Chesapeake Bay Program Phase III Watershed Implementation Plans

Chesapeake Bay Stakeholder Assessment

Developed under EPA Conflict Prevention and Resolution Services Contract # EP-W-14-020, Task Order 044

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Outline of the Assessment

1. Background for this Assessment

2. Lessons from Stakeholders

- a. Three Stories About the Bay TMDL
- b. Key Concerns and Options for Actions
- c. Other individual participant perspectives
- d. How pollutions loads etc. should be expressed in Phase III
- e. Questions from Participants

3. Appendix

- a. Examples of success
- b. The Chesapeake Bay TMDL
 - i. Background for the Chesapeake Bay TMDL
 - ii. Watershed Implementation Plans (WIPS)
- c. List of Participants
- d. The Assessment Process

Background for this Assessment

As part of the Chesapeake Bay Program Water Quality Goal Implementation Team's (WQGIT's) Midpoint Assessment of the Chesapeake Bay TMDL, EPA will be developing expectations for jurisdictions' development of Phase III Watershed Implementation Plans (WIPs). Jurisdictions will develop Phase III WIPs in 2017-2018 in which they will outline a strategy for implementing practices necessary to meet Bay TMDL allocations by 2025.

EPA's expectations for Phase I and II WIPs were guided by the Chesapeake Bay Program partnership's intent for the Bay TMDL to accelerate implementation and engage the public. Many Chesapeake Bay Program partners recognize that Phase III needs more fully to engage local partners. The purpose of this stakeholder assessment is to recommend improvements to the WIP development, evaluation, implementation and oversight processes so that the Phase III WIPs create effective plans for implementation through 2025.

The Institute for Environmental Negotiation, University of Virginia (IEN) has been contracted to

perform this assessment. IEN is a public service organization of the University of Virginia with over 30 years experience helping public agencies, nonprofits, businesses, and individuals make public decisions using processes inclusive of diverse views, transparent and inviting to those such decisions affect, and responsive to participant needs. IEN helps build knowledge, capacity and solutions through independent and impartial research and facilitation.

This assessment is based on a series of conversations with over 100 individuals to date from federal, state, and local government, as well as non-governmental and industry organizations. Participants in these conversations were invited to identify lessons learned from the Phase I and II WIP process that should be applied to the Phase III WIPs in order to facilitate local engagement and implementation. Because of the interest in learning what helped and what hindered local implementation, a substantial proportion of the conversations occurred with those involved with local efforts. All conversations were conducted by Frank Dukes, Ph.D., of IEN, who is responsible for this assessment as well.

These conversations with stakeholders have been intended to address the following questions:

- What aspects of the Phase I and II WIP process facilitated implementation?
- What topics does the Phase III WIP process need to address more directly?
- How may Phase III WIPs and the oversight of implementation better engage local partners and accelerate the implementation of pollution reduction practices?
- How should information on pollutant loads, reductions, and/or implementation efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards meeting Bay TMDL allocations?
- Other topics may arise during conversations as appropriate and/or as suggested by stakeholders.

IEN has prepared this draft report (Stakeholder Assessment) to summarize the process of the assessment, the parties who were contacted, the issues that were discussed and the range of input and opinions presented.

If the first phase of this Assessment is speaking with over 100 participants from all sectors, all states and the District of Columbia, and many localities, then the second phase will be actively to seek feedback on what these participants have had to say as captured in this draft Stakeholder Assessment. This will be an active review, with IEN continuing to seek input about the draft and filling in gaps identified during the review. The types of questions accompanying the distribution of the draft Stakeholder Assessment may include general questions, such as these:

- Are there any elements of this assessment that ring particularly true for you?
- Are there any that you would say are counter to your own experience?
- Would you draw similar conclusions? other conclusions?
- Is there a sector or interest that you think has not been sufficiently addressed (and would you provide a contact to an individual or organization?)?

as well as more specific questions, such as these:

- How do you think that information on pollutant loads, reductions, and/or implementation
 efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards
 meeting Bay TMDL allocations?
- Why aren't modeling tools, such as CAST, as successful as they might be in facilitating local implementation? How could they be made more successful?
- What kind of resources do state and local jurisdictions most need? How should additional funding be targeted? Is there a better way to target resources or funding that is already available (e.g. CBRAP/CBIG grants)?

The final phase of this assessment will be for IEN to review and respond to the comments and suggestions, including speaking to additional individuals to broaden the scope even more than the initial outreach, and to develop the final assessment.

Lessons from Stakeholders

The findings in this assessment are based entirely on direct discussions with over 100 individuals; background review of documents and web sites recommended by those individuals added to understanding of the discussions. The Appendix lists those whose views inform this assessment.

Three Stories About the Chesapeake Bay TMDL

It may be helpful to understand participants' perspectives and experiences with Phases I and II of the Chesapeake Bay TMDL as lying somewhere within a range of three stories, or narratives. The boundaries of these stories are fluid; few individuals would find themselves contained within any single narrative, and some elements of all three may resonate with many. Nonetheless, in conversations that IEN has had with over 100 individuals, certain themes – aspirations, anxieties, fears and concerns, confusions, questions, and needs – emerge again and again.

Story One is the story of those for whom implementing the Chesapeake Bay TMDL and meeting applicable water quality standards in the Bay and its tidal rivers are their highest priority.

Story Two is told by those for whom the Bay TMDL is an important priority largely because of regulatory or institutional mandates, and who have to juggle Bay TMDL demands with other priorities.

Story Three is the story of those for whom the Bay TMDL is, at best, potentially helpful for some of their goals, and, at worst, an unfair burden that impinges on other priorities of equal and greater importance to them and those they represent.

Each story includes illustrative statements from participants. While it is tempting to align these stories with particular jurisdictions or sectors, the reality is that individuals' views do not always match those alignments. One may find supporters and critics throughout each type of jurisdiction

and sector; nobody denies the value of a clean Chesapeake Bay, just as nobody denies the costs imposed by the Bay TMDL and the need for attention to the concerns and needs of all jurisdictions and sectors throughout the watershed.

Following descriptions of each of these stories, a set of commonalities among multiple stakeholders – areas of substantial agreement among participants - will be offered. That section includes illustrative statements representing the three different stories.

Story One: The Chesapeake Bay TMDL and efforts for Phase I, II and III need to be continued, expanded, and completed. There has been too much talk about a clean Bay, too many broken promises made, and too much time spent waiting for action, without adverse consequences to those who made and broke those promises. Despite measurable gains that have occurred, the Bay continues to be harmed by actions and by inactions of individuals and institutions.

This harm can be measured in economic terms, and the economic loss is of staggering proportions. But a different type of harm also impacts the people and communities in the watershed. We have failed in our responsibility as stewards of this national treasure and as caretakers for future generations.

Implementing the Chesapeake Bay TMDL is an unprecedented undertaking requiring shared sacrifice. Yes, there have been problems with implementation. There has been too little coordination among and within states. Some localities that don't have sufficient staffing or expertise and who don't get support by states and USDA need more technical assistance, such as those with unregulated stormwater. More funding is needed.

Contributions to the allocated fair share of reductions should be voluntary to the extent possible. But in the face either of noncompliance or of insufficient progress despite compliance, we must take all feasible steps to ensure "necessary practices in place by 2025, with practices in place by 2017 that would achieve 60% of the necessary reductions between 2009 and 2025." Agriculture in particular has been allowed to implement voluntary practices that simply are insufficient to meet the TMDL goals, and that needs to stop. The Chesapeake Bay TMDL is the law, it is what is right, and it needs to be implemented as scheduled.

