**Supplemental S1** - Description of the population model applied in the methods of this study

(Also available <https://github.com/danStich/anadrofish>)

 An age-structured starting population was initialized using a random starting number of age-1 fish drawn from a negative binomial distribution (mean = 4 × 105, range = 0 - 7.5 × 106) and region-specific *M* (instantaneous natural mortality) and tmax  (maximum age). The number of fish (*N*) at each age *t* in the starting population (*N0*) was calculated as the product of *N*0 and the vector of cumulative survivorship (*lx*) to age *t*:

*Equation S1*

$$N\_{t} = N\_{0 }l\_{x}, l\_{x} = (1 - A)^{t}$$

where *A* was the region-specific annual natural mortality rate derived from regional estimates of *M:*

*Equation S2*

*A* = 1 – *e*-*M*

and *M* was estimated from regional-specific *tmax* using the *tmax*-based estimator recommended by Then et al. (2015):

*Equation S3*

$$M = 4.899 × t\_{max}^{-0.916}$$

The age-structured number of spawning adults in the population (*NSt*) was drawn from a series of binomial distributions using region- and age-specific probabilities of recruitment to spawn and the starting population size at each age (*t* = 1 to *tmax*). Mean fork length (mm) at each age was simulated from regional parameter estimates for the von Bertalanffy (1938) growth function (VBGF):

*Equation S4*

$L\_{t}=L\_{\infty }\left(1-e^{-K\left(t-t\_{0}\right)}\right)$,

where *Lt* was the mean fork length (mm) of fish at age *t*, *L∞* was the mean asymptotic length in each region, *K* (Brody growth coefficient) represented rate of approach *L∞*, and *t0* (the x-intercept) was the hypothetical age at zero length. To avoid nonsensical combinations of growth parameters (because of inherent correlation), we randomly sampled correlated posterior estimates of VBGF parameters from 11 populations ranging from Florida to Maine, USA (Gilligan-Lunda et al., 2021). We used simulated *Lt* to predict the mean mass (g) of fish at each age *t* as a power function where *a* and *b* were region-specific parameters estimates that were estimated using a log10length-log10mass relationship for females (ASFMC 2020):

*Equation S5*

$$W\_{t} = aL\_{t}^{b}$$

Batch fecundity of female spawners was estimated using mass-batch size relationships reported by Olney and McBride (2003) from the Connecticut River, CT (SI), the York River, VA (SI) and the St. Johns River, FL (SM). For each region, batch fecundity at each age *t* (*BFt*) was as a function of regional slope (α) and intercept (β) parameters:

*Equation S6*

$$BF\_{t}= 10^{α + β × W\_{t}}$$

Potential annual fecundity (*PAFt*) at each age *t* was then simulated as the product of *BFt* and the mean number of batches spawned. We assumed that fish spawned a mean number of 6.1 batches (SD = 1) based on batch numbers reported for the Connecticut River, USA (McBride et al., 2016), although we recognize that this likely underestimates total egg production in southerly rivers given latitudinal clines in spawning duration (Limburg et al., 2003).

