

# USGS NCCWSC & DOI Climate Science Centers

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**Doug Beard, Acting Director  
National Climate Change & Wildlife  
Science Center**

**Water Smart Briefing  
Washington, DC  
June 23, 2010**



# NCCWSC Consultation and Development

Convened and assisted by: Wildlife Society (Mike Hutchins), Ecological Society of America (Cliff Duke), Meridian Institute (Tim Mealey)

December 2008 – National Workshop

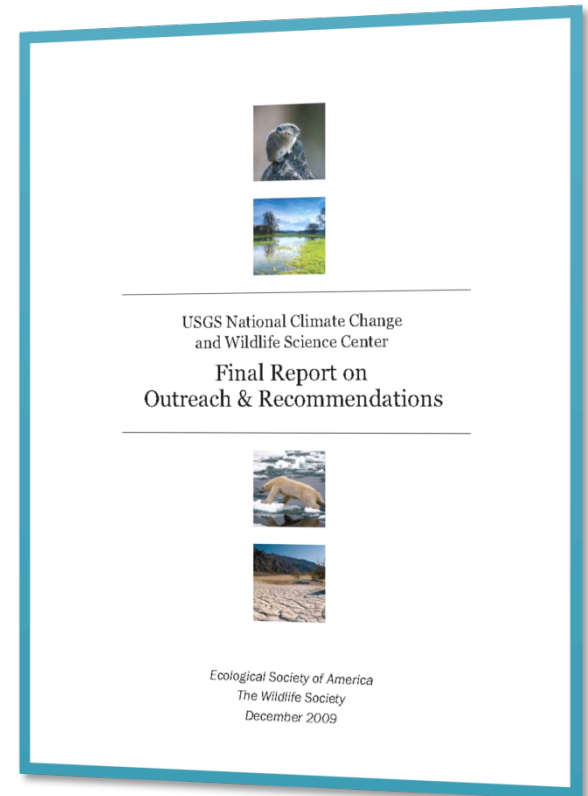
May 2009 – (Eastern region) Laurel, MD

June 2009 – (Western region) Seattle, WA

June 2009 – (Central region) Denver, CO

July 2009 – Meeting with national partners

Reports available at [www.nccw.usgs.gov](http://www.nccw.usgs.gov)  
(includes TWS–ESA final report)



# National Climate Change & Wildlife Science Center

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- **Mission**

Provide **natural resource managers** with the **tools and information** they need **to develop and execute management strategies** that address the impacts of climate change on **fish, wildlife, and their habitats**

- **Focus on climate change adaption & impacts**

“Adjustment in natural or human systems in

response to actual or expected climatic changes

opportunities



# Secretarial Order 3289

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Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources (9/14/09)

... the United States Geological Survey (USGS) has been developing regional science centers ... currently known as "regional hubs" of the National Climate Change and Wildlife Science Center...

