U.S. Fish & Wildlife Service

Landscape Conservation Cooperatives (LCCs):

The Right Science in the Right Places

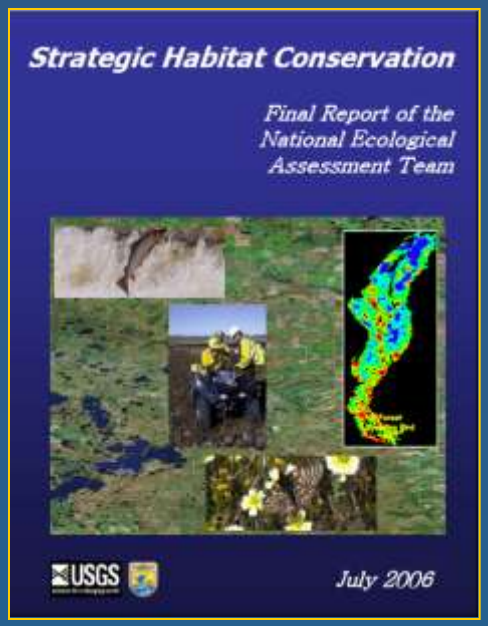
Cindy Dohner, USFWS Regional Director,
Southeast Region

Landscape Conservation Cooperatives (LCCs):

Background

Brief Status Report Across LCCs

The Beginnings of the GCPO LCC



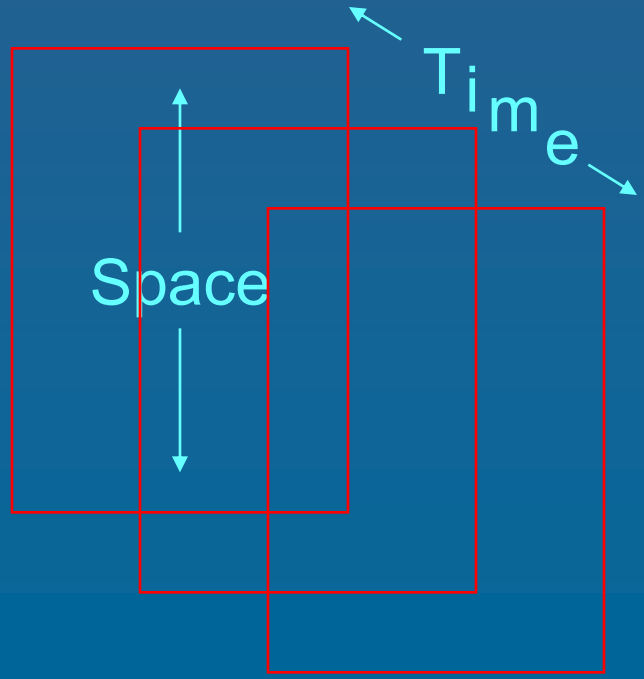
Landscape Conservation/AKA SHC

…a conservation approach that seeks to define, design, and deliver landscapes that support and sustain socio-viable populations of fish and wildlife and the ecological processes on which they depend.

Requisites:

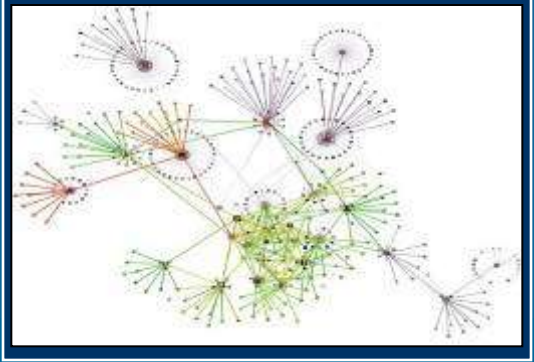
Science

Scalability

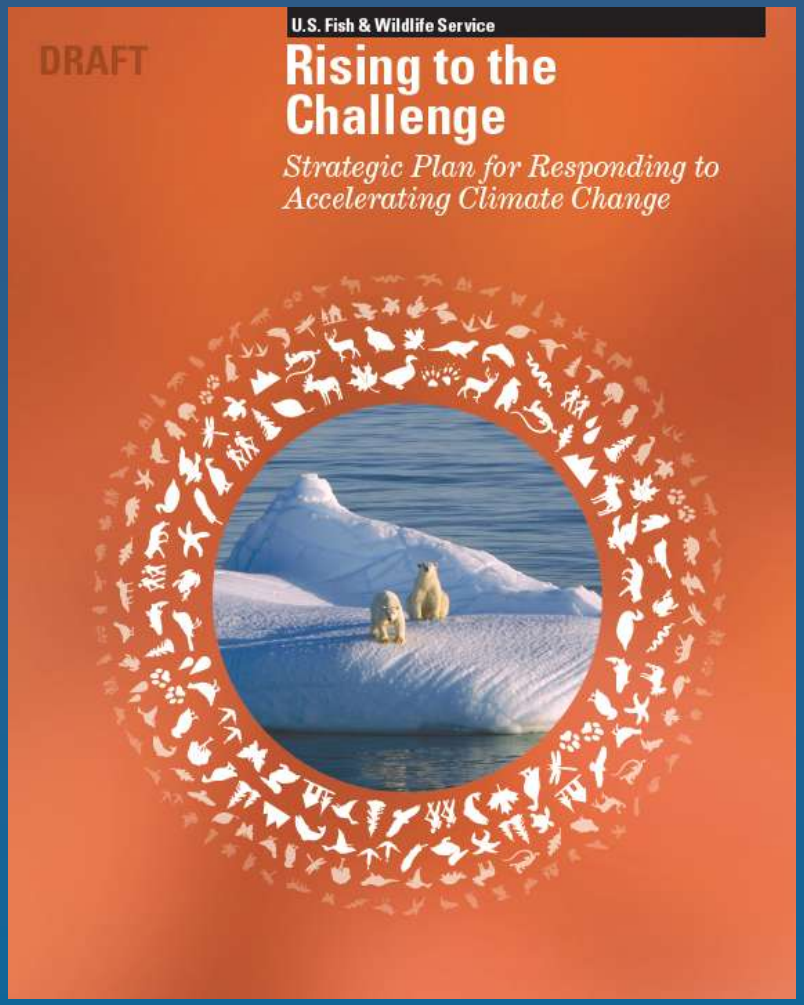


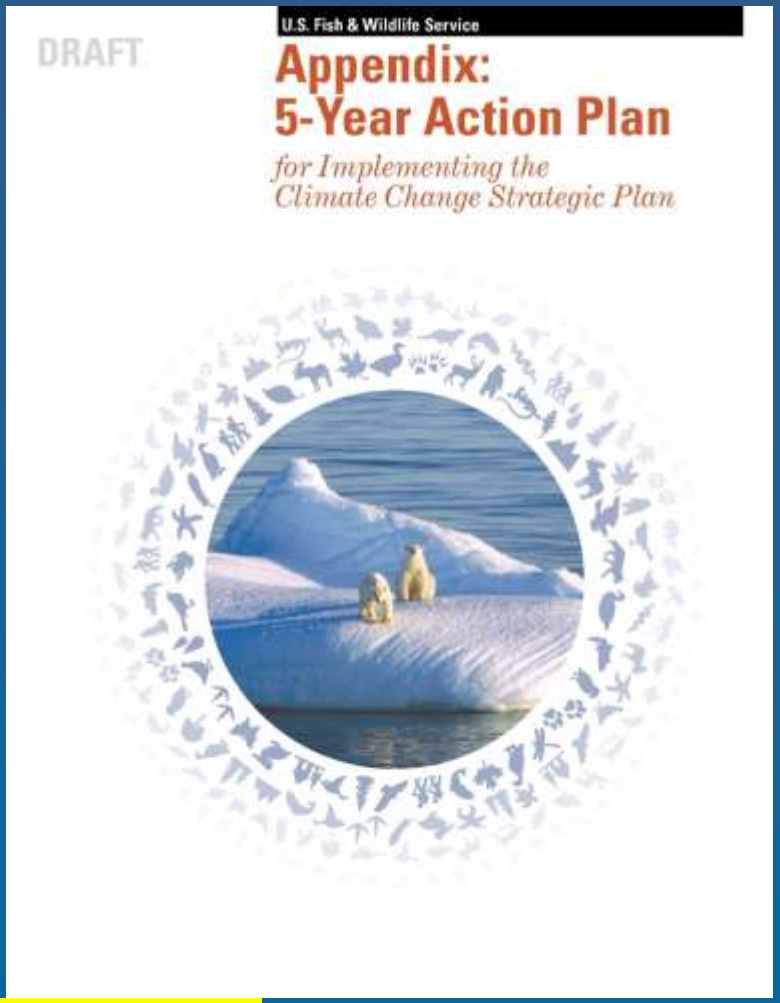
Interdependence

Landscape Conservation Cooperative (Conservation–Science Network)



Landscape Conservation Cooperatives





http://www.fws.gov/home/climatechange/

Landscape Conservation Cooperatives

From the FWS Climate Change Strategic Plan . . . .

