

## Chesapeake Bay Program Office Most Effective Basins Funding Guidance

This document describes the methodology EPA followed to establish the most effective use of these funds and the best locations for these practices to be implemented to make the greatest progress toward achieving water quality standards in the Chesapeake Bay.

### Most Effective Basins Funding Allocations

This funding is being allocated based on jurisdictions' commitments to reduce nitrogen from all sources to meet their 2025 Planning Targets by implementing their respective Phase 3 Watershed Implementation Plans (for Pennsylvania, the amended plan). Table 1 shows the nitrogen reduction commitment from each jurisdiction for all sources from 2021 to the relevant 2025 goal, and the percentage of the total watershed-wide reduction among jurisdictions. There is also a minimum amount of funding, set at three percent of the total funding allocated for MEB, for each jurisdiction. Combining the minimum allocation with the nitrogen reduction commitments results in the final allocation shown in the Table 1. This funding is split between the annual appropriation allocation and the infrastructure allocation. Funding levels are subject to change each year based on CBPO Annual Appropriation.

**Table 1: MEB Funding Allocations**

|              | Nitrogen Commitment (millions of lbs) | Percent Total Nitrogen Commitment | Fund Totals w/ Minimum Funding Levels Added | Percent of Funds w/ Minimum Funding Levels Added | Allocation – CBPO Annual Appropriation (estimate) | Allocation – Infrastructure Act Funding |
|--------------|---------------------------------------|-----------------------------------|---------------------------------------------|--------------------------------------------------|---------------------------------------------------|-----------------------------------------|
| DC           | 0                                     | 0%                                | \$650,000                                   | 3%                                               | \$226,087                                         | \$423,913                               |
| DE           | 1.8                                   | 6%                                | \$1,187,669                                 | 5%                                               | \$413,102                                         | \$774,567                               |
| MD           | 4.9                                   | 15%                               | \$3,170,019                                 | 14%                                              | \$1,102,615                                       | \$2,067,404                             |
| NY           | 0.8                                   | 2%                                | \$650,000                                   | 3%                                               | \$226,087                                         | \$423,913                               |
| PA           | 22.2                                  | 66%                               | \$14,310,129                                | 62%                                              | \$4,977,436                                       | \$9,332,693                             |
| VA           | 3.7                                   | 11%                               | \$2,382,183                                 | 10%                                              | \$828,586                                         | \$1,553,597                             |
| WV           | 0                                     | 0%                                | \$650,000                                   | 3%                                               | \$226,087                                         | \$423,913                               |
| <b>Total</b> | <b>33.4</b>                           | <b>100%</b>                       | <b>\$23,000,000</b>                         | <b>100%</b>                                      | <b>\$8,000,000</b>                                | <b>\$15,000,000</b>                     |

This allocation will fund implementation in MEBs, based on load effectiveness. Load effectiveness is a measure of the ability of management practices implemented in a given area (basin) to have a positive effect on dissolved oxygen in the Chesapeake Bay.<sup>1</sup> Load effectiveness is the combination of three factors: land to water, delivery, and dissolved oxygen response. The scale used to determine load effectiveness is the State-River basin segmentation that is described in the EPA's [Chesapeake Bay Effectiveness Rationale](#).

In January 2021, Executive Order 14008, [Tackling the Climate Crisis at Home and Abroad](#), announced Justice40, which states the goal that at least 40% of the benefits of certain federal programs flow to disadvantaged

<sup>1</sup> Load effectiveness is the same measure known as relative effectiveness used to calculate allocations as described in Section 6.3 of the 2010 Bay TMDL. It was also used to calculate Phase WIP III nitrogen planning targets in 2017.

communities. Consistent with this Executive Order 14008, 40% of these funds should support projects that provide direct benefits to disadvantaged communities, as described below. The selection of MEBs to increase benefits in disadvantaged communities considers two factors: load effectiveness and disadvantaged communities.

Disadvantaged communities are identified based on demographic metrics from the American Community Survey. Disadvantaged communities are identified by the following variables. All variables except percent low income utilize the 80th percentile as the threshold to be included in that group:

- Percent Low income: Defined as ratio of income to cost of living that is less than two. Data is presented as a census block group with a percentage of population that is low income  $\geq 50\%$ . This definition comes from work completed by the CBP Diversity Workgroup based on “best professional judgment” in terms of interpreting this metric.
- Percent Unemployment: All those who did not have a job at all during the reporting period, made at least one specific active effort to find a job during the prior 4 weeks, and were available for work (unless temporarily ill).
- Percent in linguistic isolation: Percent of households in which no one age 14 and over speaks English “very well” or speaks English only (as a fraction of households).
- Percent less than high school education: Percent of individuals age 25 and over with less than high school degree.
- Percent under age 5: Percent of individuals under age 5 as a fraction of population.
- Percent over age 64: Percent of individuals over age 64 as a fraction of the population.

