Local Area Planning Targets Task Force Conference Call

June 6, 2016

Meeting Summary

Summary of Actions and Decisions

DECISION: The May Meeting Summary was approved as-written.

ACTION: Additional discussion on the appropriate scales for developing local area targets will be scheduled for a future conference call.

ACTION: Joan Salvati will make minor edits to the Guiding Principles document based on the Task Force's discussion and will redistribute it for final approval.

ACTION: At the next meeting, the Task Force will review the strawman document, approve the Guiding Principles and begin to discuss possible approaches to local area target development.

Introductions and Announcements – David Wood, CRC

- David welcomed the group, took roll and reviewed action and decision items from May.
    - There were no comments on the May meeting summary.

DECISION: The May Meeting Summary was approved as-written.

Overview of Water Quality Monitoring Data – Doug Moyer, USGS

Doug provided an overview of the most recent water quality monitoring and trends data released by USGS, and summarized how that data could be used to inform decisions related to the targeting of local outreach efforts and the implementation of local area targets. (*Attach. A*)

Discussion:

- Why does it seem that trends in the upper Susquehanna are improving, but not around the Conowingo Dam?
    - Reservoir dynamics are likely the reason. Infilling behind the reservoir shows a muting of the trend signal.
- Is USGS taking on additional projects in other communities, similar to the projects in Fairfax and Hampton Roads?
    - Yes, USGS routinely establishes targeted monitoring routines with local communities to help tackle local water quality concerns.
- Suggestion to not use yellow and red for showing loads, because that implies caution and danger scenarios, when they are really just relative to each other.
    - The loads are intended to be represented objectively by quantifying the load and breaking it into three equal intervals, but the concern is understandable.

Summary of 2015 Progress – Jeff Sweeney, EPA

Jeff summarized the results of the Chesapeake Bay Program's (CBP's) 2015 progress runs in order to show the status of implementation efforts across the watershed. (Attach. B)

Discussion:

- Would local area targets also potentially apply to the agricultural sector?
    - That is a possible option, but it will be up to the recommendations of this group.
- The Chesapeake Bay Watershed Model (CBWM) accounts for growth. As time passes, there is more impervious surface and turf grass, so urban loads will grow from year to year. You can offset that growth, but it is difficult to hold the urban line, even by increasing BMP implementation.
- If a locality is developing at the urban fringe and converting agriculture lands to urban lands, is that captured?
    - It is captured. The loss of agricultural land to urban land or development is accounted for in the CBWM.
- How would rural counties be simulated in the CBWM?
    - Within a county, we have a breakdown of crops and land uses based on Ag Census data. For the urban parts of a county, we use land cover imagery so we know how many acres are in each sector.
- Is atmospheric deposition considered? What is the assumed change in deposition over the history of the CBWM?
    - Yes. It is one of the major source loads. To date, there have been slight reductions in nitrogen deposition to the Bay across the watershed.
- Can you distinguish between loads from regulated and unregulated stormwater?
    - The CBWM is set up to make that distinction. However, we are dependent upon the jurisdictions to report specifically where their practices are implemented. Often, the jurisdictions report total implementation but don't tell us if it was in the MS4 area or not, so we distribute the implementation evenly across regulated and nonregulated lands. That situation should improve with the historical data cleanup effort.
- Why is there a difference in the progress being seen in nitrogen and phosphorus reductions in the urban sector?
    - You need a lot more LID infiltration to capture greater reductions in nitrogen. Many states and localities are still focused on controlling volume and sediment.
- Is there guidance on the practices in the urban sector that specifically address nitrogen reductions?
    - There are many guides that have been developed by the states, EPA and the CBP. There are tables available that give you the nitrogen reductions for each type of stormwater BMP.

<u>Phase 6 Model Overview</u> – Gary Shenk, USGS

Gary provided an overview of the CBP Partnership's Phase 6 suite of modeling tools, focused on the extent and scale to which those tools could be utilized to inform decisions related to local area targets. (Attach. C)

Discussion:

- What scale is most appropriate to use for the development of local area targets?

