

WELCOME TO THOSE OF YOU JOINING US VIA ADOBE CONNECT. **PLEASE NOTE WE WILL HAVE THE MEETING ROOM MUTED UNTIL WE ARE READY TO BEGIN, SO YOU MAY NOT HEAR ANY SOUND UNTIL 2:30PM.**

# Open Session: Animal Waste Management Systems (AWMS) Expert Panel

Public Stakeholder Forum  
Thursday, April 7<sup>th</sup>, 2016  
Catonsville, MD

Shawn Hawkins, University of Tennessee, Panel Chair  
Jeremy Hanson, Virginia Tech, Panel Coordinator

# SOUND CHECK for webinar participants

- If you can't hear us right now, then make sure you connected your audio!
- Audio is available through your computer OR on the conference line
- For computer: please make sure your speakers/headphones are properly connected and that your computer's audio settings are not on mute
- If calling in, be sure that your computer IS muted or else you will hear everything twice
- Here's the conference line info if you need it—  
Conf line: 866 299 3188  
Code: 267 5715
- If you call in, you will be muted to prevent disruptions. We will give you instructions during the discussion for un-muting your line if you wish to speak instead of type your questions.

**PLEASE DO NOT PUT THE CONFERENCE LINE ON HOLD AT ANY TIME.** If you must take another call, hang up and dial back in.

# *Agenda*

- Welcome and introduction
  - Ground rules and logistics
  - Overview of the BMP expert panel process
  - Overview of AWMS in the Phase 6 Watershed Model and the panel's charge
  - Panel introductions
  - Panel timeline at a glance
- Stakeholder presentation
- Discussion
- Next steps
- Adjourn

# Ground rules and logistics

- **For those participating via webinar:**
  - Tell us your name and affiliation in the chat box at this time.
    - If multiple participants, please provide the names of others in the room so we have a more accurate attendance record.
  - **During the presentations, please enter your questions and comments into the chat box.**
  - We will monitor the chat and ask the questions for you when the speaker is finished.
    - If referencing a specific slide from one of the presentations, please provide a slide number
  - During the discussion portion of the meeting you will have opportunity to unmute and speak. We will also keep an eye on the chat box.

# 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.
- Please raise your hand and wait to be acknowledged 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 hallway to have any side conversations or answer your phone if needed.
- Please sign-in if you did not do so already
- **...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 lot 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.

# Pollutant load reductions 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 a BMP's effectiveness (i.e. an "efficiency")
3. a change to the inputs or outputs associated with a land use(s) (e.g. less fertilizer applied)
4. a measured reduction from a treatment process (e.g. a wastewater treatment plant)

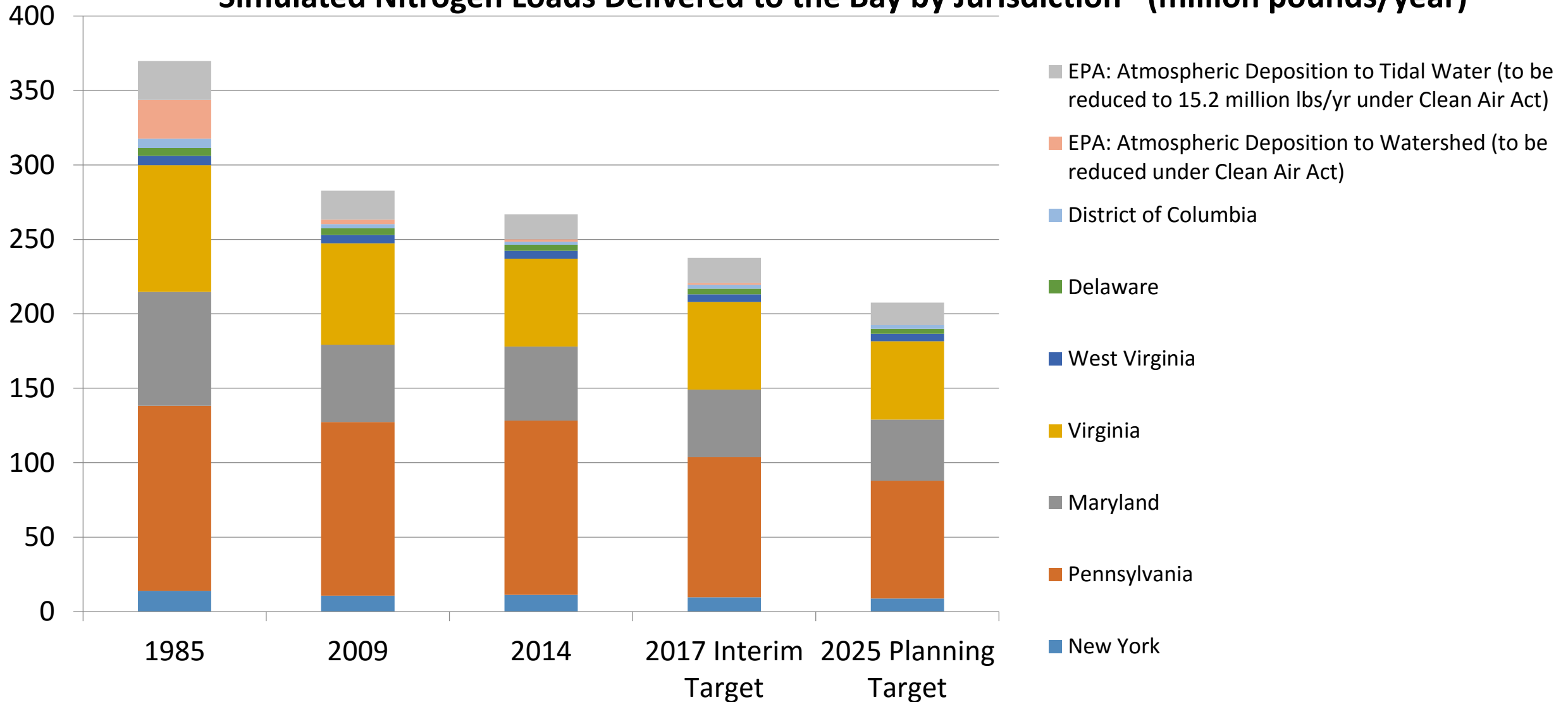
# BMPs: How the jurisdictions reduce their nonpoint source loads

