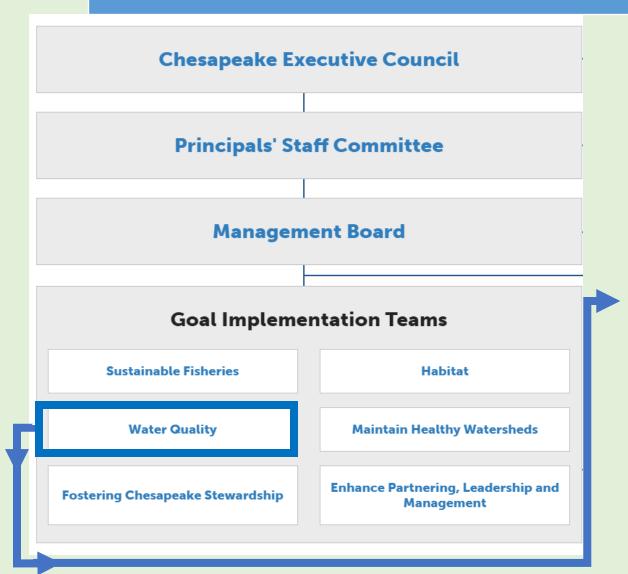
# Agricultural Modeling Team (AMT) Structure and Decision Making

Tom Butler, EPA

## Outline



#### Structure





Agricultural Modeling Team

- Under Agriculture
  Workgroup
- Science based
- Consensus as defined by the Water Quality GIT

### Expertise

#### \*\*Represent technical expertise\*\*

#### **Agricultural systems**

- Bovine
- Equine
- Hogs
- Poultry
- Livestock Feed
- Row Crops
- Hay and Ag Open Space
- Specialty Crops
- Pasture and Riparian Pasture

## Application/storage of both manure and fertilizer

- Storage and handling
- Transport
- Nutrient Management
- Soil Phosphorus
- Volatilization

## Agricultural nutrient modeling data within the Chesapeake Bay watershed

- CAST
- SPARROW
- USDA
- Land Use
- Data management
- Model my watershed
- Climate change

### Group Structure

## 12 voting members

- Chair
- Six states
- EPA
- Four at large positions

\*NOTE\*

We ENCOURAGE participation from nonvoting members.

## AMT Voting Structure

<u>Affiliation</u>	<u>Primary</u>	<u>Alternate</u>
Chair	Zach Easton, VT	None
Delaware	Chris Brosch (DDA)	Clint Gill (DDA)
Maryland	Alisha Mulkey (MDA)	None
New York	Cassie Davis (NYS DEC)	Emily Dekar (Upper Susquehanna Coalition)
Pennsylvania	Scott Heidel (PA DEP)	Kate Bresaw (PA DEP)
Virginia	Robert Shoemaker (VA DCR)	Rebecca Barlow (VA DCR)
West Virginia	Dave Montali (Tetratech)	Kristen Bisom (WV Conservation Agency)
U.S. Environmental Protection Agency	Jeff Sweeney (EPA)	None
At Large	Ken Staver, UMD	None
At Large	Tamie Veith, USDA-ARS	Curtis Dell, USDA-ARS
At Large	Candiss Williams, USDA-NRCS	Lisa Duriancik, USDA-NRCS
At Large	Alex Soroka, USGS	None

## AMT Non-Voting Structure

<u>Affiliation</u>	<u>Primary</u>	<u>Alternate</u>
*NA adalina	Com, Chaple LICCC	None
*Modeling	Gary Shenk USGS	
	Olivia Devereux, Devereux	
*CAST	Consulting	Jessica Rigelman, J7llc.
		None
*CAST Data Processing Expert	Sucharith Ravi, UMD	
		None
*CBP Ag Advisor	Mark Dubin, UMD	
		None
*CBP NPS Expert	Ruth Cassilly, UMD	
		None
* Staffer	Jackie Pickford, CRC	
		None
*Coordinator	Tom Butler, EPA	
		None
* AgWG Coordinator	Loretta Collins, UMD	

