

Landscape Conservation Cooperatives

Expectations & Desires

Bill Knapp
Office of the Science
Advisor
December 2009

Our next hour together

- Very important discussion
- Very challenging discussion
- Some fun, some “tough love”
- Easier for us not to do, but not fair to ourselves and others.
- Individually and collectively better off for having this discussion.

Talk about

1. What we told important people from 2004 to the present.
2. What's been said over the last four months.
3. What this means to you

The message we delivered

- ✓ LCCs are about conservation at landscape scales - - - achieving shared population objectives across large landscapes;
- ✓ LCCs are about inter-dependent partnerships; and
- ✓ LCCs are about using the SHC approach or a similarly robust AM approach.

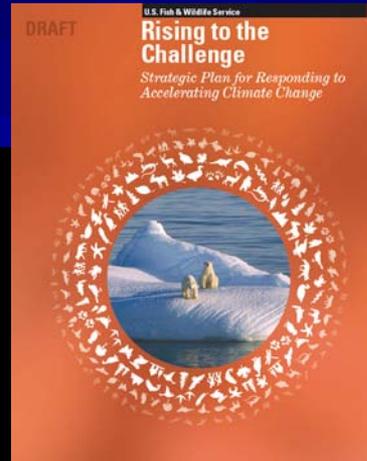
We delivered these messages to important folks



AFWA



NGOs



Employees



Other Feds



Media

We delivered these messages to important folks



Secretary - DOI

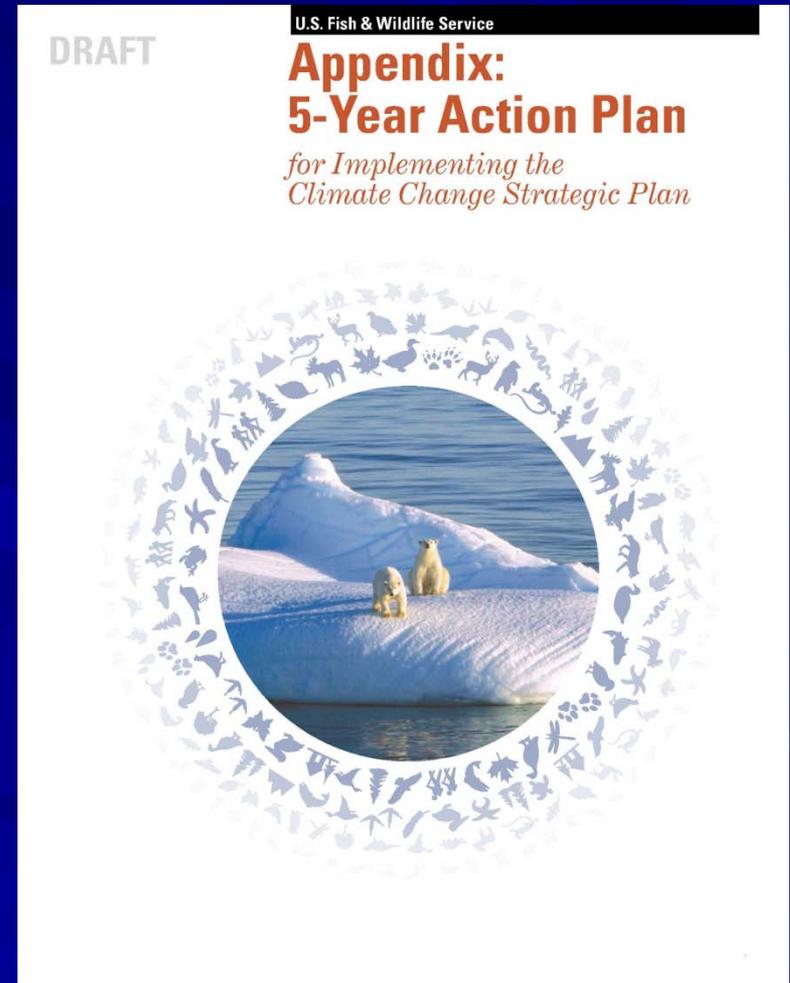
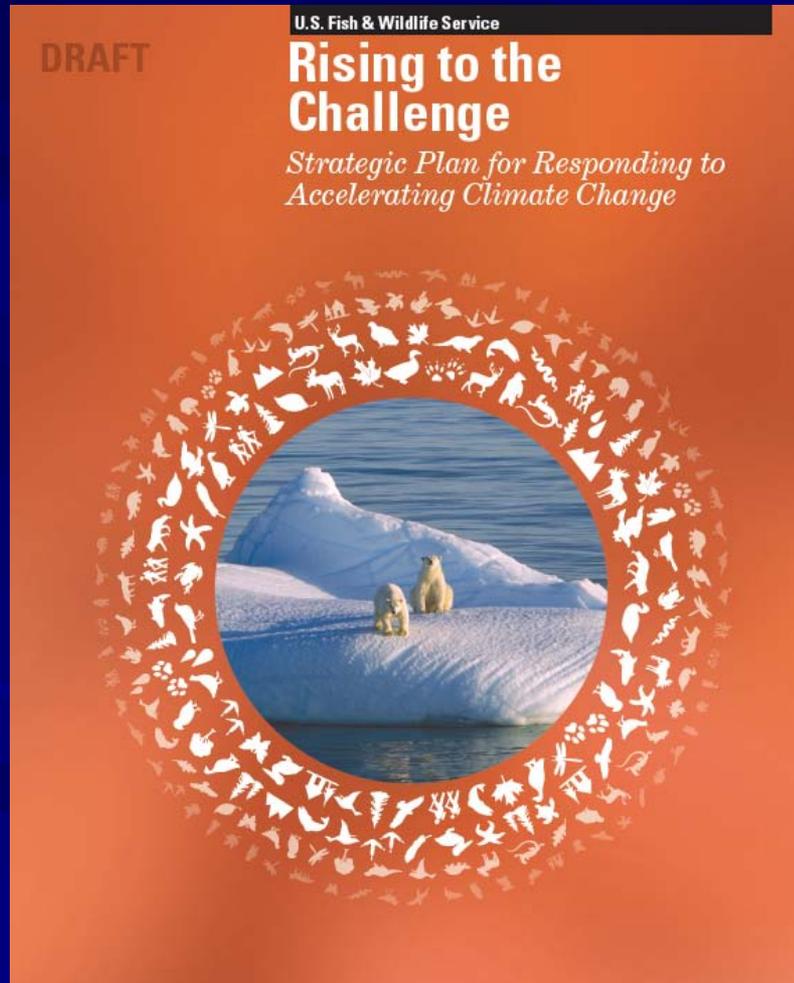


Obama Administration

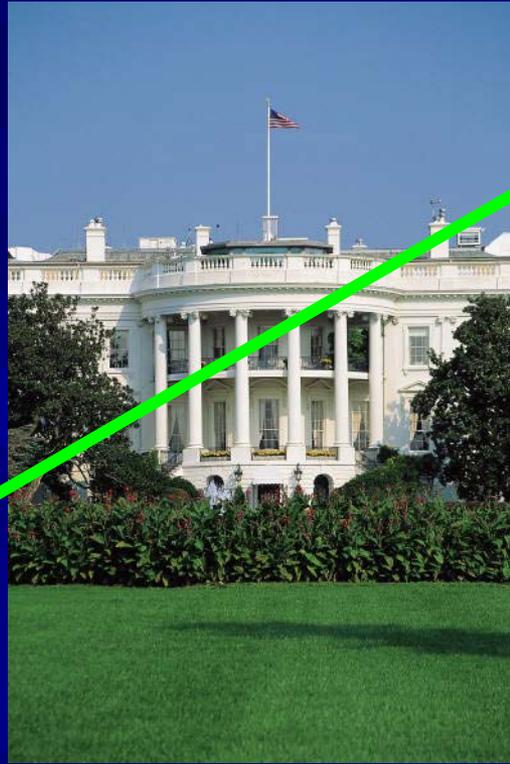
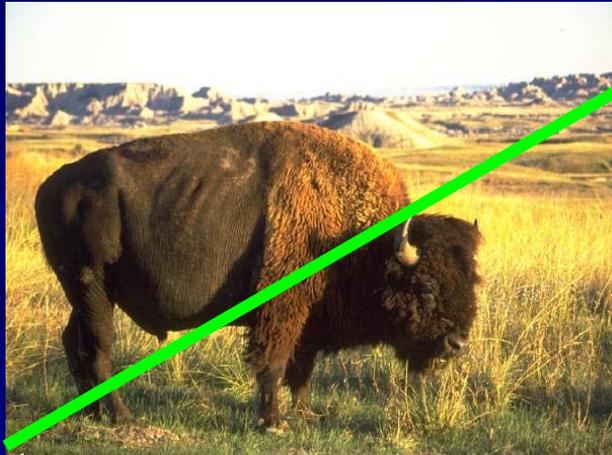


