

SECTION 7. REASONABLE ASSURANCE AND ACCOUNTABILITY FRAMEWORK

When EPA establishes or approves a TMDL that allocates pollutant loads to both point and nonpoint sources, it determines whether there is reasonable assurance that the LAs will be achieved and WQS will be attained. EPA does that to be sure that the LAs established in the TMDL are not based on overly generous assumptions regarding the amount of nonpoint source pollutant reductions that will occur.

This is necessary because the WLAs for point sources are determined, in part, on the basis of the expected contributions to be made to pollutant reductions by nonpoint sources. If the reductions embodied in LAs are not fully achieved because of a failure to fully implement needed nonpoint source pollution controls, the collective reductions from all sources will not result in attainment of WQS. As a result, EPA evaluates whether a TMDL provides reasonable assurance that nonpoint source controls will achieve expected load reductions.

For the Chesapeake Bay TMDL, numerous elements combine to provide that reasonable assurance, of which the primary mechanism is the Accountability Framework described in Section 7.2. EPA has provided a demonstration of reasonable assurance by evaluating each of the jurisdictions' Draft WIPs to determine if any WIP falls short of achieving the basin loading or lacks sufficient reasonable assurance that allocations can be achieved. Section 8 also describes the federal gap filling actions EPA is proposing to provide as sufficient assurance that the remaining allocations are achieved.

7.1 Reasonable Assurance

CWA section 303(d) requires that a TMDL be “established at a level necessary to implement the applicable water quality standard.” Federal regulations define a TMDL as “the sum of the individual WLAs for point sources and LAs for nonpoint sources and natural background” [40 CFR 130.2(i)]. Documenting adequate reasonable assurance increases the probability that regulatory and voluntary mechanisms will be applied such that it achieves the pollution reduction levels specified in the TMDL and therefore attains WQS.

When a TMDL is developed for waters impaired by point sources only, the existence of the NPDES regulatory program and the issuance of an NPDES permit(s) provide the reasonable assurance that the WLAs in the TMDL will be achieved. That is because federal regulations implementing the CWA require that effluent limits in permits be consistent with “the assumptions and requirements of any available [WLA]” in an approved TMDL [40 CFR 122.44(d)(1)(vii)(B)].

Where a TMDL is developed for waters impaired by both point and nonpoint sources, reasonable assurance that the TMDL's LAs will be achieved depends on whether practices capable of reducing the specified pollutant load (1) exist; (2) are technically feasible at a level required to meet allocations; and (3) have a high likelihood of implementation within a given period. Where there is a demonstration that nonpoint source load reductions can and will be achieved, a TMDL writer can determine that reasonable assurance exists and, on the basis of that reasonable assurance, allocate greater loadings to point sources. Without a demonstration of reasonable

assurance that nonpoint source allocations will be met, a TMDL would have to assign all necessary reductions to the point sources.

For the Chesapeake Bay TMDL, reasonable assurance that nonpoint source load reductions will be achieved is based, in large part, on the new accountability framework EPA is developing for this TMDL, including the Bay jurisdictions' WIPs. As discussed below and in the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed* (Federal Strategy), the goal for installing all controls necessary to achieve the Bay's DO, water clarity, SAV, and chlorophyll *a* criteria is 2025. EPA is therefore making its evaluation of reasonable assurance according to that time horizon. EPA has provided an interim goal that 60 percent of the reductions to achieve water quality standards occur by no later than 2017. The goal is primarily directed at achieving the more difficult reductions from nonpoint sources.

Since 2008, EPA Region 3 has communicated its heightened expectations for reasonable assurance in the Chesapeake Bay watershed and its basis for expecting WIPs to assist in its demonstration. The September 11, 2008, and November 4, 2009, letters and the April 2, 2010, *Guide for EPA's Evaluation of Phase I Watershed Implementation Plans* provide extensive information on what EPA expects the jurisdictions to include in their WIPs to help demonstrate reasonable assurance (USEPA 2008b, 2009c, 2010e), including

- Develop WIPs that identify how point and nonpoint sources will reduce nitrogen, phosphorus, and sediment loads sufficient to meet WQS for DO, chlorophyll *a*, SAV, and water clarity in the tidal waters of the Chesapeake Bay and its tidal tributaries
- Commit to set and meet specific 2-year milestones for implementing practices to achieve load reductions

EPA has also stated its intention to take additional federal actions, as necessary, to ensure implementation of the Bay TMDL (see Section 7.2.4). As part of that demonstration of reasonable assurance, EPA provides an analysis of the jurisdictions' WIPs in Section 8 in which EPA determines if a jurisdiction's WIP falls short or lacks sufficient reasonable assurance. Section 8 also describes the federal actions EPA is proposing to provide as a partial backstop for additional assurance that the remaining LAs are achieved.

