

AMT Updates

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AMT Refresh

Phase 7 Chesapeake Assessment Scenario Tool

Decision making

Agricultural Data inputs

What have we been up to?

Crop Yields

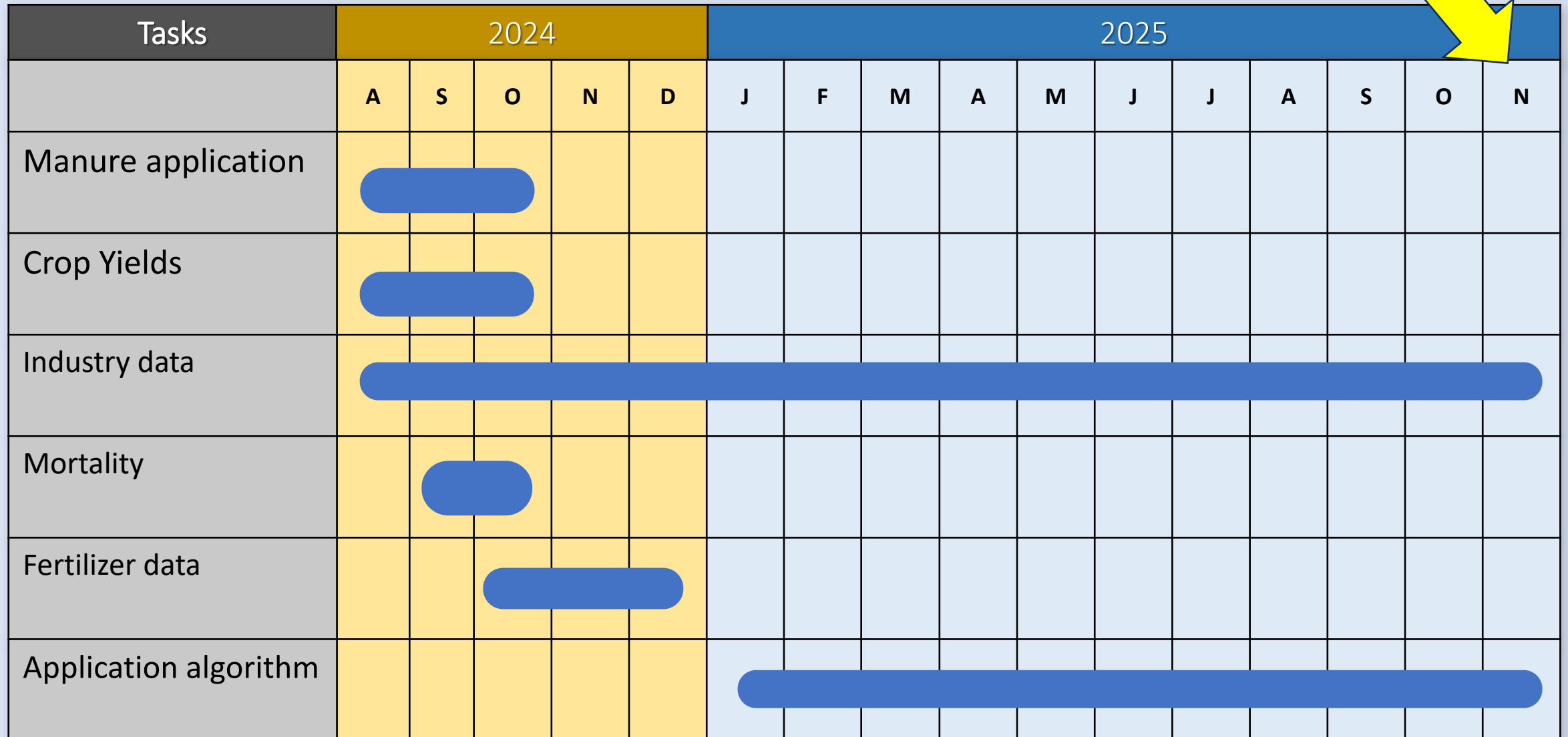
Manure acres

Manure application

Mortality

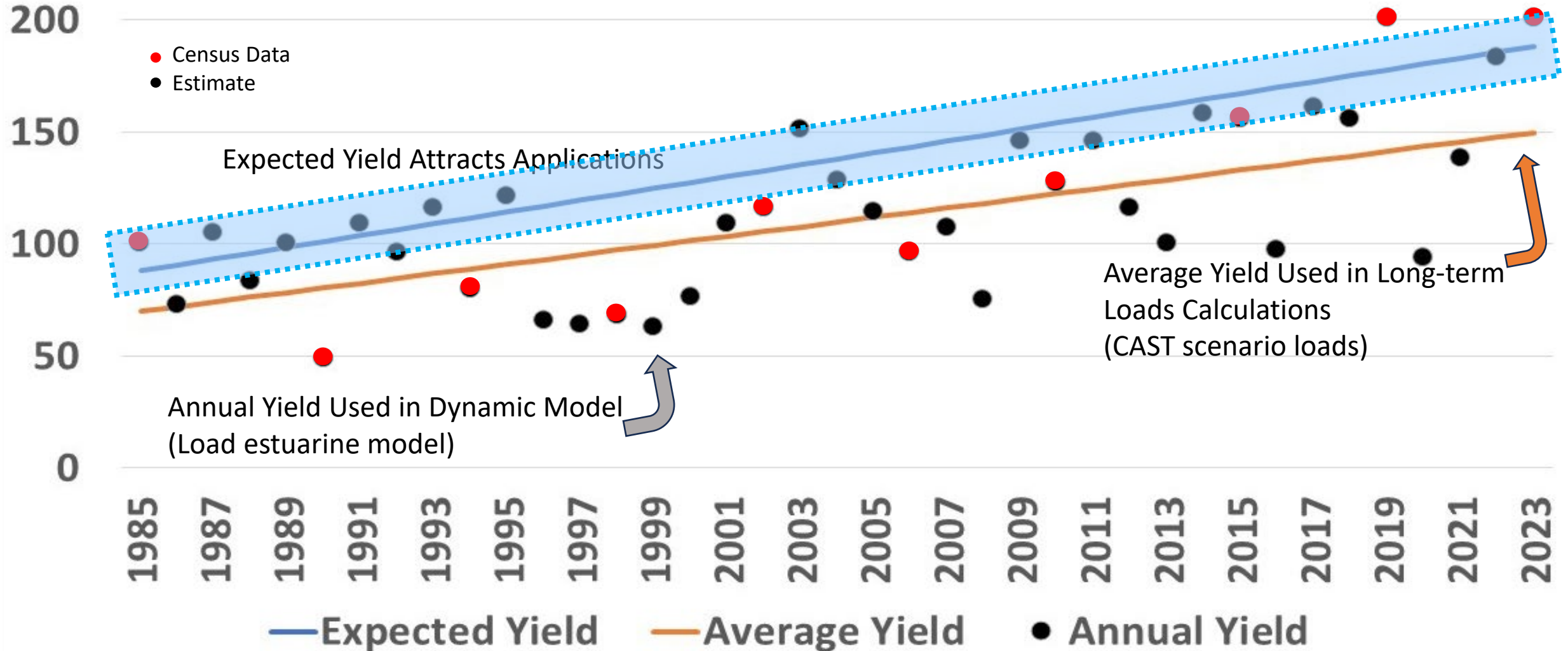
Where do we need to go?
(dates subject to change)

