Agriculture Data Input Updates

Tom Butler 4/20/23

Two major efforts underway

Fertilizer Expert Group (FEG)

- 3 month timeframe
- Phase 6 of CAST (current version)
- Singular focus

Agricultural Modeling Team (AMT)

- 3 year timeframe
- Phase 7 of CAST (next version)
- Broad array of topics

Fertilizer Expert Group

The group recommends the continued use of AAPFCO fertilizer sales tonnage for records prior to 2016.

a. The group recommends using the existing AAPFCO records for NY which have been held constant since 2015.

The group has recommended that state-reported fertilizer sales tonnage be used from 2017 onward if available from states making up at least 50% of the historic fertilizer sales.

The group recommends no change to the procedure for calculating applications for scenarios beyond the last year of fertilizer sales data.

The group recommends the continued use of a basin-wide fertilizer bucket for years with at least 50% of historic sales. To construct the fertilizer bucket with missing data from some states three methods have been proposed:

- a.PREFFERED To calculate the fertilizer bucket tonnage for a year after the last year with full reported data, apply the percentage change for the sum of the states with data to the last year of fully reported data
- b.ALTERNATIVE 1 Continue to use the last reported year for states without reported data.
- c.ALTERNATIVE 2 Use a state-specific trends using the last 15 years of data for states without reported data.

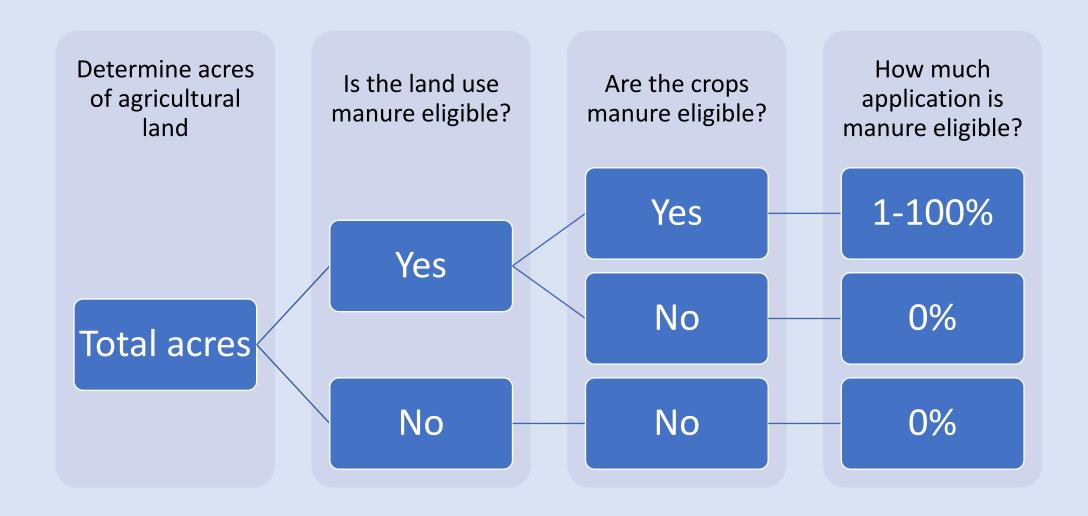
The group further recommends that whenever new state reported fertilizer sales tonnage data are available, they will be incorporated into the next update to CAST.

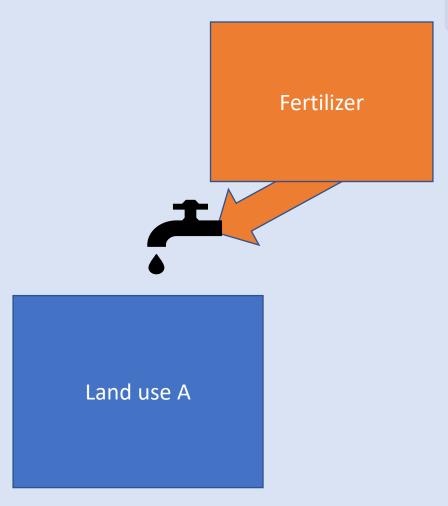
The group has recommended that for Phase 7 the CBPO partnership reexamine the use of both farm and nonfarm categories of fertilizer to calculate agricultural fertilizer applications.

