Welcome!

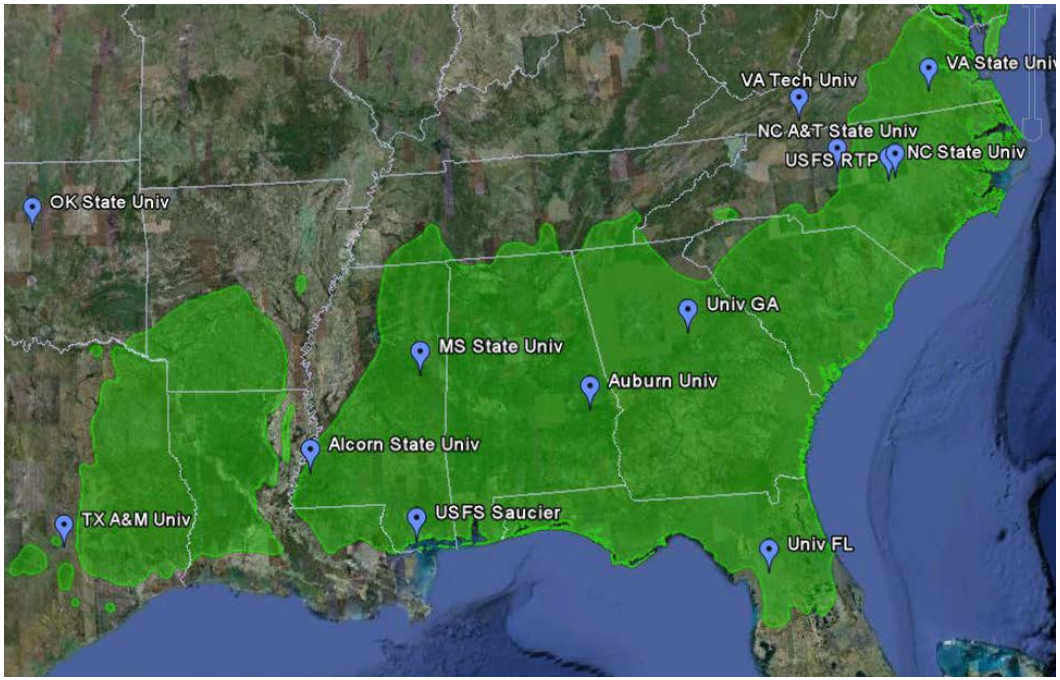
PINEMAP Annual Meeting

May 14-16, 2014

Pine Integrated Network: Education, Mitigation, and Adaptation project (PINEMAP) is a Coordinated Agricultural Project funded by the USDA National Institute of Food and Agriculture, Award #2011-68002-30185

USDA United States Department of Agriculture National Institute of Food and Agriculture

PINEMAP:
Pine Integrated Network: Education, Mitigation and Adaptation Project



Google Earth

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NIFA Coordinated Agricultural Project ("CAP") Program – Climate Change

- Large (initially 5 yr, $20 million) commodity-focused projects
- Multi/inter/transdisciplinary
- Include research, education, outreach
- Focus on climate mitigation and adaptation

