SECTION 7. REASONABLE ASSURANCE AND ACCOUNTABILITY FRAMEWORK

When the U.S. Environmental Protection Agency (EPA) establishes or approves a total maximum daily load (TMDL) that allocates pollutant loads to both point and nonpoint sources, it determines whether there is reasonable assurance that the load allocations (LAs) will be achieved and water quality standards (WQS) will be attained. EPA does that to be sure that the wasteload allocations (WLAs) and 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 by nonpoint sources to the total pollutant reductions necessary to achieve WQS. If the reductions embodied in LAs are not fully achieved because of a failure to fully implement needed nonpoint source pollution controls, or that the reduction potential of the proposed best management practices (BMPs) was overestimated, 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. Section 8 also describes EPA actions designed to provide additional assurance that the Bay TMDL's allocations are achieved.

7.1 REASONABLE ASSURANCE

The Clean Water Act (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 the pollution reduction levels specified in the TMDL are achieved and, therefore, applicable WQS are attained.

When a TMDL is developed for waters impaired by point sources only, the existence of the National Pollutant Discharge Elimination System (NPDES) regulatory program and the issuance of an NPDES permit 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, in EPA's best professional judgment, determinations of reasonable assurance that the TMDL's LAs will be achieved could include 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. 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 relied-upon nonpoint source reductions will occur, the Bay TMDL would have to assign commensurate reductions to the point sources.

7.1.1 Overview of the Accountability Framework

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' watershed implementation plans (WIPs). This framework incorporates an adaptive management approach that documents implementation actions, assesses progress, and determines the need for alternative management measures based on the feedback of the accountability framework. As discussed below and in the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed* (FLCCB 2010), the goal for installing all controls necessary to achieve the Bay's DO, water clarity, SAV, and chlorophyll *a* criteria is 2025. EPA therefore is 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 applicable WQS occur by no later than 2017. This interim goal ensures that the large portions of necessary reductions, or the more difficult restoration actions, are not left until the later years of the restoration schedule.

Since 2008, EPA Region 3 has communicated its heightened expectations for reasonable assurance in the Chesapeake Bay watershed and its basis for expecting the jurisdictions' WIPs to assist in the demonstration of that reasonable assurance. EPA's September 11, 2008, and November 4, 2009, letters and its 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 that the jurisdictions

- 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 also has stated its intention to take additional federal actions, as determined to be appropriate to ensure implementation of the Bay TMDL, as described in Section 7.2.4 below. One of those potential federal actions is the modification or replacement of the TMDL. Another is the use of EPA's 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.

As part of EPA's demonstration of reasonable assurance, EPA evaluated the jurisdictions' final Phase I WIPs to determine whether the jurisdictions both met their target allocations and provided sufficient reasonable assurance. Section 8 describes the results of EPA's evaluation of the jurisdictions' final Phase I WIPs. Section 8 also describes EPA actions designed to provide additional reasonable assurance that applicable WQS in the Chesapeake Bay watershed will be attained and maintained.

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 determination that reasonable assurance exists for the Chesapeake Bay TMDL.

7.1.2 Federal Strategy

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." The federal agencies fulfilled this order by drafting the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed*, which 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 and annual federal action plans 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, the seven Bay watershed jurisdictions, and other stakeholders, including the public, about the need for additional state and federal actions.

USGS, NOAA, and other federal agencies will work with EPA and the jurisdictions 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 federal agencies will undertake 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 2-year milestones 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.

7.1.3 Funding

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, CWA 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 U.S. Department of Agriculture (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 basin. Along with an increase in federal cost share dollars, USDA is bringing an unprecedented focus on targeted efforts in the watersheds that contribute the greatest reductions in nitrogen, phosphorus, and sediment. That will substantially help the jurisdictions to meet their respective LAs in the TMDL, to implement their WIPs, and to achieve their 2-year milestones (FLCCB 2010 pp. 34–45). USDA also is leading efforts to accelerate development of new conservation technologies and is contributing to the system of accountability for tracking and reporting conservation practices. Finally, USDA is working to streamline conservation planning and is 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 acres).

7.1.4 Air Emission Reductions.

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 Clean Air Act (CAA) through 2020. These reductions are discussed in more detail in Section 6.4.1 and Appendix L.

While the federal Bay 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 allocations will be implemented. Those combined elements, together with the accountability framework described in greater detail below, collectively provide reasonable assurance that the Chesapeake Bay TMDL nitrogen, phosphorus, and sediment allocations 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;
- 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); and
- 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 nitrogen, phosphorus, 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. Agreement that if the jurisdictions do not meet the commitments, additional measures might 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 nitrogen, phosphorus, and sediment allocations, Regional Administrator Shawn Garvin further communicated key aspects of the accountability framework (USEPA 2010g, 2010h).

