

WATER RESOURCES TECHNICAL COMMITTEE (WRTC) MEETING

Thursday, September 10, 2009

(10:00 a.m. to 12:30 p.m.)

Board Room, 3rd Floor

Lunch will be provided at 12:00 p.m.

Note: WRTC Members' Meeting will follow at 12:30 p.m.

AGENDA – OPEN MEETING

I. Call to Order, Welcome & Introductions – Elaine Schaeffer, WRTC Chair (10:00 – 10:05 a.m.)

Meeting Materials

- **Roundtable Discussion – The Chesapeake Bay TMDL Watershed Implementation Plans (WIPs):**
 - Background Information
 - Key Questions & Discussion Schedule
 - Katherine Antos (EPA/CBP) Presentation to the WQGIT (8/24/09)
 - Bob Wayland (EP/OWOW) Memo on Stormwater & WLAs (11/22/02)
 - Donald Welsh (EPA/Region III) TMDL Letter (9/11/08)

Reference Material

- **Clean Air Act Information:**
 - Features of 1990 Clean Air Act: Role of Federal Government & Role of States
 - Section 174 Clean Air Act - authorizing COG's role in regional planning
 - MWAQC By-laws
 - Primer on Air Quality State Implementation Plans
 - Summary of Control Measures for SIPs
 - Ozone Transport Commission overview

II. Chesapeake Bay Program (CBPC) – Updates - Tanya Spano, COG staff (10:05 – 10:15 a.m.)

Ms. Spano will provide a brief overview of key CBP activities and schedules, including updates on the load allocation process and other TMDL developments.

Roundtable Discussion on Watershed Implementation Plans (WIPs)

III. Objectives, Presentations & Roundtable Process – Ted Graham, and EPA/State Representatives (10:15 – 11:00 a.m.)

This Roundtable Discussion is designed to provide an opportunity for local jurisdictions in the COG region to engage with their federal and state counterparts early in the process of developing the Watershed Implementation Plans (WIPs). The agenda for the Roundtable includes four distinct "Issue Areas." Included with this agenda is a set of questions and issues – not necessarily exhaustive - intended to help frame the discussion for each of the four issue areas. It is expected that these discussions will be the first of many over the next two years as the WIPs and Bay TMDLs are developed.

A. Objectives & Process – Ted Graham, COG (10:15 – 10:20 a.m.)

Dr. Graham will review the objectives of the Roundtable Discussion, which include:

- Understand EPA's expectations for the WIPs – and each state's perspective and proposed process;
- Provide an opportunity for COG's local governments and utilities to:
 - Better understand the purpose, proposed content, process and schedule for developing the WIPs;
 - Share their perspectives and recommendations for the WIPs with EPA and the states; and
- Agree on follow-up activities.

He will also describe the overall schedule and process for today's discussions.

B. EPA's Vision/Expectations for the Watershed Implementation Plans - Rich Batiuk, EPA/CBPO
(10:20 – 10:30 a.m.)

Mr. Batiuk will provide an overview of EPA's guidelines on the development and implementation of the WIPs. He will also share any relevant information related to the issuance of the reports pursuant to the Presidential Executive Order, which are due out on September 9, 2009. He will emphasize areas where the Bay Program Partners will be looking for input from local governments, wastewater utilities, and entities with stormwater management responsibilities.

C. States' Perspectives on WIPs & EPA's Guidance – Various representatives (by phone or present)
(10:30 – 11:00 a.m.) (10 minutes/jurisdiction)

Agency representatives from Virginia, Maryland and the District of Columbia will provide an overview of the state's planned development and implementation of the WIPs. This is an opportunity for them to: a) share their perspectives on EPA's guidelines; b) indicate when and how local governments and wastewater utilities can best participate; c) outline how they plan to proceed; highlight any ongoing issues; and d) outline how the WIPs are expected to translate into "on the ground" requirements.

