

# Using the State Wildlife Action Plans

## Case Studies in Strategic Conservation

**Jeff Lerner - Defenders of Wildlife**  
**Joe McGovern – Iowa Natural Heritage Foundation**  
**Michael Whitfield – Teton Regional Land Trust**  
**Mark Shaffer – Doris Duke Charitable Foundation**



# Defenders of Wildlife

...is dedicated to the protection of all native wild animals and plants in their natural communities.

New approaches that keep species from becoming endangered

Protect entire ecosystems and interconnected habitats

# Living Lands:

Helping Land Trusts  
Conserve Biodiversity

**Defenders of Wildlife  
Living Lands Project**



# Living Lands Mission

- To support and increase the capacity of the land trust community to conserve biodiversity on private lands through financial and technical assistance.

**Defenders of Wildlife  
Living Lands Project**



# Living Lands Project: Why Now?

- Standard 8 (Conservation value, Public benefits)
- IRS and taxpayers need conservation donations to be worthy of a federal tax benefit
- Land trusts need to document “conservation purposes” in easement language
- Funders want strategic planning
- New State Wildlife Action Plans (AKA comprehensive wildlife conservation strategies)

**Defenders of Wildlife  
Living Lands Project**



# Road Map

- State Wildlife Grants program
- State Wildlife Action Plans
- Implementation of Plans
- Land Protection efforts



# Biodiversity Loss

- 1,272 species listed as threatened or endangered
- Estimated additional 15,000 species at risk in the U.S.
- Habitat loss is a leading cause of species imperilment in the U.S.



# Habitat Loss

## Development:

- 10.4 million acres of forest lost between 1982 and 1997
- Estimated 44.2 million acres of forest land lost by 2030
- 60% of rare and imperiled species in the United States are found within the boundary of a metropolitan area



Jeff Vanuga Courtesy of NRCS



Photo Courtesy of USDA-NRCS



Poweshiek Skipper Courtesy of MN DNR



Grizzly Bear Photo Courtesy of FWS

## Highways:

- Each mile of highway affects 48 acres of land
- Transportation Infrastructure alters 1/5 of the land area in the United States



# Ecological Impacts

## Altered physical environment



Photo Courtesy of USDA-NRCS

Habitat Loss and Fragmentation



Photo Courtesy of NRCS  
Altered Hydro Regime



Air Pollution



Water Pollution

## Altered chemical environment

## Modified Behavior



Reduced Nesting Success



## Mortality from Collisions



Road Kill

## Increased Invasive Species



Invasive Scotch Broom  
*Flickr*



Roadside Thistle

*Flickr*

# Solutions?

- Land acquisition and protection
- Integrate conservation and land use decisions
- Need access to species and habitat data
- Need knowledge of ecosystem processes



*tobyotter*



*Photos Courtesy of NRCS*



*Photos Courtesy of NRCS*



*TheManWhoWasn'tThere*

# State & Tribal Wildlife Grants Program

**Defenders of Wildlife**



# State & Tribal Wildlife Grants

- Established in 2000 through Interior Appropriations – administered by USFWS
- Focus on Species of Greatest Conservation Need (SGCN) to avoid future listings
- Non-regulatory proactive solution
- State Comprehensive Wildlife Conservation Plans completed October 2005
- Defenders played leading role in establishing program



# Importance of State Wildlife Grants Program

- **Conservation Planning** – Most states have never done a comprehensive wildlife plan
- **Habitat Conservation** – Habitat loss is the main problem for wildlife. Plans can map out habitat areas to conserve
- **Policy Connections** – To address habitat, plans can be used to inform land use decisions
- **Funding** – Plans can be used to inform other funded planning & conservation investments



# State Wildlife Action Plans

**Defenders of Wildlife**



# State Wildlife Action Plans

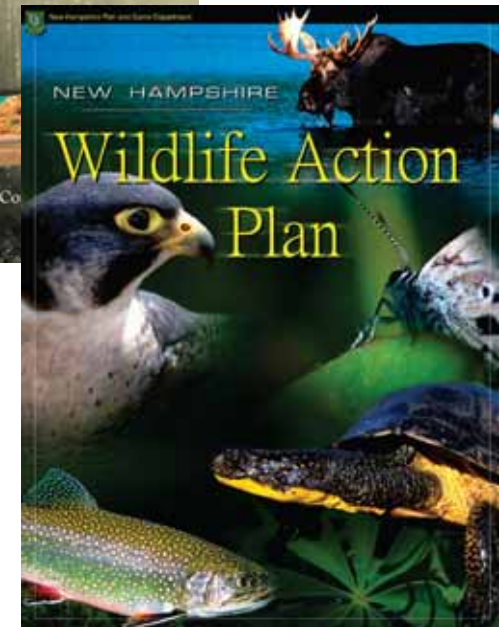
State and Tribal Wildlife Grants Program