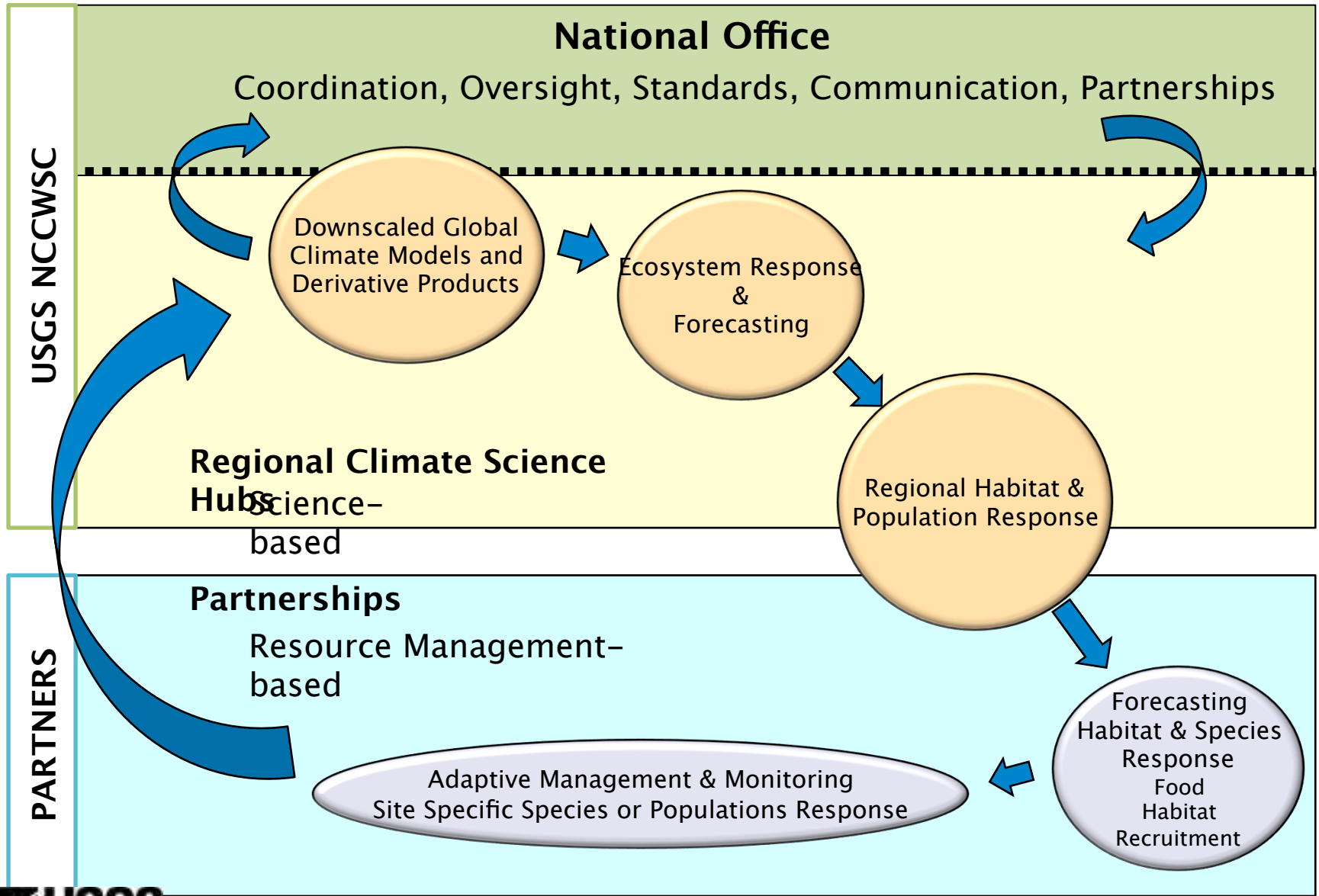


The **Climate Change & Energy Response Council** will work with USGS and other Department bureaus to rename these regional science centers as

**USGS**ional Climate Science Centers and broaden their mandate



# NCCWSC Science-Management Interface



# NCCWSC 2009 Research

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- **SE Regional Pilot (\$1.7 Million)**