### Eligible Uses and Recipients

This funding is intended for use by state and local entities. After a Bay watershed jurisdiction or other grantee is awarded MEB funding, the grantee is expected to provide this funding directly to support implementation projects, or through contracts or subgrants to state and/or local entities, based on the state and local entities’ ability to reduce nutrient loading while minimizing the impacts from impervious surfaces. Up to 25% of this funding can be used to support technical assistance directly to local communities and to develop plans and projects that will lead to direct implementation. This money can be used to fund both proven and new, innovative practices.

The most effective basins for focusing this funding are identified [below](#) in Table 2 of this guidance. The 40% of funding that is to be directed toward disadvantaged communities is intended to focus on the census block groups that were identified by the criteria list above. These census block groups can be seen on the [MEB map viewer](#) and associated [story map](#). Where a jurisdiction chooses to award these funds to state or local entities, Bay watershed jurisdictions must describe in their grant workplan the mechanisms they will use to distribute their share of this funding for implementation of projects in the disadvantaged communities in these basins.

Implementation activities in the most effective basins will be in support of the 2014 Chesapeake Watershed Agreement, including Bay watershed jurisdictions’ Watershed Implementation Plans (WIPs). Jurisdictions should give priority to funding those activities that will accelerate the pace for meeting WIP commitments while addressing co-benefits beyond water quality improvements. In deciding which implementation activities to fund,

jurisdictions should also consider the timeliness and cost-effectiveness of the activities in contributing to nitrogen reduction.

Jurisdictions must be able to track BMP implementation activities funded with this money. Jurisdictions are required to submit these practice implementation data to CBPO through the National Environmental Information Exchange Network (NEIEN), in accordance with Attachment 4 of the [Grant Guidance](#). Jurisdictions may use their existing CBRAP funding if they need to improve tracking, verification, and reporting of these implementation activities.

## **Award Process and Budget Guidance**

### *General Award and Workplan Requirements*

MEB allocations funded through CBPO's annual appropriation will be awarded as part of each jurisdiction's CBIG grant<sup>2</sup>. For tracking and reporting purposes, MEB funds must be included in each jurisdiction's CBIG workplan as a separate objective.

As indicated by EPA policy, MEB allocations funded via the Infrastructure Act will be issued as a separate award from each jurisdiction's other CWA 117(e) implementation grants. The introduction section of the workplan must include the following statement: "This project is funded by the Infrastructure Investment and Jobs Act." In addition, the introduction section should provide a general description of the objectives covered by the grant and a description of the relationship to the WIP and/or two-year milestones, where applicable, or to Management Strategies and two-year Logic & Action Plans of other goals and outcomes from the 2014 Chesapeake Bay Watershed Agreement.

### *Cost-Share Waiver and Reduction Options for Infrastructure-Funded MEB Grants*

To advance equitability in the grantmaking process, the Infrastructure Act language provides EPA discretion to waive or reduce statutorily required non-federal cost shares on these funds<sup>3</sup>. Accordingly, jurisdictions may submit a written request to CBPO to either a) waive the 50% cost-share or b) reduce the 50% cost share for their Infrastructure MEB grant for FY 2023-26. Jurisdictions requesting a reduction of cost-share must clearly identify the requested cost-share level in their request.

EPA will consider requests to waive or reduce cost-share where any of the following apply:

- Waiving or reducing the recipient and/or subrecipient share will accelerate the implementation of projects that provide direct or indirect benefits to disadvantaged communities;
- MEB funds will be awarded to a federally recognized tribe or intertribal consortia comprised of federally recognized tribes; or
- *Not* waiving or reducing the recipient and/or subrecipient share requirement will limit meaningful competition of funds or prevent projects from moving forward due to lack of available cost-sharing funds.

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<sup>2</sup> On a limited basis, CBPO management may approve the for MEB – CBPO Annual Appropriation funds to be awarded as part of a jurisdictions' CBRAP grant.