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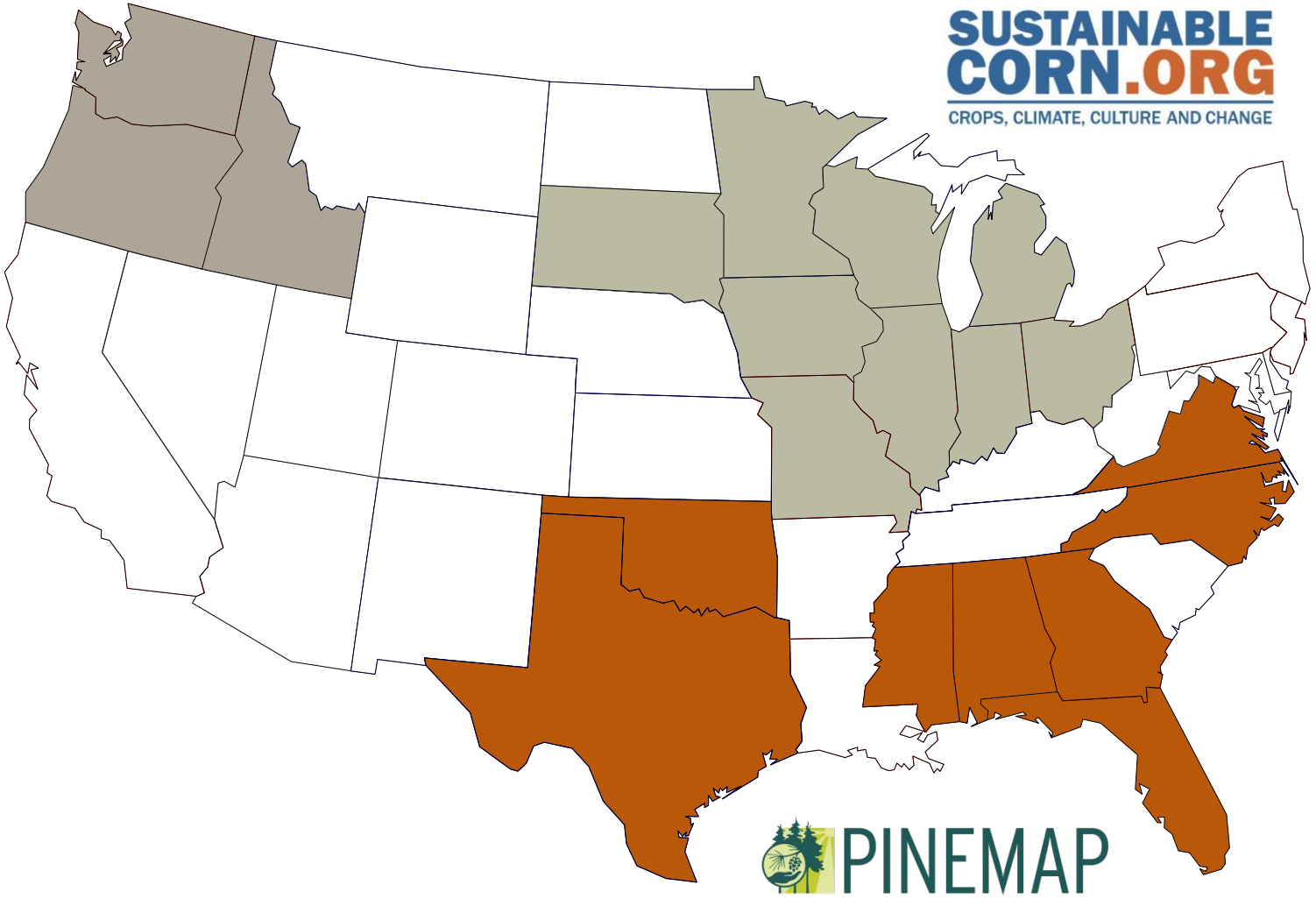
PINEMAP

REACCH
Regional Approaches to Climate Change – PACIFIC NORTHWEST AGRICULTURE

SUSTAINABLE CORN.ORG
CROPS, CLIMATE, CULTURE AND CHANGE



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Prescribed, Outcome Based Program Dictates Project Goals

- Reduce the use of (energy), nitrogen fertilizer, and (water) by 10% and increase carbon sequestration by 15% through resilient forest production systems under changing climate by 2030
- Project research, education and Extension goals focused on achieving these outcomes