What others most need to understand:

- o There are substantial benefits to implementing the Bay TMDL. The benefits to the Bay are paramount, but local waters will also benefit from improvements in water quality.
- Every jurisdiction and sector needs to be involved actively in implementing the Bay TMDL.
 Leaders from local government and agriculture, stormwater, and development sectors need to act with all due urgency.
- Outside of the regulated community (urban MS4's, developers, wastewater), the effort to drive implementation local has fallen short; that is unacceptable.
- Yes, the costs may be difficult for some sectors and some localities to bear. But advocates for the Bay TMDL and for the Bay have invested enormous amounts of time and energy in

securing funding for cost-share programs, for staffing, for technical assistance, and for outright grants. Rather than finger-pointing, we would benefit from ensuring that funding is increased and sustained, from increasing innovation and development of BMPs, and from ensuring that those practices with the greatest cost-benefit ratio are the ones that are implemented and credited appropriately.

The Bay model has been criticized unfairly. States, localities and sectors need to understand that no model of any kind, much less such a complex ecosystem as the Chesaeake Bay, can be perfect. A science-based approach means that changes will be made consistent with the latest research, monitoring, and modeling; those changes are because of improvements in science and understanding, and should be welcomed. The Bay model is the most sophisticated such model in the world. It improves with each iteration. If the time and energy spent criticizing the model were instead devoted to implementing the WIPs, we all would be better off.

What most needs to happen:

- Everyone in the watershed community members who pay taxes, farmers, local government officials, and others - needs to understand the value of the Bay TMDL.
- Funding must continue to be expanded and sustained and technical assistance provided to localities and sectors with the fewest resources.
- Because local implementation has fallen short, efforts need to be redoubled to keep to the scheduled implementation plan. Backstop measures need to be implemented when states fail to meet agreed timetables. EPA needs to demonstrate that failure to achieve the TMDL goals is unacceptable.
- We need to rely more on monitoring, which is showing less improvement than modeling results indicate.

Story Two: The cleanup of the Chesapeake Bay undoubtedly needs to be done, but it needs to be an approach based on recognition of political and financial realities at the local levels. EPA and other agencies and advocates for the Bay TMDL need to listen more and to understand the realities of local government, including authentic competing priorities with critical issues such as education, mental health, and public safety, as well as the burdens of unfunded mandates.

EPA and other agencies and advocates for the Bay TMDL also need to listen to and understand concerns from both regulated and non-regulated sectors. What may work for modeling – making changes based on newer and more accurate data – causes uncertainty and confusion within jurisdictions and the different sectors. Budgets, staffing, and programming cannot change every few months; the real world is not like that.

In the face of noncompliance, efforts need to be made to explore and address the root causes - which typically have to do with insufficient staffing, technical support, or funding - rather than imposing penalties. Similarly, jurisdictions or sectors should not be held accountable if they are compliant but models or even monitoring indicate insufficient progress despite that compliance; one cannot say "you must do A, B & C" and then when A, B & C are completed decide that is not good enough. Penalizing states and localities for not meeting unrealistic deadlines or

unachievable goals will only create a backlash against the Bay TMDL; withholding funding will only slow implementation. Even if progress is stalling due to noncompliance, then find out the reasons first rather than assume the worst. Backstops and penalties should be a last resort; the best change occurs when concerns are addressed and real partnerships between relations of equals are developed.

What others need to understand:

- Localities have many critical priorities. As important as a clean Bay may be to many people, it
 is not more important for my jurisdiction and residents than public safety, mental health, or
 education.
- Equity and perception of equity plays a major role in responses to the WIPs. The regulated sectors are concerned that they already are paying a high cost and that EPA and/or the states will force them to do more as the non-regulated sectors fail to achieve their goals. It is entirely unfair for the regulated sectors to be forced to make up deficits in meeting goals from the unregulated sectors.
- O The regulated sectors have invested substantial tax dollars at state and local levels, often for purposes that are not apparent to the taxpayers. Funds spent by the regulated sector have not been spent in ways that achieve the most benefit at the least cost (e.g., the equivalent reductions in agriculture cost less than for wastewater).
- There is no way that we will be able to meet the TMDL it is physically not possible to do [from stormwater sector and others].
- The demands of the Bay TMDL have grown exponentially since the program's inception, while support has not kept up.
- Outside of the regulated community (urban MS4's, developers, wastewater), the effort to drive implementation local has really fallen short of the schedule; the schedule is unrealistic.
- There may be TMDL fatigue hearing over and over again about what is needed. Each time an rfp goes out [offering funding for BMPs] the interest declines somewhat.
- o In many areas, political interest and funding dried up during Phase II.
- We have not received sufficient credit for actions that were and are being done.

What most needs to happen:

- o Providing more funding is key to successful implementation.
- EPA needs to have a clear communication strategy that is tailored for and targeted to each state
 and each sector: What needs to happen, why, how it may be done, and who should be defined
 and targeted to each sector.
- O Because the effort to drive implementation local has fallen short to date, EPA needs to adopt realistic schedules rather than following a schedule for the sake of the schedule.
- O Stop calling this a "blueprint." A blueprint is a complete design that can be built as it is. The Bay TMDL is a plan, which can and must be adapted based both on what is learned about what works and what is affordable.
- Bring affected parties together again, where this was done previously, or for the first time
 where not. We benefit from understanding the needs, concerns, and interests of all the sectors
 and other jurisdictions.
- We should receive more credit for actions that were and are being done.

Story three: The Bay is important to those jurisdictions adjacent to the Bay, but it is not the highest importance for my jurisdiction or sector. Cleaning the Bay may be a worthy goal, and we might be willing to contribute more than we have already done – and we have done a lot - if we were given sufficient support and we had a realistic schedule. But the TMDL either is the wrong way to go about it, or is being implemented in ways that impose undue burdens on my jurisdiction or sector.

The Bay TMDL seems to be a moving target. Furthermore, elections change priorities. We may be rushing to implement actions that a new administration will overturn. We need to take a measured approach that acknowledges the many realities on the ground.

Participation should be voluntary. Threats of backstops and contingencies are unproductive; change occurs when concerns are addressed and real partnerships between relations of equals are developed.

What others need to understand:

- The schedule is being driven by fear of lawsuits rather than by what is most suitable for good implementation.
- o Unilateral decisions do not represent true partnerships.
- O Phase II in particular put the process in a bad light with many localities, with concerns about modeling, the lack of authentic collaboration or even consultation, and the accelerated schedule that resulted in inadequate engagement and poor data.
- My [jurisdiction or sector] has been dealt an unfair hand by the TMDL. [Variations on this theme include:]
 - We bear an inequitable portion of the cleanup costs relative to our contribution to the problem; and/or,
 - We need upstream localities to do their fair share so that we aren't cleaning up their mess; and/or,
 - We get insufficient credit for our contributions; and/or,
 - We are receiving too little compensation relative to our contributions.
- O Communication is a two-way street. Listening means more than hearing what is said; it means acknowledging and acting on local or sector concerns and needs.
- Many upstream communities have feeder streams and rivers that already meet water quality standards, and elected officials, administrators, and citizens resent being forced to implement costly actions because downstream jurisdictions have not adequately protected their waters.
- o There is a paradox that language about the EPA oversight role may drive localities that are not regulated away from voluntary action; they don't want any additional oversight.