- "Establish *Landscape Conservation Cooperatives* that enable members of the conservation community to plan, design and deliver conservation in ways that integrate local, State, Tribal, regional, national and international efforts and resources...."

- = LCCs

Climate Change – DOI Secretarial Order No. 3289

- Issued September 14, 2009

  includes the following:

"A network of Landscape Conservation Cooperatives will engage DOI and federal agencies, states, tribal and local governments and the public to craft practical, landscape-level strategies for managing climate change impacts..."

= LCCs

2010 Funding

- USFWS
  - $10 M nationwide for LCCs (capacity)
  - $10 M nationwide for LCC's (science)
  - Expectation: 8 LCCs will be developed in FY 2010
- NPS
  - Science Capacity, new positions in LCCs
- USGS
  - DOI Regional Climate Change Response Centers
  - Support for USFWS LCC Activities ($5 M)

Additional 2010 Funding

- USFWS Program Funding for Climate Change
  - National Wildlife Refuges ($12M)
    - For Inventory and Monitoring
  - Partners for Fish and Wildlife ($6M)
    - Conservation Delivery in Support of Climate Change
  - Fisheries ($2M)
    - Support for Fish Habitat Partnerships
- State Wildlife Grants
  - Increased funding in FY 2010 ($15M)
    - State Wildlife Action Plans can update/ incorporate climate change

Form and Function of Landscape Conservation Cooperatives

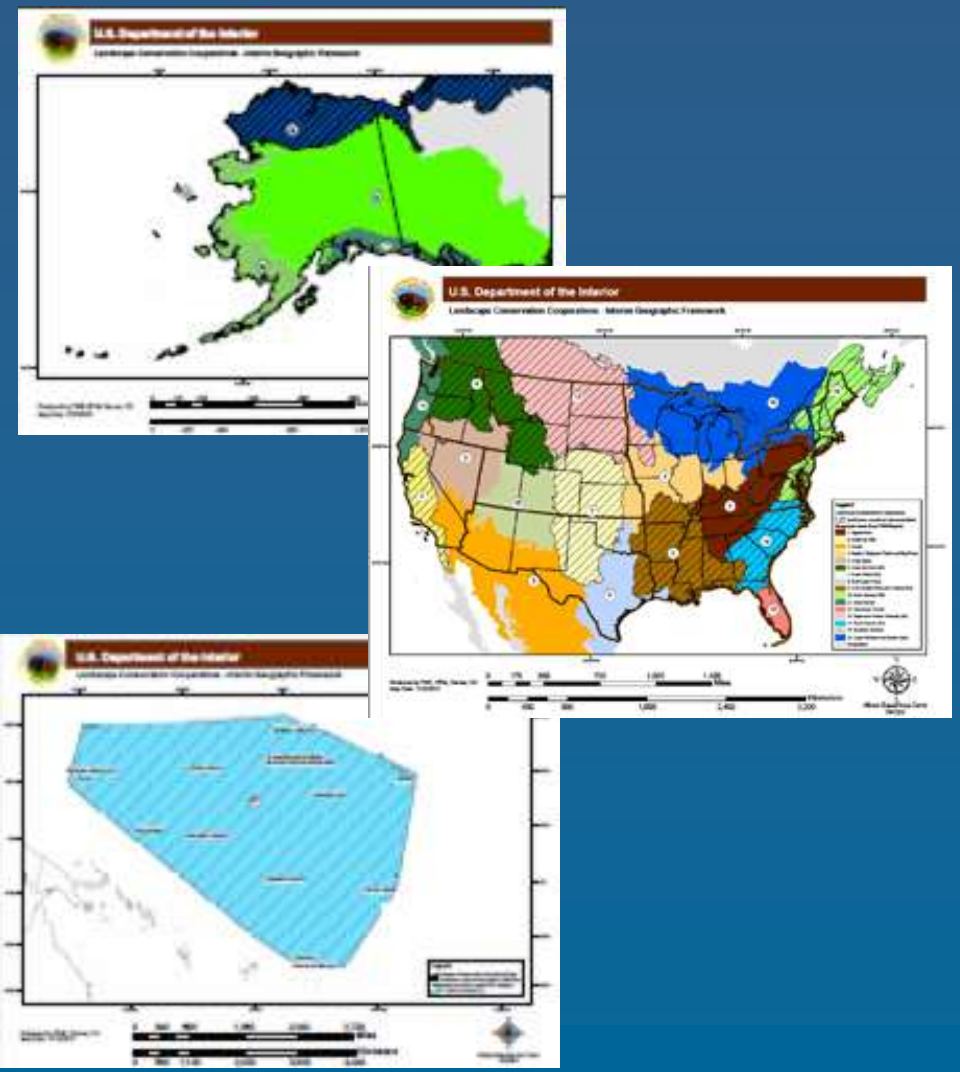
- For LCCs to function as a national framework and a seamless national network, each will have:
  - A steering committee of executive and management level representatives from partner organizations, which will provide management direction and set priorities
  - An LCC Coordinator
  - A science and technology coordinator
  - GIS capability and other expertise as needed
  - …

Form and Function continued . .

- Self-directed non-regulatory partnerships between federal and state agencies, tribes, NGOs, universities and others
- Guided by a steering committee with representatives of partner organizations
- Shared capacity (including staff) for coordination, technology and science including population and habitat modeling, GIS, decision analysis, monitoring and evaluation, data management, etc.

Landscape Conservation Cooperatives

LCCs established in FY 2010



1. Arctic
2. California
3. Great Northern
4. Great Plains
5. Gulf Coastal Plains & Ozarks
6. North Atlantic
7. Pacific Islands
8. Plains and Prairie Potholes
9. South Atlantic

Arkansas GFC

Kentucky DFWR

Alabama DCNR

Louisiana DWF

Oklahoma DWC

Tennessee WRA

US Geologic Survey

Missouri DC

Texas DPW

Mississippi DWFP

US Forest Service

US Fish and Wildlife Service

The Nature Conservancy

Florida FWCC

Auburn University

Wildlife Management Institute

Ducks Unlimited

National Audubon Society

National Wild Turkey Fed

American Bird Conservancy

Northern Bobwhite Initiative

Landscape Conservation Cooperatives (LCCs):

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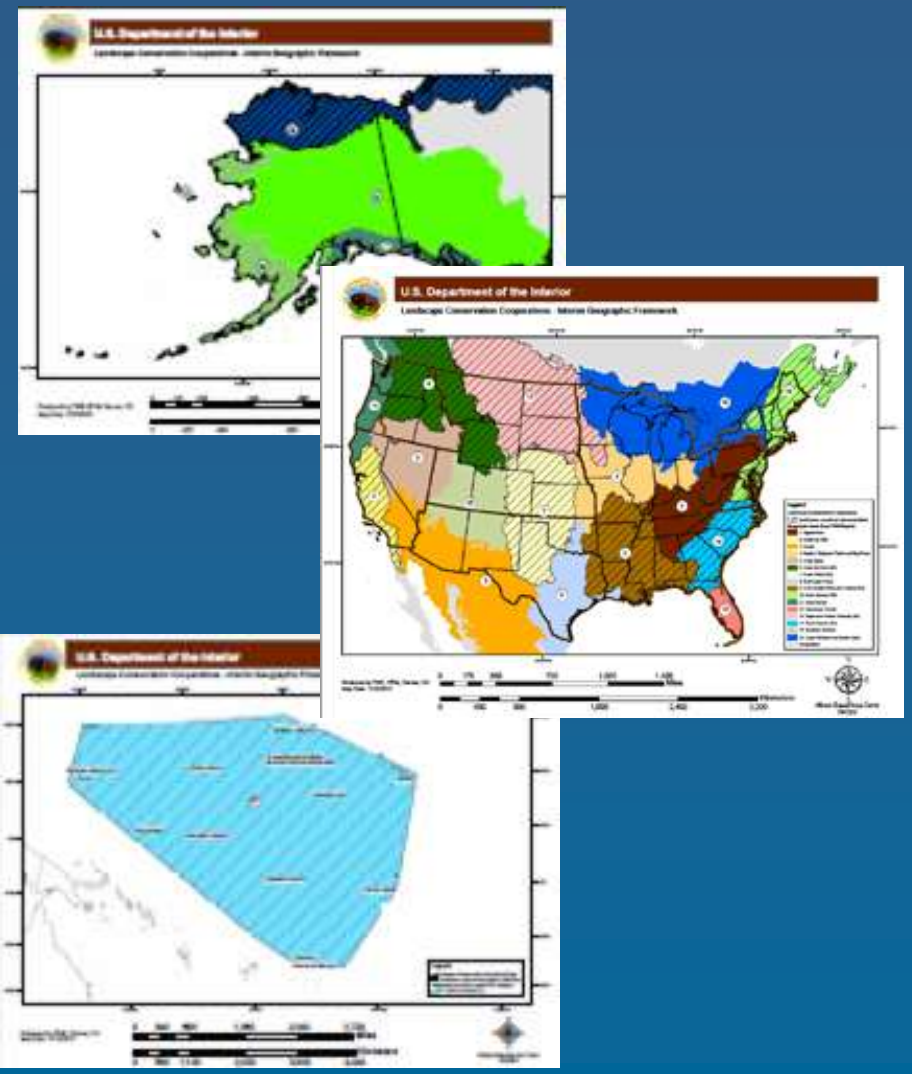
Activities at the National Level

