

Interior Department Innovations in Conservation Delivery

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A few modest challenges

- ❖ Climate change
- ❖ Land use and habitat change
- ❖ Invasive species
- ❖ Wildfire
- ❖ Species conservation
- ❖ Energy development (renewable and conventional)
- ❖ Multiple competing demands (including that of “change”)



Lessons and Goals

- ❖ Operate at landscape scale (put local into context)
- ❖ Operate across jurisdictions
- ❖ Integrate multiple uses / demands
- ❖ Ensure tight linkages between science and management
- ❖ Facilitate adaptive management
- ❖ Get ahead of the curve
- ❖ Partners are key



- ❖ NPS / FWS Inventory and Monitoring Program
- ❖ Rapid Ecological Assessments – Bureau of Land Management + **partners**
- ❖ Landscape Conservation Cooperatives – All DOI bureaus + **partners**
- ❖ Climate Science Centers – ALL DOI bureaus (USGS lead) + **partners**





BLM Rapid Ecoregional Assessments

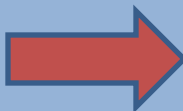
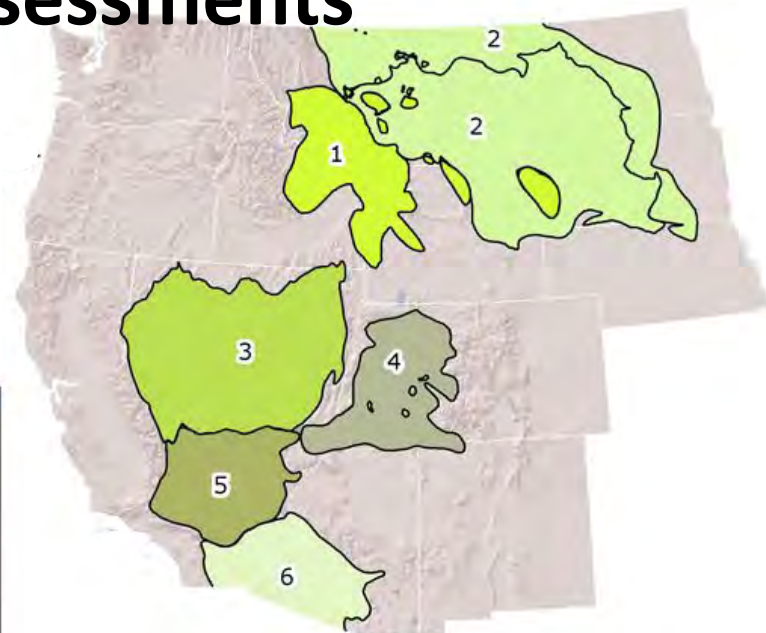
Key purposes:

**Synthesize existing
information**

**Identify potential areas for
conservation and
development**

**Project future trends from
climate change, fire,
invasive species,
development**

**Establish baseline ecological
data to gauge change,
management
effectiveness**



**Create direct links to
management and decision
making**





Fundamentals

- Consistent approach
- Rapid: approximately 18 months
- Use only **AVAILABLE** information
- Seek interagency participation
- First REAs completed in 2012
- Common management questions, change agents, conceptual models
- Appropriate peer review
- Opportunity for public involvement





Field Implementation

Making it real through:

- ❖ Land Use Planning
- ❖ Use authorization/BMPs
- ❖ Land tenure adjustments
- ❖ On-the-ground projects
- ❖ Sub-assessments and monitoring
- ❖ Budget Process
 - How to focus and share resources



