Opportunities for Collaborative Interdisciplinary Programs

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Outline

• Introduction: Motivation for the FCI
• Ongoing Projects
• Mechanisms
• Emerging Needs, Opportunities
• Closing Remarks
Introduction: Motivation for the FCI

- Science
- Societal Needs
Motivation for the FCI

• Address the complex issues and challenges associated with climate change, climate variability, sea level rise
• Target science to inform decision and policy responses
• … We want the FCI to be known for both
Motivation for the FCI

• Targeting Science Opportunities
  – Climate or sector-driven science questions
  – New technologies, education
  – Regional, national, international opportunities

• Targeting societal needs (state & regional)
  – Engagement with Floridians, Florida issues (FCI)
  – Regional (SECC, others in & affiliated with FCI)
  – Research, extension, education, service
Mechanisms

• Interdisciplinary proposals written to federal agencies (research and education)
• Stakeholder climate working groups (involving scientists, agencies, private sector) to co-learn about issues, solutions
• Technical working groups (or task forces) to respond to stakeholder needs
• Other FCI activities (symposia, seminars, etc.)
There Are Many Ongoing Projects

• Open-source climate information & decision support for agriculture & food production
• Inferring paleoclimate from lake sediments
• Carbon sequestration: Terrestrial Carbon information system
• Analysis of sedimentary data to create paleo records of hurricane landfalls in Florida
• Predicting impacts of climate variability & change on land use/land cover change in Southern Africa
• Stability, chemistry and interactions of pyrogenic C (Biochar) with soil minerals and microbes
• Ocean circulation and Antarctic ice sheet development
Emerging Needs, Opportunities

- Meet state needs, engage Floridians
- Regional centers (i.e., USGS, NSF, …)
- National Climate Services (NOAA)
- National Climate Assessment (USGCRP)
- International research, education opportunities
Meet State Needs

- Climate Working Groups (e.g., agriculture, water utilities; need to explore more)
- Technical Working Groups
  - Sea level rise?
  - Climate scenarios?
    - Local level (county or weather station scale)
    - Multiple time scales
    - Not only climate – population, land use, policy, …
NOAA Climate Service (NCS)

Six Regions, SECC is a mechanism for engagement
Time Scales: 1-50+ years

Tom Karl is interim Director, Eileen Shea is Assistant Director, both of NCDC
Kathy Jacobs, on assignment from the University of Arizona, is the Director of the National Climate Assessment.

Regional assessments
Time Scales: 25 years, 50-100 years
BUT include all time scales
International Agricultural Modeling Intercomparison and Improvement Project (AgMIP) – Models and Outcomes

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Closing Comments