In addition to the new Bay-specific accountability framework, reasonable assurance for the Chesapeake Bay TMDL is based on the existence and implementation of numerous existing federal, state, and local programs that provide for both point and nonpoint source controls. While not all these programs provide funding or apply to all sources, together they contribute to EPA's belief that reasonable assurance exists that the Chesapeake Bay TMDL's allocations will be met.

President Obama signed Executive Order 13508 on May 12, 2009. That order directs federal agencies to "define environmental goals for the Chesapeake Bay and describe milestones for making progress toward attainment of these goals." In the Federal Strategy, the federal agencies focused on achieving four essential priorities to restore and maintain a healthy Chesapeake ecosystem: restore clean water; recover habitat; sustain fish and wildlife; and conserve land and increase public access (FLCCB 2010). The Federal Strategy articulates 12 key environmental outcomes that will be achieved through federal actions and ongoing state activities. The commitments and actions described in the Federal Strategy are a unique and powerful tool to

achieve the Bay's water quality goals and provide additional support for reasonable assurance in this TMDL.

The Bay TMDL, along with the jurisdictions' WIPs, are key elements of the strategy because together they provide a set of numeric pollutant reduction targets and implementation plans to guide and assist achievement of the Goal to Restore Clean Water. Under the Federal Strategy, EPA is also creating a system to track and report TMDL/WIP reduction goals and 2-year milestones for federal and state agencies (see Section 7.2.3). The tracking system provides additional reasonable assurance that the TMDL's allocations will be met by clearly charting ongoing progress and, if there are shortfalls, informing EPA and other stakeholders, including the public, about the need for additional state and federal actions.

The CWA authorizes EPA to provide funding to the Bay watershed jurisdictions through various sources, including but not limited to Chesapeake Bay Implementation grants, Nonpoint Source Control grants, Section 106 grants for water pollution control programs, the Clean Water State Revolving Loan Fund, the American Recovery and Reinvestment Act, and various grant programs targeting Chesapeake Bay restoration. The funding will help the jurisdictions meet their pollutant reduction targets.

In addition, significant USDA funds and cost share programs are available through the Farm Bill, which recently were increased through the Chesapeake Bay Watershed Initiative. USDA administers the funds and target priority watersheds in the Chesapeake Bay. The Federal Strategy describes how USDA is working with producers to apply new, more effective conservation practices on the highest priority watersheds in the Chesapeake Bay and its tidal tributaries. Along with an increase in federal cost share dollars, USDA is bringing an unprecedented focus on targeted efforts in the watersheds that contribute the most reductions to nutrient and sediment pollutants. That will substantially help the states meet their respective LAs, watershed implementation plans and 2-year milestones (FLCCB 2010 pp. 34–45). USDA is also leading efforts to accelerate development of new conservation technologies and contributing to the system of accountability for tracking and reporting conservation practices. Finally, USDA is working to streamline conservation planning and sponsoring a number of showcase projects to test and monitor the benefits of a focused outreach on a number of small watersheds (30,000–40,000 acre).

USGS, NOAA, and other federal agencies will work with EPA and the states to improve the water quality monitoring and tracking of management actions and restoration activities. Part of that effort includes expanding and improving the NOAA Chesapeake Bay Interpretive Buoy System and improving the monitoring of tidal river and upland stream conditions. Many other agencies will undertake other actions to conserve land, sustain fish and wildlife, and recover habitat.

The strategy also outlines specific tools to promote transparency and accountability in the implementation and coordination of the activities. Those tools include Federal Two-Year Milestones (starting in calendar years 2012-13) where the federal agencies identify and track their actions toward meeting water quality milestones and other strategy outcomes. Other tools outlined in the strategy include an annual federal action plan, an annual progress report and providing for an independent evaluation of both federal and state progress on meeting the goals set forth in section 206 of the Executive Order.

While the strategy and associated activities are not a federal TMDL implementation plan and are not directly part of the TMDL, the additional resources, accountability, oversight and coordination provided by EPA and other federal agencies add to the reasonable assurance that the TMDL LAs will be implemented. EPA also reserves its authority to take additional federal actions, including modification or replacement of the TMDL as determined to be appropriate.

