WELCOME TO THOSE OF YOU JOINING US VIA ADOBE CONNECT. PLEASE BE SURE TO UNMUTE YOUR COMPUTER AND THAT YOUR HEADPHONES OR SPEAKERS ARE PROPERLY CONNECTED. **PLEASE NOTE WE WILL HAVE THE MEETING ROOM MUTED UNTIL WE ARE READY TO BEGIN, SO YOU MAY NOT HEAR ANY SOUND UNTIL 1:00PM.**

Open Session: Impervious Surface Disconnection Expert Panel

Public Stakeholder Forum
Tuesday, September 15th, 2015
Annapolis, MD

Bill Stack, Center for Watershed Protection, Panel Chair
Jeremy Hanson, Virginia Tech, Panel Coordinator

Virginia Tech 1872 Invent the Future

Chesapeake Bay Program
Science. Restoration. Partnership.

Center for Watershed Protection

SOUND CHECK for webinar participants

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  Conf line: 866 299 3188

  Code: 410 267 5731

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Agenda at a glance

- Welcome and introductions
  - Ground rules and logistics
  - Overview of the BMP expert panel process
  - Overview of panel charge and timeline
- Stakeholder presentations
- Discussion
- Recap and next steps
- Adjourn

Ground rules and logistics

- **For those participating via webinar:**
  - Tell us your name and affiliation in the chat box.
    - If multiple participants, please provide the names of others in the room so we have a more accurate attendance record.
  - Since we cannot hear you, **please enter your questions and comments into the chat box**.
  - Bill and Jeremy will monitor the chat and ask the questions for you.

Ground rules and logistics

- **For those in the room**
  - Is your phone on silent?
  - During the presentations, please save your questions until the speaker has finished.
  - At all times please raise your hand and wait for Bill to acknowledge you before speaking.
  - Please **speak loudly and clearly**, *especially* if you are seated around the edge of the room. Our friends on the webinar want to hear you too!
  - The polycom can pick up side conversations around the table, so please step into the lobby (and close the door) to have any side conversations.
  - Please sign-in if you did not do so already (sign-in sheet in the lobby)
  - **…Is your phone on silent???**

What is a “BMP Expert Panel?”

- Best Management Practices (BMPs) are practices or technologies that reduce pollution when implemented or installed.
  - Structural, non-structural, programmatic
- Expert panels use the best available science and best professional judgment to inform the Chesapeake Bay Program Partnership how much a BMP reduces pollution
  - They write a report with a TON of information in it
  - They follow the BMP Protocol (more on this soon…)
- The expert panels focus on the water quality benefits – specifically, the nitrogen, phosphorus and sediment reductions – associated with BMPs. They consider ancillary effects, too.

Purpose of this meeting

- To provide an open exchange of information that may help inform the Panel as it moves forward with its deliberations, as well as provide an opportunity for the public and interested stakeholders to learn more about the Panel's charge.
- The Panel may elect to solicit input from guests prior to the close of a meeting to ensure that the Panel receives the full range of information and science available on the Panel topic. In addition, guests may submit relevant BMP performance data or any other such supporting literature for the Panel to consider.

