Landscape Conservation Cooperatives

Landscape Conservation Cooperatives

…to ensure that we accomplish the right things, in the right places, at the right times based on sound science, good planning, monitoring of outcomes, and adaptive management

Landscape
wildlife
expanding
now
science
bold
unified
Conservation
conservation
together
existing
water
stakeholders
building
answers
partnerships
new
land
visionary
cultural
community
Cooperatives
climate
network
future
seamless
landscape
connecting
change
national

Landscape Conservation Cooperatives

Climate Change Cornerstones

LCCs and the Climate Science Centers (CSC) are key elements of the Department of the Interior's Strategic Response to Climate Change

Landscape Conservation Cooperatives

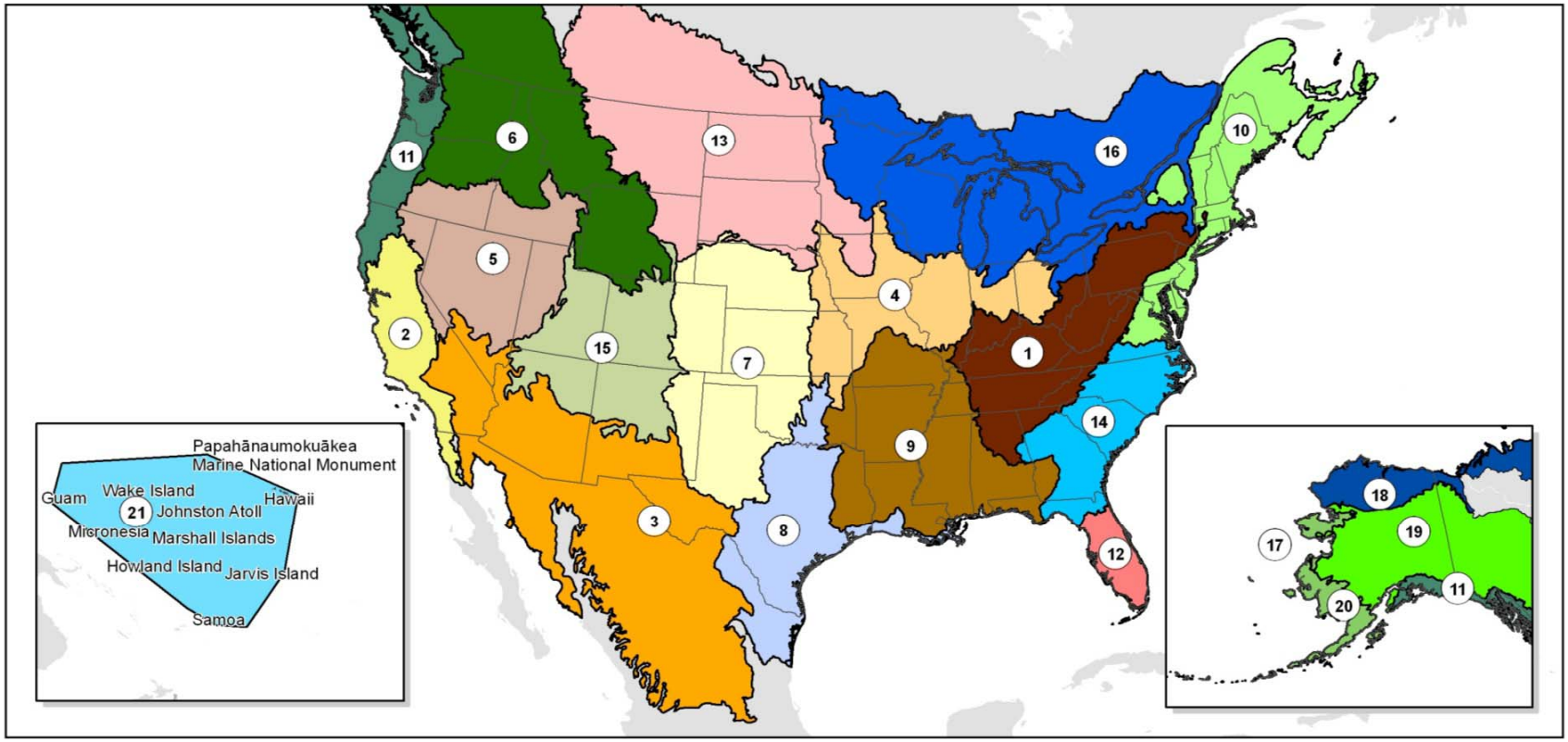
What are they?

