Chesapeake Bay Stakeholder Assessment

Developed under EPA Conflict Prevention and Resolution
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<u>Background for this Assessment</u>

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 121 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 121 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 on schedule. 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.
o   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.
o   Outside of the regulated community (urban MS4's, developers, wastewater), the effort to drive implementation local has fallen short; that is unacceptable.
o   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.

o 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 Chesapeake 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:

o Everyone in the watershed – community members who pay taxes, farmers, local government officials, and others – needs to understand the value of the Bay TMDL.

o Funding must continue to be expanded and sustained and technical assistance provided to localities and sectors with the fewest resources.

o 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.

o 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 state and 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:
o 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.
o 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).
o 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].
o The demands of the Bay TMDL have grown exponentially since the program's inception, while support has not kept up.
o 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.
o 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.
o 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.
o 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.
o 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.
o 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:
o 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.
o We have a farming community that is giving considerable funding to implement practices; our average cost-share is 25% for the farmers.
o 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.
o 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.
o 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).
o Let funding go directly to local BMPs rather than being filtered – and reduced by administrative costs – by intermediaries.
o We should receive more credit for actions that were and are being done.
o EPA and its partners need to listen – really listen and understand - and respond accordingly to local needs and concerns.

What has Worked to Facilitate Implementation

Every discussion included an opportunity to share what has worked to facilitate implementation. Those participants whose perspective is mostly captured in Story Three often had nothing to say. But others offered responses that in total provide a fairly consistent assessment of what has worked well. These included the following:

o The early involvement of EPA in going into the states and D.C. helped lay the groundwork for understanding what the Chesapeake Bay TMDL would mean, even as some state agency participants indicated concern about being bypassed. Continuing communication with timely and accurate responses is also highly valued.

There needs to be a more meaningful EPA presence at all statewide stakeholder meetings.

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

o Similarly, states that have engaged jurisdictions and sectors benefit from understanding what could happen on the ground. A collaborative rather than command and control approach in the long run makes permitting more sustainable. [but see below – some localities and sectors believe that state public outreach was for show and that decisions had already been made]

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.

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

Pennsylvania's Phase I WIP is a wonderful source of information about our program; going through the exercise of putting that together was helpful.

Virginia DEQ finalized its [MS4 permit] guidance in March 2015; there was a stakeholder process and a lot of communication about it, so it was not a surprise.

o Program funding makes all the difference.

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

NRCS has received substantial funding increases.

The various sectors do support one another receiving funding, e.g., Virginia Association of Counties (VACO) supports cost-share support for farmers.

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

o EPA has helped substantially with data collection.

The Program has helped us with our stormwater database. They are also helping us with innovative pollution prevention.

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.")

o Webinars and presentations attracted many participants eager to learn and clarified how various tools could be used.

o A number of those tools were mentioned repeatedly.

o Showing local benefits builds local support.

When we do our stream restoration projects, people see the benefits. Streetscaping also is visible and helps.

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

o The new emphasis on verification of BMPs will provide for more accurate accounting.

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

o EPA has worked to bring federal landowners in D.C. to the table with the District government in an effort to have those landowners, who own a substantial portion of the land in the District (30-35%), take action.

Navy and GSA have made an effort to communicate and share data, but getting federal agencies to commit funds is difficult.

o Accounting for and crediting BMPs has been problematic, but is improving now.

When we first started there were only 5 or 6 bmps, now even though the workgroups are not ideal they have increased

o The Model keeps improving [see below for other perspectives].

EPA and the states identified some critical problems with data input into the model and have deliberately been addressing these, e.g., better land use data. There's a protocol for incorporating what farmers are actually doing.

They eventually realized it was a problem with the model and corrected it.

Key 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) 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. Those sectors and jurisdictions who are not contributing their share do need to be held accountable.

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. 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.

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.

There could be various metrics for computing the capacity of jurisdictions to meet their obligations on schedule.

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

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

Webinars and seminars have often been valuable.

What is working in one jurisdiction needs be shared throughout all levels of government. There is a hunger for that knowledge.

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

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 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.

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.