EPA also has the discretionary authority to increase oversight of NPDES permits proposed and issued by the Bay watershed jurisdictions. As discussed in EPA's December 29, 2009, letter, pursuant to EPA-jurisdiction NPDES program agreements, EPA can expand its oversight review of draft permits in the Bay watershed and can object to permits that do not meet CWA requirements, including NPDES effluent limits that are inconsistent with the Bay TMDL's WLAs (USEPA 2009d). EPA also could use its discretionary residual designation authority to increase the number of sources, operations, or communities regulated under the NPDES permit program.

Finally, the reasonable assurance for the reductions in loadings from air deposition is based on the air emission reductions that will occur by regulation under the CAA through 2020, as discussed in more detail in Section 6.4.1.1.

Those combined elements, including the WIP evaluation and EPA backstop actions described in Section 8, together with the accountability framework described in greater detail below, collectively provide reasonable assurance that the Chesapeake Bay TMDL nutrient and sediment allocations can and will be achieved.

7.2 Accountability Framework

The Chesapeake Bay Protection and Restoration Executive Order 13508 directs EPA and other federal agencies to build a new accountability framework that guides water quality restoration of the Chesapeake Bay. In addition to the federal components described above as set forth in the Federal Strategy, the Chesapeake Bay TMDL accountability framework has four elements:

- The Bay jurisdictions' development of WIPs as described in Section 7.2.1
- The Bay jurisdictions' development of 2-year milestones to demonstrate restoration progress
- EPA's commitment to track and assess the jurisdictions' progress, by way of developing and implementing a Chesapeake Bay TMDL Tracking and Accountability System (BayTAS)
- EPA's commitment to take appropriate federal actions if the jurisdictions fail to develop sufficient WIPs, effectively implement their WIPs or fulfill their 2-year milestones

The accountability framework, including the jurisdictions' WIPs and 2-year milestones, will help ensure implementation of the Chesapeake Bay TMDL but is not itself an *approvable* part of the TMDL. In its September 11, 2008, letter to the CBP's PSC (USEPA 2008b), EPA outlined the following expectations for each of the Bay watershed jurisdictions as part of the Bay TMDL accountability framework:

1. Identify the controls needed to achieve the allocations identified in the Bay TMDL through revised tributary strategies.

2. Identify the current state and local capacity to achieve the needed controls (i.e., an assessment of current funding programs for point source permitting/treatment upgrades and nonpoint source controls, programmatic capacity, regulations, legislative authorities).
3. Identify the gaps in current programs that must be filled to achieve the needed controls (i.e., additional incentives, state or local regulatory programs, market-based tools, technical or financial assistance, new legislative authorities).
4. A commitment from each jurisdiction to work to systematically fill the identified gaps. As part of this commitment, the jurisdictions would agree to meet specific, iterative, and short-term (1-2 year) milestones demonstrating increased levels of implementation or nutrient and sediment load reduction.
5. A commitment to continue efforts underway to expand monitoring, tracking, and reporting directed to assessing the effectiveness of implementation actions and to use the data to drive adaptive decision making and redirect management actions.
6. Agree that if the jurisdictions do not meet the commitments, additional measures will be necessary.

Letters sent by EPA to the jurisdictions on November 4, 2009, and December 29, 2009, further developed this accountability framework (USEPA 2009c, 2009d). In his July 1, 2010, and August 13, 2010, letters to the jurisdictions setting out the draft nutrient and sediment allocations, respectively, Regional Administrator Shawn Garvin further communicated key aspects of the accountability framework (USEPA 2010f, 2010h).

7.2.1 Watershed Implementation Plans

A major element of EPA's demonstration of reasonable assurance for the Chesapeake Bay TMDL is developing WIPs by each of the Bay jurisdictions. The WIPs have informed, and will continue to inform, EPA's development of the Bay TMDL and its setting of WLAs and LAs. In essence, the WIPs are the roadmap for how the jurisdictions, in partnership with federal and local governments, will achieve and maintain the Chesapeake Bay TMDL nitrogen, phosphorus, and sediment allocations.

EPA's November 4, 2009, letter outlined expectations for the WIPs, including that they address the eight elements summarized in Table 7-1 below.