**Supplemental S2** - Data from the 164 rivers used in this study to estimate spawner potential coast-wide with an without the presence of dams, river name, governmental jurisdiction (CN for Canada or Unites States state two letter abbreviations) and latitude of river ocean entry are indicated. Estimation of accessible habitat, modeled annual spawner potential and biomass (import and export) are presented for an “Undammed” (U) scenario (representing historic conditions) and a Dammed (D) scenario (representing full exclusion by existing dams).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  **River Name**  | **Eco-region** | **Area** | **Latitude**  | **Habitat (km2)** | **Spawner Potential- mean (95% CI)** | **Biomass Import (MT)** | **Biomass Export (MT)** |
| **(degrees)** | **UD** | **D** | **U**  | **D** | **U**  | **D** | **UD** | **D** |
| 1 | Abagadasset | NI | ME | 43.78109 | 0.116 | 0.116 | 6,357 | *(3546-9616)* | 6,357 | *(3546-9616)* | 4.41 | 4.41 | 0.33 | 0.33 |
| 2 | Acadian Peninsula | NI | CN | 47.34396 | 4.565 | 4.565 | 268,087 | *(148894-398698)* | 268,087 | *(148894-398698)* | 168.66 | 168.66 | 13.03 | 13.03 |
| 3 | Aguanus | NI | CN | 50.23914 | 4.810 | 4.810 | 287,142 | *(160968-428534)* | 287,142 | *(160968-428534)* | 180.68 | 180.68 | 13.95 | 13.95 |
| 4 | Altamaha | SP | GA | 31.31150 | 148.014 | 121.731 | 869,421 | *(411995-1374552)* | 705,720 | *(344768-1111824)* | 1052.70 | 854.26 | 357.53 | 290.18 |
| 5 | Androscoggin | NI | ME | 43.78109 | 9.492 | 1.915 | 525,912 | *(295993-801646)* | 105,408 | *(60700-157346)* | 365.14 | 73.17 | 27.22 | 5.46 |
| 6 | Annapolis | NI | CN | 44.68433 | 3.449 | 1.268 | 202,162 | *(118234-303700)* | 73,969 | *(42669-110833)* | 128.31 | 46.95 | 9.88 | 3.61 |
| 7 | Ashepoo | SP | SC | 32.49979 | 2.334 | 2.334 | 13,576 | *(6454-21781)* | 13,576 | *(6454-21781)* | 16.44 | 16.44 | 5.58 | 5.58 |
| 8 | Ashley | SP | SC | 32.76296 | 2.012 | 2.012 | 12,000 | *(5933-18721)* | 12,000 | *(5933-18721)* | 14.55 | 14.55 | 4.88 | 4.88 |
| 9 | Baddeck | NI | CN | 46.11619 | 0.076 | 0.076 | 4,507 | *(2521-6742)* | 4,507 | *(2521-6742)* | 2.84 | 2.84 | 0.22 | 0.22 |
| 10 | Black | SP | SC | 33.39758 | 11.653 | 11.653 | 71,879 | *(35788-112140)* | 71,879 | *(35788-112140)* | 87.15 | 87.15 | 28.46 | 28.46 |
| 11 | Blackstone-Pawtuxet-Woonasquatuxet | NI | RI | 41.71754 | 3.373 | 1.324 | 149,219 | *(82126-226775)* | 58,274 | *(33162-86688)* | 134.89 | 52.67 | 9.40 | 3.67 |
| 12 | Broad | SP | SC | 32.34699 | 1.011 | 1.011 | 5,855 | *(2841-9149)* | 5,855 | *(2841-9149)* | 7.09 | 7.09 | 2.41 | 2.41 |
| 13 | Bull Creek | SI | NC | 35.93451 | 0.632 | 0.632 | 16,785 | *(9253-25325)* | 16,785 | *(9253-25325)* | 24.00 | 24.00 | 2.08 | 2.08 |
| 14 | Cap-Chat | NI | CN | 49.07249 | 0.111 | 0.111 | 6,638 | *(3659-9927)* | 6,638 | *(3659-9927)* | 4.18 | 4.18 | 0.32 | 0.32 |
| 15 | Cape Fear | SP | NC | 32.76860 | 69.672 | 32.461 | 416,090 | *(194519-656127)* | 191,607 | *(97163-299545)* | 504.43 | 232.27 | 169.11 | 77.86 |
| 16 | Cascapedia | NI | CN | 48.25209 | 2.220 | 2.220 | 131,203 | *(74421-198046)* | 131,203 | *(74421-198046)* | 82.59 | 82.59 | 6.37 | 6.37 |
| 17 | Cathance | NI | ME | 43.78109 | 0.268 | 0.253 | 14,789 | *(8317-21504)* | 14,005 | *(7850-20882)* | 10.27 | 9.73 | 0.77 | 0.72 |
| 18 | Chaleur Bay | NI | CN | 48.35940 | 0.705 | 0.705 | 41,803 | *(23264-62226)* | 41,803 | *(23264-62226)* | 26.31 | 26.31 | 2.03 | 2.03 |