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: Geographic Areas



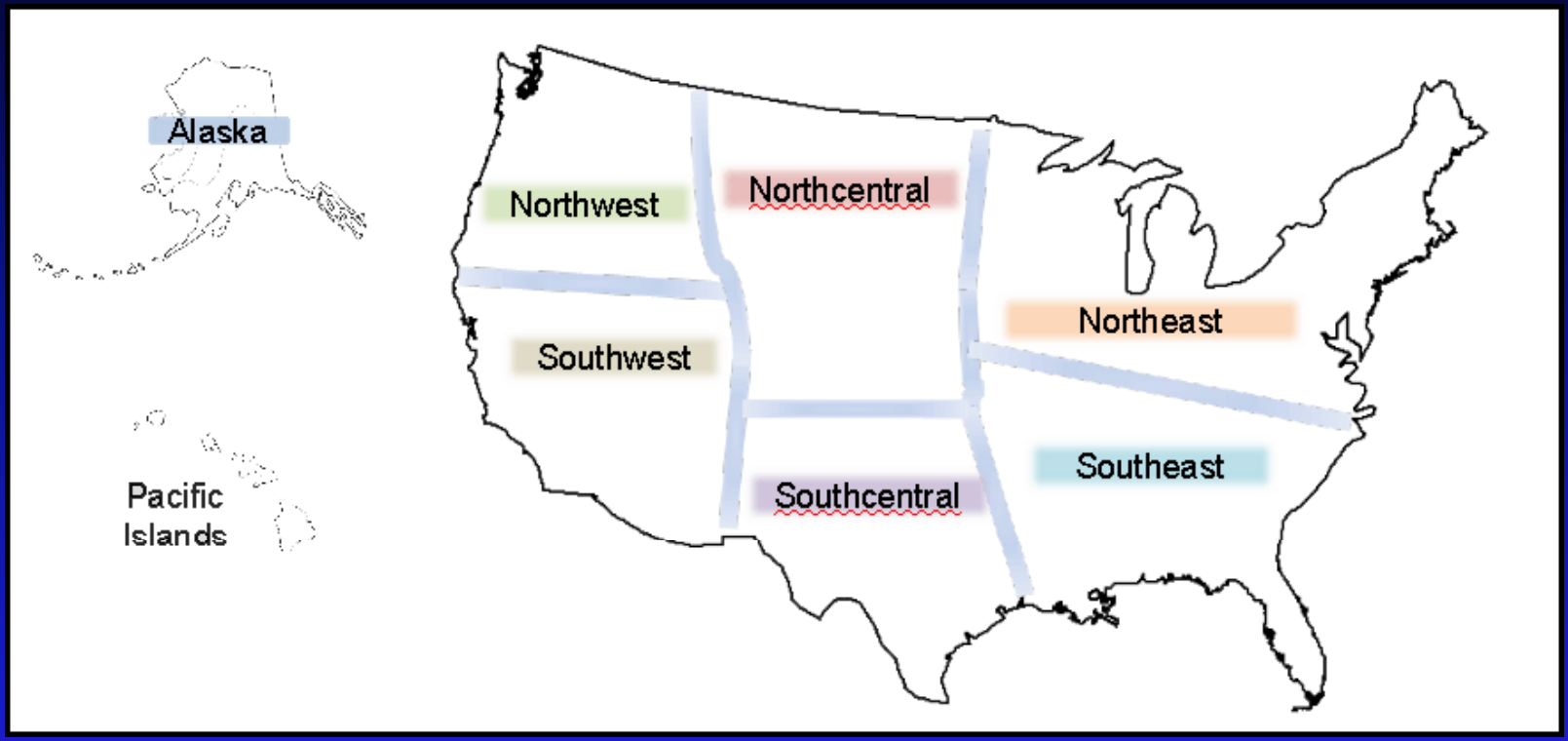
Landscape Conservation Cooperatives

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

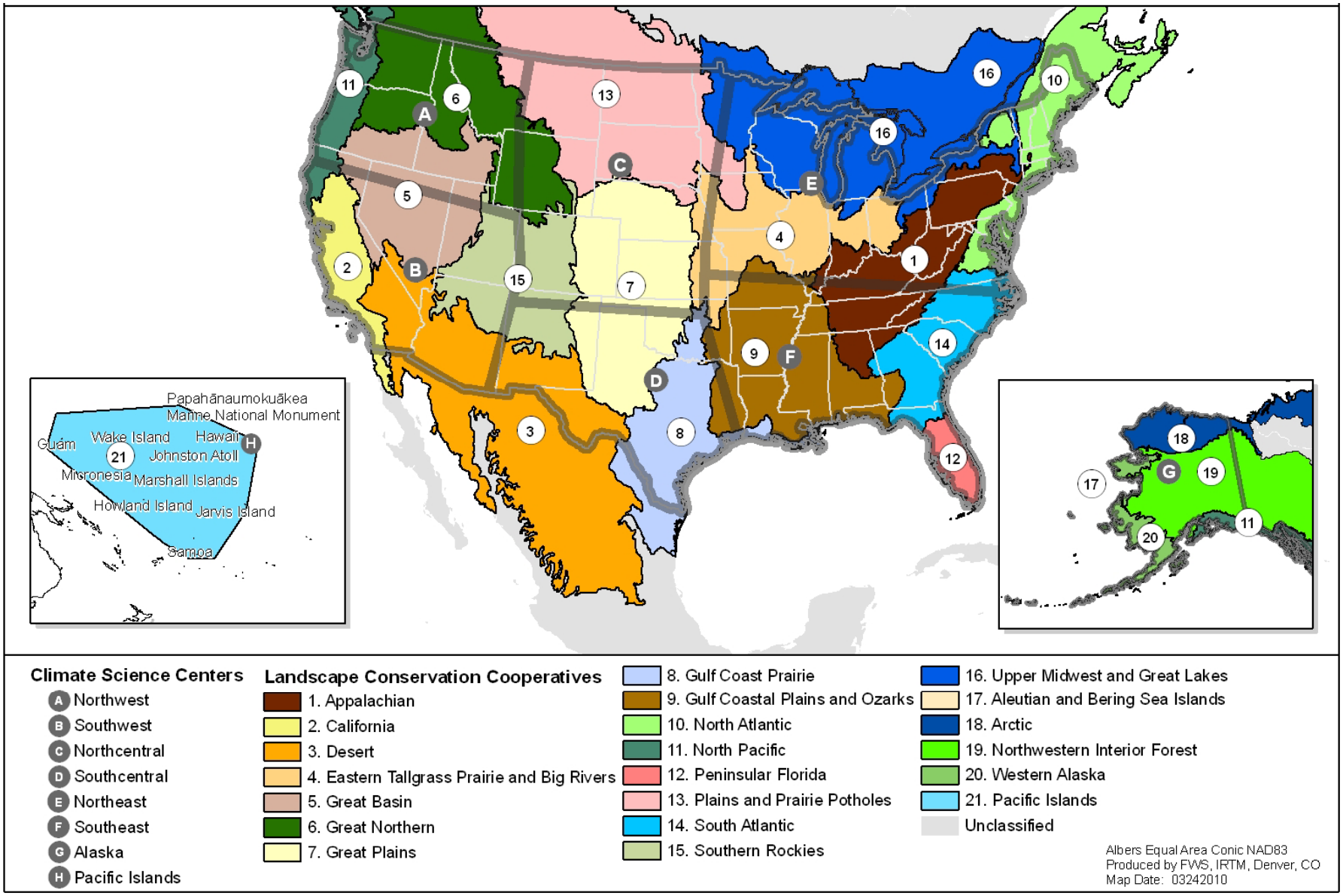
Unclassified

Albers Equal Area Conic NAD83
Produced by FWS, IRTM, Denver, CO
Map Date: 03182010

Climate Science Centers



Climate Science Centers will provide the latest climate science information and data and help LCCs develop modeling tools and conduct site-specific studies of climate impacts on natural resources.


Papahānaumokuākea Marine National Monument
Guam
Wake Island
Hawaii
Johnston Atoll
Micronesia
Marshall Islands
Howland Island
Jarvis Island
Samoa
Climate Science Centers
A Northwest
B Southwest
C Northcentral
D Southcentral
E Northeast
F Southeast
G Alaska
H Pacific Islands
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Produced by FWS, IRTM, Denver, CO
Map Date: 03242010

Landscape Conservation Cooperatives (LCCs)

- Link science and conservation delivery through management-science partnerships
- Inform integrated resource management
- Address climate change and other stressors within and across landscapes
- Function within a specific landscape and as part of a national network
- Include Federal, state, tribal and local governments and non-governmental organizations
- Work interactively with DOI Climate Science Centers

Positioning of LCC's

- Integral to climate change adaptation efforts but not climate centric.
- Augment and draw upon existing science capacities of partners.
- Link science with conservation planning and design – products relevant, timely and effective in support of conservation decisions
- No expectation that LCC's will provide all science needs of FWS or partners
- Provide a diversity of decision support tools

Products and Services

- Biological plans, conservation design, research priorities, monitoring and inventory design and evaluate conservation delivery strategies and activities
- Focus on priority species and habitats identified by LCC partners

Strategic Habitat Conservation

The Right Stuff in the Right Places for America's Fish and Wildlife

US FISH & WILDLIFE SERVICE

USGS
science for a changing world

Strategic Habitat Conservation (SHC) is:

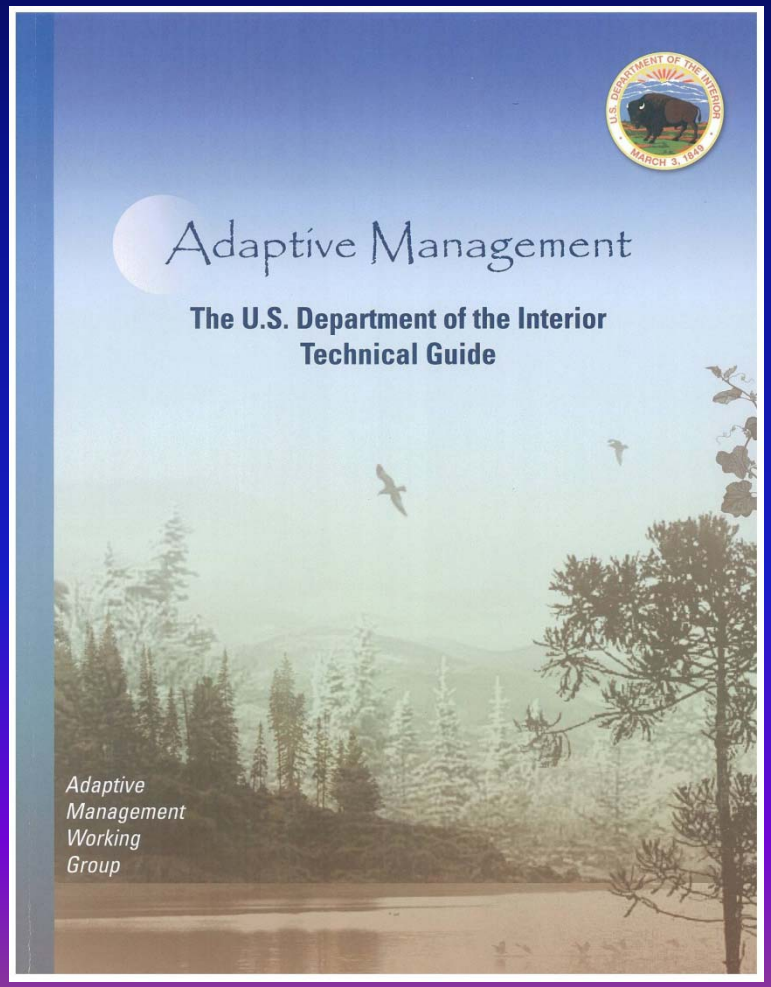
- A unified conservation approach for defining and pursuing landscape and population sustainability.
- A structured science-based framework founded on an adaptive, iterative process of biological planning, conservation design, conservation delivery, monitoring, and research.

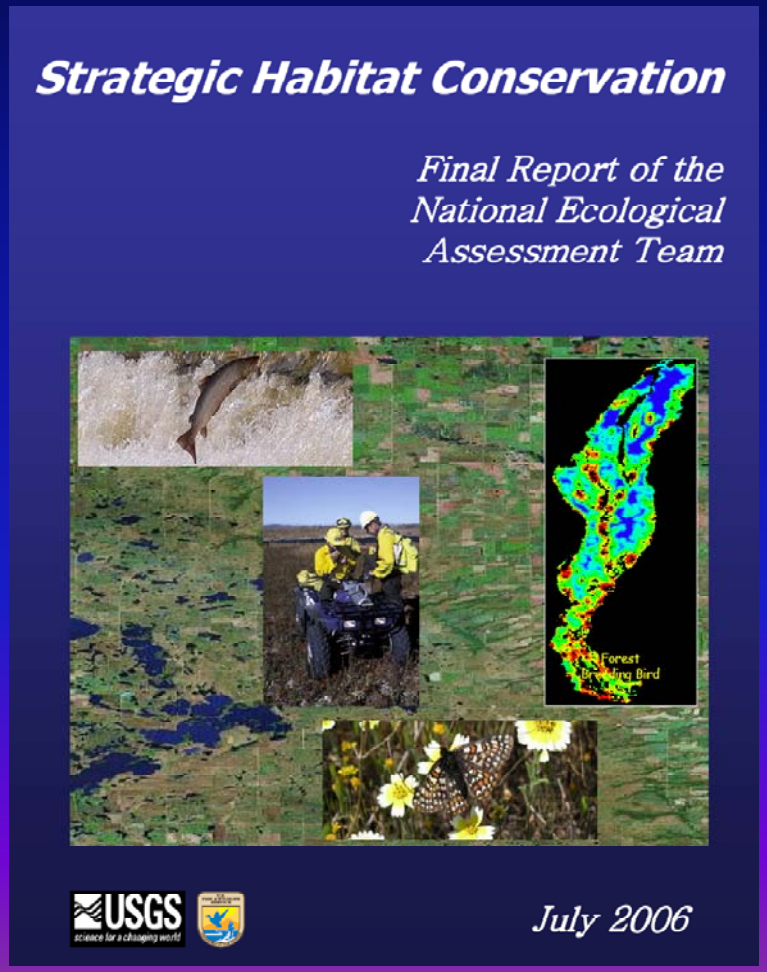
Strategic Habitat Conservation Framework Functional Elements

- Biological Planning
- Conservation Design
- Conservation Delivery
- Decision-Based Monitoring
- Assumption-Driven Research

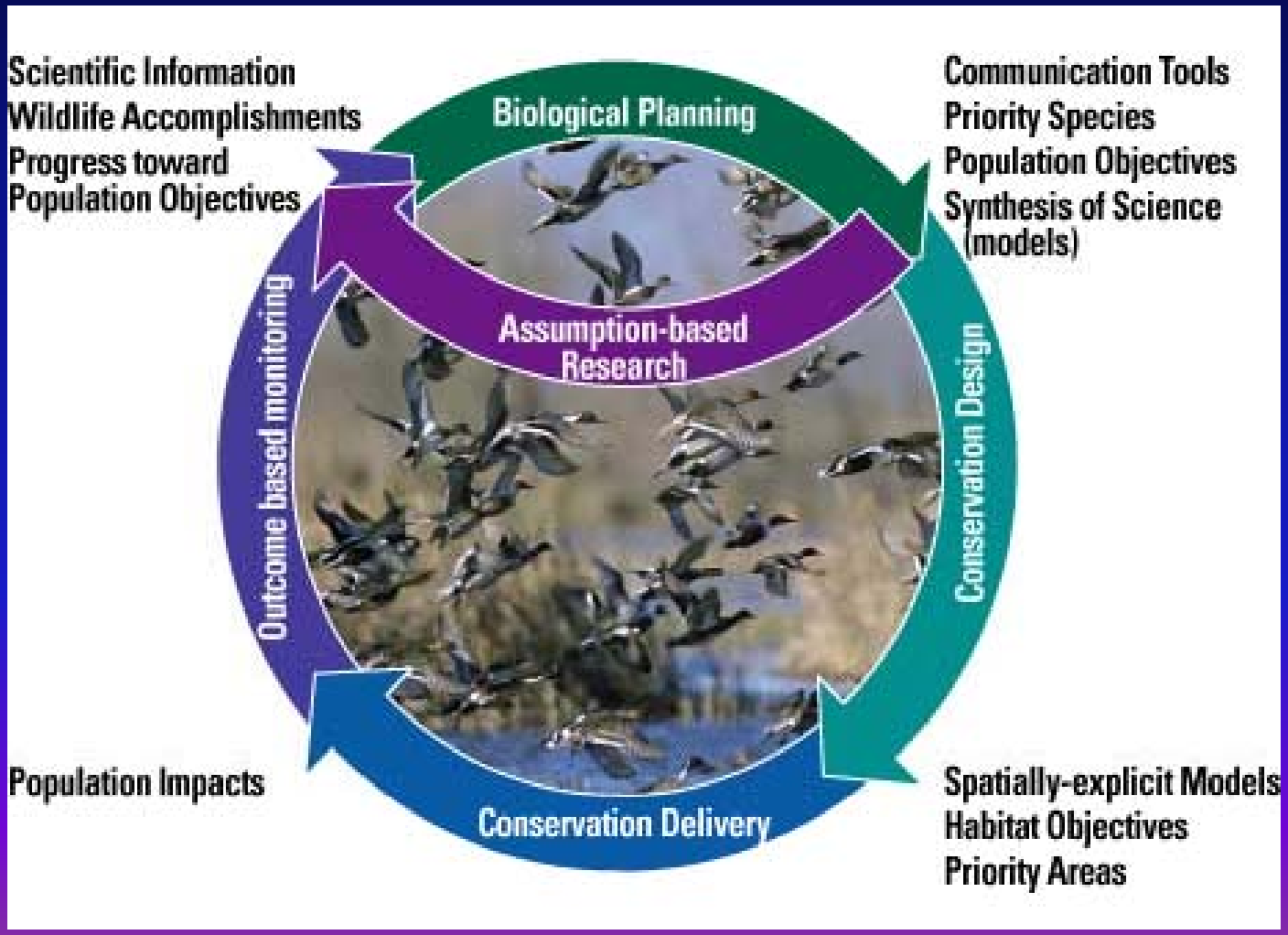
SHC:

- Bridges the research-management gulf
- Is a form of Adaptive Resource Management at broad spatial scales

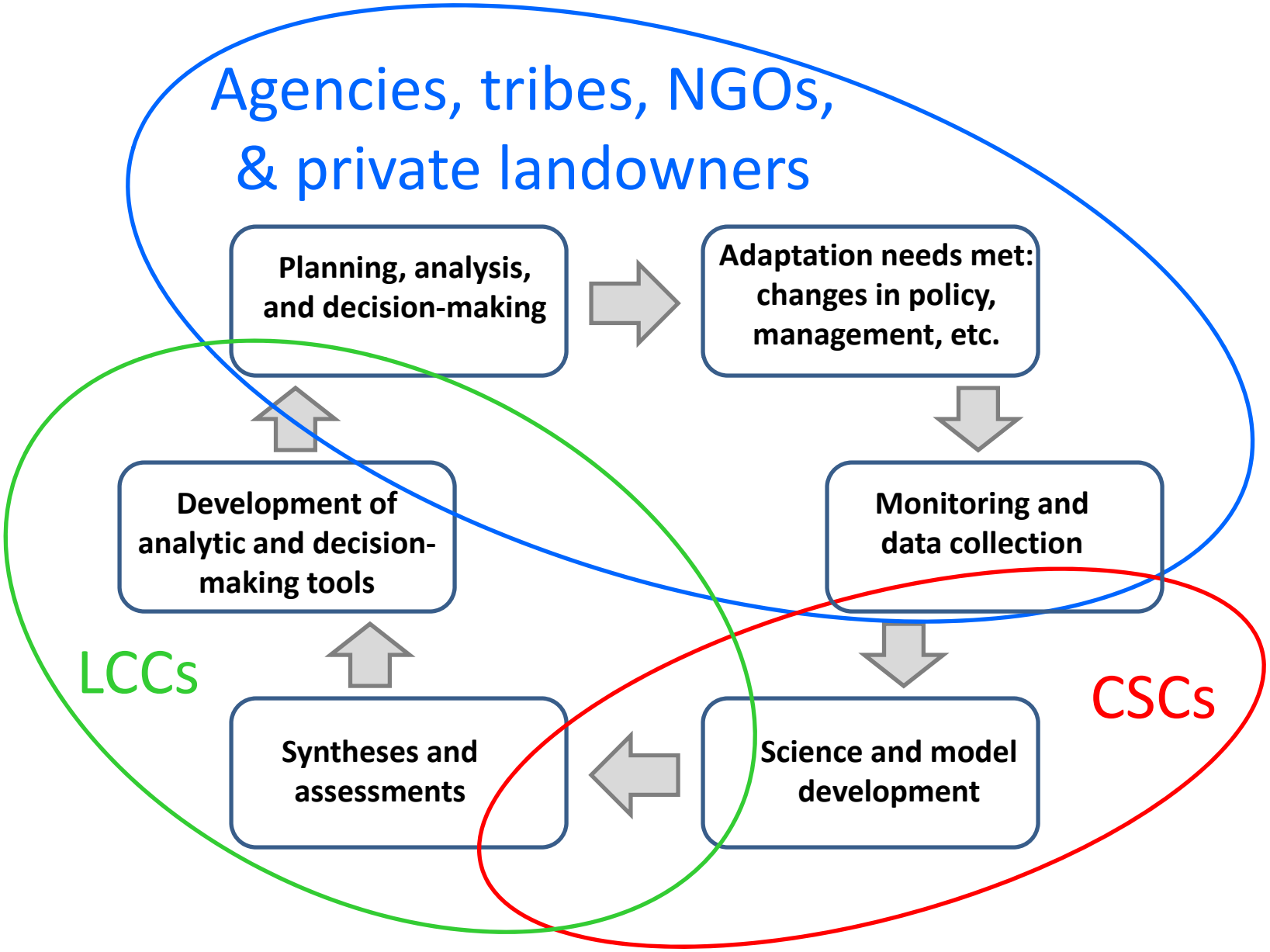




The Basic SHC Framework is an Iterative, Adaptive Process



Climate Change Adaptation Conceptual Model



Connecting Climate Change to Resource Management

Global Climate Models
Describe likely climate changes at a very large scale
Produced by agencies, universities, and research centers

Local / Regional Climate Information
Describe likely climate changes at a regional or local scale. Downscaled from global models or produced from regional models.