<sup>3</sup> This cost-share waiver or reduction authority applies to grants funded via the Infrastructure Act only.

Requests must be submitted in writing to the CBPO Infrastructure Coordinator, Matt Robinson ([robinson.matthew@epa.gov](mailto:robinson.matthew@epa.gov)), with a cc to the EPA project officer for the Infrastructure MEB grant. Note that EPA's authority to waive or reduce statutorily required non-federal cost shares on Infrastructure Act funds is discretionary; applying for such a waiver or reduction does not guarantee that it will occur.

Recipients that previously requested and received approval for a cost-share waiver for FY 2023-26 do not need to submit a new request in FY 2024.

#### Additional Reporting Requirements for Infrastructure-Funded Grants

##### *Project-Level Reporting*

Infrastructure funded grants include additional post-award reporting requirements that help maintain accountability to taxpayers and advance equity. All Infrastructure-related grant and cooperative agreement programs must track and report post-award information on the status of award-specific goals and objectives, including 1) project-level location data and 2) the phase of project implementation.

CBPO has contracted with The Commons to utilize FieldDoc as the collection system for this information. Within FieldDoc, a "project" is a unit for organizing an organization's collection of practices. Under the project umbrella, recipients should report geometry data (i.e., points or polygons) for each practice implemented utilizing Infrastructure funds. The Commons and EPA will work with each recipient to develop workflows for importing data to minimize reporting burden.

Recipients are required to submit this information in FieldDoc on a semi-annual basis, to coincide with progress report submission dates. As part of the first submission, recipients should include data for activities completed since the start of their Infrastructure grant. CBPO will use data collected through this process to assess compliance with the Justice40 requirements.

##### *USA Spending*

Recipients are reminded of the requirement as established by the Federal Funding Accountability and Transparency Act for reporting on subawards and executive compensation. We expect that there will be enhanced monitoring of recipient compliance with these requirements. More information can be found in the [EPA General Terms and Conditions](#) (subsection Reporting Subawards and Executive Compensation).

#### **List of Most Effective Basins**

Table 2 below lists the most effective basins in which implementation using these funds is to occur. Where work in the identified basins is not feasible, EPA will consider on a limited, case-by-case basis expansion to additional basins not identified in this list. To request consideration for additional basins, a jurisdiction must submit a request in writing to Lee McDonnell ([mcdonnell.lee@epa.gov](mailto:mcdonnell.lee@epa.gov)), Chief of the CBPO Science, Analysis, and Implementation Branch, with a cc to the EPA project officer. The request must identify the specific basins requested for consideration and the rationale explaining how implementation in this basin will advance the jurisdiction's nitrogen reduction efforts.

