

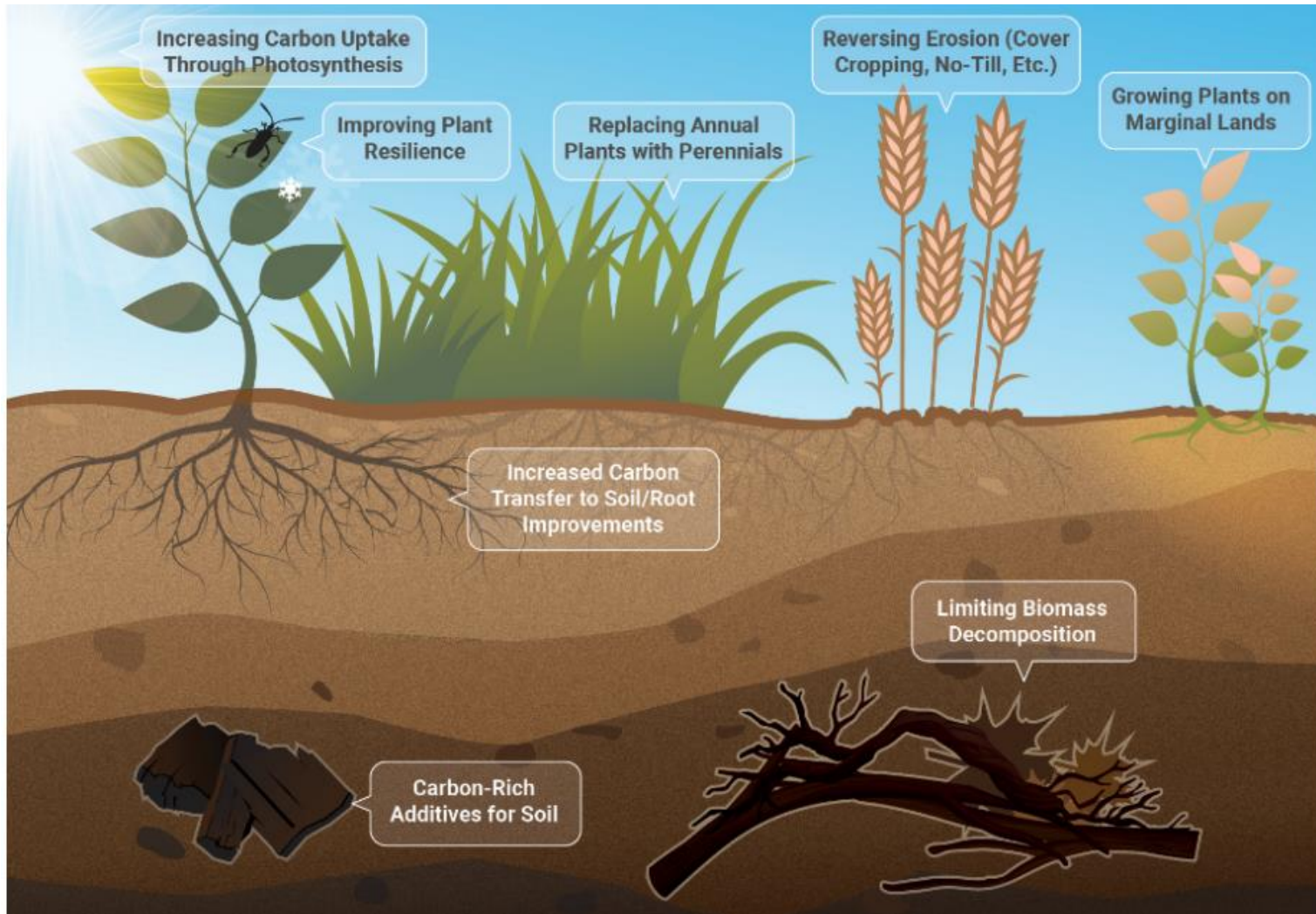
## **Breakout 2 - Systems**

# Priorities for this discussion

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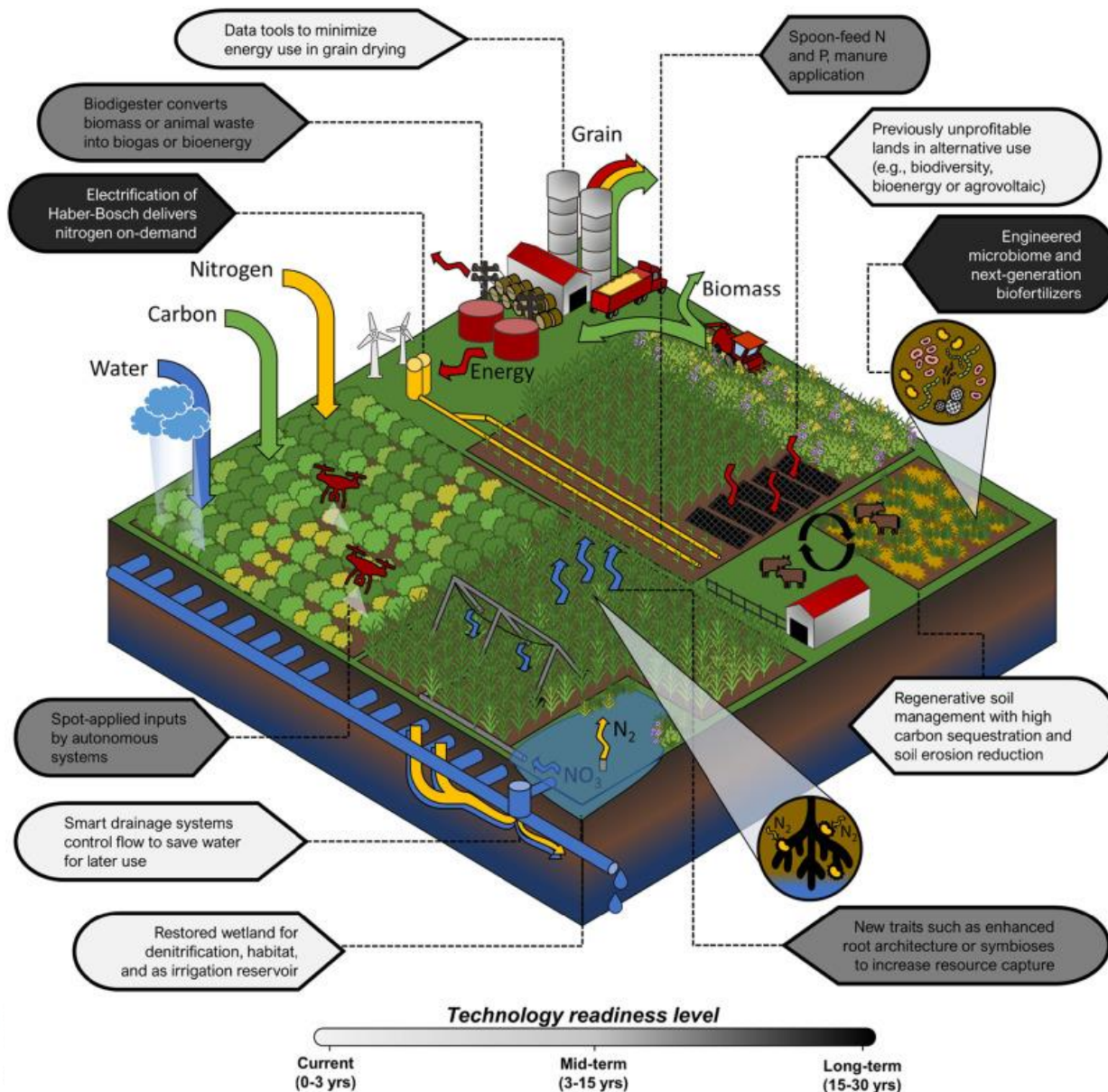
- ▶ Synergies/tradeoffs
  - Combined approaches
  - Environmental conditions
  - Land uses
- ▶ Accounting methods
  - Tools
  - Timing
  - Certainty

