

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

JUL 1 2010

The Honorable Shari T. Wilson Secretary Department of the Environment 1800 Washington Boulevard Baltimore, Maryland 21230

Dear Secretary Wilson:

I thank you for your continued commitment to the Bay restoration partnership. As we develop the Chesapeake Bay Total Maximum Daily Load (TMDL) and Watershed Implementation Plans (WIPs), we have faced some challenging issues. It is critical that the Partnership remain strong as we work through any remaining differences and show the citizens of the watershed that we can deliver on our commitments, complete a TMDL by the end of 2010, and put forth aggressive, defensible implementation plans that will put in place all necessary actions, by no later than 2025, to fully restore the Bay and tidal rivers – with an interim goal of 60% or more being accomplished by 2017.

As I have said before, restoring the health of the Bay and our rivers will not be easy. If it were, we would have completed the necessary restoration actions long ago. Every one of the Bay jurisdictions has a significant role to play. Fortunately, through the Chesapeake Bay Program partnership, we have a scientific understanding of the Bay ecosystem that is the envy of other restoration efforts around the U.S. and the world. In addition to abundant scientific information and monitoring data, we have state-of-the-art computer models that provide us with an irreplaceable tool to help guide and formulate our restoration efforts and inform our actions. But the models are just that – tools. Armed with these tools, we, the senior policy makers that represent the Bay watershed partners, must decide upon the actions necessary to meet our restoration commitments.

I wish to emphasize that the ongoing Bay restoration effort will be an adaptive process. We have afforded opportunities in the schedule to make corrections and adjust course as necessary while we continue to learn from the science and the results of our restoration actions.

We are at a critical point in the Bay Partnership and our combined restoration effort. It is imperative as we move forward, that we meet our commitments, measure continued progress toward our goals, and confirm for the public that we will fully restore the health of the Chesapeake Bay and rivers. I welcome the opportunity to work closely with you and the other Bay restoration partners to finalize the Bay TMDL and advance implementation actions.

In earlier correspondence, EPA notified the Bay watershed jurisdictions that we would provide draft allocations for nitrogen and phosphorus for each jurisdiction by July 1, 2010. I write to you today in fulfillment of that commitment. Also note that by August 15, I will notify the jurisdictions of their draft sediment allocations. I want to thank the many dedicated staff within each of the jurisdictions and EPA who have labored many long hours to develop these draft allocations. The enclosed tables detail the jurisdictions' major river basin nitrogen and phosphorus draft allocations in the Bay and its tidal rivers as well as a "temporary reserve" that may be revised or removed in 2011 when Phase II WIPs are developed (see Temporary Reserve section below for further explanation).

As you review these draft nutrient allocations, it is important to keep in mind several key assumptions behind their development and how we expect they will be used as we move forward with the development of the Bay TMDL and the jurisdictions' WIPs.

## Nutrient Allocations and Potential for Modification

The nitrogen and phosphorus draft allocations included with this letter are intended to be used to inform the jurisdictions of their WIP development. They may be modified subject to EPA's review of each jurisdiction's draft and final WIPs [see Tables 1 and 2]. EPA may also modify these draft allocations in the draft or final TMDL to reflect input received during the TMDL public review period and the agency's review of the implementation framework provided in the jurisdictions' WIPs.

The draft allocations are also subject to change based upon refinements in 2011 to the Phase 5.3 Chesapeake Bay Watershed Model as requested by the jurisdictions. As stated in my recent letter on June 11, 2010, any adjustments to draft allocations as a result of the agreed upon watershed model refinements to address nutrient management effectiveness and suburban land use will be incorporated into the Phase II WIP development and submission process in 2011. EPA does not expect to pursue making further modifications to the Phase 5.3 model prior to the 2017 Phase III WIP development process.