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

I have another 12 municipalities that are not MS4 and need to know how to bring them in.

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 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.

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.

2c) There is too little public 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.

The economic benefits have not been studied or communicated enough. People do get motivated by local impacts and by the economics especially – put an economic value on the changes.

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

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.

I have another 12 municipalities that are not MS4 and need to know how to bring them in.

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.

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

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

EPA has made tools available but they aren't going through to the localities.

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

3) <u>Collaborative</u> <u>Leadership.</u>

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, decisions about the Bay are being made between EPA and the states. There is no longer an attitude of transparency within the program, which is a big change.

Given that some sectors have not met goals, the TMDL does weaken the sense that all of us are in this together.

Communication is far too often a one-way street.

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

There is not a clear understanding on the Water Quality GIT of everyone's roles and responsibilities when getting to consensus. Is the management board the right group to make the decisions? Do you have the right people at the table?

EPA wants them to fine people. They need to understand the impacts of culture – we will not run people out of business and destroy the livelihood when 90% of people who live here grew up here. If you come in heavy handed when not necessary you will just cause people to hide.

I wish there were a way to have frank conversations with environmental advocates and sectors and jurisdictions about where we are and what is achievable and doing so in ways that could lead to consensus about what would work best [at the Phase III WIP level].

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

The goals for all the BMPs developed by DEP were superficial; we were invited to the table, but more analysis should have been done. There was a goal to get more forest buffers implemented without thinking through how this would be done and how it would be adopted by farmers.

has been a lack of engagement with elected officials who actually make the budget.

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-local partners.

There is a lot of information sharing but not much role in helping Virginia decide how to move forward. You are not asked your perspective about technical issues or any kind of input; for instance the verification plan has all been between DEQ and DCR and EPA.

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

There is no longer any well-functioning stakeholder group in Pennsylvania.

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.

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

4) Accountability for results.

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.

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.

We need easy ways to verify and capture what agriculture is doing.

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

Our [NRCS] conservation stewardship program is not getting credited in the Bay model.

5) Funding and other resources. Implementing the Chesapeake Bay TMDL has involved considerable expenditures. Participants throughout the watershed credit program funding and local tax funding for significant benefits but worry about Phase III. But funding and regulatory structures have not kept up, nor has thinking about using new strategies for best use of money.

Funding drives everything.

It may be more legitimate having assistance provided by other than EPA or the state.

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.

6) Cost-effectiveness. 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) Adaptability. Too often EPA or the state are more interested in checking off a box than in getting results. Jurisdictions vary by topography and hydro-geology; that needs to be taken into account by the states when developing the WIP. 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.

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

They have shoehorned us into a model of anticipated growth and getting rid of impervious areas that is not taking place.

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 particular target that is appropriate for that sector, locality or state, at that particular time.

Jurisdiction-based solutions for reducing pollution were 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. 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.
- There is a lot still being learned about what does and does not work, and rushing to implement practices that may not work in the long run is costly and unnecessary.

It is incorrect to call this a mid-point reassessment; we have just begun. We would like to have some time at the current pace of implementation, including the ramping up that still needs to be done, before making changes.

The feedback from EPA [on our reporting] doesn't seem to take enough time and then the public report card will be inaccurate and/or mischaracterize our situation.

The demand for professional capacity is high, and even with funding the numbers of individuals who can do this work are limited.

The goals are overly ambitions and not set with any kind of practicality, e.g., 15,000 miles of riparian buffers by 2025. We need goals to strive for but in reaching for an acceptable plan they have overreached.

It took a lot more time than 15 years to get this way and should we expect to complete this by 2025?

Many participants do not believe that the 2025 deadline is feasible and that meeting what are arbitrary deadlines actually interferes with good 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. And for those for whom modeling is unfamiliar, hearing of results that don't match their experience de-legitimize 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.

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.

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

We need more honesty about the uses and limits of the Model; there are unrealistic expectations of what it can do, e.g., the model does not differentiate between poorly or well-drained soils.

On the other hand, the Bay model may be able to provide a more accurate picture of the effectiveness of implementation efforts than monitoring, 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.