Created by State Fish and Wildlife Agencies

Proactive, non-regulatory conservation

Comprehensive Assessments & Strategies:

- Priority species
- Priority habitats
- Conservation threats
- Conservation actions



# Conservation Information

## Species of Greatest Conservation Need



WDFW

Sharp-tailed Grouse, MT



FWS

Karner Blue Butterfly,  
NH



californiaherps.com

Great Plains Narrow  
Mouthed Toad, AZ



Charles and Clint

Painted Bunting, GA

## Key Habitats



NGS

Short Grassland Prairie, MT



TNC

Pine Barrens, NH



californiaherps.com

Semi-Desert Wetland, AZ



Brevardparks.com

Scrub Shrub, SE U.S.



# Wildlife Plans Review

## Essential Questions:

- **Where should we work?**

(Conservation planning is a spatial exercise)

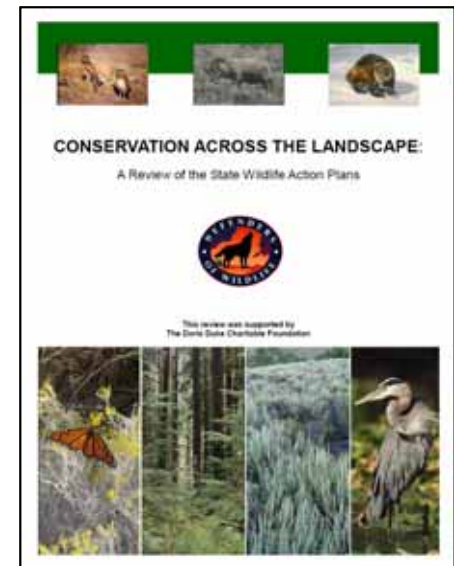
- **What should we do when we get there?**

(Conservation Goals & Actions)

- **What do we do first?**

(Prioritization)

- Summary of Results in Defenders report:  
“Conservation Across the Landscape: A Review of the State Wildlife Action Plans”



# Review Criteria

## Eight Elements

- Species
- Habitat
- Threats
- Actions
- Monitoring
- Coordination
- Periodic Review
- Public Participation