7.2.1 Watershed Implementation Plans

A major element of EPA's demonstration of reasonable assurance for the Chesapeake Bay TMDL is the development of WIPs by each of the seven Bay watershed 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' Watershed Implementation Plans

Element	Description
1. Interim and Final Nitrogen, Phosphorus, 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.
2. 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.
3. Account for Growth	WIPs are expected to describe procedures for estimating additional loads due to growth and to provide EPA with information to inform additional pollutant load reductions that are at least sufficient to offset the growth and development that is anticipated in the watershed between 2011 and 2025.
4. Gap Analysis	WIPs are expected to identify gaps between current capacity (Element 2) and the capacity needed to fully attain the interim and final nitrogen, phosphorus, and sediment target loads for each of the 92 drainage areas for impaired segments of the Bay TMDL (Element 1).
5. Commitment and Strategy to Fill Gaps	WIPs are expected to include a proposed strategy to systematically fill the gaps identified in Element 4.
6. 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.
7. 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.
8. 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 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 submitted their final Phase I WIPs to EPA on November 29, 2010 (December 3, 2010 for Maryland; December 17, 2010 for New York; Pennsylvania amended December 23, 2010), for consideration in the final Bay TMDL. After working with local partners, the jurisdictions are expected to submit their Phase II WIPs describing actions and controls to be implemented by 2017 to achieve applicable WQS; deadlines for the submission of draft and final Phase II WIPs to EPA are currently June 1, 2011 and November 1, 2011, respectively, but these dates will be revisited in early 2011. Finally, the jurisdictions are expected to submit to EPA by 2017, their Phase III WIPs describing refined actions and controls to be implemented between 2018 and 2025 to achieve applicable WQS.

With submission of the Phase II WIP, the jurisdictions are expected to subdivide 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 the jurisdictions' WIPs (USEPA 2010e). EPA also provided continuous feedback and technical support to each jurisdiction on elements of its final Phase I WIP that the jurisdiction submitted informally to EPA.

Upon receiving the jurisdictions' final 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 final Phase I WIP (see Section 8).

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

Where the proposed allocations provided by a jurisdiction in its final Phase I WIP did not meet the overall loadings necessary to meet applicable WQS or where the jurisdiction provided an insufficient demonstration of reasonable assurance, EPA established alternative WLAs and LAs and provided additional reasonable assurance as appropriate. (see Section 7.2.4 and Section 8) (USEPA 2009d).