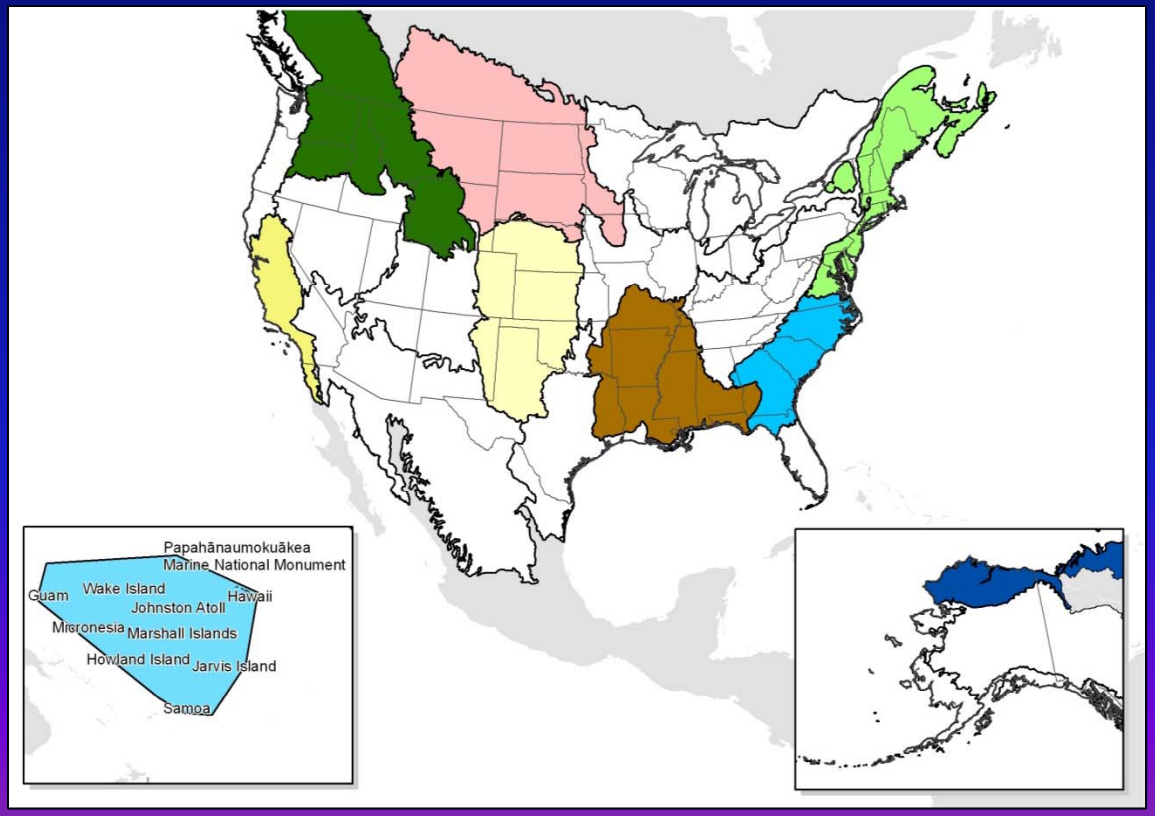
Ecological Understanding
Describe basic ecological processes (hydrology, population biology, ecosystem functions, processes, and services)

Forecasts of Ecological Response
Describe likely effects on fish, wildlife, ecosystems
Use regional and local projections of climate change
Major focus of National Climate Change and Wildlife Science Center

Adaptive Management
Conservation actions designed to react to changing circumstances
Identified by Landscape Conservation Cooperatives and other resource managers

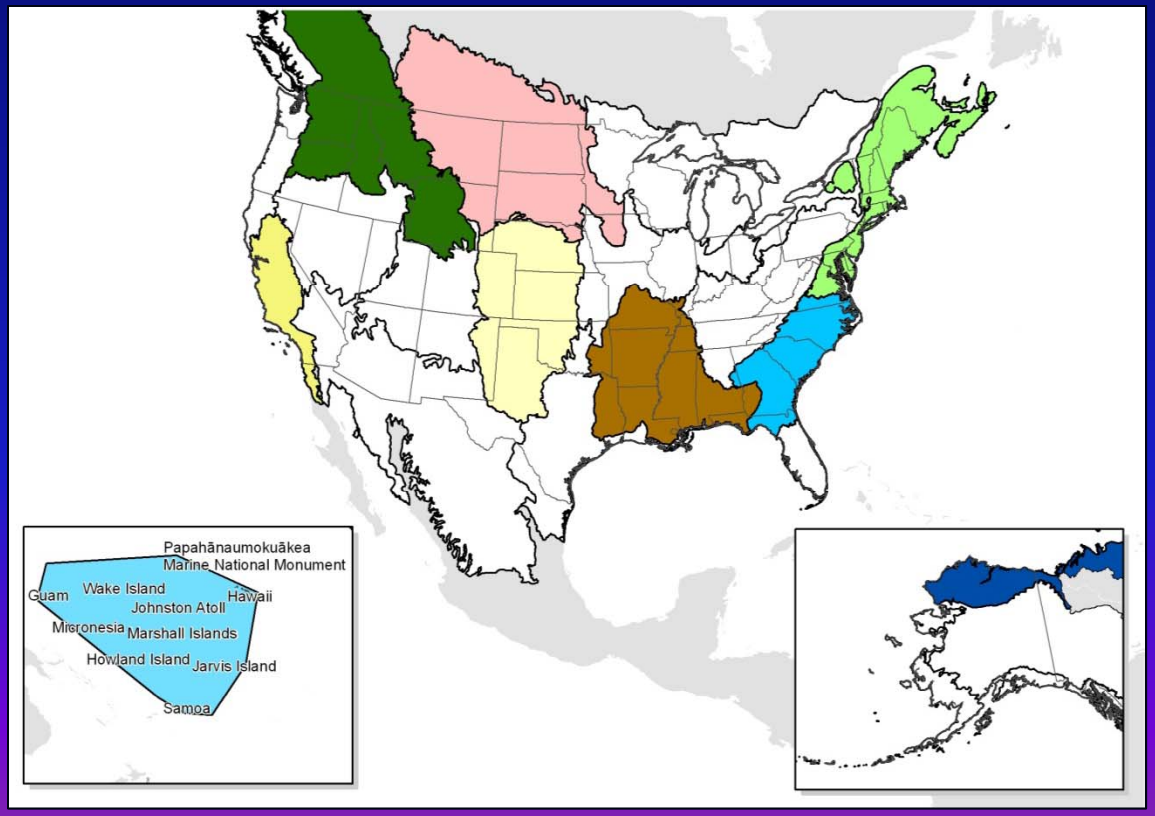
Monitoring and Feedback
Identify effective actions, inform mid-course corrections
A fundamental component of effective planning and management

Status of
Landscape Conservation Cooperatives



Landscape Conservation Cooperatives

Established in FY2010



- Arctic
- California
- Great Northern
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- Gulf Coastal Plains & Ozarks
- North Atlantic
- Pacific Islands
- Plains and Prairie Potholes
- South Atlantic

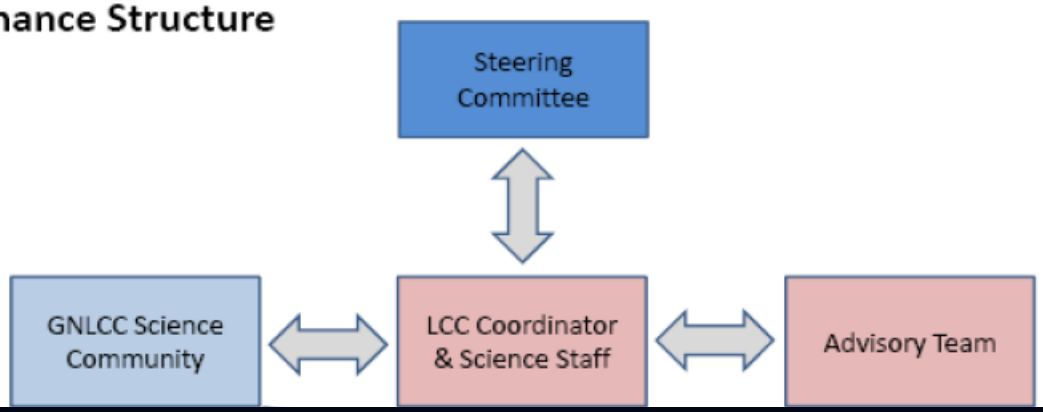
Landscape Conservation Cooperatives Beyond 2010