A lot of progress in model world may go away [with the next iteration] and will make meeting commitments much more difficult.

The urban component of the Model is always a challenge and we do not agree with it.

EPA has been sending the wrong message, which will cause a lot of heartache. They say that you are on target, without saying that this result is modeled and contingent.

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.
- Two big challenges in older areas are legacy land use and drainage decisions. Basically this is a retrofit scheme and cannot be done in 15 years; this is a generational change.
- In the District of Columbia, federal partners, including National Park Service and Department of Defense [landowners] 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.
- The first level is getting local governments to understand what they are and are not responsible for. The state can drill down and let Caroline County know "you need to reduce this much stormwater, this much agriculture." The second level is more of a "this is what needs to happen for having a health Bay," targeted by sector.
- 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.
- This 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 localities about how WIP implementation will resolve local water quality concerns, especially local TMDL issues.
- Grant significantly greater attention to the cost-benefit ratio when determining load allocations.
- We don't understand how the Model works; we don't know how to compare one bmp with another, e.g., if we cannot do a forested buffer how does that relate to the cover crop?
- 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?
- Those used to receiving funding don't have a predictable amount of funding; will there be a new model for funding for Phase III?
- 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.
- What is it that the farms need to do to meet their share?

- How will you make the reductions that need to occur real to the people who have to implement them?
- What is meant by "practices in place by 2017 to meet 60 percent of the necessary pollution reductions"? The jurisdictions have different views of what this means.
- If agriculture is to fix their 60% [in Pennsylvania], how can they do this with their economic constraints? We don't see a state agency coming to the table with funding. How do you pass the cost to the consumer?
- It would be helpful to engage the business community more – e.g., Businesses for the Bay – is there a way to do that amicably?

DRAFT

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).
   o 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)

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.

| discussion completed |
| email invitation sent |
| email rejected |

Last Name	First	State	Sector	Affiliation
Besse	Sheila	DC	D. C. Government	Department of Energy & Environment
Burrell	Collin	DC	D. C. Government	Department of Energy & Environment
Davis	Diane	DC	D. C. Government	Department of Energy & Environment
Hurd	Martin	DC	D. C. Government	Department of Energy & Environment
Karimi	Dr. Hamid	DC	D. C. Government	Department of Energy & Environment
Koran	David	DC?	Federal landowner	
Norris	Marian		NPS	
Onyullo	George	DC	D. C. Government	Department of Energy & Environment
Person	Roberta		Navy	
Quinn	Sheryle	DC?	Federal landowner	
Searing	Mary	DC	D. C. Government	Department of Energy & Environment
Seltzer	Jefferey	DC	D. C. Government	Department of Energy & Environment
Shepp	David	DC?	Federal landowner	
Spaur	Christopher C.	DC?	Federal landowner	
Absher	Debbie	DE	conservation district	Sussex County Conservation District
Anderson	Charles	DE	local government	City of Seaford
Davis	Mark	DE	State agency	Department of Agriculture
Fox	Marcia	DE	State agency	Department of Natural Resources and Enviromental Control
Gregory	Jamie	DE	State agency	Department of Natural Resources and Enviromental Control
Monteith	Tyler	DE	State agency	Department of Natural Resources and Enviromental Control
Palmer	Bob	DE	State agency	Department of Natural Resources and Enviromental Control
Prettyman	Vikki	DE	local government	Town of Blades
Schneider	John	DE	State agency	Department of Natural Resources and Environmental Control
Slatcher	Delores	DE	local government	City of Seaford

Sturgis	Brittany	DE	State agency	Department of Natural Resources and Environmental Control
Towle	Larry	DE	State agency	Department of Agriculture
Volk	Jenn	DE	State agency	Extension
Walls	Jennifer	DE	State agency	Department of Natural Resources and Environmental Control