What most needs to happen:

- o There needs to be a realistic schedule that is not driven by fear of lawsuits.
- o Funding drives everything. Localities need more funding for agriculture, stormwater, and wastewater treatment facilities to meet targeted reductions.

- Allow decisions to be made at the most local level (e.g., New York is credited with doing an
 excellent job in collaborating with the Upper Susquehanna Coalition to write the agriculture
 component of the WIPs).
- Let funding go directly to local BMPs rather than being filtered and reduced by administrative costs – by intermediaries.
- We should receive more credit for actions that were and are being done.
- EPA and its partners need to listen really listen and understand and respond accordingly to local needs and concerns.

Key Shared Concerns and Ideas for Actions

While participants report varied perspectives, there also are commonalities that have emerged with many shared concerns across sectors and jurisdictions, as well as ideas about what needs to happen during Phase III to address those concerns. Below is an effort to synthesize those commonalities, framed in terms of concerns that have been identified, actions that have helped with implementation, and recommendations for actions that should be taken in preparation for and during Phase III to address those concerns and to build on what is successful.

1) Equity.

1a) Those sectors and jurisdictions who are not contributing their share do need to be held accountable. It is unfair for those who have made substantial efforts and who have invested

considerable effort and money to allow any other sector or jurisdiction to get by without making a similar effort.

We have been implementing the Bay Preservation Act to treat stormwater, while those west of I-95 have not been doing so. But when dividing the loads across the watershed, the state made the same assumptions for everyone.

EPA is going to have to stand firm on its consequences.

EPA really needs to work on getting more people involved in this; the ones who are actively participating are the ones that are constantly being penalized – we get more attention.

1b) There are vast differences in capability from one jurisdiction and one sector to another. Some urban localities have more staff and capability than does state government. Funding and support need to be targeted to areas that need it the most.

Agriculture is making progress, wastewater treatment is doing well, but nobody is paying attention to non-regulated stormwater. The land mass is substantial and there is no mechanism to get to them.

Smaller and more rural jurisdictions in particular are overwhelmed with requirements. They do not need punishment; they need more resources, including technical assistance and funding.

1c) There will inevitably be concerns that other sectors or other jurisdictions are receiving more favorable treatment, which makes it of paramount importance to be transparent and equitable in how burdens and benefits are shared.

2) Communication.

2a) Jurisdictions and sectors know too little about what their peers are doing to implement the Bay TMDL and their states' WIPs. There have been too few opportunities for cross-sector and cross-jurisdictional exchange and learning. That leads to suspicion, competition, and concern that other sectors and jurisdictions may be receiving more favorable treatment. It also means that there is no opportunity to benefit from lessons from others. LGAC could advise partners on better

communication among federal-state-local partners.

There is no means provided for partners to learn what others are doing.

Webinars and seminars have often been valuable.

At the local level, having central jurisdiction contacts are really helpful – both state and EPA contacts.

There needs to be some structure for periodic updates that people know where to go for information. Networking can and should take many forms, including webinars, multi-stakeholder roundtables, and peer learning opportunities (e.g., a set of peer-to-peer networks organized by staff, sector, local elected officials) throughout the watershed. For Phase III, a sharing of lessons learned from pilots would be very helpful.

The Center for Agro-Ecology has done two surveys and there is a lot of insight in those documents: https://agresearch.umd.edu/agroecol

2b) Too many localities and sectors do not know what is expected of them. The states have had no comprehensive communication strategy, which leads to uncertainty and other problems with localities and sectors.

We need a strategic communication plan for federal and state jurisdictions.

Each state needs to develop a comprehensive communication strategy that informs localities and sectors, including federal landowners, of what needs to happen and why, what resources are available, and the implications of success and Virginia eventually provided useful guidance for the development of MS4 action plans.

States need more personnel to help with outreach and public engagement.

The biggest unknown is the lack of clear direction from the state [Pennsylvania]; the current MS4 permit does not have any targets for pollutant reduction.

People did not understand how to take advantage of the opportunities to participate. They did not understand enough about where the numbers came from and what they meant, and this was a regulated community. Those that are not regulated have even less understanding.

failure. The first step is getting local governments to understand what they are and are not responsible for. The second level is more of a "this is what needs to happen for having a health Bay," targeted by sector. Target concise, relevant, and direct messages to elected officials, and detail what actions do they need to take based on this. Hitting them only one time at conferences is insufficient; not everyone goes, and that is a one-time hit.

2c) There is too little understanding about the Bay TMDL, both its requirements and its benefits, including the potential for local water quality improvements.

There is a huge gap between what staff know and what elected officials and residents know.

Speaking of the Bay TMDL did help with people with an environmental perspective living in the city.

There is more awareness of the Bay TMDL, but not necessarily more buy-in, not when funding competes with other necessities such as schools and social services.

A comprehensive marketing plan needs to be undertaken to demonstrate the value of implementing the Bay TMDL to local waters and local economies as well as to the Bay's waters, recreational users, and the local economy. For instance, in an economically distressed area tree planting could be highlighted because this will

The economic benefits have not been studied or communicated enough.

help lower cooling costs. NGOs can play a role with this.

Eric Eckl from Water Words That Work is helping localities improve the public's understanding about and acceptance of stormwater fees.

2d) There are too many mixed messages from states and EPA. Open hostility between EPA and state officials is evident in planning meetings; that creates doubt that if they cannot agree on what is right, how can we know what is right? EPA and the state need to work out their differences before meeting with local jurisdictions and sectors.

An openly antagonistic approach towards EPA by the state administration filters down to the staff.

EPA also needs to have a clear communication strategy that is tailored for and targeted to each state and each sector: What needs to happen, why, how it may be done, and who should be defined and targeted to each sector.

If EPA is going to be going to backstops the do need to be active at meeting with sectors within the state again.

3) Collaborative Leadership.

3a) The Bay Program has always embodied an authentic partnership with strong leadership from each of the states and the District of Columbia. The Program valued science, deliberation, and consensus. That has changed dramatically. With the inception of the Bay TMDL,

Leadership from the Bay Program needs to learn from this assessment and carry forward its recommendations.

We would have had less resentment if we had done a better job of educating people, including a formal public input process.

decisions about the Bay are being made between EPA and the states. There is not an attitude of transparency within the program, which is a big change. There needs to be a more meaningful EPA presence at all statewide stakeholder meetings.

3b) When states brought together representatives from localities and different sectors, they learned from one another and even resolved some conflicts. But too often the engagement is limited to sharing information rather than working through problems. There has been a lack of engagement with elected officials who actual

Stakeholder advisory groups that brought multiple sectors and jurisdictions to be table were very helpful in addressing conflicts among and between sectors and jurisdictions. They also helped develop collective understanding of which WIP features applied to which interest. [n.b. – some stakeholders believe that the state public outreach was for show and that decisions had already been made]

engagement with elected officials who actually make the budget.

There is no longer any wellfunctioning stakeholder group in Pennsylvania.

There is frustration that the locals did not have any role in the policy development. That is true for all sectors.

In Virginia, the schedule did not help matters, but the state was not willing to have serious negotiations with stakeholders; they figured out what they could do for what needed to be accomplished.

Holding two public meetings for each WIP, including federal partners and NGOs, involved everyone from the very beginning.

We did not find any value for the Stakeholder meetings; they did not lead to actual change.

