | 1.0        | 209                     | 3.3        | 2.3  | 0.7           | 0.4        | 0.0        |
| Epping                   | 16776          | 16470          | 98.2         | 306        | 1.8        | 1011                    | 6.1        | 3.7  | 1.8           | 0.6        | 0.0        |
| Exeter                   | 12813          | 12553          | 98.0         | 260        | 2.0        | 931                     | 7.4        | 3.7  | 1.8           | 1.2        | 0.6        |
| Farmington               | 23640          | 23218          | 98.2         | 422        | 1.8        | 773                     | 3.3        | 1.6  | 1.1           | 0.3        | 0.3        |
| Fremont                  | 11142          | 11035          | 99.0         | 108        | 1.0        | 565                     | 5.1        | 2.2  | 1.7           | 1.0        | 0.2        |
| Greenland                | 8524           | 6781           | 79.5         | 1743       | 20.5       | 329                     | 4.9        | 2.1  | 2.2           | 0.2        | 0.3        |
| Hampstead                | 9014           | 8543           | 94.8         | 471        | 5.2        | 0                       | 0.0        | 0.0  | 0.0           | 0.0        | 0.0        |
| Hampton                  | 9073           | 8287           | 91.3         | 786        | 8.7        | 966                     | 11.7       | 9.8  | 0.7           | 0.7        | 0.4        |
| Hampton Falls            | 8078           | 7719           | 95.6         | 359        | 4.4        | 774                     | 10.0       | 8.9  | 1.0           | 0.2        | 0.0        |
| Kensington               | 7668           | 7635           | 99.6         | 32         | 0.4        | 370                     | 4.9        | 3.2  | 0.7           | 0.2        | 0.2        |
| Kingston                 | 13450          | 12494          | 92.9         | 957        | 7.1        | 224                     | 1.8        | 1.5  | 0.7           | 0.7        | 0.2        |
| Lee                      | 12927          | 12686          | 98.1         | 241        | 1.9        | 768                     | 6.1        | 3.3  | 1.6           | 1.2        | 0.0        |
| Madbury                  | 7799           | 7400           | 94.9         | 400        | 5.1        | 387                     | 5.2        | 3.2  | 1.9           | 0.0        | 0.0        |
| Middleton                | 11843          | 11559          | 97.6         | 284        | 2.4        | 407                     | 3.5        | 3.0  | 0.5           | 0.0        | 0.0        |
| Milton                   | 21936          | 21089          | 96.1         | 847        | 3.9        | 853                     | 4.0        | 3.0  | 0.6           | 0.0        | 0.0        |
| New Castle               | 1348           | 506            | 37.6         | 841        | 62.4       | 145                     | 28.7       | 3.3  | 0.0           | 0.4        | 25.3       |
| New Castle New Durham    | 28054          | 26345          | 93.9         | 1709       | 6.1        | 323                     | 1.2        | 1.1  | 0.0           | 0.0        | 0.0        |
| Newfields                | 4647           | 4541           | 97.7         | 106        | 2.3        | 293                     | 6.5        | 4.4  | 1.4           | 0.0        | 0.0        |
| Newington                | 7917           | 5216           | 65.9         | 2700       | 34.1       | 178                     | 3.4        | 0.4  | 0.5           | 1.3        | 1.1        |
| Newmarket                | 9080           | 8038           | 88.5         | 1043       | 11.5       | 458                     | 5.4<br>5.7 | 2.8  | 1.2           | 1.1        | 0.7        |
