AMS Update to Ag Workgroup

03162017

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Items for Final Phase 6 Model

- **Approved by Ag Workgroup**

- **Pending Approval by Ag Workgroup**

- **Use of Revised Swine Manure Data**

- **Soil History Methods**

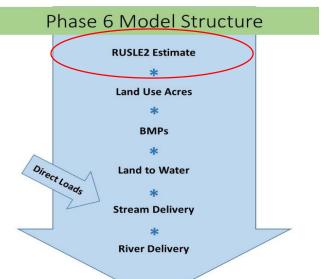- **RUSLE2 Revisions for Sediment Calculations**
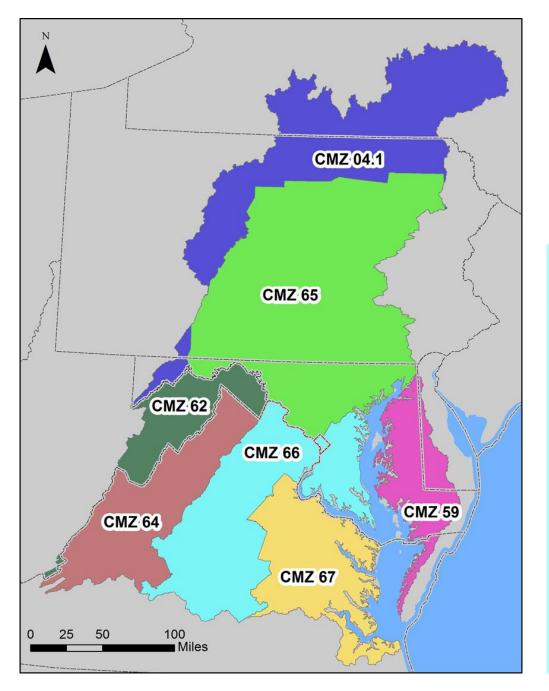
Background/Question

- STAC review indicated inconsistencies in C-management factors.
- AMS, Ag Workgroup, Modeling Workgroup, WQGIT and MB approved responses to STAC review which included a promise to work with a STAC-selected RUSLE expert to review and potentially revise C-management factors.
- AMS recommends using revised RUSLE2 results presented today.
- **Does the Ag Workgroup approve the use of these revised RUSLE2 results?**
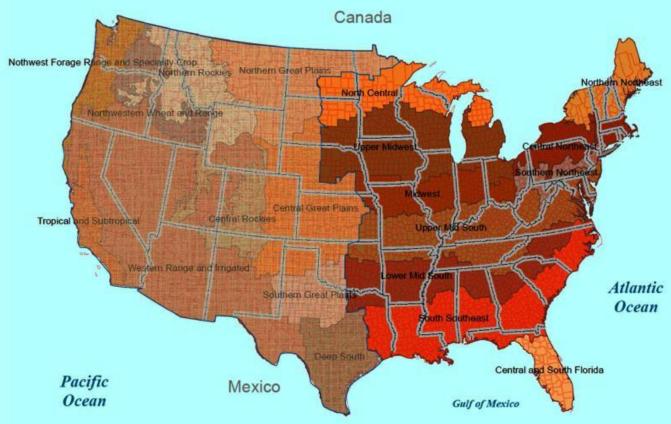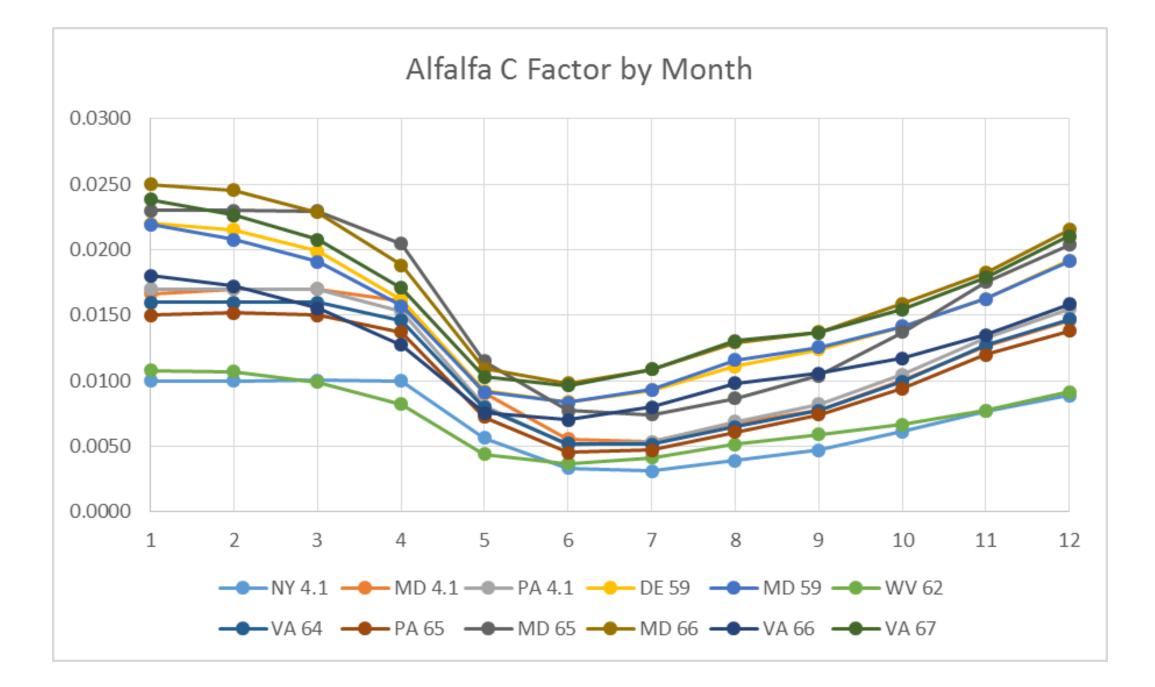
RUSLE2 => A = RKLS<u>C</u>P