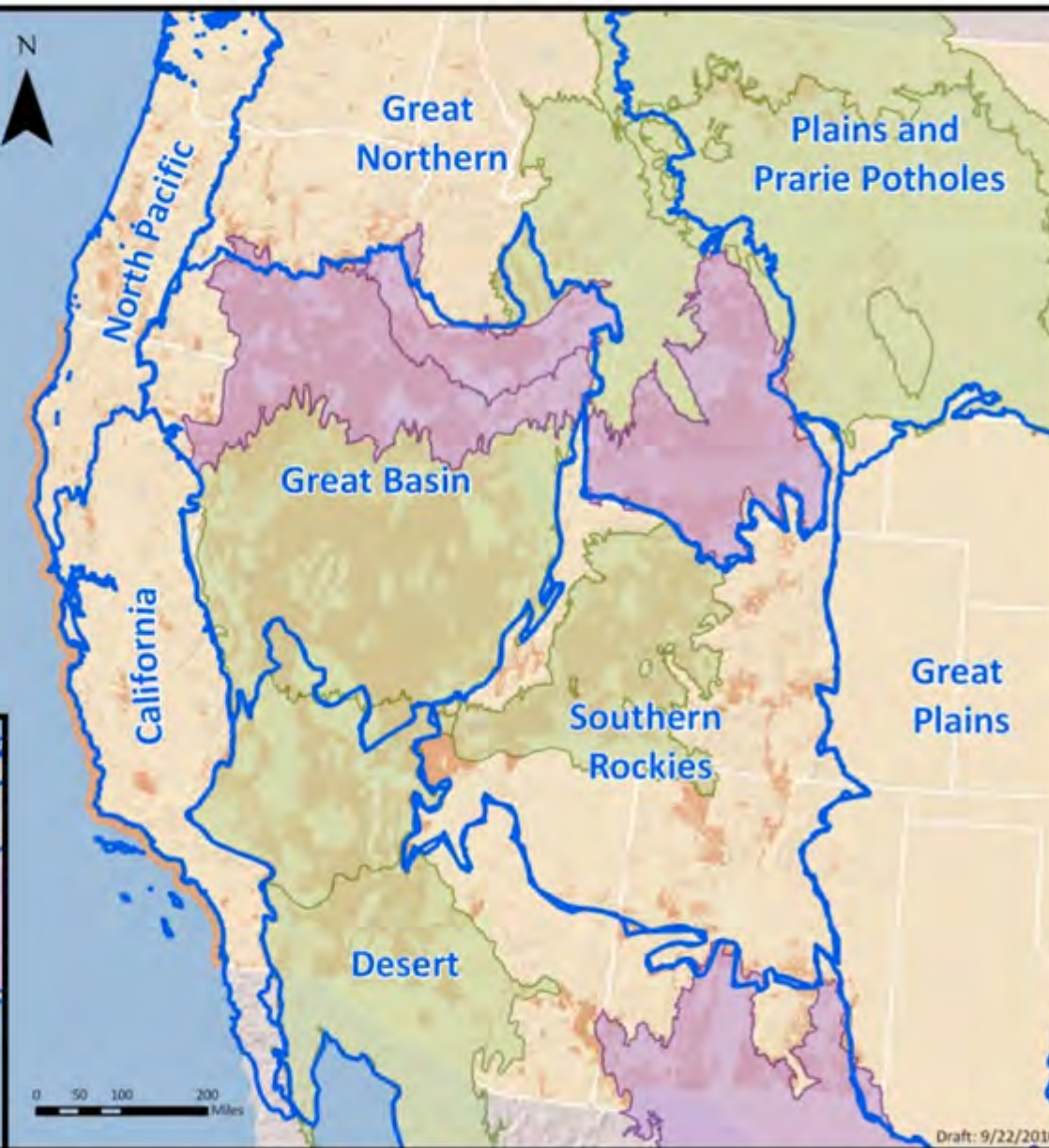
Key REA Partnering Opportunities

Initiation	Phase I	Phase II
• Participate on assessment management or technical team • Define preliminary management questions • Identify common landscape issues • Prepare assessment work plan	• Refine management questions • Suggest conservation elements • Suggest change agents • Recommend potential data sets • Recommend methods and models	• Provide available data
	• Provide technical review • Participate in peer review	

Rapid Ecoregional Assessments

-  LCC Boundaries
-  BLM Lands
-  2010 - Initiated
-  2011 - Proposed

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Landscape Conservation Cooperatives: Geographic Areas



Landscape Conservation Cooperatives

- | | | | |
|---|-----------------------------------|-------------------------------------|----------------------------------|
| 1. Appalachian | 6. Great Northern | 12. Peninsular Florida | 18. Arctic |
| 2. California | 7. Great Plains | 13. Plains and Prairie Potholes | 19. Northwestern Interior Forest |
| 3. Desert | 8. Gulf Coast Prairie | 14. South Atlantic | 20. Western Alaska |
| 4. Eastern Tallgrass Prairie and Big Rivers | 9. Gulf Coastal Plains and Ozarks | 15. Southern Rockies | 21. Pacific Islands |
| 5. Great Basin | 10. North Atlantic | 16. Upper Midwest and Great Lakes | Unclassified |
| | 11. North Pacific | 17. Aleutian and Bering Sea Islands | |

Albers Equal Area Conic NAD83
 Produced by FWS, IRTM, Denver, CO
 Map Date: 03/19/2010



Landscape Conservation Cooperatives

What are they?

Applied conservation science partnerships. Partners include federal and state agencies, Tribes, conservation organizations, and universities within a geographically defined area

Fundamental units of planning and adaptive science that inform conservation actions on the ground

A national and international network of land, water, wildlife and cultural resource managers and interested public and private organizations





Landscape Conservation Cooperatives

What do they do?

