

## **Appendix B**

### **Physical/Chemical Parameters**

**APPENDIX B**  
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TABLE B-1 DAILY FRESHWATER FLOW (CU. M/S) ESTIMATED FOR GREEN ISLAND,  
NEW YORK, 1999

|                 | JAN  | FEB | MAR  | APR  | MAY | JUN | JUL | AUG | SEP  | OCT | NOV | DEC |
|-----------------|------|-----|------|------|-----|-----|-----|-----|------|-----|-----|-----|
| DAY OF<br>MONTH |      |     |      |      |     |     |     |     |      |     |     |     |
| 1               | 154  | 413 | 412  | 823  | 223 | 178 | 107 | 82  | 92   | 304 | 202 | 478 |
| 2               | 154  | 416 | 512  | 906  | 217 | 147 | 121 | 82  | 86   | 275 | 224 | 460 |
| 3               | 140  | 686 | 424  | 999  | 200 | 169 | 157 | 75  | 76   | 227 | 256 | 515 |
| 4               | 136  | 886 | 679  | 1033 | 205 | 141 | 320 | 77  | 66   | 215 | 419 | 466 |
| 5               | 181  | 826 | 931  | 1163 | 223 | 127 | 629 | 71  | 71   | 255 | 279 | 405 |
| 6               | 176  | 702 | 685  | 1044 | 187 | 147 | 323 | 69  | 92   | 288 | 253 | 347 |
| 7               | 181  | 626 | 520  | 956  | 178 | 133 | 181 | 73  | 97   | 238 | 255 | 354 |
| 8               | 172  | 557 | 424  | 996  | 196 | 130 | 209 | 82  | 109  | 229 | 234 | 347 |
| 9               | 174  | 457 | 400  | 962  | 254 | 117 | 176 | 82  | 89   | 234 | 207 | 294 |
| 10              | 198  | 458 | 385  | 917  | 246 | 133 | 113 | 76  | 102  | 244 | 223 | 278 |
| 11              | 215  | 435 | 387  | 754  | 248 | 94  | 128 | 91  | 103  | 238 | 233 | 261 |
| 12              | 193  | 445 | 355  | 639  | 222 | 141 | 126 | 76  | 89   | 269 | 225 | 274 |
| 13              | 189  | 585 | 328  | 521  | 170 | 87  | 113 | 82  | 74   | 217 | 234 | 264 |
| 14              | 252  | 577 | 321  | 465  | 146 | 106 | 138 | 94  | 91   | 243 | 220 | 242 |
| 15              | 353  | 460 | 318  | 381  | 144 | 137 | 111 | 99  | 84   | 307 | 218 | 254 |
| 16              | 302  | 433 | 315  | 343  | 163 | 89  | 83  | 106 | 153  | 270 | 211 | 301 |
| 17              | 252  | 420 | 356  | 416  | 157 | 111 | 66  | 93  | 1336 | 252 | 180 | 281 |
| 18              | 218  | 429 | 469  | 462  | 128 | 92  | 87  | 91  | 1141 | 244 | 202 | 281 |
| 19              | 432  | 416 | 591  | 488  | 149 | 115 | 87  | 85  | 526  | 245 | 195 | 242 |
| 20              | 462  | 406 | 533  | 445  | 362 | 87  | 120 | 82  | 325  | 227 | 188 | 226 |
| 21              | 487  | 398 | 438  | 402  | 314 | 110 | 97  | 75  | 215  | 222 | 200 | 227 |
| 22              | 412  | 360 | 773  | 354  | 228 | 77  | 100 | 77  | 367  | 199 | 207 | 367 |
| 23              | 414  | 309 | 1344 | 307  | 209 | 105 | 86  | 73  | 501  | 288 | 199 | 341 |
| 24              | 931  | 317 | 962  | 312  | 203 | 88  | 97  | 71  | 414  | 365 | 183 | 286 |
| 25              | 1650 | 313 | 812  | 379  | 224 | 93  | 72  | 75  | 319  | 310 | 203 | 232 |
| 26              | 1259 | 314 | 753  | 354  | 271 | 85  | 86  | 84  | 286  | 373 | 204 | 209 |
| 27              | 1033 | 300 | 682  | 305  | 278 | 78  | 95  | 96  | 217  | 311 | 443 | 208 |
| 28              | 815  | 291 | 671  | 242  | 292 | 100 | 97  | 101 | 200  | 233 | 810 | 195 |
| 29              | 651  | NA  | 693  | 235  | 276 | 107 | 84  | 98  | 170  | 248 | 666 | 181 |
| 30              | 533  | NA  | 789  | 170  | 198 | 137 | 101 | 95  | 213  | 231 | 493 | 198 |
| 31              | 481  | NA  | 840  | NA   | 137 | NA  | 77  | 94  | NA   | 237 | NA  | 204 |

NA = NO DATA AVAILABLE

TABLE B-2 LONG-TERM (1947-1998) AND 1999 MONTHLY MEAN FRESHWATER  
FLOW (CU. M/S) ESTIMATED FOR GREEN ISLAND, NEW YORK

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| MONTH             | 1999<br>AVERAGE | LONG-TERM<br>AVERAGE | LONG-TERM<br>MINIMUM | LONG-TERM<br>MAXIMUM |
|-------------------|-----------------|----------------------|----------------------|----------------------|
| JAN               | 426             | 391                  | 118                  | 961                  |
| FEB               | 473             | 396                  | 128                  | 885                  |
| MAR               | 584             | 613                  | 258                  | 1,077                |
| APR               | 592             | 865                  | 257                  | 1,749                |
| MAY               | 214             | 529                  | 156                  | 1,147                |
| JUN               | 115             | 281                  | 101                  | 839                  |
| JUL               | 142             | 187                  | 87                   | 520                  |
| AUG               | 84              | 160                  | 48                   | 414                  |
| SEP               | 257             | 178                  | 58                   | 482                  |
| OCT               | 259             | 247                  | 71                   | 853                  |
| NOV               | 276             | 361                  | 93                   | 740                  |
| DEC               | 297             | 413                  | 173                  | 989                  |
| ANNUAL<br>AVERAGE | 310             | 385                  |                      |                      |

TABLE B-3 MONTHLY MEAN FRESHWATER FLOW (CU. M/S) ESTIMATED FOR GREEN ISLAND, NEW YORK, 1974 TO 1999

|                | 1974 | 1975 | 1976  | 1977  | 1978 | 1979  | 1980  | 1981 | 1982  | 1983  | 1984 | 1985 | 1986        | 1987    |
|----------------|------|------|-------|-------|------|-------|-------|------|-------|-------|------|------|-------------|---------|
| JAN            | 623  | 540  | 417   | 225   | 744  | 571   | 256   | 148  | 321   | 259   | 133  | 439  | 310         | 262     |
| FEB            | 527  | 548  | 885   | 227   | 400  | 335   | 128   | 851  | 356   | 352   | 552  | 319  | 362         | 201     |
| MAR            | 587  | 670  | 897   | 987   | 619  | 1,077 | 633   | 349  | 613   | 580   | 281  | 581  | 1,018       | 605     |
| APR            | 854  | 724  | 1,040 | 1,092 | 950  | 1,009 | 748   | 384  | 897   | 1,062 | 761  | 456  | 689         | 981     |
| MAY            | 650  | 566  | 900   | 421   | 530  | 508   | 274   | 328  | 354   | 1,036 | 651  | 232  | 363         | 156     |
| JUN            | 249  | 367  | 431   | 207   | 282  | 216   | 192   | 169  | 431   | 358   | 275  | 157  | 428         | 175     |
| JUL            | 333  | 211  | 432   | 162   | 131  | 131   | 144   | 140  | 182   | 127   | 127  | 133  | 250         | 162     |
| AUG            | 180  | 254  | 414   | 154   | 169  | 149   | 130   | 133  | 124   | 155   | 48   | 104  | 350         | 118     |
| SEP            | 294  | 482  | 271   | 408   | 175  | 221   | 118   | 233  | 122   | 133   | 58   | 171  | 218         | 341     |
| OCT            | 256  | 662  | 658   | 853   | 244  | 313   | 158   | 456  | 124   | 71    | 178  | 206  | 336         | 504     |
| NOV            | 486  | 637  | 507   | 663   | 227  | 465   | 242   | 393  | 196   | 224   | 277  | 423  | 544         | 453     |
| DEC            | 548  | 532  | 398   | 749   | 303  | 430   | 273   | 319  | 233   | 624   | 447  | 338  | 524         | 437     |
| ANNUAL AVERAGE | 466  | 516  | 604   | 512   | 398  | 452   | 275   | 325  | 329   | 415   | 316  | 296  | 449         | 366     |
|                | 1988 | 1989 | 1990  | 1991  | 1992 | 1993  | 1994  | 1995 | 1996  | 1997  | 1998 | 1999 | Range       | Average |
| JAN            | 268  | 196  | 383   | 512   | 304  | 550   | 239   | 490  | 736   | 465   | 922  | 426  | 133 - 922   | 413     |
| FEB            | 349  | 256  | 703   | 496   | 236  | 276   | 337   | 263  | 503   | 516   | 437  | 473  | 128 - 885   | 419     |
| MAR            | 461  | 332  | 994   | 696   | 408  | 453   | 562   | 514  | 461   | 683   | 873  | 584  | 281 - 1,077 | 635     |
| APR            | 476  | 548  | 894   | 655   | 648  | 1,749 | 1,375 | 257  | 939   | 873   | 652  | 593  | 257 - 1,749 | 819     |
| MAY            | 357  | 620  | 990   | 346   | 501  | 375   | 534   | 158  | 1,081 | 643   | 349  | 214  | 156 - 1,081 | 505     |
| JUN            | 123  | 389  | 250   | 144   | 342  | 203   | 233   | 130  | 353   | 180   | 550  | 115  | 115 - 550   | 267     |
| JUL            | 131  | 92   | 157   | 112   | 254  | 136   | 248   | 94   | 384   | 153   | 243  | 142  | 92 - 432    | 185     |
| AUG            | 139  | 61   | 248   | 123   | 203  | 140   | 265   | 97   | 191   | 126   | 153  | 84   | 48 - 414    | 166     |
| SEP            | 164  | 120  | 159   | 136   | 217  | 158   | 190   | 102  | 185   | 127   | 133  | 257  | 58 - 482    | 200     |
| OCT            | 211  | 254  | 477   | 216   | 286  | 192   | 177   | 361  | 288   | 133   | 169  | 259  | 71 - 853    | 309     |
| NOV            | 565  | 407  | 653   | 301   | 531  | 347   | 251   | 693  | 613   | 293   | 190  | 276  | 190 - 693   | 418     |
| DEC            | 330  | 180  | 687   | 364   | 438  | 403   | 396   | 328  | 989   | 268   | 187  | 297  | 180 - 989   | 424     |
| ANNUAL AVERAGE | 298  | 288  | 549   | 342   | 364  | 415   | 401   | 291  | 560   | 372   | 405  | 310  | 275 - 604   | 397     |