Final decisions



Crop Yields

*EXAMPLE
DATA ONLY

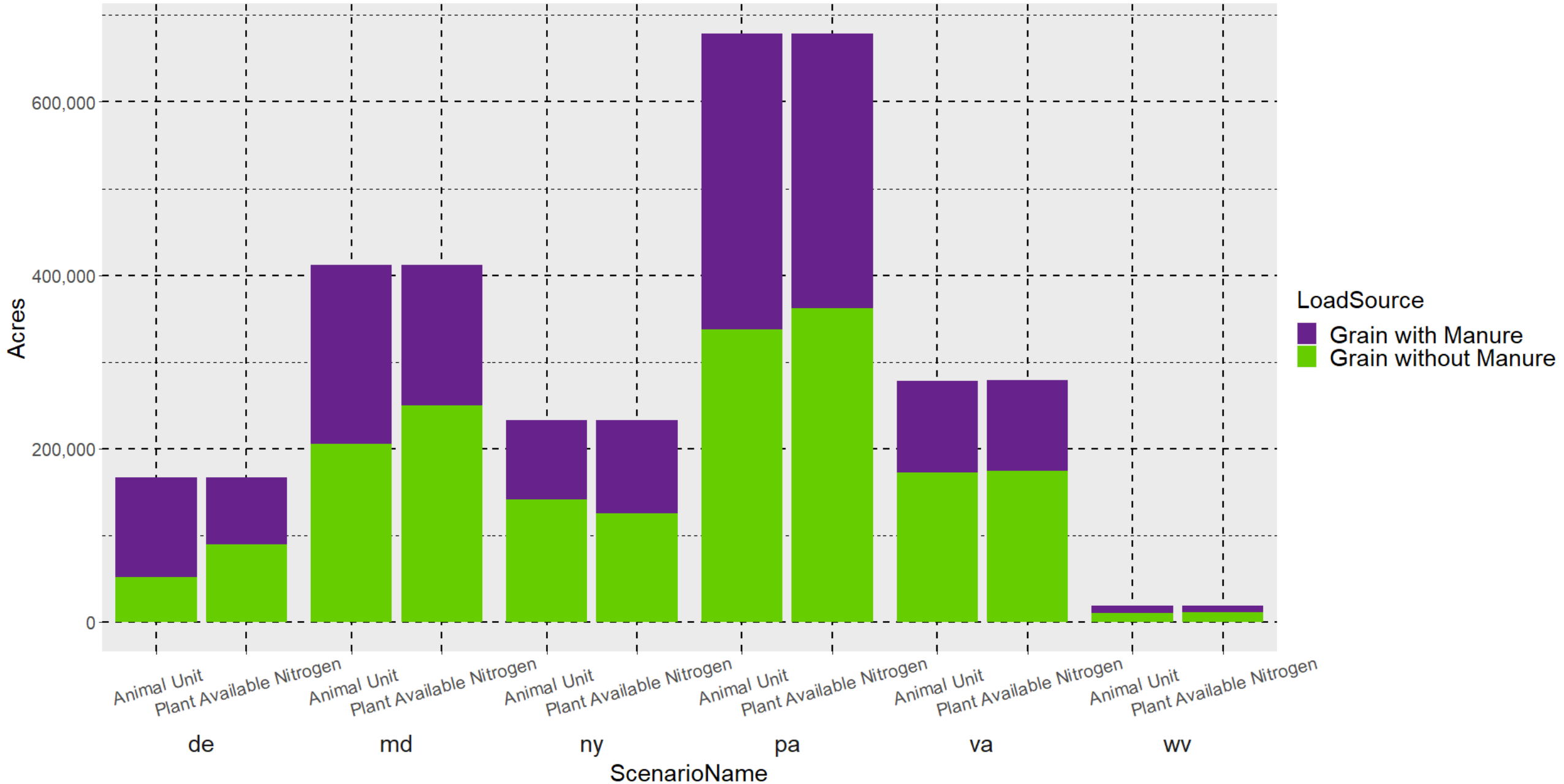


A good starting point for manure:

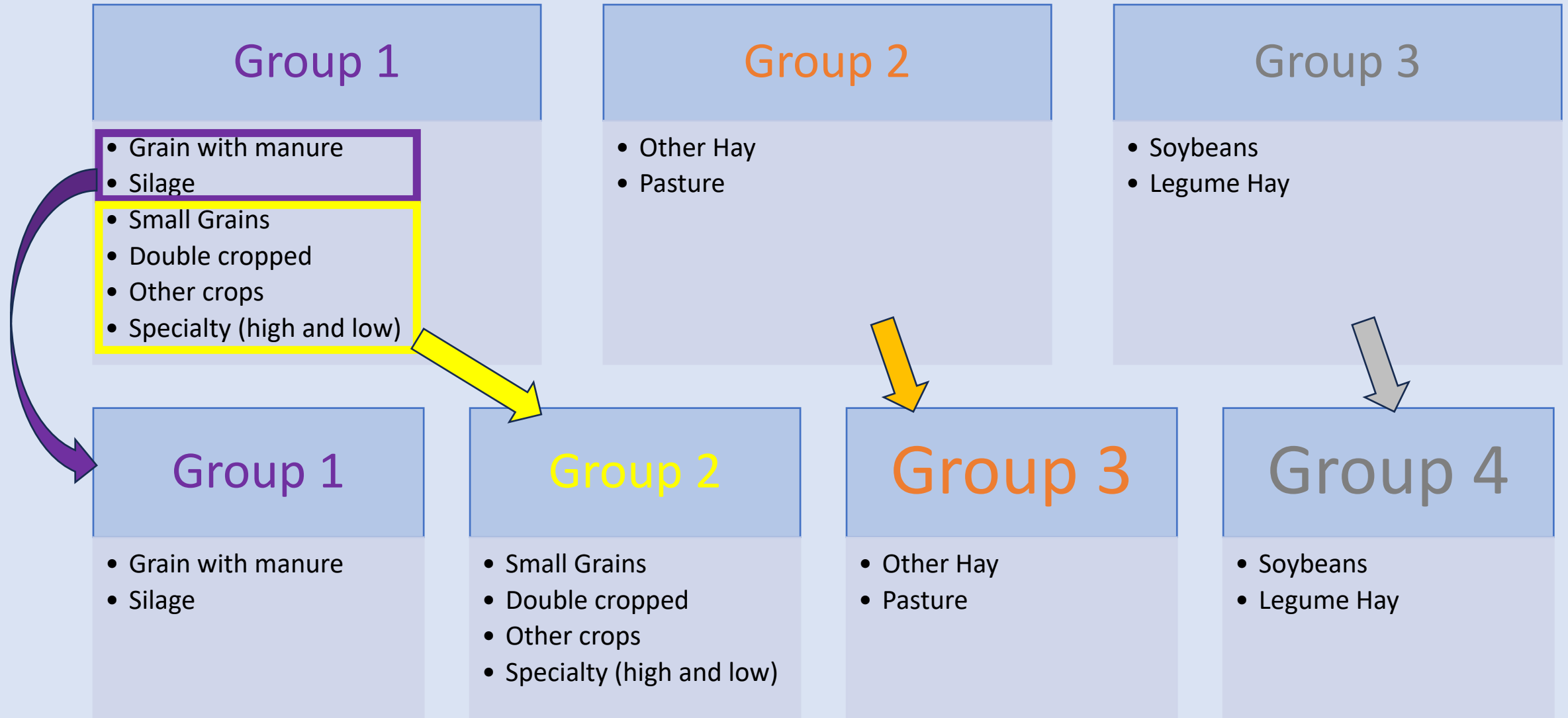
	POULTRY HEAVY*	DAIRY HEAVY**	POULTRY HEAVY*	DAIRY HEAVY**
Animal	Northumberland, PA Animal Units	Steuben, NY Animal Units	Northumberland, PA Stored PAN Lbs	Steuben, NY Stored PAN Lbs
dairy	5,820	28,608	166,795	880,136
layers	3,747	4,301	379,718	435,831
beef	2,133	8,191	14,768	111,974
broilers	27,785	2	252,542	23
goats	36	31	363	310
hogs and pigs for breeding	1,504	121	62,573	5,035
hogs for slaughter	9,216	4,749	101,947	52,539
horses	1,368	4,499	2,059	10,995
other cattle	4,710	13,409	38,187	339,599
pullets	270	329	24,439	29,717
sheep and lambs	136	351	978	2,528
turkeys	8,664	4	86,257	39
Total Value:	65,389	64,595	1,130,626	1,868,726

Manure Acres

AU vs PAN Grains acres compared by state 2020



Manure application categories:



Mortality:

Why do this?