Congress

Places to see our messages



Places to see our messages FY10 Appropriations



2 yrs

FY10 Appropriations

- \$10M - - “Climate Change Planning” at LCCs

1. Biological planning
2. Conservation design
3. ~~Conservation delivery~~
4. Outcome-based monitoring
5. Assumption-driven research



FY10 Appropriations

- \$10M - - “Climate Change Adaptive Science Capacity” at LCCs
 1. Vulnerability assessments
 2. Inventory & monitoring
 3. Habitat-population assessments
 4. Conservation planning
 5. Management evaluations
 6. Conservation genetics



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Core Functions of LCCs

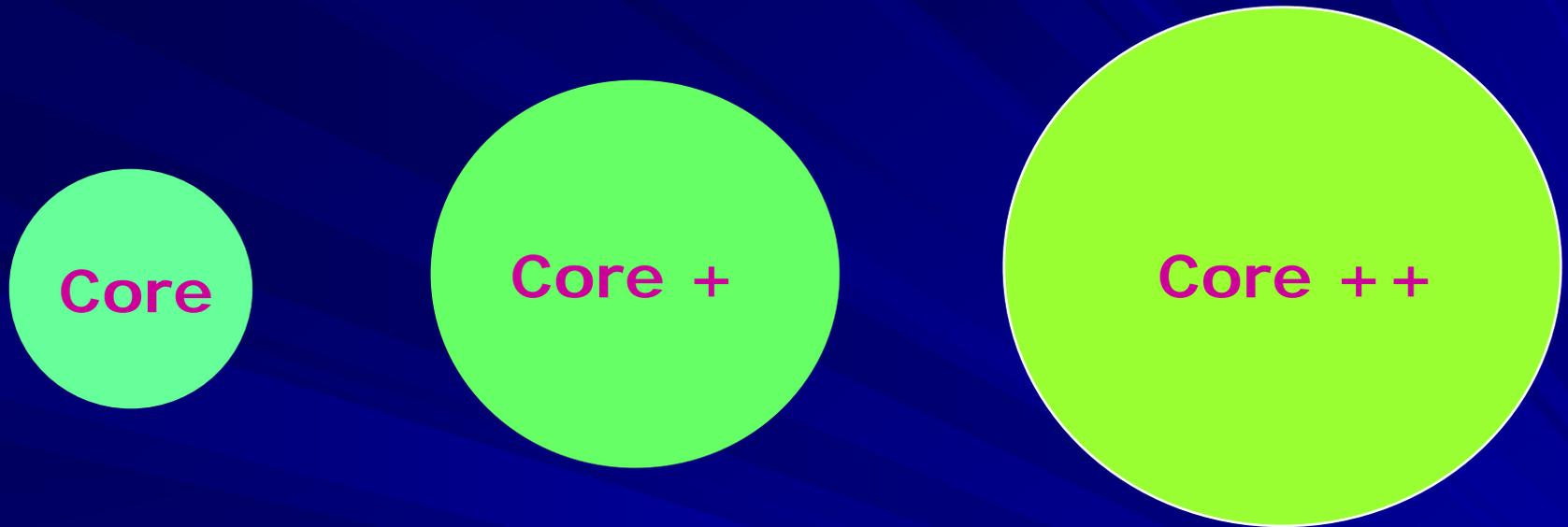
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1. Biological planning
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■ \$10M - - “Climate Change Adaptive Science Capacity”

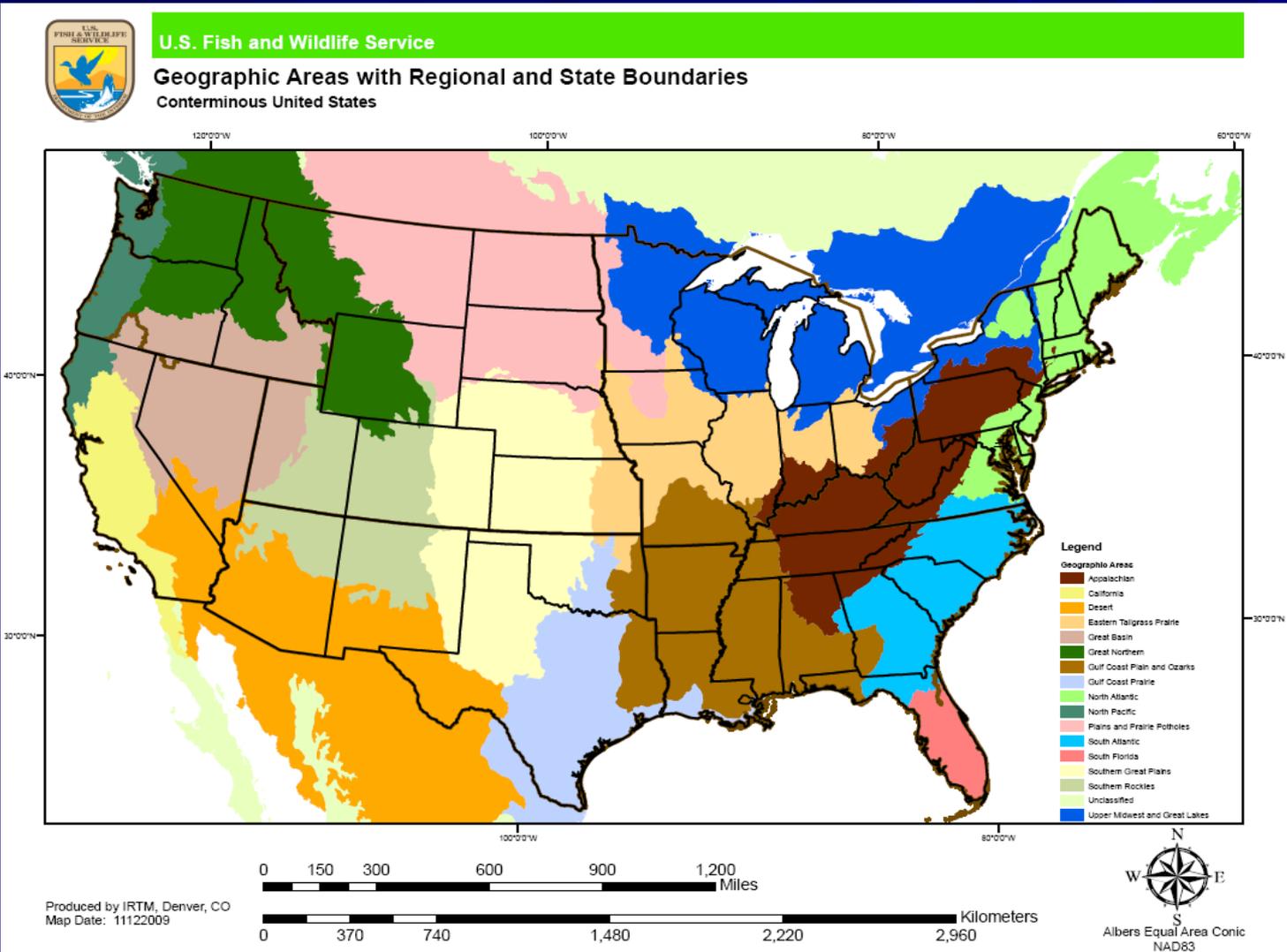
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Visualizing LCCs



- LCCs are expected to grow in size and number.
- Each LCC is expected to be part of a seamless national network.
- Each LCC is expected to be consistent in its functions, structure and governance.