Science and Technology Needs To Ensure A National Network of Landscape Conservation Cooperatives



Workshop

DOI Landscape Conservation Cooperatives National Network: A Platform for Collaboration and Analysis

Objectives:

- Develop consensus on a shared information platform to support a national network of Landscape Conservation Cooperatives (LCCs)
- Agree to strategic directions and guiding principles
- Identify common and unique requirements to ensure success of each LCC and the network as a whole
- Assess the current capacity to meet information and analytical requirements
- Develop a high level plan and agree to a set of priority investments
- Ensure alignment with other efforts related to data and information

Agenda

Monday, March 29, 2010	
	Travel and Group Dinner
Tuesday, March 30, 2010	
8:00 am to 8:30 am	Welcome, Introductions and Overview **Dan Ashe**
8:30 am to 10:00 am	Leadership Panel: Opportunities for a DOI-Wide LCC National Network **David Hayes, Anne Castle, Tom Strickland** **Dan Ashe, Kit Batten, Suzette Kimball, Karen Siderelis**
10:00 am to 10:30 am	Break

Landscape Conservation Cooperatives (LCCs):

Background

Brief Status Report Across LCCs

The Beginnings of the GCPO LCC

Reactions and Attitudes

GCPO – The Complexity

Establishing the Science Foundation

Forming the Cooperative

Reactions and Attitudes

"CAMPS"

Reactions and Attitudes

"CAMPS"

Complexity


Ozark Glades and Springs


pi River


Longleaf Pine


Forested Wetlands, Bayous, and Swamps


ald Coast


GCRO – The Complexity
Ouachita kidneyshell
Rabbitsfoot
Southern hickorynut
Kiamichi shiner
Rocky shiner
Peppered shiner
Blackspot shiner
Taillight shiner
Blue- headed shiner
Blue sucker
Leopard darter
Crystal darter
Harlequin darter
Lesser siren
Alligator snapping turtle
Razor-backed musk turtle
River otter
Big Thicket blind isopod
Texas prairie crayfish
Upshur crayfish
Neches crayfish
Black-girdled crayfish
Kensley's crayfish
Texas pigtoe
Louisiana pigtoe
Sandbank pocketbook
Texas heelsplitter
Wartyback
Creeper
Fawnsfoot
Texas emerald (dragonfly)
Western sand darter
American eel
Creek chubsucker
Ironcolor shiner
Sabine shiner
Silverband shiner
Paddlefish
Ozark cavefish
Bristly cave crayfish
Ozark big-eared bat
Gray myotis
Cave salamander
Northern long-eared myotis
Grotto salamander
Oklahoma cave crayfish
Delaware County cave crayfish
Endemic subterranean isopods and amphipods
Sinkhole pond
Ringed salamander
Arkansas darter
Stippled darter
Redspot chub
Ozark minnow
Cardinal shiner
Plains topminnow
Southern book lamprey
Oklahoma salamander
Louisiana waterthrush
Neosho mucket
Ouachita kidneyshell
Little spectaclecase
Purple lilliput
Butterfly mussel
Midget crayfish
Oklahoma salamander
Wedgespot shiner
Blunt-faced shiner
Redspot chub
Long-nosed darter
Blue sucker
Leopard darter
Savanna
Prairie
Wetland
River/Stream
Cerulean Warbler
Swallow-tailed kite
Swamp rabbit
Mississippi kite
Bird-voiced treefrog
Mole salamander
Western mudsnake
Early-successional and shrub/scrub habitats
Orchard oriole
White-eyed vireo
Painted bunting
Mississippi kite
LeConte's sparrow
Henslow's sparrow
Field sparrow
Grasshopper sparrow
Loggerhead shrike
Dickcissel
Short-eared owl
Sedge wren
Nonforested wetlands
shorebirds
long-legged wading birds
bitterns
rails
Western chicken turtle
Bottomland depression (swamp or slough)
Gulf crayfish snake
Pallid sturgeon
Alligator gar
Paddlefish
Fat pocketbook
Pink mucket
Rabbitsfoot
Swainson's warbler
Bachman's warbler
Mississippi Kite
Pine savannah/Flatwoods
Red-cockaded woodpecker
Flatwoods salamander
Gopher frog
Loggerhead shrike
Mimic glass lizard
Northern Bobwhite
Henslow's sparrow
Florida sandhill crane
Longleaf Pine woodlands
Bachman's sparrow
Brown-headed nuthatch
Northern bobwhite
Black pine snake
Gopher tortoise
Dougherty plain cave crayfish
Georgia blind salamander
Robust redhorse
Alabama shad
Blackbanded sunfish
Altamaha arcmussel
Apalachicola floater
Altamaha spinymussel
Oval pigtoe

GCPO – The Complexity

States
12

USGS
3

BLM
2

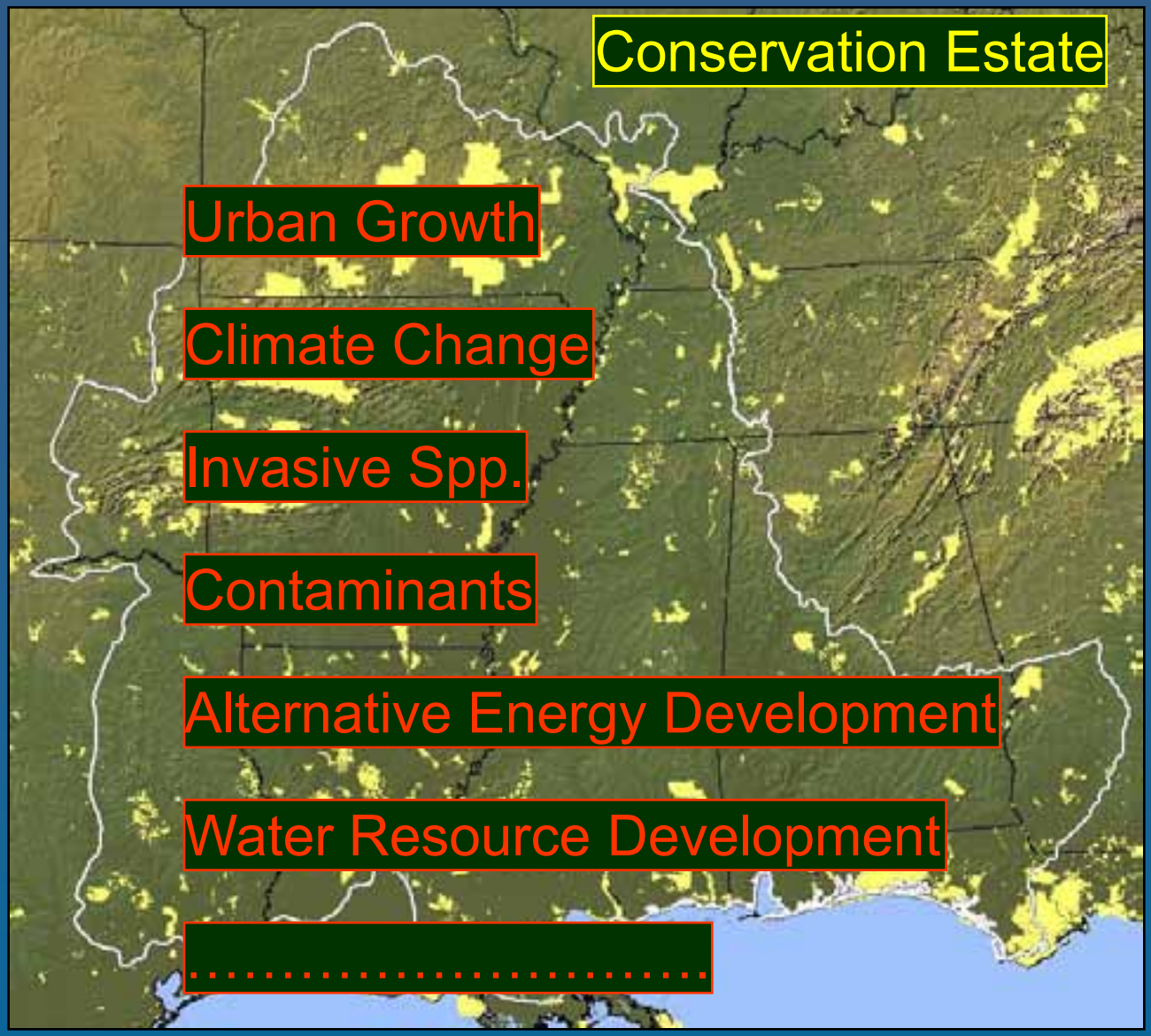
NPS
3

NPSI&M
5

FWS
3

FS
2

GCPO – The Complexity



Conservation estate (acres) of the Gulf Coastal Plains and Ozarks LCC.	
Ownership	Acres
Federal Lands	
FWS Refuges	1,262,134
NPS	456,002
USFS	6,845,550
Military	474,274
USCOE	572,232
Federal Subtotal	9,610,192
State Lands	
WMA	4,800,355
State Parks	377,270
Other	568,444
State Subtotal	5,746,069
Public Subtotal	15,356,261
Private Lands	
NGO	72,739
WRP	717,669
Private Subtotal	790,408
Grand Total	16,146,669

~9% In Conservation Estate: 91% (>160,000,000 pvt)

Reactions and Attitudes

GCPO – The Complexity

Establishing the Science Foundation

Forming the Cooperative

Establishing the Science Foundation

Attack the Complexity

Stepping Stones and “Immediate Successes?”

