

# Northwest Climate Science Center

PNW CESU Annual Meeting  
November 16, 2011

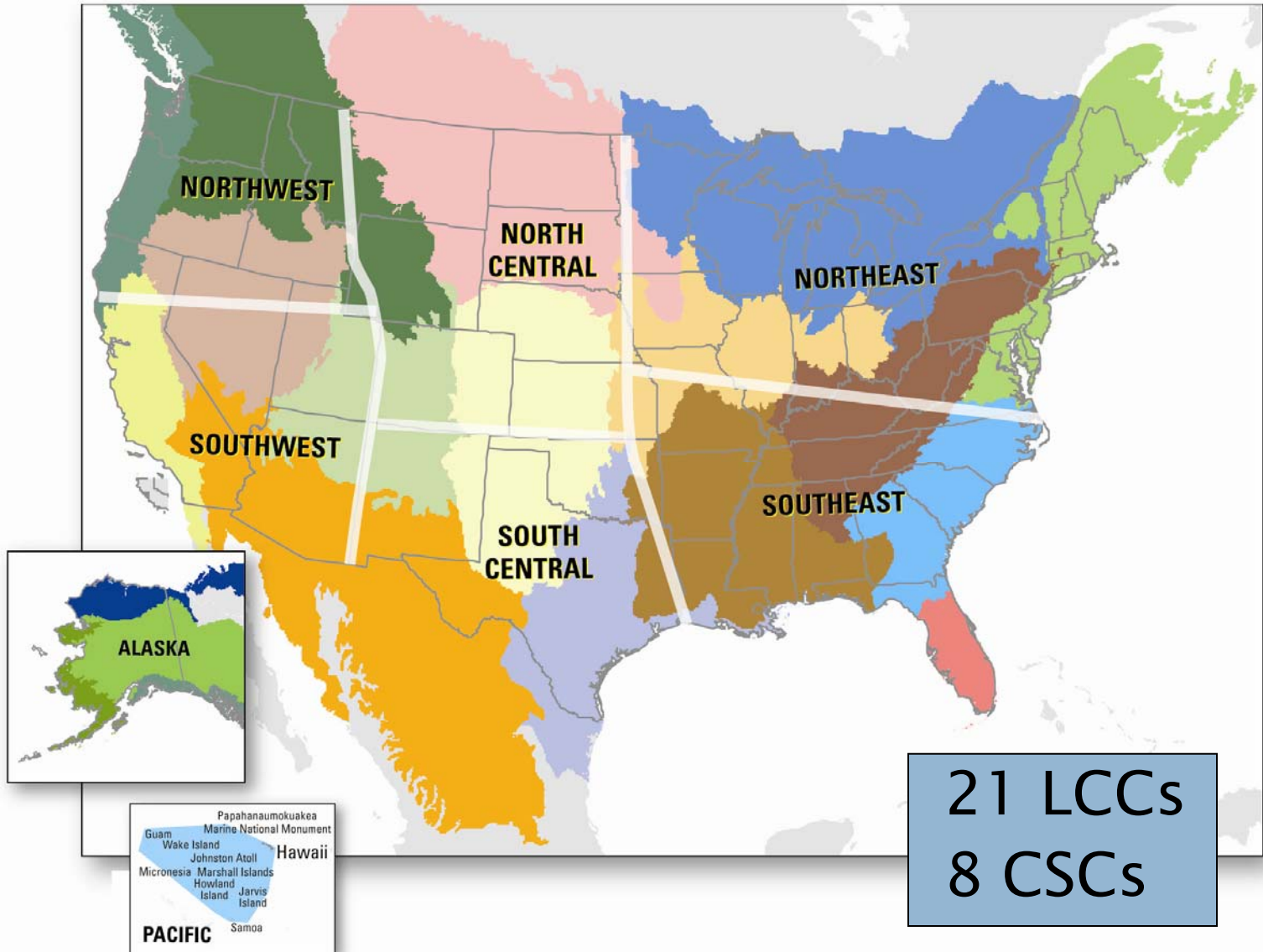
Nancy Lee  
Interim Director, NW CSC  
Deputy Regional Executive, Northwest Area  
U.S. Geological Survey

# Department of Interior (DOI)

- ▶ Secretarial Order (Sept. 4, 2009) – “Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources”
- ▶ Directs DOI Bureaus:
  - To work together to address climate change impacts
  - To analyze climate change impacts in any major decisions
- ▶ Established nationwide network of:
  - Climate Science Centers (CSCs)
  - Landscape Conservation Cooperatives (LCCs)
- ▶ Develop landscape level strategies for understanding and responding to climate change impacts