| 19 | Charles | NI | MA | 42.76274 | 0.081 | 0.081 | 3,996 | *(2294-5932)* | 3,996 | *(2294-5932)* | 3.21 | 3.21 | 0.23 | 0.23 |
| 20 | Chechessee | SP | SC | 32.32688 | 0.056 | 0.056 | 329 | *(163-522)* | 329 | *(163-522)* | 0.40 | 0.40 | 0.14 | 0.14 |
| 21 | Chester | SI | MD | 38.85148 | 0.029 | 0.029 | 941 | *(540-1400)* | 941 | *(540-1400)* | 1.21 | 1.21 | 0.10 | 0.10 |
| 22 | Cheticamp River | NI | CN | 46.65687 | 0.028 | 0.028 | 1,653 | *(921-2469)* | 1,653 | *(921-2469)* | 1.04 | 1.04 | 0.08 | 0.08 |
| 23 | Choptank | SI | MD | 38.64806 | 3.483 | 3.483 | 111,495 | *(61844-169869)* | 111,495 | *(61844-169869)* | 144.55 | 144.55 | 11.76 | 11.76 |
| 24 | Chowan | SI | NC | 36.02112 | 34.442 | 30.803 | 919,434 | *(519209-1367690)* | 815,228 | *(453206-1223726)* | 1311.68 | 1163.24 | 113.24 | 100.37 |
| 25 | Cocheco | NI | ME | 43.19665 | 0.291 | 0.106 | 15,014 | *(8598-22194)* | 5,464 | *(3030-8307)* | 11.39 | 4.15 | 0.82 | 0.30 |
| 26 | Combahee | SP | SC | 32.50019 | 8.315 | 1.715 | 48,653 | *(23802-76186)* | 10,013 | *(4810-16043)* | 58.91 | 12.12 | 19.98 | 4.11 |
| 27 | Congaree | SP | SC | 32.79082 | 66.210 | 0.000 | 391,200 | *(199923-608573)* | 0 | *(0-0)* | 474.30 | 0.00 | 158.84 | 0.00 |
| 28 | Connecticut | NI | CT | 41.27874 | 68.715 | 31.049 | 2,882,051 | *(1594753-4359950)* | 1,311,529 | *(711078-1984440)* | 2713.75 | 1235.55 | 188.60 | 85.80 |
| 29 | Cooper | SP | SC | 32.79082 | 28.581 | 8.866 | 169,142 | *(83294-264096)* | 52,795 | *(26754-82086)* | 205.04 | 64.00 | 68.68 | 21.43 |
| 30 | Coosawhatchie | SP | SC | 32.34699 | 1.739 | 1.739 | 10,119 | *(5112-15977)* | 10,119 | *(5112-15977)* | 12.25 | 12.25 | 4.16 | 4.16 |
| 31 | Damariscotta | NI | ME | 44.06196 | 0.776 | 0.600 | 43,540 | *(24398-66532)* | 33,744 | *(18374-50962)* | 29.11 | 22.56 | 2.20 | 1.71 |
| 32 | Delaware | SI | DE | 39.27538 | 107.447 | 92.076 | 3,613,282 | *(2042012-5321766)* | 3,106,999 | *(1745306-4648226)* | 4526.93 | 3892.36 | 365.73 | 314.49 |
| 33 | Dennys | NI | ME | 44.89341 | 0.688 | 0.688 | 40,472 | *(24023-60427)* | 40,472 | *(24023-60427)* | 25.47 | 25.47 | 1.97 | 1.97 |
| 34 | Duval | NI | CN | 48.07990 | 2.422 | 2.422 | 142,426 | *(80216-212458)* | 142,426 | *(80216-212458)* | 89.62 | 89.62 | 6.92 | 6.92 |
| 35 | East | NI | ME | 43.78109 | 0.135 | 0.135 | 7,402 | *(4120-10882)* | 7,402 | *(4120-10882)* | 5.14 | 5.14 | 0.38 | 0.38 |
| 36 | East and West River of Pictou | NI | CN | 45.68040 | 0.896 | 0.896 | 53,066 | *(30920-79658)* | 53,066 | *(30920-79658)* | 33.40 | 33.40 | 2.58 | 2.58 |
| 37 | East and West River Sheet Harbour | NI | CN | 44.93336 | 0.568 | 0.568 | 33,692 | *(19454-51124)* | 33,692 | *(19454-51124)* | 21.20 | 21.20 | 1.64 | 1.64 |
| 38 | Edisto | SP | SC | 32.49711 | 29.918 | 29.812 | 173,782 | *(79352-277404)* | 175,787 | *(87814-276570)* | 210.41 | 212.80 | 71.40 | 72.21 |
| 39 | Elk | SI | MD | 39.44020 | 0.763 | 0.763 | 25,941 | *(13788-38526)* | 25,941 | *(13788-38526)* | 32.18 | 32.18 | 2.60 | 2.60 |
| 40 | Exeter | NI | ME | 42.96979 | 0.565 | 0.282 | 28,235 | *(15920-42344)* | 14,268 | *(8030-21567)* | 22.08 | 11.17 | 1.59 | 0.80 |
| 41 | Gaspereau | NI | CN | 45.12961 | 0.707 | 0.707 | 42,146 | *(23813-64795)* | 42,146 | *(23813-64795)* | 26.53 | 26.53 | 2.05 | 2.05 |
| 42 | Gouffre | NI | CN | 47.43832 | 0.723 | 0.723 | 42,906 | *(24558-64645)* | 42,906 | *(24558-64645)* | 27.00 | 27.00 | 2.08 | 2.08 |
| 43 | Grand | NI | CN | 45.61376 | 0.284 | 0.284 | 16,894 | *(9588-25027)* | 16,894 | *(9588-25027)* | 10.63 | 10.63 | 0.82 | 0.82 |