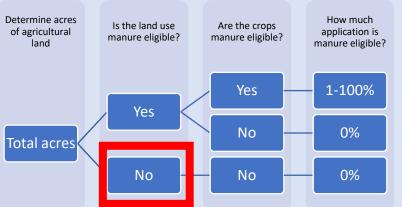
Agricultural Modeling Team

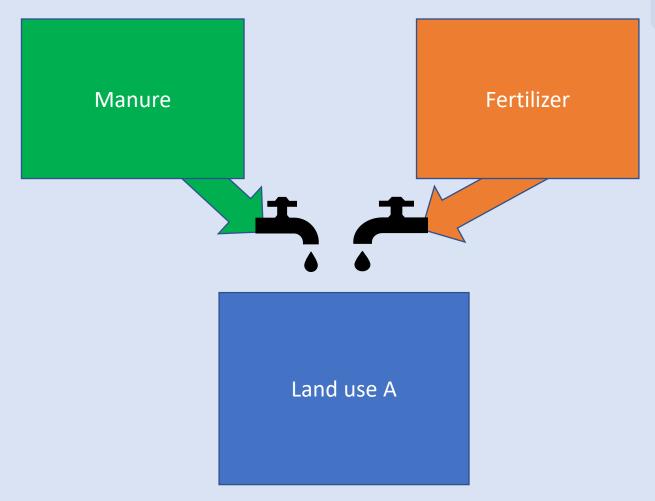
Crop nutrient applications

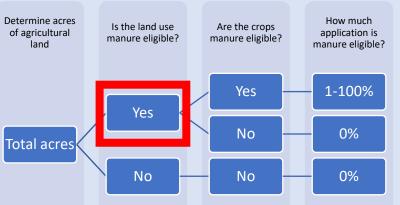
- Timing is captured in the model AND through BMPs
- Models averaged annually
- Impacts manure applications

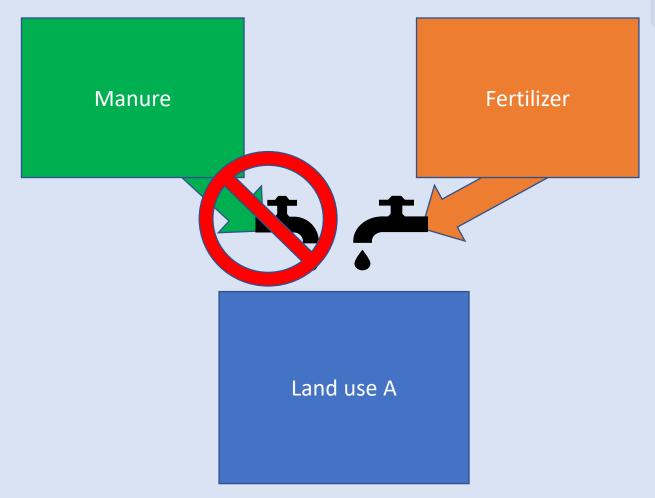


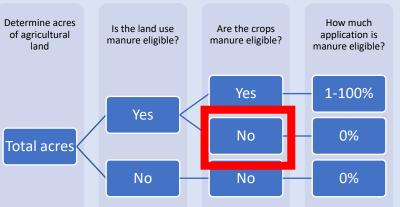


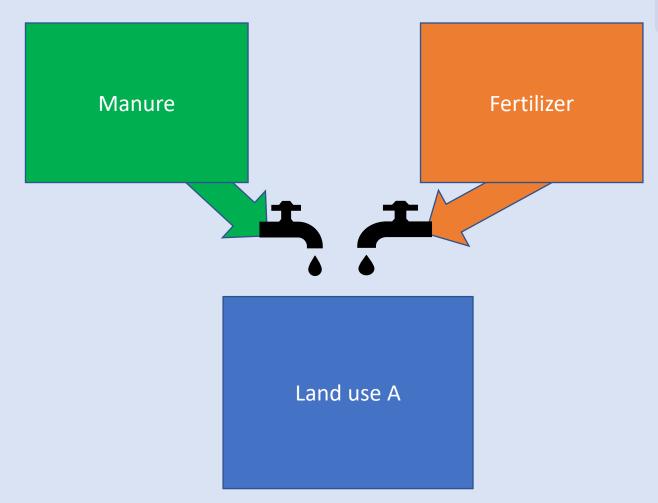


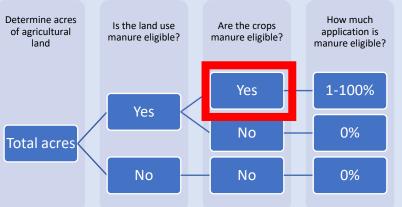




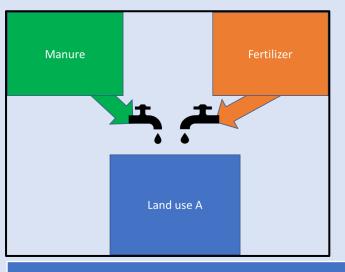








An important caveat



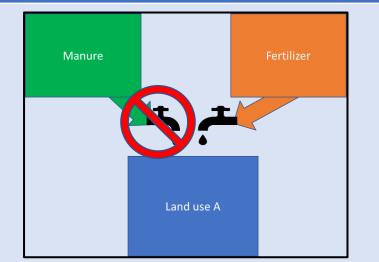
Manure Fertilizer

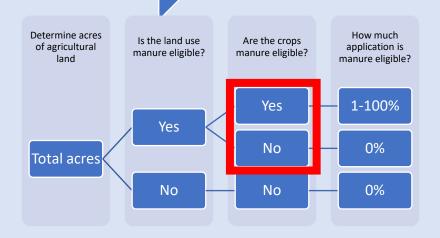
Land use A

-30 days before planting

Planting

60 days after planting





Questions?