April AMT Office Hours

4/11/2025

Topics

Other Hay crops

Crop yields

Inorganic fertilizer

February Recap: 5 Decisions

1. Two new Land Uses Managed Hay and Pasture.
2. Four manure application groups
3. Defined managed and unmanaged hay and pasture.
4. Acres of managed Land Uses will be state reporting each year by November 1st.
5. Assigned Non - Nutrient Management multipliers for Nitrogen and Phosphorus.

March Recap:

Other haylage; grass silage and greenchop

- Ag census definition:
  - "***haylage, grass silage, and greenchop*** *(hay cut and fed green) made from such crops or mixtures as small grains, clover, lespedeza, fescue, timothy, Bermuda grass, sudangrass, sorghum-sudan crosses, orchardgrass, soybeans, peanuts, etc*".
- Currently:
  - 30.24 lbs N fixed per yield unit
  - Currently ~ 25% of other hay acres
- Discussed allocation in CAST

There are multiple crops in Other Hay

Crop Name:	CAST Land Use:
bromegrass seed	Other Hay
cropland on which all crops failed or were abandoned	Other Hay
fescue seed	Other Hay
orchardgrass seed	Other Hay
other field and grass seed crops	Other Hay
other haylage; grass silage and greenchop	Other Hay
other managed hay	Other Hay
ryegrass seed	Other Hay
small grain hay	Other Hay
timothy seed	Other Hay

A quick caveat:

Fixes Nitrogen

Crop Name:	CAST Land Use:
bromegrass seed	Other Hay
cropland on which all crops failed or were abandoned	Other Hay
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orchardgrass seed	Other Hay
other field and grass seed crops	Other Hay
other haylage; grass silage and greenchop	Other Hay
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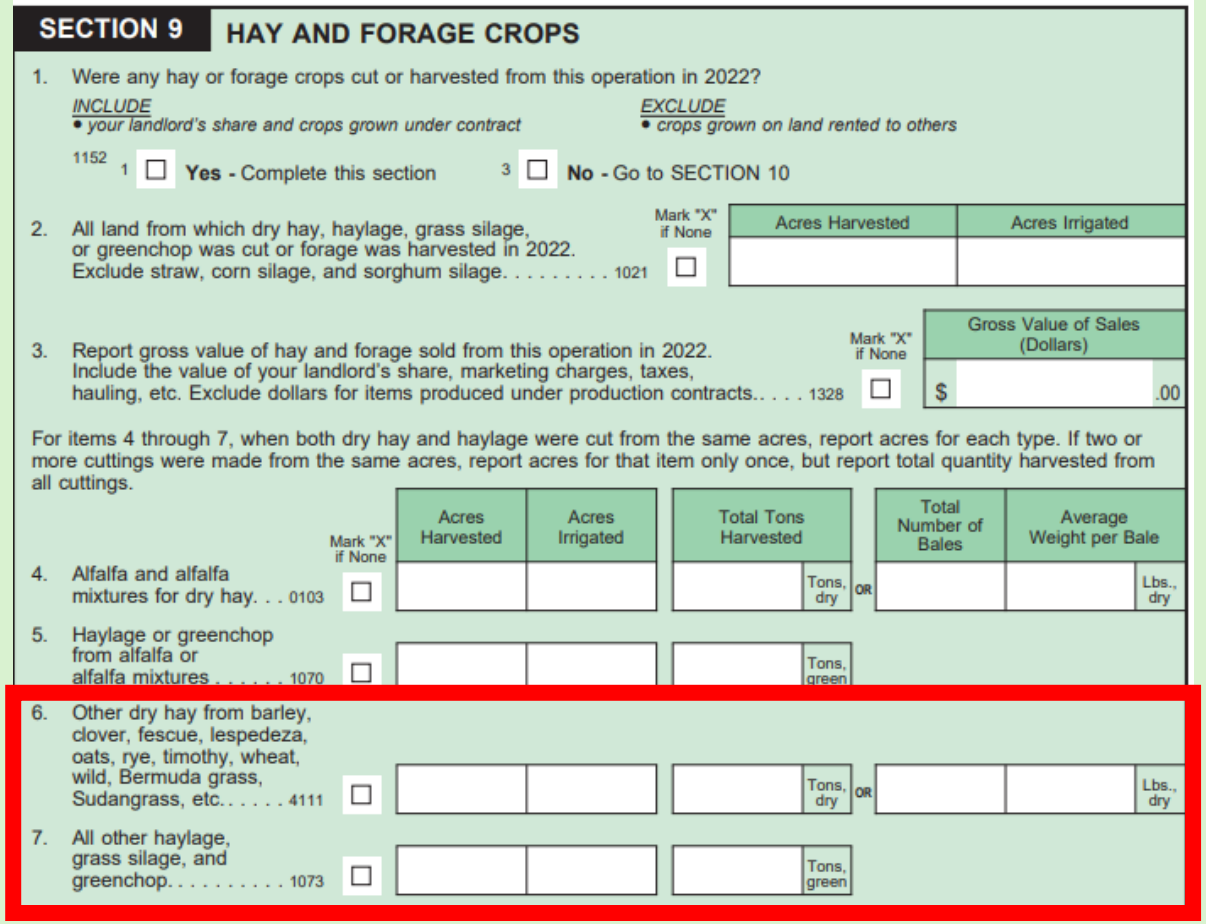
timothy seed	Other Hay

