Scientific, Technical Assessment and Reporting (STAR) Team Meeting

February 26, 2015

10:00AM – 1:30PM

Joe Macknis Memorial Conference Room (Fish Shack)

Conference Line: 1-866-299-3188 Access Code: 4102675731
Adobe Connect: https://epa.connectsolutions.com/star/
Event webpage: http://www.chesapeakebay.net/S=0/calendar/event/21556/

AGENDA

Welcome, Introduction, and Announcements *(Bill Dennsion – UMCES, STAR Co-Chair)*

- **ACTION:** STAR will continue to notify the Communications Team of upcoming publications and projects.
- Scott Phillips, Walter Boynton and others provided testimony to the Maryland General Assembly of the House and Senate for SB 257 (on February 24) and HB 381 (on February 25). Video of the testimony can be found on the General Assembly of Maryland website under the Senate Education, Health, and Environmental Affairs log and the House Environment and Transportation log.
- **ACTION:** Scott will send a written version of his testimony regarding the phosphorus management tool, Lea will send it out to STAR. Bill Dennison will email Walter Boynton to get a copy of his testimony.
- This year is UMCES' 90th anniversary which will be celebrated at Chesapeake Biological Laboratory campus, Solomon's Island, on September 19th.
- All public comments regarding the Lower Susquehanna River Watershed Assessment Report will be available this summer.
- STAR submitted an unprecedented number of STAC workshop proposals:
    - STAR Seminar lunches
    - New Technologies
    - Climate Change
    - Integrated Monitoring Networks
    - Shared Science priority agenda
    - Understanding the uncertainty within the modeling tools as they relate to Bay restoration
    - Incorporation of new monitoring data from the LSRWA into modeling tools
- **ACTION:** Get modeling proposals from Lee Currey or Lewis Linker (Lea)
- There was a discussion of proposing a one-time funding increase to Nick DiPasquale for STAC proposals this year, since there is an overwhelming number of pressing STAC proposals.

- UMCES is doing a press release for the enhanced monitoring at the Conowingo dam, which can be found here. It could be helpful for the Bay Program to also leverage the release as DNR, Exelon, and others have done.
- Mark Belton has been sworn in as the new DNR secretary. He has previously served as the county executive for multiple counties including Anne Arundel.

ChesapeakeStat *(Catherine Krikstan – UMCES/CBPO)*

- An overview of the ChesapeakeStat website was provided, and potential future products being developed for the website were also discussed.
- This web tool will be re-launched this month, and will serve as an accountability framework and gateway to three web products: ChesapeakeProgress, ChesapeakeDecisions and ChesapeakeData.

Modeling WG Workplan *(Lew Linker – EPA/CBPO, Dave Montali – WVDEP, and Lee Currey - MDE)*

- Modeling Workgroup Leadership presented the Modeling Workgroup workplan for 2015.
- **ACTION:** STAR will provide comments and feedback on the Modeling Workgroup 2015 workplan.
    - 2015 is the year of building models, 2016 is the year to review the models, and throughout 2017 jurisdictions will be actively working on WIPs.
- UMD is investigating an update and revision of modeling the sediment transport from the Conowingo Dam in the Upper Bay.
- Discussion about collaboration with USDA
    - Within the Agriculture Workgroup there is an agricultural modeling subgroup, Gary and others are working closely to further develop modeling within the agriculture sector.
    - Lee, Lew, and Gary to follow up with Scott about USDA's involvement.

Citizen Science Grant Award *(Peter Tango – USGS/CBPO)*

- Peter informed STAR of the plans in progress with the new citizen science grant award.
- **ACTION:** STAR will provide comments and feedback on the strategy for integrating citizen science into the Chesapeake Bay Program monitoring network.
    - Recommended that the Alliance should have participation in the Data Integrity WG.
    - Although the Alliance is the grant recipient, they have set up a network of partners that will be a part of the process.

Citizen Science Association Conference Overview *(Peter Tango – USGS/CBPO and Lea Rubin CRC/CBPO)*

- Peter and Lea attended the first national Citizen Science Association conference in San Jose, February 11-12. They presented insights from other citizen science programs and research gathered at the conference.
- **ACTION:** STAR will discuss the potential of lessons learned from the Citizen Science Association Conference for the Chesapeake Bay Program citizen science monitoring component.
    - Presentation should be sent to the Alliance as well as Riverkeepers and other interested partners.
    - Discussion regarding the inclusion of Citizen Science initiatives on ChesapeakeStat.
    - Discussion of an ongoing international challenge for industries to develop nutrient sensors to track phosphorus and nitrogen, which could be used for citizen science.