| 44 | Great Pee Dee | SP | SC | 33.35791 | 65.647 | 34.823 | 402,768 | *(197985-641547)* | 215,387 | *(107311-337680)* | 488.44 | 261.19 | 159.78 | 85.44 |
| 45 | Gunpowder | SI | MD | 39.32773 | 1.591 | 1.375 | 53,388 | *(29977-81004)* | 46,421 | *(26406-70010)* | 66.67 | 57.99 | 5.39 | 4.68 |
| 46 | Housatonic | NI | CT | 41.17417 | 9.140 | 2.440 | 382,556 | *(224774-570895)* | 103,265 | *(59422-153772)* | 363.62 | 98.23 | 25.26 | 6.81 |
| 47 | Hudson | SI | NJ | 40.70670 | 65.467 | 58.422 | 2,456,286 | *(1351969-3663277)* | 2,190,590 | *(1216971-3250984)* | 2788.65 | 2486.04 | 224.70 | 200.48 |
| 48 | Indian Head | NI | MA | 42.16467 | 0.029 | 0.029 | 1,340 | *(781-1979)* | 1,340 | *(781-1979)* | 1.16 | 1.16 | 0.08 | 0.08 |
| 49 | Indianhead | SI | NC | 36.22817 | 0.471 | 0.471 | 12,745 | *(6989-19041)* | 12,745 | *(6989-19041)* | 18.09 | 18.09 | 1.55 | 1.55 |
| 50 | Inhabitants | NI | CN | 45.59890 | 0.366 | 0.366 | 21,597 | *(12520-32329)* | 21,597 | *(12520-32329)* | 13.59 | 13.59 | 1.05 | 1.05 |
| 51 | James | SI | VA | 36.97631 | 98.805 | 71.902 | 2,782,934 | *(1562666-4279907)* | 2,049,995 | *(1123052-3137404)* | 3864.25 | 2846.95 | 325.00 | 239.34 |
| 52 | John | NI | CN | 45.72878 | 0.263 | 0.263 | 15,399 | *(8630-23224)* | 15,399 | *(8630-23224)* | 9.69 | 9.69 | 0.75 | 0.75 |
| 53 | Kennebec | NI | ME | 43.78109 | 28.504 | 18.357 | 1,570,223 | *(888812-2358017)* | 1,015,520 | *(576747-1507802)* | 1089.47 | 705.14 | 81.31 | 52.57 |
| 54 | Kennebunk | NI | ME | 43.35185 | 0.201 | 0.201 | 10,520 | *(5973-15627)* | 10,520 | *(5973-15627)* | 7.81 | 7.81 | 0.57 | 0.57 |
| 55 | Kennetcook | NI | CN | 44.99656 | 1.856 | 1.516 | 110,109 | *(62133-163114)* | 89,768 | *(49801-135440)* | 69.28 | 56.49 | 5.35 | 4.36 |
| 56 | Kouchibouguac | NI | CN | 46.77790 | 1.996 | 1.996 | 118,081 | *(67509-175300)* | 118,081 | *(67509-175300)* | 74.33 | 74.33 | 5.73 | 5.73 |
| 57 | LaHave | NI | CN | 44.29017 | 1.896 | 1.896 | 109,323 | *(63206-164846)* | 109,323 | *(63206-164846)* | 71.78 | 71.78 | 5.46 | 5.46 |
| 58 | Lamprey | NI | ME | 43.08134 | 1.286 | 0.129 | 64,913 | *(37800-97763)* | 6,612 | *(3751-9900)* | 50.03 | 5.10 | 3.61 | 0.37 |
| 59 | Lehigh | SI | DE | 40.54667 | 12.546 | 0.000 | 465,289 | *(253520-698140)* | 0 | *(0-0)* | 534.98 | 0.00 | 43.07 | 0.00 |
| 60 | Liscomb | NI | CN | 45.01482 | 0.210 | 0.210 | 12,456 | *(7051-18878)* | 12,456 | *(7051-18878)* | 7.84 | 7.84 | 0.61 | 0.61 |
| 61 | Little Cascapedia | NI | CN | 48.18682 | 0.934 | 0.934 | 55,516 | *(30149-82795)* | 55,516 | *(30149-82795)* | 34.95 | 34.95 | 2.70 | 2.70 |
| 62 | Little Pee Dee | SP | SC | 33.36746 | 9.009 | 9.009 | 55,890 | *(26984-88899)* | 55,890 | *(26984-88899)* | 67.76 | 67.76 | 22.16 | 22.16 |
| 63 | Loup | NI | CN | 47.84251 | 0.109 | 0.109 | 6,491 | *(3626-9721)* | 6,491 | *(3626-9721)* | 4.08 | 4.08 | 0.32 | 0.32 |
| 64 | Lower Betsiamites | NI | CN | 48.94177 | 8.023 | 8.023 | 474,204 | *(266608-719565)* | 474,204 | *(266608-719565)* | 298.32 | 298.32 | 23.04 | 23.04 |
| 65 | Lynches | SP | SC | 33.36746 | 12.440 | 12.440 | 76,620 | *(38168-121241)* | 76,620 | *(38168-121241)* | 92.89 | 92.89 | 30.38 | 30.38 |
| 66 | Maccan | NI | CN | 45.74914 | 0.830 | 0.830 | 49,102 | *(27467-74714)* | 49,102 | *(27467-74714)* | 30.90 | 30.90 | 2.39 | 2.39 |
| 67 | Machias-East Machias | NI | ME | 44.74069 | 1.798 | 1.772 | 106,086 | *(60466-158093)* | 104,527 | *(58297-159044)* | 67.01 | 66.03 | 5.17 | 5.09 |