- Substantial activity at 14 (8 Coordinators/4 Permanent)
- 6 w/full Operational Plans and Steering Committees
- 8 w/Interim Steering Committees
- Multiple Agency Leadership
  - 1 BLM – Great Basin
  - 2 BOR – Desert & S. Rockies
  - NPS – dedicated staff
  - USGS – dedicated staff

Great Northern LCC

- Montana
- Wyoming
- Idaho
- Washington
- Oregon
- British Columbia
- Alberta
- Small parts of Colorado and Utah

Great Northern Landscape Conservation Cooperative Governance Structure



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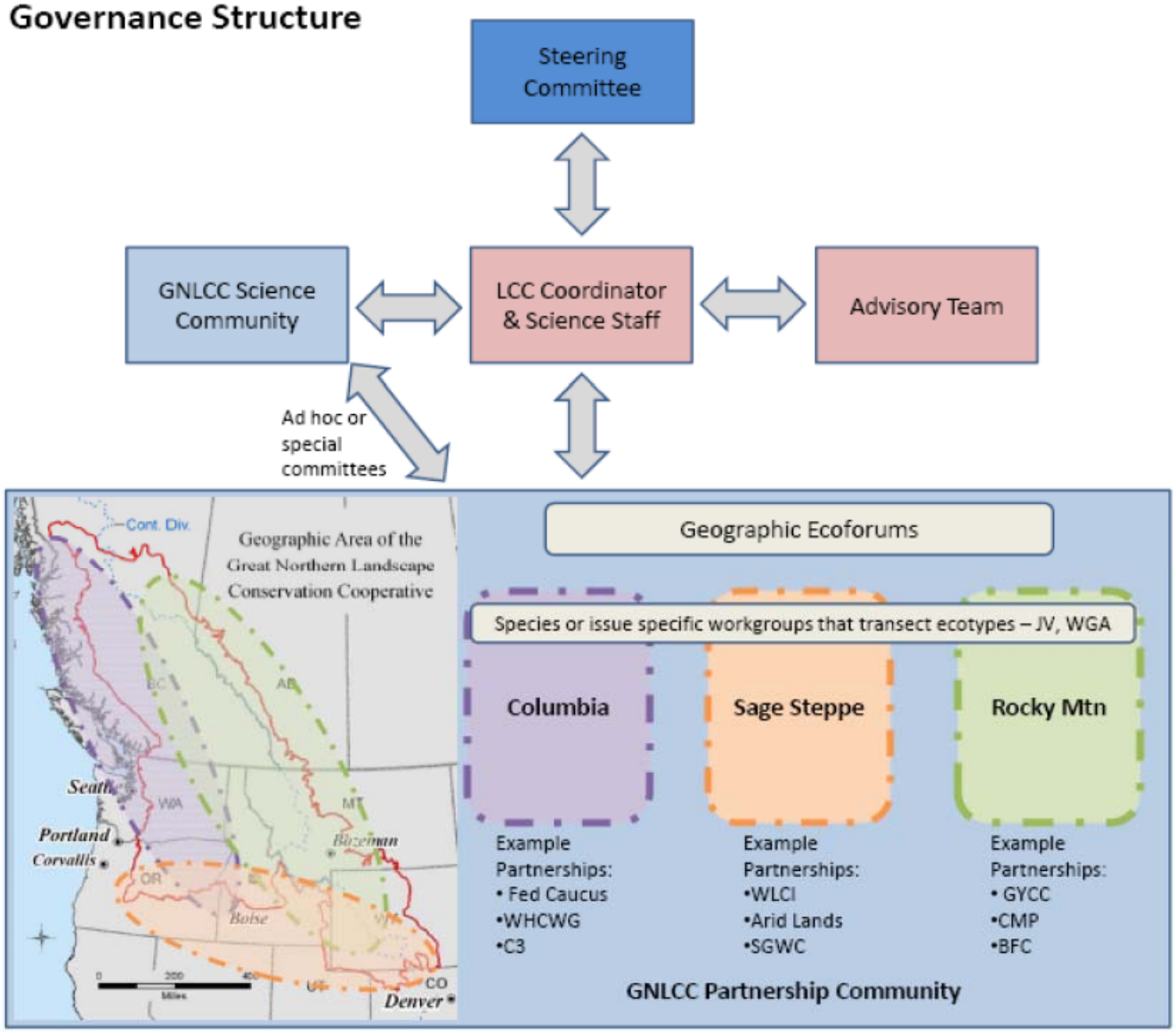

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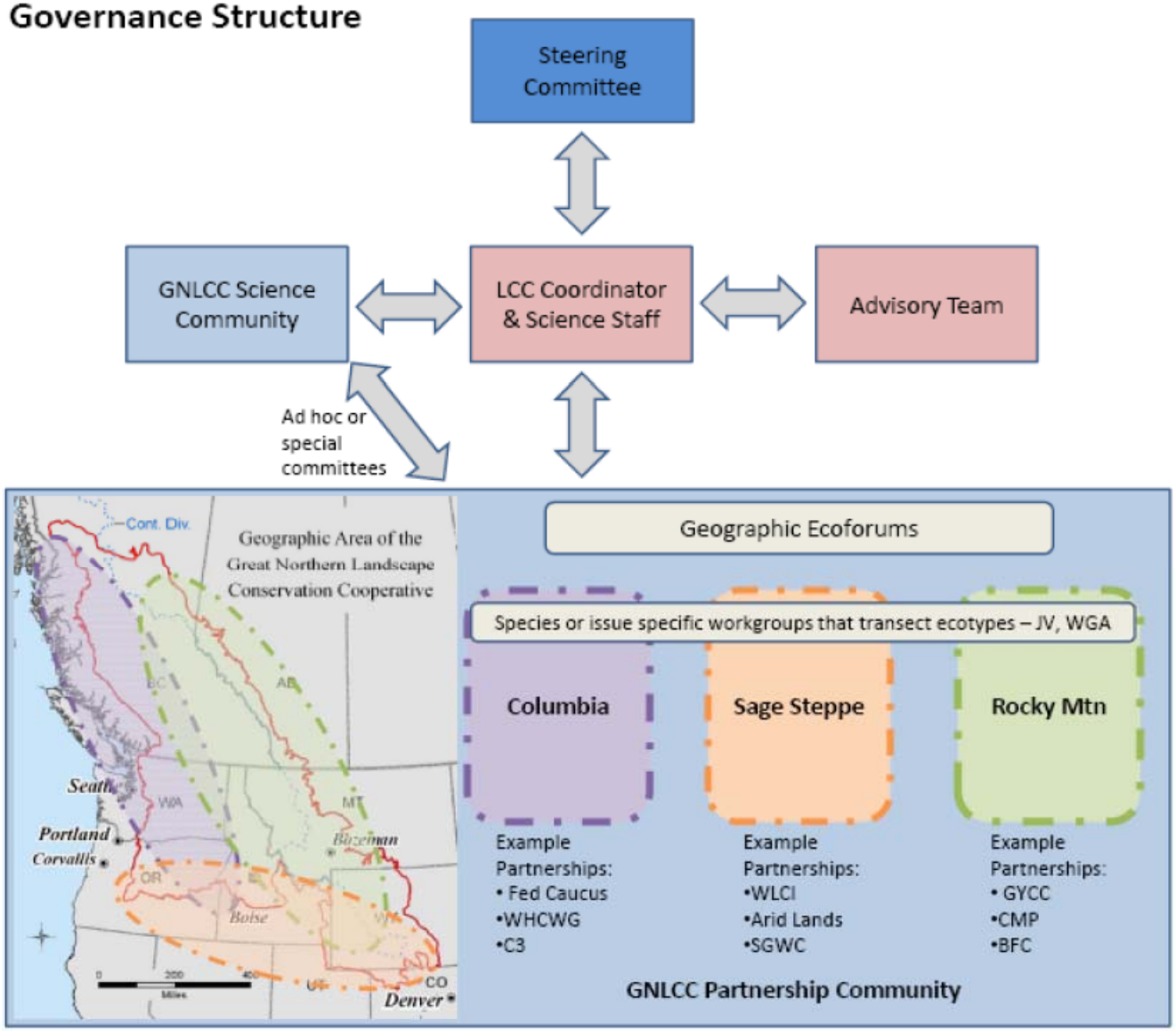


