Meeting Summary
Local Area Targets Task Force
Teleconference
Tuesday, August 30, 2016, 1:00 PM – 3:00 PM

Welcome and Announcements – Lucinda Power, Coordinator

- Lisa Schaefer (Co-Chair) introduced Shawn Garvin, EPA R3 Regional Administrator.
- Shawn Garvin outlined what the preliminary draft Phase III WIP Expectations are intended to convey and asked for Task Force feedback.
    - When EPA refers to local, they are not specifically referring to local governments. The Task Force's draft recommendations document is on the right path and EPA is relying on the Task Force to recommend how best to look at smaller scale activities and how some form of targets could be used to add up to the state-wide reductions that need to be achieved.
    - EPA does not expect to have a cookie cutter approach to developing local area targets. The goal is to allow flexibility in sectors and geography, as well as provide the ability to adaptively manage.
    - A limiting factor in the Phase II WIPs was the information available on the ground to evaluate and use the tools we have to effectively articulate how reductions at a small scale add up. The high resolution land cover data and local land use data in the Phase 6 Watershed Model will significantly improve our ability to look at more refined scales.
- Does EPA have a different idea on how to define "local"?
    - EPA is most interested in the ideas the Task Force has developed that work regardless of whether you use a sector-based approach or a geographic-based approach. Providing flexibility that allows states to develop an approach that best fits them and allows them to evolve is important.
- How much confidence do you need to have in the data that comes out of the Model to confidently make assessments about investments and decision making?
    - The model is one of the tools we use and we try to make it as sound as possible. When we refer to the Model, we are really talking about a number of different models and tools. The ultimate report card will continue to be the monitoring data and the actual water quality standards attainment. For a predictive tool, we need to continually evaluate the BMPs, and look at the science behind the efficiencies and making sure they are performing the way we think they are. The modeling tools are very useful but we need to continue to look at what is going on, on the ground. We are also looking at programs in place and other components that are not necessarily numeric.

Local Area Targets and the Phase 6 Model – CBP Modeling Team

Representatives from the Chesapeake Bay Program's Modeling Team discussed the extent and scale to which the Partnership's Phase 6 suite of modeling tools could be utilized to inform decisions related to local area targets.

Discussion:

- When you use the term local, how are you defining that?
    - However you would like. I am specifically not defining it, other than something smaller than a state basin scale. I know there are a lot of options on the table.
- When we use the Watershed Model, we need to understand what questions we're trying to answer. If we are asking about the confidence we have in being able to swap one BMP for another, we're really asking about the

confidence in the reduction efficiency values determined by the BMP expert panels. If we ask about implementing BMPs at one location versus another, that is another good use of the Model because of the fine scale information from SPARROW and the high resolution land cover and land use data. Those are the types of questions we can discuss when talking about confidence in the Watershed Model.

- Who is actually going to be using the Model from a local government perspective?
    - The Watershed Model and the Chesapeake Assessment Scenario Tool (CAST) are the same thing. CAST is the web-based tool that anyone can access for free. That tool allows them to specify a set of BMPs they would apply in their area and CAST would tell them what the Watershed Model would say in terms of loads reduced. We have partners all across the watershed who are using this tool. Previously, the two tools were not giving exactly the same results, but now they are synced, so that partners in your county/municipality can come up with the same sets of results as the Watershed Model. Federal partners, for instance, have worked to develop facility-specific targets using this tool. CAST also provides costs, and we are currently doing work to show other co-benefits as well.
- How would we go about getting our staff trained and aware of CAST? Is there a means of making sure local governments know about this tool and know how to use it?
    - The Chesapeake Bay Program have put on trainings in the past, but we would love to get feedback from the Task Force in terms of who we need to reach out to and what mechanisms are the best ways to reach local partners. We have staff resources for those trainings, and we can work with you to set up those trainings.
    - As part of our Phase III WIP engagement strategy, Virginia will have two work sessions with local staff. During at least one of those we will have a training on a variety of tools, including CAST.
- I want to confirm that the Modeling Team is saying that if a Bay jurisdiction were to establish targets at the local government or district scale, there is a high degree of confidence that the Model can accurately simulate the loads from those counties. Also, I want to know what I can tell my local board of supervisors. If you compared the Model at a basin scale or at local conservation district scale, which is more accurate?
    - I know that you all want me to be able to say that we are +/- 10% or something like that. But estimating uncertainty of a complex model like this is beyond our current scientific and technical ability at this point. We had a STAC workshop on this issue earlier this year and we are still a ways from being able to do that. To the extent that we have good estimates on BMP effectiveness values, and good land use information, we have confidence because that is what is changing. It is a good tool for comparing different sets of BMPs. We are using multiple sources of evidence to say, for instance, one landscape is more retentive than another, and one BMP is twice as effective as another. The confidence in that information is the confidence we have in the modeling tools.
    - To add to that, we got 75-80% of local partners to provide local parcel or land use data in addition to the 1 meter resolution land cover data across the entire Bay watershed. No other area in the country has that level of land use or land cover data. The BMPs are another piece of the puzzle. We also bring in data from hundreds of monitoring stations going back 30 years through time, so we are comparing the Model with millions of monitoring data points over the history of the Bay Program. You all can have access to your local area's monitoring data so you can judge for yourself, but the bottom line is that the confidence we have in our land use/land cover data, and BMP efficiency data, is strong. But that said, it is only a tool and we need to keep evaluating and verifying it.
- You are talking about the calibration skill of the Model and how well the model is calibrated at each of those monitoring stations. Is there a value you can look at to say it is either a strong calibration or a weaker calibration?
    - Yes. Where the USGS estimates loads, we have 78 sites where they do that, we can look at the loads or flow and see that they are accurate at that site to a particular percentage. That is something we looked at hard over the course of the year to make sure it matches the spatial distribution of loads as best we can. But I would say the question for this group is how well the Model evaluates different implementation scenarios. It is a planning tool.
        - It is also how well it simulates loads, which is highly variable across the watershed. I am not aware that any version of CAST has been tested to show how well it replicates the Model. The Model is calibrated at multiple stations and each is calibrated with different levels of accuracy. The high resolution land use is only one point in time, while the majority of the calibration will