| 68 | Madeleine | NI | CN | 49.20049 | 1.022 | 1.022 | 61,170 | *(35067-91671)* | 61,170 | *(35067-91671)* | 38.51 | 38.51 | 2.97 | 2.97 |
| 69 | Magpie | NI | CN | 50.30084 | 3.748 | 3.748 | 220,724 | *(128552-332275)* | 220,724 | *(128552-332275)* | 138.91 | 138.91 | 10.72 | 10.72 |
| 70 | Malbaie | NI | CN | 47.66519 | 0.838 | 0.319 | 49,951 | *(29306-74336)* | 18,924 | *(11126-28006)* | 31.42 | 11.91 | 2.43 | 0.92 |
| 71 | Manic-Outardes | NI | CN | 49.18353 | 4.773 | 1.017 | 281,668 | *(164501-414632)* | 61,155 | *(33668-91870)* | 177.22 | 38.48 | 13.69 | 2.97 |
| 72 | Manitou | NI | CN | 50.27575 | 0.417 | 0.417 | 24,864 | *(14335-37130)* | 24,864 | *(14335-37130)* | 15.65 | 15.65 | 1.21 | 1.21 |
| 73 | Margaree | NI | CN | 46.33716 | 0.771 | 0.771 | 45,543 | *(26360-66419)* | 45,543 | *(26360-66419)* | 28.65 | 28.65 | 2.21 | 2.21 |
| 74 | Marshyhope | SI | MD | 38.25283 | 0.702 | 0.702 | 21,793 | *(12518-32220)* | 21,793 | *(12518-32220)* | 28.79 | 28.79 | 2.36 | 2.36 |
| 75 | Matane | NI | CN | 48.84533 | 1.834 | 1.834 | 109,604 | *(62564-163858)* | 109,604 | *(62564-163858)* | 68.98 | 68.98 | 5.32 | 5.32 |
| 76 | Medomak | NI | ME | 44.09902 | 0.377 | 0.000 | 21,477 | *(12244-32429)* | 0 | *(0-0)* | 14.33 | 0.00 | 1.08 | 0.00 |
| 77 | Medway | NI | CN | 44.17210 | 0.198 | 0.198 | 11,268 | *(6492-16586)* | 11,268 | *(6492-16586)* | 7.47 | 7.47 | 0.57 | 0.57 |
| 78 | Merrimack | NI | MA | 42.28267 | 40.452 | 7.212 | 1,906,193 | *(1076250-2809275)* | 335,996 | *(199276-503600)* | 1623.28 | 285.93 | 114.16 | 20.13 |
| 79 | Mersey | NI | CN | 44.06080 | 0.243 | 0.243 | 13,886 | *(7828-20709)* | 13,886 | *(7828-20709)* | 9.29 | 9.29 | 0.70 | 0.70 |
| 80 | Mira | NI | CN | 46.04137 | 0.865 | 0.865 | 51,311 | *(29160-75949)* | 51,311 | *(29160-75949)* | 32.28 | 32.28 | 2.49 | 2.49 |
| 81 | Miramichi | NI | CN | 47.08574 | 14.104 | 14.104 | 834,585 | *(473271-1244630)* | 834,585 | *(473271-1244630)* | 525.12 | 525.12 | 40.55 | 40.55 |
| 82 | Mitas | NI | CN | 48.61904 | 1.372 | 0.047 | 81,207 | *(46578-121955)* | 2,780 | *(1597-4160)* | 51.11 | 1.75 | 3.94 | 0.14 |
| 83 | Moise | NI | CN | 50.25104 | 4.738 | 4.738 | 279,725 | *(158425-422341)* | 279,725 | *(158425-422341)* | 176.01 | 176.01 | 13.59 | 13.59 |
| 84 | Mousam | NI | ME | 43.34617 | 0.175 | 0.071 | 9,157 | *(5127-13657)* | 3,755 | *(2144-5784)* | 6.80 | 2.79 | 0.50 | 0.20 |
| 85 | Musquodoboit | NI | CN | 44.88079 | 0.658 | 0.658 | 38,953 | *(22458-57917)* | 38,953 | *(22458-57917)* | 24.52 | 24.52 | 1.89 | 1.89 |
| 86 | Nanticoke | SI | MD | 38.25283 | 3.326 | 3.326 | 104,205 | *(58088-157561)* | 104,205 | *(58088-157561)* | 137.65 | 137.65 | 11.27 | 11.27 |
| 87 | Narraguagus | NI | ME | 44.55593 | 2.315 | 0.373 | 135,483 | *(76585-201721)* | 21,808 | *(12536-32688)* | 86.99 | 14.01 | 6.67 | 1.07 |
| 88 | Nassau | SP | FL | 30.51291 | 1.700 | 1.700 | 9,799 | *(4870-15730)* | 9,799 | *(4870-15730)* | 11.86 | 11.86 | 4.03 | 4.03 |
| 89 | Natashquan | NI | CN | 50.18775 | 5.711 | 5.711 | 336,791 | *(187388-507845)* | 336,791 | *(187388-507845)* | 211.98 | 211.98 | 16.36 | 16.36 |
| 90 | Nepisiguit | NI | CN | 47.61492 | 0.635 | 0.635 | 37,685 | *(21807-55929)* | 37,685 | *(21807-55929)* | 23.72 | 23.72 | 1.83 | 1.83 |
| 91 | Neponset | NI | MA | 42.27112 | 0.153 | 0.106 | 7,074 | *(3869-10516)* | 4,974 | *(2775-7310)* | 6.03 | 4.24 | 0.42 | 0.30 |
| 92 | Neuse | SI | NC | 35.08700 | 52.872 | 47.611 | 1,336,609 | *(750430-2003947)* | 1,200,766 | *(678056-1822671)* | 1943.48 | 1745.95 | 172.80 | 155.24 |