A new perspective:



SECTION 9 HAY AND FORAGE CROPS

1. Were any hay or forage crops cut or harvested from this operation in 2022?

INCLUDE
- *your landlord's share and crops grown under contract*

EXCLUDE
- *crops grown on land rented to others*

1152 1 ☐ **Yes** - Complete this section 3 ☐ **No** - Go to SECTION 10

	Mark "X" if None	Acres Harvested	Acres Irrigated
2. All land from which dry hay, haylage, grass silage, or greenchop was cut or forage was harvested in 2022. Exclude straw, corn silage, and sorghum silage. 1021	☐		

	Mark "X" if None	Gross Value of Sales (Dollars)
3. Report gross value of hay and forage sold from this operation in 2022. Include the value of your landlord's share, marketing charges, taxes, hauling, etc. Exclude dollars for items produced under production contracts. 1328	☐	$ .00

For items 4 through 7, when both dry hay and haylage were cut from the same acres, report acres for each type. If two or more cuttings were made from the same acres, report acres for that item only once, but report total quantity harvested from all cuttings.

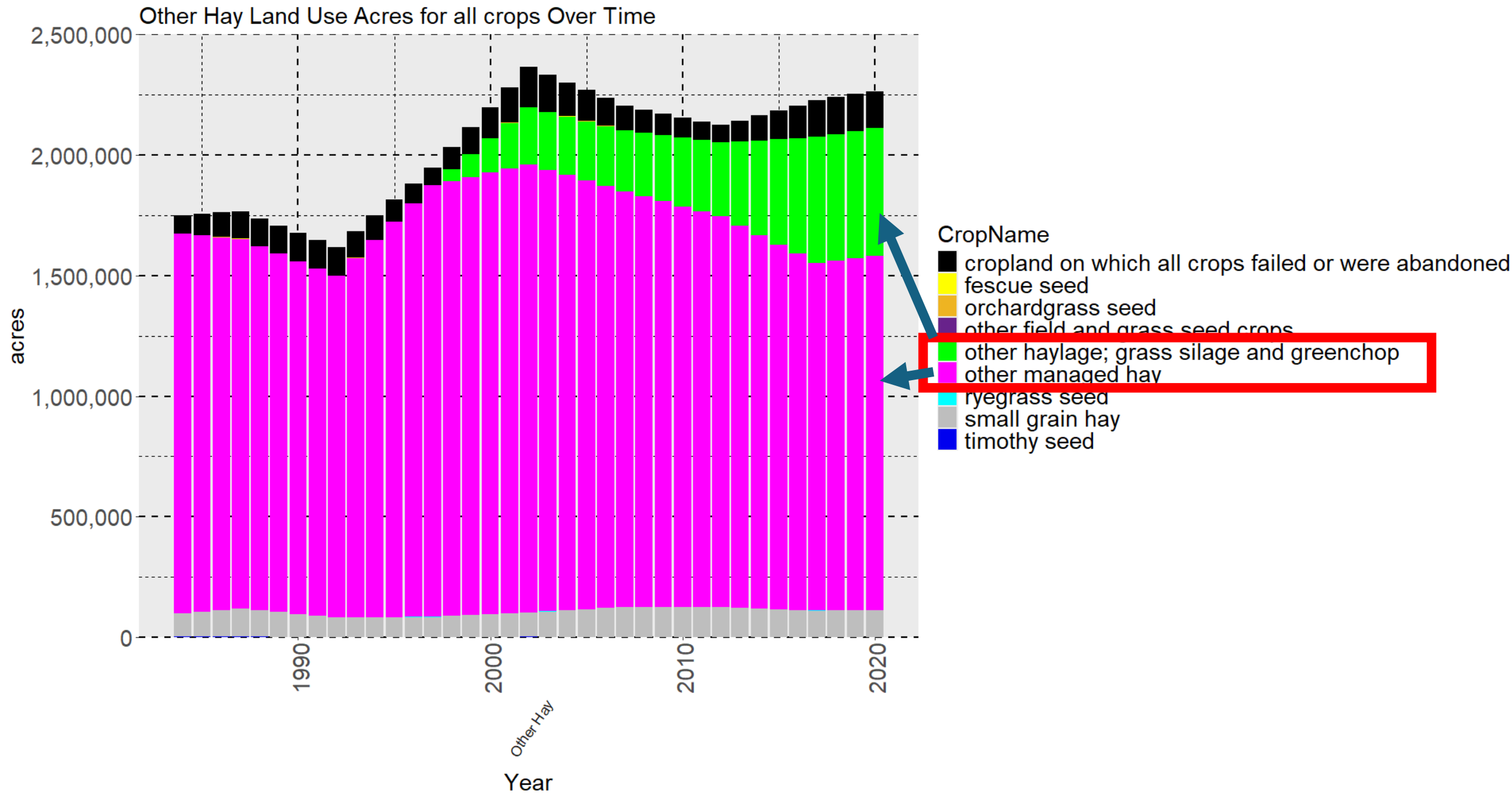
	Mark "X" if None	Acres Harvested	Acres Irrigated	Total Tons Harvested		OR	Total Number of Bales	Average Weight per Bale	
4. Alfalfa and alfalfa mixtures for dry hay. . . 0103	☐				Tons, dry	OR			Lbs., dry
5. Haylage or greenchop from alfalfa or alfalfa mixtures 1070	☐				Tons, green				
6. Other dry hay from barley, clover, fescue, lespedeza, oats, rye, timothy, wheat, wild, Bermuda grass, Sudangrass, etc. 4111	☐				Tons, dry	OR			Lbs., dry
7. All other haylage, grass silage, and greenchop. 1073	☐				Tons, green				

time the hay was removed from the field for storage or feeding. If the production in tons is not known, report the number of bales and the estimated average bale weight.

Item 5 – Haylage or greenchop from alfalfa or alfalfa mixtures - Report acres harvested, tons harvested green, and any irrigated harvested acres of haylage or greenchop (hay cut and fed green) of alfalfa and alfalfa mixtures. If haylage or greenchop from alfalfa or alfalfa mixtures was cut from the same land from which dry alfalfa hay was cut, also report the acreage and production for the acres which were cut for alfalfa dry hay in item 4.