There need to be opportunities for localities and sectors within states to work with each other as Phase III is being developed, to learn together, to work out challenges, and to build consensus for actions that reflect experience. LGAC could advise partners on better communication among federal-state-

4) Accountability for results.

local partners.

4a) Credit has been given for practices without sufficient testing and/or verification. That is changing, which makes sense. But this will drive up the costs of implementation considerably.

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4b) Too little credit has been given for some jurisdictions or sectors who were good stewards before the Bay TMDL.

4c) Jurisdictions vary by topography and hydro-geology; that needs to be taken into

The verification process has forced us to be clearer about our practices, but it does significantly increase the costs of these practices.

The agricultural sector in Pennsylvania has to have three plans; there are 30-40,000 family farms and we ask, who sees these plans and who monitors? That is a big disconnect when all they have to do is to have a plan, with no accountability for implementation.

Monitoring should not be relied on too heavily, as many effective practices will have a substantial lag time.

A one-size-fits-all model is both unfair and ineffective.

account by the states when developing the WIP.

5) <u>Funding and other resources</u>. Participants throughout the watershed credit program funding and local tax funding for significant benefits but worry about Phase III.

Implementing the Chesapeake Bay TMDL has involved

considerable expenditures. Representatives of many localities with regulated sectors (wastewater treatment and MS4) expressed considerable frustration with the burden that their taxpayers have had to pay, and may have to pay in the future. Norfolk, for instance, estimates that it could cost taxpayers \$200 million that they do not have to retrofit their stormwater, and that assumes that they can meet a substantial proportion of their potential goals with new development and redevelopment that pays for itself.

EPA came out with additional funding for implementation and the CBRAP grant.

EPA or the state.

EPA has been a particularly good partner with data acquisition (e.g., Virginia received \$25,000 for a BMP data cleanup effort to look at older data, and is also contracting for updated land cover "digital orthography.")

Funding drives everything.

It may be more legitimate having

assistance provided by other than

The state has done a lot over the last four years to provide resources for regulated and non-regulated communities.

6) <u>Cost-effectiveness</u>. There has been too little consideration about the cost-effectiveness of various practices to make the needed reductions. EPA has been promoting trading whether it is appropriate for our state or not. Everyone knows that the most cost-effective practices generally involve agriculture.

We need to mandate an accurate cost-benefit analysis for all program guidance so that moneys are spent in an accountable way. If not, the program will fail.

If the funding that was spent on wastewater treatment had been spent on reducing agricultural contributions, we would have already achieved our goals.

7) <u>Adaptability.</u> Too often EPA or the state are more interested in checking off a box than in getting results. Focus less about directing the means and more about what outcomes need to be, with some reasonable assurance that the TMDL is likely to be achieved.

There is too much of trying to fit everything into one mold, e.g., if it works in Maryland we all should do it. That won't work in Pennsylvania and would be very hard to do in Virginia.

Rather than understanding how a particular state, sector, or program is working, EPA focuses on either their own goals (e.g., they insist on the value of nutrient trading programs) or on what works for the model, or on the letter of a program or BMP rather than the best way to reach a page.

Communication is far too often a one-way street.

on the letter of a program or BMP rather than the best way to reach a particular target that is appropriate for that sector, locality or state, at that particular time.

Jurisdiction-based solutions for reducing pollution were a longstanding priority for EPA and why the agency always provided

Funding and regulatory structures have not kept up, nor has thinking about using new strategies for best use of money.

the jurisdictions with flexibility to determine how to reduce pollution in the most cost-effective, efficient and acceptable manner. That has changed but needs to change back. We also need to be creative in developing innovative and cost-effective BMPs.

We have to do more of the Prince George's county public-private model.

The Prince George's County and Corvias Solutions Public-Private Partnership (P3), also called the Clean Water Partnership, is an agreement between County government and the private sector to retrofit up to 4,000 acres of impervious surfaces using green infrastructure. This pioneering P3 approach will leverage private sector best practices and efficiencies to deliver functional and sustainable stormwater infrastructure with accelerated project timelines and reduced costs. The Partnership is also specifically tasked with driving local economic development by using local, small and minority businesses for at least 30 - 40 percent of the total project scope.

http://www.princegeorgescountymd.gov/sites/StormwaterManagement/Documents/CWP FAQ.pdf

- 8) Schedule. Keeping to the EPA-imposed schedule for the Phase I and II WIPS has led to many problems. These have included:
- States had insufficient time to do outreach to sectors and localities to learn from them, incorporate those lessons into the WIPs, and gain support for them.
- Local jurisdictions had insufficient time to do outreach to elected officials and local stakeholders.
- Data provided by localities was not sufficiently incorporated into the state WIP. This may have been due to inadequate staffing at the state level and/or incompatibility of data formats between localities and states, which may have been addressed had there been sufficient time to address incompatibilities. When local staff spend months collecting data and then seeing the wrong data used, it delegitimizes the effort.

Many participants do not believe that the 2025 deadline is feasible and that meeting what are arbitrary deadlines actually harms planning and implementation. On the other hand, there are concerns that easing the schedule would be the first step in abandoning other elements of the TMDL. There are also concerns that easing the schedule would prompt litigation by advocates for the Bay TMDL.

9) The Bay Model. Confusion over the role and validity of the model has been harmful. For some, the problem has been that the model is being asked to guide decisions at scales that are not suitable. For others, there are too many assumptions that don't match realities, e.g., modeling may show improvements in water quality that actual monitoring does not demonstrate. For others for whom

modeling is unfamiliar, hearing of results such as delegitimize the model and hence actions taken on the basis of the model.

Locals lost faith in the model when accounting for nutrient management plans showed an increase rather than decrease in those nutrients.

Monitoring should not be relied on too heavily as many effective practices will have a substantial lag time before they show results.

We don't want to get a draft set of numbers that are then changed, which is very hard to explain to localities and sectors and removes confidence in the model.

On the other hand, the Bay model may be able to provide a more accurate picture of the effectiveness of implementation efforts than modeling, since some actions may take time to demonstrate improvements. We need to accept the limitations of the model, and if not useful at the county scale, or only for particular items at the county scale, we should not use it for those purposes.

Other individual participant perspectives

- There is not sufficient political will to regulate agriculture, but that is what needs to happen.
- CAST- Chesapeake Assessment Scenario Tool is a tool to help local governments meet reduction targets. They did a one-day training and then nobody ever talked about it again. This is an example of ineffective delivery and followup. There is uncertainty about who can and should be doing what to help accelerate implementation.
- In the District of Columbia, federal partners, including National Park Service and Department of Defense [landowners], are the bulk of the land. They did very little of what they laid out in the beginning back in 2009. Get the federal agencies to step up and implement the actions that they laid out and pledged to enact in WIPs I & II.
- MS4 permits have worked because of their mandates for nutrient reductions.
- We would be willing to go to a trading program but that was only half-heartedly implemented
 after 10 years into it, possibly due to EPA and environmental advocates; the parameters change
 every few years. EPA is being very risk averse to being sued and that may drive a lot of behavior.
- The majority [of localities] knew that something had to happen because they could see it in their own community. They have stormwater issues, flooding issues, with impacts to their communities for drinking water and flooding. They were left "Standing there with one foot in the air not knowing where next to step" without getting the direction from the state.
- States need guidance about what to do about unregulated stormwater.
- In Virginia, the regional Planning District Commissions (PDCs) could play a huge role, but they need EPA or state funding.
- Certification programs need to be developed for local governments, e.g., methods for verifying and crediting homeowner actions.
- Information that is not verified or verifiable should not be used.
- Phase III will have to deal with regulated vs. unregulated stormwater; the non-regulated community has done very little.