- Identify common goals and priorities
- Link science and conservation delivery
- Support biological planning, conservation design and adaptive management
- Evaluate the effectiveness of scientific information and conservation actions





Landscape Conservation Cooperatives

Key Components

- A steering committee of partners
- LCC coordinator
- Planning and technical staff
- GIS capability and other scientific expertise
- Communications



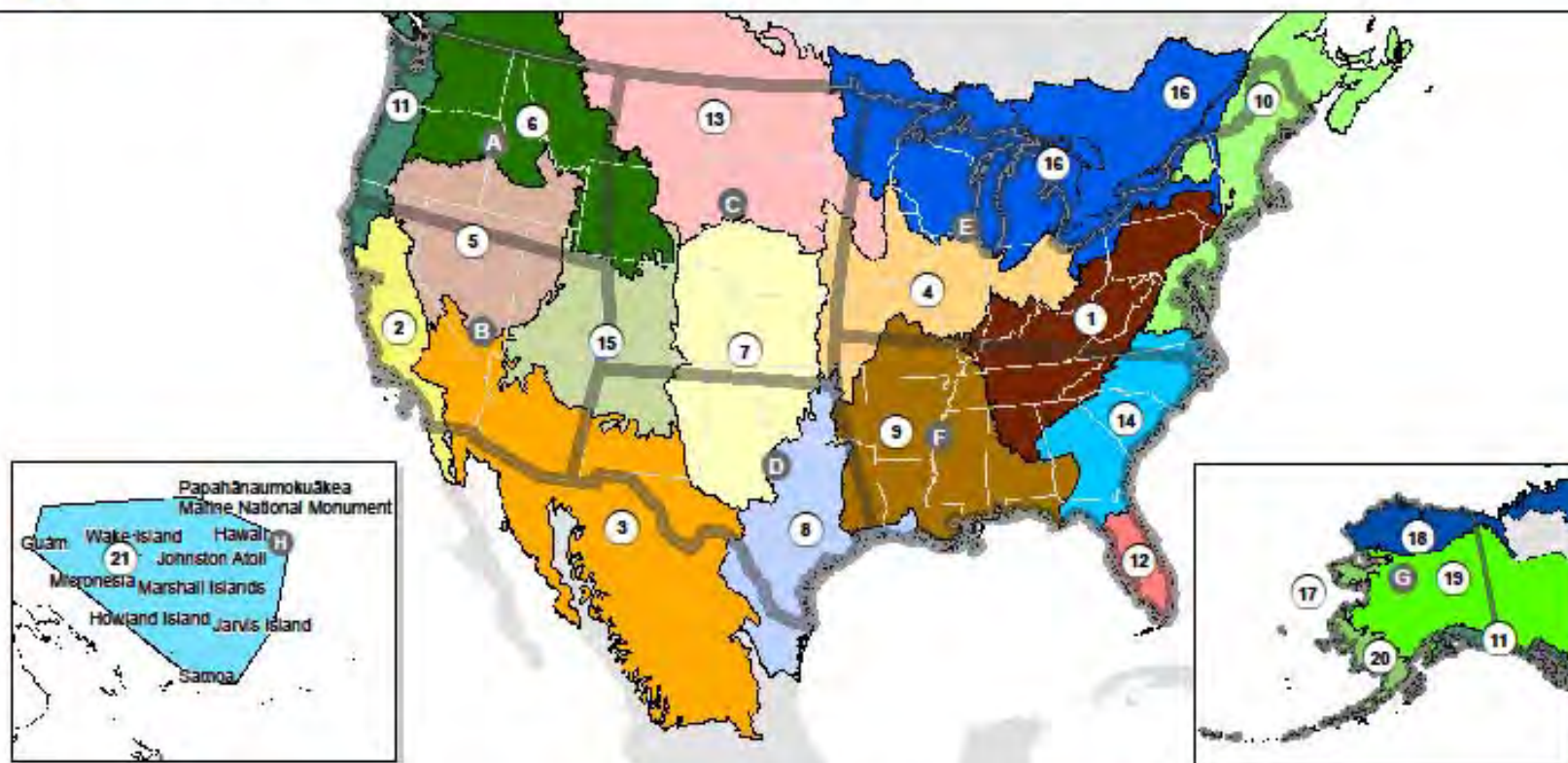
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U.S. Department of the Interior

Landscape Conservation Cooperatives - Climate Science Centers



Climate Science Centers

- A Northwest
- B Southwest
- C Northcentral
- D Southcentral
- E Northeast
- F Southeast
- G Alaska
- H Pacific Islands