Item 6 – Other dry hay - Report the acres, tons harvested, and any irrigated harvested acres of hay made from small grains or small grain mixtures. Include hay made from small grains and alfalfa mixtures where the quantity harvested was predominantly from small grains. Report all dry hay made from such crops or mixtures as clover, lespedeza, fescue, timothy, Bermuda grass, Sudan grass, sorghum cut for dry hay, sorghum-sudan crosses, orchard grass, soybeans, peanuts, etc. Report the total acres harvested, tons harvested, and acres irrigated of all such crops or mixtures. If the production in tons is not known, report the number of bales and the estimated average bale weight.

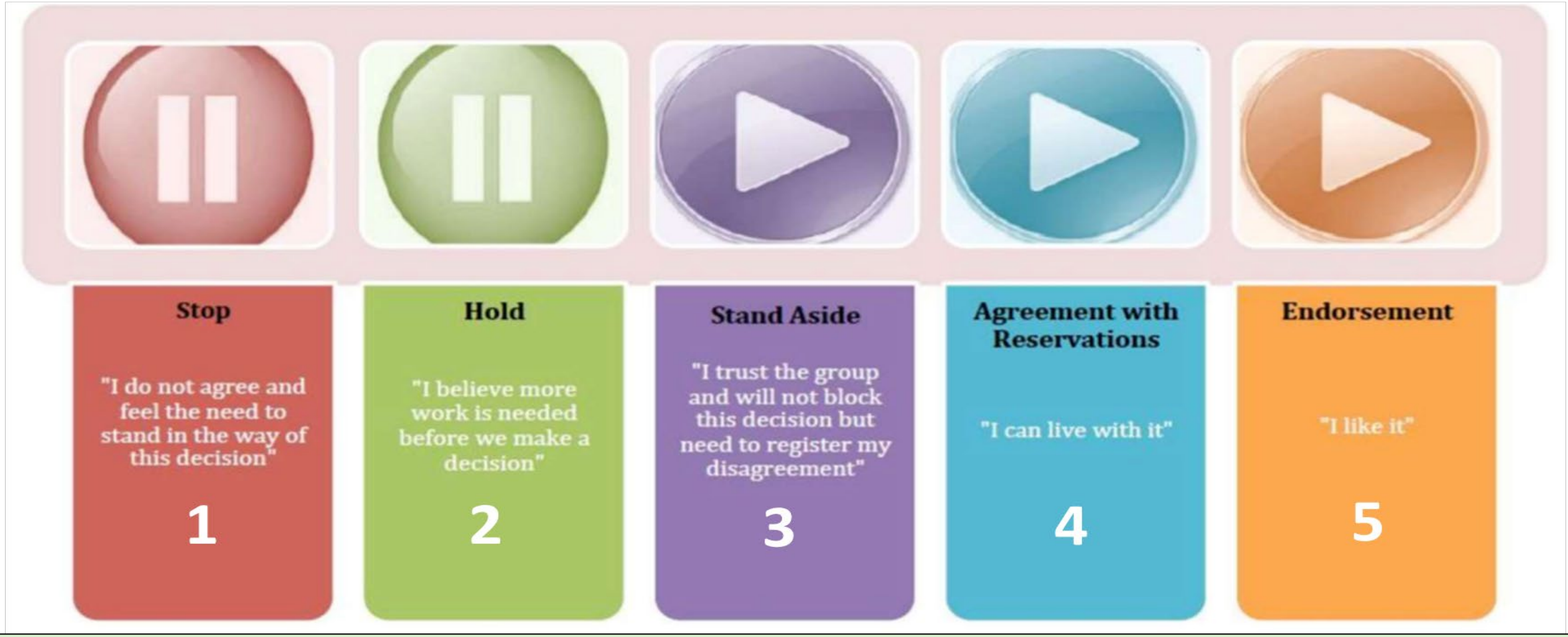
Item 7 – All other haylage, grass silage, and greenchop - Report the acres, tons harvested green, and any irrigated harvested acres of haylage, grass silage, and greenchop (hay cut and fed green) made from such crops or mixtures as small grains, clover, lespedeza, fescue, timothy, Bermuda grass, sudangrass, sorghum-sudan crosses, orchardgrass, soybeans, peanuts, etc. When reporting haylage, grass silage, and greenchop, include acres and total quantities from all cuttings, whether harvested from land previously cut for dry hay or from land used mainly for pasture. Report alfalfa haylage in item 5 in this section.