## Additional Categories

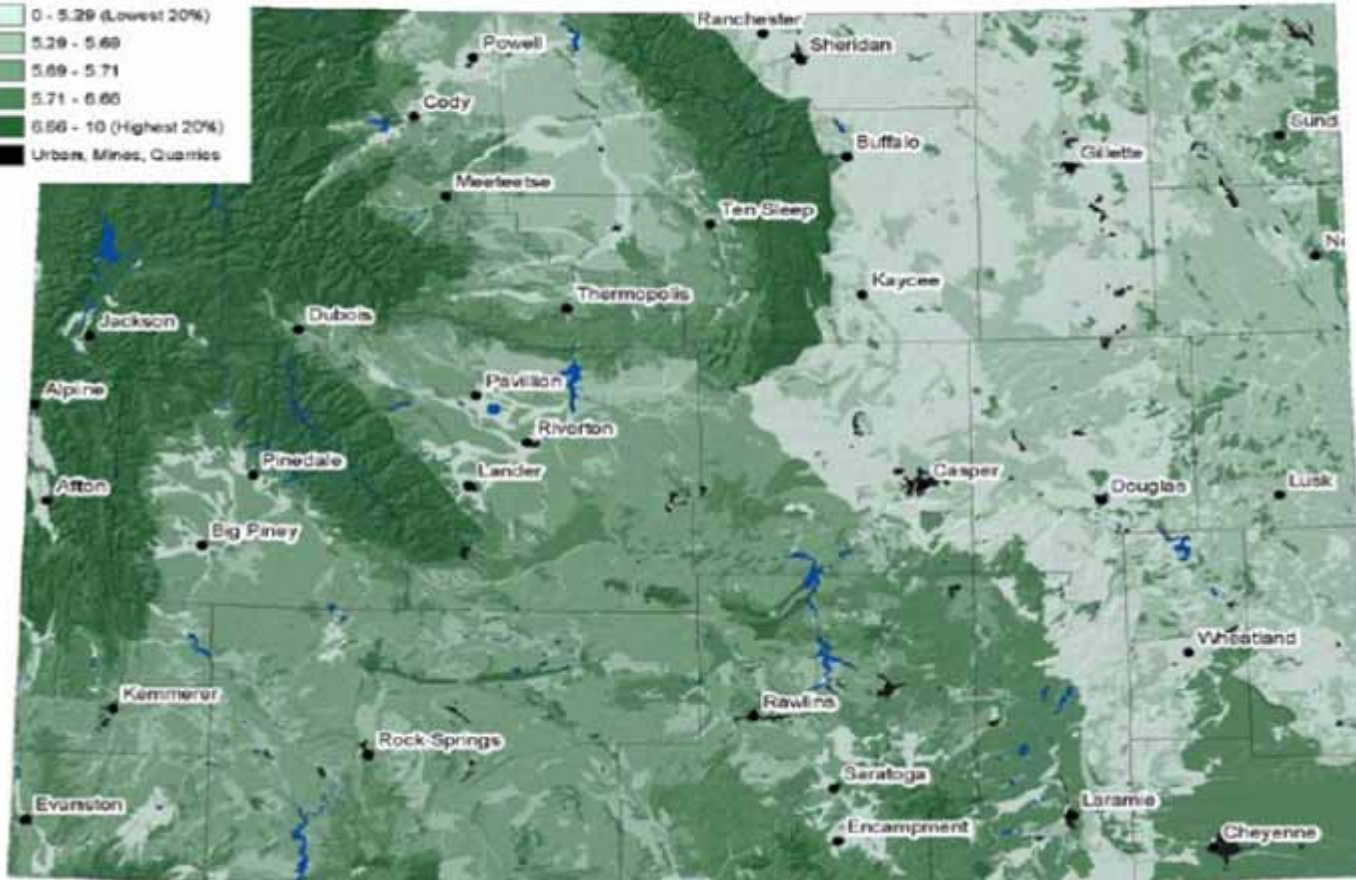
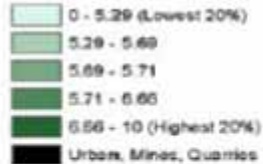
- Goals
- Maps
- Methods
- Leadership
- Policy Connections
- Funding
- Format



# Assessments of Wildlife

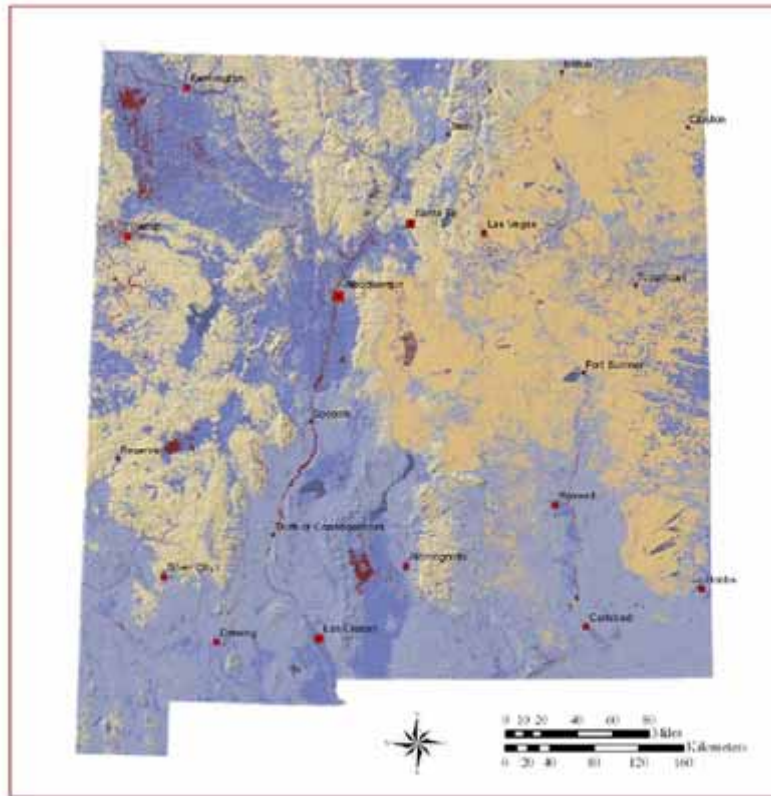
## Wyoming Ecosystems

### Habitat Quality



Source: Wyoming Game & Fish Department, 2005

# Assessments of Wildlife



Synergistic Effects of Factors that Influence Habitat



Threats Map: Synergistic  
Effects of Factors that  
Influence Habitat  
(NMGFD, 2005)