| 93 | New | SI | NC | 34.57287 | 1.984 | 1.984 | 48,754 | *(27053-73290)* | 48,754 | *(27053-73290)* | 71.41 | 71.41 | 6.47 | 6.47 |
| 94 | New Harbour | NI | CN | 45.35196 | 0.449 | 0.449 | 26,562 | *(14914-40238)* | 26,562 | *(14914-40238)* | 16.71 | 16.71 | 1.29 | 1.29 |
| 95 | Nonesuch | NI | ME | 43.54740 | 0.022 | 0.022 | 1,204 | *(708-1820)* | 1,204 | *(708-1820)* | 0.87 | 0.87 | 0.06 | 0.06 |
| 96 | North River | NI | MA | 42.16467 | 0.294 | 0.294 | 13,693 | *(7986-20521)* | 13,693 | *(7986-20521)* | 11.81 | 11.81 | 0.83 | 0.83 |
| 97 | Nouvelle | NI | CN | 47.99584 | 1.890 | 1.890 | 111,634 | *(62710-167356)* | 111,634 | *(62710-167356)* | 70.26 | 70.26 | 5.42 | 5.42 |
| 98 | Ogeechee | SP | GA | 31.85330 | 35.039 | 34.642 | 204,154 | *(103189-322490)* | 203,030 | *(100189-318357)* | 247.14 | 245.80 | 83.93 | 83.47 |
| 99 | Olomane | NI | CN | 50.23979 | 7.031 | 7.031 | 417,942 | *(238936-618863)* | 417,942 | *(238936-618863)* | 263.11 | 263.11 | 20.30 | 20.30 |
| 100 | Oulle | NI | CN | 47.41881 | 0.332 | 0.332 | 19,782 | *(11107-30044)* | 19,782 | *(11107-30044)* | 12.45 | 12.45 | 0.96 | 0.96 |
| 101 | Outardes | NI | CN | 49.13431 | 0.177 | 0.177 | 10,563 | *(6069-15552)* | 10,563 | *(6069-15552)* | 6.65 | 6.65 | 0.51 | 0.51 |
| 102 | Palmer | NI | RI | 41.71577 | 0.179 | 0.179 | 7,908 | *(4402-11973)* | 7,908 | *(4402-11973)* | 7.15 | 7.15 | 0.50 | 0.50 |
| 103 | Patapsco | SI | MD | 39.16369 | 1.929 | 1.697 | 64,219 | *(34267-96745)* | 56,107 | *(32549-83528)* | 80.97 | 70.73 | 6.55 | 5.72 |
| 104 | Patuxent | SI | MD | 38.31367 | 5.228 | 5.228 | 163,213 | *(93339-245972)* | 163,213 | *(93339-245972)* | 215.04 | 215.04 | 17.58 | 17.58 |
| 105 | Pawcatuck | NI | CT | 41.34213 | 1.747 | 0.336 | 74,000 | *(41560-112100)* | 14,335 | *(8162-21631)* | 69.32 | 13.43 | 4.82 | 0.93 |
| 106 | Pemaquid | NI | ME | 43.87761 | 0.079 | 0.079 | 4,404 | *(2479-6487)* | 4,404 | *(2479-6487)* | 3.01 | 3.01 | 0.23 | 0.23 |
| 107 | Penobscot | NI | ME | 44.58850 | 51.953 | 12.842 | 3,056,006 | *(1696634-4487222)* | 759,830 | *(430748-1120848)* | 1956.78 | 486.60 | 150.06 | 37.31 |
| 108 | Petitcodiac | NI | CN | 45.86970 | 2.415 | 1.420 | 141,938 | *(79037-211172)* | 83,898 | *(48183-123530)* | 89.29 | 52.81 | 6.90 | 4.08 |
| 109 | Philip | NI | CN | 45.81443 | 0.707 | 0.707 | 42,141 | *(23949-62879)* | 42,141 | *(23949-62879)* | 26.52 | 26.52 | 2.05 | 2.05 |
| 110 | Piscataqua | NI | ME | 43.22675 | 1.381 | 1.381 | 70,925 | *(40533-105559)* | 70,925 | *(40533-105559)* | 53.59 | 53.59 | 3.88 | 3.88 |
| 111 | Pleasant | NI | ME | 44.58079 | 1.099 | 1.099 | 64,023 | *(36088-95656)* | 64,023 | *(36088-95656)* | 41.01 | 41.01 | 3.15 | 3.15 |
| 112 | Pocomoke | SI | MD | 37.97996 | 2.500 | 2.500 | 75,384 | *(42559-111692)* | 75,384 | *(42559-111692)* | 100.77 | 100.77 | 8.30 | 8.30 |
| 113 | Point Wolfe | NI | CN | 45.73532 | 0.052 | 0.007 | 3,059 | *(1756-4545)* | 404 | *(232-606)* | 1.92 | 0.25 | 0.15 | 0.02 |
| 114 | Portneuf | NI | CN | 48.35048 | 0.727 | 0.560 | 42,913 | *(24481-63505)* | 33,396 | *(18822-49455)* | 27.01 | 21.01 | 2.08 | 1.62 |
| 115 | Potomac | SI | MD | 38.00085 | 45.655 | 41.005 | 1,392,178 | *(767319-2123421)* | 1,268,639 | *(716085-1899902)* | 1859.95 | 1694.95 | 152.95 | 139.37 |
| 116 | Presumpscot | NI | ME | 43.67870 | 2.138 | 0.838 | 115,685 | *(66892-169284)* | 45,741 | *(25782-68867)* | 81.62 | 32.28 | 6.05 | 2.39 |