TABLE B-4 POUGHKEEPSIE WATER WORKS DATA, MEAN, MINIMUM, AND MAXIMUM TEMPERATURE (C) FOR EACH DAY OF THE YEAR, 1951-1999

| MONTH | DAY | LONG-TERM | TEMPERATURE (1951-1998) |         | 1999 ACTUAL TEMPERATURES |
|-------|-----|-----------|-------------------------|---------|--------------------------|
|       |     | MEAN      | MINIMUM                 | MAXIMUM |                          |
| 1     | 1   | 1.5       | 0.6                     | 4.4     |                          |
| 1     | 2   | 1.5       | 0.0                     | 4.4     |                          |
| 1     | 3   | 1.5       | 0.6                     | 4.4     |                          |
| 1     | 4   | 1.5       | 0.6                     | 3.3     | 2.8                      |
| 1     | 5   | 1.5       | 0.0                     | 3.3     | 2.7                      |
| 1     | 6   | 1.3       | 0.0                     | 3.3     | 2.4                      |
| 1     | 7   | 1.3       | 0.0                     | 3.3     | 1.9                      |
| 1     | 8   | 1.3       | 0.0                     | 3.3     | 1.6                      |
| 1     | 9   | 1.3       | 0.0                     | 3.3     |                          |
| 1     | 10  | 1.1       | 0.0                     | 2.8     |                          |
| 1     | 11  | 1.2       | 0.0                     | 3.7     | 1.4                      |
| 1     | 12  | 1.1       | 0.4                     | 3.4     | 1.2                      |
| 1     | 13  | 1.1       | 0.0                     | 3.5     | 1.0                      |
| 1     | 14  | 1.1       | 0.0                     | 3.2     | 0.8                      |
| 1     | 15  | 1.1       | 0.0                     | 2.8     | 0.8                      |
| 1     | 16  | 1.1       | 0.4                     | 2.8     |                          |
| 1     | 17  | 1.1       | 0.5                     | 2.8     |                          |
| 1     | 18  | 1.1       | 0.6                     | 3.3     |                          |
| 1     | 19  | 1.0       | 0.6                     | 2.8     | 1.2                      |
| 1     | 20  | 1.0       | 0.5                     | 2.2     | 0.9                      |
| 1     | 21  | 1.0       | 0.0                     | 2.4     | 0.9                      |
| 1     | 22  | 1.0       | 0.6                     | 2.2     | 0.9                      |
| 1     | 23  | 1.1       | 0.6                     | 3.3     |                          |
| 1     | 24  | 1.0       | 0.0                     | 3.3     |                          |
| 1     | 25  | 1.0       | 0.0                     | 3.7     | 1.1                      |
| 1     | 26  | 1.0       | 0.0                     | 3.5     | 1.0                      |
| 1     | 27  | 1.0       | 0.0                     | 3.1     | 1.6                      |
| 1     | 28  | 1.0       | 0.5                     | 3.0     | 1.2                      |
| 1     | 29  | 1.0       | 0.6                     | 2.5     | 1.1                      |
| 1     | 30  | 1.0       | 0.0                     | 2.5     |                          |
| 1     | 31  | 1.0       | 0.6                     | 2.8     |                          |
| 2     | 1   | 1.0       | 0.6                     | 2.4     | 1.3                      |
| 2     | 2   | 1.0       | 0.6                     | 2.7     | 1.6                      |
| 2     | 3   | 1.0       | 0.6                     | 2.2     | 1.2                      |
| 2     | 4   | 1.0       | 0.6                     | 2.0     | 1.3                      |
| 2     | 5   | 0.9       | 0.0                     | 1.8     | 0.7                      |
| 2     | 6   | 0.9       | 0.5                     | 2.0     |                          |
| 2     | 7   | 0.9       | 0.2                     | 2.2     |                          |
| 2     | 8   | 1.0       | 0.0                     | 2.2     | 0.8                      |
| 2     | 9   | 0.9       | 0.2                     | 2.2     | 0.8                      |
| 2     | 10  | 1.0       | 0.2                     | 3.3     | 1.8                      |
| 2     | 11  | 1.0       | 0.0                     | 2.2     | 1.0                      |
| 2     | 12  | 1.0       | 0.3                     | 2.3     |                          |
| 2     | 13  | 1.0       | 0.0                     | 2.2     |                          |
| 2     | 14  | 1.1       | 0.3                     | 2.8     |                          |
| 2     | 15  | 1.1       | 0.2                     | 2.8     |                          |
| 2     | 16  | 1.1       | 0.0                     | 2.8     | 2.0                      |
| 2     | 17  | 1.1       | 0.6                     | 2.8     | 1.9                      |
| 2     | 18  | 1.1       | 0.0                     | 2.8     | 1.8                      |
| 2     | 19  | 1.2       | 0.6                     | 2.8     | 2.4                      |
| 2     | 20  | 1.2       | 0.0                     | 2.8     |                          |
| 2     | 21  | 1.2       | 0.4                     | 2.8     |                          |
| 2     | 22  | 1.3       | 0.0                     | 3.9     | 1.8                      |
| 2     | 23  | 1.3       | 0.0                     | 2.8     | 1.6                      |
| 2     | 24  | 1.3       | 0.0                     | 3.9     | 1.6                      |
| 2     | 25  | 1.3       | 0.5                     | 3.9     | 1.6                      |
| 2     | 26  | 1.5       | 0.0                     | 3.9     | 1.6                      |
| 2     | 27  | 1.5       | 0.0                     | 4.4     |                          |
| 2     | 28  | 1.5       | 0.0                     | 5.0     |                          |
| 2     | 29  | 1.8       | 0.6                     | 4.4     |                          |
| 3     | 1   | 1.5       | 0.6                     | 4.4     | 1.6                      |
| 3     | 2   | 1.6       | 0.5                     | 4.4     | 1.6                      |
| 3     | 3   | 1.6       | 0.5                     | 4.4     | 1.9                      |
| 3     | 4   | 1.7       | 0.5                     | 4.6     | 1.8                      |
| 3     | 5   | 1.6       | 0.5                     | 4.6     | 2.3                      |
| 3     | 6   | 1.7       | 0.6                     | 4.8     |                          |
| 3     | 7   | 1.8       | 0.6                     | 4.8     |                          |
| 3     | 8   | 1.8       | 0.0                     | 4.9     | 2.2                      |
| 3     | 9   | 1.9       | 0.6                     | 4.9     | 2.4                      |
| 3     | 10  | 2.0       | 0.6                     | 5.4     | 2.3                      |
| 3     | 11  | 2.0       | 0.6                     | 5.3     | 2.2                      |
| 3     | 12  | 2.1       | 0.5                     | 4.5     | 1.9                      |
| 3     | 13  | 2.2       | 0.5                     | 4.4     |                          |
| 3     | 14  | 2.3       | 0.6                     | 4.4     |                          |
| 3     | 15  | 2.3       | 0.6                     | 5.0     | 1.8                      |

TABLE B-4 (CONTINUED)