| North Hampton            | 8923           | 8862           | 99.3         | 61         | 0.7        | 490                     | 5.7<br>5.5 | 3.9  | 1.3           | 0.1        | 0.7        |
| Northwood                | 19357          | 17974          | 92.9         | 1383       | 7.1        | 285                     | 1.6        | 1.4  | 0.1           | 0.1        | 0.2        |
| Nottingham               | 30997          | 29882          | 92.9<br>96.4 | 1115       | 3.6        | 1409                    | 4.7        | 4.1  | 0.1           | 0.0        | 0.0        |
|                          |                |                |              |            |            | _                       |            |  |               |            |            |
| Pittsfield<br>Portsmouth | 15559<br>10763 | 15190<br>10002 | 97.6<br>92.9 | 369<br>761 | 2.4<br>7.1 | 0<br>431                | 0.0<br>4.3 | 0.0<br>1.8                                   | 0.0<br>0.2    | 0.0<br>0.5 | 0.0<br>1.9 |
|                          | 18944          | 18459          | 92.9<br>97.4 | 485        | 2.6        | 1092                    | 5.9        |  |               | 0.5        | 0.1        |
| Raymond                  |                |                |              |            |            |                         |            | 2.6  | 2.3           |            |            |
| Rochester                | 29081          | 28321          | 97.4         | 759        | 2.6        | 1569                    | 5.5        | 1.8  | 1.8           | 1.3        | 0.5        |
| Rollinsford              | 4843           | 4682           | 96.7         | 161        | 3.3        | 296<br>554              | 6.3        | 3.2  | 0.0           | 2.8        | 0.3        |
| Rye                      | 8406           | 7998           | 95.1         | 408        | 4.9        | 554                     | 6.9        | 4.7  | 1.1           | 0.5        | 0.7        |
| Sandown                  | 9232           | 8888           | 96.3         | 343        | 3.7        | 290                     | 3.3        | 2.6  | 0.4           | 0.2        | 0.0        |
| Seabrook                 | 6161           | 5664           | 91.9         | 497<br>470 | 8.1        | 721                     | 12.7       | 10.4   | 0.5           | 1.4        | 0.4        |
| Somersworth              | 6398           | 6219           | 97.2         | 179        | 2.8        | 280                     | 4.5        | 2.1  | 0.4           | 1.3        | 3.0        |
| South Hampton            | 5147           | 5044           | 98.0         | 102        | 2.0        | 0                       | 0.0        | 0.0  | 0.0           | 0.0        | 0.0        |
| Strafford                | 32779          | 31151          | 95.0         | 1628       | 5.0        | 691                     | 2.2        | 2.1  | 0.0           | 0.0        | 0.0        |
| Stratham                 | 9902           | 9674           | 97.7         | 228        | 2.3        | 439                     | 4.5        | 3.1  | 0.9           | 0.4        | 0.1        |
| Wakefield                | 28717          | 25264          | 88.0         | 3453       | 12.0       | 451                     | 1.8        | 1.2  | 0.2           | 0.3        | 0.0        |
| Wolfeboro                | 37406          | 30693          | 82.1         | 6713       | 17.9       | 0                       | 0.0        | 0.0  | 0.0           | 0.0        | 0.0        |
| Total                    | 759673         | 708144         | 93.2         | 51529      | 6.8        | 25279                   | 3.6        | 2.3  | 0.7           | 0.4        | 0.2        |

