# Building adaptive capacity through partnerships and networks

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**Carolinas Integrated Sciences & Assessments** 

#### National Climate Assessment Research

- "Engaging Climate-Sensitive Sectors in the Carolinas"
  Forestry, Government, Tourism, Water, Wildlife
- Questions
  - What networks currently exist within the study sectors?
  - How do they support climate-related decisions and activities?
  - How are existing and emerging networks being used to build adaptive capacity within and across sectors?

# Advantages of networks

- Information sharing, knowledge exchange
- Provide access to resources
- Enable collective action
  - Conflict resolution
  - Consensus building
  - Distribution of risks

# Building adaptive capacity

- "activities or processes undertaken to encourage or enable adaptation, such as:
  - investigation/research;
  - planning;
  - participation in networks or discussion groups;
  - training staff in climate change science;
  - increasing climate change management capacity, etc."

## Methods

- Web-based search for documents, key sector leaders engaged with climate-related activities
- $\Box$  Documents (n = 128)
- Coupled Questionnaires/Interviews (n=117)
- NVivo used to code and analyze interview transcripts



# Coding and analysis

- Network purpose/type of interaction
  - Information-sharing, project-based, agency coordination, research, education-outreach, planning
- Key partners
  - Academic/research, government agencies, non-profits, private, clients
- "Bridging" networks and activities
  - Interagency, regional, cross-scale interactions and activities
  - conferences and workshops, mitigation/adaptation projects
- Facilitating factors

### Climate networks in the Carolinas

□ Few formal climate networks

- Lack of political and public support for climate change adaptation (actions or planning)
- Climate concerns and management of climate stressors incorporated into existing decision making and planning processes
- Sectoral differences
- Emerging networks
  - Primarily informal or "shadow" networks
  - Tied to other/related interests, e.g. sustainability, energy efficiency, environmental protection

#### Key sector networks

Water	Established professional network
Focus/scope	Providing technical expertise: provision of clean water
Built through	Professional associations, educational opportunities, conferences
Forestry	Strong professional network
Focus/scope	Sharing information and data: fire risks, long-term forest management
Built through	Shared training, long careers, decision support activities
Government	Networks and collaborations within the local community, with neighbors
Focus/scope	Planning /projects: sustainability, energy efficiency, environmental planning
Built through	Cross-government/regional activities facilitated by incentives/mandates, funding
Tourism	Fragmented, shaped by local -regional and sub-sector interests
Hospitality	Promoting tourism, initiatives related to sustainability and green business
Outdoor	Regional/cross-agency collaborations focus on land conservation, environmental and
	resource protection
Wildlife	Multi-agency, multi-organizational partnerships
Focus/scope	Pooling resources and expertise for project development and implementation; research, monitoring, knowledge exchange
Built through	Initiatives to address common environmental concerns, restoration and conservation projects

Building capacity through networks and partnerships

- Information sharing
  - Conferences, workshops, colleagues
- Research collaborations
  - U.S. Forest Service Southern Research Station
  - NC Sea Level Rise Impact study
  - Biofuels/renewable energy
  - Center for Sustainable Tourism, East Carolina University

## Project planning and implementation

- Forest and land management
- Electric Cooperatives of SC
- Energy Efficiency and Conservation Block Grant Program
- Sustainable Communities Regional Planning Grant
- Ecosystem restoration and conservation

Inter-agency collaborations: "bridging" activities

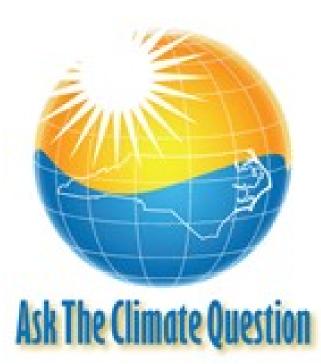
- Alligator River
  National Wildlife
  Refuge adaptation
  project
  USFWS
  - TNC
  - Duke Energy
  - other federal, state, and local partners



Source: Debbie Crane/The Nature Conservancy (http://www.psmag.com/environment/alligator-river-refuge-rolls-back-from-rising-sea-36879/)

Inter-agency collaborations: "bridging" activities

- NC Interagency Leadership Team
  - 6 state agencies, 5 federal agencies
  - March 2010: "Planning for NC's Future: Ask the Climate Question"
  - DENR-led Climate Change Initiative



## Education and outreach

#### Networks are used to:

- disseminate information and increase levels of awareness about potential impacts of climate change
- build a broader range of organizations and stakeholders who are aware and interested in climate issues
- increase public and political support for climate adaptation

# Facilitating factors: more than \$

- Opportunities
  - Mandates
  - Incentives, funding
- Governance/management structures and processes
  that enable partnerships, collaborations, coordination
- Public/political support
- Leaders

Lessons and observations: how to expand adaptive capacity

- No centralized network
  - Varying degrees of reliance on existing networks
    Value of decentralization, "tailored" collaborations
- No 1-way to build partnerships
  - Different motivations
  - Sectoral differences
  - Value of "top-down" direction or mandates
- Next steps for CISA

#### THANK YOU For more information please visit our website: <u>www.cisa.sc.edu</u>

Or contact us at: cisa@sc.edu

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**Climate Science for Decision-Making**