#### General member estimated commitment

Table 2. General member time commitment breakdown		
Activity	Time commitment (Hrs./Mo.)	
Meeting preparation	4	
General activities	4	
Monthly meetings	2	
TOTAL	10	

#### Chair estimated commitment

TOTAL

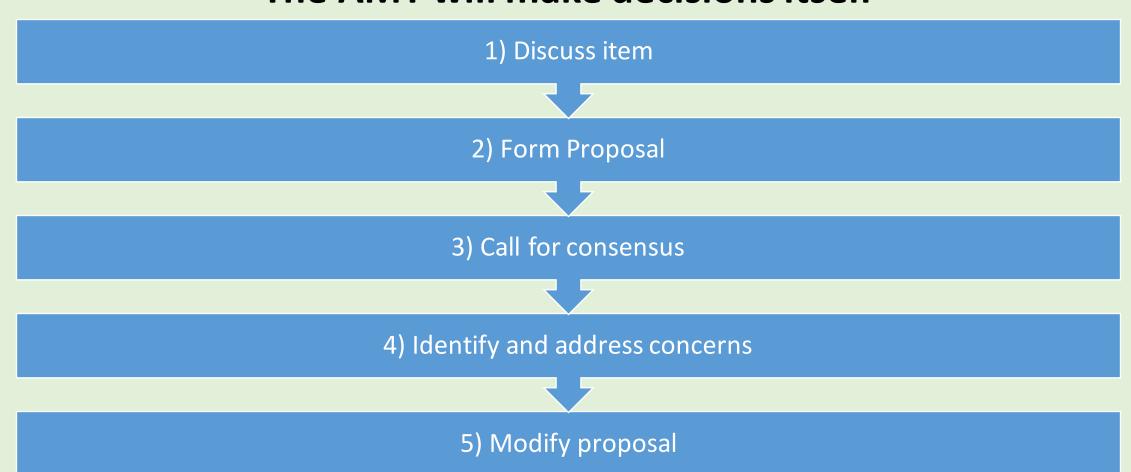
Table 3. Chair time commitment breakdown		
Activity	Time commitment (Hrs./Mo.)	
Meeting preparation	6	
General activities	4	
Monthly meetings	2	
Meeting agendas	2	
Direct group work	4	
Preparatory meetings	1	
Post meeting briefs	1	

## Partnership Requested Topics

CROP	ANIMAL	MANURE	INORGANIC FERTILIZER	MODELING
Crop nutrient application	Reevaluate animal types	Dissolved Air Flocculants (DAF)	Soil and Water Extractable Phosphorus	Nutrient Application
Agricultural plant categories	Feeding operations	Manure Storage	Fertilizer breakdown	Land Use
Legume nitrogen fixation	Animal mortality	Nitrogen mineralization	Revisit AAPFCO NH4 to NO3	Cover factors
Timing of crop nutrient applications	Size	Transport	Biologicals	Evaluation of alternative agricultural data sources
Nutrient use Efficiency	Feeding additives	Storage and handling losses		Model Structure
Double cropping				
Climate change effects on				
crop types				
Crop uptake vs removal				

## Structure (Consensus)

#### \*\*The AMT will make decisions itself\*\*



#### **Consensus Continuum**



#### Stop

"I do not agree and feel the need to stand in the way of this decision"

#### Hold

"I believe more work is needed before we make a decision"

#### **Stand Aside**

"I trust the group and will not block this decision but need to register my disagreement"

#### Agreement with Reservations

"I can live with it"

#### **Endorsement**

"I like it"

## Summary

#### We will:

- Discuss a data item
- Examine issues associated with it
- Propose solutions
- Decide on the best one

## Questions?



## AMT Membership

Ag Modeling Team Voting members	* = Non-Voting	
<u>Affiliation</u>	Primary	<u> Alternate</u>
Chair	Zach Easton, VT	None
Delaware	Chris Brosch (DDA)	Clint Gill (DDA)
Maryland	Alisha Mulkey (MDA)	None
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