Agricultural Modeling Team Update

Tom Butler, EPA-CBPO 4/3/2023

Outline

Background

Working with the modelers

Progress and next steps

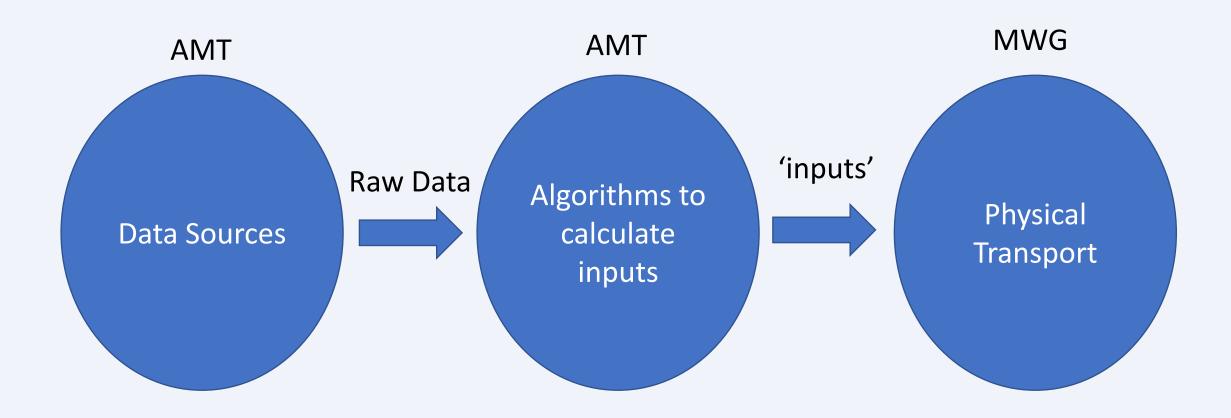
Agricultural Modeling Team

Technical

Ag input data

Phase 7

CAST Domains



Phase 7 CAST

Average Load



△ Inputs * Sensitivity

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BMPs

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Acres

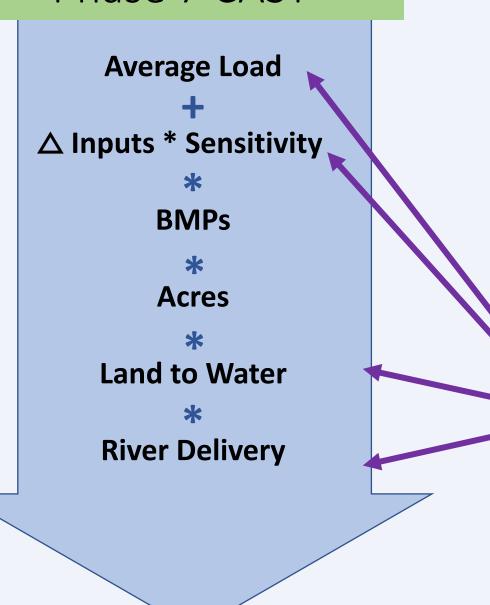
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Land to Water

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River Delivery

Phase 7 CAST



Modeling Workgroup

Phase 7 CAST **Average Load** Inputs * Sensitivity **WQGIT-BMPs Acres** Modeling **Land to Water** Workgroup **River Delivery** Load by land-river segment and land use

Phase 7 CAST **AMT Average Load** Inputs * Sensitivity **BMPs WQGIT-Acres** Modeling **Land to Water** Workgroup **River Delivery** Load by land-river segment and land use

Connecting with CBPO models

- Help identify agricultural sources for calibration
- Contribute expertise
 - Sensitivities change in output for each input
 - Agricultural topics

△ Inputs * Sensitivity

Progress to date

August 7^{th,} 2022

• Charge was approved

November 1st and 2nd

• Introductory meeting

March

- Finalized workplan
- Decision making











October 11th, 2022

• Membership approved

December – February

• CAST learning

Next steps

Tier 1 Topics
Crop nutrient application
Re-evaluate Land Uses
Manure production factors
Nutrient Application
Legume nitrogen fixation
Timing of crop nutrient applications
Manure storage and handling losses
Crop uptake vs removal

- CAST scenario testing
- Group consensus

Questions?