How should information on pollutant loads, reductions, and/or implementation efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards meeting Bay TMDL allocations?

- Perhaps the load should not be distributed among all states rather than living in model world.
- Now they break it out by basin or land-river segment or county, but if possible it would be helpful to be done by political jurisdiction.
- One of the challenges in Pennsylvania is that the county governmental system is advisory; townships and municipalities make the land-use decisions. This results in a lack of accountability. The first step overall is much more concrete county-level allocations challenge them to come up

- with plans to meet those allocations and a system to administer them with a circuit rider and a management team. They don't know what their target is EPA needs to let the states know.
- There is a lot of reliance in Pennsylvania on the Mapshed program, a Fortran 10-state developed graphical user interface GIS, that DEP has been talking about for local TMDLs and the Bay TMDL. We don't know what the assumptions are and would like to know those. We don't know if other models will be incorporated or compatible.
- Loadings absolutely need to be localized.
- They should be done on as fine a scale as is possible; communities need to feel responsible for their own stream segment. They need information at their scale. That was supposed to happen during Phase II but did not. Try to find a way to provide information to about how WIP implementation will resolve local water quality concerns, especially a local TMDL issue.
- Grant significantly greater attention to the cost-benefit ratio when determining load allocations.
- The model cannot be used for anything at a lower level than the state.

Questions from Participants

- The big questions is whether the loads will change with the next iteration of the model; if that does happen, will the TMDL have to be reopened?
- What information can be submitted to the state without violating privacy concerns from the USDA 1619 agreement?
- There is a huge expectation in Phase II WIPS for significant wastewater treatment plants; what is the plan for non-significant facilities?
- We still have a lot of questions about the ways that the loads are distributed.
- How will you make the reductions that need to occur real to the people who have to implement them?
- What does the 60% represent? The jurisdictions have different views of what this means.

Appendix

The Chesapeake Bay TMDL

Background for the Chesapeake Bay TMDL

From http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/FrequentlyAskedQuestions.html

On December 29, 2010, the U.S. Environmental Protection Agency established the Chesapeake Bay Total Maximum Daily Load (TMDL), a historic and comprehensive "pollution diet" with rigorous accountability measures to initiate sweeping actions to restore clean water in the Chesapeake Bay and the region's streams, creeks and rivers.

The Clean Water Act (CWA) sets an overarching environmental goal that all waters in the United States be "fishable" and "swimmable." More specifically it requires states and the District of Columbia to establish appropriate uses for their waters and adopt water quality standards that are protective of those uses. The CWA also requires that every two years jurisdictions develop – with EPA approval – a list of waterways that are impaired by pollutants and do not meet water quality standards. For those waterways identified on the impaired list, a TMDL must be developed. A TMDL is essentially a "pollution diet" that identifies the maximum amount of a pollutant the waterway can receive and still meet water quality standards.

Despite extensive restoration efforts during the last 25 years, the Bay TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries. The TMDL is required under the federal Clean Water Act and responds to consent decrees in Virginia and the District of Columbia from the late 1990s. It is also a keystone commitment of a federal strategy to meet President Obama's Executive Order 13508 to restore and protect the Bay.

More than 40,000 TMDLs have been completed across the United States, but the Chesapeake Bay TMDL will be the largest and most complex thus far – it is designed to achieve significant reductions in nitrogen, phosphorus and sediment pollution throughout a 64,000-square-mile watershed that includes the District of Columbia and large sections of six states. The TMDL is actually a combination of 92 smaller TMDLs for individual Chesapeake Bay tidal segments and includes pollution limits that are sufficient to meet state water quality standards for dissolved oxygen, water clarity, underwater Bay grasses and chlorophyll-a, an indicator of algae levels.

The TMDL sets pollution limits necessary to meet applicable water quality standards in the Bay and its tidal rivers. Specifically, the TMDL set Bay watershed limits of 185.9 million pounds of nitrogen, 12.5 million pounds of phosphorus, and 6.45 billion pounds of sediment per year. That represents a 25 percent reduction in nitrogen, 24 percent reduction in phosphorus and 20 percent reduction in sediment. These pollution limits are further divided by jurisdiction and major river basin based on state-of-the-art modeling tools, extensive monitoring data, peer-reviewed science, and close interaction with jurisdiction partners.

Most of the Chesapeake Bay and its tidal waters are listed as impaired because of excess nitrogen, phosphorus and sediment. These pollutants cause algae blooms that consume oxygen and create "dead zones" where fish and shellfish cannot survive, block sunlight that is needed for underwater Bay grasses, and smother aquatic life on the bottom. The high levels of nitrogen, phosphorus and sediment enter the water from a variety of sources, including agricultural operations, urban and suburban runoff, wastewater facilities, onsite septic systems, air pollution, and other sources.

The Bay watershed is 16 times the size of the Bay, a ratio much higher than any other comparable watershed in the world. That characteristic makes the Bay highly susceptible to actions taken on the land, including those associated with agriculture, development, transportation and wastewater treatment.

Since 2000, the seven jurisdictions in the Chesapeake Bay watershed (Delaware, the District of Columbia, Maryland, New York, Pennsylvania, Virginia, and West Virginia) EPA, and the Chesapeake Bay Commission, which are partners in the Chesapeake Bay Program, have been planning for a Chesapeake Bay TMDL. Since September 2005, the seven jurisdictions have been actively involved in decision-making to develop the TMDL. During the October 2007 meeting of the Chesapeake Bay Program's Principals' Staff Committee, the Bay watershed jurisdictions and EPA agreed that EPA would establish the multi-state TMDL. Since 2008, EPA has sent official letters to the jurisdictions detailing all facets of the TMDL, including: nitrogen, phosphorus and sediment allocations, schedules for developing the TMDL and pollution reduction plans; EPA's expectations and evaluation criteria for jurisdiction plans to meet the TMDL pollution limits; reasonable assurance for controlling non point source pollution; and backstop actions that EPA could take to ensure progress.

The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025, with practices in place by 2017 to meet 60 percent of the necessary pollution reductions. While it will take years after 2025 for the Bay and its tributaries to fully heal, EPA expects some areas of the Bay will recover before others and there will be gradual and continued improvement in water quality as controls are put in place around the watershed.

The pollution controls employed to meet the TMDL will have significant benefits for water quality in the tens of thousands of streams, creeks and rivers throughout the region, improving waterways that support local economies and livelihoods, and are used for fishing, swimming, boating, and often as a source of drinking water.

Previously-approved TMDLs were established to protect local waters. While some were based on reducing nitrogen, phosphorus, and sediment, many were for other pollutants. In contrast, the Bay TMDL is based on protecting the Bay and its tidal waters from excessive nitrogen, phosphorus, and sediment. For waters that have both local TMDLs and Bay TMDLs for nitrogen, phosphorus, and sediment, the more stringent of the TMDLs will apply.