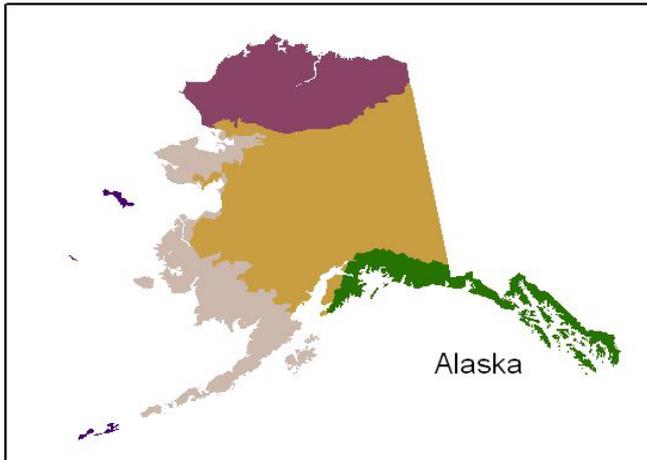
National Geographic Framework



NABCI Bird Conservation Regions



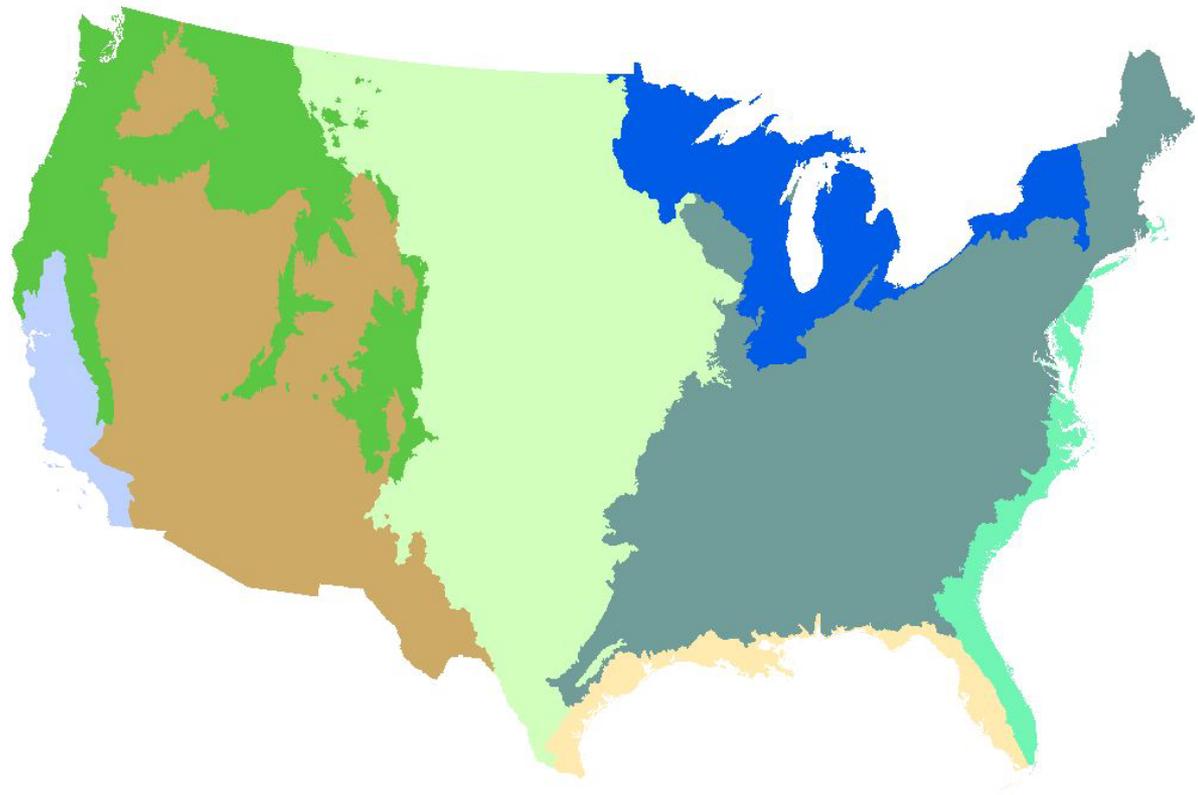
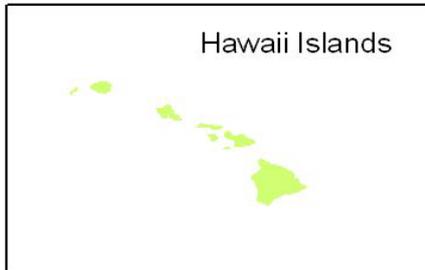
- | | | | |
|---|--|---|---|
|  ALEUTIAN/BERING_SEA_ISLANDS |  COASTAL_CALIFORNIA |  NORTHERN_ROCKIES |  SIERRA_NEVADA |
|  APPALACHIAN_MOUNTAINS |  EASTERN_TALLGRASS_PRAIRIE |  NORTHWESTERN_INTERIOR_FOREST |  SONORAN_AND_MOJAVE_DESERTS |
|  ARCTIC_PLAINS_AND_MOUNTAINS |  EDWARDS_PLATEAU |  OAKS_AND_PRAIRIES |  SOUTHEASTERN_COASTAL_PLAIN |
|  ATLANTIC_NORTHERN_FOREST |  GREAT_BASIN |  PENINSULAR_FLORIDA |  SOUTHERN_ROCKIES/COLORADO_PLATEAU |
|  BADLANDS_AND_PRAIRIES |  GULF_COASTAL_PRAIRIE |  PIEDMONT |  TAMAULIPAN_BRUSHLANDS |
|  BOREAL_HARDWOOD_TRANSITION |  LOWER_GREAT_LAKES/ST._LAWRENCE_PLAIN |  PRAIRIE_HARDWOOD_TRANSITION |  WESTERN_ALASKA |
|  CENTRAL_HARDWOODS |  MISSISSIPPI_ALLUVIAL_VALLEY |  PRAIRIE_POTHoles |  WEST_GULF_COASTAL_PLAIN/OUACHITAS |
|  CENTRAL_MIXED_GRASS_PRAIRIE |  NEW_ENGLAND/MID-ATLANTIC_COAST |  SHORTGRASS_PRAIRIE | |
|  CHIHUAHUA DESERT |  NORTHERN_PACIFIC_RAINFOREST |  SIERRA MADRE OCCIDENTAL | |