DOI/FWS Performance Measures

e.g., Areas and species most vulnerable to climate change identified, # of management actions evaluated for effectiveness in response to climate change, forecasts of biological and ecological changes to priority species…

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Attack the Complexity

"Vulnerability Assessment"

- Optimal Conservation Strategies

"See The System" - Common/Communal Information

Optimal conservation strategies for dynamic landscapes

Incorporating climate change and urban growth in conservation planning

James B. Grand, USGS
Alabama Cooperative
Fish and Wildlife Research Unit

USGS
science for a changing world

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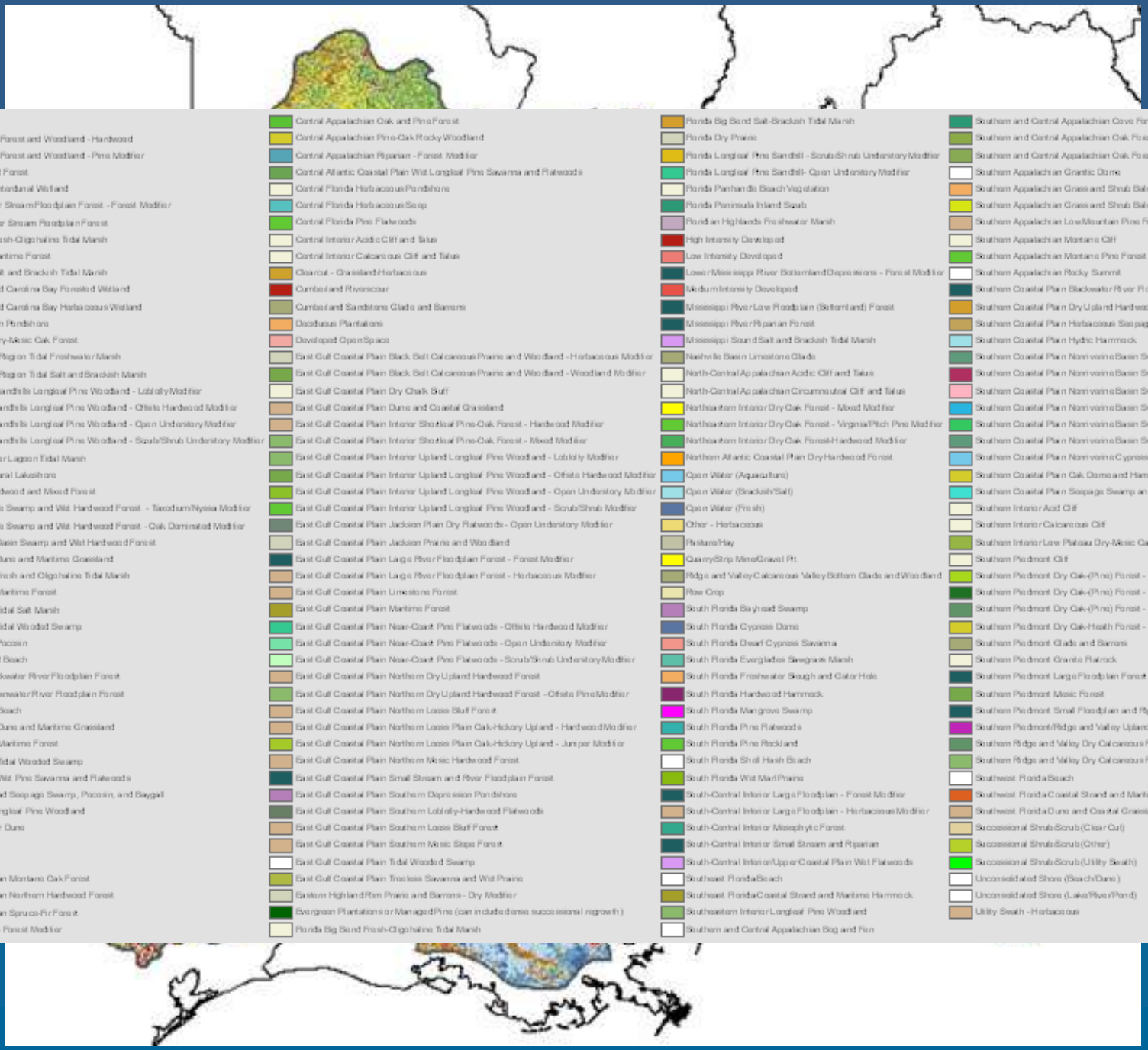
Attack the Complexity

"Vulnerability Assessment"

- Optimal Conservation Strategies
- Rapid-prototyping Assessment

"See The System" - Common/Communal Information

- Begin the Arduous Task of Assimilating and Standardizing Geospatial Data
- Develop a Data Management System for collaborating disparate habitat data
- Fill in Gaps in Common Land Use Land Cover and Hydrologic Data Sets