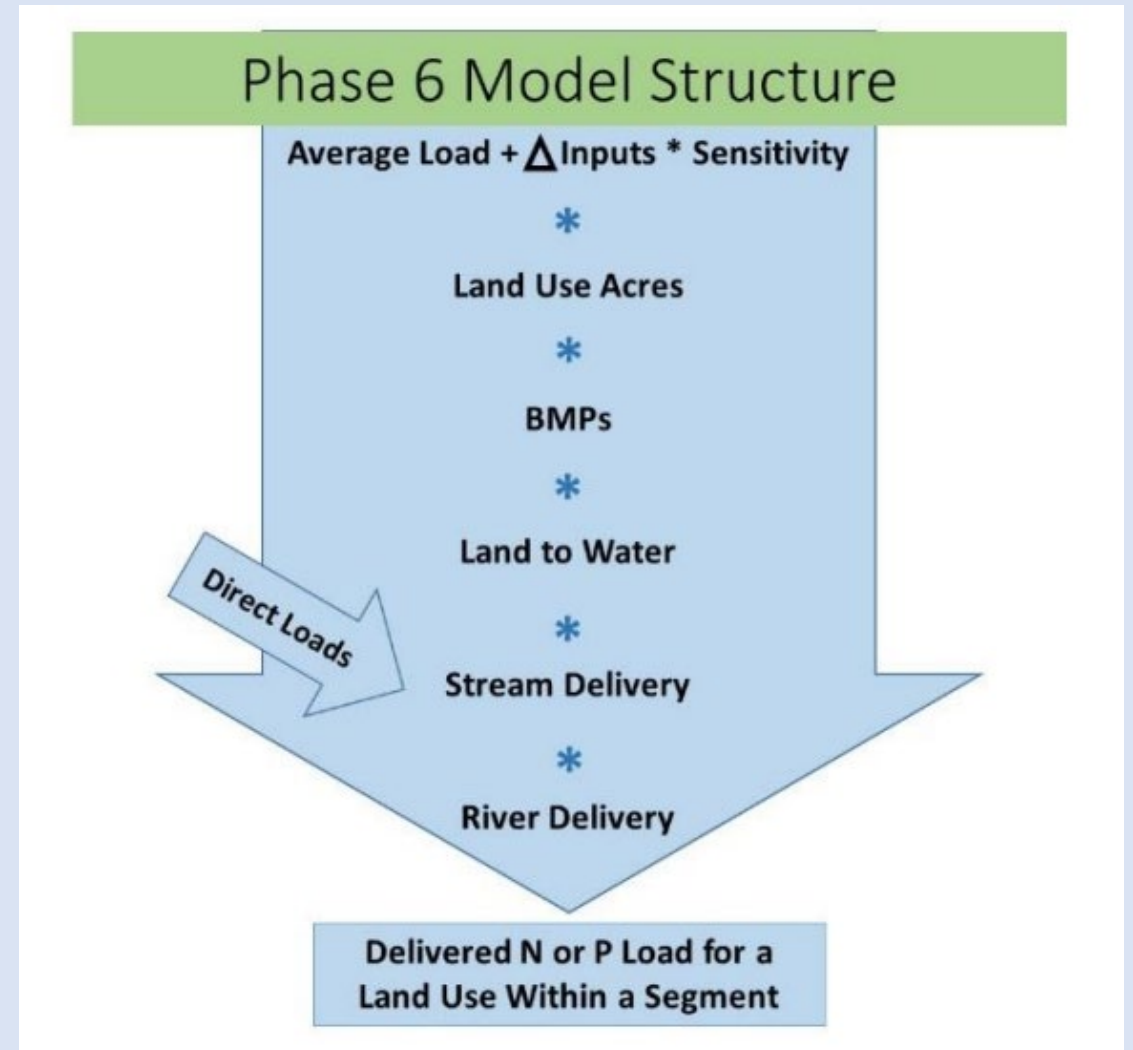
- Improve CAST simulation of mortality nutrients (Expert Panel recommendation).

What are we expected to do?

- Decide if we should adopt a different methodology to simulate mortality nutrients.