NPS Bioregions

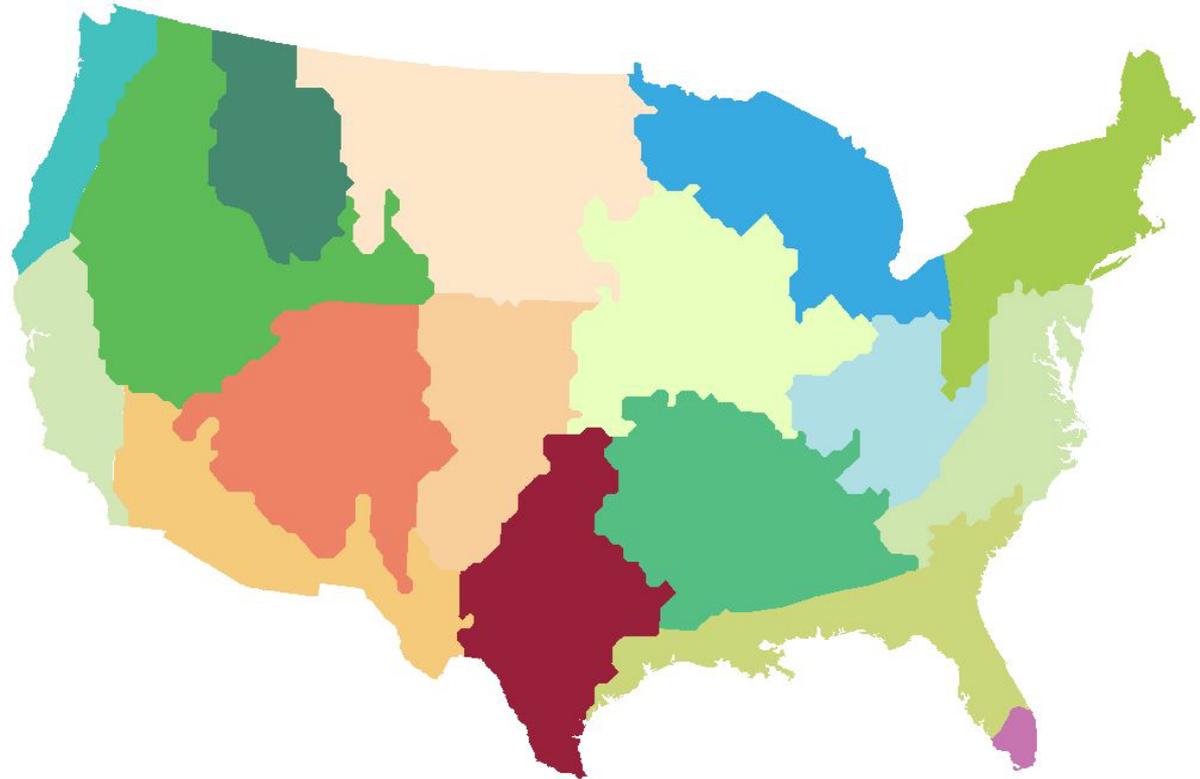
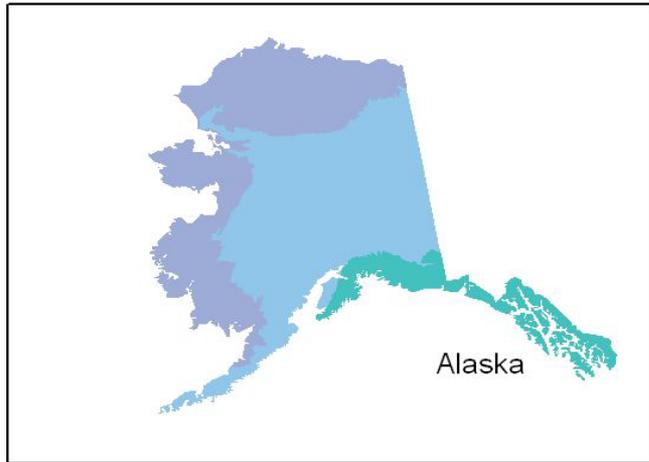
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|--|---|
|  ARID LANDS |  HAWAIIAN ISLANDS |
|  ATLANTIC COAST |  MARITIME & TRANSITIONAL |
|  BOREAL & ARCTIC |  PACIFIC COAST |
|  EASTERN FORESTS |  PRAIRIE GRASSLANDS & POTHOLES |
|  GREAT LAKES |  WESTERN MOUNTAINS |
|  GULF COAST | |



NEON Ecological Domains



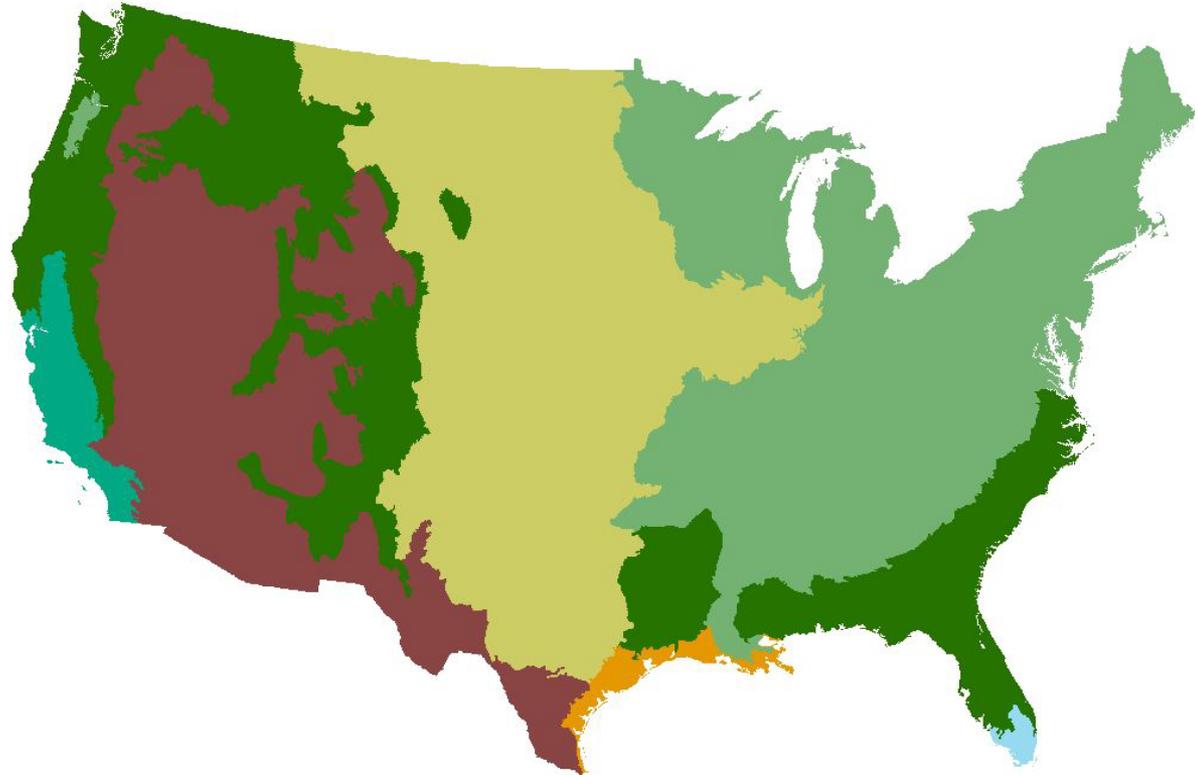
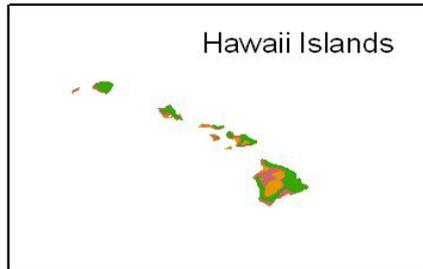
- | | | |
|--|---|---|
|  Appalachians / Cumberland Plateau |  Northeast |  Prairie Peninsula |
|  Atlantic Neotropical |  Northern Plains |  Southeast |
|  Central Plains |  Northern Rockies |  Southern Plains |
|  Desert Southwest |  Ozarks Complex |  Southern Rockies / Colorado Plateau |
|  Great Basin |  Pacific Northwest |  Taiga |
|  Great Lakes |  Pacific Southwest |  Tundra |
|  Mid Atlantic |  Pacific Tropical | |