Southeast GAP
Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood
Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Appalachian Hemlock-Hardwood Forest
Atlantic and Gulf Coastal Plain Interdunal Wetland
Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh
Atlantic Coastal Plain Central Maritime Forest
Atlantic Coastal Plain Central Salt and Brackish Tidal Marsh
Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Atlantic Coastal Plain Depression Pondshore
Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh
Atlantic Coastal Plain Embayed Region Tidal Salt and Brackish Marsh
Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Oak Understory Modifier
Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier
Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Atlantic Coastal Plain Indian River Lagoon Tidal Marsh
Atlantic Coastal Plain Large Natural Lakeshore
Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Atlantic Coastal Plain Northern Dune and Maritime Grassland
Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh
Atlantic Coastal Plain Northern Maritime Forest
Atlantic Coastal Plain Northern Tidal Salt Marsh
Atlantic Coastal Plain Northern Tidal Wooded Swamp
Atlantic Coastal Plain Peatland Pocosin
Atlantic Coastal Plain Sea Island Beach
Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Atlantic Coastal Plain Southern Beach
Atlantic Coastal Plain Southern Dune and Maritime Grassland
Atlantic Coastal Plain Southern Maritime Forest
Atlantic Coastal Plain Southern Tidal Wooded Swamp
Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Atlantic Coastal Plain Upland Longleaf Pine Woodland
Atlantic Coastal Plain Xeric River Dune
Bare Sand
Bare Soil
Central and Southern Appalachian Montane Oak Forest
Central and Southern Appalachian Northern Hardwood Forest
Central and Southern Appalachian Spruce-Fir Forest
Central Appalachian Floodplain - Forest Modifier
Central Appalachian Oak and Pine Forest
Central Appalachian Pine-Oak Rocky Woodland
Central Appalachian Riparian - Forest Modifier
Central Atlantic Coastal Plain Wet Longleaf Pine Savanna and Flatwoods
Central Florida Herbaceous Pondshore
Central Florida Herbaceous Seep
Central Florida Pine Flatwoods
Central Interior Acidic Cliff and Talus
Central Interior Calcareous Cliff and Talus
Clearcut - Grassland/Herbaceous
Cumberland Riverscour
Cumberland Sandstone Glade and Barrens
Deciduous Plantations
Developed Open Space
East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Herbaceous Modifier
East Gulf Coastal Plain Black Belt Calcareous Prairie and Woodland - Woodland Modifier
East Gulf Coastal Plain Dry Chalk Bluff
East Gulf Coastal Plain Dune and Coastal Grassland
East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier
East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Oak Understory Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Open Understory Modifier
East Gulf Coastal Plain Jackson Prairie and Woodland
East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
East Gulf Coastal Plain Limestone Forest
East Gulf Coastal Plain Maritime Forest
East Gulf Coastal Plain Near-Coast Pine Flatwoods - Oak Hardwood Modifier
East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Oak/Pine Modifier
East Gulf Coastal Plain Northern Loess Bluff Forest
East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
East Gulf Coastal Plain Northern Mesic Hardwood Forest
East Gulf Coastal Plain Small Stream and River Floodplain Forest
East Gulf Coastal Plain Southern Depression Pondshore
East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
East Gulf Coastal Plain Southern Loess Bluff Forest
East Gulf Coastal Plain Southern Mesic Slope Forest
East Gulf Coastal Plain Tidal Wooded Swamp
East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Eastern Highland Rim Prairie and Barrens - Dry Modifier
Evergreen Plantations or Managed Pine (can include some successional regrowth)
Florida Big Bend Fresh-Oligohaline Tidal Marsh
Florida Big Bend Salt-Brackish Tidal Marsh
Florida Dry Prairie
Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Florida Longleaf Pine Sandhill - Open Understory Modifier
Florida Panhandle Beach Vegetation
Florida Peninsula Inland Scrub
Floridian Highlands Freshwater Marsh
High Intensity Developed
Low Intensity Developed
Lower Mississippi River Bottomland Depressions - Forest Modifier
Medium Intensity Developed
Mississippi River Low Floodplain (Bottomland) Forest
Mississippi River Riparian Forest
Mississippi Sound Salt and Brackish Tidal Marsh
Nashville Basin Limestone Glade
North-Central Appalachian Acidic Cliff and Talus
North-Central Appalachian Circumneutral Cliff and Talus
Northeastern Interior Dry Oak Forest - Mixed Modifier
Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Northeastern Interior Dry Oak Forest-Hardwood Modifier
Northern Atlantic Coastal Plain Dry Hardwood Forest
Open Water (Aquaculture)
Open Water (Brackish/Salt)
Open Water (Fresh)
Other - Herbaceous
Pasture/Hay
Quarry/Strip Mine/Gravel Pit
Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Row Crop
South Florida Bayhead Swamp
South Florida Cypress Dome
South Florida Dwarf Cypress Savanna
South Florida Evergladesa Sawgrass Marsh
South Florida Freshwater Slough and Gator Hole
South Florida Hardwood Hammock
South Florida Mangrove Swamp
South Florida Pine Flatwoods
South Florida Pine Rockland
South Florida Shell Hash Beach
South Florida Wet Marl Prairie
South-Central Interior Large Floodplain - Forest Modifier
South-Central Interior Large Floodplain - Herbaceous Modifier
South-Central Interior Mesophytic Forest
South-Central Interior Small Stream and Riparian
South-Central Interior/Upper Coastal Plain Wet Flatwoods
Southeast Florida Beach
Southeast Florida Coastal Strand and Maritime Hammock
Southeastern Interior Longleaf Pine Woodland
Southern and Central Appalachian Bog and Fen
Southern and Central Appalachian Cove Forest
Southern and Central Appalachian Oak Forest
Southern and Central Appalachian Oak Forest - Xeric
Southern Appalachian Granitic Dome
Southern Appalachian Grass and Shrub Bald - Herbaceous Modifier
Southern Appalachian Grass and Shrub Bald - Shrub Modifier
Southern Appalachian Low Mountain Pine Forest
Southern Appalachian Montane Cliff
Southern Appalachian Montane Pine Forest and Woodland
Southern Appalachian Rocky Summit
Southern Coastal Plain Blackwater River Floodplain Forest
Southern Coastal Plain Dry Upland Hardwood Forest
Southern Coastal Plain Herbaceous Seepage Bog
Southern Coastal Plain Hydric Hammock
Southern Coastal Plain Nonriverine Basin Swamp
Southern Coastal Plain Nonriverine Basin Swamp - Coastal Plain Bay/Gum Modifier
Southern Coastal Plain Nonriverine Basin Swamp - Coastal Plain Cladhra Modifier
Southern Coastal Plain Nonriverine Basin Swamp - Coastal Plain Nyssa Modifier
Southern Coastal Plain Nonriverine Basin Swamp - Coastal Plain Pine Modifier
Southern Coastal Plain Nonriverine Basin Swamp - Coastal Plain Taxodium Modifier
Southern Coastal Plain Nonriverine Cypress Dome
Southern Coastal Plain Oak Dome and Hammock
Southern Coastal Plain Seepage Swamp and Baygall
Southern Interior Acid Cliff
Southern Interior Calcareous Cliff
Southern Interior Low Plateau Dry-Mesic Oak Forest
Southern Piedmont Cliff
Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Southern Piedmont Dry Oak-(Pine) Forest - Loblolly Pine Modifier
Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Southern Piedmont Glade and Barrens
Southern Piedmont Granite Flatrock
Southern Piedmont Large Floodplain Forest - Forest Modifier
Southern Piedmont Mesic Forest
Southern Piedmont Small Floodplain and Riparian Forest
Southern Piedmont/Ridge and Valley Upland Depression Swamp
Southern Ridge and Valley Dry Calcareous Forest
Southern Ridge and Valley Dry Calcareous Forest - Pine modifier
Southwest Florida Beach
Southwest Florida Coastal Strand and Maritime Hammock
Southwest Florida Dune and Coastal Grassland
Successional Shrub/Scrub (Clear Cut)
Successional Shrub/Scrub (Other)
Successional Shrub/Scrub (Utility Swath)
Unconsolidated Shore (Beach/Dune)
Unconsolidated Shore (Lake/River/Pond)
Utility Swath - Herbaceous

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Attack the Complexity

"Vulnerability Assessment"

- Optimal Conservation Strategies
- Rapid-prototyping Assessment

"See The System" - Common/Communal Information

- Begin the Arduous Task of Assimilating and Standardizing Geospatial Data
- Develop a Data Management System for collaborating disparate habitat data
- Fill in Gaps in Common Land Use Land Cover and Hydrologic Data Sets

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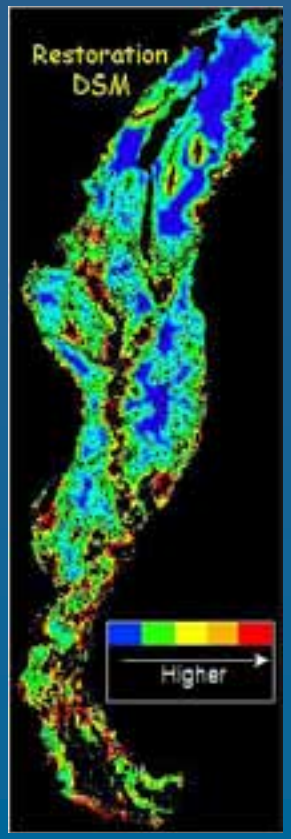
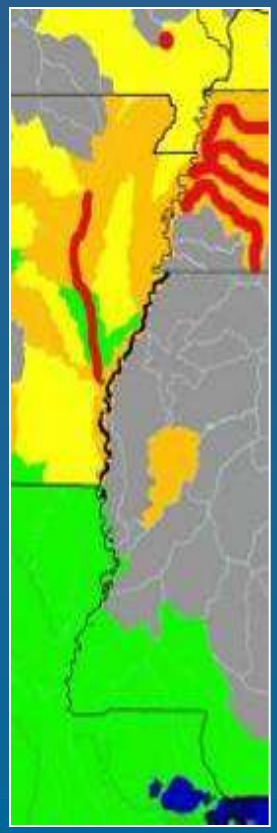
Stepping Stones and "Immediate Successes?"

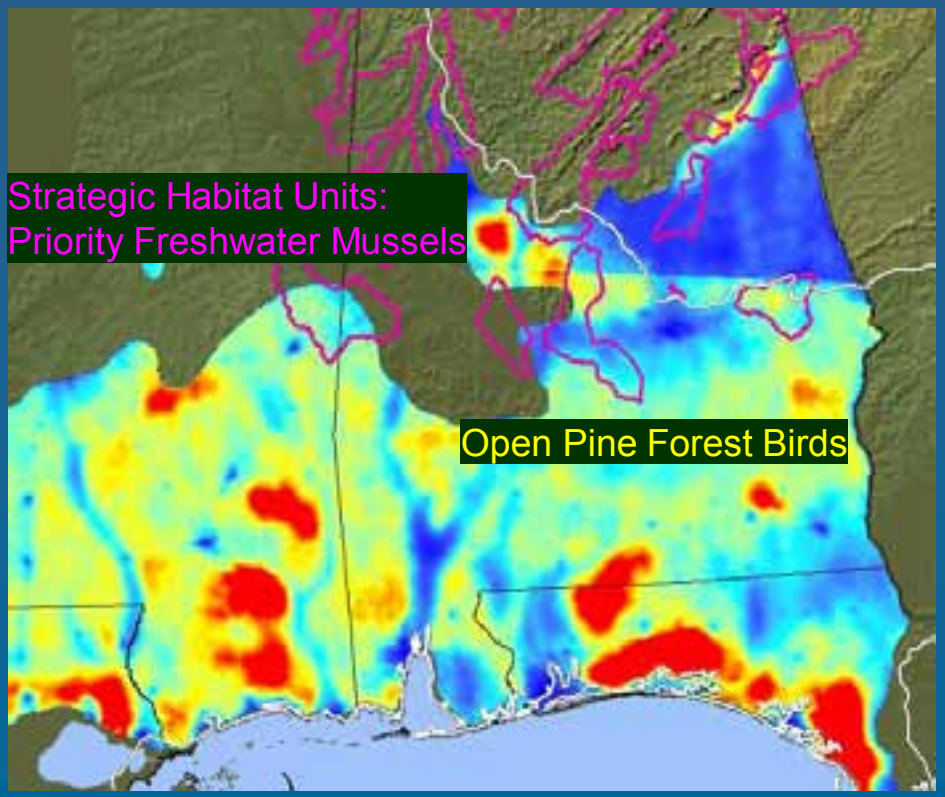
- Integrate Explicit Biological Objectives for Aquatic and Terrestrial Species/Systems (Linked to Larger "Plans" e.g., NAWMP, SARP, Recovery Plan)