| MONTH | DAY | LONG-TERM TEMPERATURE (1951-1998) |         |         | 1999 ACTUAL TEMPERATURES |
|-------|-----|-----------------------------------|---------|---------|--------------------------|
|       |     | MEAN                              | MINIMUM | MAXIMUM |                          |
| 3     | 16  | 2.5                               | 0.6     | 5.6     | 1.9                      |
| 3     | 17  | 2.6                               | 0.6     | 5.7     | 2.2                      |
| 3     | 18  | 2.6                               | 0.5     | 5.9     | 2.5                      |
| 3     | 19  | 2.7                               | 0.6     | 7.7     | 2.8                      |
| 3     | 20  | 2.9                               | 0.6     | 7.5     |                          |
| 3     | 21  | 2.9                               | 0.6     | 7.3     |                          |
| 3     | 22  | 3.1                               | 0.6     | 7.2     | 3.2                      |
| 3     | 23  | 3.3                               | 0.6     | 7.1     | 3.3                      |
| 3     | 24  | 3.4                               | 0.6     | 7.1     | 4.7                      |
| 3     | 25  | 3.5                               | 0.6     | 6.4     | 5.1                      |
| 3     | 26  | 3.7                               | 0.6     | 6.5     | 5.1                      |
| 3     | 27  | 4.0                               | 1.1     | 6.9     |                          |
| 3     | 28  | 4.3                               | 1.1     | 6.8     |                          |
| 3     | 29  | 4.5                               | 1.1     | 7.5     | 5.6                      |
| 3     | 30  | 4.7                               | 1.1     | 7.8     | 6.1                      |
| 3     | 31  | 5.0                               | 1.1     | 8.3     | 6.1                      |
| 4     | 1   | 5.2                               | 1.7     | 9.4     | 6.6                      |
| 4     | 2   | 5.4                               | 2.2     | 9.1     |                          |
| 4     | 3   | 5.6                               | 2.8     | 10.8    |                          |
| 4     | 4   | 5.8                               | 2.8     | 10.8    |                          |
| 4     | 5   | 6.0                               | 2.8     | 10.8    | 7.7                      |
| 4     | 6   | 6.1                               | 3.3     | 9.3     | 7.9                      |
| 4     | 7   | 6.3                               | 2.8     | 9.5     | 9.1                      |
| 4     | 8   | 6.4                               | 2.8     | 9.4     | 8.8                      |
| 4     | 9   | 6.5                               | 2.8     | 9.2     | 9.1                      |
| 4     | 10  | 6.6                               | 2.8     | 10.2    |                          |
| 4     | 11  | 6.8                               | 2.8     | 11.2    |                          |
| 4     | 12  | 7.0                               | 2.8     | 11.4    | 9.1                      |
| 4     | 13  | 7.2                               | 2.8     | 11.4    | 9.2                      |
| 4     | 14  | 7.4                               | 2.8     | 11.4    | 9.3                      |
| 4     | 15  | 7.6                               | 2.8     | 11.5    | 9.3                      |
| 4     | 16  | 7.7                               | 3.3     | 11.8    | 9.3                      |
| 4     | 17  | 7.9                               | 3.9     | 11.7    |                          |
| 4     | 18  | 8.1                               | 5.6     | 11.8    |                          |
| 4     | 19  | 8.4                               | 5.6     | 12.2    | 9.5                      |
| 4     | 20  | 8.7                               | 6.1     | 12.2    | 9.7                      |
| 4     | 21  | 9.0                               | 6.1     | 12.2    | 9.8                      |
| 4     | 22  | 9.2                               | 6.7     | 12.8    | 10.2                     |
| 4     | 23  | 9.4                               | 6.7     | 12.8    | 10.1                     |
| 4     | 24  | 9.5                               | 6.7     | 13.3    |                          |
| 4     | 25  | 9.7                               | 6.7     | 13.3    |                          |
| 4     | 26  | 10.0                              | 6.7     | 13.3    | 10.4                     |
| 4     | 27  | 10.2                              | 7.2     | 13.3    | 10.5                     |
| 4     | 28  | 10.4                              | 7.8     | 13.3    | 10.4                     |
| 4     | 29  | 10.6                              | 8.3     | 13.9    | 10.7                     |
| 4     | 30  | 10.9                              | 8.9     | 13.9    | 11.0                     |
| 5     | 1   | 11.2                              | 8.9     | 14.4    |                          |
| 5     | 2   | 11.4                              | 8.9     | 14.4    |                          |
| 5     | 3   | 11.7                              | 8.9     | 14.4    | 11.9                     |
| 5     | 4   | 12.0                              | 8.9     | 15.0    | 12.1                     |
| 5     | 5   | 12.1                              | 8.9     | 15.0    | 12.3                     |
| 5     | 6   | 12.3                              | 8.9     | 15.0    | 12.4                     |
| 5     | 7   | 12.5                              | 8.9     | 15.0    | 12.4                     |
| 5     | 8   | 12.6                              | 8.9     | 15.4    |                          |
| 5     | 9   | 12.8                              | 8.9     | 15.6    |                          |
| 5     | 10  | 13.0                              | 8.9     | 16.1    | 13.7                     |
| 5     | 11  | 13.1                              | 9.4     | 16.1    | 13.8                     |
| 5     | 12  | 13.2                              | 9.4     | 16.2    | 15.3                     |
| 5     | 13  | 13.4                              | 10.0    | 16.7    | 14.9                     |
| 5     | 14  | 13.6                              | 10.6    | 16.7    | 15.1                     |
| 5     | 15  | 13.8                              | 11.1    | 16.8    |                          |
| 5     | 16  | 14.1                              | 11.1    | 17.2    |                          |
| 5     | 17  | 14.3                              | 11.7    | 17.6    | 15.7                     |
| 5     | 18  | 14.5                              | 11.7    | 17.7    | 16.1                     |
| 5     | 19  | 14.7                              | 11.7    | 17.7    | 16.4                     |
| 5     | 20  | 15.0                              | 12.2    | 17.8    | 16.4                     |
| 5     | 21  | 15.3                              | 12.8    | 18.0    | 17.1                     |
| 5     | 22  | 15.5                              | 12.8    | 18.5    |                          |
| 5     | 23  | 15.7                              | 12.8    | 18.9    |                          |
| 5     | 24  | 15.9                              | 12.8    | 19.0    | 18.0                     |
| 5     | 25  | 16.1                              | 12.8    | 19.3    | 17.9                     |
| 5     | 26  | 16.3                              | 12.2    | 19.4    | 18.0                     |
| 5     | 27  | 16.5                              | 12.2    | 20.6    | 18.1                     |
| 5     | 28  | 16.8                              | 12.2    | 20.6    | 18.2                     |
| 5     | 29  | 17.0                              | 12.8    | 20.7    |                          |

TABLE B-4 (CONTINUED)

| MONTH | DAY | LONG-TERM TEMPERATURE (1951-1998) |         |         | 1999 ACTUAL TEMPERATURES |
|-------|-----|-----------------------------------|---------|---------|--------------------------|
|       |     | MEAN                              | MINIMUM | MAXIMUM |                          |
| 5     | 30  | 17.1                              | 12.8    | 21.5    |                          |
| 5     | 31  | 17.3                              | 13.3    | 21.3    |                          |
| 6     | 1   | 17.7                              | 13.3    | 22.0    | 19.4                     |
| 6     | 2   | 17.9                              | 13.3    | 22.2    | 20.0                     |
| 6     | 3   | 18.0                              | 14.4    | 22.1    | 20.2                     |
| 6     | 4   | 18.3                              | 13.9    | 22.5    | 20.1                     |
| 6     | 5   | 18.5                              | 15.0    | 22.2    |                          |
| 6     | 6   | 18.7                              | 15.6    | 22.4    |                          |
| 6     | 7   | 18.8                              | 15.0    | 22.4    | 20.6                     |
| 6     | 8   | 19.1                              | 16.1    | 22.5    | 21.0                     |
| 6     | 9   | 19.2                              | 16.1    | 23.0    | 21.3                     |
| 6     | 10  | 19.4                              | 16.1    | 23.2    | 21.3                     |
| 6     | 11  | 19.7                              | 17.2    | 23.4    | 21.7                     |
| 6     | 12  | 19.8                              | 17.2    | 23.3    |                          |
| 6     | 13  | 20.0                              | 17.8    | 23.4    |                          |
| 6     | 14  | 20.1                              | 17.8    | 23.3    | 22.2                     |
| 6     | 15  | 20.2                              | 17.8    | 23.5    | 22.6                     |
| 6     | 16  | 20.4                              | 17.8    | 23.8    | 22.8                     |
| 6     | 17  | 20.5                              | 17.8    | 23.8    | 22.3                     |
| 6     | 18  | 20.8                              | 17.8    | 24.2    | 22.3                     |
| 6     | 19  | 20.8                              | 17.8    | 24.1    |                          |
| 6     | 20  | 21.0                              | 17.8    | 24.0    |                          |
| 6     | 21  | 21.3                              | 17.8    | 24.3    | 22.4                     |
| 6     | 22  | 21.4                              | 17.2    | 24.3    | 22.8                     |
| 6     | 23  | 21.5                              | 17.2    | 24.1    | 23.0                     |
| 6     | 24  | 21.7                              | 17.8    | 24.1    | 23.1                     |
| 6     | 25  | 21.8                              | 17.8    | 24.2    | 23.3                     |
| 6     | 26  | 22.0                              | 17.8    | 24.5    |                          |
| 6     | 27  | 22.1                              | 17.8    | 24.4    |                          |
| 6     | 28  | 22.2                              | 17.8    | 24.4    | 23.8                     |
| 6     | 29  | 22.4                              | 17.8    | 25.0    | 24.2                     |
| 6     | 30  | 22.5                              | 17.8    | 25.0    | 24.3                     |
| 7     | 1   | 22.6                              | 18.9    | 25.4    | 24.5                     |
| 7     | 2   | 22.7                              | 18.9    | 25.0    | 24.5                     |
| 7     | 3   | 22.8                              | 19.4    | 25.0    |                          |
| 7     | 4   | 22.9                              | 19.4    | 25.0    |                          |
| 7     | 5   | 23.1                              | 20.0    | 25.6    |                          |
| 7     | 6   | 23.2                              | 20.0    | 25.6    | 25.6                     |
| 7     | 7   | 23.3                              | 20.0    | 25.6    | 26.3                     |
| 7     | 8   | 23.4                              | 20.0    | 25.6    | 26.1                     |
| 7     | 9   | 23.5                              | 20.0    | 25.6    | 26.2                     |
| 7     | 10  | 23.5                              | 20.6    | 26.0    |                          |
| 7     | 11  | 23.7                              | 20.6    | 25.9    |                          |
| 7     | 12  | 23.8                              | 21.1    | 26.1    | 26.4                     |
| 7     | 13  | 24.0                              | 21.7    | 26.7    | 26.1                     |
| 7     | 14  | 24.0                              | 21.7    | 26.7    | 26.0                     |
| 7     | 15  | 24.2                              | 21.7    | 26.7    | 25.8                     |
| 7     | 16  | 24.3                              | 22.2    | 26.7    | 26.0                     |
| 7     | 17  | 24.4                              | 22.2    | 26.6    |                          |
| 7     | 18  | 24.4                              | 22.2    | 26.3    |                          |
| 7     | 19  | 24.6                              | 22.2    | 26.5    | 26.6                     |
| 7     | 20  | 24.7                              | 22.2    | 26.7    | 26.8                     |
| 7     | 21  | 24.7                              | 22.8    | 26.6    | 26.5                     |
| 7     | 22  | 24.8                              | 22.2    | 27.0    | 26.4                     |
| 7     | 23  | 24.8                              | 22.2    | 27.0    | 26.7                     |
| 7     | 24  | 24.9                              | 22.8    | 26.8    |                          |
| 7     | 25  | 24.9                              | 22.8    | 26.7    |                          |
| 7     | 26  | 25.0                              | 22.8    | 26.7    | 26.8                     |
| 7     | 27  | 25.1                              | 22.8    | 27.2    | 26.9                     |
| 7     | 28  | 25.1                              | 22.8    | 27.2    | 27.0                     |
| 7     | 29  | 25.2                              | 22.8    | 27.0    | 27.1                     |
| 7     | 30  | 25.2                              | 23.3    | 27.1    | 27.1                     |
| 7     | 31  | 25.2                              | 23.3    | 27.1    |                          |
| 8     | 1   | 25.2                              | 22.8    | 26.7    |                          |
| 8     | 2   | 25.3                              | 22.8    | 26.7    | 27.4                     |
| 8     | 3   | 25.3                              | 22.8    | 26.9    | 27.3                     |
| 8     | 4   | 25.3                              | 22.8    | 26.9    | 27.4                     |
| 8     | 5   | 25.4                              | 23.3    | 27.2    | 27.2                     |
| 8     | 6   | 25.3                              | 23.3    | 27.2    | 27.1                     |
| 8     | 7   | 25.3                              | 23.3    | 27.4    |                          |
| 8     | 8   | 25.3                              | 23.3    | 27.4    |                          |
| 8     | 9   | 25.3                              | 23.3    | 27.8    | 26.4                     |
| 8     | 10  | 25.3                              | 23.3    | 27.8    | 26.6                     |
| 8     | 11  | 25.3                              | 22.8    | 27.8    | 26.5                     |
| 8     | 12  | 25.3                              | 22.8    | 28.1    | 26.5                     |