Table 7-1. Eight elements of the jurisdictions' WIPs

Element	Description
Interim and Final Nutrient and Sediment Target Loads	WIPs are expected to subdivide interim and final target loads by pollutant source sector within each of the 92 areas draining to section 303(d) tidal water segments and identify the amount and location of loads from individual or aggregate point sources and nonpoint source sectors.
Current Loading Baseline and Program Capacity	WIPs are expected to include evaluation of current legal, regulatory, programmatic, financial, staffing, and technical capacity to deliver the target loads established in the TMDL.
Account for Growth	WIPs are expected to describe procedures for estimating additional loads due to growth and provide EPA with information to inform additional pollution load reductions that are at least sufficient to offset the growth and development that is anticipated in the watershed between 2011 and 2025.
Gap Analysis	WIPs are expected to identify gaps between current capacity (Element 2) and the capacity needed to fully attain the interim and final nutrient and sediment target loads for each of the 92 drainage areas for impaired segments of the Bay TMDL (Element 1).
Commitment and Strategy to Fill Gaps	WIPs are expected to include a proposed strategy to systematically fill the gaps identified in Element 4.
Tracking and Reporting Protocols	WIPs are expected to describe efforts underway or planned to improve transparent and consistent monitoring, tracking, reporting, and assessment of the effectiveness of implementation actions.
Contingencies for Slow or Incomplete Implementation	If the proposed strategies outlined in Element 5 are not implemented, WIPs are expected to provide for alternative measures resulting in equivalent reductions and an indication of what such contingencies might entail.
Appendix with Detailed Targets and Schedule	WIPs are expected to include detailed interim and final load targets for each tidal Bay segment drainage area, source sector, and local area (after November 2011) in an appendix, with a reduction schedule comprising the 2-year target loads at the scale of each major basin within a jurisdiction. The 2-year target loads allow EPA to assess whether future 2-year milestones are on schedule to meet interim and final water quality goals.

Source: USEPA 2009c

Three Phases of Watershed Implementation Plans

The jurisdictions are expected to develop WIPs over three Phases. Draft Phase I WIPs were to be developed and submitted to EPA on or around September 1, 2010. EPA used them to support the development of specific allocations in the draft Bay TMDL. Draft Phase I WIPs for each of the seven Chesapeake watershed jurisdictions are at www.epa.gov/chesapeakebaytmdl.

The jurisdictions are expected to submit their final Phase I WIPs to EPA by November 29, 2010, for consideration in the final Bay TMDL. After working with local partners, the jurisdictions are expected to submit their Phase II WIPs in draft and final form to EPA by June 1 and November 1, 2011, respectively. Finally, the jurisdictions are expected to submit their Phase III WIPs to EPA by 2017 describing refined actions and controls to be implemented between 2018 and 2025 to achieve WQS.

With each successive WIP, the jurisdictions are expected to suballocate the allocations provided in the Bay TMDL at an increasingly finer scale (Table 7-2). During Phases II and III of the WIP process, EPA will consider whether modifications to the Chesapeake Bay TMDL are necessary and appropriate on the basis of developments or changes in the jurisdictions' WIPs.

Table 7-2. Comparison of elements within the Chesapeake Bay TMDL and Phase I, II, and III WIPs

Element	Bay TMDL	Phase I WIP	Phase II WIP	Phase III WIP
Individual or Aggregate WLAs and LAs to Tidal Jurisdictions	✓			
Gross WLAs and LAs for Non-Tidal Jurisdictions if those Jurisdictions Submit WIPs that meet EPA Expectations	✓			
WLAs for individual significant point sources, or, where appropriate, aggregate point sources		✓	✓	✓
LAs for nonpoint source sectors		✓	✓	✓
Proposed actions and, to the extent possible, specific controls to achieve point source and nonpoint source target loads		✓	✓	✓
Point source and nonpoint source loads by local area			✓	✓
Specific controls and practices to be implemented by 2017		To the extent possible	✓	
Refined point source and nonpoint source loads				✓
Specific controls and practices to be implemented by 2025				✓

Source: USEPA 2009c

Evaluation of Phase I Watershed Implementation Plans

EPA provided the jurisdictions with a *Guide for EPA's Evaluation of Phase I Watershed Implementation Plans* in April 2010 detailing how it would evaluate the adequacy of jurisdictions' WIPs (EPA 2010e). EPA provided feedback and technical support to each jurisdiction on elements of its draft Phase I WIP that it submitted informally before September 1.

