

## Agricultural Modeling Team (AMT) Meeting

May 9<sup>th</sup>

09:00 AM – 11:00 AM

[Meeting Materials](#)

Microsoft Teams: [Join the meeting now](#)

Meeting ID: 246 929 423 243

Passcode: z872qn

Dial-in by phone: [+1 202-991-0477,,913721509#](#) United States, Washington DC

*This meeting will be recorded for internal use to assure the accuracy of meeting notes.*

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### Statement of purpose:

*Determine whether to utilize a new method of projecting crop yield trends, discuss Ag Land Use mapping, evaluate inorganic fertilizer data sets, evaluate animal concerns for Phase 7.*

### Decision items:

1. Approve the [April minutes](#).
2. Decide on the adoption of a new method to predict crop yield trends.

### Announcements:

- None

### **Introduction/Recap: 09:00-09:15 [15 min (Zach Easton, Virginia Tech)]**

Zach will go over the group's timeline and a list of topics we have yet to cover. Feedback will be requested regarding what the group wants to tackle with the time remaining. **Feedback requested post meeting.**

### **Crop Yield Trends 09:15- 09:45 [30 min (10 min presentation 20 min discussion) (Joseph Delesantro, ORISE)]**

We will seek approval of the new method for calculating long term average crop yields for Phase 7. This method utilizes a statistical framework to predict the expected and average yields which influence nutrient applications and uptake respectively. **Decisional.**

### **Ag Land Use Mapping Data 09:45-10:30 [45 min (20 min presentation 25 min discussion) (Sarah McDonald, USGS)]**

We will hear from the Land Use team regarding the determination of the agricultural footprint within the Chesapeake Bay watershed. **Informational.**

### **Inorganic fertilizer data update 10:30-10:45 [15 min (5 min presentation 10 min discussion) (Tom Butler, EPA)]**

Efforts have been underway to compare inorganic fertilizer datasets. One such comparison has been done regarding a dataset called [TREND](#) and the current Phase 6 fertilizer dataset. We will share and discuss the results of this comparison. **Informational.**

### **Animal Systems Excess Discussion 10:45-10:55 [10 min (10 min presentation) (Bill Keeling, VA DEQ)]**

It has been brought to the partnership's attention that circumstances have arisen where BMPs are being submitted in excess of what CAST shows possible. In these cases, excess BMPs are not given credit within CAST. We will begin to hear about some of these circumstances and discuss why there is excess implementation, especially waste management BMPs which are commonly engineered and expensive. [Informational](#).

**Recap/Closing 10:55-11:00 [5 min (Zach Easton, VT)]**

**Action Items:**

- Decision: Crop Yields update.
- Discuss how the group would like to proceed on its topics list given the finite time remaining, Land Use data, inorganic fertilizer and animal BMP calculation concerns.

**Adjourn – 11:00**

**Up Next:**

Office Hours: Friday, June 13<sup>th</sup>, 2024, from 8:00 - 9:00 am.

AMT Meeting: Friday, June 13<sup>th</sup>, 2024, from 09:00 - 11:00 am.

**\*\*Common Acronyms**

AgWG- [Agriculture Workgroup](#)

AMT- [Agricultural Modeling Team](#) (Phase 7)

BMP- Best Management Practice

CAST- [Chesapeake Assessment Scenario Tool](#) (user interface for the CBP Watershed Model)

CBP- [Chesapeake Bay Program](#)

CBPO- Chesapeake Bay Program Office (houses EPA, federal partners, and various contractors and grantees working towards CBP goals)

CBW-Chesapeake Bay Watershed

CRC- [Chesapeake Research Consortium](#)

EPA- [United States] Environmental Protection Agency

PSC – [Principals' Advisory Committee](#) (CBP)

Sandbox Decision – A tentative decision made via consensus; these are made to allow for more focused testing of CAST.

STAC- [Scientific & Technical Advisory Committee](#)

TMDL- Total Maximum Daily Load

WQGIT- [Water Quality Goal Implementation Team](#)