**Table 2: MEBs Ranked by Total Nitrogen (TN) Reduction Effectiveness**

| Rank <sup>4</sup> | Jurisdiction | State-Rivers                                | TN Effectiveness | TN Reductions Made to Date | TN Load Remaining to Reduce | Watershed Size (sq. mi.) |
|-------------------|--------------|---------------------------------------------|------------------|----------------------------|-----------------------------|--------------------------|
| 1                 | PA           | York Indian Rock Dam                        | 22.87            | 14,237                     | 218,825                     | 21                       |
| 2                 | PA           | Black Creek                                 | 19.39            | 27,953                     | 63,440                      | 62                       |
| 3                 | PA           | Codorus Creek                               | 19.11            | 9,916                      | 367,864                     | 66                       |
| 4                 | PA           | Safe Harbor Dam                             | 17.51            | 107,726                    | 799,160                     | 114                      |
| 5                 | PA           | Chiques Creek                               | 17.16            | 551,740                    | 1,857,828                   | 126                      |
| 6                 | PA           | Conestoga Creek                             | 16.68            | 953,008                    | 3,007,086                   | 278                      |
| 7                 | PA           | Little Swatara Creek                        | 16.34            | 0                          | 1,110,781                   | 99                       |
| 8                 | PA           | Pequea Creek                                | 16.12            | 403,680                    | 1,865,801                   | 155                      |
| 9                 | PA           | Shamokin Creek                              | 16.08            | 12,615                     | 332,191                     | 137                      |
| 10                | PA           | Mahanoy Creek                               | 15.96            | 17,014                     | 382,719                     | 157                      |
| 11                | PA           | Mill Creek                                  | 15.58            | 220,956                    | 668,640                     | 56                       |
| 12                | PA           | Octoraro Creek                              | 15.11            | 259,512                    | 1,974,658                   | 176                      |
| 13                | PA           | Deer Creek                                  | 15.06            | 25,340                     | 218,681                     | 25                       |
| 14                | PA           | Catawissa Creek                             | 14.86            | 21,243                     | 301,544                     | 153                      |
| 15                | WV           | Stony River                                 | 14.59            | 2,004                      | 10,285                      | 10                       |
| 16                | PA           | Codorus Creek West Branch                   | 14.58            | 31,409                     | 308,201                     | 50                       |
| 17                | MD           | Little Pipe Creek                           | 14.42            | 304,558                    | 517,846                     | 83                       |
| 18                | PA           | Swatara Creek                               | 14.32            | 219,465                    | 1,600,423                   | 396                      |
| 19                | MD           | Deer Creek                                  | 14.11            | 201,343                    | 626,682                     | 146                      |
| 20                | PA           | Cocalico Creek                              | 14.1             | 303,655                    | 1,094,543                   | 140                      |
| 21                | PA           | Mahantango Creek                            | 14.08            | 124,321                    | 793,410                     | 165                      |
| 22                | PA           | Roaring Creek                               | 13.84            | 27,979                     | 330,495                     | 88                       |
| 23                | PA           | Nescopeck Creek                             | 13.83            | 94,098                     | 167,141                     | 112                      |
| 24                | PA           | Wiconisco Creek                             | 13.8             | 181,818                    | 368,808                     | 116                      |
| 25                | MD           | Bloomington/Jennings Randolph               | 13.64            | 10,882                     | 41,235                      | 63                       |
| 26                | PA           | Middle Creek                                | 13.64            | 0                          | 817,242                     | 177                      |
| 27                | WV           | Mt. Storm Power Station Dam/Stony River Dam | 13.53            | 9,634                      | 58,170                      | 49                       |
| 28                | MD           | Susquehanna River                           | 13.37            | 9,581                      | 65,361                      | 28                       |
| 29                | PA           | East Licking Creek                          | 13.37            | 10,549                     | 76,561                      | 46                       |
| 30                | VA           | Lower Eastern Shore Tidal Drainage          | 13.26            | 145,008                    | 1,224,541                   | 219                      |
| 31                | MD           | Savage River Dam                            | 13.25            | 13,567                     | 30,384                      | 56                       |

<sup>4</sup> Basins ranked below 198 reflect approved expansions to the MEB list.

|    |    |                                     |       |           |           |      |
|----|----|-------------------------------------|-------|-----------|-----------|------|
| 32 | PA | Tuscarora Creek                     | 13.08 | 38,911    | 590,526   | 224  |
| 33 | PA | Sherman Creek                       | 12.93 | 0         | 778,438   | 276  |
| 34 | MD | Octoraro Creek                      | 12.84 | 51,357    | 123,333   | 35   |
| 35 | PA | Codorus Creek South Branch          | 12.81 | 45,232    | 703,913   | 117  |
| 36 | PA | Buffalo Creek                       | 12.79 | 28,828    | 859,729   | 207  |
| 37 | PA | Alvin R. Bush Dam                   | 12.78 | 1,196     | 18,824    | 95   |
| 38 | PA | Juniata River                       | 12.71 | 207,199   | 1,992,742 | 767  |
| 39 | PA | Larrys Creek                        | 12.69 | 32,513    | 83,963    | 89   |
| 40 | PA | Susquehanna River                   | 12.62 | 1,360,081 | 4,779,581 | 2262 |
| 41 | PA | Penns Creek                         | 12.59 | 107,376   | 1,115,206 | 377  |
| 42 | PA | Fishing Creek                       | 12.5  | 96,073    | 653,637   | 271  |
| 43 | MD | Potomac River North Branch          | 12.36 | 62,959    | 136,977   | 157  |
| 44 | MD | Conowingo Dam                       | 12.24 | 13,275    | 42,727    | 23   |
| 45 | WV | Bloomington/Jennings Randolph       | 12.21 | 1,663     | 70,956    | 81   |
| 46 | MD | Muddy Creek                         | 12.08 | 1,003     | 4,615     | 2    |
| 47 | WV | Potomac River North Branch          | 12.06 | 18,036    | 160,819   | 162  |
| 48 | MD | Monocacy River                      | 11.99 | 1,008,035 | 1,657,042 | 448  |
| 49 | PA | Sinnemahoning Creek                 | 11.99 | 5,284     | 11,534    | 72   |
| 50 | MD | Linganore Creek                     | 11.88 | 212,204   | 380,907   | 89   |
| 51 | PA | Chillisquaque Creek                 | 11.87 | 77,137    | 545,406   | 112  |
| 52 | PA | Warrior Ridge Dam                   | 11.87 | 15,990    | 129,815   | 78   |
| 53 | PA | Susquehanna River West Branch       | 11.78 | 348,229   | 2,137,577 | 1745 |
| 54 | PA | Holtwood Dam                        | 11.73 | 9,014     | 242,256   | 50   |
| 55 | PA | Bald Eagle Creek                    | 11.71 | 151,794   | 600,282   | 383  |
| 56 | PA | Aughwick Creek                      | 11.7  | 9,009     | 94,102    | 47   |
| 57 | VA | Pocomoke River                      | 11.67 | 5,584     | 108,298   | 24   |
| 58 | MD | Jones Falls                         | 11.66 | 5,654     | 170,604   | 58   |
| 59 | PA | Muddy Creek                         | 11.66 | 50,272    | 855,327   | 137  |
| 60 | MD | Lower Western Shore Tidal Drainage  | 11.64 | 27,704    | 714,109   | 275  |
| 61 | MD | Savage River                        | 11.64 | 17,958    | 42,274    | 60   |
| 62 | PA | White Deer Creek                    | 11.52 | 0         | 20,073    | 45   |
| 63 | PA | Broad Creek                         | 11.51 | 99        | 2,602     | 1    |
| 64 | MD | Big Pipe Creek                      | 11.48 | 281,098   | 507,253   | 109  |
| 65 | PA | Cush Creek                          | 11.46 | 94,404    | 608,556   | 191  |
| 66 | MD | Middle Western Shore Tidal Drainage | 11.42 | 7,177     | 332,988   | 118  |
| 67 | PA | Foster Joseph Sayers Dam            | 11.42 | 26,444    | 120,565   | 73   |
| 68 | MD | Broad Creek                         | 11.34 | 62,779    | 140,252   | 40   |