TABLE B-4 (CONTINUED)

| MONTH | DAY | LONG-TERM TEMPERATURE (1951-1998) |         |         | 1999 ACTUAL TEMPERATURES |
|-------|-----|-----------------------------------|---------|---------|--------------------------|
|       |     | MEAN                              | MINIMUM | MAXIMUM |                          |
| 8     | 13  | 25.2                              | 22.2    | 28.0    | 26.5                     |
| 8     | 14  | 25.1                              | 22.2    | 28.4    |                          |
| 8     | 15  | 25.1                              | 22.2    | 28.4    |                          |
| 8     | 16  | 25.0                              | 22.2    | 28.4    | 26.3                     |
| 8     | 17  | 25.0                              | 22.2    | 28.1    | 26.2                     |
| 8     | 18  | 25.0                              | 22.8    | 28.0    | 26.2                     |
| 8     | 19  | 24.9                              | 22.2    | 27.7    | 26.1                     |
| 8     | 20  | 24.9                              | 22.8    | 27.6    | 26.0                     |
| 8     | 21  | 24.8                              | 22.2    | 27.5    |                          |
| 8     | 22  | 24.7                              | 22.2    | 27.1    |                          |
| 8     | 23  | 24.7                              | 22.8    | 26.9    | 25.3                     |
| 8     | 24  | 24.7                              | 22.2    | 26.7    | 25.4                     |
| 8     | 25  | 24.6                              | 21.7    | 26.2    | 25.3                     |
| 8     | 26  | 24.5                              | 21.7    | 26.1    | 25.0                     |
| 8     | 27  | 24.5                              | 22.2    | 26.2    | 24.7                     |
| 8     | 28  | 24.4                              | 22.2    | 26.1    |                          |
| 8     | 29  | 24.3                              | 22.2    | 26.7    |                          |
| 8     | 30  | 24.3                              | 22.2    | 26.1    | 24.7                     |
| 8     | 31  | 24.2                              | 22.2    | 26.1    | 24.1                     |
| 9     | 1   | 24.3                              | 22.2    | 26.1    | 24.2                     |
| 9     | 2   | 24.2                              | 22.2    | 26.7    | 23.8                     |
| 9     | 3   | 24.1                              | 22.2    | 26.1    | 23.8                     |
| 9     | 4   | 24.0                              | 22.2    | 25.6    |                          |
| 9     | 5   | 23.9                              | 21.7    | 25.6    |                          |
| 9     | 6   | 23.8                              | 22.2    | 25.6    |                          |
| 9     | 7   | 23.7                              | 21.6    | 25.6    | 24.4                     |
| 9     | 8   | 23.6                              | 21.7    | 25.6    | 24.2                     |
| 9     | 9   | 23.5                              | 21.7    | 25.6    | 24.3                     |
| 9     | 10  | 23.4                              | 21.1    | 25.6    | 24.6                     |
| 9     | 11  | 23.3                              | 21.1    | 25.6    |                          |
| 9     | 12  | 23.1                              | 21.1    | 25.6    |                          |
| 9     | 13  | 22.9                              | 20.0    | 25.6    | 24.1                     |
| 9     | 14  | 22.8                              | 18.9    | 25.0    | 24.3                     |
| 9     | 15  | 22.6                              | 17.8    | 25.0    | 24.2                     |
| 9     | 16  | 22.4                              | 17.2    | 25.0    | 23.7                     |
| 9     | 17  | 22.3                              | 17.2    | 25.0    | 22.6                     |
| 9     | 18  | 22.1                              | 16.7    | 25.0    |                          |
| 9     | 19  | 22.0                              | 16.7    | 23.9    |                          |
| 9     | 20  | 21.8                              | 17.2    | 23.9    | 19.7                     |
| 9     | 21  | 21.5                              | 16.7    | 23.3    | 19.4                     |
| 9     | 22  | 21.4                              | 16.1    | 23.3    | 19.0                     |
| 9     | 23  | 21.1                              | 16.1    | 23.1    | 18.9                     |
| 9     | 24  | 20.9                              | 15.6    | 22.8    | 18.7                     |
| 9     | 25  | 20.7                              | 15.6    | 22.8    |                          |
| 9     | 26  | 20.6                              | 15.6    | 22.3    |                          |
| 9     | 27  | 20.4                              | 16.1    | 22.3    | 18.2                     |
| 9     | 28  | 20.2                              | 15.6    | 22.2    | 18.3                     |
| 9     | 29  | 20.0                              | 15.6    | 22.2    | 18.5                     |
| 9     | 30  | 19.8                              | 15.6    | 22.2    | 18.5                     |
| 10    | 1   | 19.6                              | 16.1    | 22.2    | 18.2                     |
| 10    | 2   | 19.4                              | 15.6    | 22.2    |                          |
| 10    | 3   | 19.3                              | 15.6    | 22.2    |                          |
| 10    | 4   | 19.0                              | 15.6    | 21.7    | 18.0                     |
| 10    | 5   | 18.7                              | 15.0    | 21.1    | 17.6                     |
| 10    | 6   | 18.6                              | 15.0    | 21.1    | 17.4                     |
| 10    | 7   | 18.5                              | 15.0    | 21.1    | 16.8                     |
| 10    | 8   | 18.2                              | 14.4    | 21.1    | 16.8                     |
| 10    | 9   | 18.0                              | 14.4    | 21.1    |                          |
| 10    | 10  | 17.9                              | 14.4    | 21.1    |                          |
| 10    | 11  | 17.7                              | 13.9    | 21.1    |                          |
| 10    | 12  | 17.4                              | 13.3    | 21.1    | 16.1                     |
| 10    | 13  | 17.2                              | 13.3    | 20.0    | 16.1                     |
| 10    | 14  | 17.0                              | 12.8    | 21.1    | 16.2                     |
| 10    | 15  | 16.8                              | 12.2    | 20.0    | 15.6                     |
| 10    | 16  | 16.6                              | 12.2    | 20.0    |                          |
| 10    | 17  | 16.3                              | 12.2    | 20.0    |                          |
| 10    | 18  | 16.1                              | 12.2    | 20.0    | 15.4                     |
| 10    | 19  | 15.9                              | 11.7    | 20.0    | 14.8                     |
| 10    | 20  | 15.7                              | 10.6    | 19.4    | 14.9                     |
| 10    | 21  | 15.4                              | 10.6    | 18.9    | 14.3                     |
| 10    | 22  | 15.1                              | 10.0    | 18.9    | 14.3                     |
| 10    | 23  | 15.0                              | 10.0    | 18.9    |                          |
| 10    | 24  | 14.8                              | 10.0    | 18.3    |                          |
| 10    | 25  | 14.5                              | 10.0    | 18.3    | 13.4                     |
| 10    | 26  | 14.3                              | 10.0    | 17.8    | 13.4                     |

TABLE B-4 (CONTINUED)

| MONTH | DAY | LONG-TERM TEMPERATURE (1951-1998) |         |         | 1999 ACTUAL TEMPERATURES |
|-------|-----|-----------------------------------|---------|---------|--------------------------|
|       |     | MEAN                              | MINIMUM | MAXIMUM |                          |
| 10    | 27  | 14.1                              | 9.4     | 17.8    | 13.2                     |
| 10    | 28  | 14.0                              | 8.9     | 17.8    | 13.2                     |
| 10    | 29  | 13.7                              | 8.3     | 17.8    | 13.2                     |
| 10    | 30  | 13.5                              | 7.8     | 16.7    |                          |
| 10    | 31  | 13.3                              | 7.2     | 16.7    |                          |
| 11    | 1   | 13.1                              | 7.2     | 16.7    | 12.6                     |
| 11    | 2   | 12.9                              | 7.2     | 16.1    | 12.6                     |
| 11    | 3   | 12.7                              | 7.2     | 16.1    | 12.8                     |
| 11    | 4   | 12.5                              | 7.2     | 16.1    | 12.7                     |
| 11    | 5   | 12.2                              | 7.2     | 15.6    | 12.5                     |
| 11    | 6   | 12.0                              | 6.7     | 15.6    |                          |
| 11    | 7   | 11.7                              | 6.1     | 15.0    |                          |
| 11    | 8   | 11.4                              | 6.1     | 15.0    | 11.2                     |
| 11    | 9   | 11.2                              | 5.6     | 15.0    | 10.9                     |
| 11    | 10  | 10.9                              | 5.0     | 15.0    | 11.1                     |
| 11    | 11  | 10.7                              | 5.0     | 15.0    |                          |
| 11    | 12  | 10.4                              | 5.0     | 15.0    | 10.9                     |
| 11    | 13  | 10.2                              | 5.0     | 13.3    |                          |
| 11    | 14  | 9.9                               | 5.0     | 13.3    |                          |
| 11    | 15  | 9.7                               | 5.0     | 12.8    | 10.1                     |
| 11    | 16  | 9.5                               | 5.0     | 12.8    | 9.7                      |
| 11    | 17  | 9.3                               | 5.0     | 12.8    | 9.2                      |
| 11    | 18  | 9.1                               | 5.0     | 12.8    | 9.1                      |
| 11    | 19  | 8.8                               | 5.0     | 12.2    | 9.1                      |
| 11    | 20  | 8.6                               | 4.9     | 11.1    |                          |
| 11    | 21  | 8.4                               | 3.9     | 11.1    |                          |
| 11    | 22  | 8.2                               | 3.9     | 11.1    | 8.5                      |
| 11    | 23  | 8.0                               | 3.9     | 11.1    | 8.4                      |
| 11    | 24  | 7.8                               | 3.9     | 10.6    | 8.2                      |
| 11    | 25  | 7.5                               | 3.9     | 10.6    |                          |
| 11    | 26  | 7.3                               | 3.3     | 10.0    |                          |
| 11    | 27  | 7.0                               | 3.3     | 10.0    |                          |
| 11    | 28  | 6.9                               | 3.3     | 10.0    |                          |
| 11    | 29  | 6.7                               | 3.3     | 10.0    | 8.3                      |
| 11    | 30  | 6.4                               | 2.8     | 10.0    | 8.2                      |
| 12    | 1   | 6.2                               | 2.2     | 9.4     | 7.6                      |
| 12    | 2   | 6.0                               | 3.0     | 8.9     | 7.1                      |
| 12    | 3   | 5.7                               | 2.2     | 8.9     | 7.0                      |
| 12    | 4   | 5.6                               | 1.3     | 8.3     |                          |
| 12    | 5   | 5.4                               | 2.8     | 7.9     |                          |
| 12    | 6   | 5.3                               | 2.6     | 7.9     | 6.8                      |
| 12    | 7   | 5.1                               | 2.0     | 8.3     | 6.8                      |
| 12    | 8   | 4.9                               | 2.0     | 8.2     | 6.4                      |
| 12    | 9   | 4.6                               | 1.7     | 8.1     | 6.3                      |
| 12    | 10  | 4.3                               | 1.1     | 8.1     | 6.3                      |
| 12    | 11  | 4.2                               | 1.1     | 7.8     |                          |
| 12    | 12  | 4.0                               | 0.6     | 7.8     |                          |
| 12    | 13  | 3.9                               | 0.6     | 7.8     | 5.8                      |
| 12    | 14  | 3.6                               | 0.6     | 7.3     | 5.8                      |
| 12    | 15  | 3.4                               | 0.6     | 7.1     | 5.7                      |
| 12    | 16  | 3.3                               | 0.6     | 6.9     | 5.7                      |
| 12    | 17  | 3.1                               | 0.6     | 7.0     | 5.6                      |
| 12    | 18  | 2.9                               | 0.6     | 6.8     |                          |
| 12    | 19  | 2.8                               | 0.6     | 6.8     |                          |
| 12    | 20  | 2.8                               | 0.6     | 6.8     | 4.8                      |
| 12    | 21  | 2.5                               | 0.6     | 6.6     | 4.6                      |
| 12    | 22  | 2.3                               | 0.6     | 6.5     | 4.6                      |
| 12    | 23  | 2.2                               | 0.6     | 6.1     | 4.1                      |
| 12    | 24  | 2.2                               | 0.6     | 5.9     |                          |
| 12    | 25  | 2.1                               | 0.6     | 5.6     |                          |
| 12    | 26  | 2.0                               | 0.0     | 6.1     |                          |
| 12    | 27  | 1.9                               | 0.0     | 6.1     | 3.3                      |
| 12    | 28  | 1.9                               | 0.0     | 6.1     | 3.2                      |
| 12    | 29  | 1.9                               | 0.0     | 6.1     | 3.2                      |
| 12    | 30  | 1.8                               | 0.6     | 6.1     | 3.0                      |
| 12    | 31  | 1.7                               | 0.0     | 5.0     |                          |