Upon receiving the jurisdictions' draft Phase I WIPs, EPA evaluated the WIPs to determine whether they met EPA's expectations as described in the April 2010 guide and in EPA's November 4, 2009 letter (USEPA 2009c, 2010e). EPA's WIP evaluation process involved a systematic review of the contents of the eight elements of each jurisdiction's draft Phase I WIP (see Section 8).

The draft Phase I WIPs were to include the Bay jurisdictions' proposed allocations to sources and sectors and a demonstration of reasonable assurance that the allocations can be achieved and maintained. The draft Chesapeake Bay TMDL incorporates the allocations where they enable the jurisdictions to meet the overall loadings necessary to meet WQS and where EPA found sufficient demonstration of reasonable assurance.

Where the allocations provided by the jurisdictions in their draft Phase I WIPs did not meet the overall loadings necessary to meet WQS or where EPA found insufficient demonstration of reasonable assurance, EPA established alternative WLAs and LAs, and supported them, where necessary, with potential federal actions identified in EPA's December 29, 2009, letter to the jurisdictions (see Section 7.2.4 and Section 8) (USEPA 2009d).

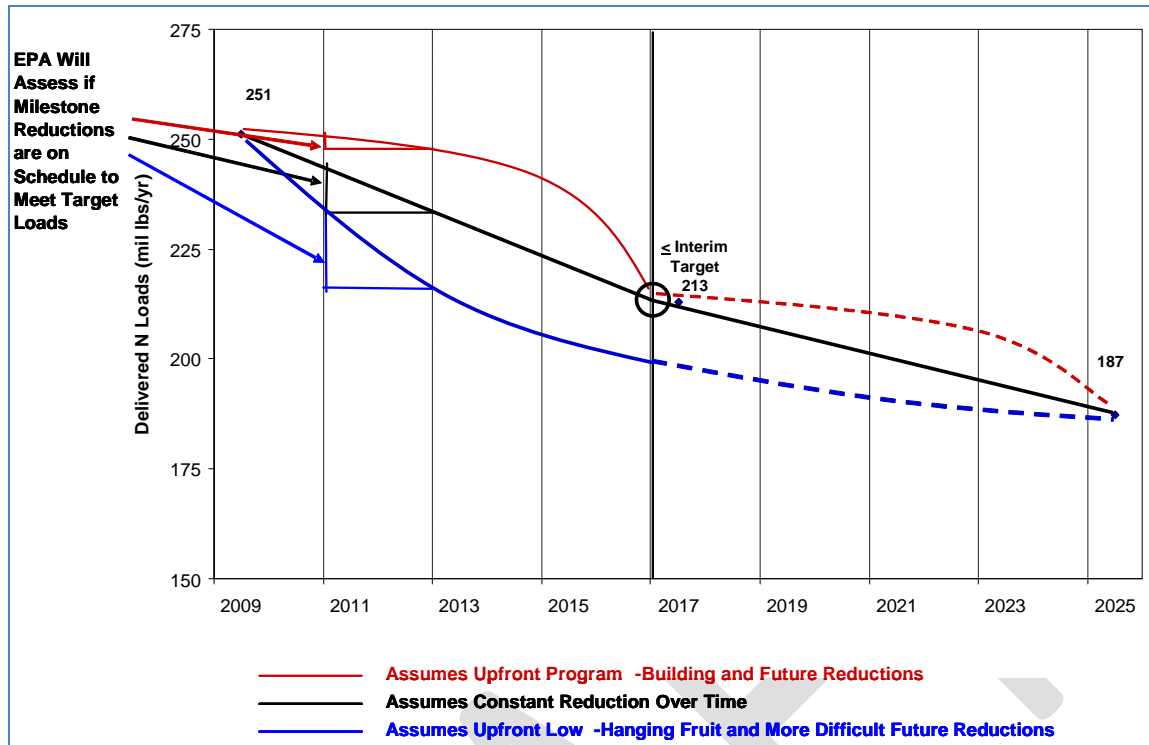
Because the draft WIP submissions of the upstream states of New York, Pennsylvania, and West Virginia do not meet EPA's expectations, EPA is not providing those states with gross LAs and WLAs (Section 8). Instead, consistent with previous letters, EPA is providing each of those states with individual WLAs to each significant point source and aggregate allocations to other point and nonpoint sources on a scale consistent with state with tidal waters.