FUNCTIONS

Steering Committee or Executive Council

1. Set vision, Goals and Priorities for GNLCC
2. Provide direction to the GNLCC Coordinator and Staff
3. Approve Long-term Strategy and Operations
4. Approve GNLCC capacity needs
5. Approve funding for annual workplan including priority setting process

GNLCC Coordinator and Staff/ Advisory Team

1. Promote and communicate long-term vision
2. Develop and write long-term strategy and annual workplans
3. Coordinate science and information needs
4. Develop and implement process for operations
5. Develop annual workplan recommendations
6. Develop and revise Long-term Strategy
7. Coordinate, communicate and provide outreach to Science and Partnership Communities

SCIENCE AND RESEARCH CENTERS
GOV AGENCIES AND ORGANIZATIONS
Conservation Delivery
CONSERVATION PARTNERSHIPS

SCIENCE AND RESEARCH CENTERS

Universities
Climate Science Centers
Natural Heritage Programs
Fed, State, Tribal and NGO Research Centers

LANDSCAPE/CLIMATE

Bureau of Land Management
US Forest Service
NOAA
National Park Service
National Wildlife Refuges
State and Tribal Wildlife Programs
The Nature Conservancy
WCS, NWF, and others

GNLCC

(An organizing framework)

informing
CONSERVATION
DELIVERY

CONSERVATION PARTNERSHIPS

Intermountain West Joint Venture
Interagency Grizzly Bear Committee
Columbia Basin Federal Caucus
Crown Managers Partnership
Wyoming Landscape Conservation Initiative
Washington Habitat Connectivity Working Group
Western Governor's Association
Greater Yellowstone Coordinating Committees

2010 LCC Project Update

- 84 projects/$9.2 Million
- 16 Risk and Vulnerability Assessments
- 17 Inventory and Monitoring
- 25 Resource Assessments
- 21 Resource Planning/Conservation Design
- 5 Management Effectiveness/Research
- Partners include USGS, BLM, NPS, BOR, USFS, NFWF, States (>20),TNC, DU, WMI

Challenges

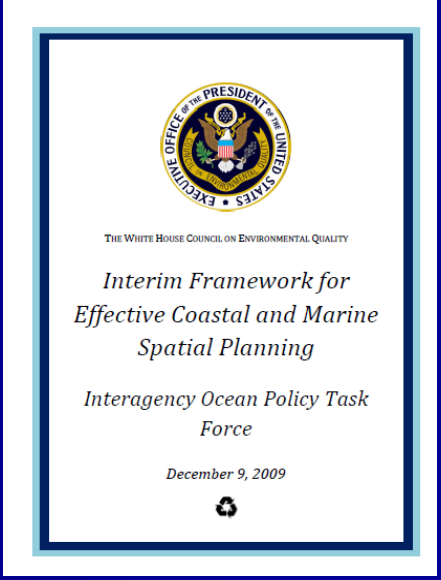
- Marine extent
- Expanded partnerships with agricultural programs, defense, EPA, others
- Relationship with the NFWPCAS

Presidential Executive Order

- Executive Order announced on July 19, 2010
- Adopts the recommendations of the Interagency Ocean Policy Task Force.
- Contains a set of policies to guide Federal activities and management.
- Envisions the development of regional coastal and marine spatial plans.
- Establishes the National Ocean Council

Coastal & Marine Spatial Planning

- "CMSP is a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas."
- Preserve critical ecosystem services to meet economic, environmental, security, and social objectives.
  - identify appropriate uses
  - reduce conflicts among uses
  - reduce environmental impacts
  - facilitate compatible uses

