

Nutrient Placement and Usage

Building a Better Bay Model

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Why are we here?

- Provide an overview of current nutrient use and application simulated in the Model
 - Explore potential new opportunities to represent the use of nutrients across the agricultural landscape
 - Data sources
 - Suggestions for methods to collect
 - Barriers/constraints to getting the data
 - When possible, need past data too
- Goal: Build a better Bay Model with better data, and identify methods for collecting this data.

Ground Rules

- Speak when acknowledged by facilitator
- Some topics will be put in the Parking Lot
- Support a civil and collegial environment
- Others?

Discussion Question Categories

- Nutrient Management Planning
- Chemical Fertilizer
- Manure
- Pasture
- Biosolids

Nutrient Management Planning

- Currently have # of acres under “NMP”
- Number and type of plans
 - P or N based?
 - How to get what is happening with rates and timing?
 - How to better quantify reductions in applications that happen as a result of NMP?

Chemical Fertilizer

- Sources and methods for collecting data:
 - Nutrient content
 - Timing and rate of application
 - Crop
 - Type
 - Yield
 - Uptake
- Is using chemical fertilizer sales data preferable to estimating application based on manure nutrients, crop types, uptake, etc.?

Manure

- Sources and methods for collecting data:
 - Nutrient content
 - Timing and rate of application
 - Type (currently based on ASAE standards: nutrient content and volume per animal unit)
 - Dairy
 - Beef
 - Swine
 - Poultry
- How can we better quantify manure analysis data
- How can we better quantify animal numbers?
- Mineralization vs. organic nutrient content (available for crop uptake)?

Manure Excess

- How and when is excess manure applied on animal operations?
- How and when is excess manure applied on farms without animal production?
- What data are available regarding manure transported between operations?
 - How could this be tracked (credited or added)?

Pasture

- What is pasture land nutrient management?
- Does this definition vary from state to state?
- What data can help represent Pasture NMP?

Biosolids

- Should the model account for application of bio-solids across all jurisdictions (only VA is reporting currently)?
- What data is available for estimating nutrient content, application rates and timing?