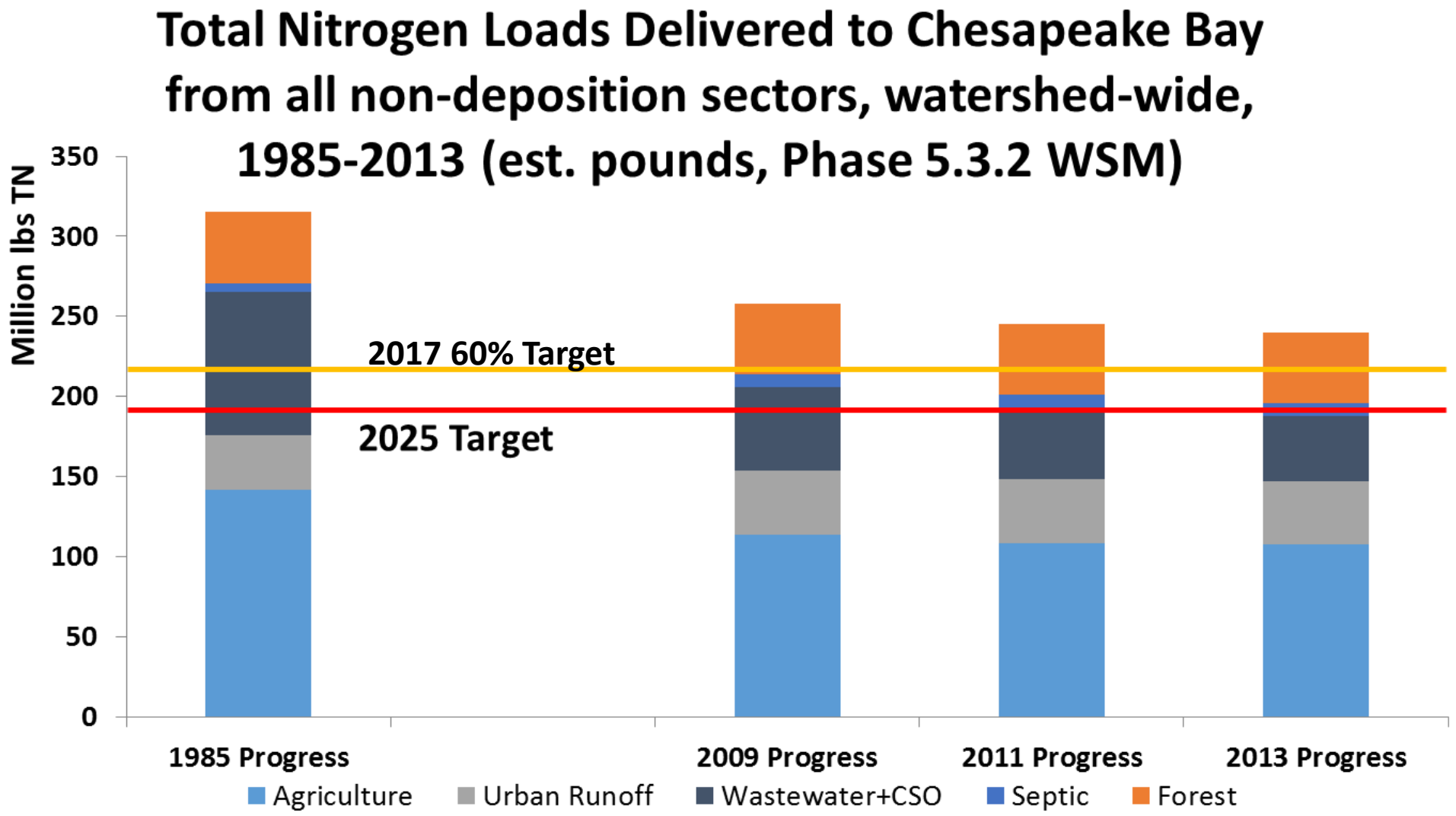
Why BMPs? Why N, P and sediment?

- Sorry, but the answer is more acronyms: WIPs and the Chesapeake Bay TMDL
  - TMDL = Total Maximum Daily Load
    - http://www.epa.gov/chesapeakebaytmdl/
  - WIPs = Watershed Implementation Plans

Pollutant loads from a BMP may be credited as:

1. A change in the land use (e.g. trees instead of turf grass)
2. an adjustment based on an estimate of effectiveness of a BMP (i.e. an “efficiency”)
3. a measured reduction in direct load to the land use (e.g. less fertilizer)
4. a measured reduction from a treatment process (e.g. a wastewater treatment plant)

…or, to put it graphically (for nitrogen):



BMPs: How the jurisdictions reduce their nonpoint source loads

- Each year the jurisdictions submit their BMP implementation data to the Chesapeake Bay Program Office
  - You can view and download the latest data here: http://stat.chesapeakebay.net/?q=node/130&quicktabs_10=3
  - New and improved information about progress for BMP implementation and other efforts will soon be available at: http://www.chesapeakestat.com/chesapeakeprogress
- Data includes elements such as:
    - Name of BMP
    - Appropriate location information (county, land-river segment,…)
    - Other fields depending on BMP (installation date, acres or unit of measurement, etc.)