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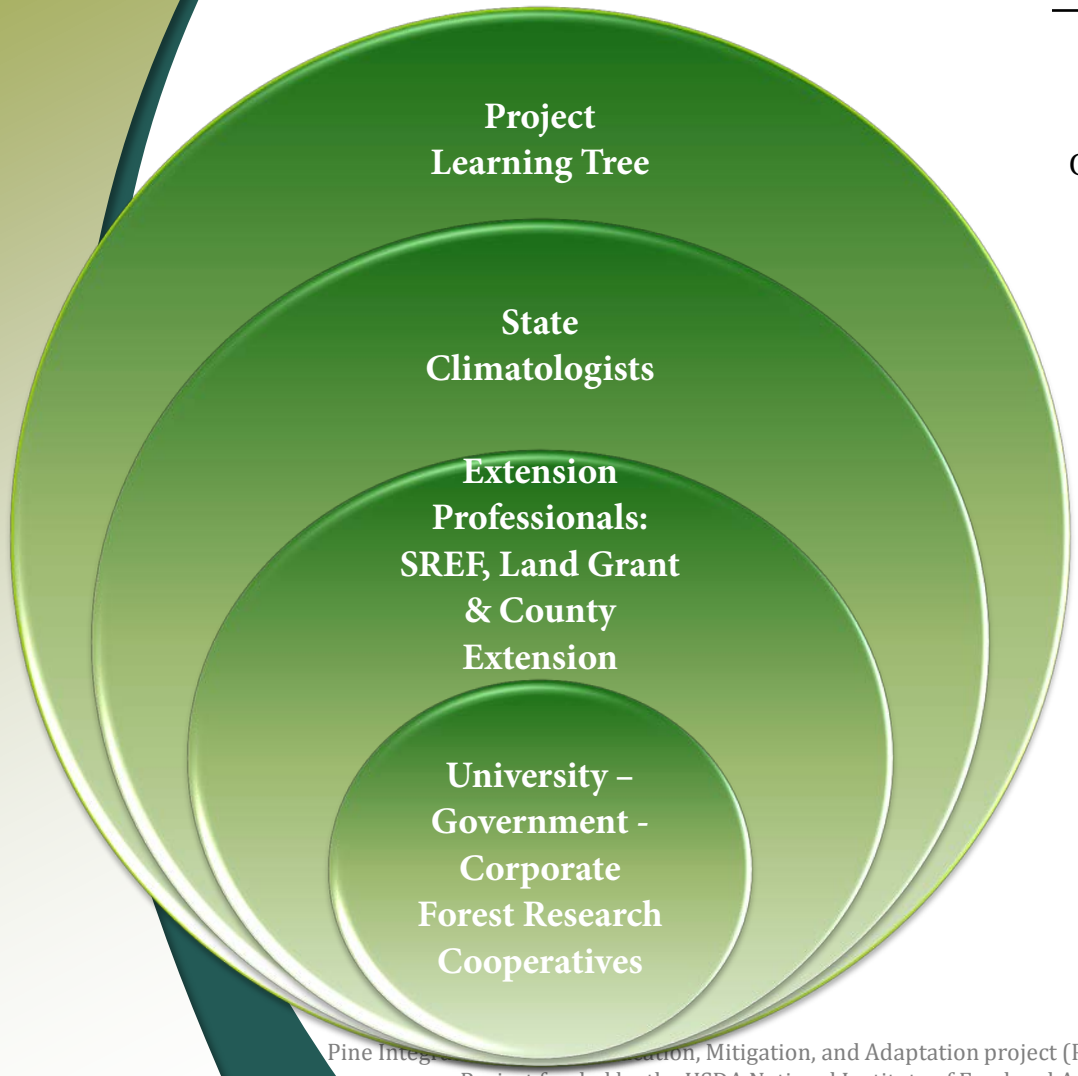
PINEMAP Approach: Integrating & Leveraging Existing Networks



Research Cooperative	Host University (year founded)
Cooperative Forest Genetics Research Program	University of Florida (1953)
Cooperative Tree Improvement Program	North Carolina State University (1955)
Forest Biology Research Cooperative	University of Florida (1996)
Forest Modeling Research Cooperative	Virginia Polytechnic Univ. (1979)
Forest Productivity Cooperative	Virginia Polytechnic Univ. / NC State Univ. (1969)
Plantation Management Research Cooperative	University of Georgia (1975)
Southern Forest Resource Assessment Consortium	North Carolina State University (1994)
Western Gulf Forest Tree Improvement Program	Texas A&M Univ. / Texas Forest Service (1969)

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PINEMAP Goals

To create, synthesize, and disseminate the necessary knowledge to enable southern forest landowners

- to harness pine forest productivity to mitigate atmospheric $CO_{2,}$
- to more efficiently utilize nitrogen and other fertilizer inputs,
- and to adapt their forest management approaches to increase resilience in the face of changing climate.