Forest Breeding Birds



Alligator Gar



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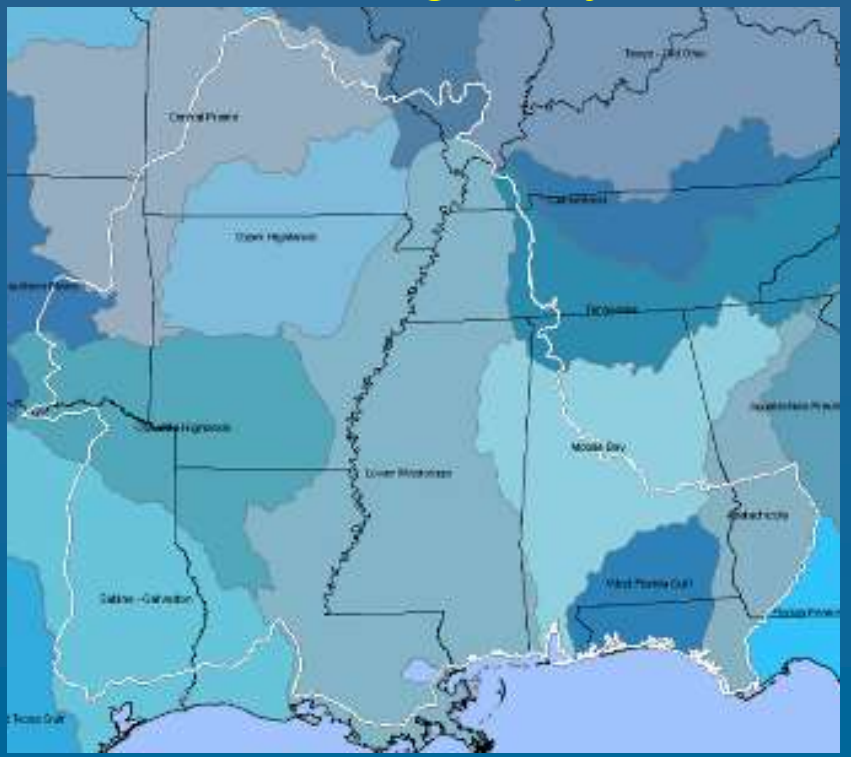
Stepping Stones and “Immediate Successes”

- Integrate Explicit Biological Objectives for Aquatic and Terrestrial Species/Systems (Linked to Larger “Plans” e.g., NAWMP, SARP, Recovery Plan)

- Initiate Progress Across The GCPO Geography



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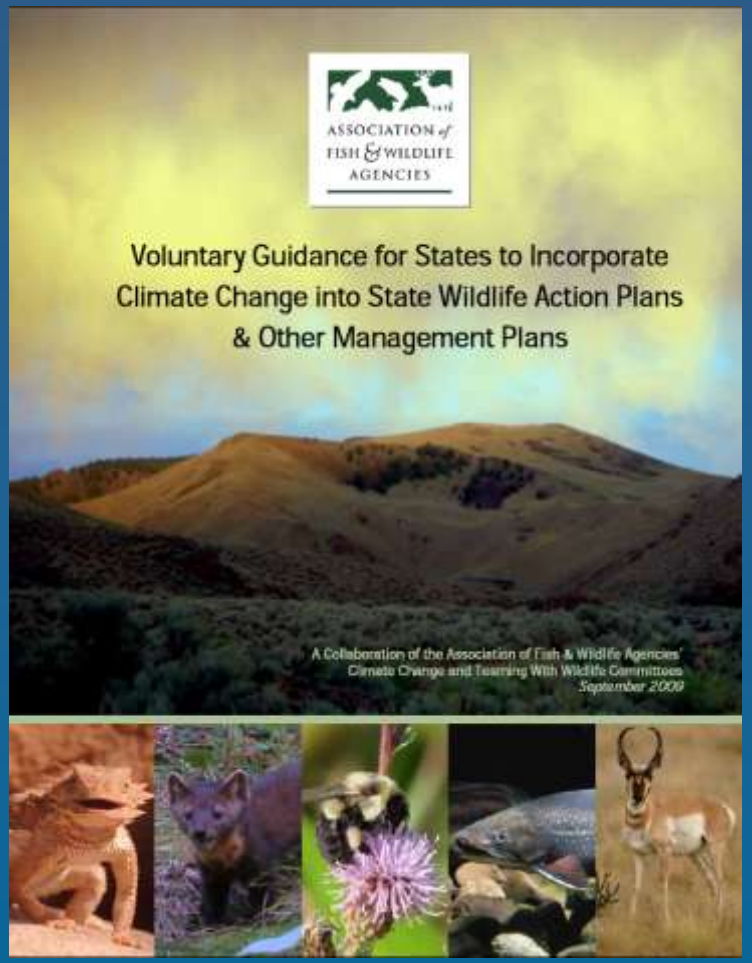
Stepping Stones and “Immediate Successes”

- Integrate Explicit Biological Objectives for Aquatic and Terrestrial Species/Systems (Linked to Larger “Plans” e.g., NAWMP, SARP, Recovery Plan)
- Initiate Progress Across The GCPO Geography
- Develop/Refine Biological Models In Preparation For Downscaled Climate Data

Links to State Plans

Guidance on Incorporating Climate Change into State Wildlife Action Plans

LCCs offer opportunity for states and partners to develop regional adaptation strategies that can be included in state plans.



Downscaled Data

Temperature (Min/Max, etc)

Precipitation (Daily, Avg, etc)