TABLE B-5 WEIGHTED MEAN TEMPERATURE (C) BY REGION AND WEEK FROM 1999  
LONG RIVER/FALL SHOALS SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|
|                             | BT      | YK   | TZ   | CH   | IP   | WP   | CW   | PK   | HP   | KG   | SG   | CS   | AL   |
| 22MAR99                     | 4.9     | 5.4  | 5.1  | .    | .    | .    | 3.2  | .    | .    | .    | .    | .    | .    |
| 29MAR99                     | 6.9     | 7.0  | 6.1  | 6.3  | 6.1  | 6.0  | 6.1  | .    | .    | .    | .    | .    | .    |
| 05APR99                     | 7.4     | 7.8  | 7.8  | 7.4  | 7.2  | 6.8  | 7.0  | 7.5  | 7.9  | 8.3  | 7.9  | 7.1  | 6.8  |
| 12APR99                     | 8.0     | 8.7  | 8.9  | 8.3  | 8.8  | 8.2  | 8.6  | 8.4  | 7.8  | 7.3  | 6.3  | 7.4  | 7.4  |
| 19APR99                     | 9.1     | 9.5  | 10.3 | 10.1 | 8.9  | 9.0  | 9.1  | 9.1  | 9.2  | 9.2  | 9.1  | 9.6  | 10.1 |
| 26APR99                     | 9.7     | 10.7 | 11.7 | 10.4 | 9.2  | 9.1  | 9.2  | 9.9  | 10.4 | 10.7 | 11.2 | 11.2 | 11.1 |
| 03MAY99                     | 12.6    | 13.2 | 13.6 | 13.7 | 13.1 | 12.4 | 12.3 | 12.4 | 12.7 | 13.0 | 13.7 | 14.0 | 14.6 |
| 10MAY99                     | 14.2    | 14.8 | 15.6 | 16.3 | 15.3 | 14.2 | 14.2 | 14.1 | 14.6 | 15.7 | 15.0 | 15.7 | 16.3 |
| 17MAY99                     | 16.2    | 16.9 | 17.4 | 18.5 | 17.3 | 16.4 | 16.4 | 16.4 | 17.0 | 17.3 | 18.1 | 18.6 | 18.9 |
| 24MAY99                     | 16.8    | 17.6 | 18.0 | 19.1 | 18.4 | 17.1 | 17.6 | 17.8 | 18.3 | 18.4 | 17.1 | 17.9 | 19.0 |
| 31MAY99                     | 19.6    | 20.5 | 20.7 | 21.9 | 20.4 | 19.8 | 20.1 | 20.6 | 20.5 | 20.7 | 21.3 | 21.5 | 21.4 |
| 07JUN99                     | 18.5    | 20.8 | 22.5 | 23.1 | 22.4 | 21.4 | 22.2 | 21.7 | 21.5 | 22.2 | 22.6 | 22.8 | 23.7 |
| 14JUN99                     | 21.0    | 22.2 | 23.0 | 23.4 | 23.8 | 22.5 | 23.1 | 23.3 | 23.3 | 23.3 | 23.9 | 24.5 | 25.3 |
| 21JUN99                     | 21.7    | 22.1 | 23.1 | 24.3 | 24.4 | 23.5 | 23.4 | 23.6 | 23.7 | 23.8 | 23.9 | 24.4 | 24.9 |
| 28JUN99                     | 23.4    | 24.2 | 24.7 | 25.5 | 25.8 | 25.1 | 24.7 | 25.0 | 25.2 | 25.2 | 25.2 | 25.9 | 26.0 |
| 05JUL99                     | 24.0    | 26.7 | 27.6 | 27.8 | 28.0 | 26.6 | 27.0 | 26.8 | 26.7 | 27.7 | 28.2 | 25.8 | 28.0 |
| 12JUL99                     | 21.7    | 23.4 | 25.3 | 26.4 | 27.1 | 26.5 | 26.0 | 26.3 | .    | .    | .    | .    | .    |
| 19JUL99                     | 24.5    | 26.3 | 27.0 | 27.7 | 27.8 | 26.8 | 26.9 | 28.4 | 27.4 | 27.1 | 27.3 | 27.6 | 27.8 |
| 26JUL99                     | 24.7    | 25.8 | 27.0 | 27.9 | 28.0 | 27.7 | 28.0 | 27.5 | .    | .    | .    | .    | .    |
| 02AUG99                     | 28.1    | 28.0 | 27.2 | 28.6 | 28.9 | 27.8 | 28.1 | 27.5 | 27.5 | 27.9 | 28.0 | 28.2 | 28.9 |
| 09AUG99                     | 25.1    | 25.4 | 25.9 | 27.0 | 27.5 | 26.9 | 26.6 | 26.5 | .    | .    | .    | .    | .    |
| 16AUG99                     | 25.8    | 26.1 | 26.7 | 27.5 | 27.8 | 27.0 | 27.1 | 27.0 | 25.8 | 24.9 | 24.9 | 24.3 | 24.6 |
| 23AUG99                     | 23.8    | 24.4 | 25.2 | 26.4 | 26.8 | 26.5 | 26.5 | 26.2 | .    | .    | .    | .    | .    |
| 30AUG99                     | 23.8    | 23.7 | 23.9 | 24.8 | 25.3 | 25.1 | 24.5 | 24.5 | 24.2 | 24.0 | 23.7 | 24.2 | 24.8 |
| 06SEP99                     | 24.0    | 23.9 | 24.6 | 25.6 | 26.0 | 25.1 | 25.3 | 25.2 | .    | .    | .    | .    | .    |
| 13SEP99                     | 24.1    | 23.8 | 24.9 | 25.0 | 25.3 | 24.9 | 25.0 | 25.1 | 24.7 | 24.7 | 24.9 | 25.1 | 25.3 |
| 20SEP99                     | 22.3    | 22.5 | 22.7 | 22.9 | 22.3 | 22.0 | 21.8 | 20.6 | .    | .    | .    | .    | .    |
| 27SEP99                     | 20.8    | 21.0 | 21.0 | 20.9 | 20.2 | 20.2 | 20.3 | 19.0 | 18.7 | 18.2 | 18.0 | 18.0 | 17.6 |
| 04OCT99                     | 19.6    | 19.4 | 19.2 | 18.7 | 18.8 | 18.5 | 17.9 | 17.5 | .    | .    | .    | .    | .    |
| 11OCT99                     | 18.3    | 18.1 | 17.9 | 17.5 | 17.4 | 17.2 | 17.7 | 17.2 | 16.2 | 15.6 | 15.1 | 14.8 | 14.6 |
| 25OCT99                     | 15.4    | 14.1 | 14.6 | 15.2 | 15.9 | 14.8 | 14.8 | 14.2 | 13.3 | .    | .    | .    | .    |
| 08NOV99                     | 13.5    | 13.3 | 13.0 | 13.3 | 14.2 | 12.4 | 12.5 | 12.3 | 10.9 | 9.7  | 9.1  | 9.7  | 9.1  |
| 29NOV99                     | 11.7    | 11.2 | 10.2 | 9.8  | 9.7  | 8.0  | 7.6  | 7.3  | 6.9  | 6.9  | 7.0  | 8.0  | 7.4  |

Note: Dots (.) indicate no sampling.

TABLE B-6 MEAN TEMPERATURE (C) BY REGION AND WEEK FROM 1999 BEACH  
SEINE SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|
|                             | YK      | TZ   | CH   | IP   | WP   | CW   | PK   | HP   | KG   | SG   | CS   | AL   |
| 14JUN99                     | 22.5    | 23.2 | 22.6 | 22.9 | 23.1 | 24.3 | 23.5 | 23.0 | 22.3 | 23.3 | 25.8 | 25.2 |
| 28JUN99                     | 26.5    | 26.7 | 27.5 | 27.6 | 25.7 | 25.1 | 25.0 | 25.2 | 25.7 | 25.5 | 27.6 | 26.7 |
| 12JUL99                     | 25.3    | 25.6 | 26.6 | 27.0 | 25.4 | 25.0 | 25.4 | 25.5 | 25.2 | 25.3 | 26.8 | 25.5 |
| 26JUL99                     | 26.5    | 26.6 | 28.7 | 29.5 | 28.0 | 28.1 | 27.9 | 27.1 | 26.5 | 27.7 | 28.3 | 27.6 |
| 09AUG99                     | 25.8    | 26.2 | 27.6 | 27.3 | 26.9 | 26.9 | 26.8 | 25.9 | 24.2 | 25.3 | 26.2 | 25.8 |
| 23AUG99                     | 24.6    | 24.9 | 26.9 | 26.3 | 25.8 | 25.3 | 24.9 | 23.4 | 23.5 | 25.2 | 24.6 | 23.6 |
| 06SEP99                     | 24.8    | 24.5 | 25.9 | 26.1 | 25.9 | 25.8 | 25.7 | 23.9 | 24.0 | 25.4 | 25.7 | 25.3 |
| 20SEP99                     | 23.2    | 22.5 | 20.1 | 20.5 | 20.6 | 18.9 | 19.7 | 18.1 | 17.5 | 17.6 | 17.3 | 17.8 |
| 04OCT99                     | 17.2    | 17.3 | 17.0 | 16.5 | 16.8 | 16.0 | 15.0 | 13.8 | 13.3 | 15.6 | 15.3 | 13.7 |
| 18OCT99                     | 16.4    | 15.9 | 16.3 | 15.7 | 15.2 | 14.3 | 14.1 | 13.5 | 13.0 | 13.6 | 13.1 | 12.3 |