- **Research Emphases (\$5.2 Million)**

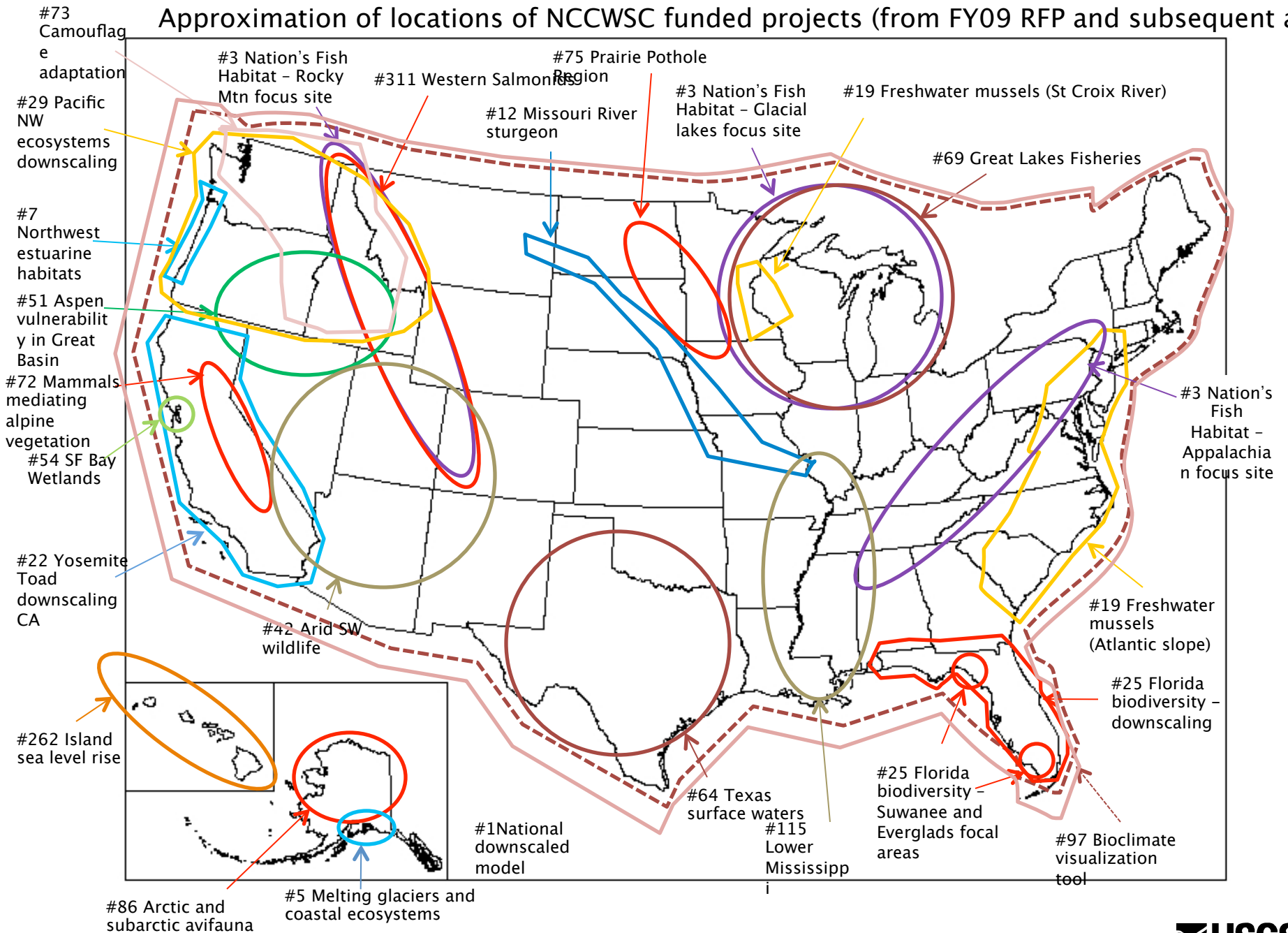
- Fisheries & Fish Habitat – \$1.8 Million
- Arctic & Arctic Species – \$0.8 Million
- Estuaries & Coasts – \$0.7 Million
- Avian Conservation – \$0.5 Million
- Wildlife & Terrestrial Species – \$1.4 Million



- **Partnerships (\$1.4 Million)**

- Climate Monitoring (NASA, FWS, NSF, Smithsonian, NPS)
- Landscape Conservation Cooperatives

# Approximation of locations of NCCWSC funded projects (from FY09 RFP and subsequent add



# 2010 NCCWSC Activities

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- Vulnerability Assessment Projects  
\$1.5M
- Establish Alaska CSC
- Initiated competitive process for 4 other CSC's for 2010 and 2011 establishment
- Staffing of National Office
- Information and downscaling standards

