

# Agricultural Modeling Team

## April Recap

Tom Butler, EPA

05/12/2023

# Requests from last months meeting:

Any analyses or perspectives on which topics may have more weight in terms of importance to CAST.

A visualization across the entire watershed of where fertilizer shifts.

For specialty crop low and high percentage of:

- Load contributed relative to the overall watershed loads.
- Land covered over the watershed.

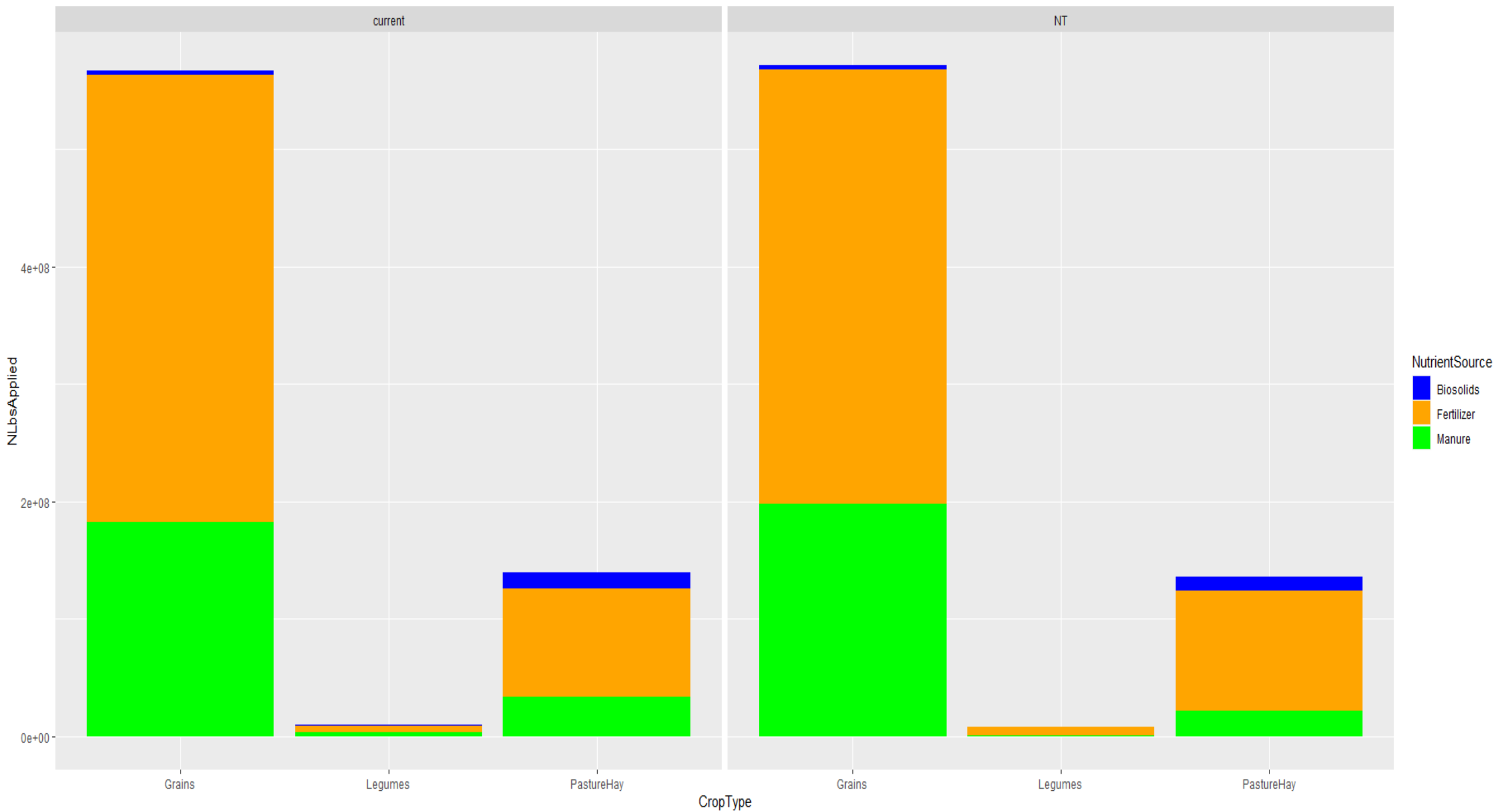
# An experts perspective on model importance

- ASK:
  - Is there a sensitivity analysis or some idea of topics which are more important to CAST?
- Nothing formally done
- Land use
  - Crops
  - Land uses
  - Land use groups