|     |    |                                     |       |         |           |     |
|-----|----|-------------------------------------|-------|---------|-----------|-----|
| 69  | PA | Beech Creek                         | 11.32 | 6,483   | 72,132    | 171 |
| 70  | PA | George B. Stevenson Dam             | 11.25 | 1,764   | 2,925     | 27  |
| 71  | PA | Little Juniata River                | 11.1  | 68,670  | 728,326   | 343 |
| 72  | DE | Nanticoke River                     | 11    | 112,513 | 1,009,792 | 91  |
| 73  | PA | Blacklog Creek                      | 10.98 | 6,420   | 77,292    | 73  |
| 74  | DE | Lower Eastern Shore Tidal Drainage  | 10.96 | 100,031 | 2,012,862 | 232 |
| 75  | PA | Conowingo Dam                       | 10.9  | 109,679 | 850,259   | 102 |
| 76  | MD | Wills Creek                         | 10.88 | 14,380  | 44,297    | 61  |
| 77  | PA | Conodoguinet Creek                  | 10.84 | 0       | 2,397,677 | 458 |
| 78  | PA | Huntington Creek                    | 10.82 | 72,545  | 114,179   | 114 |
| 79  | PA | Big Elk Creek                       | 10.73 | 88,005  | 349,503   | 42  |
| 80  | PA | Wills Creek                         | 10.73 | 39,775  | 283,946   | 193 |
| 81  | PA | Bennett Branch                      | 10.54 | 24,401  | 96,810    | 377 |
| 82  | PA | Quittapahilla Creek                 | 10.39 | 23,640  | 643,461   | 77  |
| 83  | PA | Conococheague Creek West Branch     | 10.37 | 0       | 1,212,735 | 198 |
| 84  | PA | Texas Creek                         | 10.36 | 45,659  | 117,707   | 180 |
| 85  | PA | Muncy Creek                         | 10.32 | 119,615 | 318,205   | 204 |
| 86  | VA | Great Wicomico River                | 10.26 | 59,620  | 370,341   | 128 |
| 87  | PA | Meshoppen Creek                     | 10.15 | 126,494 | 132,856   | 115 |
| 88  | PA | Yellow Breeches Creek               | 10.05 | 0       | 744,883   | 220 |
| 89  | WV | Back Creek                          | 10    | 0       | 109,425   | 106 |
| 90  | MD | Little Conococheague Creek          | 9.97  | 24,013  | 57,469    | 17  |
| 91  | PA | Kettle Creek                        | 9.97  | 3,104   | 56,482    | 152 |
| 92  | PA | Moshannon Creek                     | 9.95  | 16,234  | 149,836   | 274 |
| 93  | PA | Driftwood Branch                    | 9.94  | 34,099  | 14,962    | 95  |
| 94  | MD | Tonoloway Creek                     | 9.9   | 623     | 3,070     | 2   |
| 95  | MD | Licking Creek                       | 9.87  | 7,539   | 29,706    | 27  |
| 96  | PA | Conococheague Creek                 | 9.84  | 891     | 1,981,838 | 304 |
| 97  | PA | Juniata River Frankstown Branch     | 9.81  | 1,887   | 935,455   | 396 |
| 98  | NY | Owego Creek                         | 9.72  | 14,266  | 21,236    | 13  |
| 99  | MD | Nanticoke River                     | 9.71  | 53,543  | 120,930   | 20  |
| 100 | MD | Winters Run                         | 9.7   | 18,598  | 186,226   | 58  |
| 101 | PA | Bowman Creek                        | 9.7   | 50,820  | 60,678    | 120 |
| 102 | MD | Conococheague Creek                 | 9.63  | 102,907 | 282,130   | 66  |
| 103 | WV | Sleepy Creek                        | 9.63  | 16,944  | 86,747    | 125 |
| 104 | DE | Middle Eastern Shore Tidal Drainage | 9.61  | 15,869  | 124,020   | 19  |
| 105 | PA | Lycoming Creek                      | 9.61  | 42,472  | 199,800   | 273 |
| 106 | MD | Potomac River                       | 9.6   | 320,501 | 799,081   | 373 |