    - There is no truly scientific way to determine the precise accuracy of the CBWM at different scales. It boils down to the questions you want to ask and your comfort level with the tools at a particular scale. One way to approach it is by asking if the monitoring data scale and data input scale help you make those determinations.
- Input data is available at a number of different scales. Some inputs are at a scale larger than counties, but some is down to the NHD+ catchment scale. Turf grass fertilizer is watershed wide. Crop fertilizer application is on a county basis. BMPs are reported at a scale anywhere from the state in which they were implemented, down to a latitude and longitude. Land and water transport factors are at an NHD+ catchment scale. Land use imagery is at a 1m pixel resolution.
- When used in a relative sense, the CBWM can be very effective at judging whether actions at different scales are consistent with the WIPs and the Bay TMDL.
- How would you describe the accuracy of the CBWM, at showing implementation, to a group of elected officials?
    - We can't put a number on the uncertainty. We just had a workshop on trying to do that, and it is a very difficult scientific task. We have a lot of confidence that, at the broad scale, if the WIPs are implemented, we will meet the water quality goals. This is thanks to lines of evidence that were used to construct the CBWM. We can use this tool to say whether the local plans are consistent or not with the larger plans. How you set up the local area targets is critical to making them make sense at the local level.
- How well does the CBWM simulate land uses and reductions from those land uses?
    - We have reasonable answers to that. We are not running a process-based model in a black box that can't be tracked. The effectiveness of the land use simulation comes from the 1m resolution land cover data. Implementation numbers comes from what the jurisdictions report to the CBP. Watershed retentiveness comes from the USGS SPARROW model and other models which, put together, factors on a 1 square mile basis. There is a lot of information going into these decision support tools and it is our best collective understanding of how to roll up this information.
- Suggestion that these local area targets be thought of as a means of collectively tracking progress, rather than a way to track individual loads.
    - That makes sense as an option. This would potentially be the "programmatic local targets" approach, where programs and planning is done locally but numeric progress is still tracked at the state level rather than having the model crunch the numbers county by county. To set county level targets and allow counties to track themselves against that target is another option. That is for this group to decide.
- How many water quality calibration sites were available for Phase 6 compared to Phase 5.3.2?
    - There are a few more available for Phase 6. About 100 for nitrogen, 150 for phosphorus and 200 for sediment. While the number of stations is similar, they have higher quality data now because more information is available than what they've had in the past.

ACTION: Additional discussion on the appropriate scales for developing local area targets will be held for a future conference call.

<u>Discussion of Path Forward for Task Force</u> – Joan Salvati and Lisa Schaefer, Co-Chairs

Joan and Lisa reviewed the Task Force's Guiding Principles and the suggested edits received from the membership. They asked the Task Force to come to agreement on the proposed Guiding Principles.

Discussion:

- Suggested edit to Guidance 1: "Focus, accelerate, and effectively target the implementation of load reductions."
- Agreement that these are broad guiding principles.
- Suggestion to remove mention of non-water quality priorities in Principle 2.
    - If a locality wants to achieve multiple benefits from a suite of BMPs, or has other local priorities that need to be addressed, the methods should provide the flexibility for them to also address those concerns.
    - Decision to remove text after "unique priorities of local partners" in Principle 2.
- In Principle 4, "local area planning targets" should facilitate communication and engagement, and facilitate on-the-ground implementation.
- Suggestion that Principle 5 and Principle 7 are too similar. The group prefers the wording of Principle 7.
- The Task Force felt that the last comment was too specific for inclusion in the Guiding Principles.

ACTION: Joan Salvati will make minor edits to the Guiding Principles document based on the Task Force's discussion and will redistribute it for final approval.

- Members of the Task Force raised the question of how local governments will be held responsible for these targets.

ACTION: At the next meeting, the Task Force will review the strawman document, approve the Guiding Principles and begin to discuss possible approaches to local area target development.

List of Call Participants

Member Name	**Affiliation**	
Lucinda Power	Staff	EPA, CBPO
David Wood	Staff	CRC, CBPO
Sarah Bradbury	DC	DOEE
Marty Hurd	DC	DOEE
Jennifer Walls	DE- State	DNREC
Sarah Diebel	Federal	DOD
Jen Sincock	Federal	EPA
Suzanne Trevena	Federal	EPA
Jeff Sweeney	Federal	EPA
Gary Shenk	Federal	USGS
Doug Moyer	Federal	USGS
Joel Blomquist	Federal	USGS
Mary Gattis	Local	LGAC
Bruce Williams	MD- Local	LGAC-Maryland
Bob Ensor	MD- Local	Howard Co. SWCD

Vimal Ameen	MD- State	MDE
Jim George	MD- State	MDE
Wendy Walsh	NY- Local	USC/ Tioga Co. SWCD
Ben Sears	NY- State	NYSDEC
Mike LaSala	PA- Local	LandStudies
Karen Martynick	PA- Local	Lancaster Farmland Trust
Lisa Schaefer	PA- Local	County Commissioners Assoc. of PA
James Wheeler	PA- Local	LGAC-Pennsylvania
Charlotte Katzenmoyer	PA- Local	City of Lancaster
Nicki Kasi	PA- State	PA DEP
Ted Tesler	PA- State	PA DEP
Ann Jennings	Regional	CBC
Bill Angstadt	Regional	WQGIT
Chris Pomeroy	VA- Local	VAMSA/VAMWA
Norm Goulet	VA- Local	NVRC
Joe Wood	VA- Local	CBF
Christopher Thomas	VA- Local	King George Co. Service Authority
Daniel Moore	VA- State	VA DEQ
Joan Salvati	VA- State	VA DEQ
Matthew Pennington	WV- Local	Region 9 Planning and Development Council
Alana Hartman	WV- State	WV DEP