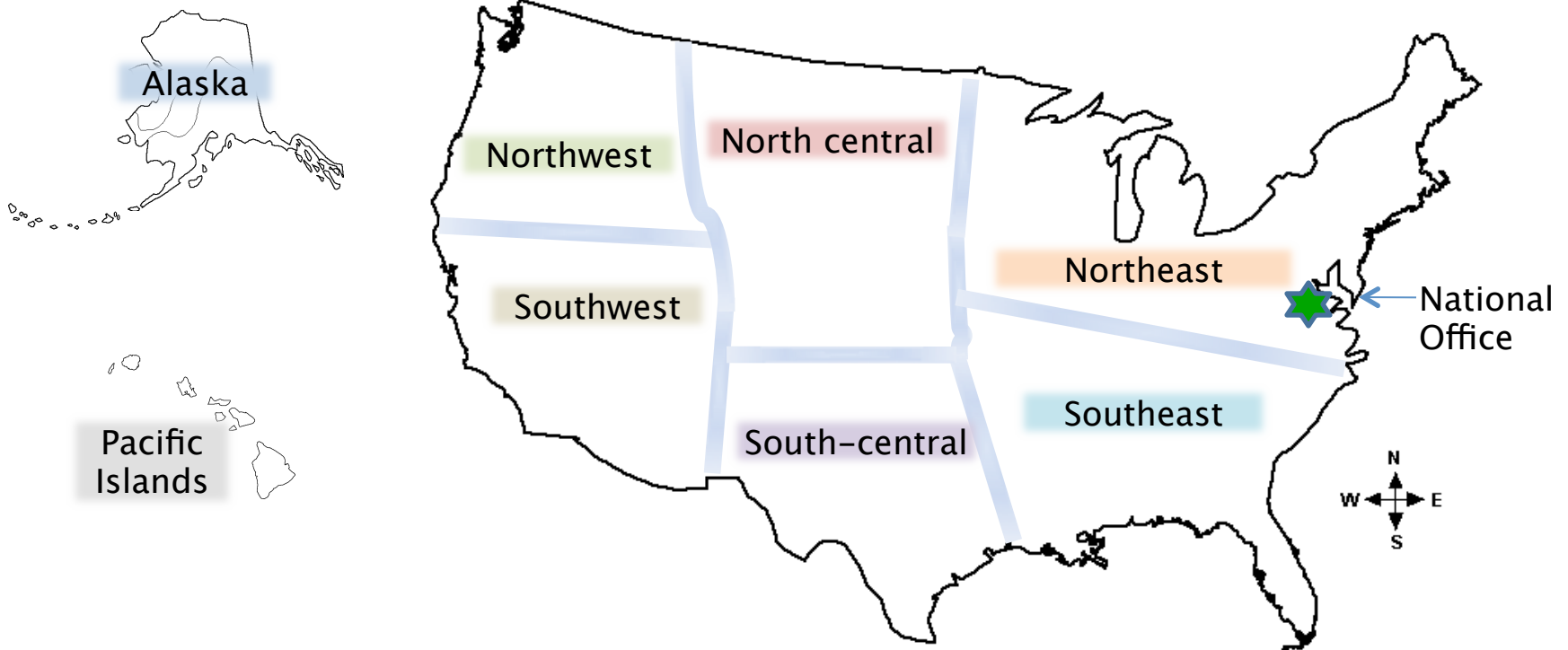


- Interagency Partnerships



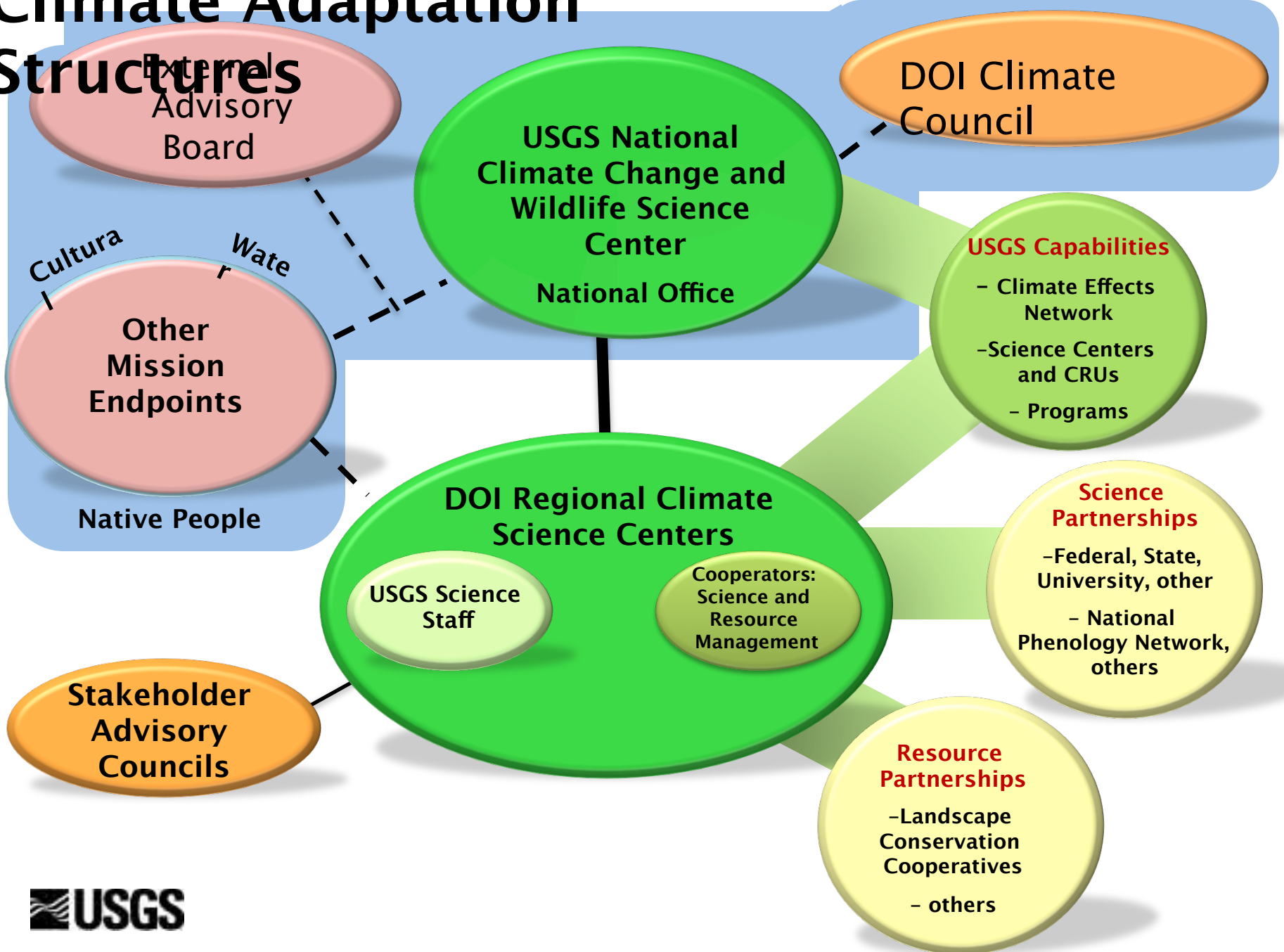
# NCCWSC National & Regional Organization

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“Fuzzy Boundaries”