# **Townwide Conservation Lands**

#### **Data Summary** Townwide Conservation Lands

|               | I OWITWI | de Conservatio |           |
|---------------|----------|----------------|-----------|
| Taura Nara    |          | 0/ af Taura    | % of Land |
| Town Name     | Acres    | % of Town      | Area      |
| Alton         | 3766     | 7.1            | 9.3       |
| Barrington    | 2667     | 8.6            | 9.0       |
| Brentwood     | 1387     | 12.8           | 12.9      |
| Brookfield    | 1817     | 12.2           | 12.5      |
| Candia        | 2008     | 10.3           | 10.4      |
| Chester       | 1312     | 7.8            | 7.9       |
| Danville      | 540      | 7.1            | 7.3       |
| Deerfield     | 5582     | 16.7           | 17.1      |
| Derry         | 1118     | 4.8            | 4.9       |
| Dover         | 1529     | 8.2            | 8.9       |
| Durham        | 4321     | 27.3           | 30.2      |
| East Kingston | 670      | 10.5           | 10.6      |
| Epping        | 1271     | 7.6            | 7.7       |
| Exeter        | 3496     | 27.3           | 27.8      |
| Farmington    | 1242     | 5.3            | 5.3       |
| Fremont       | 181      | 1.6            | 1.6       |
| Greenland     | 893      | 10.5           | 13.2      |
| Hampstead     | 1506     | 16.7           | 17.6      |
| Hampton       | 408      | 4.5            | 4.9       |
| Hampton Falls | 633      | 7.8            | 8.2       |
| Kensington    | 1549     | 20.2           | 20.3      |
| Kingston      | 1376     | 10.2           | 11.0      |
| Lee           | 2299     | 17.8           | 18.1      |
| Madbury       | 1328     | 17.0           | 17.9      |
| Middleton     | 488      | 4.1            | 4.2       |
| Milton        | 2553     | 11.6           | 12.1      |
| New Castle    | 92       | 6.8            | 18.1      |
| New Durham    | 1751     | 6.2            | 6.6       |
| Newfields     | 753      | 16.2           | 16.6      |
| Newington     | 1307     | 16.5           | 25.1      |
| Newmarket     | 1331     | 14.7           | 16.6      |
| North Hampton | 709      | 8.0            | 8.0       |
| Northwood     | 2381     | 12.3           | 13.2      |
| Nottingham    | 5860     | 18.9           | 19.6      |
| Pittsfield    | 728      | 4.7            | 4.8       |
| Portsmouth    | 1099     | 10.2           | 11.0      |
| Raymond       | 972      | 5.1            | 5.3       |
| Rochester     | 431      | 1.5            | 1.5       |
| Rollinsford   | 409      | 8.4            | 8.7       |
| Rye           | 1488     | 17.7           | 18.6      |
| Sandown       | 470      | 5.1            | 5.3       |
| Seabrook      | 447      | 7.3            | 7.9       |
| Somersworth   | 221      | 7.5<br>3.5     | 3.6       |
| South Hampton | 284      | 5.5            | 5.6       |
| Strafford     | 5261     | 16.1           | 16.9      |
| Stratham      | 1023     | 10.1           | 10.9      |
|               |          |                |           |
| Wakefield     | 390      | 1.4            | 1.5       |
| Wolfeboro     | 2248     | 6.0            | 7.3       |
| Total         | 75596    | 10.0           | 10.7      |
|               |          |                |           |

