

## Mission/Goal

Enable understanding and forecasting of regional landscape capacities to provide agricultural commodities & ecosystem services under changing conditions.

## Network Priority: Sustainability

- Satisfy human needs\* for food, feed, and fiber, & contribute to biofuel
- Enhance environmental quality & the natural resources base
- Sustain economic viability of agriculture
- Enhance the quality of life for farmers, farm workers, & society as a whole

\* Quantity & nutritional quality

## Are current *Business-As-Usual* and innovative, *Aspirational* production systems & ecosystem services sustainable?

### What evidence (metrics) indicate this?

#### A foundation of information for research

- Factors controlling stability (resistance to change) & recovery from negative impacts (resilience)
- Processes affecting productivity & ecosystem services
- Consequences of decision-making at multiple scales (farmer-to-policy) on sustainability & ability to intensify production

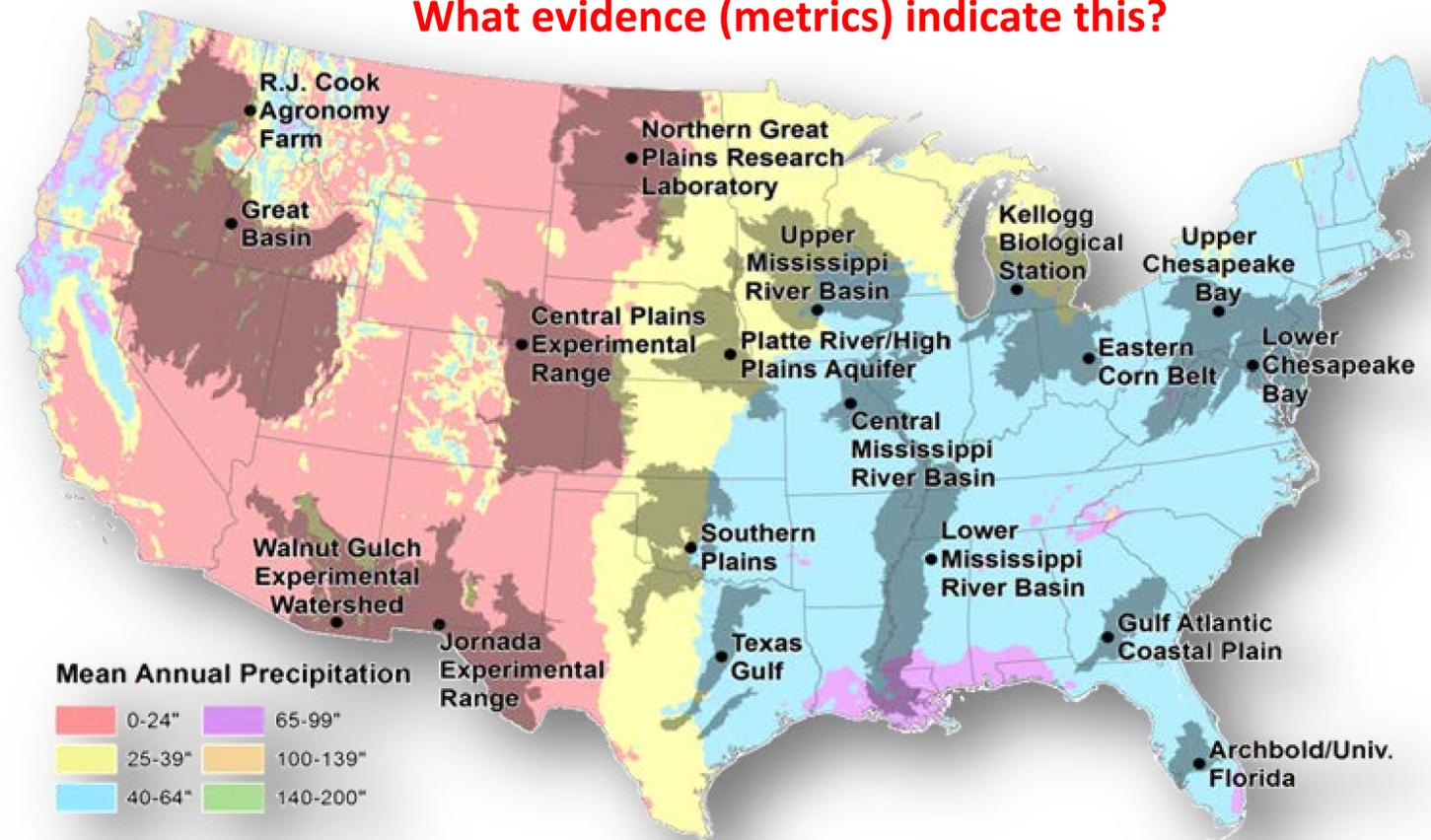
#### Regional test-beds for long-term analysis

- Chronic & threshold changes to ecosystem services
- Croplands
- Grazinglands

#### Common core measurements

#### Simulation Models

#### Data Management Systems



**Site Hosts**

- USDA ARS Laboratories
- Archbold Biological Station & University of Florida
- Michigan State University
- University of Nebraska

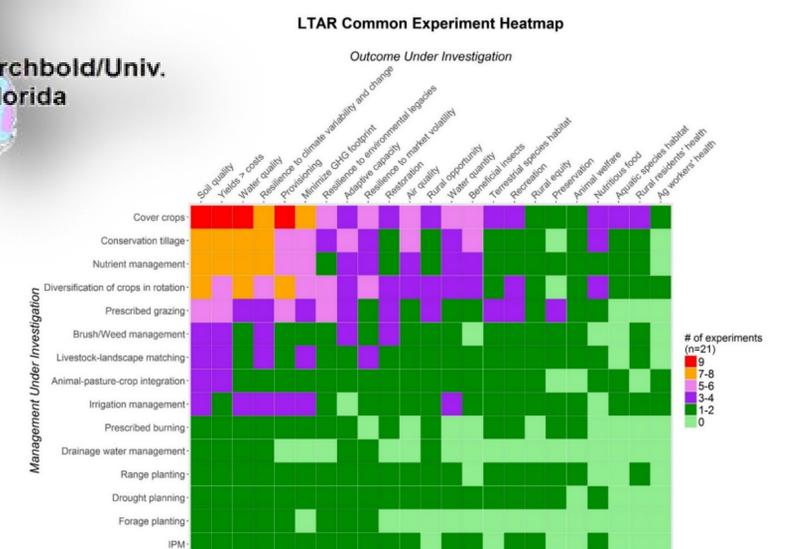
**Collaborators**

- 60 Colleges & Universities
- 15 Federal Agencies
- 12 State Agencies
- 11 Other Research Networks
- 25 NGO's
- 19 Industry Organizations
- 29 International Organizations

#### Common Experiment

- *Business-As-Usual* (Current) production systems
- vs
- *Aspirational* production systems:

*Ahead of the curve...  
Something that pulls out all of our best technology...  
Something that includes all that we have learned about farming on the edge of the future.*



**Vision: Sustainable agroecosystems providing goods and services.**