# Which pathways offer the greatest potential across various environmental conditions\*?



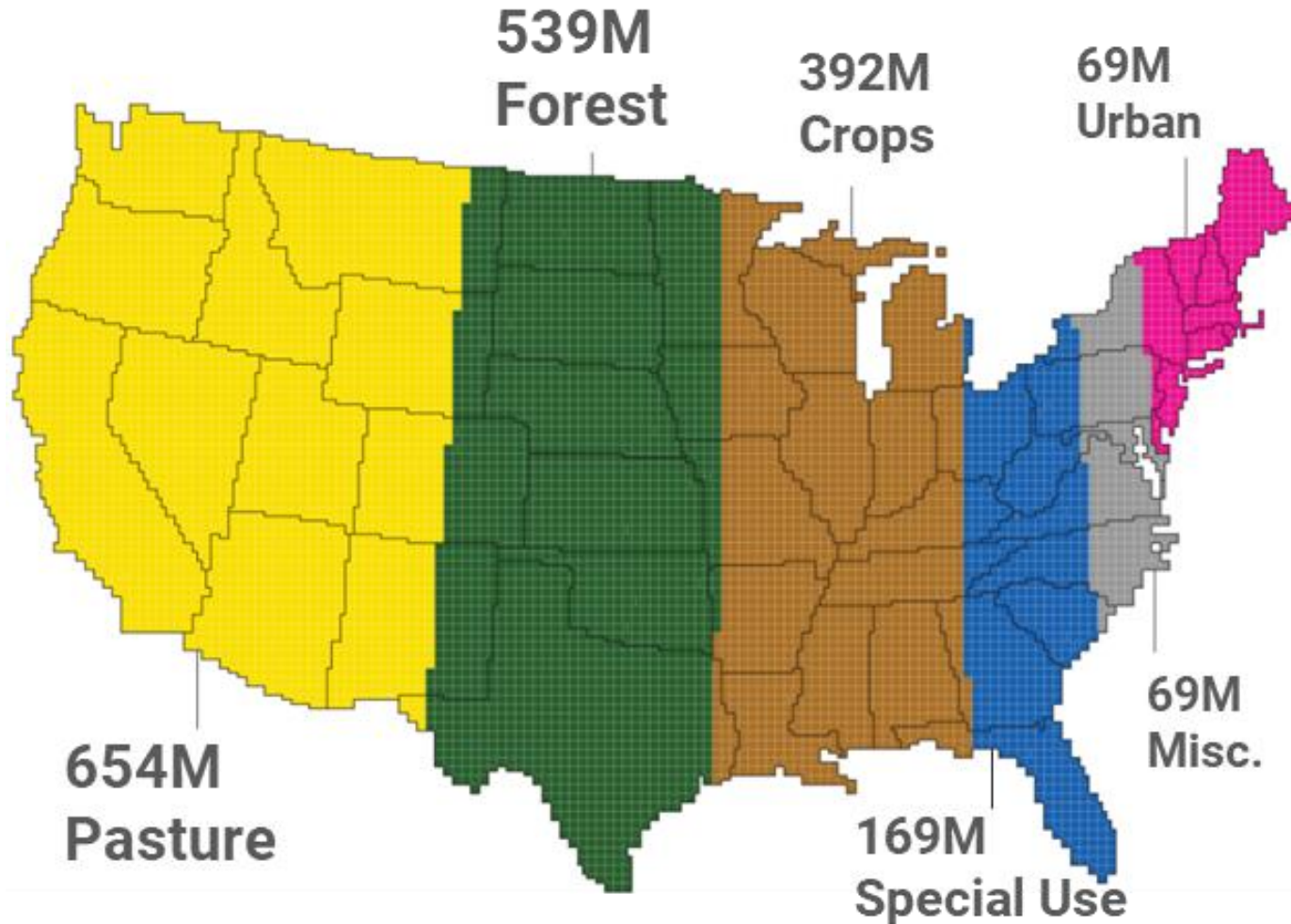
- ▶ Potential to enhance the density and/or rate of carbon removal despite variations in environment?
- ▶ Potential to promote climate resilience?
- ▶ Potential to enhance ecosystem services?

# How many "miracles" make sense?



- ▶ Which combinations have the greatest co-benefits/potential for impact? e.g.,
  - Plant + microbe
  - Microbe + biochar
  - Plant + microbe + enhanced weathering
  - Enabling management tools
  - Other combinations
  
- ▶ How many approaches before a project becomes too complex to manage?