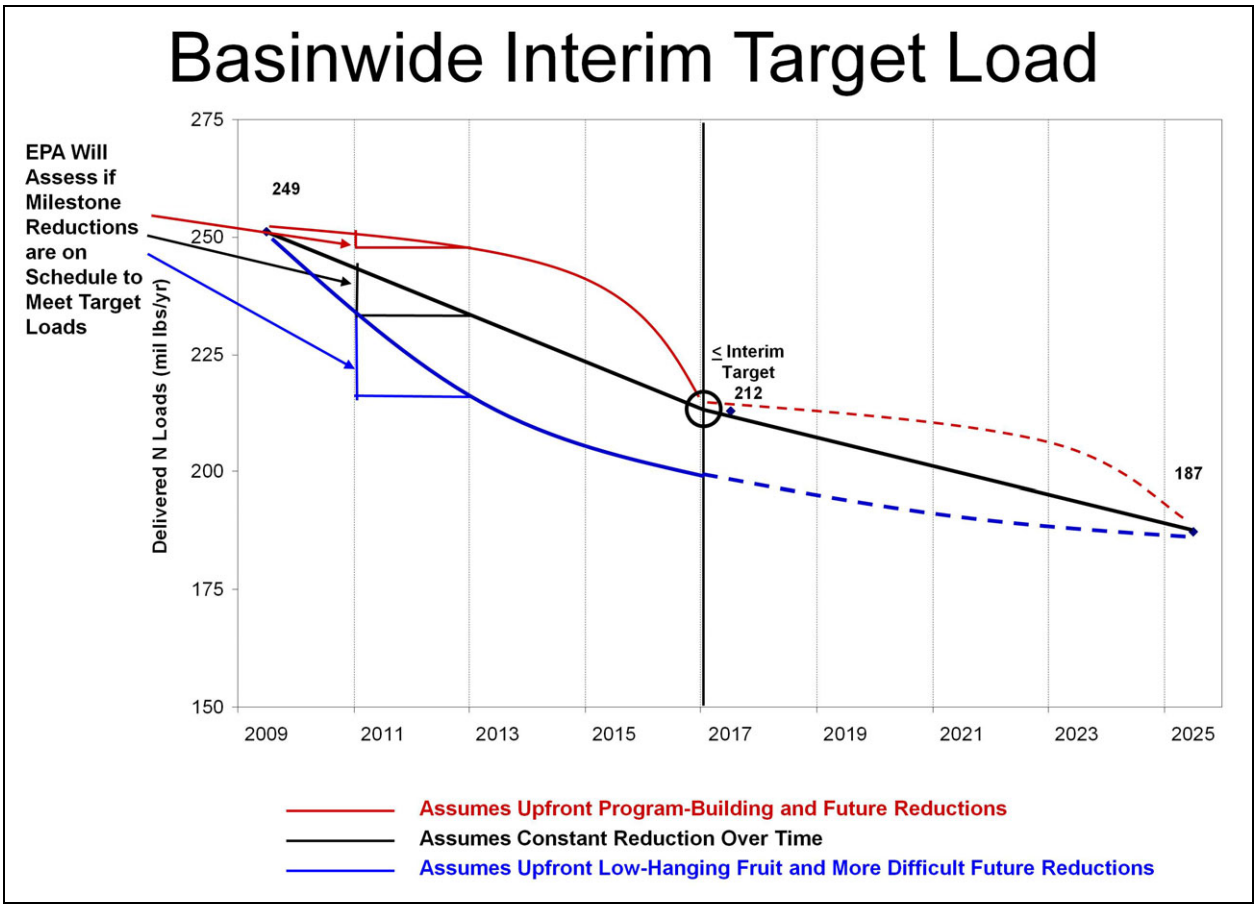
7.2.2 Two-Year Milestones

EPA will measure the jurisdictions' progress toward reaching the TMDL's ultimate nitrogen, phosphorus, and sediment reduction goals against 2-year milestones by which the jurisdictions are expected to identify and commit to implement specific pollutant-reduction controls and actions in each of their successive 2-year milestone periods (USEPA 2009c). The federal government also will 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 jurisdictions' WIPs for the associated 2-year milestone period and whether the jurisdictions have fulfilled their previous milestone commitments. As discussed in Section 7.1, 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 a jurisdiction 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 nitrogen, phosphorus, 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 represented in Figure 7-1 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 in Figure 7-1 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 provide greater specificity regarding 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 Tracking and Accountability System

To determine whether sufficient progress is being made toward meeting the TMDL allocations and interim milestones, 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 Chesapeake Bay Watershed Model along with Chesapeake Bay tidal and watershed water quality monitoring data (including contributions from other federal agencies including NOAA, USGS, USACE, and USDA) to assess the jurisdictions' progress.

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 meeting the TMDL allocations. 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 through their 2-year milestone commitments using a transparent Chesapeake Bay TMDL Tracking and Accountability System (BayTAS). EPA is designing BayTAS in consultation with the jurisdictions.

BayTAS is a Web-based system that uses data from EPA and the jurisdictions to

- Track the WLAs and LAs established in the TMDL. Tracking entails storing the loadings values and managing changes in status that may occur to the loadings in the future;
- Enable users to determine progress toward the final TMDL allocations, using progress run data from the Chesapeake Bay Watershed Model;
- Track progress relative to the milestones identified by jurisdictions in their WIPs; and
- Record the baseline nitrogen and phosphorus 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, under which EPA committed to begin implementation of a tracking system 30 days after establishment of the final TMDL.

Version 1.0 of BayTAS (and future upgrades) will 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 outlined in their Phase I WIPs.

EPA expects to refine and adjust BayTAS as the jurisdictions submit their Phase II and Phase III WIPs. As it is refined, BayTAS is expected to enable higher levels of monitoring of jurisdiction pollution-control programs than currently exist, including tracking the implementation of WLAs in NPDES permits; LAs for nonpoint sources; offsets of new or increased loadings of nitrogen, phosphorus, and sediment; and pollutant trades.

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

BayTAS data also will come from different EPA and national systems. Basic facility/permit information will come from EPA's Permit Compliance System (PCS) or the Integrated Compliance Information System (ICIS); DMR data and other information for NPDES permits will be submitted by the jurisdictions as part of an existing grant agreement; BMP implementation status information will come from the National Environmental Information Exchange Network (NEIEN); and the status of loadings information will come from the Chesapeake Bay Watershed Model. As other processes are implemented, BayTAS may incorporate information from additional data sources.

Once BayTAS Version 1.0 becomes operational 30 days from establishment of the TMDL, data flow into BayTAS will be electronic (e.g., via NEIEN) or loaded by the BayTAS operation and maintenance team. This will eliminate the jurisdictions' data entry and other operational requirements for maintaining the system. As noted above, Bay jurisdictions are expected to review information in BayTAS to ensure accuracy and for other needs and to advise the BayTAS team on design over the lifecycle of the system.

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 nitrogen, phosphorus, 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

[1] http://www.epa.gov/Networkg/info/index.html.

- 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 (significant and nonsignificant) 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 nitrogen, phosphorus, 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 nitrogen, phosphorus, 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 nitrogen, phosphorus, 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