- **Maryland** – Rich Eskin (or designee), MDE and Cathie Shanks, DNR
- **Virginia** – Al Pollock, DEQ and Russ Perkinson, DCR
- **District of Columbia** – Hamid Karimi, DDOE

IV. WIPs – Discussions by Issue Areas – WRTC members & EPA/State staff – Facilitated by COG staff
(11:00 a.m. – 12:30 p.m.)

Facilitated Discussion - Key Questions & Discussion Schedule

Refer to 'Key Questions and Discussion Schedule' for a list of preliminary questions organized by Issue Area. Given the range of issues and questions associated with the WIPs, and the limited time available to address all of them - three Key Questions have been identified for each issue. The participants will be asked to note if any Key Questions are missing from the list. COG staff will facilitate the discussions to address the Key Questions, with the expectation that additional follow-up work will be done to address the remaining questions over the next few months.

A. Process, Schedule & Regulatory Basis - Ted Graham
(11:00 – 11:15 a.m.)

B. Geographic Specificity - Karl Berger
(11:15 – 11:30 a.m.)

C. Implementation - Tanya Spano
(11:30 – 11:45 a.m.)

D. Feasibility and Cost - Steve Bieber
(11:45 a.m. – 12:00 p.m.)

Working Lunch
(12:00 -12:15 p.m.)

E. Summation and Next Steps - Ted Graham, COG
(12:15 – 12:30 p.m.)

Proposed Next Steps:

1. Conduct follow-up discussions with EPA/States to summarize Roundtable discussions and determine how/when to address remaining questions; and
2. Schedule presentations by States/EPA to WRTC to report on development of the WIPs.

WRTC Meeting – September 10, 2009
Background Information for Roundtable Discussion on:
The Chesapeake Bay TMDL Watershed Implementation Plans (WIPs)

Note to Roundtable Participants: *The main focus of the September 10th WRTC Meeting will be a Roundtable Discussion with federal and state representatives to address a range of topics related to the State's Watershed Implementation Plans (WIPs). [Note that the term "Watershed Implementation Plan" or WIP is now being used instead of the previously used term "State Implementation Plan" or SIP.] This paper, when read in conjunction with the presentation by Katherine Antos of EPA dated August 24, 2009, is designed to give an overview and stress the importance of the WIPs. Any additional comments or questions should be directed to Ted Graham at tgraham@mwvcog.org or 202-962-3352.*

INTRODUCTION

Progress is underway to develop the 92 "Chesapeake Bay TMDLs" that are specific to states and basins and will be issued by EPA. At the Principals' Staff Committee (PSC) meeting on July 22, 2009, Bob Koroncai presented EPA's "preliminary ideas" of what needs to be included in the WIPs. This was updated by a "Revised Guidelines for Watershed Implementation Plans," discussed by the Bay Program's Water Quality Goal Implementation Team (WQGIT) on August 24, 2009. The PowerPoint presentation (see Ref. #1) by Katherine Antos is, at this point, the principle source of information related to WIPs. Ms. Antos also made an earlier presentation to COG's WRTC on July 9th on these topics - as part of COG's ongoing efforts to inform COG's members and provide opportunities to exchange perspectives with the Bay Partners.

IMPORTANCE OF THE WIPs

The importance and potential impact of the WIPs cannot be overstated. Consider the following elements:

Increased Efforts to Address and Accelerate Implementation for All Sources

Pressure continues to increase on all sectors to reduce nutrient and sediment loads to meet Chesapeake Bay water quality standards. The Bay Program partners have issued or are on a fast track for each of these activities:

- At its meeting in May 2009, the Bay Program's Executive Council (EC) committed that **"the Bay jurisdictions will put in place all pollution control measures necessary for a restored Bay no later than 2025."**
- To accelerate load reduction progress, each state adopted **Two Year Milestones (2YMs)** at the same EC meeting. These are a new set of state-by-state short-term goals that represent a 77% rate of progress increase in the case of nitrogen and a 78% rate of progress increase in the case of phosphorus. These are to be **implemented by December 2011 and followed by subsequent 2YMs from 2011 through 2025**. The 2YMs are envisioned to be a key tool for implementation and maintaining accountability.
- Several months ago, each of the Bay Program partner states made estimates how long it would take to reduce their loads to achieve their overall respective nitrogen loads limits. **Maryland estimated that it could reach its limit by 2020 if it increased its recent implementation rate by a factor of 2.5; for Virginia the factor was 3.0.**
- The **92 Bay TMDLs** (Waste Load Allocations - WLAs & Load Allocations - LAs) which will set the load limits necessary to achieve water quality standards are to be **completed somewhere between December 2010 (the target date) and May 2011 (the court-mandated date)**.
- The WIPs – to be completed in concert with the TMDLs. During the WQGIT conference call on August 24, EPA stated that it is expecting **draft WIPs by December 2010 and final versions by May 2011**.

Short Timeframe for Decisions

Given the completion date for the Bay TMDLs (between December 2010 and May 2011) key implementation decisions will have to be made in the next 16-21 months. These include many issues and as yet unanswered questions associated with the activities listed above.

A Note on Reasonable Assurance

According to EPA's "Guidelines for Reviewing TMDLs Under Existing Regulations Issued in 1992"¹ the concept of reasonable assurance is as follows:

"When a TMDL is developed for waters impaired by point sources only, the issuance of a National Pollutant Discharge Elimination System (NPDES) permit(s) provides the reasonable assurance that the wasteload allocations contained in the TMDL will be achieved. This is because 40 C.F.R. 122.44(d) (1) (vii)(B) requires that effluent limits in permits be consistent with "the assumptions and requirements of any available wasteload allocation" in an approved TMDL."

"When a TMDL is developed for waters impaired by both point and nonpoint sources, and the WLA is based on an assumption that nonpoint source load reductions will occur, EPA's 1991 TMDL Guidance states that the TMDL should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable. This information is necessary for EPA to determine that the TMDL, including the load and wasteload allocations, has been established at a level necessary to implement water quality standards."

"EPA's August 1997 TMDL Guidance also directs Regions to work with States to achieve TMDL load allocations in waters impaired only by nonpoint sources. However, EPA cannot disapprove a TMDL for nonpoint source-only impaired waters, which do not have a demonstration of reasonable assurance that LAs will be achieved, because such a showing is not required by current regulations."

Urban Stormwater and WLAs

An EPA Guidance Memo, dated November 22, 2002 makes it clear that "NPDES-regulated storm water discharges must be addressed by the wasteload allocation component of a TMDL." (see Ref. #2)

SCOPE AND ELEMENTS OF THE WIPs

The WIPs are expected to be much broader in scope and far more prescriptive - by sector and by geography - than previous Tributary Strategies. Given the emphasis on WLAs for regulated sectors (for both wastewater and urban stormwater), it's reasonable to assume EPA envisions that there will be a close connection between the WIPs and NPDES permitting. For nonpoint sources, the TMDL "should provide reasonable assurances that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable."

The most definitive treatment to date of WIP scope is in the August 24th Antos presentation. Per that presentation, the **WIPs will be specific to: 1) Basin; (2) "Segmentshed"** (i.e., that waterbody segment listed as impaired); **and (3) County**. It will also be sector-specific. Further, each WIP is to contain (quoting from the Antos presentation):

- Bay Model Percent **Reductions by Sector in each Segmentshed and County**;
- Load Reduction **Schedule that Meets Interim and Final Targets**;
- Identification of **Program Gaps**
- **Program Enhancements** (legal, funding, etc.) and Schedule to Fill;
- **Contingencies**;
- **Account for Growth** by Setting Aside Allocations or Specifying How Will Offset;
- General Description of **Planned Pollution Controls**;
- Quantitative Planned **Point Source Controls**;
- **County/Segmentshed Location of BMPs**; and
- Uniform, Transparent and Consistent **Tracking and Reporting Requirements**.

Stakeholder Involvement

As noted above, a great number of questions and issues have been identified with a direct or indirect bearing on the WIP development and implementation. A key objective of the Roundtable Discussion is to begin to explore these questions and issues with federal and state agency representatives involved in the development and implementation of the WIPs.