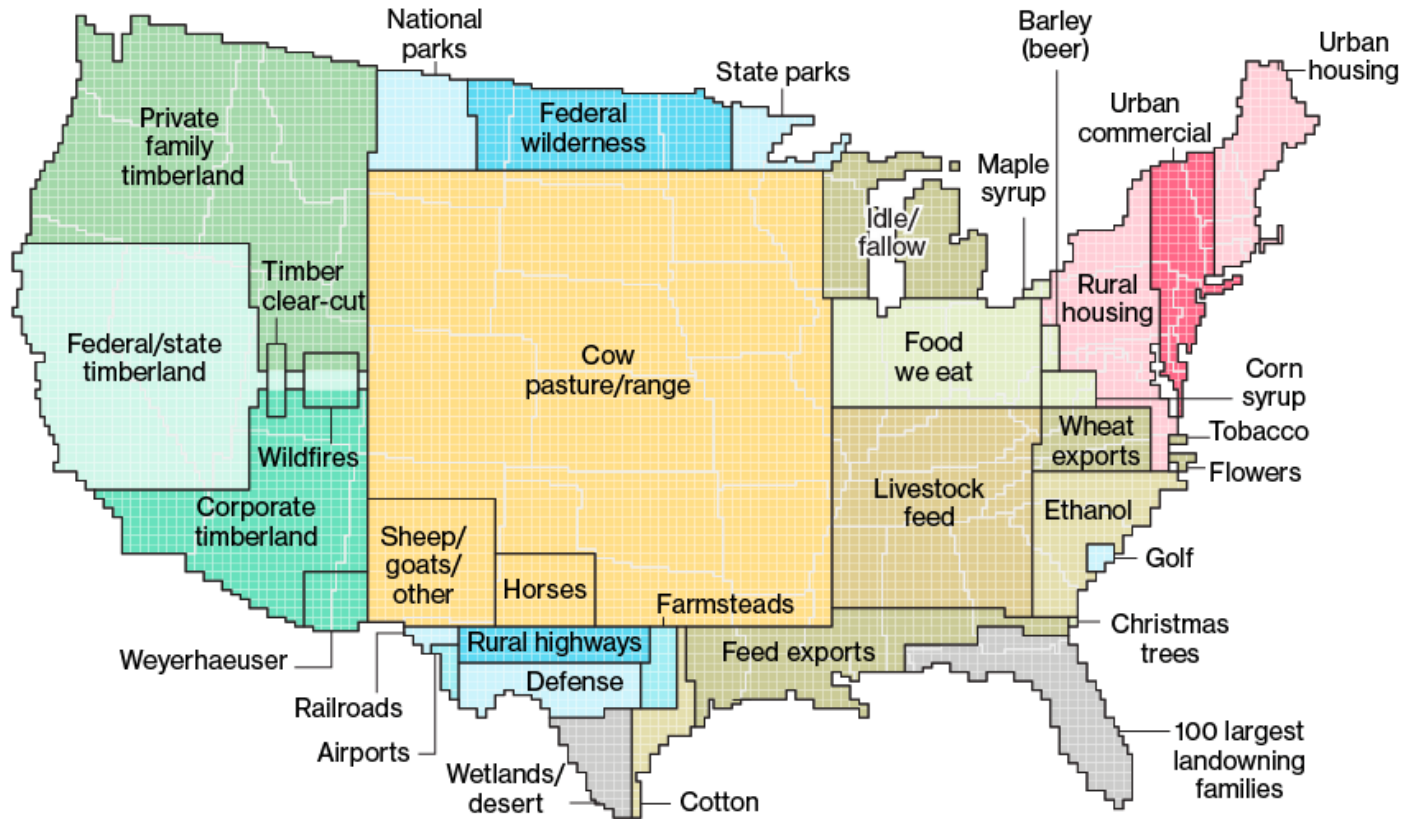
# Which land uses offer the greatest potential for parallel carbon farming pathways?



- ▶ Potential to sequester the most carbon?
- ▶ Potential to offer the greatest economic benefit?
- ▶ Potential to accommodate the greatest number of approaches?

What do we know about how these land uses will change with a changing climate?

# Which land uses offer the greatest potential for exclusive carbon farming pathways?



- ▶ Potential to sequester the most carbon?
- ▶ Potential to offer the greatest economic benefit?
- ▶ Potential to accommodate the greatest number of approaches?

# Carbon Farming Accounting

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- ▶ Do we have the tools we need? If we assume SMARTFARM is successful in bringing high-certainty/low-cost MRV for soil carbon and N<sub>2</sub>O to market, what MRV gaps remain?
- ▶ What is the appropriate timeframe over which to assess net carbon intensity, when factoring in:
  - Soil carbon (organic and inorganic)
  - Biomass carbon
  - N<sub>2</sub>O, CH<sub>4</sub>, CO<sub>2</sub> emissions
- ▶ What about indirect removal pathways – e.g., crop protection products that would enable greater root growth – should those be considered in scope given the potential for carbon-independent value?
- ▶ To what extent should feedstock carbon credits be tied to use and end-of-life?