Indicator Assessment Team Objectives and Update *(Mindy Ehrich – UMCES/CBPO and Jennifer Gundersen – EPA/CBPO)*

- Mindy and Jennifer presented the objectives of the Indicator Assessment Team, a preamble to the Status and Trends Team. They also provided an update on current efforts and plans moving forward.
- **ACTION:** STAR will provide comments and feedback on the objective and next steps of the Indicator Assessment Action Team.
  - The IA Team is working with the GITs and determining data gaps. Results will contribute to fulfilling the BASIN III process. Findings on indicators and monitoring efforts supporting the management strategies coming out of the first few meetings include:
    - Oysters – Indicator involves the number of tributaries restored, there was question of what to report until reported restoration.
    - Public Land Access – Very well established
    - Water Quality – Guidance needed in determining which indicators should be used
    - Indicators could be viewed then from the bottom up.
  - It may be helpful to begin looking at the framework from the top down, with possible re-designs of the framework, and determining how the status and trends team is going to function.
  - It would be beneficial to develop a table for all outcomes and listing what data is being used to track progress as well as points where there are gaps.

Using Chesapeake Bay Program Decision Support Tools for Developing Local TMDLs and Implementation Plans
Olivia H. Devereux, Environmental Scientist, DEC, Inc.

Presentation Summary:
Olivia will show how the Chesapeake Bay Program's decision support tools are used to develop local TMDLs and TMDL implementation plans. These decision support tools include CAST and BayFAST and the state-specific tools of MAST (Maryland) and VAST (Virginia). She will show examples of how the tools may be used to demonstrate the ability to comply with permit requirements related to nitrogen, phosphorus, and sediment loads as well as demonstrate costs associated with plans.

Presenter Biography
Ms. Devereux founded Devereux Environmental Consulting, Inc. (DEC) in 2012 to serve both private and government sector environmental planning needs. She has nine years experience in the environmental field. Ms. Devereux offers expertise in modeling water quality improvements under various management actions. Ms. Devereux has worked frequently and directly with officials of all the jurisdictions in the Chesapeake Bay watershed with responsibility for planning, tracking, and reporting associated with the 2010 Chesapeake Bay TMDL. Along with J7 LLC, DEC is the developer and manager of a suite of online decision support tools that assist jurisdictions within the Chesapeake Bay Watershed to plan for compliance with the 2010 Chesapeake Bay TMDL: Chesapeake/Maryland/Virginia Assessment Scenario Tool (CAST/MAST/VAST) and BayFAST (a site specific planning tool).

Ms. Devereux was the lead scientist in developing the Scenario Builder, which is a process-based model for estimating pollutant loading to the land. The output of Scenario Builder serves as the input to the Chesapeake Bay Program's Watershed Model. Ms. Devereux previously has served on the

environmental science staff of the Interstate Commission on the Potomac River Basin, the University of Maryland/Chesapeake Bay Program, and Haley & Aldrich, Inc.

M.S., Env. Science and Technology, Univ. of Maryland, College Park, 2006
B.A., Sociology, Univ. of Texas at Austin, 1991

Discussion

- In BayFAST you can pull land uses from those used within the watershed model, planning is meant for more site-specific areas but could be used for a larger scale if the user is willing to delineate the watershed.
- There are 1,000+ individual users, but power users are those at state levels making plans for the CBP and generating the most scenarios. However, local governments are also using the tool with the help of contractors.
- The tool is also applicable for watershed associations and citizen science groups.
- Are there plans within the Bay Program or its partners to advertise the tool better?
    - Discussion to follow up on this question will be taken offline.
- Future plans include helping users determine which BMPs are most cost-effective and a tool that helps users select the best BMP implementation plan for their area.

Participants

Last Name	First Name	Affiliation	Email
Bennett	Mark	USGS/STAR Vice Chair	mrbennet@usgs.gov
Currey	Lee	MDE	lcurrey@mde.state.md.us
Dennison	Bill	UMCES/STAR Chair	dennison@umces.edu
Ehrich	Mindy	UMCES/CBP	mehrich@chesapeakebay.net
Gundersen	Jennifer	EPA/CBP	gundersen.jennifer@epa.gov
Hinson	Kyle	CRC/CBP	khinson@chesapeakebay.net
Krikstan	Catherine	UMCES/CBP	ckrikstan@chesapeakebay.net
Ley	Mary Ellen	USGS/CBP	mley@chesapeakebay.net
Linker	Lewis	EPA-CBP	llinker@chesapeakebay.net
Michael	Bruce	MDNR	bmichael@dnr.state.md.us
Montali	Dave	WVDEP	david.a.montali@wv.gov
Phillips	Scott	USGS	swphilli@usgs.gov
Rubin	Lea	CRC/CBP	lrubin@chesapeakebay.net
Smith	Stephanie	ACB/CBP	ssmith@chesapeakebay.net
Stephens	Guy	UMCES/CBP	gstephen@chesapeakebay.net
Tango	Peter	USGS/CBP/STAR Coordinator	ptango@chesapeakebay.net
Vetter	Doreen	EPA	vetter.doreen@epa.gov
Winters	Julie	EPA	winters.julie@epa.gov