The Chesapeake Bay Program includes the signers of the original 1983 Chesapeake Bay Agreement - the jurisdictions of Maryland, Virginia, Pennsylvania, and the District of Columbia; EPA, representing the federal government; and the Chesapeake Bay Commission, representing Bay jurisdiction legislators. It also includes the U.S. Department of Agriculture and the headwater jurisdictions of Delaware, New York and West Virginia. The Program is led by the Chesapeake Executive Council, which includes the EPA Administrator, the governors of Maryland, Pennsylvania and Virginia, the mayor of the District of Columbia, and the chair of the Chesapeake Bay Commission. The Principals' Staff Committee, which includes the EPA Region 3 Administrator, state secretaries and others, serves as an advisory body to the Executive Council.

Watershed Implementation Plans (WIPS)

From http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/FrequentlyAskedQuestions.html#gi3

The cornerstone of the accountability framework is the jurisdictions' development of Watershed Implementation Plans, which serve as roadmaps for how and when a jurisdiction plans to meet its pollutant allocations under the TMDL. In their Phase I WIPs, the jurisdictions were expected to subdivide the Bay TMDL allocations among pollutant sources; evaluate their current legal, regulatory, programmatic and financial tools available to implement the allocations; identify and rectify potential shortfalls in attaining the allocations; describe mechanisms to track and report implementation activities; provide alternative approaches; and outline a schedule for implementation.

The two most important criteria for a WIP is that it achieves all of the jurisdiction's target allocations at both the jurisdiction and individual basin level, and that it meets EPA's expectations for providing reasonable assurance that reductions will be achieved and maintained, particularly for non-permitted sources like runoff from agricultural lands and currently unregulated stormwater from urban and suburban lands.

Phase I WIPS:

After the draft Phase I WIP submittals in September 2010, a team of EPA sector experts conducted an intense evaluation process, comparing the submissions with EPA expectations. The EPA evaluation concluded that the pollution controls identified in two of the seven jurisdictions' draft Phase I WIPs met nitrogen and phosphorus allocations and five of the seven jurisdictions' draft Phase I WIPs met sediment allocations. The EPA evaluation also concluded that none of the seven draft Phase I WIPs met EPA's expectations for providing reasonable assurance that pollution controls identified could actually be implemented to achieve the nitrogen, phosphorus and sediment reduction targets by 2017 or 2025.

The result was a draft TMDL that established allocations based on the adequate portions of the jurisdictions' draft Phase I WIPs along with varying degrees of federal backstop allocations in all seven jurisdictions. Backstop allocations focused on areas where EPA has the federal authority to control pollution allocations through NPDES permits, including wastewater treatment plants, stormwater permits, and animal feeding operations.

EPA worked closely with each jurisdiction to revise and strengthen its plan. Because of this

cooperative work and leadership by the jurisdictions, the final Phase I WIPs were significantly improved. Examples of specific improvements included:

- Committing to more stringent nitrogen and phosphorus limits at wastewater treatment plants, including on the James River in Virginia. (Virginia, New York, Delaware)
- Pursuing state legislation to fund wastewater treatment plant upgrades, urban stormwater management, and agricultural programs. (Maryland, Virginia, West Virginia)
- Implementing a progressive stormwater permit to reduce pollution. (District of Columbia)
- Dramatically increasing enforcement and compliance of state requirements for agriculture. (Pennsylvania)
- Committing state funding to develop and implement state-of-the-art technologies for converting animal manure to energy for farms. (Pennsylvania)
- Considering implementation of mandatory programs for agriculture by 2013 if pollution reductions fall behind schedule (Delaware, Maryland, Virginia, New York)

The improvements to the WIPs enabled EPA to reduce and remove most federal backstops, leaving only a few targeted backstops and a plan for enhanced oversight and contingency actions to ensure progress. As a result, the final TMDL is shaped in large part by the jurisdictions' plans to reduce pollution. Jurisdiction-based solutions for reducing pollution was a long-standing priority for EPA and why the agency always provided the jurisdictions with flexibility to determine how to reduce pollution in the most cost-effective, efficient and acceptable manner.

Phase II WIPS:

The primary purpose of the Phase II Watershed Implementation Plans (WIPs) is to ensure that local partners who play a key role in cleaning up our waterways are engaged and ready to help implement the WIPs. As articulated in the Guide for Chesapeake Bay Jurisdictions for the Development of Phase II Watershed Implementation Plans released on March 30, 2011 (PDF) (6 pg, 49K), Phase II provides the Chesapeake Bay jurisdictions with the opportunity to facilitate implementation and refine their WIP strategies and commitments through local partner engagement. Although it varies by jurisdiction, "local partners" could include local governments, conservation districts, planning commissions, federal agencies, utilities, and watershed groups.

The most important element of the Phase II WIP is the narrative, which explains how jurisdictions will work with key partners to get the necessary practices in place by 2025, with practices in place by 2017 that would achieve 60% of the necessary reductions between 2009 and 2025. Jurisdictions are expected to demonstrate in their WIP narratives that local partners (1) are aware of the WIP strategies; (2) understand their contribution to meeting the TMDL allocations; and (3) have been provided with the opportunity to suggest any refinements to the WIP strategies.

The purpose of "local area targets" is to provide local partners with specific actions or goals that represent their contribution toward meeting the Chesapeake Bay TMDL allocations. Jurisdictions can decide how to define and set local area targets based upon what makes the most sense to their key partners. Examples of ways to express local targets could include:

- Implementation goals, such as:
 - o The number of BMPs that need to be implemented (e.g. 5,000 animal waste management

- systems compared to 1,000 in place today) or the number of acres receiving BMPs (e.g. cover crops on 500,000 acres compared to 300,000 today).
- The percent of sources with BMPs (e.g. 100% of dairy on feed management compared to 10% today or non-commodity cover crops on 80% of lands compared to 20% today).
- Phase 5.3.2 Watershed Model inputs or outputs, such as pounds of pollutant reductions to be achieved by individual counties.
- Programmatic actions, such as adopting ordinances that will help municipalities meet Bay TMDL allocations for stormwater.

The Bay Total Maximum Daily Load (TMDL) or "pollution diet" sets pollution limits necessary to meet applicable water quality standards in the Bay and its tidal rivers. The primary elements of the TMDL are "wasteload allocations" for "point sources" like sewage treatment plants, urban stormwater systems and large animal feeding operations, and "load allocations" for "non point sources" such as runoff from agricultural lands and non-regulated stormwater from urban and suburban lands. These pollution limits are further divided by jurisdiction and major river basin based on state-of-the-art modeling tools, extensive monitoring data, peer-reviewed science, and close interaction with jurisdiction partners. (see https://stat.chesapeakebay.net/?q=node/130&quicktabs_10=1)

List of Participants

The following individuals were contacted about participating in the assessment. Those outlined in yellow graciously agreed to offer their experiences and insights during one or more conversations.