Evaporation

Solar Radiation

Drought Index

Growing Season

Fire Frequency

Frost Days

Insect Outbreak

Physical Changes

Soil Moisture

Stream Flow

Hydroperiod

Biological Responses

Vegetation

Forest Structure

Forest Composition

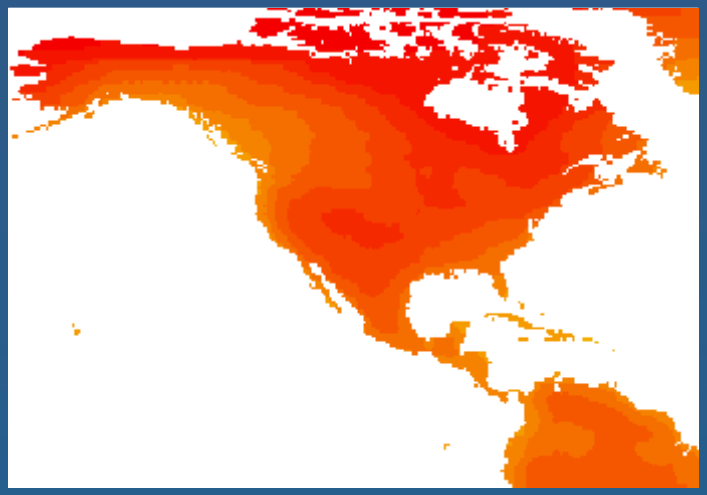
Algal Blooms

Species

Population Distributions

Fecundity Rates

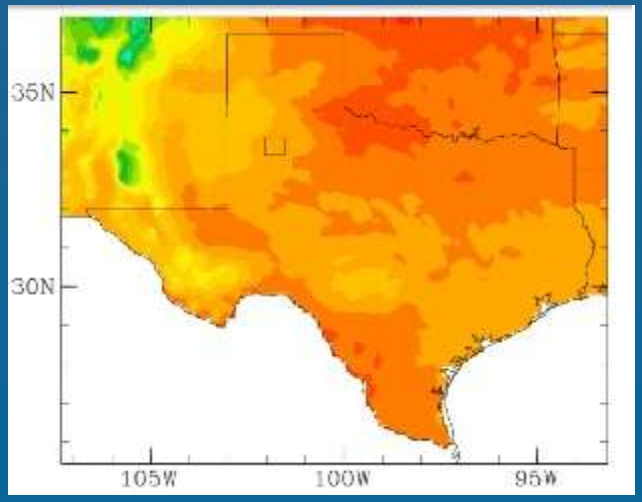
Foraging Phenology



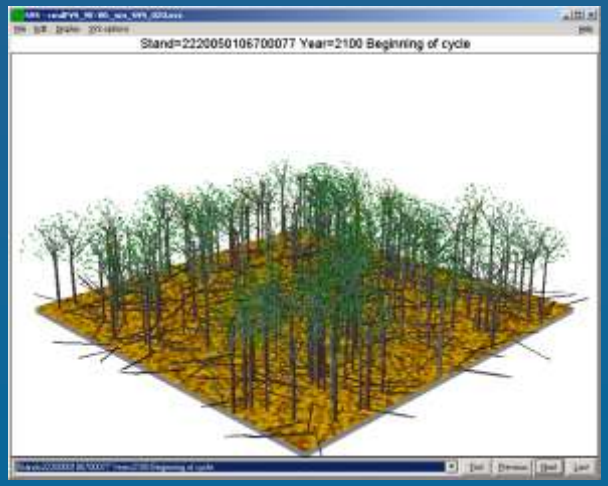
Downscaled Data

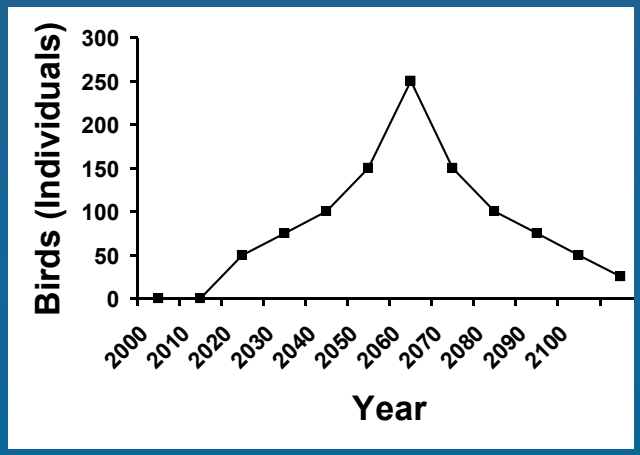
- Temperature (Min/Max, etc)
- Precipitation (Daily, Avg, etc)
- Evaporation
- Solar Radiation
- Drought Index
- Growing Season
- Fire Frequency
- Frost Days
- Insect Outbreak

Physical Changes



Biological Responses



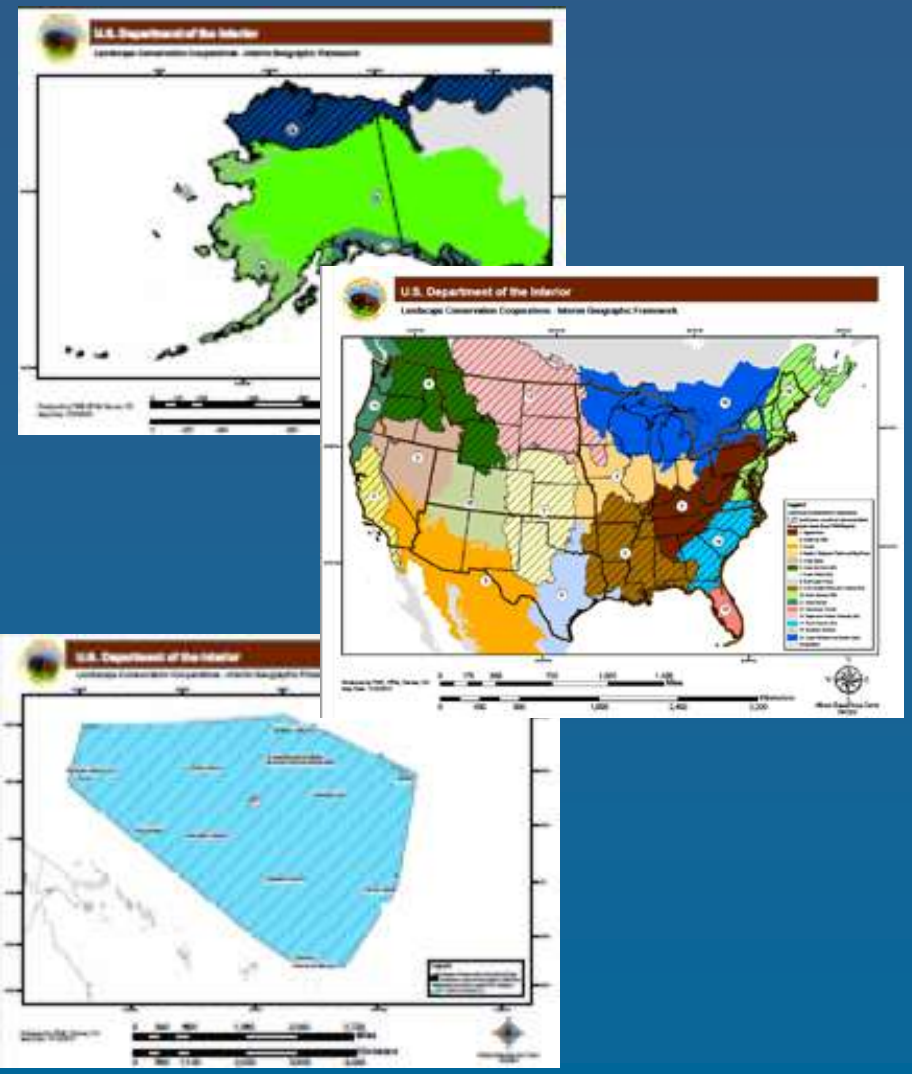


Establishing the Science Foundation

Stepping Stones and “Immediate Successes”

- Integrate Explicit Biological Objectives for Aquatic and Terrestrial Species/Systems (Linked to Larger “Plans” e.g., NAWMP, SARP, Recovery Plan)
- Initiate Progress Across The GCPO Geography
- Develop/Refine Biological Models In Preparation For Downscaled Climate Data
- Pursue Actions That Connects the GCPO as Part of the National Network of LCCs

Science and Technology Needs To Ensure A National Network of Landscape Conservation Cooperatives



Workshop

DOI Landscape Conservation Cooperatives National Network: A Platform for Collaboration and Analysis

Objectives:

- Develop consensus on a shared information platform to support a national network of Landscape Conservation Cooperatives (LCCs)
- Agree to strategic directions and guiding principles
- Identify common and unique requirements to ensure success of each LCC and the network as a whole
- Assess the current capacity to meet information and analytical requirements
- Develop a high level plan and agree to a set of priority investments
- Ensure alignment with other efforts related to data and information

Agenda

Monday, March 29, 2010	
	Travel and Group Dinner
Tuesday, March 30, 2010	
8:00 am to 8:30 am	Welcome, Introductions and Overview **Dan Ashe**
8:30 am to 10:00 am	Leadership Panel: Opportunities for a DOI-Wide LCC National Network **David Hayes, Anne Castle, Tom Strickland** **Dan Ashe, Kit Batten, Suzette Kimball, Karen Siderelis**
10:00 am to 10:30 am	Break

Reactions and Attitudes

GCPO – The Complexity

Establishing the Science Foundation

Forming the Cooperative

Forming the Cooperative

A formal relationship between the management and science communities wherein each participates in creating a shared conservation vision and commits to creating the science capacity needed to efficiently achieve that vision.

