

Agricultural Modeling Team

Tom Butler, EPA

Outline

What is the AMT?

AMT progress to date

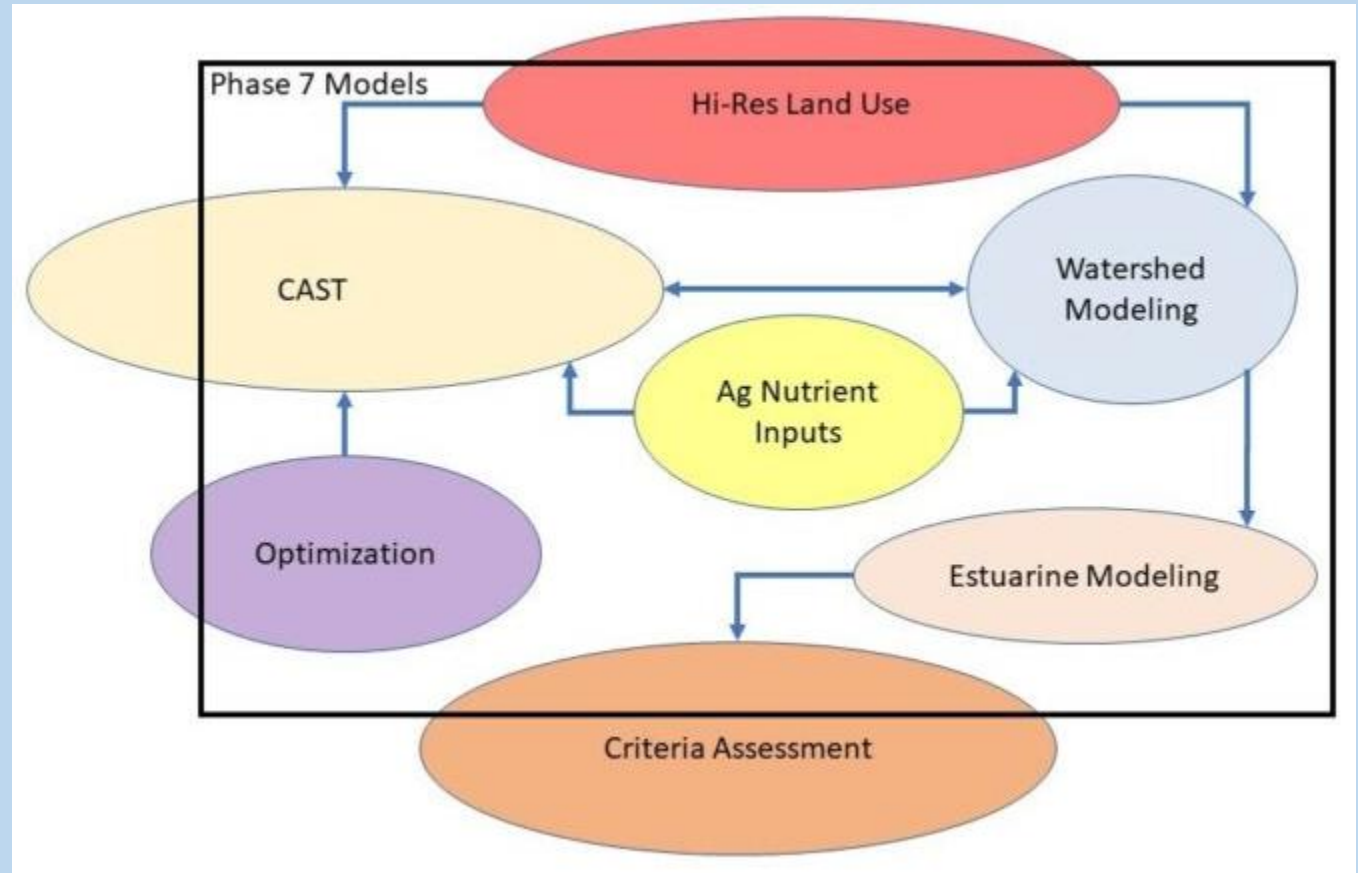
Future work

Agricultural Modeling Team (AMT)