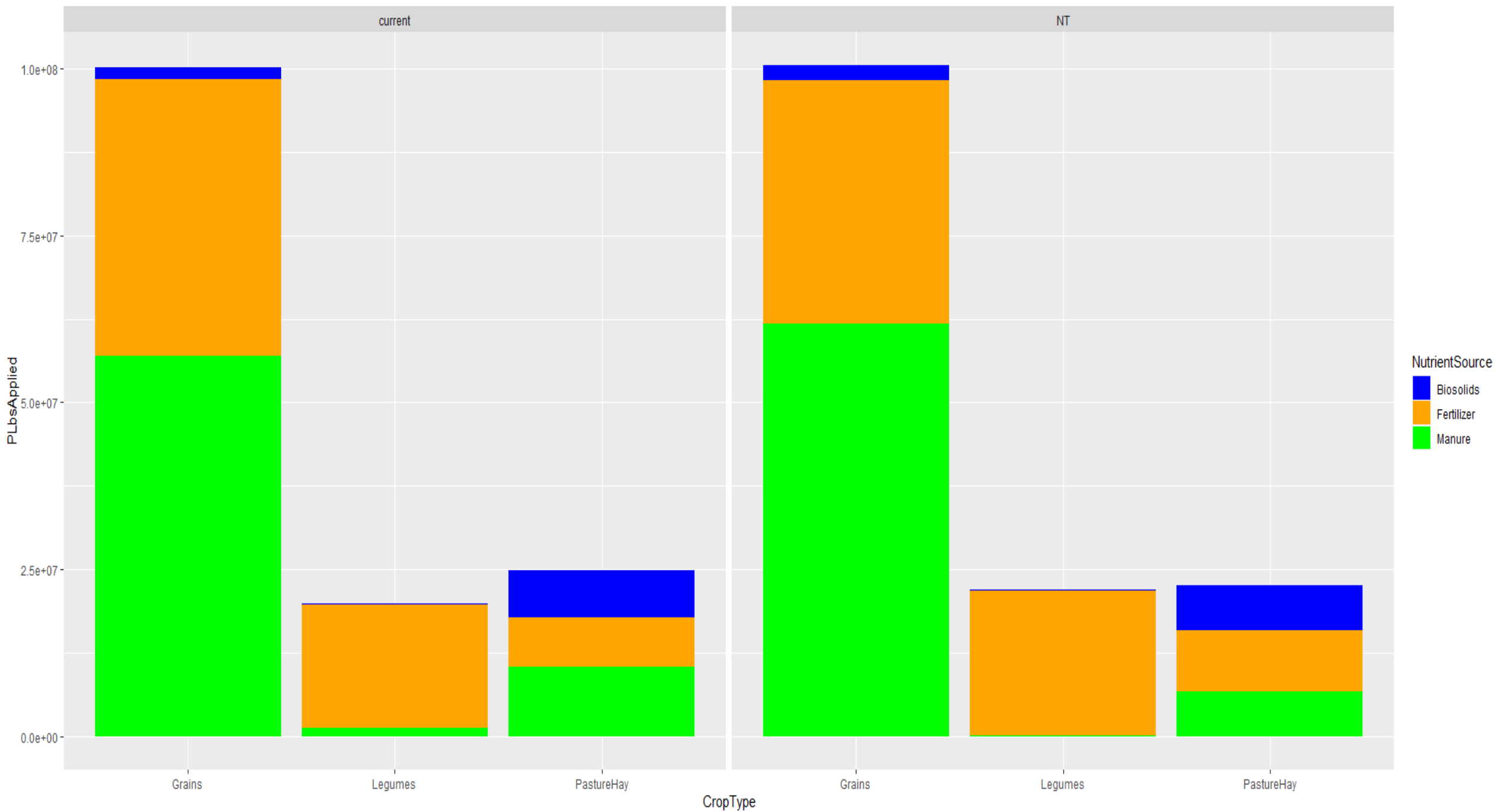
# Fertilizer shifts across the watershed:

- ASK:
  - What happens to nutrient sources across the watershed with an annual timing?
- 2016
- Watershed wide scale
- Three application curves
- Define no timing and current

2016 NlbsApplied



2016 PLbsApplied



# Specialty Crops, what is the real contribution?

- ASK:
  - What is the watershed wide contribution of specialty crops to the overall acreage, N an P?
- Combined specialty high and specialty low

	2012	2013	2014	2015	2016
% of watershed	0.49	0.46	0.45	0.44	0.43
N % of load at EOT	0.96	0.92	0.94	0.98	0.99
P % of load at EOT	1.53	1.51	1.51	1.52	1.51

Questions?



# Specialty percentage of Ag

	2012	2013	2014	2015	2016
% of ag land in watershed	2.35	2.23	2.18	2.13	2.09
Ag N % of load at EOT	2.03	1.93	1.95	2.02	2.05
Ag P % of load at EOT	5.24	5.02	4.95	4.97	4.98