- R = Runoff
  - $= 1.24P^{1.36}$ P from PRISM

- K = Erodibility
  - from STATSGO and gSSURGO

- LS = slope length
  - $= (\text{Flow Accumulation x Cell Resolution} / 22.1)^{0.4}$ x $(\text{Sin}(\text{Slope x } 0.01745) / 0.09)^{1.4}$ x 1.4

- C = C-Management Factor
  - ~~from Tetratech and AgWG~~
  - STAC via Dave Lightle

- P = Practice
  - = 1 since no action loads

Phase 6 Model Structure

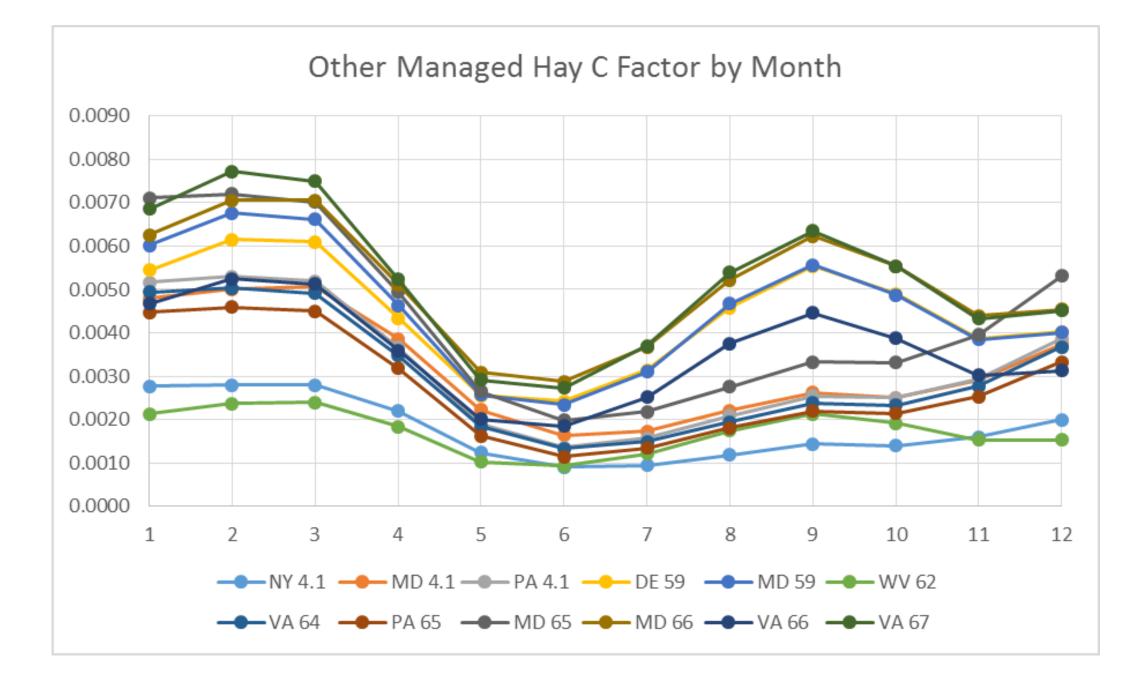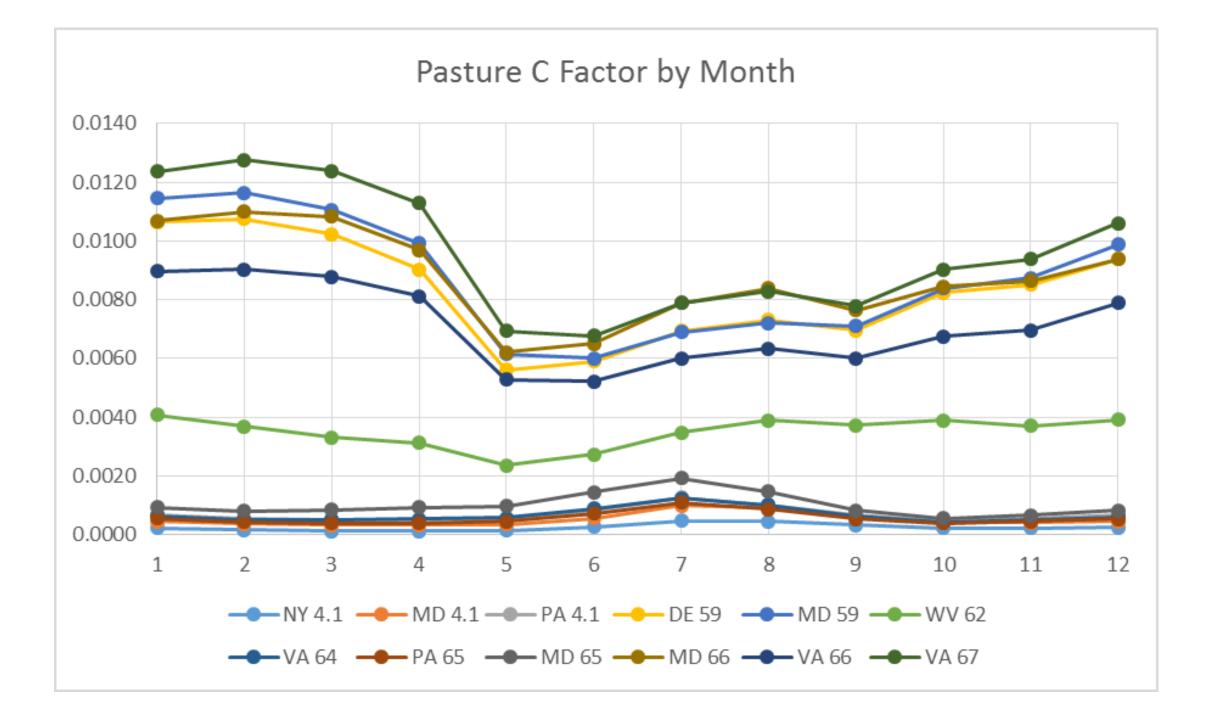RUSLE2 Estimate
*
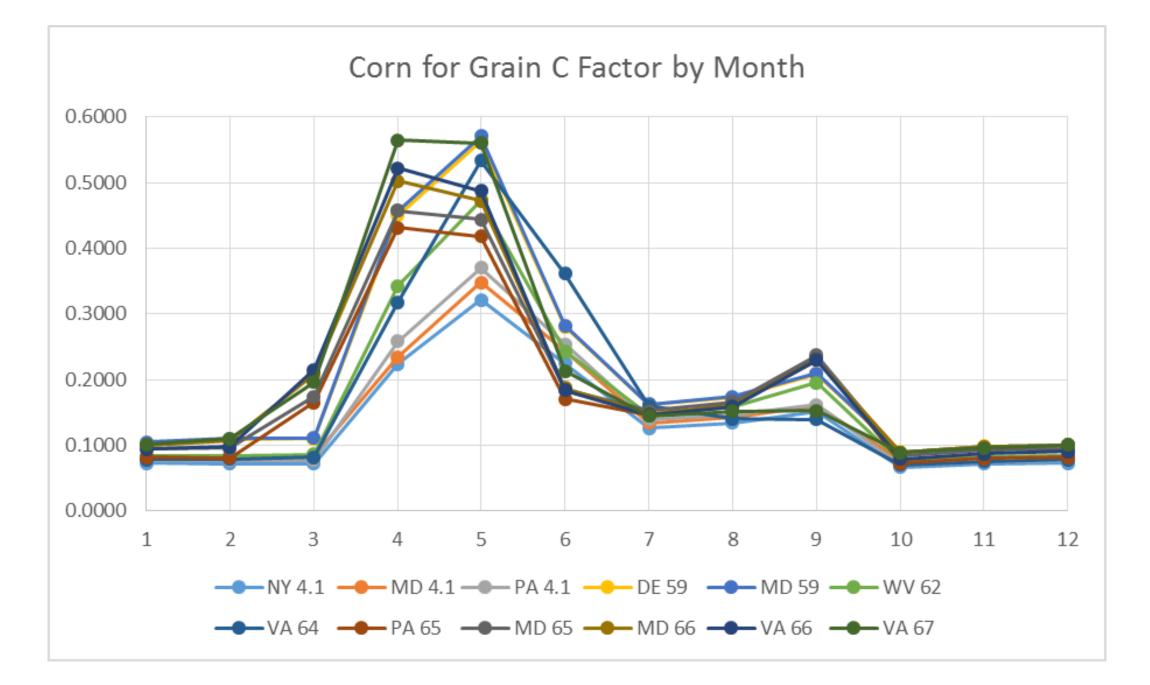Land Use Acres
*
BMPs
*
Land to Water
*
Stream Delivery
*
River Delivery