The BMP Evaluation Process

- The Water Quality Goal Implementation Team (WQGIT) is responsible for approving the loading rate reductions, and percentage adjustments to these rates, used in the Chesapeake Bay Watershed Model (CBWM).
- The document that explains how it all works:
  - *Protocol for the Development, Review, and Approval of Loading and Effectiveness Estimates for Nutrient and Sediment Controls in the Chesapeake Bay Watershed Model*, AKA the "BMP Protocol"
    - http://www.chesapeakebay.net/publications/title/bmp_review_protocol

The BMP Evaluation Process, “simply” put

The Impervious Surface Disconnection Expert Panel

- Expert Panel Charge and Scope
  - Provide recommendations on nitrogen, phosphorus and sediment reductions for impervious disconnection practices available for credit for jurisdictions towards the Bay TMDL
  - BMP definition
  - Qualifying conditions for credit
  - Crediting method
  - Ancillary benefits
  - Recommendations to address future research and management needs

Our esteemed panel of experts

Name	Role	Affiliation
Bill Stack	Panel Chair	Center for Watershed Protection
Greg Evanylo	Panel Member	Virginia Tech
Jason Papacosma	Panel Member	Arlington County, Dept. of Environmental Services
Steve Stewart	Panel Member	Baltimore County, Dept. of Environmental Protection and Sustainability
Ryan Winston	Panel Member	North Carolina State
David Sample	Panel Member	Virginia Tech
Franco Montalto	Panel Member	Drexel University
Justin Shafer	Panel Member	City of Norfolk (VA)
Panel support		
Jeremy Hanson	Panel and VT Coordinator	Virginia Tech, CBPO
Brian Benham	VT Project Lead	Virginia Tech
Greg Sandi	WTWG Representative	MDE
Jeff Sweeney	CBP Modeling Team Representative	EPA, CBPO
Liz Ottinger	Regulatory Support	EPA Region 3
Reid Christianson	CWP Staff Support	CWP

Impervious Disconnection Panel Meeting Schedule

1. **August 21**: Kick-off Meeting/Conference Call
2. **September 15 (Fish Shack):**
   - PM: Panel Meeting – Initial literature synthesis and possible crediting approaches
   - AM: Public Stakeholders Forum
3. **October**: Review/Discussion – literature review results
4. **November**: Discussion – crediting approach
5. **December**: Review – crediting approach strawman
6. **January (Fish Shack):** Review draft protocol and panel report
7. **February**: Review final protocol and panel report

The panel charge

- This panel will evaluate the nutrient and sediment removal and runoff reduction benefits associated with disconnecting existing acres of impervious cover through several engineering and/or field assessment methods as defined within this Charge.
- The Panel can consider and modify these approaches based on available science and their best professional judgment.

Background

- During 2014, the USWG evaluated the potential to create a land use category to represent disconnected impervious cover in the Phase 6 Chesapeake Bay Watershed Model (CBWM), but concluded that available mapping and monitoring data could not accurately differentiate between connected and disconnected impervious cover at the scale of the Bay watershed at the present time.
- The USWG agreed that there was merit to investigate impervious cover disconnection as a “new” BMP that would be applied to existing impervious cover.

Approach

- Direct or otherwise spread stormwater runoff from impervious cover of existing development (not new or re-development) to an acceptable area of pervious cover where it may be effectively stored and infiltrated into the soil using protocols that have been explicitly developed by the Expert Panel that increase the infiltration capacity of the receiving soils such as deep soil tilling with compost augmentation or changes in the flow path or retention within the existing drainage network.
- These protocols will represent an entirely new set of practices for treating urban runoff which involves changing the existing hydrologic properties of the soils receiving and generating runoff. In many cases, this will usually entail some modification to the soils of the pervious cover receiving the runoff, such as soil tilling, compost or other soil amendments, phyto-remediation or special plantings that can increase that can increase soil infiltration.

Caveats

- Methods to disconnect impervious cover used to comply with new state stormwater performance standards for new development or redevelopment projects.
- Homeowner BMPs such as rain gardens, rain barrels, dry wells and downspout disconnections that are used to retrofit existing residential properties.
- Urban filter strips, urban filtering practices, urban or agricultural stream buffers, and shoreline management practices that accept stormwater runoff from adjacent areas.

Today's Stakeholder Presentations

- Reid Christianson, Center for Watershed Protection
- Ryan Winston, NCSU
- Greg Evanylo, Virginia Tech
- David Sample, Virginia Tech

Q&A to follow each presentation

Full group discussion following all presentations

Follow-up

All presentations will be uploaded to the CBP calendar, along with other materials:

http://www.chesapeakebay.net/calendar/event/22967/

Questions or comments about the panel can be sent to:

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