|     |    |                                        |      |         |           |     |
|-----|----|----------------------------------------|------|---------|-----------|-----|
| 107 | MD | Big Elk Creek                          | 9.56 | 4,727   | 24,146    | 11  |
| 108 | PA | Branch Creek                           | 9.56 | 0       | 214,490   | 46  |
| 109 | PA | Wallis Run                             | 9.55 | 5,586   | 19,906    | 37  |
| 110 | PA | Cayuta Creek                           | 9.53 | 2,067   | 5,048     | 2   |
| 111 | MD | Great Seneca Creek                     | 9.35 | 122,870 | 214,447   | 102 |
| 112 | PA | Sinnemahoning Creek<br>First Fork      | 9.33 | 7,362   | 77,126    | 240 |
| 113 | MD | Antietam Creek East<br>Branch          | 9.32 | 9,267   | 22,410    | 8   |
| 114 | PA | Potomac River                          | 9.3  | 1,140   | 12,444    | 3   |
| 115 | PA | Wyalusing Creek                        | 9.3  | 222,476 | 245,752   | 220 |
| 116 | MD | Upper Western Shore<br>Tidal Drainage  | 9.29 | 42,521  | 264,224   | 141 |
| 117 | PA | Pine Creek                             | 9.24 | 57,915  | 219,806   | 599 |
| 118 | PA | Sideling Hill Creek                    | 9.23 | 19,918  | 384,431   | 284 |
| 119 | MD | Middle Eastern Shore<br>Tidal Drainage | 9.2  | 638,248 | 1,771,391 | 348 |
| 120 | PA | Licking Creek                          | 9.19 | 27,154  | 407,836   | 186 |
| 121 | PA | Conewago Creek                         | 9.11 | 282,392 | 1,775,750 | 510 |
| 122 | PA | Lackawanna River                       | 9.07 | 33,808  | 206,810   | 348 |
| 123 | DC | Bull Run                               | 8.93 | 0       | 4,086     | 20  |
| 124 | MD | Gunpowder Falls                        | 8.92 | 84,899  | 376,374   | 175 |
| 125 | PA | Little Northeast Creek                 | 8.9  | 2,852   | 66,473    | 8   |
| 126 | PA | Loyalsock Creek                        | 8.9  | 43,639  | 204,007   | 377 |
| 127 | MD | Georges Creek                          | 8.75 | 14,601  | 37,387    | 75  |
| 128 | MD | Choptank River                         | 8.73 | 139,913 | 551,765   | 108 |
| 129 | MD | Lower Patuxent Tidal<br>Drainage       | 8.65 | 75,751  | 562,738   | 300 |
| 130 | WV | Cacapon River                          | 8.63 | 3,814   | 22,942    | 61  |
| 131 | MD | Antietam Creek                         | 8.58 | 262,951 | 641,720   | 178 |
| 132 | MD | Marshyhope Creek                       | 8.52 | 221,074 | 589,651   | 119 |
| 133 | VA | Sleepy Creek                           | 8.52 | 0       | 15,459    | 20  |
| 134 | MD | Loch Raven Dam                         | 8.43 | 3,790   | 45,168    | 31  |
| 135 | VA | South Branch Potomac                   | 8.39 | 0       | 69,628    | 59  |
| 136 | MD | Seneca Creek                           | 8.38 | 38,860  | 75,753    | 27  |
| 137 | PA | Mehoopany Creek                        | 8.38 | 28,506  | 41,128    | 123 |
| 138 | DE | Deep Creek                             | 8.37 | 3,913   | 233,516   | 30  |
| 139 | WV | Potomac River                          | 8.37 | 53,672  | 433,956   | 320 |
| 140 | MD | Western Run                            | 8.32 | 83,020  | 295,407   | 118 |
| 141 | PA | Little Conococheague<br>Creek          | 8.32 | 0       | 517       | 1   |
| 142 | PA | Spring Creek                           | 8.29 | 94,318  | 363,288   | 146 |
| 143 | WV | Potomac River South<br>Branch          | 8.26 | 107,838 | 573,565   | 543 |