#### Water Quality Standards

EPA developed the draft nutrient allocations provided with this letter under the assumption that the jurisdictions with Bay tidal waters — Maryland, Virginia, Delaware and the District of Columbia — would adopt currently proposed water quality standards revisions by the date the final TMDL is established. These revisions would incorporate the proposed Bay criteria assessment and designated uses refinements contained in the fifth addendum to the original 2003 Chesapeake Bay water quality criteria document issued by EPA in May, 2010. This Bay criteria addendum reflects the latest scientific findings and technical advances in the application and assessment of Bay water quality criteria. The draft allocations also assume that Maryland will soon propose (and timely adopt) modifications of its water quality standards regulations to include a lower Chester River deep-channel restoration variance, to recognize the periodic presence of a deep-water use in the South, Severn and Magothy Rivers, and to include a site-specific dissolved oxygen criterion for the Pocomoke River. The draft allocations also assume that, in addition to the jurisdictions' timely adoption of these water quality standards revisions,

EPA has sufficient time to perform the necessary review of these revisions and ultimately approves them as consistent with the Clean Water Act. If the jurisdictions do not adopt these revised standards, or if EPA does not approve them by the time the final TMDL is established, EPA would establish the Bay TMDL based on alternative draft allocations reflective of the states' and District's existing Bay water quality standards. EPA is working in close cooperation with each of these four jurisdictions and will ascertain the need for alternative draft allocations if obstacles are encountered.

## **EPA Expectations for WIPs**

EPA has clearly articulated its expectations for the jurisdictions' WIPs in correspondence issued on November 4, 2009, in the April 2, 2010 document entitled A Guide for EPA's Evaluation of Phase I Watershed Implementation Plans, and through periodic calls and webinars. We will continue to use the expectations contained in those documents and communications to ascertain the adequacy of jurisdictions' draft and final WIPs. EPA has been working closely with staff in all seven jurisdictions to assist in WIP development and will continue to do so over the ensuing months. In addition, we have made substantial technical and financial resources available to assist in the WIP development process.

# Potential Federal Backstop Actions

In a letter dated December 29, 2009, I summarized several potential actions that EPA could pursue to "ensure that jurisdictions develop and implement appropriate Watershed Implementation Plans, attain appropriate two-year milestones of progress, and provide timely and complete information to an effective accountability system for monitoring pollutant reductions." EPA intends to work closely and cooperatively with the jurisdictions in the development of effective implementation programs in line with the previous guidance. The capacity still exists for each jurisdiction to work with EPA staff to evaluate various "what if' scenarios to achieve the necessary nutrient reductions. However, in the event that WIP submittals to EPA are inadequate to ensure continued progress and fulfillment of the Partnership's commitments to achieve Bay water quality standards and implement the TMDL's allocations, EPA is prepared to take appropriate "backstop" actions as necessary.

### Schedule

On June 11, 2010, I sent representatives of the seven Bay watershed jurisdictions a letter containing a revised schedule for development of the Bay TMDL and all three phases of the WIPs. EPA has adjusted the schedule, where possible, to provide additional time and flexibility to address concerns raised by partners at the April 2010 Principals' Staff Committee (PSC) meeting as well as in individual follow-up discussions. In keeping with that schedule, I am today providing you with the basinwide, jurisdictional, and major river basin draft allocations for nitrogen and phosphorus. By August 15, I will provide the basinwide, jurisdictional, and major river basin draft allocations for sediment. By September 1, EPA expects jurisdictions to submit draft WIPs which sub-allocate these nutrient and sediment jurisdictional and major river basin draft allocations among source sectors and the 92 Bay TMDL segmentsheds. After review of the respective state's Phase I WIPs and allocations, EPA would propose for comment (on September

24 for a 45-day public comment period) the draft Bay TMDL. The draft TMDL's allocations will be informed by the information in the jurisdictions' WIPs and EPA anticipates the TMDL's allocations would be consistent with the jurisdiction's WIP allocations if EPA determines they are set at a level necessary to implement the applicable water quality standards. Following the completion of the public comment period, EPA expects the jurisdictions to revise their WIPs as necessary and submit final WIPs to EPA by November 29. EPA expects the jurisdictions to submit their Phase II and III WIPs, with revisions to the jurisdiction's allocations, according to the schedule included in my letter of June 11, 2010.

## Temporary Reserve

As discussed at the April 29-30, 2010 PSC meeting and further described in the June 11, 2010 letter, EPA has included a separate Temporary Reserve, for both nitrogen and phosphorus, of five percent for each jurisdiction that will be applied for purposes of WIP development and incorporating "contingency actions" [see Table 3]. EPA expects jurisdictions to incorporate contingency actions into their WIPs as a separate suite of actions to be undertaken in the event that the 2011 refinements to the Phase 5.3 Chesapeake Bay Watershed Model result in draft allocations lower than those provided with this letter. Contingency actions should be described in similar detail to implementation actions included in the jurisdiction's WIPs for the 2017-2025 timeframe.