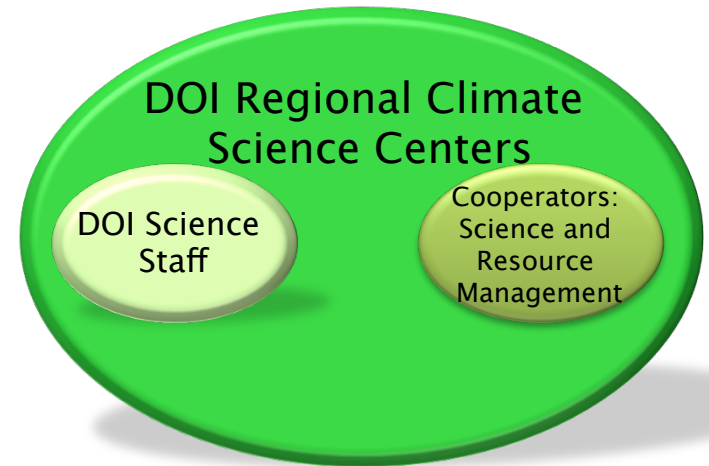
# Climate Adaptation Structures



# Establishing DOI Regional CSCs

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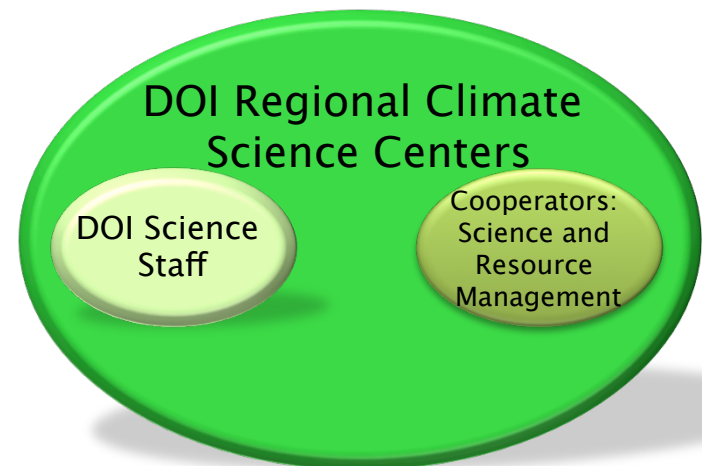
- University Based
- Competitive Process;
- 3 Funded in FY 2010; 2 in 2011, 3 in 2012
- Program Announcement in Early 2010



# DOI Regional CSCs -- DRAFT Selection Criteria

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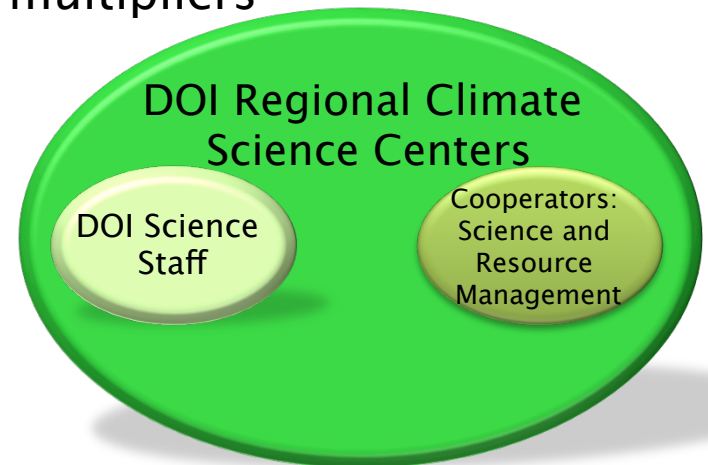
1. Current climate change program
2. Existing Linkages with Department of the Interior (DOI) bureaus
3. Existing linkages with potential Center partners
4. Organization capabilities and contributions
5. Regional climate change science needs and adaptation partner availability



# USGS NCCWSC Component of DOI Regional CSCs

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- Initial / Core Staffing (USGS NCCWSC) – Director/Coordinator, Ecologists, Modelers, Climate Scientists, Population Biologists, etc.
- Annual DOI/USGS funding ~\$4 million
  - ~\$1.5 M = DOI staff and operations (space/facilities, etc.)
  - Remainder = science funding through university, USGS, other partners
  - Partnerships – in-kind and monetary multipliers



# DOI Climate Science Centers

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- CSCs will deliver basic climate change impact science.
- CSCs will prioritize fundamental science, data and decision-support activities.
- CSCs will partner with and help facilitate the coordination of fundamental climate science capabilities across their regions of responsibility.
- CSCs will synthesize, integrate, and communicate existing climate change impact data.
- CSCs will partner with resource managers at pertinent LCCs to assist development of science-based adaptation strategies.

# DOI Climate Science Centers

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## A New Paradigm

- Linking Physical, Biological, and Social Science
- Scenario/Forecasts of Future Possibilities
- Link Research, Modeling, Synthesis, and Monitoring in a Landscape/System Perspective
- Science Collaboration/Resource Management Collaboration
- Stakeholders set priorities/Provide Feedback



- Share Data and Information