7.2.2 Two-Year Milestones

EPA will measure the jurisdictions' progress toward reaching the TMDL's ultimate nutrient and sediment reduction goals against 2-year milestones by which the jurisdictions are expected to, with contingencies, identify and commit to implement specific pollutant-reduction controls and actions in each of their successive 2-year milestone periods (USEPA 2009c). Starting in calendar years 2010–2013, the federal government will also be providing 2-year milestones.

Before the start of each milestone period, EPA will evaluate whether the 2-year commitments are sufficient to achieve necessary reductions identified in the WIPs for the associated 2-year milestone period and whether the jurisdictions have fulfilled their previous milestone commitments. As discussed above in the Federal Strategy, an independent evaluation will be made of progress toward achieving the water quality restoration goal in accordance with section 206 of the Executive Order.

When assessing 2-year milestone commitments, EPA will evaluate whether proposed actions, controls, and practices would result in estimated loads at the jurisdiction scale that meet the jurisdiction's 2-year milestone targets (USEPA 2009c). If EPA determines that the jurisdictions would not achieve the milestone loads identified, EPA may identify which source sectors, basins, and local areas would not achieve reductions on schedule to meet that jurisdiction's interim and final target loads. EPA will then be in a position to decide what appropriate action to take (see Section 7.2.4) (USEPA 2009d). At the end of a milestone period, EPA expects that model-estimated nutrient and sediment loads resulting from reported implementation would be at or below target loads at the jurisdiction scale (Figure 7-1). Note that the 2009 load includes nitrogen delivered to the Bay from atmospheric deposition on the watershed. EPA estimates that delivered nitrogen loads will be reduced by 3.4 million pounds by 2025 through implementation of rules and standards under the CAA. The graph does not include the 17.4 million pounds of atmospheric nitrogen deposited directly to tidal waters of the Bay, of which approximately 1.7 million pounds per year will be reduced by 2025 through implementation of rules and standards under the CAA.



Source: USEPA 2009c

Figure 7-1. Relationship between WIPs and 2-year milestones.

In comparison to past Bay restoration efforts, the WIPs and 2-year milestones are expected to contain greater specificity of source sector and geographic load reduction, more rigorous assurances that load reductions will be achieved, and more detailed and transparent reporting to the public (USEPA 2008b, 2009c, 2010f).

7.2.3 Chesapeake Bay TMDL Accountability Tracking System

To determine whether sufficient progress toward the TMDL and interim milestones are being made, EPA will rely on the jurisdictions to monitor, verify and report their progress. EPA will use the reported tracking data and the Phase 5.3 watershed model along with Chesapeake Bay tidal and watershed water quality monitoring data (including contributions from other federal agencies including NOAA, USGS, COE, and USDA) to assess progress toward the milestone commitments.

While the jurisdictions will continue to report annually to EPA on BMP and other pollution control implementations within their respective jurisdiction, existing tracking and reporting mechanisms must be enhanced to fully measure progress toward the TMDL. As EPA stated in its December 29, 2009, letter, where jurisdictions do not provide verification that reported practices and controls have been properly installed and maintained, EPA may not fully or partially credit these actions in its assessment of annual progress and 2-year milestones (USEPA 2009d).

EPA will track the jurisdictions' progress toward achieving the gap-filling strategies proposed in their WIPs and their TMDL allocations through the jurisdictions' 2-year milestone commitments

and implementations by way of a transparent BayTAS that EPA is designing in consultation with the jurisdictions.

BayTAS is a centralized system that combines data from EPA and the jurisdictions to

- Track the WLAs and LAs established in the TMDL
- Track progress relative to the milestones identified by jurisdictions in their WIPs
- Record the baseline nutrient and sediment control practices reported in the Bay jurisdictions' WIPs and track progress against those baselines

Executive Order 13508 called for developing such a tracking and accountability system. In addition, implementation of the system is a commitment of EPA under the May 12, 2010, Settlement Agreement between Chesapeake Bay Foundation and EPA. BayTAS is being implemented contemporaneously with the TMDL to provide EPA, the Bay Watershed jurisdictions, and the public with information about LAs and WLAs established in the Chesapeake Bay TMDL, and the jurisdictions' respective progress toward implementing the strategies expected to be outlined in their WIPs.