Reference Documents:

1. Katherine Antos Presentation to the WQGIT – 8/24/09
2. Bob Wayland Memo on Stormwater & WLAs – 11/22/02

¹ <http://www.epa.gov/owow/tmdl/guidance/final52002.html>

WRTC MEETING - Thursday, September 10, 2009
Roundtable Discussion on Watershed Implementation Plans (WIPs)

KEY QUESTIONS & DISCUSSION SCHEDULE

Notes: These questions have been identified as key questions that COG's members wish to have addressed. They represent a preliminary list of questions; organized, to the extent possible, into four key Issue Areas.

A. Process, Schedule & Regulatory Basis – Ted Graham
(11:00 – 11:15 a.m.)

The first three questions are to be addressed at the Roundtable Discussion

1.	What is the status of WIP development, by MD, VA & DC? Are the plans subject to EPA approval either formally or informally?
2.	What are the connections between the WIPs and the Bay TMDLs and the 2-Year Milestones, in terms of timing and scope?
3.	What provisions are there for consultation with those responsible for implementation (e.g., local governments and wastewater utilities) as the WIPs are developed? Would the states consider periodic worksessions (quarterly?) in the COG region to ensure WIP coordination?
4.	EPA will be issuing the TMDLs while the States will be issuing the WIPs. What public review process is envisioned for the WIPs?
5.	What are the consequences for states that fail to develop a WIP or fail to comply with the general requirements of a WIP? Is there consideration for: (a) Withholding SRF funding? (b) Withholding clean water planning grants? (c) Refusing to issue NPDES permits to new sources? (d) Requiring new sources to offset loads?
6.	Stage 1 and Stage 2 as depicted in the PSC presentation needs to be better explained. Is it envisioned that the WIPs are to be revised periodically, e.g., with each 2-Year Milestone?
7.	The Clean Air Act (CAA) has been referred to as a good model for the new Chesapeake Bay WIPs. What parallels with the CAA SIPs, if any, are envisioned?
8.	The federal TMDL statute does not require the development of implementation plans. What is the legislative and regulatory authority for the WIPs?
9.	What are the implications for delegated state water pollution control programs given that the Bay TMDLs will be developed and issued by EPA?

B. Geographic Specificity - Karl Berger
(11:15 – 11:30 a.m.)

The first two questions are to be addressed at the Roundtable Discussion

1.	What is the geographic scale expected for actions listed in the WIPs (e.g., state-watershed segment / county / other)? Will the WIP geographic scale be identical to the scale of the Bay TMDLs? Will all WIPs use a consistent geographic scale?
2.	Will the state WIPs for Maryland, Virginia and the District be coordinated across the multi-jurisdictional watershed of the Potomac River, particularly in the Washington metropolitan area? How might COG play a role in assisting with such coordination?
3.	What methodology and modeling tools will be used to develop load targets at the county level?
4.	Will there be distinct WLAs for each MS4, as is the case for each WWTP, as well as for non-municipal MS4 permittees, such as state highway departments? Will there be distinct WLAs for combined animal feeding operations (CAFOs) that have NPDES permits?
5.	Will there be jurisdiction-specific allocations for MS4 general permittees, e.g., for construction and for Phase II communities?
6.	In general, how will the WIPs address sources that don't have permits, such as most agricultural operations, sources of air emissions and septic systems? How will reasonable assurance be formulated for these sources?

C. Implementation – Tanya Spano
(11:30 – 11:45 a.m.)

The first three questions are to be addressed at the Roundtable Discussion

1.	How will the WIPs (and the governing TMDLs) address growth? (EPA indicates that the WIPs are to “account for growth by setting aside allocations or specifying how (growth) will (be) offset” -- one or more specific examples – for wastewater and stormwater -- would be helpful.)
2.	What are the implications of the WIPs for MS4 NPDES permittees? If load allocation caps are included as permit conditions, how will they be enforced?