This Temporary Reserve has been included to account for the possibility that the 2011 refinements to the Phase 5.3 Chesapeake Bay Watershed Model result in draft allocations to the jurisdictions lower than those provided in this letter.

The additional five percent Temporary Reserve was derived based on two main factors: 1) the basinwide nitrogen draft allocation changed approximately five percent when transitioning from Phase 5.2 of the Chesapeake Bay Watershed Model (approximately 200 million pounds in fall 2009) to Phase 5.3 (approximately 187 million pounds currently), therefore, the additional model revisions are not expected to result in changes to draft allocations that are any greater than that extent; and 2) very preliminary, rough cut, model runs suggest that the two forthcoming refinements to the model will alter basinwide nutrient draft allocations by five percent or less.

Depending on the results of the 2011 model refinements, the Temporary Reserve will be revised or removed as appropriate during the 2011 Phase II WIP development process. In parallel, if needed, jurisdictions can submit for public comment and EPA approval any proposed modifications to the Bay TMDL draft allocations.

## Establishing the Allocation for Air Sources

It is important to note that the basinwide nitrogen allocation identifies 15.7 million pounds of atmospheric deposition loads direct to Chesapeake Bay and tidal tributary surface waters. EPA anticipates that this loading cap will be achieved through implementation of federal Clean Air Act regulations by EPA and the states through 2020. Projected reductions in atmospheric nitrogen deposition loads to the surrounding watershed over this same time period are already accounted for within the individual jurisdiction and major river basin nitrogen draft

allocations. Any additional nitrogen reductions realized through more stringent air pollution controls at the jurisdictional level, beyond minimum federal requirements, may be credited to the individual jurisdictions through future revisions to the jurisdictions' WIPs, two-year milestones, and the Bay TMDL tracking and accounting framework.

I appreciate your willingness to work in partnership with EPA to develop the Chesapeake Bay TMDL and Watershed Implementation Plans that will ensure that the Bay and rivers are restored. I look forward to working with you to advance our mutual Bay restoration goals. If you have any questions regarding the draft allocations presented with this letter or the TMDL development process, please do not hesitate to contact me or Mrs. Linda Miller, Maryland State Liaison, at (215) 814-2068.

Sincerely,

Shawn M. Garvin

Regional Administrator

#### **Enclosures**

Table 1 - Chesapeake Bay Watershed Nitrogen and Phosphorus Draft Allocations by Basin

Table 2 - Chesapeake Bay Watershed Nitrogen and Phosphorus Draft Allocations by Jurisdiction

Table 3 - Chesapeake Bay Watershed Nitrogen and Phosphorus Temporary Reserve by Jurisdiction

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| Basin/Jurisdiction                                   | Nitrogen Draft Allocations (million pounds per year) | Phosphorus Draft Allocations<br>(million pounds per year) |
|--|--|---|
| SUSQUEHANNA  | 10.75(0)///03  |   |
| NY   | 8.23   | 0.52  |
| PA   | 71.74  | 2.31  |
| MD   | 1.08   | 0.05  |
| SUSQUEHANNA Total                                    | 81.06  | 2.88  |
| EASTERN SHORE  |  |   |
| DE   | 2.95   | 0.26  |
| MD   | 9.71   | 1.09  |
| PA   | 0.28   | 0.01  |
| VA VA  | 1.21   | 0.16  |
| EASTERN SHORE Total                                  | 14.15  | 1.53  |
| WESTERN SHORE  |  |   |
| MD   | 9.74   | 0.46  |
| PA   | 0.02   | 0.001   |
| WESTERN SHORE Total                                  | 9.76   | 0.46  |
| PATUXENT   |  |   |
| MD   | 2.85   | 0.21  |
| PATUXENT Total                                       | 2.85   | 0.21  |
| POTOMAC  |  | E. Weeks  |
| PA   | 4.72   | 0.42  |
| MD   | 15.70  | 0.90  |
| DC   | 2.32   | 0.12  |
| VA VA  | 17.46  | 1.47  |
| WV   | 4.67   | 0.74  |
| POTOMAC Total  | 44.88  | 3.66  |
| RAPPAHANNOCK   |  |   |
| VA   | 5.84   | 0.90  |
| RAPPAHANNOCK Total                                   | 5.84   | 0.90  |
| YORK   |  | And the second second                                     |
| VA   | 5.41   | 0.54  |
| YORK Total   | 5.41   | 0.54  |
| JAMES  |  |   |
| VA VA  | 23.48  | 2.34  |
| WV   | 0.02   | 0.01  |
| JAMES Total  | 23.50  | 2.35  |
| Total Basin/Jurisdiction Draft Allocation            | 187.44   | 12.52   |
| Atmospheric Deposition Draft Allocation <sup>1</sup> | 15.70  |   |
|  |  |   |