Last Name	First	State	Sector
Burrell	Collin	DC	State agency
Davis	Diane	DC	State agency
Karimi	Dr. Hamid	DC	Local government
Onyullo	George	DC	State agency
Koran	David	DC?	Federal landowner
Norris	Marian		NPS
Person	Roberta		Navy
Quinn	Sheryle	DC?	Federal landowner
Shepp	David	DC?	Federal landowner
	Christopher		
Spaur	C.	DC?	Federal landowner
Absher	Debbie	DE	conservation district
Anderson	Charles	DE	local government
Davis	Mark	DE	State agency
Fox	Marcia	DE	State agency
Gregory	Jamie	DE	State agency
Monteith	Tyler	DE	State agency
Palmer	Bob	DE	State agency
Prettyman	Vikki	DE	local government
Schneider	John	DE	State agency
Slatcher	Delores	DE	local government
Sturgis	Brittany	DE	State agency
Towle	Larry	DE	State agency
Volk	Jenn	DE	State agency
Walls	Jennifer	DE	State agency
Gleason	Patricia		EPA
McGuigan	David		EPA
Ottinger	Elizabeth		EPA

Shenk	Kelly		EPA
Sincock	Jen		EPA
Sweeney	Jeff		EPA
Trulear	Brian		EPA
Wenz	Tom		EPA
Zieba	Kyle		EPA
Zolandz	Mark		EPA
Batiuk	Rich		EPA
Capacasa	Jon		EPA
Corbin	Jeff		EPA
DiPasquale	Nick		EPA
Edward	Jim		EPA
Gratz	Jeff		EPA
Allen	Greg		EPA
Antos	Katherine Katherine		EPA
Carkhuff	Ann		EPA
Hall (Trevena)	Suzanne		EPA
Izraeli	Ruth		EPA
McNally	Dianne		EPA
Parrish	Reggie		EPA
Power	Lucinda		EPA
20002	Darettica		2111
Backe	Diane	MD	Local government
Backe Bryer	Diane Mark	MD MD	Local government NGO
Bryer Carrasco	Mark Vicky	MD MD	NGO Cooperating institutions
Bryer Carrasco Coble	Mark Vicky Kim	MD MD MD	NGO Cooperating institutions NGO
Bryer Carrasco	Mark Vicky Kim Valerie	MD MD	NGO Cooperating institutions
Bryer Carrasco Coble	Mark Vicky Kim	MD MD MD	NGO Cooperating institutions NGO
Bryer Carrasco Coble Connelly	Mark Vicky Kim Valerie	MD MD MD MD	NGO Cooperating institutions NGO Private
Bryer Carrasco Coble Connelly Currey	Mark Vicky Kim Valerie Lee	MD MD MD MD MD MD	NGO Cooperating institutions NGO Private State agency Private Local government
Bryer Carrasco Coble Connelly Currey Curry, P.E.	Mark Vicky Kim Valerie Lee Burt	MD MD MD MD MD MD MD MD	NGO Cooperating institutions NGO Private State agency Private Local government Local government
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart	Mark Vicky Kim Valerie Lee Burt Meo	MD	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger	Mark Vicky Kim Valerie Lee Burt Meo Cathy	MD	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger Etgen	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis Lou	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government NGO
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger Etgen George	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis Lou Jim	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government NGO State agency
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger Etgen George Harrison	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis Lou Jim Verna	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government NGO State agency Private
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger Etgen George Harrison Hoot Johnston Keppler	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis Lou Jim Verna Lynne	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government NGO State agency Private
Bryer Carrasco Coble Connelly Currey Curry, P.E. Curtis* Drzyzgula Emmart Enslinger Etgen George Harrison Hoot Johnston	Mark Vicky Kim Valerie Lee Burt Meo Cathy Paul Dennis Lou Jim Verna Lynne Matt	MD M	NGO Cooperating institutions NGO Private State agency Private Local government Local government State agency Local government NGO State agency Private Conservation district

Powell	Royden	MD	State agency
Prost	Alison	MD	NGO
Rhoderick	John	MD	
Rice	Craig	MD	Local government
Ryberg	Greg	MD	Local government
Saunders	Kristin	MD	State agency
Strider	Meredith	MD	Local government
	Thomas		
Thornton	(Tom)	MD	State agency
Wolinski, P.E.	Bill	MD	Local government
Albrecht	Greg	NY	State agency
Ashline	Doug	NY	State agency
Barber	Amanda	NY	Conservation district
Costello	Tom	NY	
Curatola	Jim	NY	NGO
Lendrum	Jackie	NY	State agency
Lorraine	Steve	NY	
McElwee	Chip	NY	
Murphy	Robert	NY	Local government
Ristow	Aaron	NY	State agency
Sears	Ben	NY	State agency
Thigpen	Janet	NY	Stormwater
Walsh	Wendy	NY	Conservation district
Yearick	Chris	NY	NGO
Angstadt	Bill	PA	Agriculture
Bell	John	PA	Agriculture
Brath	Phil	PA	Wastewater
Brosius	John	PA	Wastewater
Brossman	John	PA	Wastewater
Brown	Karl	PA	Conservation district
			Stormwater/local
Campanero	Scott	PA	government
Campbell	Harry	PA	NGO
Chiaruttini,			
Esq.	Alexandra	PA	Private
Dawes	John	PA	NGO
Dell	Felicia	PA	Local government
Diebel	Sarah	PA	Federal landowner
Gattis	Mary	PA	NGO

Gray	Rick	PA	Local government
Hann	Steve	PA	Wastewater
Henne	Randall	PA	Wastewater
Hocker	Ruth	PA	Local government
Hurst	Randy	PA	Wastewater
Katzenmoyer	Charlotte	PA	Local government
King	Marel	PA	Federal
Kyle	Mike	PA	Wastewater
Lehman	Megan	PA	Local government
Maiden	Robert	PA	Conservation district
Malarich	Mark	PA	Wastewater
Marquart	Susan	PA	Federal
Martick	Larry	PA	Conservation district
McFarland McFarland	David	PA	Local government
Morelli	Donna	PA	NGO
Reed-Harry	Jennifer	PA	Agriculture
Reese	Jodi	PA	Wastewater
Schaefer	Lisa	PA	Local government
Schutz	Wayne	PA	Wastewater
Shambaugh	Brenda	PA	Conservation district
Snell-Zarcone	Kim	PA	NGO
Tesler	Ted	PA	State agency
Thomas	John	PA	Local government
Thompson	Chris	PA	Conservation district
Walter	Wendy	PA	Wastewater
Weston, Esq.	Tim	PA	Private
Wheeler	James	PA	Stormwater
Wilecter	julieo	111	Cooperating
Whitney	Sara	PA	institutions
Williams	Shannon	PA	Wastewater
Wolf	Kristen	PA	State agency
Wyland, Esq.	Scott	PA	Wastewater
Zemba	Andy	PA	State agency
Bauhan	Hobey	VA	Agriculture
Baxter	Russ	VA	State agency
			Stormwater/local
Bennett	Kate	VA	government
Blackburn	Jessica	VA	NGO
Burns	Janine	VA	Local government
Crofton	Scott	VA	Private
Cunningham	Fred	VA	State agency

Davis-Martin	James	VA	State agency
Dean	Nissa	VA	NGO
Geissler	Fran	VA	Local government
Goulet	Normand	VA	Local government
Grape	Laura	VA	soil & water district
Gross	Penny	VA	Local government
Hoagland	Roy	VA	Private
Jennings	Ann	VA	NGO
Keeling	Bill	VA	State agency
Kennedy	John	VA	State agency
Kling	Lara	VA	State agency
			Cooperating
Kline	Karen	VA	institutions
Maroon	Joe	VA	NGO
McKercher	Liz	VA	State agency
McRae	Nesha	VA	State agency
			Cooperating
Mitchem	C. J.	VA	institutions
Papacosma	Jason	VA	Local government
Sappington	Alyson	VA	soil & water district
Sexton	Tim	VA	State agency
Shafer	Justin	VA	Local government
Snead	Ginny	VA	Private
Tribo	Jenny	VA	Local government
Tyree	Kendall	VA	soil & water district
Whitehurst	June	VA	Local government
			Cooperating
Yagow	Gene	VA	institutions
Yancey	Erin	VA	Local government
			Cooperating
Zhou	Ning	VA	institutions
Bryer	Mark	Watershed	NGO
Claggett	Sally	Watershed	Federal landowner
Diebel	Sarah	VA	Federal landowner
Swanson	Anne	Watershed	
Basden	Tom	WV	State agency
Cooper	Katherine	WV	NGO
Copenhaver	Doug	WV	Local government
Dean	Norman	WV	NGO
		•••	, ,