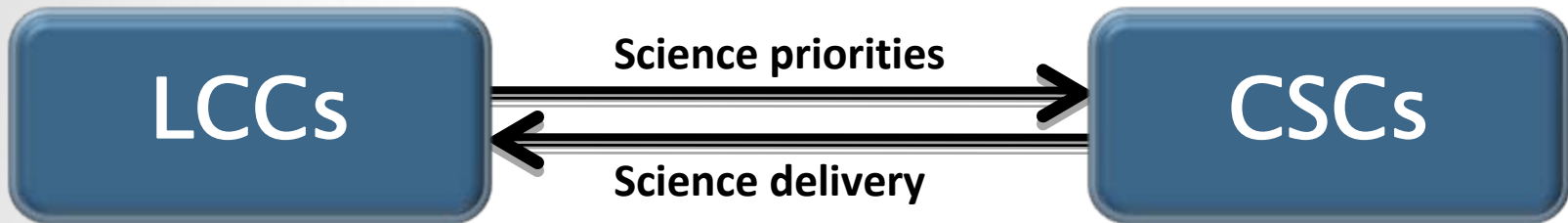


# CSCs / LCCs





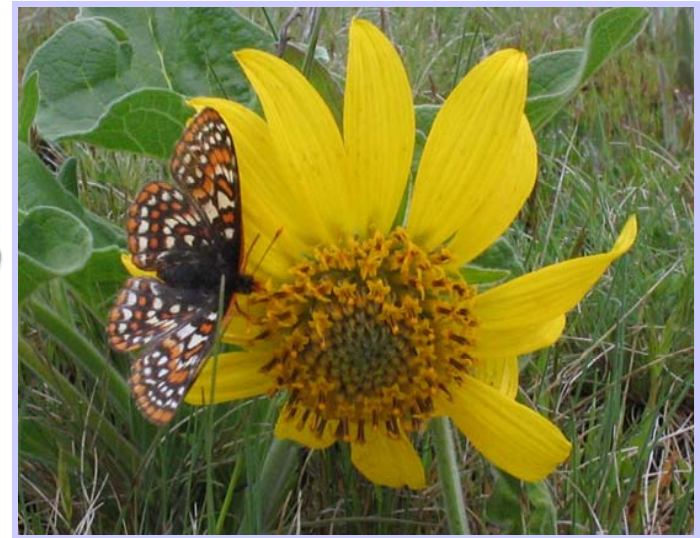
# Relationship between LCCs and CSCs



- ▶ Closely connected, complementary roles
- ▶ LCCs will help define the priorities of CSCs
- ▶ LCCs will utilize scientific information and tools produced by CSCs
- ▶ Opportunity to align priorities
- ▶ Both participant driven