# **300-ft Buffer Stream Characterization**

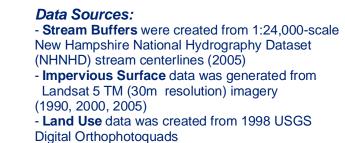
|               |             | Land / |      | Surface Wa |      | 300' Buffe |      | Percent of | Town Buffer Ad |          | orized as |
|---------------|-------------|--------|------|------------|------|------------|------|------------|----------------|----------|-----------|
|               |             |        | % of |            | % of |            | % of |            |                | Somewhat |           |
| Town Name     | Total Acres | Acres  | Town | Acres      | Town | Acres      | Town | Intact     | Mostly Intact  | Modified | Altered   |
| Alton         | 53231       | 40629  | 76.3 | 12602      | 23.7 | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
| Barrington    | 31117       | 29719  | 95.5 | 1399       | 4.5  | 3210       | 10.8 | 7.2        | 2.6            | 0.8      | 0.1       |
| Brentwood     | 10863       | 10741  | 98.9 | 122        | 1.1  | 958        | 8.9  | 2.2        | 5.8            | 0.5      | 0.4       |
| Brookfield    | 14880       | 14593  | 98.1 | 287        | 1.9  | 647        | 4.4  | 4.1        | 0.3            | 0.0      | 0.0       |
| Candia        | 19557       | 19340  | 98.9 | 217        | 1.1  | 1035       | 5.4  | 4.2        | 0.4            | 0.7      | 0.0       |
| Chester       | 16718       | 16618  | 99.4 | 100        | 0.6  | 1205       | 7.3  | 3.4        | 2.3            | 1.5      | 0.0       |
| Danville      | 7569        | 7439   | 98.3 | 131        | 1.7  | 98         | 1.3  | 0.6        | 0.7            | 0.0      | 0.0       |
| Deerfield     | 33348       | 32584  | 97.7 | 764        | 2.3  | 2161       | 6.6  | 4.0        | 1.8            | 0.9      | 0.0       |
| Derry         | 23226       | 22680  | 97.7 | 545        | 2.3  | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
| Dover         | 18592       | 17100  | 92.0 | 1492       | 8.0  | 2139       | 12.5 | 3.0        | 3.3            | 4.7      | 1.5       |
| Durham        | 15852       | 14305  | 90.2 | 1548       | 9.8  | 1377       | 9.6  | 1.5        | 1.7            | 4.9      | 1.5       |
| East Kingston | 6381        | 6318   | 99.0 | 63         | 1.0  | 416        | 6.6  | 2.4        | 2.1            | 1.2      | 0.0       |
| Epping        | 16776       | 16470  | 98.2 | 306        | 1.8  | 1980       | 12.0 | 4.0        | 5.3            | 2.4      | 0.3       |
| Exeter        | 12813       | 12553  | 98.0 | 260        | 2.0  | 1927       | 15.3 | 6.3        | 2.6            | 4.2      | 2.4       |
| Farmington    | 23640       | 23218  | 98.2 | 422        | 1.8  | 1548       | 6.7  | 2.5        | 2.0            | 1.3      | 3.0       |
| Fremont       | 11142       | 11035  | 99.0 | 108        | 1.0  | 1127       | 10.2 | 5.3        | 1.6            | 2.1      | 1.2       |
| Greenland     | 8524        | 6781   | 79.5 | 1743       | 20.5 | 670        | 9.9  | 2.0        | 5.6            | 1.6      | 0.8       |
| Hampstead     | 9014        | 8543   | 94.8 | 471        | 5.2  | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
| Hampton       | 9073        | 8287   | 91.3 | 786        | 8.7  | 2242       | 27.1 | 21.7       | 2.4            | 1.5      | 1.5       |
| Hampton Falls | 8078        | 7719   | 95.6 | 359        | 4.4  | 1752       | 22.7 | 16.9       | 4.4            | 1.3      | 0.        |
| Kensington    | 7668        | 7635   | 99.6 | 32         | 0.4  | 815        | 10.7 | 6.1        | 0.8            | 3.7      | 0.        |
| Kingston      | 13450       | 12494  | 92.9 | 957        | 7.1  | 458        | 3.7  | 2.7        | 0.5            | 0.3      | 0.1       |
| Lee           | 12927       | 12686  | 98.1 | 241        | 1.9  | 1541       | 12.1 | 5.7        | 2.9            | 3.0      | 0.5       |