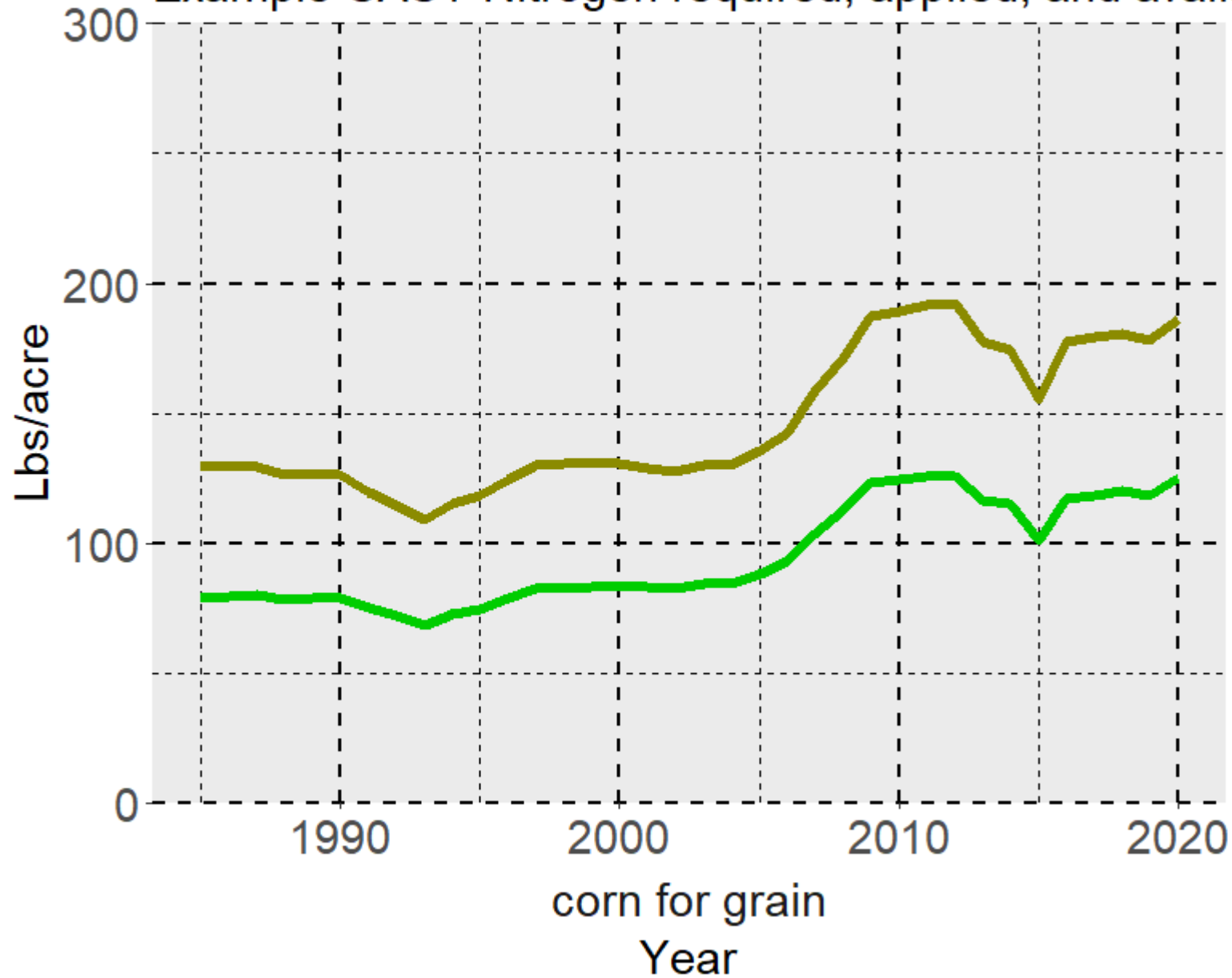
A few things to understand with CAST:

- CAST operates on long term trends
- Differences locally are compared to long term averages



Example CAST Nitrogen required, applied, and available

This what CAST says should be used to meet a known N need based on yield data for corn for grain