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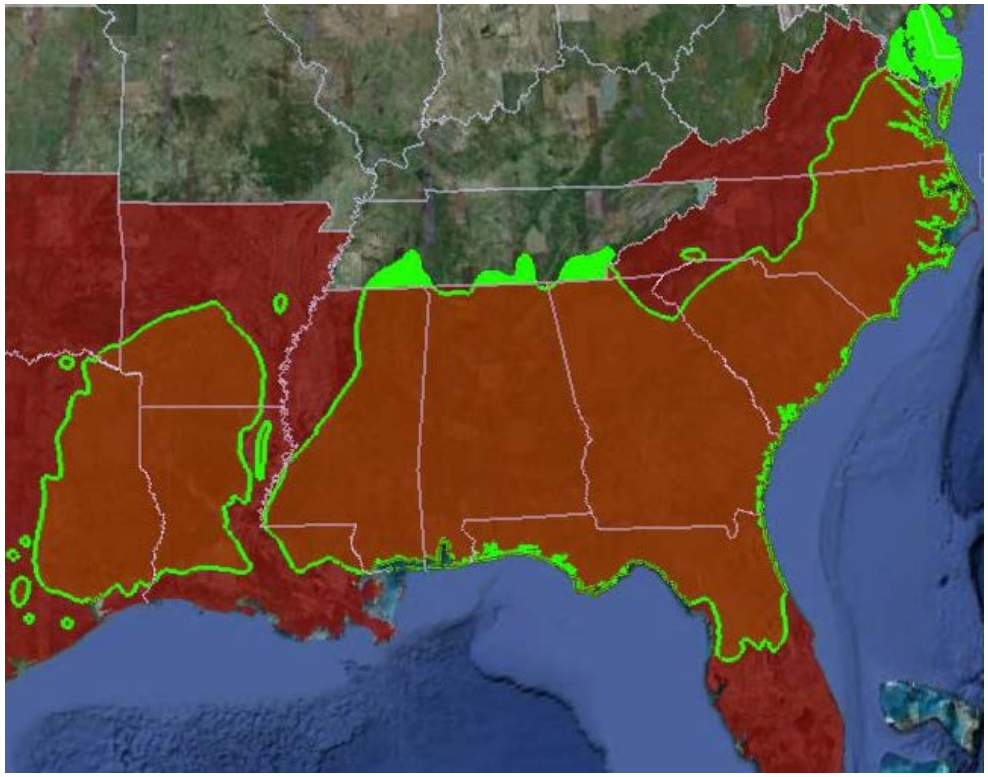
PINEMAP Scope

Planted pine forests owned by corporate and non-corporate private landowners in the Atlantic and Gulf Coastal states from Virginia to Texas, plus Arkansas and Oklahoma.



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PINEMAP Project Team

57 Principal Investigators
25 Research and Technical Staff
51 Grad Students
7 Postdocs
At 11 land grants universities + USFS

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Project Initially Structured Around 6 Disciplinary Aims

- **Silviculture and Field Ecology**– Monitoring network establishment and measurement
- **Modeling** – Multi-scale modeling
- **Genetics and Breeding** – Gene discovery and deployment guidelines
- **Economics and Policy** – Life cycle assessment; multi-scale policy and economic analysis; assessment of alternative management adoption
- **Education** – Educational and training programs for stakeholders and students
- **Extension** – Extension program development and delivery

