

# Crop Nutrient application Timing and Eligibility

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# Framing the discussion:

The Chesapeake Assessment Scenario Tool (CAST) simulates nutrient applications onto Agricultural lands.

A large blue downward-pointing arrow connects the first box to the second box.

A **specific file** within this tool restricts the time in which applications can occur as well as the source of nutrients.

A large blue downward-pointing arrow connects the second box to the third box.

Some of the state inputs to this file have created unrealistic nutrient applications

What is in this *specific file*?

## Timing

- Defines when nutrients can be applied to a crop

## Eligibility

- Defines what type of nutrient can be applied to a crop
  - Organic nutrients
  - Inorganic nutrients

# What is the issue?

- Timing and eligibility requirements can artificially impose an unrealistic application of manure nutrients.

## Applications

- Changes where applications go

## CAST averaging

- Timing and eligibility are quickly aggregated

# CAST Nutrient application process

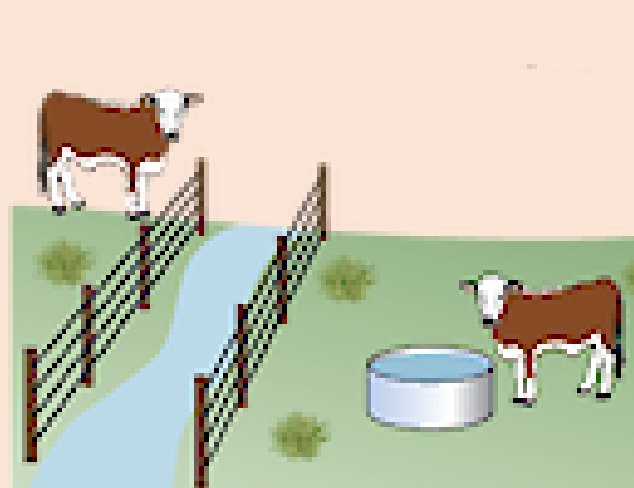
- Nutrients are generally first applied from organic sources then inorganic sources