3.	For wastewater plants whose service areas include parts of more than one jurisdiction, how will the WIPs reconcile the differences between facility loads and county-level load allocations? (In the case of Blue Plains, will the WIPs take account of existing sewage agreements governing flow?)
4.	How will the 5-year time frame associated with NPDES permits be reconciled with restoration goals on a longer time horizon?
5.	COG regional forecasts indicate substantial increases in population, households and employment, with the region’s population projected to reach 6.6 million in 2030. What flexibility will be available for local governments to manage their net load (i.e., evaluate their stormwater, wastewater, air, and agricultural sources) to best manage collective growth needs?
6.	In general, major WWTPs have received a WLA and are proceeding with expensive design and construction projects to achieve limit of technology treatment. How will the WIPs be structured and the 2-Year Milestones be integrated so that WWTPs are assured of “regulatory stability” as described in EPA Region III’s letter?
7.	Smart Growth and infill development will concentrate stormwater and sewage loads into urban areas while the WIPs will establish nutrient/sediment reductions that will need to be achieved and maintained in those same areas. How do the states envision reconciling those competing demands and influencing local growth/development decisions given the load caps?
8.	What provisions will there be for tracking progress and adapting to changed conditions (i.e., how will adaptive management concepts actually be applied)?

**D. Feasibility and Cost – Steve Bieber
 (11:45 a.m. – 12:00 p.m.)**

The first three questions are to be addressed at the Roundtable Discussion

1.	How and when will localities and other stakeholders be providing an opportunity to provide input on the feasibility of implementation and the cost of implementation for the various WIP elements that impact their jurisdiction/organization?
2.	Assuming costs will be part of the WIPs, will cost per pound of pollutants reduced be used to help prioritize projects for implementation?
3.	In lieu of conducting a formal Use Attainability Analysis under the TMDL (which EPA has ruled out for now), there has been discussion of developing an “affordability analysis” (AA). What is the status of AA development and will information from such an analysis be used in the development of the WIPs?

4.	Assuming that the WIPs are expressed at the county level, will implementation costs – both capital and operating - be expressed in per capita or similar units so that budgetary impacts can be assessed?
5.	Will uniform BMP efficiencies be applied by all of the jurisdictions developing WIPs? (Historically, different regulatory agencies and the Bay Program have accorded different efficiencies to the same stormwater management practices, and the efficiencies continually change over time.)
6.	Will the WIPs recognize opportunities for watershed-based trading? Will that include the ability to utilize interstate trading in the Potomac River Watershed? And if so, what sectors and at what scale can those trades be applied?
7.	Will the WIPs contain contingency plans in case some management actions fail to achieve the expected results?

Other Water Quality Related Questions

Note: These questions do not specifically relate to the proposed WIPs, but have also been raised as part of ongoing discussions about the CBP's TMDL developments. They will be addressed at other WRTC meetings and/or through other venues.

1.	What were the total nitrogen and phosphorous loadings to the Bay waters in ~1975? What are the loadings now?
2.	What were the total nitrogen and phosphorous loadings to the Bay waters in ~1975 from POTW sewage discharges?
3.	What are the nitrogen and phosphorous POTW loadings now?
4.	What are the projections by 2011 and beyond?
5.	What are the nutrient loadings from other sources and which are predominant?
6.	If POTW loadings have been reduced significantly and other loadings have gone up why are not the others being controlled more stringently?
7.	If POTW loadings have decreased significantly since 1975 while the Bay has continued to deteriorate, it seems unlikely that the POTWs were contributors. What are the reasons that the Bay deteriorated during that time?
8.	What is the contribution of overharvesting? Reduce commercial fishing has significantly increased some species production. This was independent of nutrient loadings changes.
9.	The recent oyster experimental seeding on higher deposits was very successful. Is the method of oyster harvesting the greater cause of the bottom deterioration and lowering yields in other areas?
10.	What is the cost benefit result of additional reductions on POTWs?
11.	What will be the incremental benefits of further expensive reductions from POTWs?
12.	How much will crab and oyster and fish populations be increased as direct result of the POTW additional expenditures?