- Each year the jurisdictions submit their BMP implementation data to the Chesapeake Bay Program Office
  - You can view and download the latest data online here:  
<http://www.chesapeakeprogress.com/clean-water/>
- Data includes elements such as:
  - Name of BMP
  - Appropriate location information (county, land-river segment,...)
  - Other fields depending on the BMP (installation date, acres or unit of measurement, etc.)



# ...or, to put it graphically (for nitrogen):

**Simulated Nitrogen Loads Delivered to the Bay by Jurisdiction\* (million pounds/year)**



\*Loads simulated using 5.3.2 version of Watershed Model and wastewater discharge data reported by Bay jurisdictions..

# 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](http://www.chesapeakebay.net/publications/title/bmp_review_protocol)

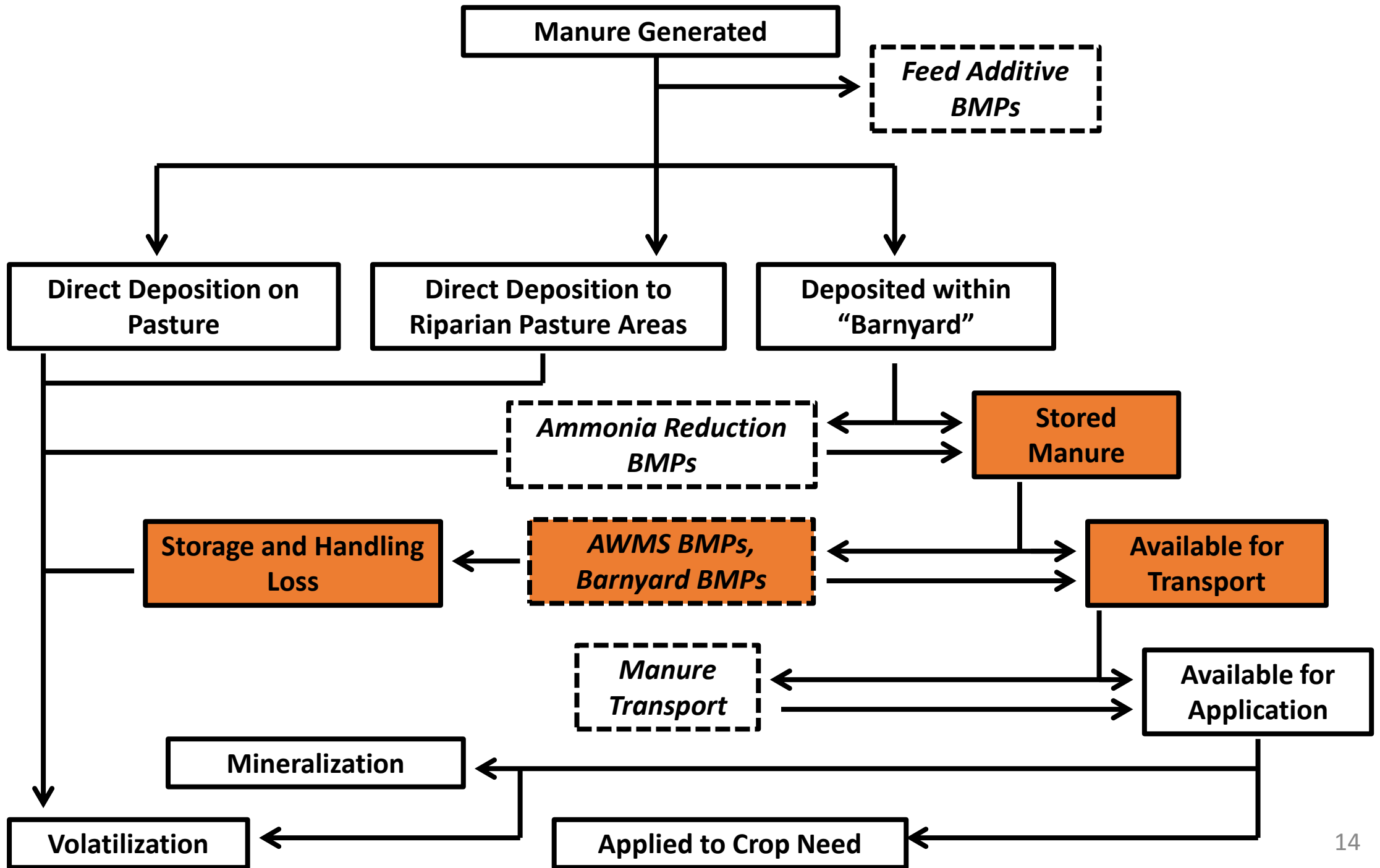
# The BMP Evaluation Process, “simply” put