|     |    |                                       |      |         |           |     |
|-----|----|---------------------------------------|------|---------|-----------|-----|
| 144 | MD | Evitts Creek                          | 8.2  | 5,098   | 20,560    | 31  |
| 145 | NY | Nanticoke Creek                       | 8.2  | 78,095  | 106,981   | 114 |
| 146 | MD | Little Northeast Creek                | 8.19 | 59,312  | 161,058   | 48  |
| 147 | PA | Curwensville Dam                      | 8.18 | 11,604  | 27,207    | 53  |
| 148 | MD | Hunting Creek                         | 8.16 | 203     | 44,248    | 26  |
| 149 | NY | Tioughnioga River West Branch         | 8.15 | 192,589 | 180,026   | 104 |
| 150 | WV | Opequon Creek                         | 8.13 | 31,496  | 403,725   | 192 |
| 151 | VA | Potomac River South Branch North Fork | 8.11 | 577     | 7,336     | 38  |
| 152 | DC | Potomac River                         | 8.09 | 401     | 30,511    | 14  |
| 153 | MD | Marsh Run                             | 8.06 | 26,001  | 78,497    | 21  |
| 154 | MD | Lower Potomac Tidal Drainage          | 8.05 | 60,460  | 716,945   | 428 |
| 155 | PA | Antietam Creek East Branch            | 7.97 | 0       | 429,574   | 86  |
| 156 | NY | Tioughnioga River                     | 7.95 | 243,695 | 220,389   | 208 |
| 157 | MD | Middle Patuxent River                 | 7.92 | 89,327  | 148,208   | 58  |
| 158 | WV | North River                           | 7.89 | 13,878  | 198,766   | 206 |
| 159 | NY | Tioughnioga Creek                     | 7.88 | 227,968 | 239,600   | 193 |
| 160 | VA | Lower Potomac Tidal Drainage          | 7.87 | 83,589  | 563,421   | 470 |
| 161 | MD | Marsh Creek                           | 7.83 | 22,088  | 40,985    | 11  |
| 162 | MD | Nassawango Creek                      | 7.82 | 129,103 | 130,002   | 68  |
| 163 | WV | Reeds Creek                           | 7.73 | 1,563   | 18,853    | 65  |
| 164 | NY | Susquehanna River                     | 7.72 | 682,455 | 751,626   | 890 |
| 165 | DC | Anacostia River                       | 7.71 | 1,380   | 37,452    | 18  |
| 166 | MD | Lower Eastern Shore Tidal Drainage    | 7.67 | 805,230 | 1,713,780 | 454 |
| 167 | PA | Tonoloway Creek                       | 7.67 | 13,483  | 261,108   | 112 |
| 168 | MD | North East Branch Anacostia River     | 7.61 | 7,435   | 103,822   | 75  |
| 169 | WV | Potomac River South Branch North Fork | 7.5  | 16,538  | 113,755   | 212 |
| 170 | MD | Chester River                         | 7.49 | 70,737  | 161,788   | 35  |
| 171 | PA | Chest Creek                           | 7.45 | 42,823  | 152,933   | 129 |
| 172 | MD | Patuxent River                        | 7.43 | 70,154  | 259,029   | 176 |
| 173 | PA | Fifteen Mile Creek                    | 7.43 | 788     | 8,244     | 12  |
| 174 | MD | Tuckahoe River                        | 7.42 | 222,241 | 657,718   | 150 |
| 175 | NY | Owego Creek East Branch               | 7.4  | 88,049  | 97,821    | 101 |
| 176 | NY | Chenango River                        | 7.37 | 621,464 | 577,651   | 614 |
| 177 | NY | Catatonk Creek                        | 7.36 | 105,054 | 135,579   | 151 |
| 178 | MD | Patapsco River                        | 7.35 | 96,286  | 355,979   | 204 |
| 179 | PA | Antietam Creek                        | 7.33 | 0       | 155,266   | 20  |