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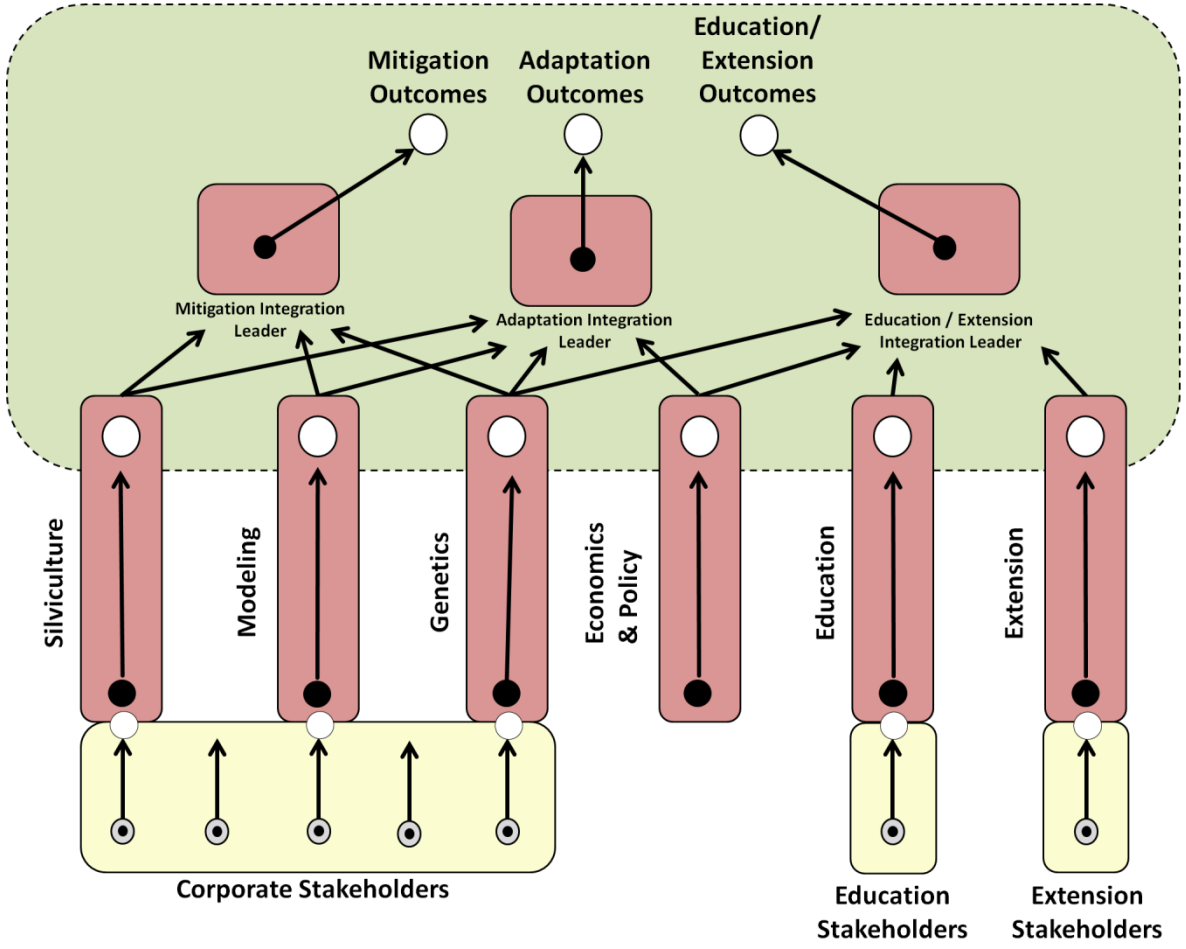
Evolving Project Architecture



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PINEMAP Synthesis Activities are Key to Achieving our Outcomes

- Integrating modeling with economic analysis
- Seed deployment tool development
- PINEMAP scenario development
- Decision Support System development
- Project Learning Tree module development
- Outreach / Extension / Tech Transfer
  - Corporate
  - Non-corporate
- Genotyping and gene discovery
- Regional analyses: Tier 2; sap flow; soil respiration
- Regional modeling runs: 3-PG, WaSSI, Growth & Yield