be over 30m land cover during the averaging period, which impacts every scenario we're running.

- I agree in terms of estimating the loads, in some areas the Model matches really well and not as well in others. CAST and the Watershed Model will absolutely have the same results. It is a single piece of software, so they are one and the same. I will have to ask about the land use, but my understanding that we are starting with the excellent 1m resolution we have and back-casting using projections with a method that will be STAC reviewed.

- We have seen that the Model simulates larger areas better than smaller areas. We also have to understand that most calibration points are not in areas where you can differentiate the counties. You can only differentiate between the calibration points. I don't see that the scale for the Model in Phase 6 will be that much different than Phase 5.3.2. There are probably some places that Phase 5.3.2 does well, such as larger segment sheds. The Lynhaven in Virginia Beach is not gauged and I don't have a lot of confidence that we have it right. Until we can evaluate the final Phase 6 Model, it is hard for me to say what scale I think would be more appropriate.

- Can the presenter talk about how you came up with the number representing the "controllable load" and how that may be different? Level of effort and level of implementation is the important number here and there should be less uncertainty associated with those numbers.
  - The real decision is estimating the level of effort. When looking at different BMP sets and whether they achieve the same level of effort is something we have confidence in. The Bay Program defines two theoretical scenarios: no action (removes all BMPs from the landscape) and the E3 (everything, by everyone, everywhere) which is the maximum level of effort, or the limit of technology if money were not considered a constraint. Comparing those two scenarios gives you the total load that we can control or reduce by using management actions.
- You say the Model is strongest at comparing between scenarios, but ultimately the scenario we are comparing against is the one that will achieve the loads to meet water quality standards. So, when it boils down to it, the Model's accuracy in determining the loads is what is important.
  - I don't quite see it the same way. The way the TMDL load and the planning targets are set are through runs of the Watershed Model. Because the planning targets are set using the Watershed Model framework, the relative change in loads in different scenarios is what is important.

<u>Discussion of the Draft Recommendations Document</u> – Joan Salvati and Lisa Schaefer, Co-Chairs

Joan and Lisa walked the Task Force through the draft recommendations document in order to start addressing the questions and considerations agreed to during the August 1st Task Force meeting.

Discussion:

- At this time, are there any additions or changes that Task Force members would like to see made to the document?
  - None were raised.
- Most bullets in Question 2 are in support of the second bullet. Do we need a local jurisdiction target, or area target or a regional target? Do we really need to encourage strategies to be developed at a more local scale?
  - I think the answer might be that it will be different everywhere. There was another question about whether we have to have local targets everywhere. In my jurisdiction, there is a lot of value in having local input and will facilitate local voluntary efforts. If it comes down to a number or a goal at a small scale, I think it will be counter-productive. My recommendation is create a framework where it is not mandatory everywhere.
- I think the Regional Administrator stated it well in his introduction that cookie cutter targets won't work and we should leave it to states to have the flexibility to target resources necessary to achieve our goals by working with locals in certain areas, as opposed to assigning blanket targets across the watershed.
- Maybe we should include options for local targets in Question 2. That would include language clarifying that jurisdictions should have the flexibility to apply local targets or not.