TNC Terrestrial Ecosystems

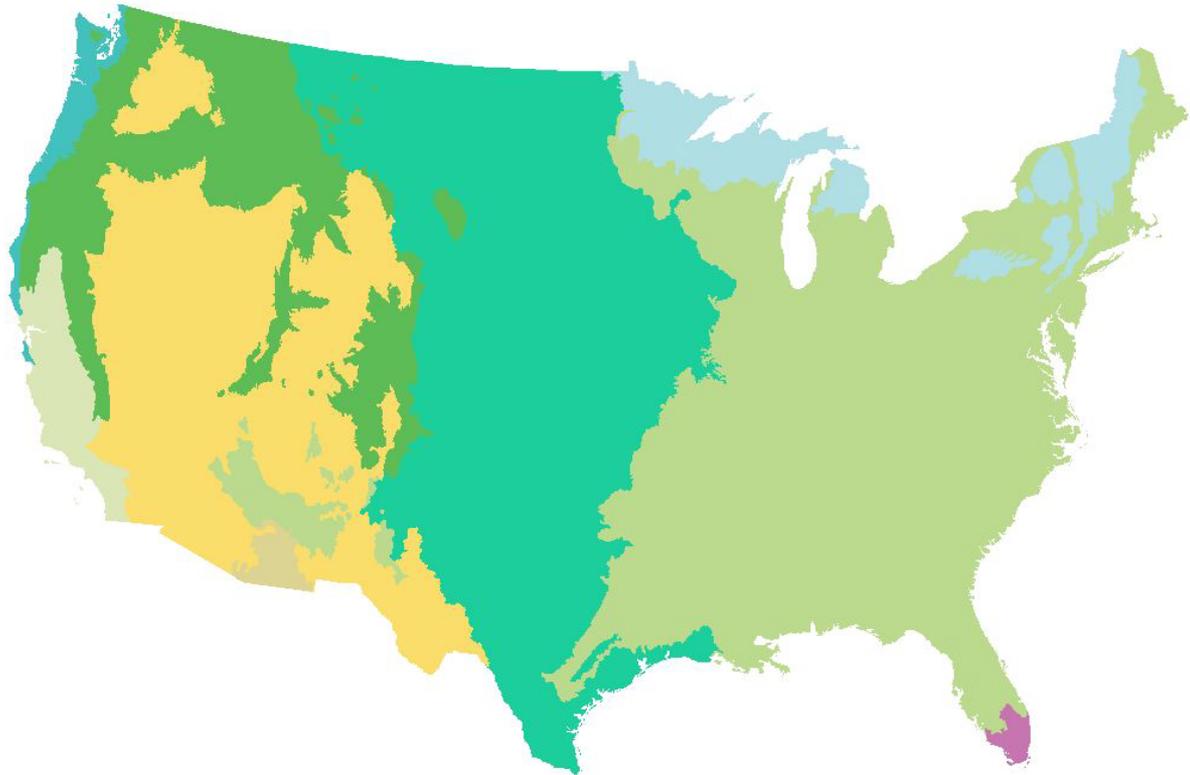
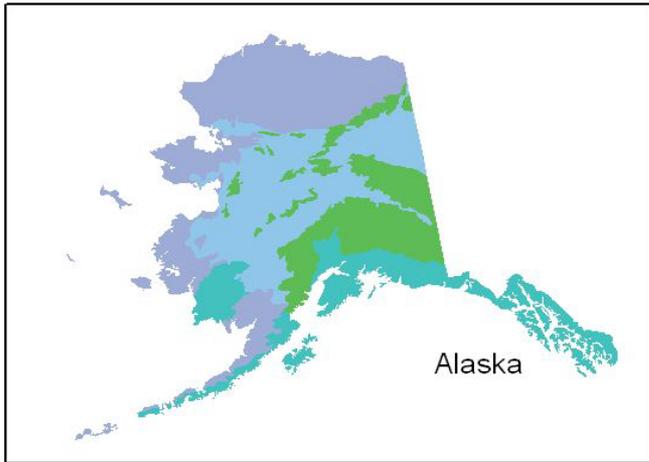
- | | |
|---|--|
|  Boreal Forests/Taiga |  Temperate Conifer Forests |
|  Deserts and Xeric Shrublands |  Temperate Grasslands, Savannas and Shrublands |
|  Flooded Grasslands and Savannas |  Tropical and Subtropical Dry Broadleaf Forests |
|  Mangroves |  Tropical and Subtropical Grasslands, Savannas and Shrublands |
|  Mediterranean Forests, Woodlands and Scrub |  Tropical and Subtropical Moist Broadleaf Forests |
|  Temperate Broadleaf and Mixed Forests |  Tundra |



Omernik's Ecoregions



- | | |
|--|--|
|  Tundra |  Great Plains |
|  Taiga |  North American Deserts |
|  Northern Forests |  Mediterranean California |
|  Northwestern Forested Mountains |  Southern Semi-Arid Highlands |
|  Marine West Coast Forest |  Temperate Sierras |
|  Eastern Temperate Forest |  Tropical Wet Forests |



Bailey's Ecoregions

Hot Continental Division

Hot Continental Regime Mountains

Marine Division

Marine Regime Mountains

Mediterranean Division

Mediterranean Regime Mountains

Prairie Division

Rainforest Regime Mountains

Savanna Division

Savanna Regime Mountains

Subarctic Division

Subarctic Regime Mountains

Subtropical Division

Subtropical Regime Mountains

Temperate Desert Division

Temperate Desert Regime Mountains

Temperate Steppe Division

Temperate Steppe Regime Mountains

Tropical/Subtropical Desert Division

Tropical/Subtropical Regime Mountains

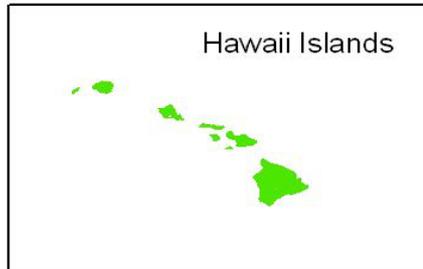
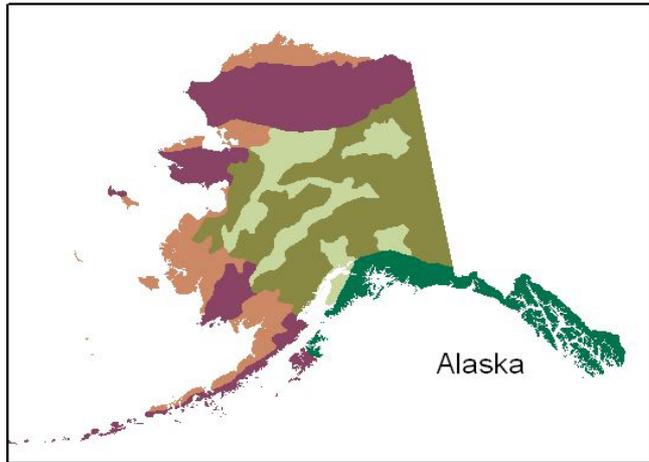
Tropical/Subtropical Steppe Division