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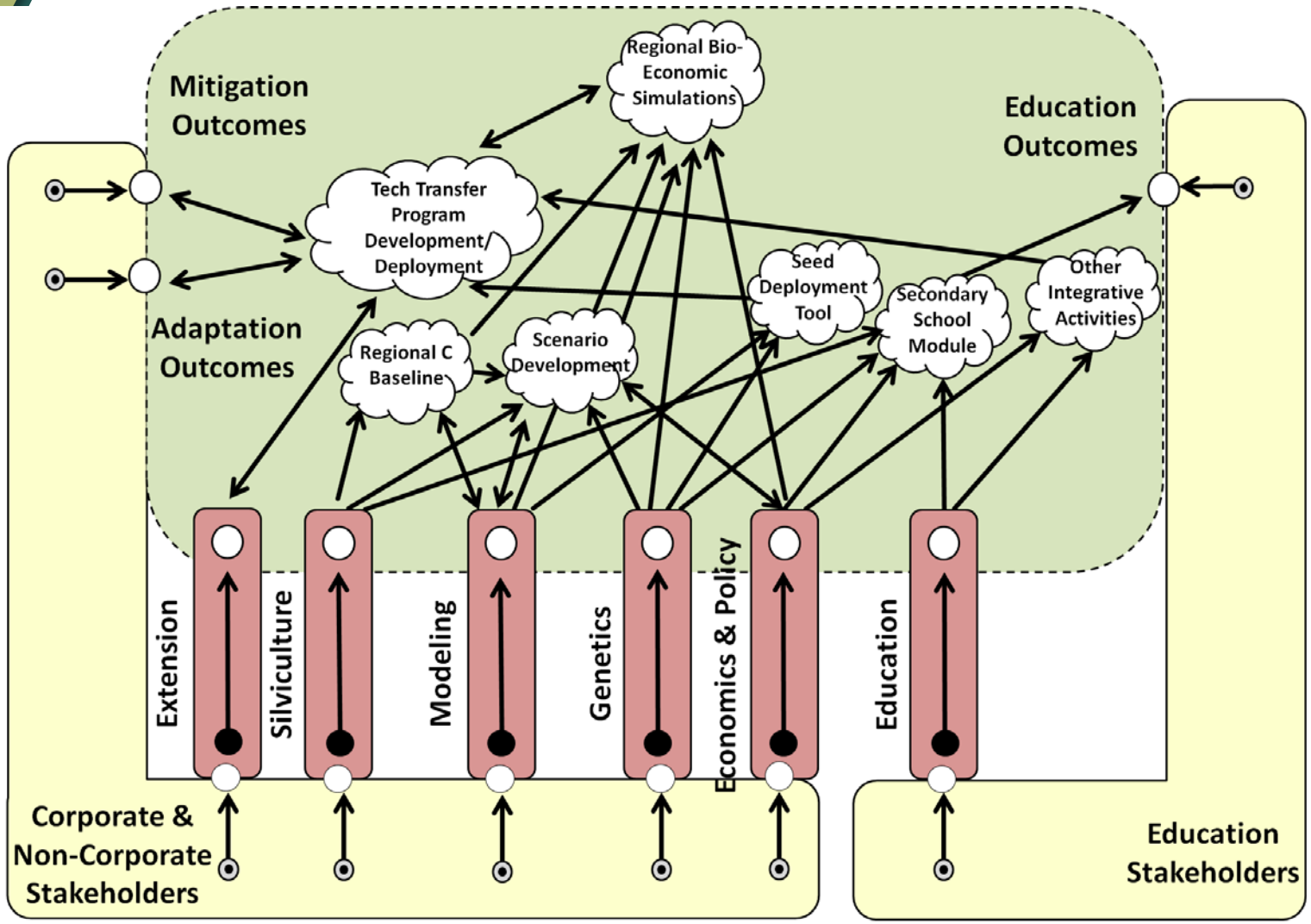

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Today's Meeting Objectives

1. Share PINEMAP science with corporate and non-corporate stakeholders.
2. Present plans for corporate and non-corporate stakeholder outreach.
3. Solicit feedback from corporate and non-corporate stakeholders re: a) research priorities and additional research needs, b) PINEMAP science, and c) PINEMAP outreach plans.

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Today's Agenda

Time	Activity	Presenter
7-8 a.m.	Registration (outside of Dogwood Hall) Continental breakfast (Pecan Tree Galleria)	
8-8:30 a.m.	**Welcome**	Tim Martin, UF Eric Norland, USDA NIFA
8:30-9 a.m.	**Corporate and non-corporate stakeholder research priorities**	Tim Martin, UF
9-9:20 a.m.	**Stakeholder feedback: PINEMAP research priorities**	
9:20-10:05	**PINEMAP science presentations session 1** Introduction PINEMAP climate scenarios and projection datasets PINEMAP management scenarios	 Tim Martin, UF Ryan Boyles, NCSU Bob Teskey, UGA
10:05-10:20 a.m.	Break (Pecan Tree Galleria)	
10:20-11:40 a.m.	**PINEMAP science presentations session 2** PINEMAP regional modeling PINEMAP Decision Support System	 Randolph Wynne, VT Ryan Boyles, NCSU
11:40 a.m.-12 p.m.	**PINEMAP's required graduate course: An innovation in integrated education**	Martha Monroe, UF
12-1 p.m.	Lunch (Magnolia Ballroom)	
1-2:40	**PINEMAP outcome theme session** Introduction CO_2 (productivity and resilience) Engaged and literate public Enhanced capacity and enhanced connections Public policy and economy	 Gary Peter, UF Tim Martin, UF Martha Monroe, UF Eric Taylor, TAMU Damian Adams, UF
2:40-3 p.m.	**Stakeholder feedback: PINEMAP science**	
3:15-3:45 p.m.	**Corporate and non-corporate stakeholder outreach plans**	Tim Martin, UF Bill Hubbard, SREF
3:45-5 p.m.	**Stakeholder panel: outreach plans and futuring**	
5-6:30 p.m.	**Poster session and reception** (Pecan Tree Galleria)	
6:45 p.m.	Dinner on your own *Hotel shuttles can be arranged with concierge*	

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