|     |    |                                    |      |           |           |     |
|-----|----|------------------------------------|------|-----------|-----------|-----|
| 180 | PA | Monocacy River                     | 7.29 | 10,592    | 116,224   | 67  |
| 181 | PA | Little Tonoloway Creek             | 7.28 | 0         | 12,888    | 10  |
| 182 | MD | Pocomoke River                     | 7.19 | 817,630   | 915,510   | 301 |
| 183 | MD | Upper Eastern Shore Tidal Drainage | 7.19 | 1,181,710 | 2,867,947 | 748 |
| 184 | MD | Catoctin Creek                     | 7.16 | 178,014   | 314,785   | 120 |
| 185 | VA | Shenandoah River South Fork        | 7.14 | 38,566    | 1,299,039 | 618 |
| 186 | DC | Rock Creek                         | 7.1  | 134       | 15,957    | 10  |
| 187 | DE | Upper Eastern Shore Tidal Drainage | 7.09 | 51,447    | 148,987   | 36  |
| 188 | PA | Little Loyalsock Creek             | 7.08 | 25,054    | 85,224    | 82  |
| 189 | WV | Shenandoah River                   | 7.08 | 12,912    | 48,460    | 103 |
| 190 | MD | Fifteen Mile Creek                 | 7.07 | 1,606     | 15,025    | 50  |
| 191 | PA | Marsh Creek                        | 7.06 | 86,013    | 488,599   | 161 |
| 192 | WV | South Branch Potomac               | 7.06 | 43,742    | 188,358   | 208 |
| 193 | PA | Sugar Creek                        | 7.04 | 176,783   | 262,318   | 190 |
| 194 | MD | Conococheague Creek West Branch    | 7    | 0         | 98        | 0   |
| 195 | VA | Back Creek                         | 6.98 | 751       | 155,817   | 309 |
| 196 | VA | Shenandoah River                   | 6.98 | 12,912    | 48,460    | 249 |
| 197 | MD | Little Tonoloway Creek             | 6.96 | 5,857     | 18,895    | 15  |
| 198 | NY | Owego Creek West Branch            | 6.95 | 49,514    | 64,209    | 77  |
| 201 | VA | Lower Rappahannock Tidal Drainage  | 6.8  | 157,795   | 920,193   | 493 |
| 202 | VA | Opequon Creek                      | 6.8  | 0         | 285,409   | 151 |
| 217 | NY | Wylie Creek                        | 6.5  | 17,517    | 13,641    | 25  |
| 225 | VA | North River                        | 6.3  | 9,180     | 234,747   | 53  |
| 228 | VA | Cat Point Creek                    | 6.2  | 25,753    | 122,328   | 72  |
| 229 | VA | Piscataway Creek                   | 6.1  | 13,600    | 83,603    | 53  |
| 230 | NY | Kelsie Creek                       | 6.1  | 36,379    | 28,896    | 42  |
| 231 | NY | Canasawacta Creek                  | 6.0  | 43,364    | 32,722    | 62  |
| 233 | VA | Shenandoah River North Fork        | 5.9  | 1,239     | 1,926,715 | 860 |
| 234 | NY | Sangerfield Creek                  | 5.9  | 65,482    | 62,389    | 62  |
| 246 | NY | Genegantslet Creek                 | 5.5  | 52,355    | 40,172    | 105 |
| 253 | NY | Whitney Point Dam                  | 5.3  | 86,312    | 68,275    | 110 |
| 269 | NY | Otselic Creek                      | 4.9  | 101,934   | 75,310    | 147 |