Tundra Division

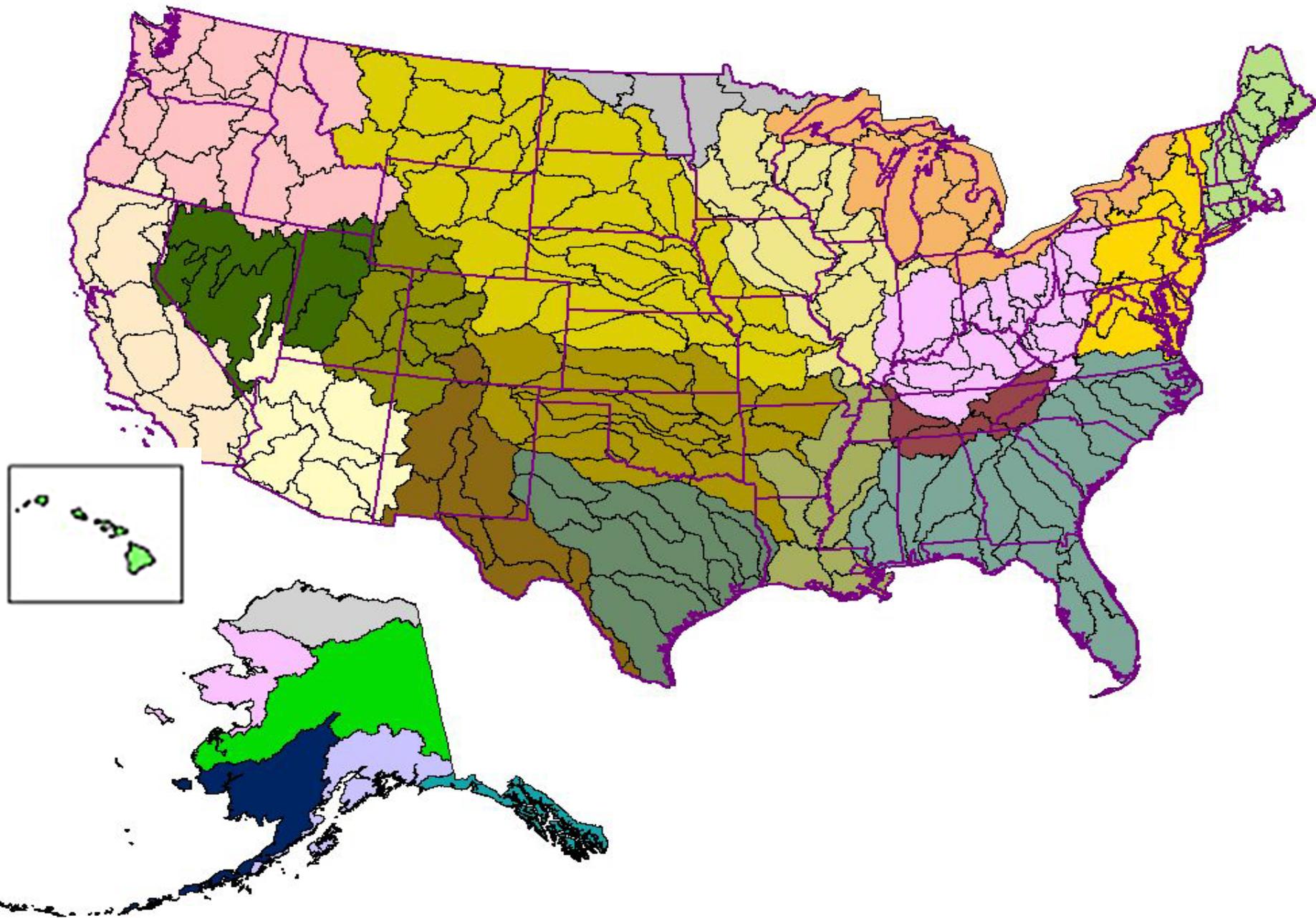
Tundra Regime Mountains

Warm Continental Division

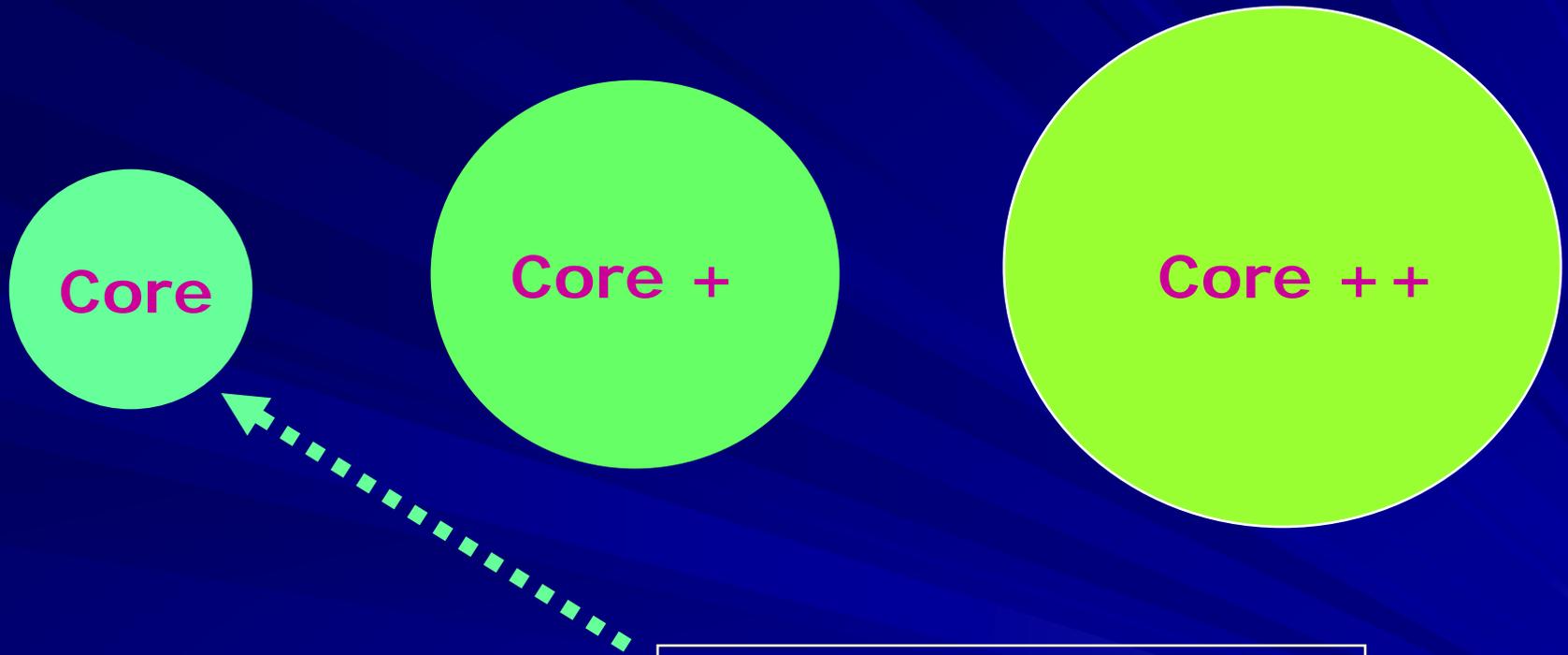
Warm Continental Regime Mountains



2-Digit Hydrologic Units (“watersheds”) with 4-digit HU boundaries overlaid



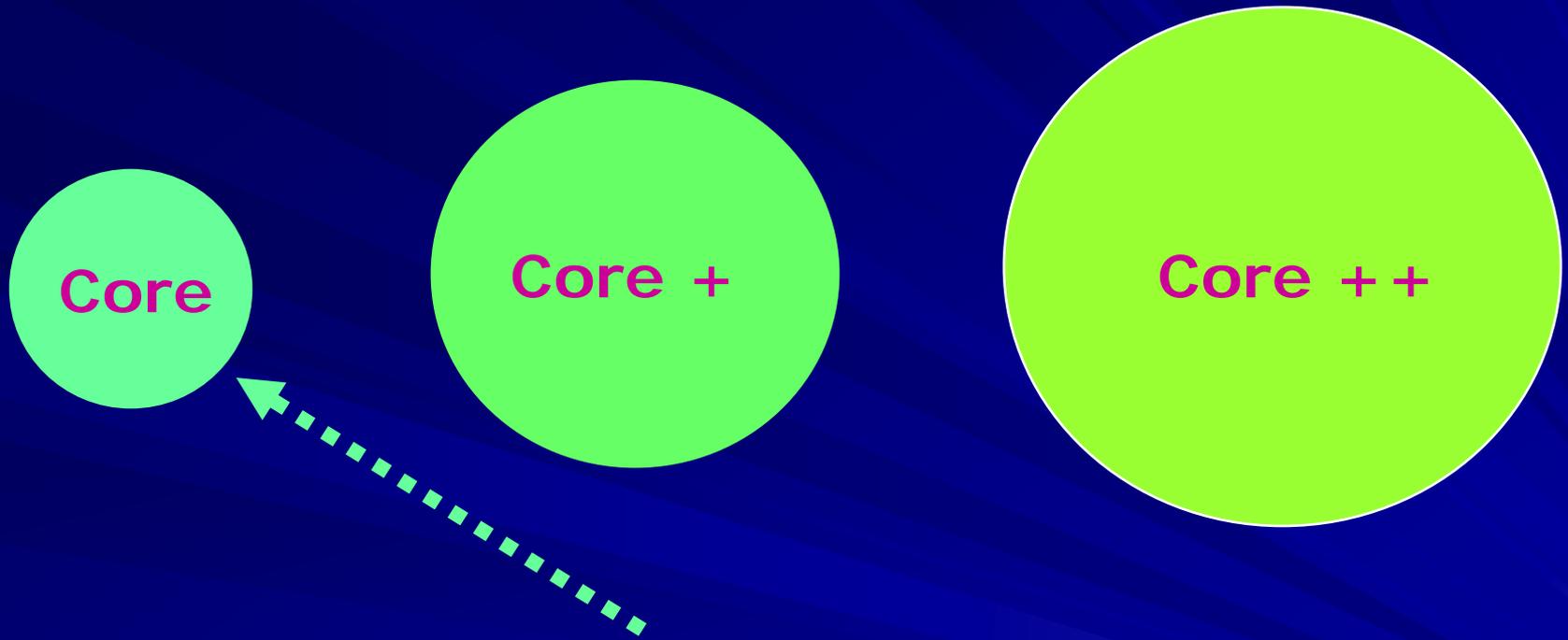
Visualizing LCCs



Biological planning
Conservation design
~~Conservation delivery~~
Outcome-based monitoring
Assumption-driven research