| Madbury       | 7799        | 7400   | 94.9 | 400        | 5.1  | 745        | 10.1 | 3.7        | 5.0            | 1.2      | 0.        |
| Middleton     | 11843       | 11559  | 97.6 | 284        | 2.4  | 843        | 7.3  | 6.2        | 0.9            | 0.0      | 0.2       |
| Milton        | 21936       | 21089  | 96.1 | 847        | 3.9  | 1759       | 8.3  | 6.0        | 0.8            | 1.3      | 0.2       |
| New Castle    | 1348        | 506    | 37.6 | 841        | 62.4 | 269        | 53.2 | 5.7        | 0.0            | 0.0      | 47.5      |
| New Durham    | 28054       | 26345  | 93.9 | 1709       | 6.1  | 703        | 2.7  | 2.5        | 0.1            | 0.1      | 0.0       |
| Newfields     | 4647        | 4541   | 97.7 | 106        | 2.3  | 596        | 13.1 | 8.8        | 0.4            | 3.3      | 0.6       |
| Newington     | 7917        | 5216   | 65.9 | 2700       | 34.1 | 364        | 7.0  | 0.9        | 0.8            | 2.2      | 3.        |
| Newmarket     | 9080        | 8038   | 88.5 | 1043       | 11.5 | 934        | 11.6 | 3.2        | 2.9            | 4.1      | 1.3       |
| North Hampton | 8923        | 8862   | 99.3 | 61         | 0.7  | 1028       | 11.6 | 5.9        | 3.3            | 1.7      | 0.6       |
| Northwood     | 19357       | 17974  | 92.9 | 1383       | 7.1  | 612        | 3.4  | 2.3        | 0.9            | 0.2      | 0.1       |
| Nottingham    | 30997       | 29882  | 96.4 | 1115       | 3.6  | 2928       | 9.8  | 6.7        | 2.6            | 0.2      | 0.3       |
| Pittsfield    | 15559       | 15190  | 97.6 | 369        | 2.4  | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
| Portsmouth    | 10763       | 10002  | 92.9 | 761        | 7.1  | 858        | 8.6  | 3.4        | 0.4            | 0.7      | 4.0       |
| Raymond       | 18944       | 18459  | 97.4 | 485        | 2.6  | 2188       | 11.9 | 3.4        | 3.4            | 4.4      | 0.7       |
| Rochester     | 29081       | 28321  | 97.4 | 759        | 2.6  | 3012       | 10.6 | 2.4        | 2.1            | 4.1      | 2.0       |
| Rollinsford   | 4843        | 4682   | 96.7 | 161        | 3.3  | 582        | 12.4 | 3.1        | 3.0            | 3.4      | 3.0       |
| Rye           | 8406        | 7998   | 95.1 | 408        | 4.9  | 1165       | 14.6 | 9.0        | 1.7            | 2.5      | 1.4       |
| Sandown       | 9232        | 8888   | 96.3 | 343        | 3.7  | 599        | 6.7  | 4.2        | 1.7            | 0.8      | 0.0       |
| Seabrook      | 6161        | 5664   | 91.9 | 497        | 8.1  | 1697       | 30.0 | 24.3       | 1.5            | 1.8      | 2.3       |
| Somersworth   | 6398        | 6219   | 97.2 | 179        | 2.8  | 569        | 9.1  | 3.1        | 1.3            | 2.4      | 2.4       |
| South Hampton | 5147        | 5044   | 98.0 | 102        | 2.0  | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
| Strafford     | 32779       | 31151  | 95.0 | 1628       | 5.0  | 1445       | 4.6  | 4.3        | 0.2            | 0.0      | 0.0       |
| Stratham      | 9902        | 9674   | 97.7 | 228        | 2.3  | 889        | 9.2  | 4.5        | 2.4            | 2.0      | 0.2       |
| Wakefield     | 28717       | 25264  | 88.0 | 3453       | 12.0 | 948        | 3.8  | 2.2        | 0.8            | 0.6      | 0.2       |
| Wolfeboro     | 37406       | 30693  | 82.1 | 6713       | 17.9 | 0          | 0.0  | 0.0        | 0.0            | 0.0      | 0.0       |
|               |             |        |      |            |      |            |      |            |                |          |           |
| Total         | 759673      | 708144 | 93.2 | 51529      | 6.8  | 52037      | 7.3  | 3.9        | 1.6            | 1.3      | 0.0       |