Other Hay Land Use Acres for all crops Over Time
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
acres
1990
2000
2010
2020
Other Hay
Year
CropName
cropland on which all crops failed or were abandoned
fescue seed
orchardgrass seed
other field and grass seed crops
other haylage; grass silage and greenchop
other managed hay
ryegrass seed
small grain hay
timothy seed

Proposals:

Item 1	Both crops; Other haylage; grass silage and greenchop AND Other Dry Hay should remain in the current Land Use “Other Hay”.
Item 2	Both crops; Other haylage; grass silage and greenchop AND Other Dry Hay should have no nitrogen fixation associated with them.

Consensus Continuum



Questions?

Crop Yield Trends

- Goals:
  - Estimate farmer yield expectations at the county level which drive the application of nutrients.
  - Estimate various yield trends to support several potential scenarios.
- Approach: Use trend analysis of long-term annual crop yields.
- More in the main meeting

Inorganic fertilizer

In progress

USGS efforts

Comparing multiple lines of evidence (CalCAST)

- National fertilizer datasets
- CBP fertilizer sales data

Needs attention

- Backfilling
- Scale

Backfilling example:

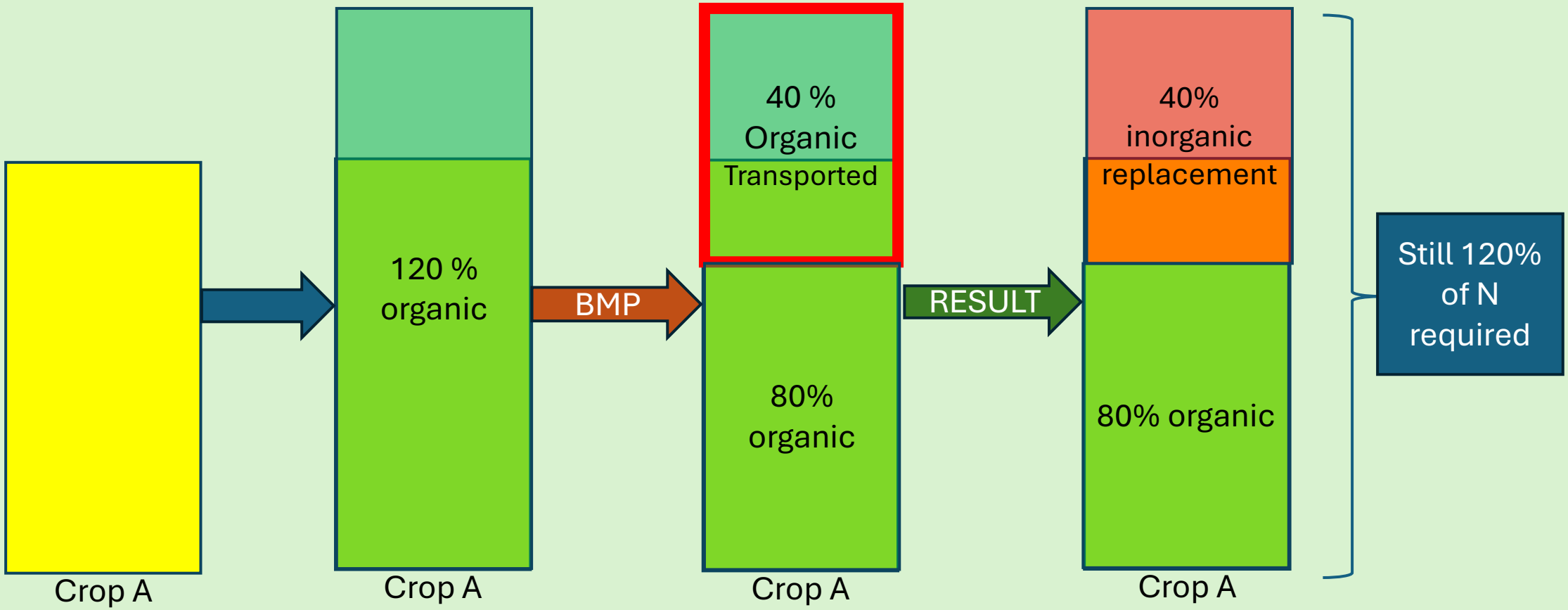
NOTE* This is most relevant where you have high organic availability and high organic removal/treatment