Vulnerability assessments
Inventory & monitoring
Habitat-population
assessments
Conservation planning
Management evaluations
Conservation genetics

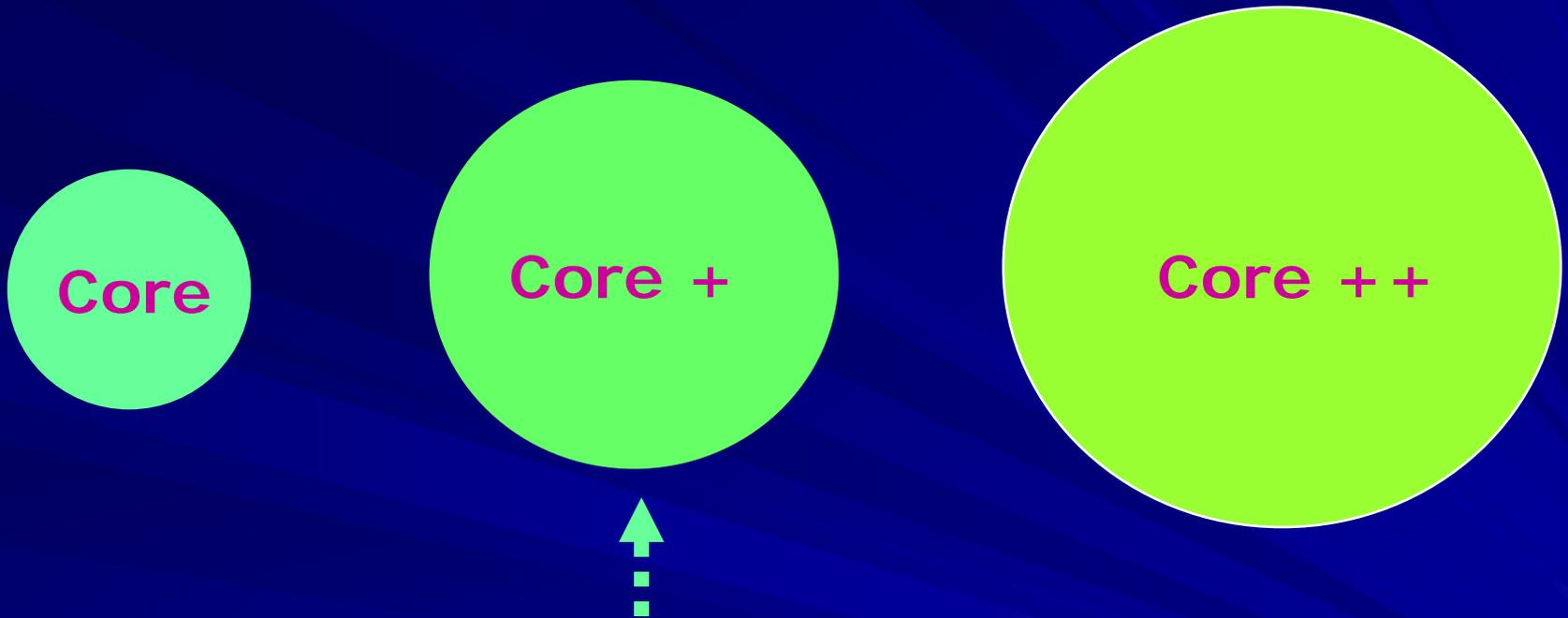
Visualizing LCCs



LCC coordinator
LCC science coordinator
GIS capacity
Population modeling
capacity
Monitoring & evaluation
capacity

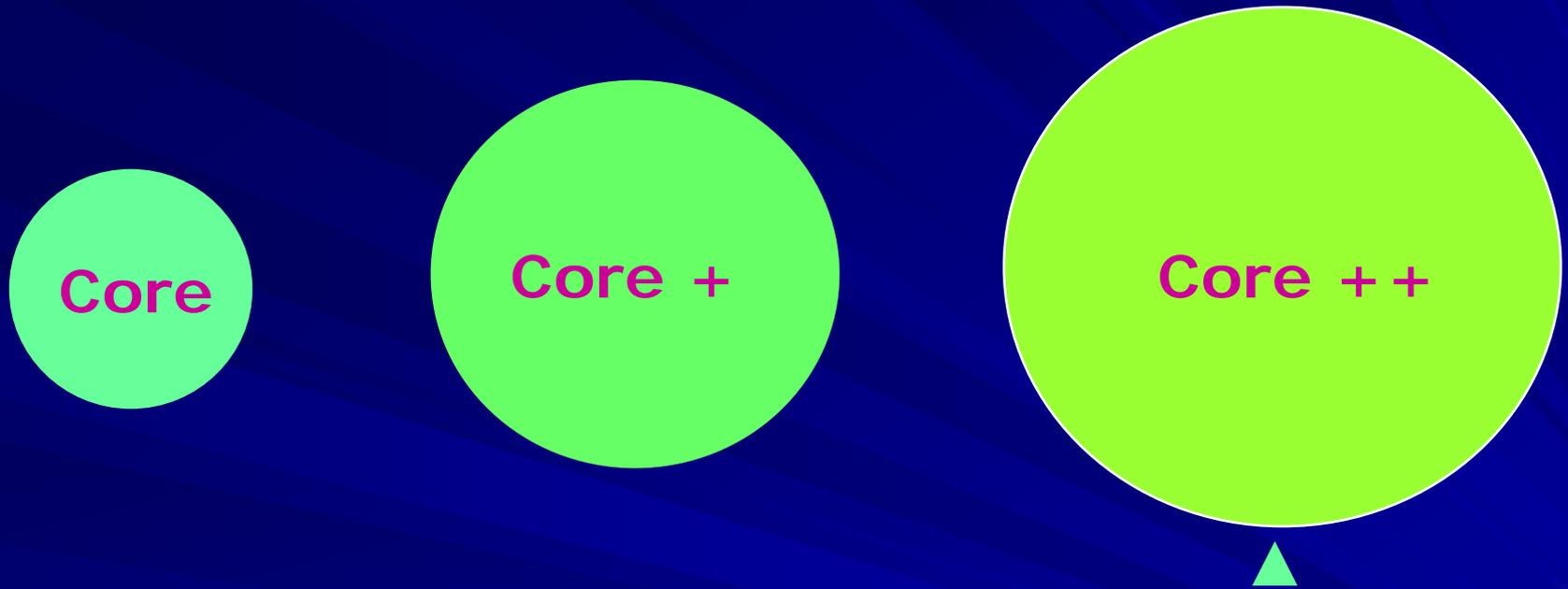
Limited administrative
capacity
Limited communications
capacity