<sup>&</sup>lt;sup>1</sup> Cap on atmospheric deposition loads direct to Chesapeake Bay and tidal tributary surface waters to be achieved by federal air regulations through 2020.

| Jurisdiction/Basin                                   | Nitrogen Draft Allocations<br>(million pounds per year)  | Phosphorus Draft Allocations (million pounds per year) |  |
|--|--|--|--|
| PENNSYLVANIA   |  |  |  |
| Susquehanna  | 71.74  | 2.31   |  |
| Potomac  | 4.72   | 0.42   |  |
| Eastern Shore  | 0.28   | 0.01   |  |
| Western Shore  | 0.02   | 0.001<br>2.74  |  |
| PA Total   | 76.77  |  |  |
| MARYLAND   |  |  |  |
| Susquehanna  | 1.08   | 0.05   |  |
| Eastern Shore  | 9.71   | 1.09   |  |
| Western Shore  | 9.74   | 0.46   |  |
| Patuxent   | 2.85   | 0.21   |  |
| Potomac  | 15.70  | 0.90   |  |
| MD Total   | 39.09  | 2.72   |  |
| VIRGINIA   |  |  |  |
| Eastern Shore  | 1.21   | 0.16   |  |
| Potomac  | 17.46  | 1.47   |  |
| Rappahannock   | 5.84   | 0.90   |  |
| York   | 5.41   | 0.54   |  |
| James  | 23.48  | 2.34   |  |
| VA Total   | 53.40  | 5.41   |  |
| DISTRICT OF COLUMBIA                                 |  |  |  |
| Potomac  | 2.32 0.12  |  |  |
| DC Total   | 2.32   | 0.12   |  |
| NEW YORK   |  |  |  |
| Susquehanna  | 8.23   | 0.52   |  |
| NY Total   | 8.23   | 0.52   |  |
| DELAWARE   |  |  |  |
| DELAWARE   | 2.05   | 0.00   |  |
| Eastern Shore  | 2.95   | 0.26   |  |
| DE Total   | 2.95   | 0.26   |  |
| WEST VIRGINIA  |  | ***  |  |
| Potomac  | 4.67   | 0.74   |  |
| James  | 0.02   | 0.01   |  |
| WV Total   | 4.68   | 0.75   |  |
| Total Basin/Jurisdiction Draft Allocation            | 187.44   | 12.52  |  |
| Atmospheric Deposition Draft Allocation <sup>2</sup> | 15.70  | <b>II</b>  |  |
|  | The state of the s |  |  |
| Total Basinwide Draft Allocation                     | 203.14   | 12.52  |  |

<sup>&</sup>lt;sup>2</sup> Cap on atmospheric deposition loads direct to Chesapeake Bay and tidal tributary surface waters to be achieved by federal air regulations through 2020.

| Table 3. Chesapeake Bay Watershed Nitrogen and Phosphorus Temporary Reserve by Jurisdiction <sup>3</sup> |  |   |  |
|--|--|---|--|
| Jurisdiction/Basin   | Nitrogen Temporary Reserve (million pounds per year) | Phosphorus Temporary Reserve<br>(million pounds per year) |  |
| PENNSYLVANIA   | 3.84   | 0.14  |  |
| MARYLAND   | 1.95   | 0.14  |  |
| VIRGINIA   | 2.67   | 0.27  |  |
| DISTRICT OF COLUMBIA   | 0.12   | 0.01  |  |
| NEW YORK   | 0.41   | 0.03  |  |
| DELAWARE   | 0.15   | 0.01  |  |
| WEST VIRGINIA  | 0.23   | 0.04  |  |
| TOTAL TEMPORARY RESERVE  | 9.37   | 0.63  |  |

<sup>&</sup>lt;sup>3</sup> EPA has included a Temporary Reserve of 5 percent for each jurisdiction that will be applied for purposes of Watershed Implementation Plan development and incorporating "contingency actions" necessary to meet allocations.

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