Grains and specialty crops



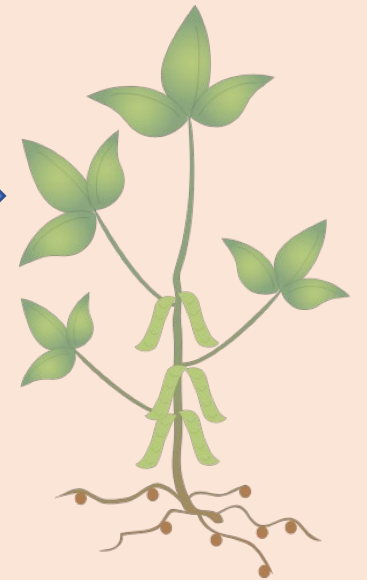
Nutrient  
application

Non Legume hay/pasture

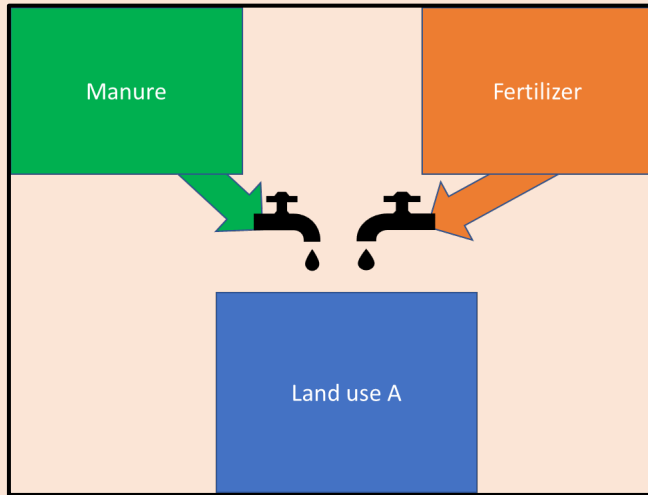


Nutrient  
application

Legume Hay/Row crops

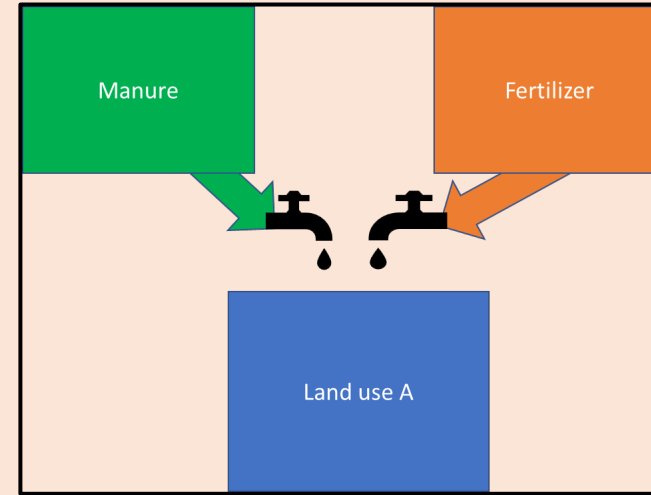


# An important caveat:

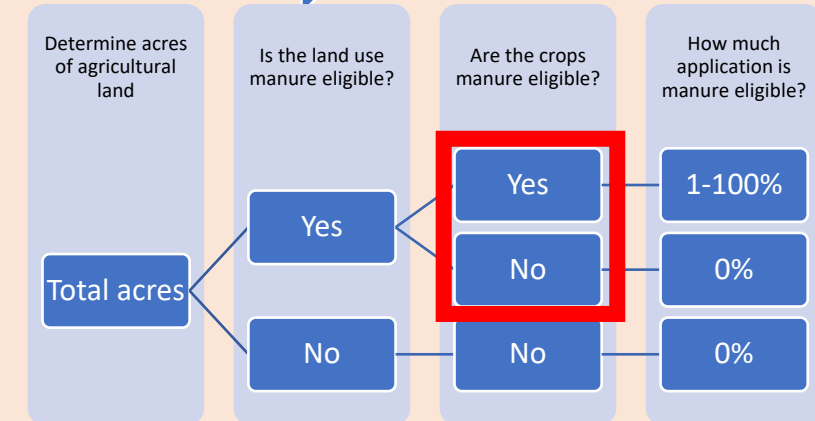
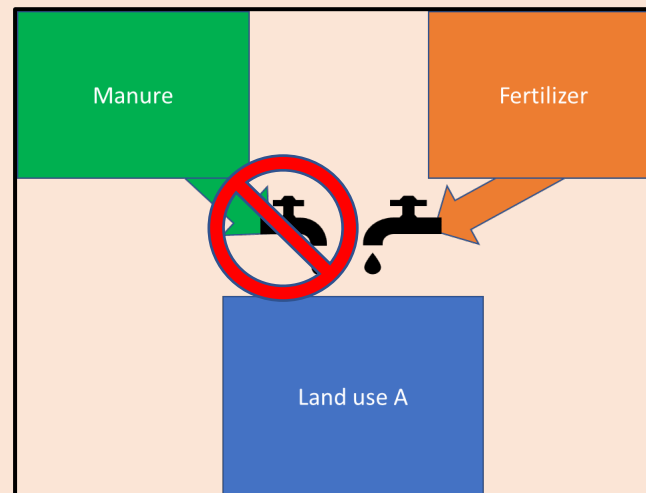