EPA expects to refine and adjust BayTAS as the jurisdictions submit their Phase II and Phase III WIPs, which is expected to occur in 2011 and 2017, respectively. As it is refined, the BayTAS is expected to enable higher levels of monitoring of jurisdiction pollution-control programs than currently exist. For example, using the system jurisdictions may use the NPDES program to closely time permit renewals to aid in assuring consistency with the TMDL WLAs. The BayTAS is also expected to provide better accounting for nonpoint source implementation, pollutant trades among point and nonpoint sources, and offsets that are relied on to achieve WLAs and LAs.

During implementation of the TMDL, EPA will continue to work with the Bay jurisdictions and local governments in the ongoing design and implementation of BayTAS. BayTAS is expected to incorporate multiple existing reporting databases and frameworks and brings in new data that are not now available through existing database frameworks. Because EPA uses the Bay Watershed Model to assess the impacts of jurisdictions' implementation efforts, BayTAS will function to tie together the jurisdictions' databases and the Bay Watershed Model.

One critical system that will facilitate the exchange of information between the jurisdictions and the Bay Watershed Model is the National Environmental Information Exchange Network (NEIEN).¹ NEIEN is a partnership among the jurisdictions and EPA that facilitates exchange of environmental information. Partners in the NEIEN share data efficiently and securely over the Internet.

The jurisdictions have received EPA resources to develop NEIEN schema for reporting nutrient and sediment controls on sources other than wastewater treatment plants and began to submit annual implementation data to the Chesapeake Bay Program using the NEIEN format after October 2010 (USEPA 2010b). As the WIP development and evaluation process proceeds, EPA expects that the data-sharing relationships and practices among the jurisdictions and EPA will

¹ <http://www.epa.gov/Networkg/info/index.html>.

rely heavily on NEIEN to support the BayTAS. In fact, BMPs may be incorporated into BayTAS only if they are reported through NEIEN.

7.2.4 Federal EPA Actions

In its December 29, 2009, letter to the jurisdictions, EPA listed various federal actions that EPA may take if a jurisdiction fails to demonstrate progress toward meeting required nutrient and sediment load reductions (USEPA 2009d). EPA may take action if a jurisdiction fails to do the following:

- Develop and submit Phase I, II, and III WIPs consistent with the expectations and schedule described in EPA's letter of November 4, 2009, and the amended schedule described in EPA's letter of June 11, 2010
- Develop 2-year milestones consistent with the expectations, load reductions, and schedule described in EPA's letter of November 4, 2009, and the amended schedule described in EPA's letter of June 11, 2010
- Achieve each successive set of 2-year milestones and their respective target loads by having appropriate controls in place pursuant to the strategies identified in the jurisdiction's WIP and 2-year milestones
- Develop and propose sufficiently protective NPDES permits consistent with the CWA and the Chesapeake Bay TMDL WLAs
- Develop appropriate mechanisms to ensure that nonpoint source LAs are achieved

Following is the list of potential actions EPA may take to ensure that jurisdictions develop and implement appropriate WIPs, attain appropriate 2-year milestones of progress, and provide timely and complete information to an effective accountability system for monitoring pollutant reductions:

- Expand NPDES permit coverage to unregulated sources: For example, using residual designation authority to increase the number of sources, operations or communities regulated under the NPDES permit program
- NPDES program agreements: Expanding EPA oversight review of draft permits (major and minor) in the Bay watershed and objecting to inadequate permits that do not meet the requirements of the CWA (including NPDES effluent limits that are not consistent with the Chesapeake Bay TMDL WLAs)
- Require net improvement offsets: For new or increased loadings, requiring net improvement offsets that do more than merely replace the anticipated new or increased loadings
- Establish finer-scale WLAs and LAs in the Chesapeake Bay TMDL: Establishing more specific allocations in the final December 2010 Chesapeake Bay TMDL than those proposed by the jurisdictions in their Phase I WIPs
- Require additional reductions of loadings from point sources: Revising the final December 2010 Chesapeake Bay TMDL to reallocate additional load reductions from nonpoint to point sources of nutrient and sediment pollution, such as wastewater treatment plants
- Increase and target federal enforcement and compliance assurance in the watershed: That could include both air and water sources of nutrients and sediment

- Condition or redirect EPA grants: Conditioning or redirecting federal grants; incorporating criteria into future Requests for Proposals based on demonstrated progress in meeting WIPs or in an effort to yield higher nutrient or sediment load reductions
- Federal promulgation of local nutrient WQS: Initiating promulgation of federal standards where the jurisdiction's WQS do not contain criteria that protect designated uses locally or downstream

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