

AMT recap

AMT

3/8/2024

Our decision total is two!

Test no timing for manure application.

Further investigation into the existing Agriculture Land Uses is warranted.

Group time check

- [24 initial topics](#)
 - Few decisions on these topics have been made
- We're a little off track THAT IS OK
- We do have a timeline though
 - November 2025
- If we haven't made changes to a topic by then we stick with the Phase 6 methodologies
 - THAT IS FINE TOO

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
Nitrogen mineralization
Manure Transport
Double cropping
Re-evaluate animal types
Agricultural plant categories
Soil and Water Extractable Phosphorus
Housing and in field volatilization
Ensure Model data transparency
Re-evaluate Cover factors
Fertilizer bucket scale processing (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)
Examine potential Agricultural data sources (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)
Feeding operations (NOTE Land Use information will be available to address this issue in 2024)
Additional Soil nutrient supplement groups
Revisit AAPFCO NH4 to NO3 (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)
Climate change and crop types
Biologicals

Some things to gear up for (NOT exhaustive):

- **Manure Production Factors**
 - Issue: We have at least one instance in which a layer operation of 5 million birds was not counted. These must be factored in.
 - Improvement: Animal population estimates.
 - Issue: The use of Animal Units to represent manure generation excludes variability in species across areas.
 - Improvement: Manure generation estimates.
- **Fertilizer values**
 - Issue: There are concerns that the current fertilizer data source is inadequate and should be replaced/supplemented with multiple lines of evidence.
 - Improvement: Fertilizer data source.
- **Nitrogen fixation**
 - Issue: There are concerns that Legume Nitrogen fixation in CAST is too high.
 - Improvement: Nitrogen Fixation.
- **Nutrient Applications**
 - Issue: Rate of allowable application above the application goal is uncapped.
 - Improvement: Manure and Fertilizer application methodologies.
 - Issue: When manure is transported out of a county it is replaced by fertilizer and can increase loads.
 - Improvement: Manure and Fertilizer application methodologies.
 - Issue: There are concerns that using a watershed wide fertilizer bucket is not accurately representing each states fertilizer use and splitting this for each state would be more accurate
 - Improvement: Fertilizer application methodology.

What are we focused on today?

Crop Yields

- Monthly Update

Land Uses

- CAST Land Uses
- Loading Ratios

Questions?