Dulyea	Dan	WV	Local government
Haid	Tanner	WV	NGO
Hardy	Carla	WV	State agency
Hartman	Alana	WV	State agency
Keller	Curtis	WV	Local government
Koon	Teresa	WV	State agency
Lehman	Kate	WV	NGO
Monroe	Matt	WV	State agency
Montali	David	WV	State agency
Pennington	Matthew	WV	Local government
Rodgers	Frank	WV	NGO
Trowbridge	Cam	WV	NGO
Wichterman	Dustin	WV	NGO
Wilkerson	Tom	WV	Local government

discussion completed or scheduled

email invitation sent email rejected

The Assessment Process

Nominations for partners and stakeholders whose experiences and perspectives would inform this assessment were offered initially by members of the Water Quality Goal Implementation Team (WQGIT). Each individual also was invited to offer names of other individuals to contact. Eventually, [180 update] individuals were contacted from all the Chesapeake Bay TMDL states and the District of Columbia, all levels of government, all sectors identified as contributors (agriculture, stormwater, wastewater treatment) and other main interests (non-governmental sector, business sector). The contractor was able to speak to [insert #] with conversations ranging from as brief as 20 minutes and as long as 90 minutes.

Depending upon the referral source, the following introductory email may have been modified. But this represents the emails sent to individuals nominated for contact:

Greetings! My name is Frank Dukes. I direct the Institute for Environmental Negotiation at the University of Virginia. My Institute has been asked to conduct an assessment of stakeholder experiences with Phase I and Phase II Watershed Implementation Plans (WIPs) developed by states and the District of Columbia as part of the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) accountability framework. This assessment will recommend improvements to the WIP development, evaluation, implementation, and oversight processes so that the forthcoming Phase III WIPs create effective blueprints for implementation through 2025.

As part of that assessment, I will be having conversations with a variety of stakeholders throughout the Bay watershed. I wonder if you would be willing to speak with me about your experience to date? The details of this assessment are below. If you are willing, please go to this Doodle poll (http://doodle.com/4gykd3gc36ufbv72) and mark ONE TIME that works for you. Please ensure that you do not select a time that is already chosen; in this case, the polling is not to find a single time that works for everyone but for everyone to have their own time.

I also wish to note that I would be glad to speak with groups of stakeholders at the same time, in order to hear from more individuals. I anticipate speaking with at least 75 stakeholders, but that number could increase considerably if provided an opportunity to talk with more than one individual at a time. If you wish to invite another individual from your organization or area (private, nonprofit, and local, state and federal government) at the time you choose, by all means just pick a time that works for you and the other(s).

The specifics of this work follow below. If you have any questions feel free to email me or call me at 434-924-2041.

- As part of the Chesapeake Bay Program Water Quality Goal Implementation Team's (WQGIT's) Midpoint Assessment of the Chesapeake Bay TMDL, EPA will be developing expectations for jurisdictions' development of Phase III Watershed Implementation Plans (WIPs).
- o Jurisdictions will develop Phase III WIPs in 2017-2018 in which they will outline a strategy for implementing practices necessary to meet Bay TMDL allocations by 2025.
- EPA's expectations for Phase I and II WIPs were guided by the Chesapeake Bay Program
 partnership's intent for the Bay TMDL to accelerate implementation and engage the public.

- Many Chesapeake Bay Program partners recognize that most jurisdictions' Phase II WIPs did not meaningfully engage local partners, with the possible exceptions of Maryland and DC.
- We are conducting this stakeholder assessment to recommend improvements to the WIP development, evaluation, implementation and oversight processes so that the Phase III WIPs create effective blueprints for implementation through 2025. We are learning from a series of conversations with stakeholders from local government, nonprofit sector, the private sector, and state and federal agencies to identify lessons learned from the Phase I and II WIP process that should be applied to the Phase III WIPs in order to facilitate local engagement and implementation.

Goals of the conversations

The goals of these conversations are to find answers to the following questions:

- What aspects of the Phase I and II WIP process facilitated implementation?
- What topics does the Phase III WIP process need to address more directly?
- How may Phase III WIPs and the oversight of implementation better engage local partners and accelerate the implementation of pollution reduction practices?
- How should information on pollutant loads, reductions, and/or implementation efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards meeting Bay TMDL allocations? and
- Other topics as appropriate and/or as suggested by stakeholders.

Product: a written report (Stakeholder Assessment) summarizing the process of the assessment, the parties who were contacted, the issues that were discussed and the range of input and opinions presented. The draft report will be shared with you and all those who participated in the conversations and the Water Quality Goal Implementation Team, and may be distributed more widely.

Offer of confidentiality: while everyone who contributed to the assessment will be acknowledged, we will offer confidentiality by not attributing specific comments to specific individuals. If you are concerned that a particular statement might be identifiable as coming from you, just let us know during the interview that the comment should be kept "off the record."

The conversations sought to address the following questions:

- What aspects of the Phase I and II WIP process facilitated implementation;
- What topics does the Phase III WIP process need to address more directly;
- How may Phase III WIPs and the oversight of implementation better engage local partners and accelerate the implementation of pollution reduction practices;
- How should information on pollutant loads, reductions, and/or implementation efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards meeting Bay TMDL allocations?
- Other topics as appropriate and/or as suggested by stakeholders.

The order and emphasis of these questions varied depending upon the stakeholder role. Not all questions were appropriate for some or all stakeholders. Furthermore, the spirit of conversation rather than interview meant that the contractor followed the interests of the stakeholders themselves rather than any particular sequence.

1. What is your role in implementing the Bay TMDL, your state's WIP (Watershed Improvement Plans) and milestones (what some people call the "clean water blueprint")? What has been your

- relationship to the TMDL, WIP and milestone process? [target the question to the individual or group]
- 2. [local government] Do you understand what you are supposed to be doing to implement state WIPs (Watershed Improvement Plans)? What is confusing to you, and what would make sense for clarifying responsibilities and options at the local level? Are there other models of implementation out there that would be good to use?
- 3. What specific challenges have you found in implementation, particularly in terms of engaging local partners in a meaningful way?
- 4. What conflicts have you seen arising between competing interests? Are there lessons in how those have been addressed well? In those that have not been addressed so well?
- 5. What has gone well to date? What has actually helped with implementation?
- 6. Do you have good examples of cases of local engagement to share? Why do you think these cases were successful?
- 7. Do you have suggestions for how to structure public input opportunities during the development of the Phase III WIP?
- 8. What lessons from Phase I and II will be most helpful during Phase III in engaging local partners and implementing the targeted reductions?
- 9. How should information on pollutant loads, reductions, and/or implementation efforts be expressed in the Phase III WIPs so that stakeholders understand their share towards meeting Bay TMDL allocations?
- 10. Do you have suggestions for other partners to talk to, particularly those who have had success with local engagement?

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