| 117 | Rappahannock | SI | VA | 37.59308 | 23.639 | 22.689 | 703,771 | *(397401-1064665)* | 666,076 | *(372710-1009867)* | 956.13 | 904.66 | 79.25 | 75.03 |
| 118 | Raritan | SI | NJ | 40.32519 | 5.726 | 2.489 | 208,328 | *(118606-321880)* | 90,745 | *(51911-136821)* | 243.59 | 106.10 | 19.60 | 8.54 |
| 119 | Richibucto | NI | CN | 46.27221 | 2.130 | 2.130 | 126,144 | *(71933-189133)* | 126,144 | *(71933-189133)* | 79.39 | 79.39 | 6.13 | 6.13 |
| 120 | Rimouski | NI | CN | 48.41575 | 0.468 | 0.468 | 28,299 | *(15893-42555)* | 28,299 | *(15893-42555)* | 17.82 | 17.82 | 1.37 | 1.37 |
| 121 | Roanoke  | SI | NC | 35.92850 | 79.016 | 36.045 | 2,065,675 | *(1167139-3144657)* | 952,441 | *(522916-1429720)* | 2953.89 | 1361.94 | 255.61 | 117.86 |
| 122 | Rochers | NI | CN | 49.27087 | 1.463 | 1.463 | 86,439 | *(48395-130339)* | 86,439 | *(48395-130339)* | 54.37 | 54.37 | 4.20 | 4.20 |
| 123 | Romaine | NI | CN | 50.32372 | 6.432 | 6.432 | 383,877 | *(211436-571808)* | 383,877 | *(211436-571808)* | 241.66 | 241.66 | 18.64 | 18.64 |
| 124 | Royal | NI | ME | 43.79414 | 1.348 | 0.107 | 75,143 | *(42473-112712)* | 5,890 | *(3196-8802)* | 52.06 | 4.08 | 3.88 | 0.30 |
| 125 | Sackville | NI | CN | 44.55641 | 0.035 | 0.035 | 2,065 | *(1175-3067)* | 2,065 | *(1175-3067)* | 1.33 | 1.33 | 0.10 | 0.10 |
| 126 | Saco | NI | ME | 43.47500 | 8.171 | 0.729 | 431,259 | *(243280-632028)* | 38,795 | *(21694-58925)* | 314.19 | 28.25 | 23.03 | 2.07 |
| 127 | Saguenay | NI | CN | 48.17043 | 33.763 | 33.763 | 2,001,255 | *(1153377-2973165)* | 2,001,255 | *(1153377-2973165)* | 1259.63 | 1259.63 | 97.21 | 97.21 |
| 128 | Saint-Jean | NI | CN | 48.76429 | 3.227 | 3.227 | 190,497 | *(105862-283436)* | 190,497 | *(105862-283436)* | 119.88 | 119.88 | 9.25 | 9.25 |
| 129 | Saint-Ulrich | NI | CN | 48.75912 | 0.128 | 0.128 | 7,614 | *(4269-11437)* | 7,614 | *(4269-11437)* | 4.79 | 4.79 | 0.37 | 0.37 |
| 130 | Sainte-Anne | NI | CN | 49.09883 | 0.169 | 0.169 | 9,964 | *(5600-15063)* | 9,964 | *(5600-15063)* | 6.27 | 6.27 | 0.48 | 0.48 |
| 131 | Sainte-Marguerite | NI | CN | 50.19686 | 4.858 | 0.957 | 290,093 | *(166819-426124)* | 57,047 | *(32029-84680)* | 182.65 | 35.91 | 14.09 | 2.77 |
| 132 | Salmon (N.S.) | NI | CN | 45.38470 | 0.013 | 0.013 | 781 | *(437-1143)* | 781 | *(437-1143)* | 0.49 | 0.49 | 0.04 | 0.04 |
| 133 | Salmon Falls | NI | ME | 43.22675 | 0.700 | 0.218 | 35,925 | *(21190-53339)* | 11,331 | *(6291-16778)* | 27.14 | 8.56 | 1.97 | 0.62 |
| 134 | Santee | SP | SC | 33.11801 | 26.322 | 26.178 | 161,190 | *(78163-251476)* | 159,296 | *(79594-249173)* | 195.52 | 193.23 | 64.58 | 63.82 |
| 135 | Satilla | SP | GA | 31.11923 | 1.006 | 1.006 | 5,872 | *(2957-9212)* | 5,872 | *(2957-9212)* | 7.11 | 7.11 | 2.41 | 2.41 |
| 136 | Sault aux Cochons | NI | CN | 48.79979 | 0.243 | 0.243 | 14,354 | *(8071-21776)* | 14,354 | *(8071-21776)* | 9.03 | 9.03 | 0.70 | 0.70 |
| 137 | Savannah | SP | GA | 32.06578 | 99.088 | 58.649 | 579,838 | *(290448-916328)* | 339,527 | *(168105-532949)* | 701.95 | 410.99 | 238.40 | 139.59 |
| 138 | Schuylkill | SI | DE | 39.96715 | 11.980 | 1.323 | 426,457 | *(237247-639450)* | 46,715 | *(25620-71502)* | 511.42 | 56.03 | 41.16 | 4.51 |
| 139 | Sebasticook | NI | ME | 44.58006 | 4.197 | 0.592 | 246,045 | *(138489-378919)* | 34,554 | *(18995-53011)* | 157.68 | 22.13 | 12.09 | 1.70 |
| 140 | Sheepscot | NI | ME | 43.85326 | 2.381 | 1.391 | 132,343 | *(76130-199425)* | 77,060 | *(44969-114644)* | 90.75 | 52.86 | 6.80 | 3.96 |