Landscape Conservation Cooperatives

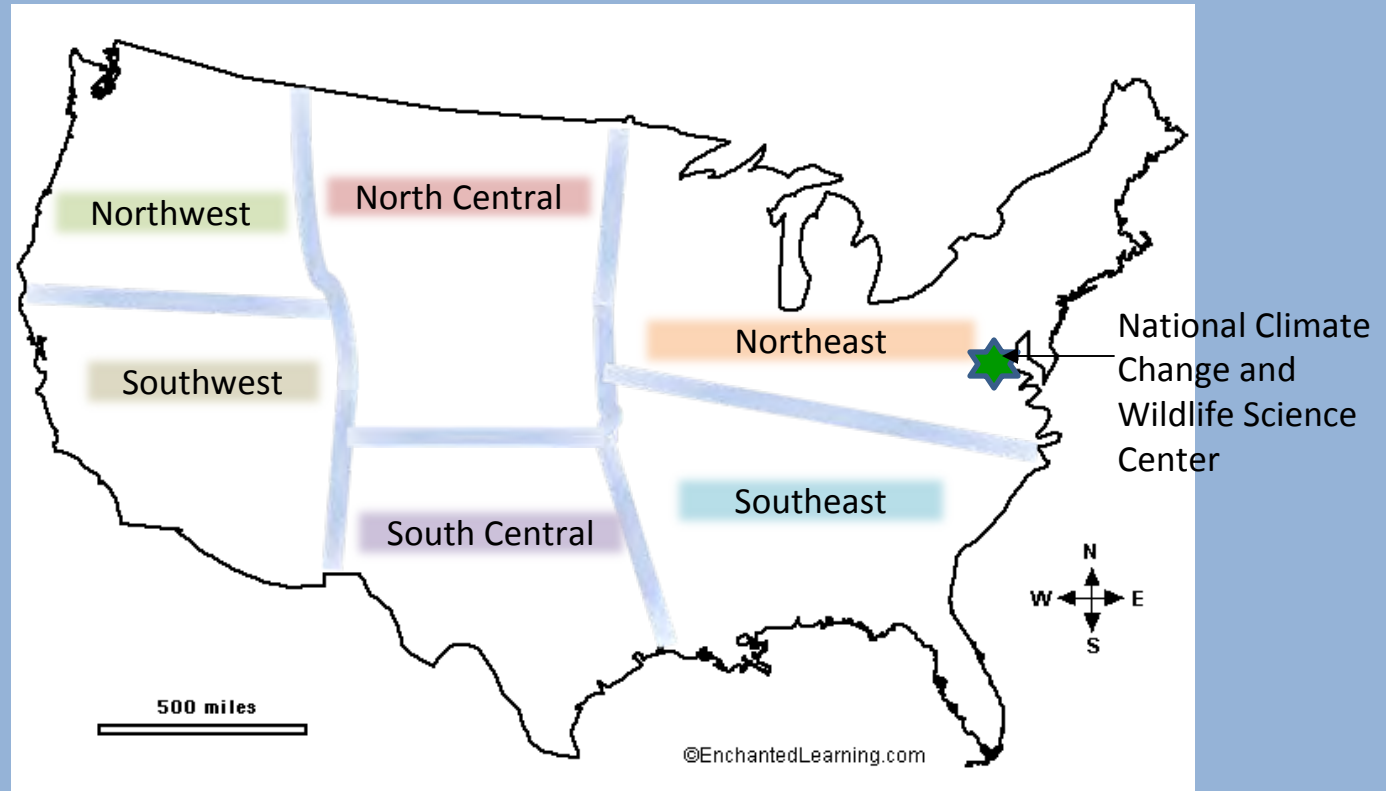
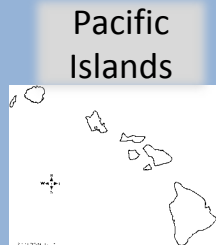
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Climate Science Centers--Regions



“Fuzzy Boundaries”

DOI Climate Science Centers

Priority Science Activities:

- Integrate physical climate models with ecological, habitat, and population response models
- Develop models and forecast fish and wildlife population and habitat changes
- Develop methods and assess vulnerability of species and habitats
- Develop standardized approaches to modeling and monitoring



DOI Climate Science Centers

- Government – university partnership
- Driven by science needs identified by LCCs and other managers
- “Co-development” of science
- Three funded and being implemented (NW, SE, AK)
- Two identified by awaiting FY 11 budget (SW, North Central)
- Three to be established in FY 12 (NE, South Central, Pacific Islands)
- \$3-4 million per center per year
(at full operational scale)



Climate Science Centers

Potentially most valuable role?

Convener of the parties

USERS with NEEDS
(management
community
convened
by LCCs)



SCIENTISTS with
CAPABILITIES
(USGS, host university,
other feds, etc.)



Regional Science Agenda

A new model

- ❖ Landscape scale – by design
- ❖ Collaborative priority setting
- ❖ Strong management linkages
- ❖ Translational science
- ❖ Collaborative science planning
- ❖ Nimble design, flexible resources
- ❖ Collaboration is an assigned task



Thank you