Phase 7

Decision
making

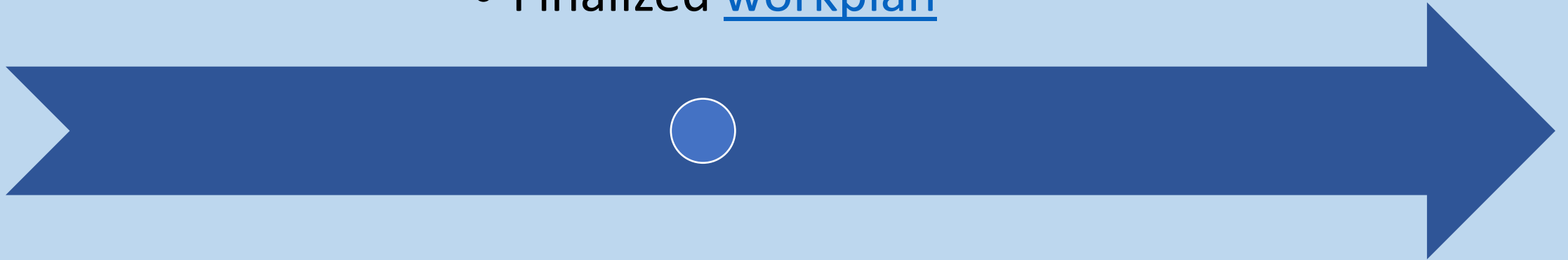
Agricultural
data inputs



Progress to date:

March 13th

- Finalized [workplan](#)



Workplan:

24 [topics](#)

- Provided by CAST users
- Agricultural Workgroup members

Refined during [Two-day workshop](#)

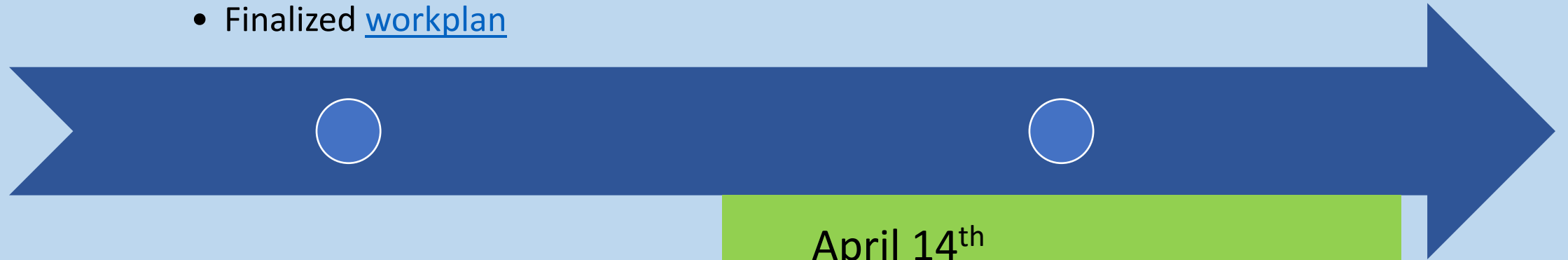
Collected information from core members via initial online poll

CAST learning sessions

Progress to date:

March 13th

- Finalized [workplan](#)



April 14th

- Sandbox version of CAST
 - Informal changes to nutrient eligibility

Nutrient Timing and Eligibility:

Current	Implication	Proposed Sandbox change
<ul style="list-style-type: none">• Explicit eligibility requirements dictate organic and inorganic crop applications	<ul style="list-style-type: none">• Model does not apply nutrients in a way consistent with real life expectations	<ul style="list-style-type: none">• Alter algorithm to enable model to perform more realistically

Progress to date:

March 13th

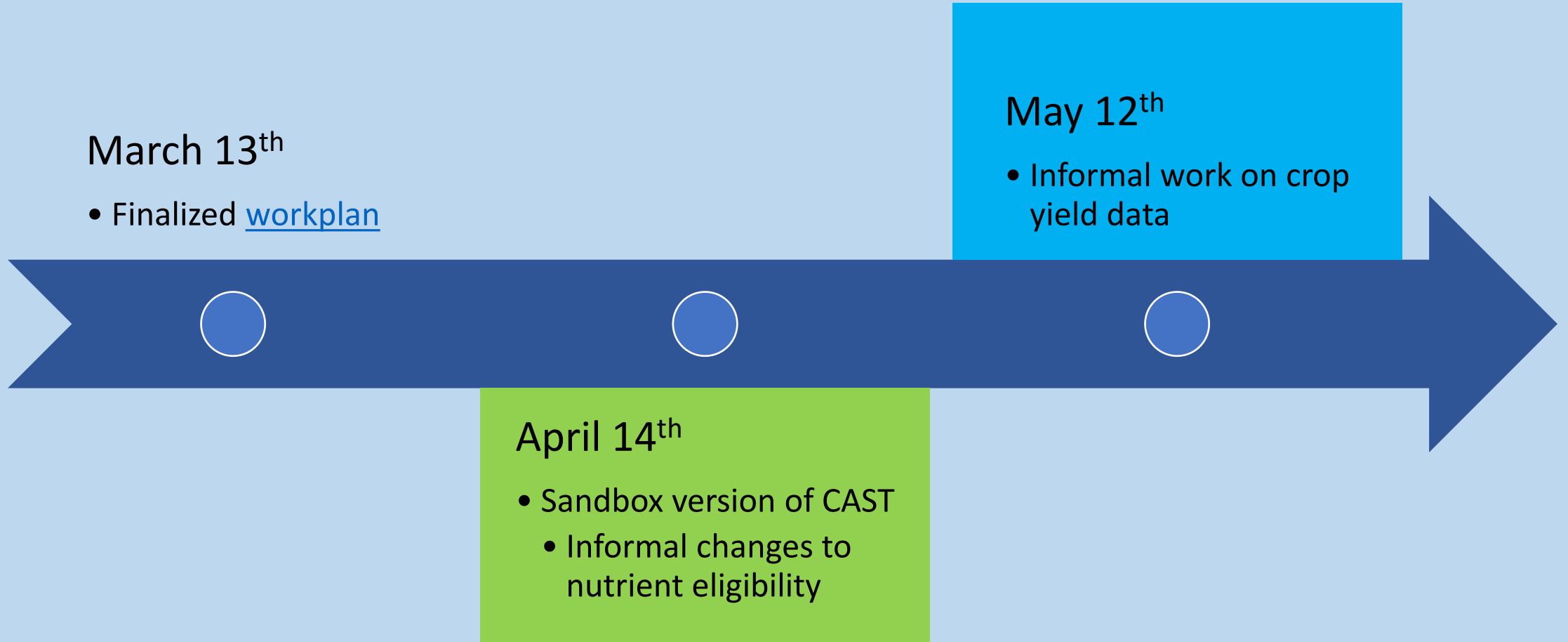
- Finalized [workplan](#)

May 12th

- Informal work on crop yield data

April 14th

- Sandbox version of CAST
 - Informal changes to nutrient eligibility



Nutrient Timing and Eligibility:

Current	Implication	Proposed Sandbox change
<ul style="list-style-type: none">• Provide unique yield values for each crop in each county by filling in values with max yields and smoothed values	<ul style="list-style-type: none">• Crop yields are not reflective of what occurs in real life	<ul style="list-style-type: none">• Utilize spatial interpolation to provide more realistic yield values

Next Steps:

Continued sandbox testing

- Crop yields
- Land use categories
- Manure production and storage
- Legume fixation
- Crop uptake vs removal

Questions?