Visualizing LCCs



- **Other capacities consistent with LCC form and primary functions.**
- **Other staff...**
- **Other funding...**
- **Other assets...**
- **Other partners**

Visualizing LCCs



- **Other capacities consistent with LCC form and primary functions.**
- **Other staff...**
- **Other funding...**
- **Other assets...**
- **Other focal species**
- **Other partners**

Other messages as of late

- “The right science in the right places.”
- “Conservation-science partnerships...within a geographically defined area.”
- Elements that “comprise a seamless national network supporting landscapes capable of sustaining abundant, diverse and healthy populations...”

Other message as of late

- “Inform resource management decisions...”
- “Provide scientific and technical support for conservation at ‘landscape’ scales.”
- “Support biological planning, conservation design, prioritizing and coordinating research, and designing species inventory and monitoring programs.”
- “Helping partners identify common goals and priorities...”

Other message as of late

- “Responding to ~~national-scale~~ stressors”
- “Do no harm.” Huh???

Landscape Conservation Cooperative

Planning & Science Capacity

Steering Committee



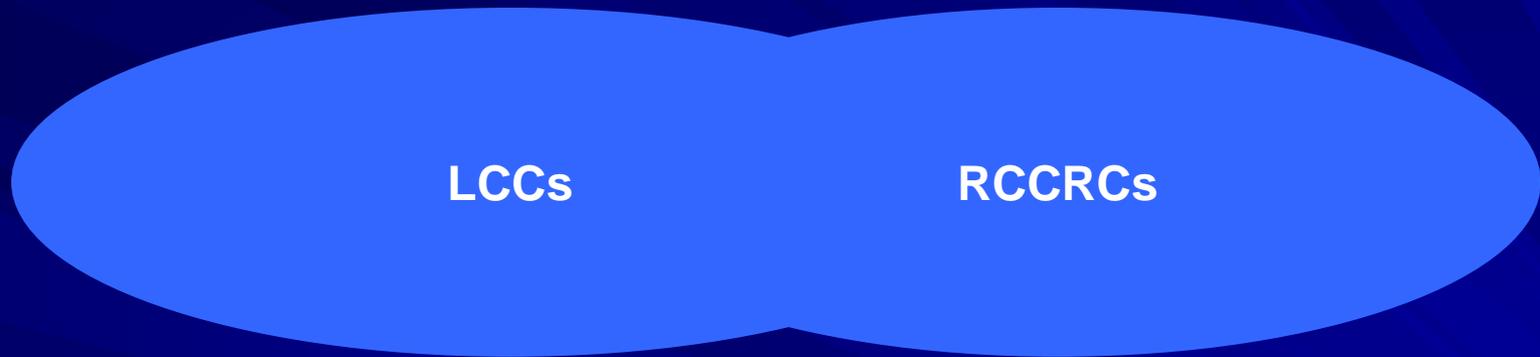
- Applies SHC at landscape scales.
- Acquires the science needed to inform those SHC applications.

Partner Organizations

- Directs LCC capacity to landscape conservation
- Identifies share priorities
- Identifies focal species
- Identifies needs for each focal species

- Work closely with LCCs as enabled and directed by their respective members of the Steering Committee.
- Focus on delivering conservation.
- Role in implementing “Adaptive Science Capacity” activities.

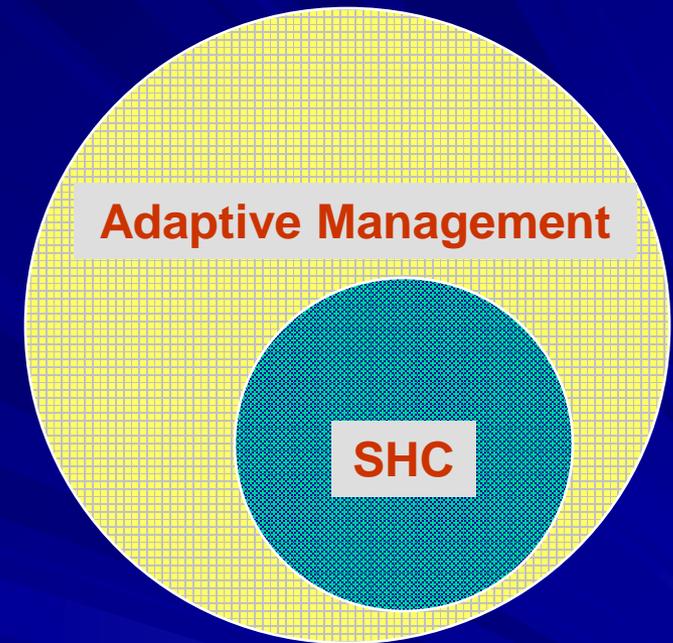
Relationship of LCCs & RCCRCs



Working on landscape conservation together.
Working on climate change adaptation together.
Separate but joined, not linked.
Science & management working together - - integrated.
Not a customer-client relations.
Figuring it out together.
Influencing the use other assets in their organizations.
Using science and help from all sources.

All that glitters is not SHC

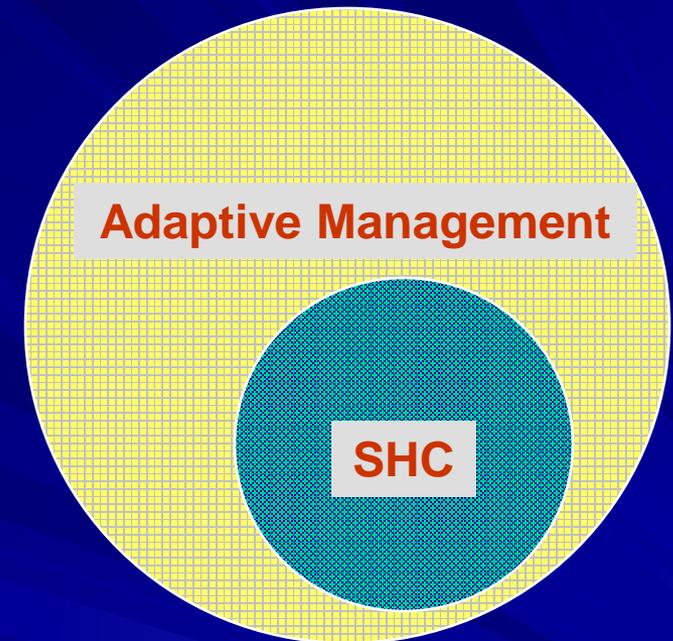
- Conservation actions can be part of an AM approach and not necessarily be SHC.
- For an actions to be part of an SHC approach it must be:
 - Tied tightly to a truly landscape approach; &
 - Tied tightly to a truly collaborative approach involving multiple partners.



Planning
Designing
Outcome-Monitoring
Delivery
Assumption-Research

LCCs are not technical service centers

- LCCs support landscape conservation activities that are genuinely “joint venture like”.
- They do not support other activities that are part of an AM approach.
- They do not support other activities that are high priorities.
- They do not support other activities that might fail in the absence of help.



Planning
Designing
Outcome-Monitoring
Delivery
Assumption-Research

Lessons learned



Thank You