TABLE B-7 WEIGHTED MEAN SALINITY (PPT) BY REGION AND WEEK FROM 1999  
LONG RIVER/FALL SHOALS SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |     |     |     |     |     |     |     |     |     |     |
|-----------------------------|---------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                             | BT      | YK   | TZ   | CH  | IP  | WP  | CW  | PK  | HP  | KG  | SG  | CS  | AL  |
| 22MAR99                     | 9.2     | 5.6  | 3.3  | .   | .   | .   | 0.2 | .   | .   | .   | .   | .   | .   |
| 29MAR99                     | 13.5    | 5.6  | 2.1  | 0.2 | 0.2 | 0.1 | 0.1 | .   | .   | .   | .   | .   | .   |
| 05APR99                     | 7.9     | 4.1  | 0.8  | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 12APR99                     | 15.6    | 6.0  | 2.9  | 2.9 | 2.4 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 19APR99                     | 14.4    | 8.5  | 3.5  | 1.3 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 26APR99                     | 18.6    | 8.1  | 2.2  | 1.1 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 03MAY99                     | 16.3    | 10.2 | 7.4  | 5.0 | 2.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 10MAY99                     | 21.5    | 13.4 | 7.1  | 5.1 | 3.9 | 2.3 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 17MAY99                     | 16.6    | 10.4 | 7.1  | 4.3 | 2.1 | 1.6 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 24MAY99                     | 18.7    | 9.5  | 4.4  | 2.0 | 1.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 31MAY99                     | 14.8    | 9.5  | 5.2  | 2.7 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 07JUN99                     | 22.8    | 15.1 | 8.1  | 0.4 | 2.4 | 0.9 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| 14JUN99                     | 17.7    | 11.1 | 7.6  | 5.3 | 2.8 | 0.6 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 21JUN99                     | 21.4    | 16.2 | 10.0 | 5.7 | 3.5 | 1.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| 28JUN99                     | 14.9    | 11.0 | 9.0  | 6.3 | 4.6 | 1.6 | 0.9 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| 05JUL99                     | 20.5    | 11.8 | 6.4  | 4.4 | 3.5 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 12JUL99                     | 23.5    | 17.8 | 8.8  | 4.4 | 3.6 | 1.5 | 0.4 | 0.2 | .   | .   | .   | .   | .   |
| 19JUL99                     | 20.0    | 11.1 | 6.8  | 6.0 | 4.2 | 0.8 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 26JUL99                     | 22.6    | 16.8 | 10.9 | 7.8 | 6.1 | 4.2 | 1.7 | 0.2 | .   | .   | .   | .   | .   |
| 02AUG99                     | 19.0    | 13.3 | 9.8  | 7.5 | 6.5 | 2.6 | 1.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 09AUG99                     | 23.8    | 17.4 | 10.0 | 7.5 | 6.8 | 4.1 | 1.9 | 0.4 | .   | .   | .   | .   | .   |
| 16AUG99                     | 18.2    | 13.4 | 9.5  | 7.3 | 5.6 | 2.9 | 1.4 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 23AUG99                     | 21.5    | 17.2 | 12.2 | 8.8 | 8.1 | 6.5 | 3.9 | 0.6 | .   | .   | .   | .   | .   |
| 30AUG99                     | 20.4    | 14.6 | 11.7 | 9.1 | 6.9 | 5.6 | 3.3 | 0.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 06SEP99                     | 24.7    | 19.3 | 12.3 | 8.6 | 7.3 | 5.4 | 3.1 | 0.8 | .   | .   | .   | .   | .   |
| 13SEP99                     | 20.3    | 13.8 | 9.5  | 7.7 | 6.5 | 3.9 | 2.2 | 0.8 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 20SEP99                     | 15.9    | 8.4  | 3.3  | 1.1 | 0.4 | 0.2 | 0.2 | 0.2 | .   | .   | .   | .   | .   |
| 27SEP99                     | 14.8    | 6.7  | 3.1  | 1.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 |
| 04OCT99                     | 15.6    | 5.0  | 1.4  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | .   | .   | .   | .   | .   |
| 11OCT99                     | 15.1    | 7.6  | 2.8  | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| 25OCT99                     | 17.8    | 7.0  | 5.5  | 4.0 | 2.3 | 0.3 | 0.2 | 0.2 | 0.2 | .   | .   | .   | .   |
| 08NOV99                     | 20.2    | 12.5 | 3.6  | 1.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 29NOV99                     | 14.9    | 7.8  | 4.3  | 3.8 | 1.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

Note: Dots (.) indicate no sampling.

TABLE B-8 MEAN SALINITY (PPT) BY REGION AND WEEK FROM 1999 BEACH SEINE SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |     |     |     |     |     |     |     |     |     |     |
|-----------------------------|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                             | YK      | TZ   | CH  | IP  | WP  | CW  | PK  | HP  | KG  | SG  | CS  | AL  |
| 14JUN99                     | 12.4    | 7.5  | 4.4 | 2.5 | 0.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 28JUN99                     | 10.0    | 7.0  | 5.1 | 4.2 | 2.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 12JUL99                     | 9.7     | 6.8  | 4.0 | 2.8 | 0.7 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 26JUL99                     | 9.4     | 7.3  | 5.7 | 4.2 | 2.2 | 0.8 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 |
| 09AUG99                     | 14.3    | 9.4  | 7.2 | 4.8 | 2.1 | 0.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 23AUG99                     | 10.6    | 8.3  | 7.4 | 7.5 | 4.9 | 2.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 06SEP99                     | 13.6    | 10.0 | 7.9 | 7.0 | 4.5 | 2.6 | 1.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 20SEP99                     | 5.1     | 3.2  | 1.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 |
| 04OCT99                     | 4.5     | 1.6  | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 18OCT99                     | 6.8     | 3.6  | 2.4 | 2.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

**TABLE B-9 WEIGHTED MEAN DISSOLVED OXYGEN (MG/L) BY REGION AND WEEK  
FROM 1999 LONG RIVER/FALL SHOALS SURVEY**

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|
|                             | BT      | YK   | TZ   | CH   | IP   | WP   | CW   | PK   | HP   | KG   | SG   | CS   | AL   |
| 22MAR99                     | 11.1    | 11.8 | 12.1 | .    | .    | .    | 12.6 | .    | .    | .    | .    | .    | .    |
| 29MAR99                     | 10.2    | 11.0 | 12.0 | 12.1 | 12.2 | 12.1 | 11.9 | .    | .    | .    | .    | .    | .    |
| 05APR99                     | 10.7    | 11.2 | 11.6 | 11.4 | 11.6 | 11.8 | 11.9 | 11.9 | 11.9 | 11.9 | 12.0 | 12.6 | 12.6 |
| 12APR99                     | 9.1     | 10.5 | 10.7 | 10.8 | 10.9 | 11.2 | 11.3 | 11.3 | 11.6 | 11.6 | 11.8 | 12.1 | 12.2 |
| 19APR99                     | 8.2     | 9.3  | 10.0 | 10.5 | 10.7 | 10.8 | 10.9 | 10.8 | 10.7 | 10.8 | 11.0 | 11.0 | 11.2 |
| 26APR99                     | 8.3     | 8.4  | 8.8  | 10.0 | 11.0 | 11.2 | 10.7 | 10.2 | 10.4 | 10.4 | 10.4 | 10.3 | 10.4 |
| 03MAY99                     | 8.7     | 9.1  | 9.3  | 9.3  | 9.8  | 10.4 | 10.6 | 10.7 | 10.6 | 10.6 | 10.6 | 10.3 | 10.1 |
| 10MAY99                     | 7.3     | 7.9  | 8.8  | 8.9  | 9.0  | 9.3  | 10.0 | 10.0 | 10.1 | 10.4 | 10.0 | 9.3  | 8.9  |
| 17MAY99                     | 6.6     | 7.6  | 8.2  | 8.5  | 8.7  | 9.3  | 9.7  | 9.6  | 10.3 | 10.5 | 10.4 | 9.3  | 8.2  |
| 24MAY99                     | 6.5     | 7.2  | 7.9  | 8.6  | 9.5  | 10.9 | 10.6 | 10.7 | 10.0 | 9.6  | 10.4 | 10.3 | 9.3  |
| 31MAY99                     | 10.0    | 10.8 | 10.2 | 9.2  | 8.9  | 8.8  | 8.7  | 8.0  | 7.7  | 7.7  | 8.9  | 8.9  | 8.4  |
| 07JUN99                     | 7.2     | 7.0  | 7.2  | 7.6  | 7.2  | 7.5  | 7.9  | 7.7  | 7.6  | 7.8  | 8.2  | 9.8  | 7.6  |
| 14JUN99                     | 5.5     | 6.3  | 7.2  | 7.5  | 7.0  | 7.0  | 7.3  | 7.4  | 6.9  | 7.0  | 7.2  | 8.2  | 7.3  |
| 21JUN99                     | 6.3     | 7.0  | 6.8  | 6.9  | 6.9  | 6.7  | 7.2  | 7.2  | 7.1  | 7.1  | 7.4  | 7.6  | 7.8  |
| 28JUN99                     | 5.8     | 6.2  | 6.6  | 7.0  | 6.6  | 7.4  | 7.2  | 7.7  | 7.9  | 7.7  | 7.3  | 7.1  | 7.4  |
| 05JUL99                     | 6.0     | 6.8  | 7.3  | 6.9  | 6.5  | 6.6  | 6.7  | 6.8  | 6.8  | 6.9  | 7.0  | 8.2  | 7.1  |
| 12JUL99                     | 5.3     | 5.3  | 6.4  | 6.8  | 6.5  | 6.3  | 6.6  | 6.8  | .    | .    | .    | .    | .    |
| 19JUL99                     | 6.8     | 7.3  | 7.8  | 7.1  | 6.7  | 7.3  | 7.5  | 7.5  | 7.0  | 6.9  | 7.1  | 7.2  | 7.9  |
| 26JUL99                     | 6.8     | 7.6  | 7.8  | 6.9  | 6.5  | 6.2  | 6.6  | 7.0  | .    | .    | .    | .    | .    |
| 02AUG99                     | 5.3     | 6.8  | 7.7  | 7.2  | 7.1  | 6.7  | 7.0  | 7.2  | 7.3  | 7.2  | 7.2  | 6.8  | 7.5  |
| 09AUG99                     | 5.0     | 5.3  | 7.5  | 8.2  | 7.8  | 6.3  | 6.6  | 6.6  | .    | .    | .    | .    | .    |
| 16AUG99                     | 5.6     | 8.6  | 8.8  | 9.1  | 7.8  | 6.6  | 7.1  | 7.0  | 6.6  | 6.4  | 6.3  | 6.3  | 6.4  |
| 23AUG99                     | 5.8     | 6.8  | 7.6  | 7.0  | 6.9  | 6.4  | 6.6  | 7.1  | .    | .    | .    | .    | .    |
| 30AUG99                     | 5.3     | 6.3  | 7.2  | 8.0  | 6.5  | 6.2  | 6.5  | 6.8  | 7.0  | 7.8  | 7.5  | 7.3  | 7.2  |
| 06SEP99                     | 5.2     | 5.2  | 6.6  | 7.0  | 6.3  | 6.3  | 6.6  | 6.6  | .    | .    | .    | .    | .    |
| 13SEP99                     | 4.4     | 5.0  | 6.3  | 6.1  | 5.8  | 6.3  | 6.7  | 6.6  | 7.0  | 7.5  | 7.4  | 7.1  | 6.9  |
| 20SEP99                     | 5.3     | 6.1  | 6.6  | 6.4  | 7.5  | 7.7  | 7.9  | 7.8  | .    | .    | .    | .    | .    |
| 27SEP99                     | 5.7     | 7.1  | 7.8  | 8.6  | 6.8  | 7.5  | 8.1  | 7.8  | 8.0  | 8.6  | 8.8  | 8.4  | 8.9  |
| 04OCT99                     | 6.5     | 7.7  | 8.4  | 7.3  | 7.2  | 7.2  | 7.3  | 7.2  | .    | .    | .    | .    | .    |
| 11OCT99                     | 6.7     | 7.7  | 8.3  | 8.4  | 8.2  | 8.3  | 7.9  | 7.8  | 8.3  | 8.6  | 9.0  | 9.3  | 10.1 |
| 25OCT99                     | 7.1     | 8.6  | 8.8  | 8.8  | 8.6  | 9.0  | 9.1  | 9.3  | 9.5  | .    | .    | .    | .    |
| 08NOV99                     | 7.9     | 8.8  | 10.2 | 9.7  | 9.5  | 9.9  | 10.0 | 9.7  | 10.3 | 10.8 | 11.0 | 11.1 | 11.7 |
| 29NOV99                     | 8.3     | 9.3  | 10.4 | 10.7 | 11.2 | 11.4 | 11.9 | 11.6 | 11.8 | 11.9 | 11.7 | 11.7 | 13.1 |