Crop A has a given NASS yield

Organic nutrients are calculated and applied

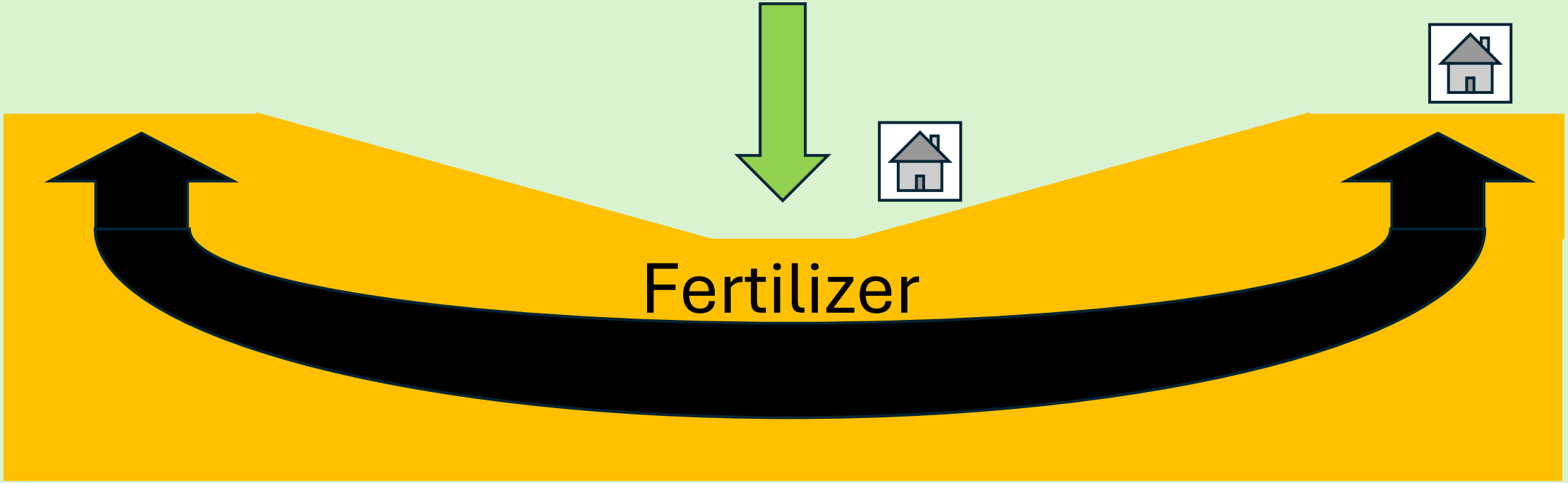
Manure transport removes 40% of organic nutrients

Inorganic nutrients are used to replace transported organics



Scale, fertilizer is a watershed product

- If one area uses less fertilizer other areas will use more.



Goal for today

- Discuss path forward
- Guide future CAST test runs

Questions?

Thank you for attending office hours!

We will begin our main meeting at 09:00.