Direct Loads

State CMZs and Forage Production Zones

Alfalfa C Factor by Month

Other Managed Hay C Factor by Month

Pasture C Factor by Month

Corn for Grain C Factor by Month

Legend: NY 4.1, MD 4.1, PA 4.1, DE 59, MD 59, WV 62, VA 64, PA 65, MD 65, MD 66, VA 66, VA 67

Corn for Silage C Factor by Month

Legend: NY 4.1, MD 4.1, PA 4.1, DE 59, MD 59, WV 62, VA 64, PA 65, MD 65, MD 66, VA 66, VA 67

Winter Wheat C Factor by Month

Soybean C Factor by Month

Legend: NY 4.1, MD 4.1, PA 4.1, DE 59, MD 59, WV 62, VA 64, PA 65, MD 65, MD 66, VA 66, VA 67

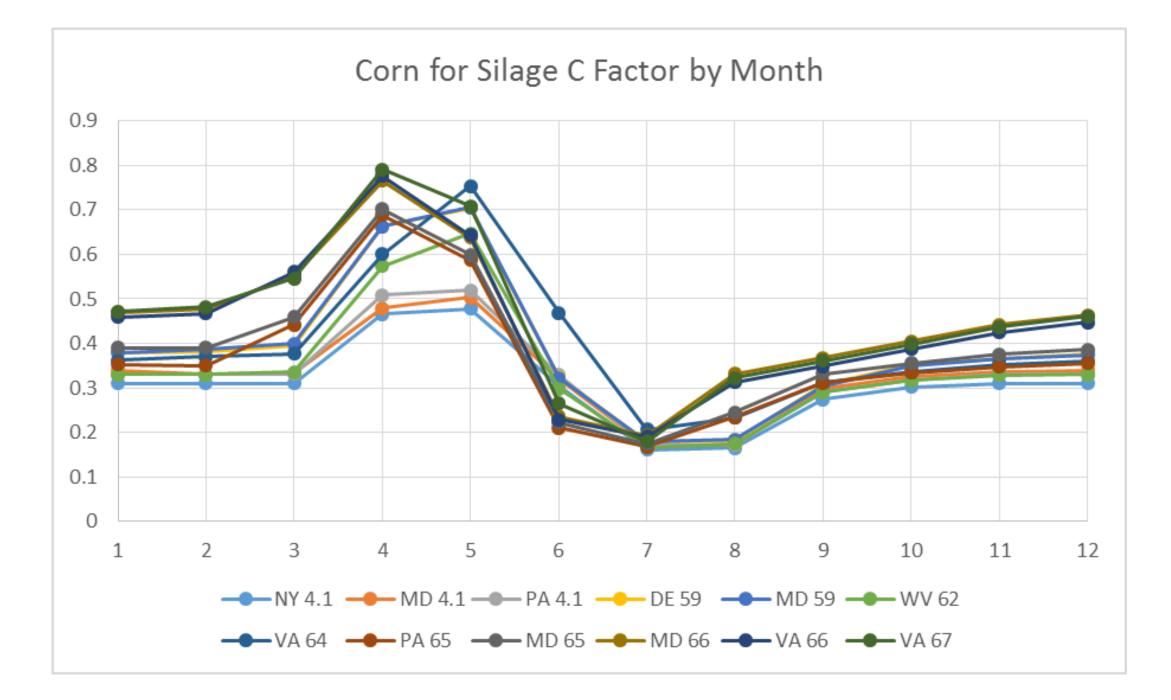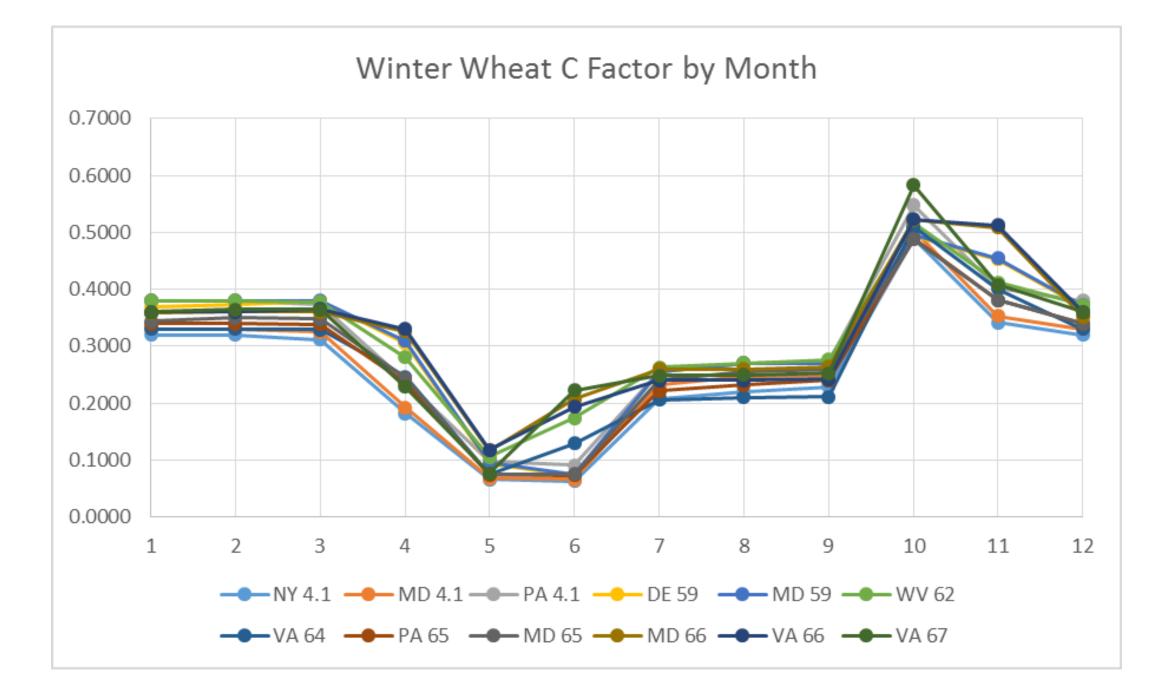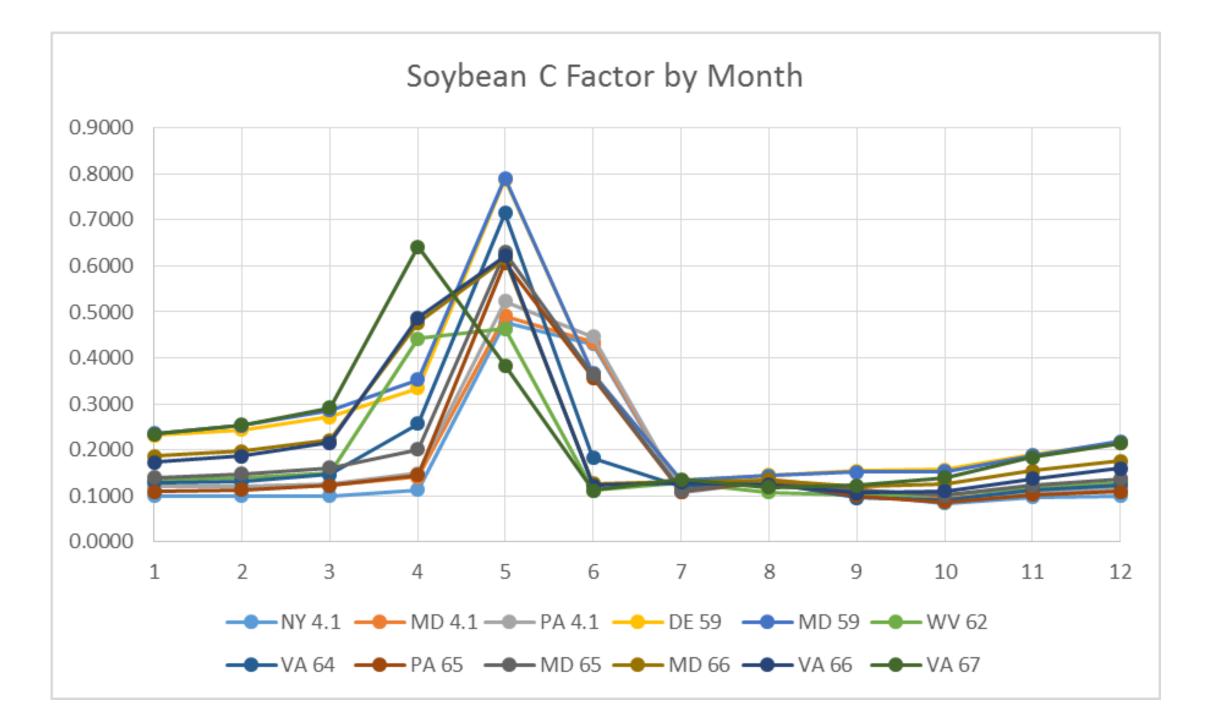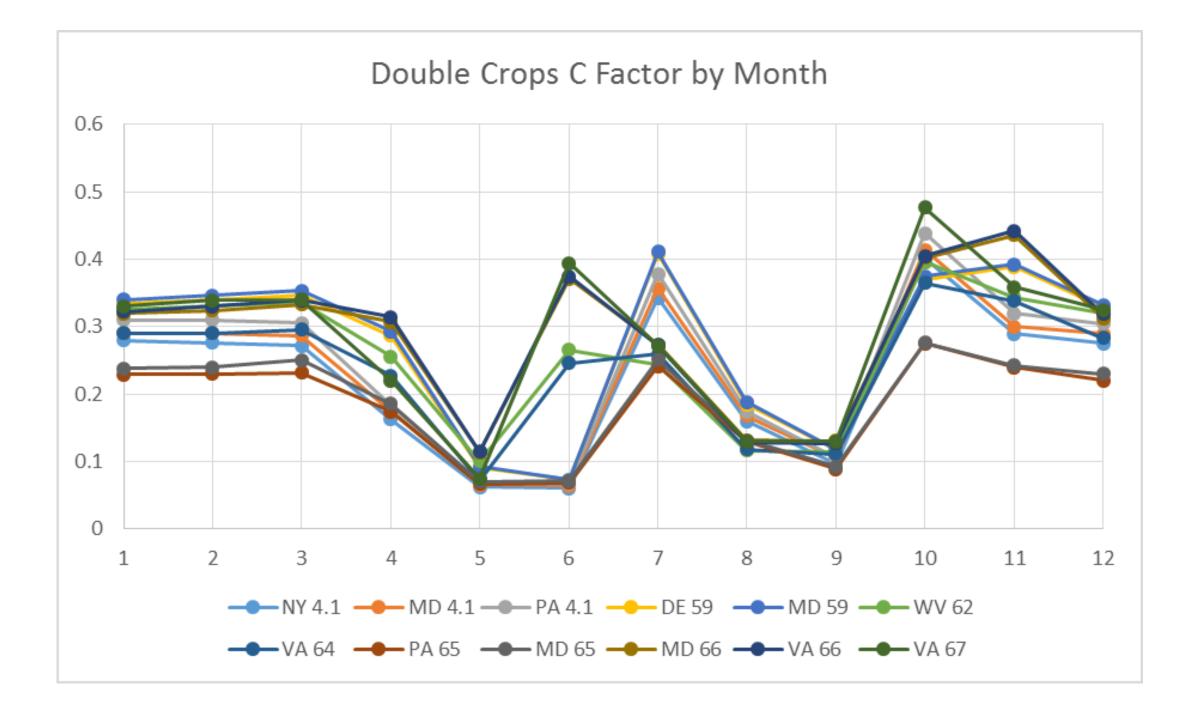Double Crops C Factor by Month

Background/Question

- **Does the Ag Workgroup approve the use of these revised RUSLE2 results?**

What's Next for the AMS?

- March – Spring Break!
- April – Continue discussions regarding how best to use of APLE model for future scenarios (progress, milestones and WIPs)
- May – Inputs may be available for detailed review by AMS (allowing a jump-start of the fatal flaw review)
- June – Begin compiling partnership comments for fatal flaw