Note: Dots (.) indicate no sampling.

TABLE B-10 MEAN DISSOLVED OXYGEN (MG/L) BY REGION AND WEEK FROM 1999  
BEACH SEINE SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |     |     |     |     |     |     |     |      |     |     |     |
|-----------------------------|---------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
|                             | YK      | TZ  | CH  | IP  | WP  | CW  | PK  | HP  | KG   | SG  | CS  | AL  |
| 14JUN99                     | 5.9     | 7.0 | 6.3 | 7.2 | 7.1 | 8.1 | 8.4 | 8.2 | 7.5  | 7.3 | 8.5 | 7.7 |
| 28JUN99                     | 8.2     | 7.2 | 9.4 | 8.9 | 6.3 | 6.2 | 5.8 | 5.6 | 10.5 | 7.5 | 6.4 | 7.0 |
| 12JUL99                     | 6.1     | 7.0 | 7.9 | 7.5 | 6.5 | 7.4 | 7.3 | 7.4 | 7.7  | 8.2 | 8.9 | 7.4 |
| 26JUL99                     | 8.2     | 8.2 | 9.1 | 7.5 | 6.6 | 7.1 | 7.4 | 7.7 | 7.3  | 8.5 | 8.3 | 7.5 |
| 09AUG99                     | 6.4     | 7.9 | 7.8 | 6.1 | 6.8 | 7.1 | 7.1 | 7.1 | 6.7  | 8.0 | 7.2 | 7.6 |
| 23AUG99                     | 9.1     | 8.2 | 9.3 | 9.3 | 7.9 | 7.3 | 7.9 | 7.1 | 8.0  | 8.5 | 7.5 | 7.5 |
| 06SEP99                     | 5.7     | 6.2 | 6.4 | 6.0 | 6.2 | 6.7 | 6.5 | 6.4 | 6.6  | 7.6 | 6.7 | 6.8 |
| 20SEP99                     | 8.1     | 8.2 | 8.7 | 8.0 | 8.2 | 8.6 | 7.9 | 8.0 | 8.0  | 8.8 | 9.0 | 8.8 |
| 04OCT99                     | 8.4     | 8.3 | 8.5 | 8.6 | 8.3 | 8.1 | 8.3 | 8.6 | 8.4  | 8.7 | 8.5 | 8.5 |
| 18OCT99                     | 7.6     | 7.9 | 8.5 | 7.4 | 7.6 | 8.5 | 8.4 | 8.6 | 8.2  | 9.4 | 8.9 | 9.6 |

TABLE B-11 WEIGHTED MEAN PERCENT OXYGEN SATURATION BY REGION AND WEEK FROM 1999 LONG RIVER/FALL SHOALS SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                             | BT      | YK    | TZ    | CH    | IP    | WP    | CW    | PK    | HP    | KG    | SG    | CS    | AL    |
| 22MAR99                     | 93.1    | 97.3  | 97.5  | .     | .     | .     | 94.3  | .     | .     | .     | .     | .     | .     |
| 29MAR99                     | 92.1    | 94.0  | 98.3  | 98.4  | 98.0  | 97.5  | 95.6  | .     | .     | .     | .     | .     | .     |
| 05APR99                     | 94.0    | 96.6  | 97.7  | 95.2  | 96.6  | 96.6  | 98.6  | 99.5  | 100.0 | 101.4 | 101.5 | 104.4 | 103.6 |
| 12APR99                     | 86.3    | 94.2  | 94.5  | 93.9  | 95.2  | 95.5  | 97.3  | 96.5  | 97.5  | 96.2  | 95.4  | 100.5 | 101.5 |
| 19APR99                     | 79.1    | 86.7  | 91.8  | 94.0  | 92.6  | 94.0  | 94.6  | 93.9  | 92.8  | 94.1  | 95.7  | 96.2  | 99.4  |
| 26APR99                     | 83.5    | 79.8  | 82.3  | 89.6  | 96.1  | 97.4  | 93.1  | 90.5  | 93.0  | 94.1  | 95.2  | 93.8  | 95.0  |
| 03MAY99                     | 91.7    | 93.0  | 94.1  | 92.5  | 94.5  | 97.3  | 99.0  | 100.4 | 100.1 | 100.6 | 102.4 | 100.2 | 99.2  |
| 10MAY99                     | 82.4    | 85.8  | 92.6  | 94.3  | 92.4  | 91.7  | 97.7  | 97.6  | 98.9  | 104.4 | 99.4  | 93.4  | 90.6  |
| 17MAY99                     | 74.6    | 83.8  | 90.0  | 93.0  | 91.7  | 95.5  | 99.1  | 98.2  | 106.9 | 109.3 | 110.2 | 99.1  | 88.4  |
| 24MAY99                     | 76.5    | 80.3  | 86.3  | 94.2  | 101.7 | 113.6 | 111.1 | 112.8 | 106.6 | 102.7 | 108.3 | 108.9 | 100.3 |
| 31MAY99                     | 120.2   | 127.5 | 117.8 | 106.3 | 99.1  | 96.3  | 95.4  | 89.4  | 85.0  | 86.0  | 101.1 | 100.5 | 94.6  |
| 07JUN99                     | 89.1    | 85.8  | 87.6  | 88.6  | 84.1  | 85.5  | 90.4  | 87.7  | 86.6  | 89.9  | 94.7  | 114.4 | 90.2  |
| 14JUN99                     | 69.8    | 78.0  | 88.3  | 91.0  | 84.0  | 80.5  | 85.8  | 86.3  | 80.6  | 81.8  | 85.0  | 98.7  | 88.5  |
| 21JUN99                     | 82.3    | 88.9  | 85.1  | 86.0  | 84.0  | 79.6  | 84.3  | 84.5  | 83.7  | 84.0  | 88.1  | 91.0  | 93.9  |
| 28JUN99                     | 75.2    | 79.7  | 84.4  | 88.3  | 83.5  | 90.1  | 86.9  | 92.7  | 95.9  | 93.4  | 88.6  | 87.2  | 90.7  |
| 05JUL99                     | 81.3    | 90.9  | 96.9  | 90.7  | 85.3  | 82.9  | 83.7  | 84.9  | 84.4  | 88.1  | 89.2  | 98.9  | 90.3  |
| 12JUL99                     | 70.1    | 70.4  | 82.3  | 87.1  | 83.8  | 78.7  | 82.1  | 84.3  | .     | .     | .     | .     | .     |
| 19JUL99                     | 92.3    | 96.7  | 101.8 | 94.0  | 86.9  | 91.1  | 93.7  | 96.6  | 87.9  | 87.2  | 89.5  | 91.6  | 100.5 |
| 26JUL99                     | 94.2    | 103.4 | 104.4 | 91.8  | 86.6  | 80.3  | 85.5  | 88.8  | .     | .     | .     | .     | .     |
| 02AUG99                     | 76.5    | 94.9  | 103.7 | 96.9  | 95.8  | 86.8  | 89.7  | 91.3  | 92.2  | 91.2  | 91.9  | 87.1  | 97.8  |
| 09AUG99                     | 70.7    | 71.4  | 97.6  | 107.5 | 102.6 | 81.4  | 83.0  | 82.7  | .     | .     | .     | .     | .     |
| 16AUG99                     | 77.7    | 115.3 | 116.8 | 120.5 | 103.1 | 84.6  | 89.5  | 88.1  | 80.9  | 77.0  | 76.0  | 75.5  | 76.6  |
| 23AUG99                     | 78.3    | 90.2  | 99.2  | 91.6  | 91.3  | 82.5  | 84.2  | 87.6  | .     | .     | .     | .     | .     |
| 30AUG99                     | 71.7    | 81.5  | 92.0  | 102.8 | 82.4  | 78.2  | 80.1  | 81.9  | 83.6  | 92.4  | 88.3  | 87.2  | 87.2  |
| 06SEP99                     | 72.9    | 69.9  | 85.8  | 90.1  | 81.2  | 78.3  | 82.4  | 80.0  | .     | .     | .     | .     | .     |
| 13SEP99                     | 60.2    | 65.0  | 81.0  | 77.0  | 73.1  | 77.9  | 82.7  | 80.6  | 83.8  | 89.9  | 89.2  | 85.5  | 84.2  |
| 20SEP99                     | 68.0    | 73.8  | 78.1  | 75.3  | 86.3  | 88.5  | 90.0  | 86.7  | .     | .     | .     | .     | .     |
| 27SEP99                     | 70.5    | 83.6  | 89.7  | 96.6  | 75.4  | 82.6  | 89.4  | 83.8  | 86.2  | 91.4  | 92.8  | 88.5  | 93.8  |
| 04OCT99                     | 78.4    | 86.6  | 91.5  | 78.7  | 77.8  | 76.9  | 76.7  | 74.9  | .     | .     | .     | .     | .     |
| 11OCT99                     | 78.6    | 86.1  | 88.9  | 88.4  | 86.1  | 86.8  | 82.7  | 81.3  | 84.2  | 86.6  | 89.7  | 92.1  | 99.3  |
| 25OCT99                     | 80.5    | 87.4  | 89.6  | 89.7  | 88.2  | 88.7  | 90.2  | 90.9  | 91.3  | .     | .     | .     | .     |
| 08NOV99                     | 87.4    | 91.1  | 99.7  | 93.8  | 93.1  | 93.0  | 94.3  | 90.3  | 93.2  | 95.2  | 95.7  | 97.9  | 102.0 |
| 29NOV99                     | 84.3    | 90.0  | 95.7  | 97.3  | 98.8  | 96.8  | 99.5  | 96.4  | 97.5  | 98.2  | 96.7  | 98.5  | 108.7 |