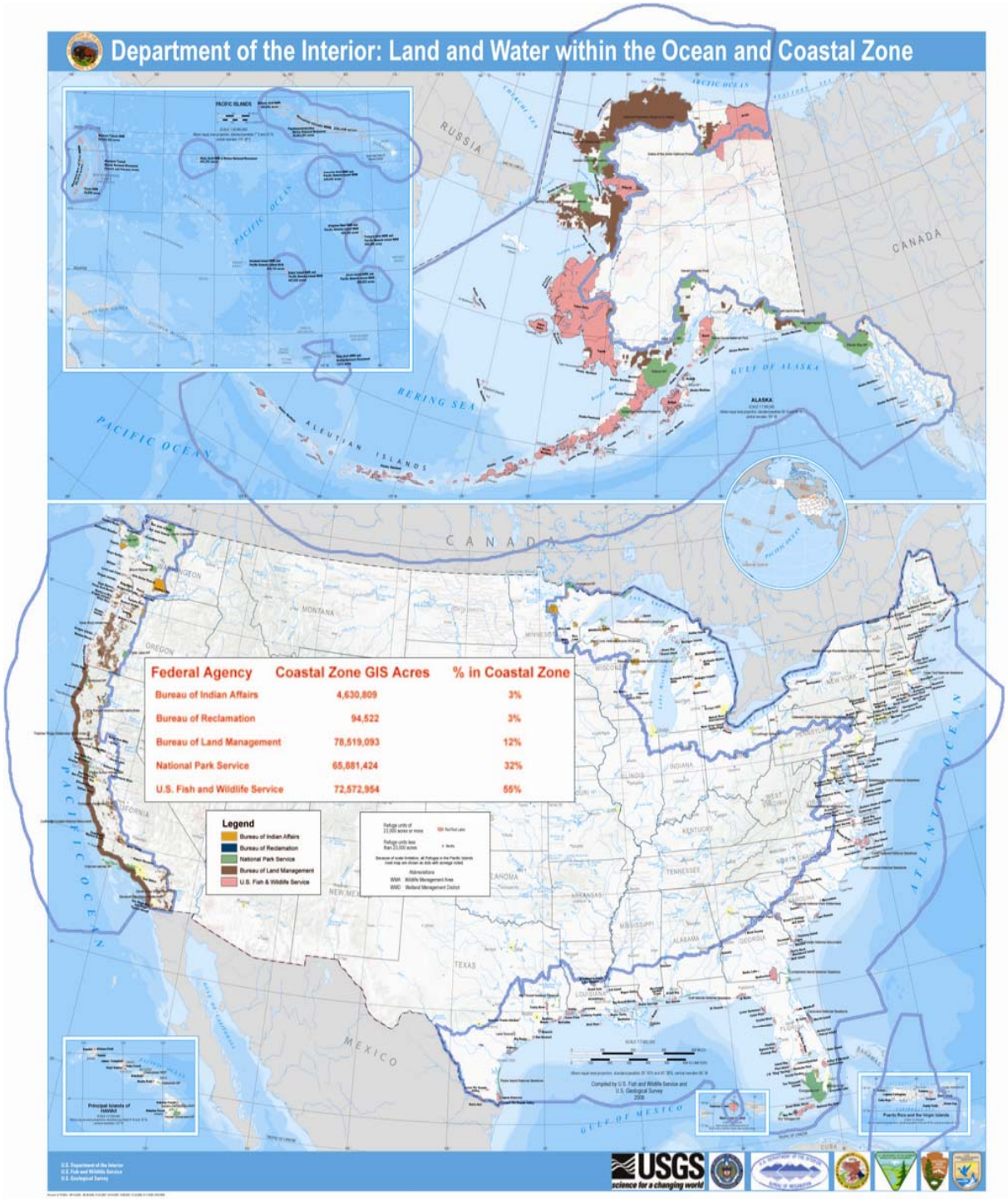

THE WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY

Interim Framework for Effective Coastal and Marine Spatial Planning

Interagency Ocean Policy Task Force

December 9, 2009

9 Large Marine Ecosystems



Federal Agency	Coastal Zone GIS Acres	% in Coastal Zone
Bureau of Indian Affairs	4,630,809	3%
Bureau of Reclamation	94,522	3%
Bureau of Land Management	78,519,093	12%
National Park Service	65,881,424	32%
U.S. Fish and Wildlife Service	72,572,954	55%

FWS Marine and Coastal Lands

NWRS:

- 246 ocean/coastal refuges totaling 121 million acres.

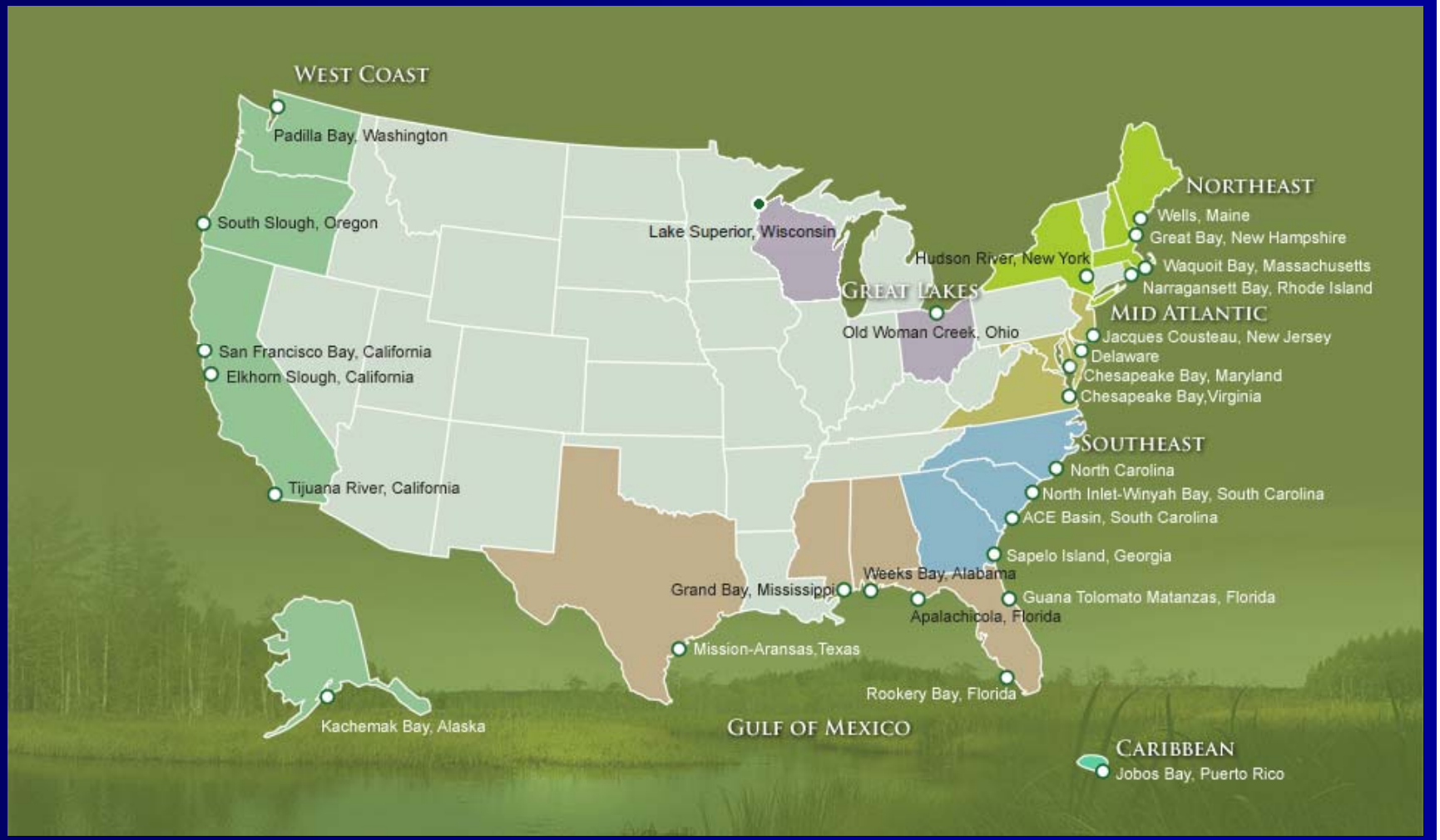
61 million terrestrial acres in the coastal zone (62% of NWRS terrestrial holdings).

- Four Marine National Monuments.

CBRS:

3.1 million acres

National Estuarine Research Reserve System



Collaborative Opportunities

- Joint funding of science projects
- Data sharing
- Incorporation of LCC/CSC climate data and tools
- Linkage to conservation practice design, implementation, and evaluation

Kachemak Bay NERR

Policy Focus Report • Lincoln Institute of Land Policy

Large Landscape Conservation:
A Strategic Framework for Policy and Action

MATTHEW McKINNEY, LYNN SCARLETT, AND DANIEL KEMMIS

Barriers to Large Landscape Conservation

- Lack of Information
- Lack of Capacity
- Lack of a Coordinated Strategy
- Lack of Appropriate Policy Tools
- Fragmented Financial Investment

National LCC Workshop

- Agreement on mission/vision
- National Network
- Form and Function
- Communications
- Performance Measures
- Data/Information

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…to ensure that we accomplish the right things, in the right places, at the right times based on sound science, good planning, monitoring of outcomes, and adaptive management