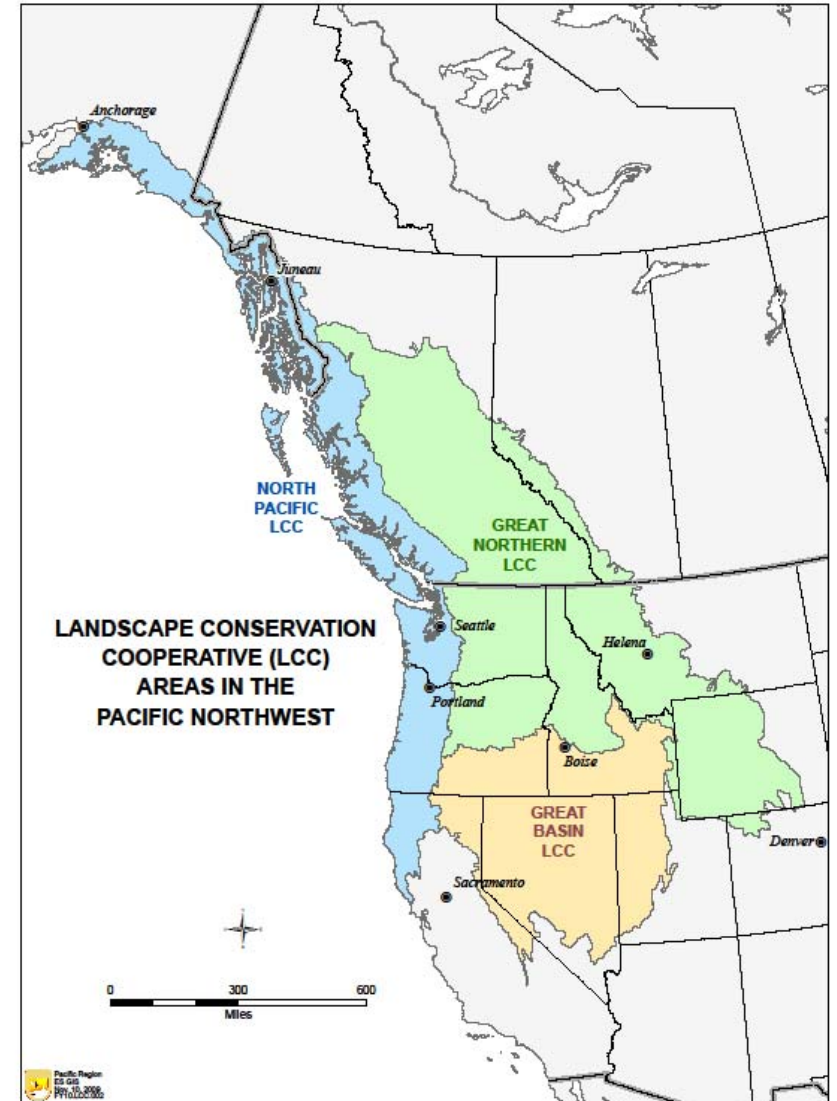
# Climate Science Centers



- ▶ Federally lead research collaborations
- ▶ Hosted by a university or university consortium
- ▶ Provide fundamental scientific information, tools, and techniques about climate change to land, water, wildlife, and cultural resource managers
- ▶ Guided by a science agenda that is updated annually and considers the priorities of LCCs and resource managers

# NW CSC and LCCs

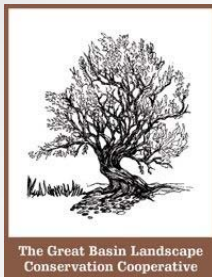
- ▶ Aligned with 3 LCCs:
  - Great Northern
  - Great Basin
  - North Pacific
- ▶ Overlapping boundaries with other CSCs



# NW CSC Organization and Leadership Structure

- ▶ USGS
  - Center Director, Gustavo Bisbal and Research Staff
  - Provide leadership, partner engagement, coordinate and conduct research
- ▶ University Consortium
  - OSU: Program management and host for NW CSC
  - UW: Communications
  - UI: Data–infrastructure
  - Provide infrastructure support, conduct research, train students
- ▶ Additional university collaborators





## Executive Stakeholder Advisory Committee

- 22 agencies and organizations (tribal, state, federal, and LCCs)
- Provide guidance in science planning and determining science priorities



# NW Climate Science Center

## Primary Goals

- ▶ Identify science needs of natural and cultural resource managers
- ▶ Understand vulnerabilities, and adapt to climate change
- ▶ Design monitoring systems to improve understanding of climate change impacts
- ▶ Support collaborative and interdisciplinary research approaches
- ▶ Develop an integrated data management infrastructure
- ▶ Communicate findings

# Science Agenda Themes

1. Climate science and modeling
2. Response of physical systems to climate change
3. Response of biological systems to climate change
4. Vulnerability and adaptation
5. Monitoring and observation systems
6. Communication of science findings

# Tribal Engagement on the Science Agenda

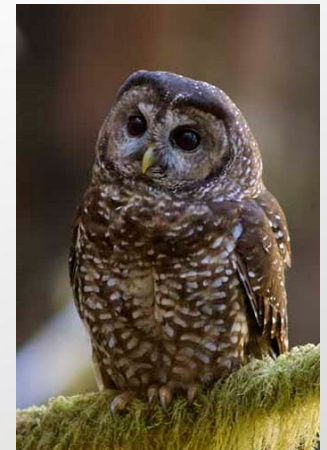
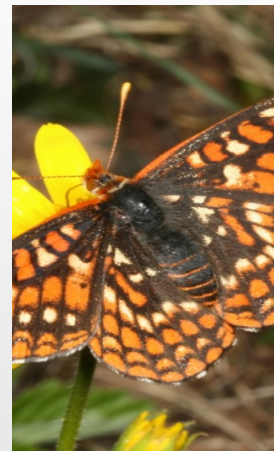
- ▶ Input from ESAC Tribal Representatives–April 2011
- ▶ Request comments from Affiliated Tribes of Northwest Indians (ATNI)
- ▶ ATNI Annual Meeting September 2011
- ▶ Traditional Ecological Knowledge Workshop September 2011
- ▶ Webex October 2011





# NW CSC FY2011 Funded Projects

- ▶ Effects of Climate and Landscape Changes on Fish and Wildlife
- ▶ Downscaling for Hydrologic Predictions
- ▶ Sponsorship of Climate Science Workshops
- ▶ ~\$700,000 in FY2011



# NW CSC Accomplishments

- ▶ University Fellows
  - Species distribution and effects of climate change
  - Downscaling climate models
  - Develop hydrologic models
- ▶ Climate Bootcamp
  - Orientation and communication
- ▶ Data Integration Pilot

# NW CSC FY2012 Activities

- ▶ ESAC Work Team science prioritization
- ▶ Establishment of NW CSC infrastructure and staffing
- ▶ Increased Engagement



## ▶ Contacts:

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