# **Townwide Impervious Surface**

# Data Summary

| 3:       |     |               |                   | pervious Surfa    |                   |
|----------|-----|---------------|-------------------|-------------------|-------------------|
| .        |     |               | % of Land         | % of Land         | % of Land         |
| ł        |     | Town Name     | Area, <b>1990</b> | Area, <b>2000</b> | Area, <b>2005</b> |
| )        |     | Alton         | 2.1               | 3.0               | 3.5               |
|          |     | Barrington    | 2.6               | 4.0               | 4.7               |
|          |     | Brentwood     | 5.0               | 7.7               | 9.5               |
| )        |     | Brookfield    | 1.0               | 1.3               | 1.4               |
| )        |     | Candia        | 2.7               | 4.1               | 4.8               |
| )        |     | Chester       | 2.5               | 4.3               | 5.1               |
| )        |     | Danville      | 3.5               | 6.0               | 7.2               |
| )        |     | Deerfield     | 1.5               | 2.4               | 3.0               |
| )        |     | Derry         | 8.0               | 11.3              | 13.1              |
| ;        |     | Dover         | 11.0              | 15.4              | 18.5              |
| ;        |     | Durham        | 4.7               | 7.2               | 7.7               |
| 3        |     | East Kingston | 3.5               | 5.3               | 7.0               |
| 3        |     | Epping        | 4.0               | 6.5               | 7.8               |
| .        |     | Exeter        | 7.5               | 11.0              | 12.4              |
| ;        |     | Farmington    | 3.0               | 4.2               | 4.7               |
| <u> </u> |     | Fremont       | 3.0               | 4.9               | 5.9               |
| ;        |     | Greenland     | 6.7               | 10.5              | 12.5              |
| )        |     | Hampstead     | 7.5               | 11.4              | 13.7              |
| ;        |     | Hampton       | 14.2              | 19.4              | 20.7              |
|          |     | Hampton Falls | 4.4               | 6.9               | 9.1               |
|          |     | Kensington    | 3.2               | 5.0               | 6.2               |
|          |     | Kingston      | 5.2               | 8.2               | 9.7               |
| ;        |     | Lee           | 3.7               | 5.8               | 6.6               |
|          |     | Madbury       | 3.4               | 5.3               | 5.3               |
| <u> </u> |     | Middleton     | 1.8               | 2.5               | 3.0               |
|          |     | Milton        | 2.8               | 4.0               | 4.7               |
| ;        |     | New Castle    | 21.4              | 30.6              | 33.8              |
|          |     | New Durham    | 1.7               | 2.4               | 2.8               |
| ,        |     | Newfields     | 3.1               | 5.5               | 6.8               |
|          |     | Newington     | 13.2              | 18.0              | 20.2              |
| .        |     | Newmarket     | 6.0               | 8.8               | 10.2              |
|          |     | North Hampton | 7.3               | 10.8              | 12.4              |
|          |     | Northwood     | 2.4               | 3.4               | 4.0               |
|          |     | Nottingham    | 1.5               | 2.3               | 2.8               |
|          |     | Pittsfield    | 2.8               | 3.7               | 4.6               |
|          |     | Portsmouth    | 21.3              | 27.3              | 30.5              |
|          |     | Raymond       | 5.3               | 8.0               | 9.3               |
| ιl       |     | Rochester     | 8.5               | 11.7              | 13.9              |
|          |     | Rollinsford   | 5.7               | 8.1               | 9.3               |
|          |     | Rye           | 7.3               | 11.0              | 12.8              |
|          |     | Sandown       | 3.8               | 6.1               | 7.9               |
|          |     | Seabrook      | 14.2              | 21.3              | 27.2              |
|          |     | Somersworth   | 12.3              | 16.4              | 20.2              |
|          |     | South Hampton | 2.4               | 3.8               | 4.8               |
| '        |     | Strafford     | 2.4<br>1.4        | 3.8<br>2.0        | 4.8<br>2.3        |
| ,        |     |               |                   |                   |                   |
|          |     | Stratham      | 6.5               | 10.1              | 12.9              |
|          |     | Wakefield     | 3.5               | 4.8               | 5.6               |
| '        |     | Wolfeboro     | 2.8               | 4.2               | 4.6               |
| ;        |     | Total         | 4.4               | 6.4               | 7.5               |
|          | . ' |               |                   |                   |                   |
|          |     |               |                   |                   |                   |

- Stream reaches were identified, attributed, and buffered based on their extent from confluence to confluence. Rules were developed to guide
- 3. At points of confluence and in other locations where buffers overlapped.
- 4. Data was processed for the Piscataqua/Coastal Basin, which includes all or part of 48 municipalities. Six of these towns – Alton, Derry,
  Hampstead, Pittsfield, South Hampton, and Wolfeboro - were not
  included in the printed map set as they have no streams that extend into the Watershed.
- 5. Only 300' buffers were analyzed with respect to impervious surface data due to the 30-meter resolution of the source satellite imagery.



version of GRANIT data layer

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Conservation Lands were based on April, 2006







- the determination of segments in specific situations, e.g. where confluences existed on one river bank but not on the opposing bank. These procedures occasionally yielded very short stream segments and therefore relatively small buffers.
- Because only 2<sup>nd</sup> order and higher perennial streams were analyzed, some discontinuities exist in the input data set and thus in the buffers.
- the most impacted category was assigned to the overlap area.
- 6. Conservation lands shown on the map and summarized in the table include only those classified as permanently protected (Level 1, 2, or 2A)