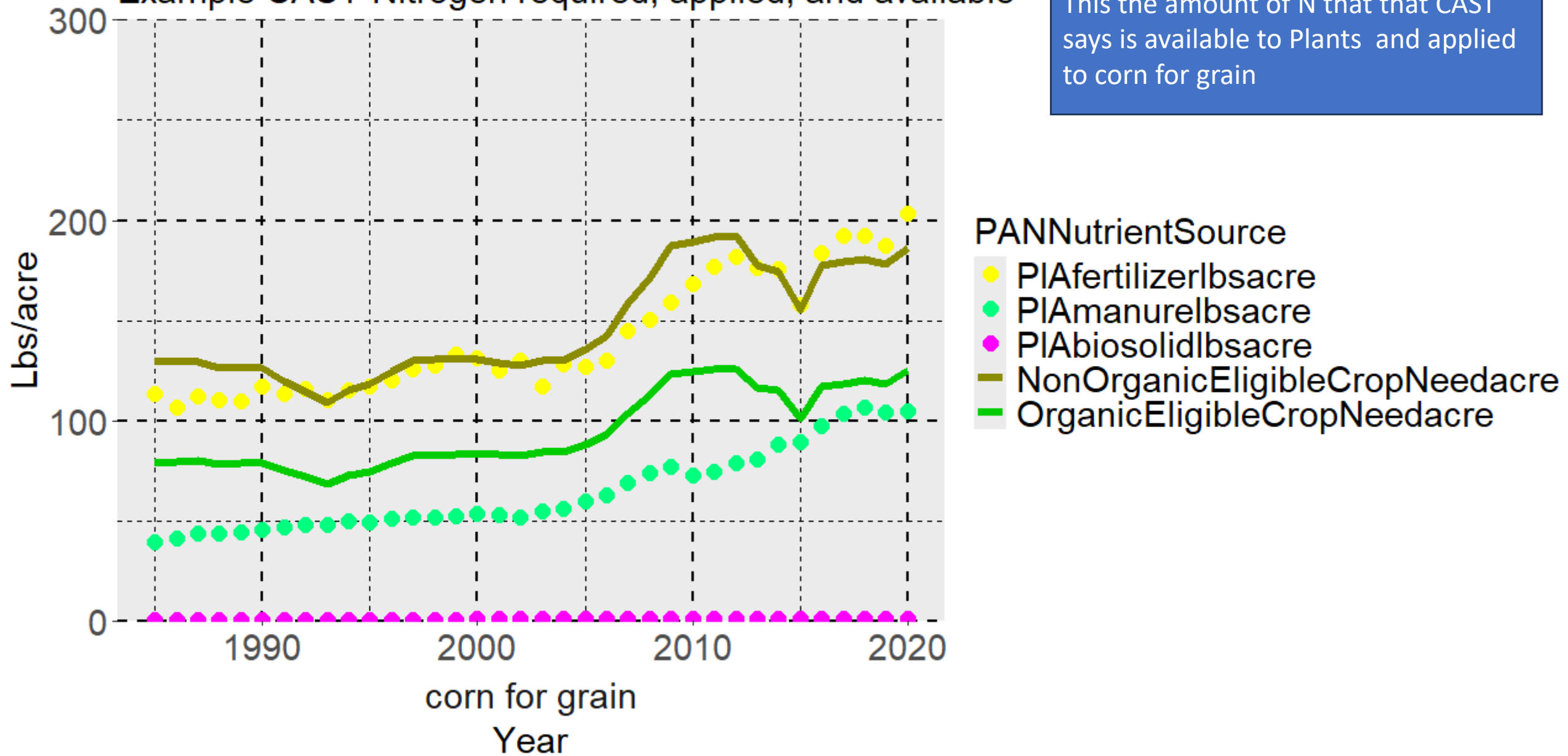


NitrogenNeed

- NonOrganicEligibleCropNeedacre
- OrganicEligibleCropNeedacre

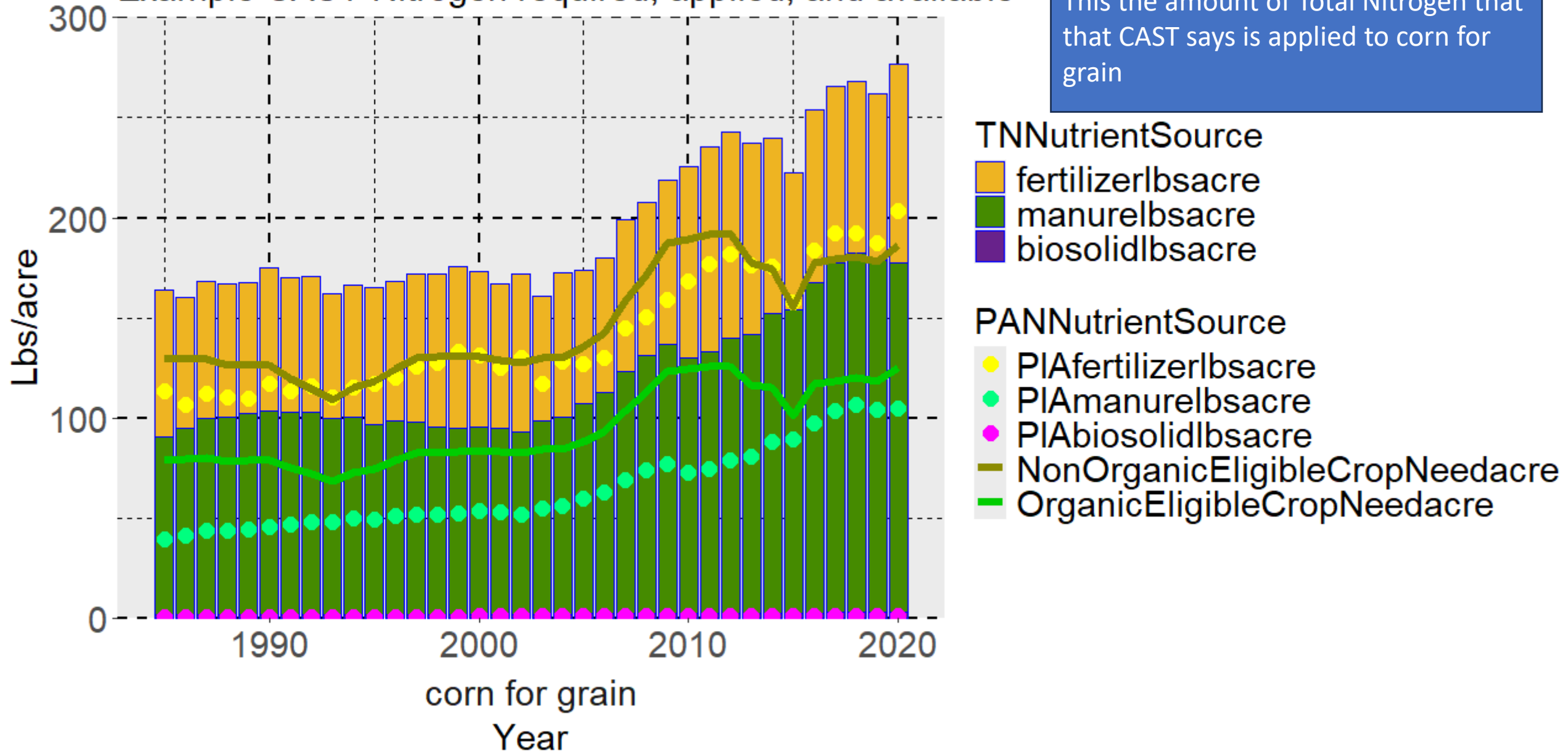
Example CAST Nitrogen required, applied, and available

This the amount of N that that CAST says is available to Plants and applied to corn for grain



Example CAST Nitrogen required, applied, and available

This the amount of Total Nitrogen that that CAST says is applied to corn for grain



Why would the total N applied be so high?

The Plant available portions are applied to meet a N requirement

The Total Nitrogen in manure is greater than the Plant Available Nitrogen

The extra N in manure won't go towards meeting a plants requirements

Difference from the average load determines what happens to the remainder

Questions?