Gleason	Patricia	Expert	EPA	EPA
McGuigan	David	Expert	EPA	EPA
Ottinger	Elizabeth	Expert	EPA	EPA
Shenk	Kelly	Expert	EPA	EPA
Sincock	Jen	Expert	EPA	EPA
Sweeney	Jeff	Expert	EPA	EPA
Trulear	Brian	Expert	EPA	EPA
Wenz	Tom	Expert	EPA	EPA
Zieba	Kyle	Expert	EPA	EPA
Zolandz	Mark	Expert	EPA	EPA
Batiuk	Rich	Sr Manager	EPA	EPA
Capacasa	Jon	Sr Manager	EPA	EPA
Corbin	Jeff	Sr Manager	EPA	EPA
DiPasquale	Nick	Sr Manager	EPA	EPA
Edward	Jim	Sr Manager	EPA	EPA
Gratz	Jeff	Sr Manager	EPA	EPA
Allen	Greg	State leads	EPA	EPA
Antos	Katherine	State leads	EPA	EPA Chesapeake Bay Program Office
Carkhuff	Ann	State leads	EPA	EPA
Hall (Trevena)	Suzanne	State leads	EPA	EPA
Izraeli	Ruth	State leads	EPA	EPA
McNally	Dianne	State leads	EPA	EPA
Parrish	Reggie	State leads	EPA	EPA
Power	Lucinda	State leads	EPA	EPA Chesapeake Bay Program Office

Backe	Diane	MD	Local government	Gaithersburg
Bryer	Mark	MD	NGO	The Nature Conservancy
Carrasco	Vicky	MD	Cooperating institutions	SeaGrant
Coble	Kim	MD	NGO	Chesapeake Bay Foundation
Connelly	Valerie	MD	Private	Maryland Farm Bureau
Currey	Lee	MD	State agency	Maryland Department of the Environment
Curry	Burt	MD	Private	Johnson, Mirmiran & Thompason
Curtis*	Meo	MD	Local government	Montgomery County, Department of Environmental Protection

Drzyzgula	Cathy	MD	Local government	Gaithersburg City Council
Emmart	Paul	MD	State agency	
Enslinger	Dennis	MD	Local government	Gaithersburg
Etgen	Lou	MD	NGO	Alliance for the Chesapeake Bay
George	Jim	MD	State agency	Maryland Department of the Environment
Harrison	Verna	MD	Private	Verna Harrison Associates, LLC
Hoot	Lynne	MD	Conservation district	Maryland Association of Conservation Districts
Johnston	Matt	MD		Chesapeake Bay Program Non-Point Source Data Analyst
Keppler	Jason	MD	State agency	Maryland Department of Agriculture
McGee	Beth	MD	NGO	Chesapeake Bay Foundation
Moore	Shannon	MD	Local government	Frederick County Office of Sustainability and Environmental Resources
Powell	Royden	MD	State agency	Maryland Department of Agriculture
Prost	Alison	MD	NGO	Chesapeake Bay Foundation
Rhoderick	John	MD		formerly Maryland Dept. of Agriculture
Rice	Craig	MD	Local government	Montgomery County Council
Ryberg	Greg	MD	Local government	Gaithersburg
Saunders	Kristin	MD	State agency	Maryland Department of Natural Resources
Strider	Meredith	MD	Local government	Gaithersburg
Thornton	Thomas (Tom)	MD	State agency	Maryland Department of the Environment
Wolinski	Bill	MD	Local government	Talbot County Department of Public Works
Albrecht	Greg	NY	State agency	Department of Agriculture and Markets
Ashline	Doug	NY	State agency	New York State Department of Environmental Conservation
Barber	Amanda	NY	Conservation district	Cortland Soil & Water Conservation District
Costello	Tom	NY		
Curatola	Jim	NY	NGO	Upper Susquehanna Coalition
Lendrum	Jackie	NY	State agency	Department of Environmental Conservation
Lorraine	Steve	NY		Upper Susquehanna Coalition
McElwee	Chip	NY		Upper Susquehanna Coalition (USC) Board
Murphy	Robert	NY	Local government	City of Binghamton
Ristow	Aaron	NY	State agency	Cornell
Sears	Ben	NY	State agency	Department of Environmental Conservation
Thigpen	Janet	NY	Stormwater	Southern Tier Central Regional Planning and Development Board
Walsh	Wendy	NY	Conservation district	Tioga County Soil and Water Conservation District
Yearick	Chris	NY	NGO	Upper Susquehanna Coalition (USC)