# 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 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.

# Animal manure and AWMS in the modeling tools



# Quick glance at AWMS...what happens to the manure and its nutrients

## Phase 5.3.2 modeling tools

- A given % of manure from “barnyard” is lost (either 15% or 20% based on animal type)
- An AWMS BMP reduces this loss by 75% (i.e. 20% loss becomes a 5% loss)

## Phase 6\*

- A certain % of manure from “barnyard” is “recovered” under baseline, according to animal type
- An AWMS BMP will increase the “recovered” portion of the manure (TBD by this panel)

\*Phase 6 Watershed Model still under development, this is based on current understanding and beta calibrations

# Let's meet our esteemed panel...

Name	Role	Affiliation
<b>Doug Hamilton</b>	Panel member	Oklahoma State
<b>Jonathan Moyle</b>	Panel member	UMD Extension
<b>Pete Vanderstappen</b>	Panel member	NRCS-Pennsylvania
<b>Shawn Hawkins</b>	Panel Chair	U. of Tennessee
<b>Mark Risse</b>	Panel member	U. of Georgia
<b>Bridgett McIntosh</b>	Panel member	Virginia Tech
<i>Panel support</i>		
<b>Jeremy Hanson</b>	Panel Coordinator	Virginia Tech, CBPO
<b>Brian Benham</b>	Virginia Tech Project Director	Virginia Tech
<b>Ashley Toy</b>	Regulatory point of contact	EPA Region 3
<b>Matt Johnston</b>	Modeling team co-rep	UMD, CBPO
<b>Jeff Sweeney</b>	Modeling team co-rep	EPA, CBPO
<b>Greg Albrecht</b>	Watershed Technical Workgroup rep	NYS Dept. of Ag and Markets
<b>Mark Dubin</b>	AgWG Coordinator	UMD



# Today's Stakeholder Presentation

**Tom Simpson, Aqua Terra Science**

Specific Q&A for speaker to follow presentation, followed by general full group discussion

# AWMS timeline at a glance

1. **March 4:** Kick-off Conference Call
2. **April 7:**
  - AM: Panel Meeting – Discussion of approach for review and synthesis
  - PM: Public Stakeholders Forum
3. **End of June – Early July:** Panel aims to release its recommendations for CBP review
4. **July-September:** CBP review/approval
5. **October 1:** Final Phase 6 Watershed Model calibration

Note: panel timelines often change. This is the intended timeline.

# Follow-up

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

<http://www.chesapeakebay.net/calendar/event/23778/>

**Questions or comments about the panel can be sent to:**

Jeremy Hanson

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