| 141 | Shubenacadie | NI | CN | 45.28178 | 2.461 | 2.461 | 146,183 | *(83576-218276)* | 146,183 | *(83576-218276)* | 92.00 | 92.00 | 7.10 | 7.10 |
| 142 | Sissiboo | NI | CN | 44.40776 | 1.017 | 0.264 | 58,486 | *(33368-86855)* | 15,136 | *(8284-22370)* | 38.02 | 9.84 | 2.90 | 0.75 |
| 143 | St. Croix | NI | ME | 45.03901 | 10.685 | 3.508 | 632,652 | *(361497-923764)* | 207,394 | *(114255-309098)* | 398.22 | 130.50 | 30.73 | 10.08 |
| 144 | St. George | NI | ME | 43.96276 | 2.134 | 2.017 | 118,788 | *(64378-179095)* | 113,418 | *(63352-169015)* | 80.02 | 76.46 | 6.04 | 5.76 |
| 145 | St. John | NI | CN | 43.88997 | 65.835 | 40.364 | 3,676,216 | *(2108379-5496210)* | 2,261,021 | *(1313859-3383293)* | 2505.86 | 1540.81 | 188.18 | 115.75 |
| 146 | St. Johns | SP | FL | 28.08051 | 49.282 | 44.375 | 289,166 | *(146051-456276)* | 261,305 | *(132867-415725)* | 350.08 | 316.33 | 118.88 | 107.42 |
| 147 | St. Lawrence | NI | CN | 45.32326 | 190.037 | 151.493 | ######## | *(6602971-16724344)* | 9,067,067 | *(5176817-13550439)* | 7035.53 | 5707.91 | 543.36 | 440.38 |
| 148 | St. Marys | NI | CN | 45.03223 | 0.787 | 0.787 | 46,723 | *(26375-70060)* | 46,723 | *(26375-70060)* | 29.40 | 29.40 | 2.27 | 2.27 |
| 149 | Strait of Belle Isle - North Shore | NI | CN | 51.48218 | 0.161 | 0.161 | 9,515 | *(5405-14329)* | 9,515 | *(5405-14329)* | 5.99 | 5.99 | 0.46 | 0.46 |
| 150 | Sud | NI | CN | 46.97922 | 1.250 | 1.250 | 73,761 | *(41674-110754)* | 73,761 | *(41674-110754)* | 46.42 | 46.42 | 3.58 | 3.58 |
| 151 | Susquehanna | SI | MD | 39.03772 | 251.770 | 8.691 | 8,365,931 | *(4652532-12534897)* | 283,330 | *(157482-424838)* | 10622.05 | 359.66 | 860.49 | 29.15 |
| 152 | Tangier | NI | CN | 44.81513 | 0.352 | 0.352 | 20,869 | *(11983-31150)* | 20,869 | *(11983-31150)* | 13.13 | 13.13 | 1.01 | 1.01 |
| 153 | Tar-Pamlico | SI | NC | 35.33426 | 35.533 | 26.893 | 903,129 | *(503278-1366492)* | 688,009 | *(396083-1030069)* | 1307.38 | 995.96 | 115.32 | 87.85 |
| 154 | Taylor-Hampton | NI | NH | 42.89560 | 0.012 | 0.012 | 596 | *(346-878)* | 596 | *(346-878)* | 0.47 | 0.47 | 0.03 | 0.03 |
| 155 | Thames | NI | CT | 41.35290 | 12.548 | 2.371 | 535,632 | *(302058-812740)* | 100,254 | *(58582-150750)* | 501.19 | 93.81 | 34.82 | 6.52 |
| 156 | Trois-Pistoles | NI | CN | 48.00000 | 0.080 | 0.080 | 4,800 | *(2632-7160)* | 4,800 | *(2632-7160)* | 3.02 | 3.02 | 0.23 | 0.23 |
| 157 | Tuckahoe | SI | MD | 38.64806 | 0.663 | 0.588 | 21,154 | *(11890-31707)* | 18,821 | *(10473-28398)* | 27.42 | 24.40 | 2.23 | 1.99 |
| 158 | Tusket | NI | CN | 43.87690 | 1.737 | 1.737 | 98,102 | *(56831-145020)* | 98,102 | *(56831-145020)* | 67.02 | 67.02 | 5.03 | 5.03 |
| 159 | Waccamaw | SP | SC | 33.36746 | 6.161 | 6.161 | 37,953 | *(18807-59259)* | 37,953 | *(18807-59259)* | 46.03 | 46.03 | 15.05 | 15.05 |
| 160 | Wando | SP | SC | 32.79082 | 0.130 | 0.130 | 769 | *(375-1199)* | 769 | *(375-1199)* | 0.93 | 0.93 | 0.31 | 0.31 |
| 161 | Wateree | SP | SC | 32.79082 | 54.247 | 0.000 | 320,432 | *(152859-513582)* | 0 | *(0-0)* | 388.43 | 0.00 | 130.11 | 0.00 |
| 162 | White Oak | SI | NC | 34.70488 | 1.128 | 1.128 | 27,796 | *(15705-41239)* | 27,796 | *(15705-41239)* | 40.64 | 40.64 | 3.66 | 3.66 |
| 163 | Wicomico | SI | MD | 38.68938 | 0.951 | 0.951 | 30,385 | *(17266-46489)* | 30,385 | *(17266-46489)* | 39.29 | 39.29 | 3.20 | 3.20 |
| 164 | York | SI | VA | 37.25625 | 26.612 | 23.264 | 773,695 | *(431250-1165812)* | 671,282 | *(359687-1013428)* | 1064.45 | 923.16 | 88.86 | 77.15 |