Angstadt	Bill	PA	Agriculture	Delaware Maryland Agribusiness Association
Bell	John	PA	Agriculture	PA Farm Bureau
Brath	Phil	PA	Wastewater	Century Engineering
Brosius	John	PA	Wastewater	Pennsylvania Municipal Authorities Association
Brossman	John	PA	Wastewater	Lower Allen Township Authority
Brown	Karl	PA	Conservation district	PA State Conservation Commission
Campanero	Scott	PA	Stormwater/local government	Altoona
Campbell	Harry	PA	NGO	Chesapeake Bay Foundation
Chiaruttini, Esq.	Alexandra	PA	Private	Stock & Leader
Coleman	Denise	PA	Federal	NRCS
Dawes	John	PA	NGO	Foundation for Pennsylvania Watersheds
Dell	Felicia	PA	Local government	York Co. Planning Commission
Difiore	Nancy	PA	Federal	NRCS
Dostie	Daniel	PA	Federal	NRCS
Frantz	Barry	PA	Federal	NRCS
Gattis	Mary	PA	NGO	Alliance for the Chesapeake Bay
Gray	Rick	PA	Local government	Mayor of Lancaster
Hann	Steve	PA	Wastewater	HRMML Law Firm
Henne	Randall	PA	Wastewater	CDM Engineers
Hocker	Ruth	PA	Local government	Stormwater Program Manager
Hurst	Randy	PA	Wastewater	Mette, Evans and Woodside Law Firm
Katzenmoyer	Charlotte	PA	Local government	Director of Public Works, Lancaster
King	Marel	PA	Federal	Chesapeak Bay Commission
Kyle	Mike	PA	Wastewater	Lancaster Area Sewer Authority
Lehman	Megan	PA	Local government	Lycoming County Planning & Community Development
Maiden	Robert	PA	Conservation district	Pennsylvania Association of Conservation Districts
Malarich	Mark	PA	Wastewater	Carlisle Borough Sewer System Authority
Marquart	Susan	PA	Federal	NRCS
Martick	Larry	PA	Conservation district	Adams CD
McFarland	David	PA	Local government	Blair County Planning Commission
Morelli	Donna	PA	NGO	Alliance for the Chesapeake Bay
Reed-Harry	Jennifer	PA	Agriculture	PA Cooperative Extension
Reese	Jodi	PA	Wastewater	CDM Smith Engineers
Schaefer	Lisa	PA	Local government	County Commissioners Association of PA
Schutz	Wayne	PA	Wastewater	Derry Township Municipal Authority (Hershey)
Shambaugh	Brenda	PA	Conservation district	Pennsylvania Conservation Districts Assn

Snell-Zarcone	Kim	PA	NGO	Conservation Voters of PA
Tesler	Ted	PA	State agency	PA DEP
Thomas	John	PA	Local government	Hampden Township Commissioner
Thompson	Chris	PA	Conservation district	Lancaster CD
Walter	Wendy	PA	Wastewater	Williamsport Sanitary Authority
Weston, Esq.	Tim	PA	Private	K &L Gates
Wheeler	James	PA	Stormwater	Director of Environmental Affairs; Manager, CDL Program, Pennsylvania State Association of Township Supervisors
Whitney	Sara	PA	Cooperating institutions	SeaGrant
Williams	Shannon	PA	Wastewater	Capitol Region Water (Harrisburg)
Wolf	Kristen	PA	State agency	PA DEP
Wyland, Esq.	Scott	PA	Wastewater	Salzmann Hughes
Zemba	Andy	PA	State agency	PA DEP
Bauhan	Hobey	VA	Agriculture	Virginia Poultry Federation
Baxter	Russ	VA	State agency	Deputy Secretary of Natural Resources for the Chesapeake Bay
Bennett	Kate	VA	Stormwater/local government	Fairfax County Stormwater
Blackburn	Jessica	VA	NGO	Alliance for the Chesapeake Bay
Burns	Janine	VA	Local government	Vice-Chair, Matthews County Board of Supervisors
Crofton	Scott	VA	Private	former DCR
Cunningham	Fred	VA	State agency	Virginia DEQ
Davis-Martin	James	VA	State agency	Virginia DEQ
Dean	Nissa	VA	NGO	Alliance for the Chesapeake Bay
Geissler	Fran	VA	Local government	James City County Stormwater Director
Goulet	Normand	VA	Local government	Northern Virginia Regional Commission
Grape	Laura	VA	soil & water district	Northern Virginia Soil & Water Conservation District
Gross	Penny	VA	Local government	Fairfax County Supervisor
Hoagland	Roy	VA	Private	
Jennings	Ann	VA	NGO	Alliance for the Chesapeake Bay
Keeling	Bill	VA	State agency	Virginia DEQ
Kennedy	John	VA	State agency	Virginia DEQ
Kling	Lara	VA	State agency	Virginia DEQ
Kline	Karen	VA	Cooperating institutions	Virginia Tech
Maroon	Joe	VA	NGO	Virginia Environmental Endowment
McKercher	Liz	VA	State agency	Virginia DEQ
McRae	Nesha	VA	State agency	Virginia DEQ