Note: Dots (.) indicate no sampling.

TABLE B-12 MEAN PERCENT OXYGEN SATURATION BY REGION AND WEEK FROM  
1999 BEACH SEINE SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |       |       |       |       |      |      |      |       |       |       |      |
|-----------------------------|---------|-------|-------|-------|-------|------|------|------|-------|-------|-------|------|
|                             | YK      | TZ    | CH    | IP    | WP    | CW   | PK   | HP   | KG    | SG    | CS    | AL   |
| 14JUN99                     | 73.7    | 85.5  | 75.4  | 84.7  | 82.8  | 97.3 | 98.6 | 96.1 | 86.0  | 85.2  | 104.0 | 93.4 |
| 28JUN99                     | 109.3   | 94.3  | 123.2 | 116.3 | 77.8  | 74.6 | 70.1 | 68.3 | 128.8 | 91.2  | 80.6  | 87.0 |
| 12JUL99                     | 79.4    | 89.3  | 101.4 | 95.9  | 79.1  | 89.4 | 89.3 | 90.6 | 94.0  | 100.1 | 111.4 | 90.4 |
| 26JUL99                     | 107.9   | 106.4 | 121.7 | 100.8 | 85.1  | 91.1 | 94.1 | 96.8 | 91.0  | 108.4 | 106.9 | 95.5 |
| 09AUG99                     | 86.2    | 104.0 | 103.3 | 78.9  | 86.1  | 88.8 | 89.3 | 87.5 | 79.5  | 97.7  | 89.2  | 92.8 |
| 23AUG99                     | 116.7   | 104.2 | 122.0 | 121.4 | 100.3 | 89.7 | 95.4 | 82.9 | 94.0  | 103.7 | 89.4  | 88.0 |
| 06SEP99                     | 74.8    | 78.6  | 83.1  | 77.5  | 77.9  | 83.8 | 80.5 | 76.0 | 78.7  | 92.7  | 81.9  | 82.2 |
| 20SEP99                     | 97.9    | 96.2  | 97.2  | 89.1  | 91.1  | 93.0 | 87.0 | 84.5 | 83.7  | 92.4  | 93.6  | 93.1 |
| 04OCT99                     | 90.0    | 87.6  | 88.1  | 88.0  | 85.9  | 82.4 | 82.2 | 82.8 | 80.0  | 87.6  | 85.2  | 81.6 |
| 18OCT99                     | 81.8    | 81.9  | 88.5  | 76.1  | 76.4  | 82.9 | 81.4 | 82.1 | 78.1  | 90.3  | 85.1  | 89.9 |

TABLE B-13 WEIGHTED MEAN CONDUCTIVITY (MS/CM @ 25 C) BY REGION AND WEEK FROM 1999 LONG RIVER/FALL SHOALS SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |      |      |      |     |     |     |     |     |     |     |
|-----------------------------|---------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
|                             | BT      | YK   | TZ   | CH   | IP   | WP   | CW  | PK  | HP  | KG  | SG  | CS  | AL  |
| 22MAR99                     | 15.6    | 9.8  | 5.8  | .    | .    | .    | 0.3 | .   | .   | .   | .   | .   | .   |
| 29MAR99                     | 22.4    | 9.7  | 3.6  | 0.3  | 0.3  | 0.3  | 0.3 | .   | .   | .   | .   | .   | .   |
| 05APR99                     | 13.3    | 7.0  | 1.4  | 0.3  | 0.3  | 0.3  | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| 12APR99                     | 25.6    | 10.2 | 5.1  | 5.1  | 4.2  | 1.0  | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 19APR99                     | 23.8    | 14.6 | 6.2  | 2.2  | 0.6  | 0.3  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 26APR99                     | 30.1    | 13.7 | 3.9  | 2.0  | 0.8  | 0.2  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 03MAY99                     | 26.6    | 17.2 | 12.7 | 8.6  | 3.9  | 0.4  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 10MAY99                     | 34.4    | 22.3 | 12.3 | 8.8  | 6.9  | 4.0  | 1.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 17MAY99                     | 27.2    | 17.6 | 12.3 | 7.5  | 3.8  | 2.7  | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| 24MAY99                     | 30.4    | 16.1 | 7.6  | 3.5  | 2.3  | 0.5  | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 31MAY99                     | 24.4    | 16.2 | 9.1  | 4.7  | 1.2  | 0.3  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| 07JUN99                     | 36.3    | 24.9 | 13.9 | 0.7  | 4.3  | 1.6  | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| 14JUN99                     | 28.9    | 18.7 | 13.1 | 9.2  | 5.0  | 1.0  | 0.5 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| 21JUN99                     | 34.3    | 26.7 | 17.0 | 9.8  | 6.1  | 2.5  | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| 28JUN99                     | 24.6    | 18.6 | 15.3 | 10.9 | 8.1  | 2.8  | 1.6 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| 05JUL99                     | 33.0    | 19.8 | 11.1 | 7.7  | 6.1  | 1.0  | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 12JUL99                     | 37.3    | 29.0 | 14.9 | 7.7  | 6.4  | 2.6  | 0.7 | 0.3 | .   | .   | .   | .   | .   |
| 19JUL99                     | 32.3    | 18.8 | 11.7 | 10.4 | 7.3  | 1.5  | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 26JUL99                     | 36.0    | 27.4 | 18.4 | 13.4 | 10.5 | 7.4  | 3.1 | 0.4 | .   | .   | .   | .   | .   |
| 02AUG99                     | 30.8    | 22.2 | 16.7 | 12.8 | 11.3 | 4.5  | 2.6 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 09AUG99                     | 37.8    | 28.4 | 16.9 | 13.0 | 11.6 | 7.1  | 3.3 | 0.7 | .   | .   | .   | .   | .   |
| 16AUG99                     | 29.6    | 22.4 | 16.3 | 12.6 | 9.7  | 5.0  | 2.5 | 0.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 23AUG99                     | 34.4    | 28.1 | 20.4 | 15.1 | 13.9 | 11.2 | 6.7 | 1.0 | .   | .   | .   | .   | .   |
| 30AUG99                     | 32.9    | 24.3 | 19.7 | 15.6 | 11.9 | 9.6  | 5.8 | 1.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 06SEP99                     | 39.1    | 31.3 | 20.6 | 14.7 | 12.5 | 9.3  | 5.5 | 1.5 | .   | .   | .   | .   | .   |
| 13SEP99                     | 32.7    | 22.9 | 16.2 | 13.2 | 11.2 | 6.7  | 3.8 | 1.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 20SEP99                     | 26.0    | 14.3 | 5.8  | 1.9  | 0.6  | 0.3  | 0.3 | 0.3 | .   | .   | .   | .   | .   |
| 27SEP99                     | 24.5    | 11.5 | 5.4  | 2.0  | 0.4  | 0.3  | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 04OCT99                     | 25.6    | 8.7  | 2.5  | 0.4  | 0.3  | 0.3  | 0.3 | 0.3 | .   | .   | .   | .   | .   |
| 11OCT99                     | 24.9    | 13.1 | 4.9  | 0.6  | 0.3  | 0.3  | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 25OCT99                     | 29.1    | 12.1 | 9.5  | 7.1  | 4.0  | 0.5  | 0.3 | 0.3 | 0.3 | .   | .   | .   | .   |
| 08NOV99                     | 32.6    | 20.8 | 6.2  | 2.4  | 0.5  | 0.3  | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 29NOV99                     | 24.5    | 13.5 | 7.5  | 6.6  | 1.9  | 0.3  | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |

Note: Dots (.) indicate no sampling.

TABLE B-14 MEAN CONDUCTIVITY (mS/cm @ 25C) BY REGION AND WEEK FROM 1999  
BEACH SEINE SURVEY

| WEEK<br>BEGINNING<br>MONDAY | REGIONS |      |      |      |     |     |     |     |     |     |     |     |
|-----------------------------|---------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
|                             | YK      | TZ   | CH   | IP   | WP  | CW  | PK  | HP  | KG  | SG  | CS  | AL  |
| 14JUN99                     | 20.8    | 12.9 | 7.7  | 4.4  | 1.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 |
| 28JUN99                     | 17.0    | 12.1 | 8.9  | 7.4  | 3.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 |
| 12JUL99                     | 16.5    | 11.7 | 6.9  | 4.9  | 1.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 |
| 26JUL99                     | 16.0    | 12.6 | 9.9  | 7.2  | 3.9 | 1.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 09AUG99                     | 23.7    | 16.0 | 12.5 | 8.4  | 3.7 | 0.8 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 |
| 23AUG99                     | 17.9    | 14.2 | 12.8 | 12.8 | 8.5 | 3.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 06SEP99                     | 22.7    | 17.1 | 13.5 | 12.0 | 7.8 | 4.6 | 2.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| 20SEP99                     | 8.8     | 5.6  | 2.2  | 0.6  | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| 04OCT99                     | 7.8     | 2.7  | 0.6  | 0.4  | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 18OCT99                     | 11.7    | 6.3  | 4.3  | 4.4  | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 |