-30 days before planting

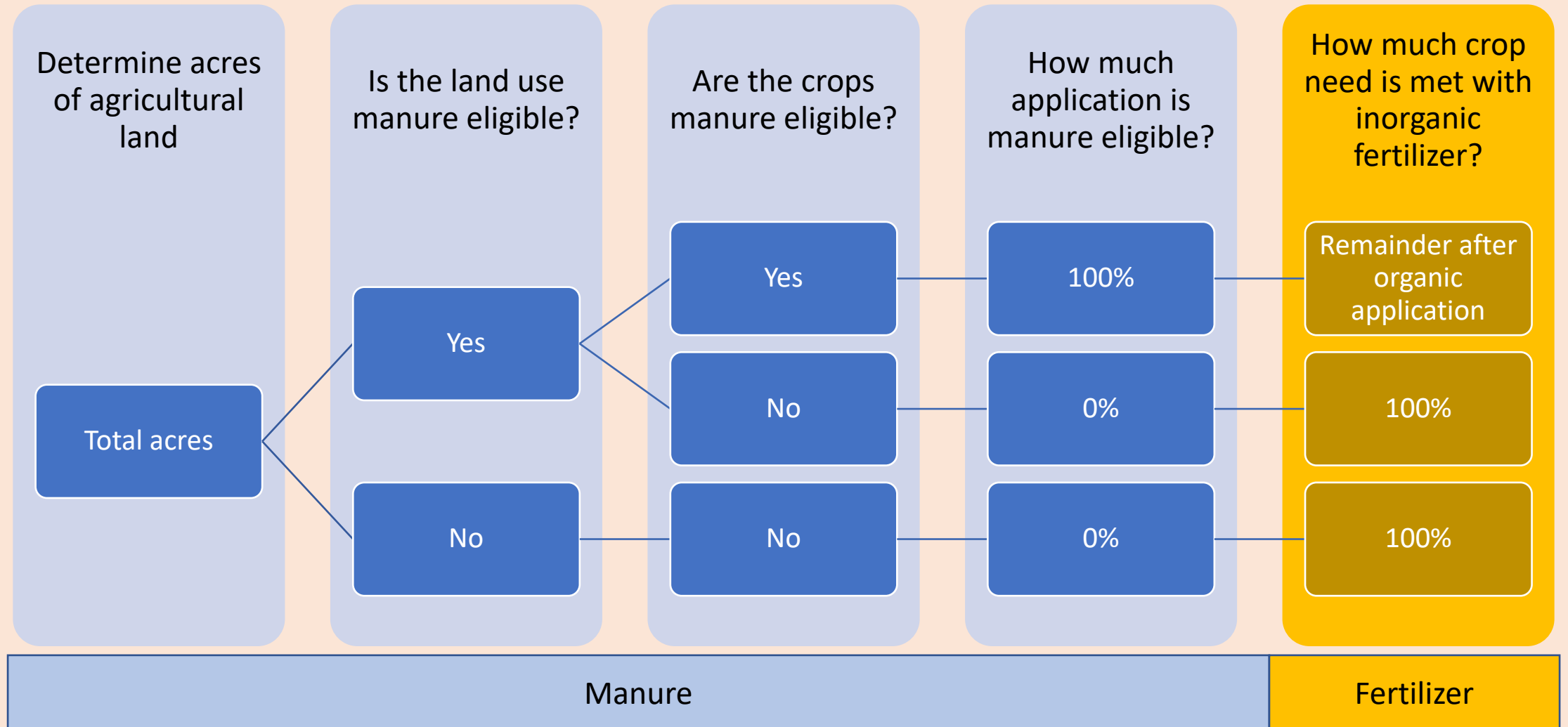
Planting



60 days after planting



# Nutrient eligibility visualized:



# Summary

Currently CAST has a file in place which restricts the source and timing of nutrients to simulate real world applications.

These restrictions in some jurisdictions have lead to an unrealistic distribution of nutrients in the agricultural sector.



# Tentative path forward: decision tree

NOTE\* this assumes:

1. we can make the WQGIT in the same month as the AgWG
2. Decisions are finalized at the WQGIT level

Decision item

Sept 21<sup>st</sup>  
AgWG

Sept 25<sup>th</sup>  
WQGIT

Oct 19<sup>th</sup>  
AgWG

Oct 23<sup>rd</sup>  
WQGIT

Make crop nutrient applications to be **both manure and fertilizer eligible** if the crop/land use allows it

AgWG Consensus vote approval

WQGIT consensus approval

AgWG consensus vote NO approval

WQGIT update

AgWG consensus vote approval

WQGIT consensus vote

Questions?

## AgW/G consensus proposal: The ask

Several jurisdictions request changing all crop nutrient applications to be both manure and fertilizer eligible if the crop/land use allows it.