- It would be helpful if we could focus targets in areas where there is a lot of need. In order to know the areas of need, you would need to know if you were meeting a target in a localized area or not. Maybe we have a hierarchy with differing extents to which localized area targets are developed.
    - I am not sure the hierarchy of need would be a good trigger for knowing when local area targets are needed.
- Local targets have a lot of appeal in my locality because it gives us a good goal to meet and helps us know what we need to do. Our issue is not the target but how they would be developed. Are they sector related or based on a geographic area? I want to make sure there is a fair system for how my target is developed compared to others.
    - I don't know if we are at that point yet. I think we are still deciding if we are actually establishing targets. I am getting the impression that we'd like to allow each state to decide for themselves whether or not to establish local targets and then define how they would do that.
- If a state chooses to break down those planning targets to a local scale, the mechanics of how we do that will be a transparent process, which will likely include breaking it to local scales and by sector, working with our local partners.
    - Do you also mean to say there would need to be uniformity within a jurisdiction? Or if localities said they wanted different types of targets, should jurisdictions have flexibility to meet those county by county needs?
        - Maybe the simply answer to Question 2 could be yes, but there are all these various options and it is up to the jurisdiction to say which option or combination of options we choose.
            - I don't think it should be a yes, it should be more like, "jurisdictions should be prepared to offer local scale planning targets to any local government or entity that determines it would help them with implementation".
- Our group is for local area planning targets. I want to keep it focused on that. I like the approach earlier about the states establishing and setting criteria to determine whether a local target is a good idea or not. The questions there help get you at that answer.
- What we don't have laid out here are the options for establishing targets.
    - I am thinking it should be framed as a set of questions to help the jurisdiction make the determination. Maybe we reverse the order of questions 1 and 2.
- My localities do not want local area targets at a county scale. You have MS4 permit requirements, so they already have clear guidance, and if you add anything additional, they do not have the tools to meet it and do not see the added benefit.
- I appreciate the suggestion to creating guidance to assist states with making the decisions in certain areas as to whether local area targets should be made. It still allows flexibility at the state scale. If the criteria show that local targets would be beneficial, they could do so using the options and criteria they defined.
- If we took the approach of developing more of a decision tree for the jurisdictions, are there any other items we would add to the list under Question 2 for screening criteria?
    - I don't think the current questions are the right ones to ask. Maybe we could use: "Would targets allow jurisdictions to focus resources and what those might be", "Identifying methods to monitor progress", and "how would we get local buy-in and flexibility". Answering those would help us determine whether it would work for us.
    - Questions a state would ask in trying to determine whether assigning local area targets in certain places would be beneficial. Identifying where the biggest loads are, what scale is beneficial, and how to organize to meet the challenges would be other good questions.
    - Other suggestions: what local resources could be brought to bear, how would jurisdictions go about doing that?
- EPA does expect the states to work with localities, so my state's question for the localities is would you need a target to encourage you to develop implementation strategies?
    - When working towards anything you need to have a goal in mind, but you also don't want to fall short of a target. I don't feel like we were close a few years ago to approaching a target. I feel like we needed more help from partners in that area. There is a difference between soft and hard targets. There may not always be an ability to meet these targets, and I don't see us getting much support from our elected

officials. Targets are meaningful, but having partnerships and a plan to meet those targets are important.
    - Northern Virginia counties are not comfortable with the linkage between MS4 permits and local area targets and would prefer there not be targets.
    - I think you would get different responses between MS4 and non-MS4 communities.
- There is a remaining question about what authority exists to impose a target on a local community. I don't know how to grapple with that in terms of what a local target means. Is it worth the time developing local numbers if we are not going to align the programs that make that local implementation possible? If local cost share is not aligned with local targets, it may not be worth it.
- Soil and water districts work with our state to develop plans. We are at the watershed level and don't want to see it go down to a more constrained approach. We all work together on our BMPs and implementation plans to meet our targets. Flexibility is key. We are already engaged at the local level and I don't know where else it would go.
- In the Pennsylvania agriculture sector, is there a similar process where Pennsylvania works through cost share dollars to meet the agriculture load targets?
    - Yes, we do. I am not thinking of this as always a mandated number. I am thinking more about identifying areas that have higher loads and working to come up with a more localized plan to ramp up implementation in a targeted area.
- In summary, we are hearing that flexibility will be necessary as some localities want targets but others do not. We need to clarify that they are not mandated, but voluntary, and that the establishment of the targets, in terms of scale, should be left to jurisdictions. We will lay out criteria that can be used to help states make these decisions.

Adjourned

List of Call Participants

Member Name	**Affiliation**	
Lucinda Power	Staff	EPA, CBPO
David Wood	Staff	CRC, CBPO
Jennifer Walls	DE- State	DNREC
Sarah Diebel	Federal	DOD
Shawn Garvin	Federal	EPA
Jen Sincock	Federal	EPA
Suzanne Trevena	Federal	EPA
Rich Batiuk	Federal	EPA
Kyle Zeba	Federal	EPA
Gary Shenk	Federal	USGS
Mary Gattis	Local	LGAC
Jessica Blackburn	Local	CAC
Bruce Williams	MD- Local	LGAC-Maryland
Paul Emmart	MD- State	MDE
Jim George	MD- State	MDE
Jason Keppler	MD- State	MDA
Wendy Walsh	NY- Local	Upper Susquehanna Coalition
Lisa Schaefer	PA- Local	County Commissioners Assoc. of PA
Brenda Shambaugh	PA- Local	PACD
Charlotte Katzenmoyer	PA- Local	City of Lancaster
Joellyn Warren	PA- Local	Lampeter Township
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Norm Goulet	VA- Local	NVRC
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Scott Rae	VA- Local	Gloucester County
Debbie Byrd	VA- Local	Goochland County
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