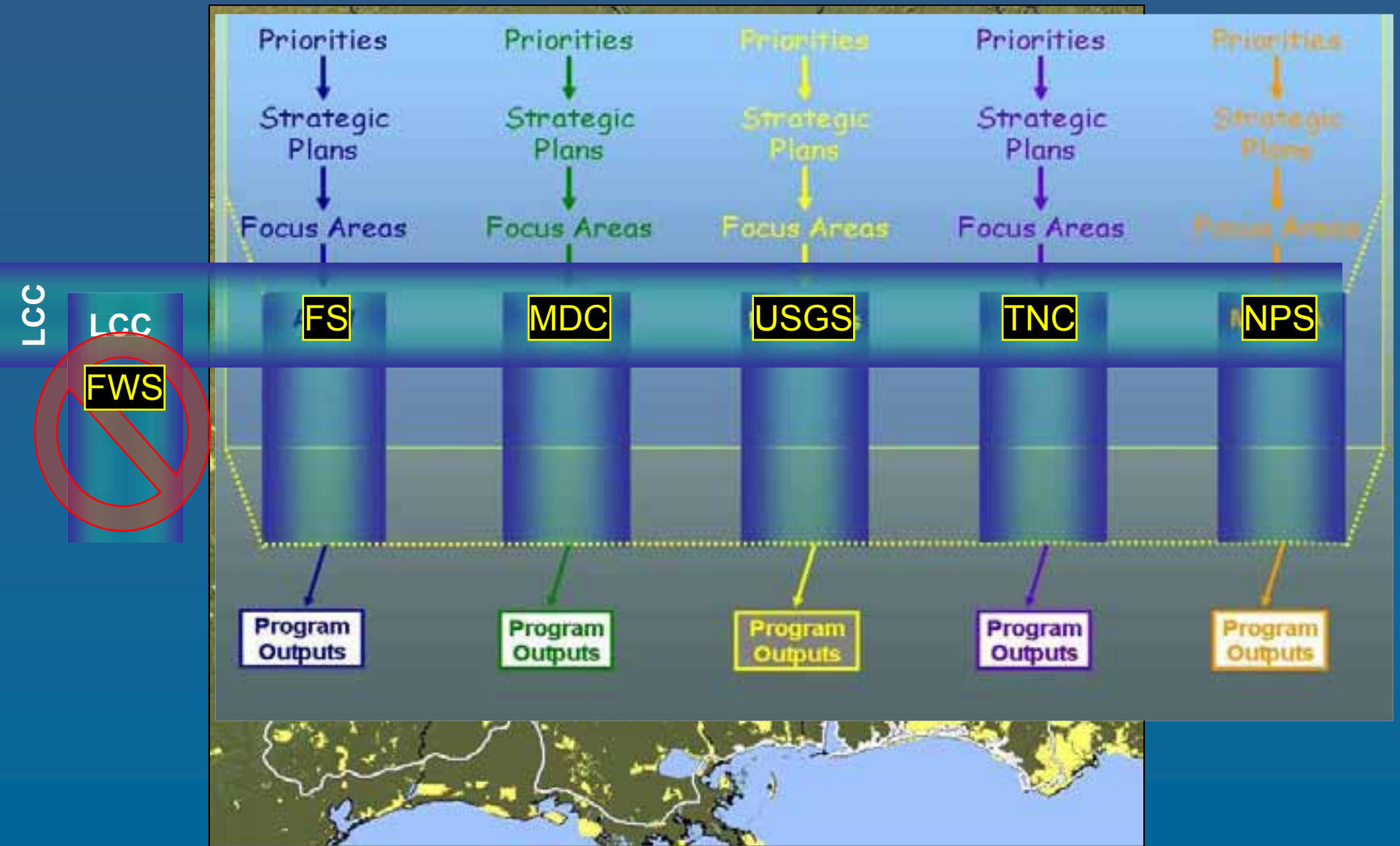
Basic Structure of the Landscape Conservation Cooperative (LCC)			
Steering Committee	**Conservation Science and Coordination Team**	**Process Networks**	**Programs, Projects, and Partnerships**
Upper Level Management/Executives Provides leadership to guide the direction and set the priorities of the Gulf Coastal Plains and Ozarks (GCPO) LCC Contributes the necessary technical expertise and resources to achieve the goals and objectives of the GCPO LCC Accepts the responsibility for the performance and success of the GCPO LCC	Dedicated Staff Supporting the LCC Provides science and technology support to the GCPO LCC in each of the functional elements of the adaptive management framework Provides partnership development and coordination support by creating, guiding, facilitating, and nurturing a networked partnership infrastructure sufficient to support the iterative, interagency application of the GCPO LCC adaptive management framework.	The Extensive Management and Science Communities of the GCPO Geography Appropriate technical staff of the various agencies and organizations within the GCPO LCC networking on issues or species specific tasks associated with one or more core functions of the adaptive conservation framework (i.e., biological planning, conservation design, conservation delivery, outcome-based monitoring, and assumption-driven research).	Existing and future Programs (e.g., Refuge System, State Agency, University), Projects (habitat delivery, monitoring and research projects) and Partnerships working in the GCPO geography represent the array of assets that directly produce and deliver targeted actions. Program management decisions have a direct impact on each organization's performance in contributing to the goals and objectives of the LCC.

Dedicated Staff: Conservation Science & Coordination Team

- LCC Coordinator
- Science and Technology Coordinator
- Ecosystem Simulation Modeler
- Monitoring Coordinator and Biometrician
- Aquatic Species/Hydrologist
- GIS Application Specialist
- Remote Sensing/Spatial Analysts
- Aquatic System Ecologist
- Geodatabase Developer/Manager
- Community Engagement Specialist
- Landscape Ecologist/Conservation Biologist

Horizontally Integrated

Dedicated Staff: Conservation Science & Coordination Team



PICCC Positions

FUNDED	UNFUNDED
PICCC Coordinator	Marine modeler
Science Manager	Ecosystem modeler
Landscape planner	Data manager
Species modeler	Coastal scientist
Administrative assistant	Outreach coordinator
Cultural resource specialist	Fire scientist
Monitoring specialist	West Pacific modeler
Hydrologist (.5 FTE)	Social scientist
Traditional ecological knowledge specialist	Monitoring teams
GIS/Data specialist (partial)	
10 Funded positions	9+ Unfunded Positions

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2010 Funding

- USFWS
  - $10 M nationwide for LCCs (capacity)
  - $10 M nationwide for LCC's (science)
  - Expectation: 8 LCCs will be developed in FY 2010
- NPS
  - Science Capacity, new positions in LCCs
- USGS
  - DOI Regional Climate Change Response Centers
  - Support for USFWS LCC Activities ($5 M)

Dedicated Conservation Science Team

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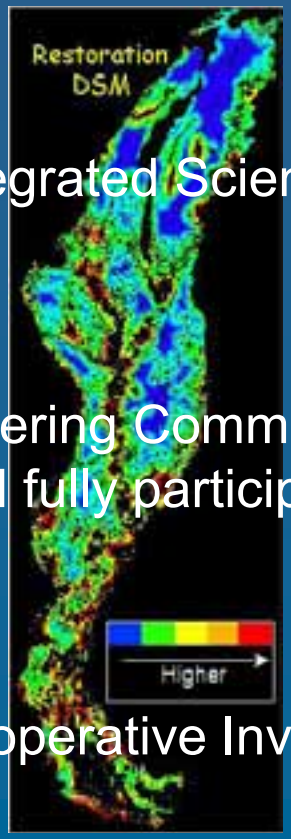
Process Networks

Technical staff of the various agencies and organizations within the GCPO LCC networking on issues or species specific tasks associated with one or more core functions of the adaptive conservation framework (i.e., biological planning, conservation design, conservation delivery, outcome-based monitoring, and assumption-driven research).



Forest Breeding Birds

Alligator Gar

Integrated Science Management Council

Steering Committee – Commit technical staff time and resources to activitely and fully participate.

Cooperative Investment Registry and Response Tool

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Arkansas GFC

Kentucky DFWR

Alabama DCNR

Louisiana DWF

Oklahoma DWC

Tennessee WRA

US Geologic Survey

Missouri DC

Texas DPW

Mississippi DWFP

US Forest Service

US Fish and Wildlife Service

The Nature Conservancy

Florida FWCC

Auburn University

Wildlife Management Institute

Ducks Unlimited

National Audubon Society

National Wild Turkey Fed

American Bird Conservancy

Northern Bobwhite Initiative

DRAFT

GULF COASTAL PLAINS AND OZARKS LANDSCAPE CONSERVATION COOPERATIVE

DRAFT

LEADERSHIP SUMMIT

Summer/Early Fall 2010

Guiding The Development and Operations of the LCC

The Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative is envisioned to be a conservation-science alliance where the private, state, federal community operates as a networked leveraged system in a non-regulatory forum and in collaboration with the public to effectively pursue socio-viable solutions to support the nation's interest in sustaining endemic fish and wildlife populations and the ecological functions and processes on which they depend.

WHERE AND WHEN: Location TBD, Summer – Early Fall 2010

HOSTED BY: Agencies and Organizations of the Lower Mississippi Valley, East Gulf Coastal Plains, and Central Hardwoods Joint Venture Partnerships

PURPOSE: To develop strategies that guide the development and operational direction of the Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative by engaging the executive and senior level leadership among private, state, federal, and tribal communities operating within the GCPO geography. The Summit is specifically targeted to those agencies and organizations whose mission includes or substantially impacts the conservation of our nation's environmental assets to include fish and wildlife resources.

GEOGRAPHIC FOCUS: Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative

PRELIMINARY SUMMIT OBJECTIVES:

- Arrive at a common understanding of vision & expectations of a National Network of Landscape Conservation Cooperatives
- Form a broad alliance among interested parties operating within the GCPO who have a mandate or interest in the sustainability of our nation's fish and wildlife resources and the ecological processes on which they depend
- Frame strategies to guide the development and operations of the GCPO Cooperative

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2011 Funding

- FWS
  - $7 million to stand up 3 new LCCs
- USGS
- NPS
- BLM