Mitchem	C. J.	VA	Cooperating institutions	Virginia Tech
Papacosma	Jason	VA	Local government	Arlington County
Sappington	Alyson	VA	soil & water district	Thomas Jeferson Soil & Water District
Sexton	Tim	VA	State agency	Department of Conservation and Recreation
Shafer	Justin	VA	Local government	Norfolk Department of Public Works
Snead	Ginny	VA	Private	Louis Berger Group
Tribo	Jenny	VA	Local government	Hampton Roads PDC
Tyree	Kendall	VA	soil & water district	VASWCD Executive Director
Whitehurst	June	VA	Local government	Norfolk Department of Public Works
Yagow	Gene	VA	Cooperating institutions	Virginia Tech
Yancey	Erin	VA	Local government	Central Shenandoah Planning District Commission
Zhou	Ning	VA	Cooperating institutions	Virginia Tech
Bryer	Mark	Watershed	NGO	The Nature Conservancy
Cisar	Heather	Watershed	Federal landowner	US Army Corps of Engineers
Claggett	Sally	Watershed	Federal landowner	USFS
Diebel	Sarah	Watershed	Federal landowner	Navy
McMenamin	Robert	Watershed	Federal landowner	Department of Homeland Security
Norris	Marian	Watershed	Federal landowner	National Park Service
Roberta	Person	Watershed	Federal landowner	Navy
Swanson	Anne	Watershed		Chesapeake Bay Commission
Basden	Tom	WV	State agency	WVU Extension Service
Cooper	Katherine	WV	NGO	Cacapon Institute
Copenhaver	Doug	WV	Local government	Berkeley County Councilman
Dean	Norman	WV	NGO	Sleepy Creek Watershed
Dulyea	Dan	WV	Local government	Berkeley County Councilman
Haid	Tanner	WV	NGO	Cacapon Institute
Hardy	Carla	WV	State agency	WVDA
Hartman	Alana	WV	State agency	DEP
Keller	Curtis	WV	Local government	Berkeley County Public Service Sewer District
Koon	Teresa	WV	State agency	DEP

Lehman	Kate	WV	NGO	Warm Springs W'shed Assoc.
Monroe	Matt	WV	State agency	WVDA
Montali	David	WV	State agency	DEP
Pennington	Matthew	WV	Local government	Eastern Panhandle Regional Planning & Development Council (Region 9)
Rodgers	Frank	WV	NGO	Cacapon Institute
Trowbridge	Cam	WV	NGO	Opequon Creek Project Team
Wichterman	Dustin	WV	NGO	Trout Unlimited
Wilkerson	Tom	WV	Local government	Public Works Director, City of Martinsburg

discussion completed or scheduled
email invitation sent
email rejected

DRAFT

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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, over 200 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 121 individuals 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.
>
> o   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.
> o   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.

o   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?

Prepared for:

US Environmental Protection Agency
Washington, DC 20460

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