# Habitat Conservation: Mapping is Key

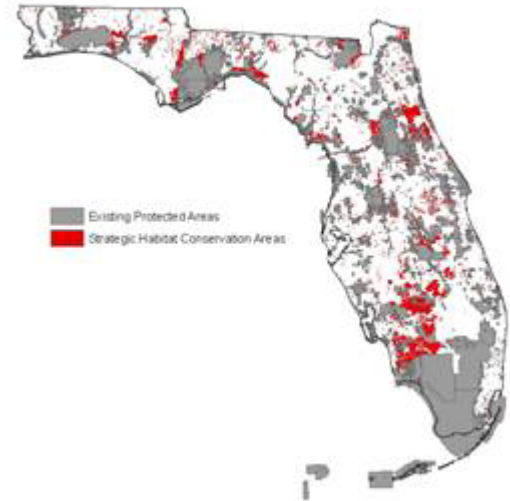


50% of States produced maps showing conservation focal areas

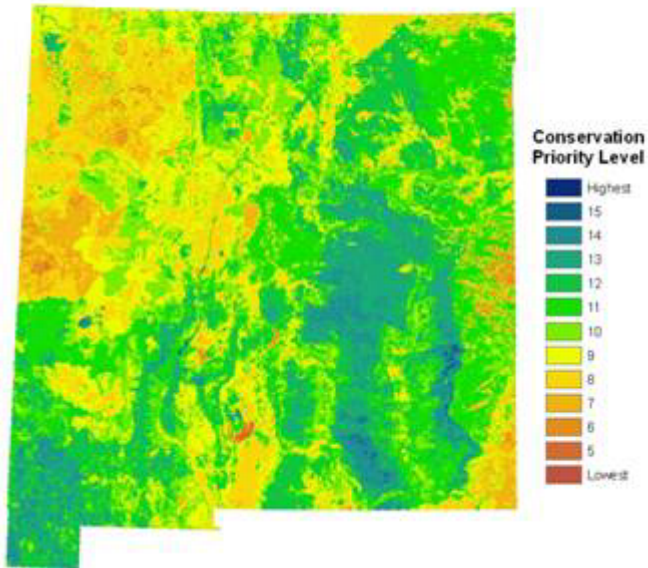
### Montana's Terrestrial Focus Areas



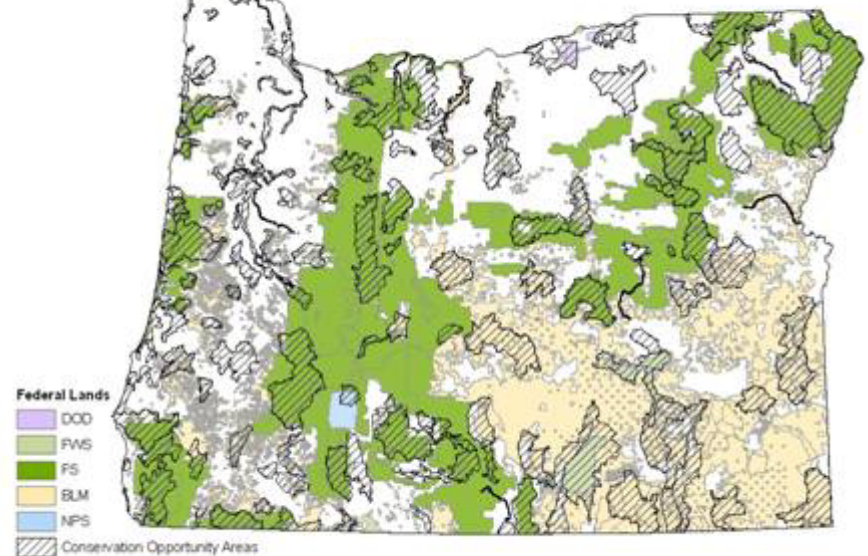
### Florida's Strategic Habitat Conservation Areas



### New Mexico's Priority Conservation Areas



### Oregon Conservation Opportunity Areas



# Strategy & Implementation

- Goals: 28% of plans included specific & measurable goals

Illinois Coastal Plain Natural Division:

“By 2020, increase land in public ownership within the project area to 60,000 acres; achieve partial reconnection of the Upper and Lower Segments of the Cache River by 2010; reduce peak flows in Big Creek by 25%” (pp. 128).

Source: Illinois Department of Natural Resources, 2005



# Strategy & Implementation

Actions: 60% of plans prioritized actions

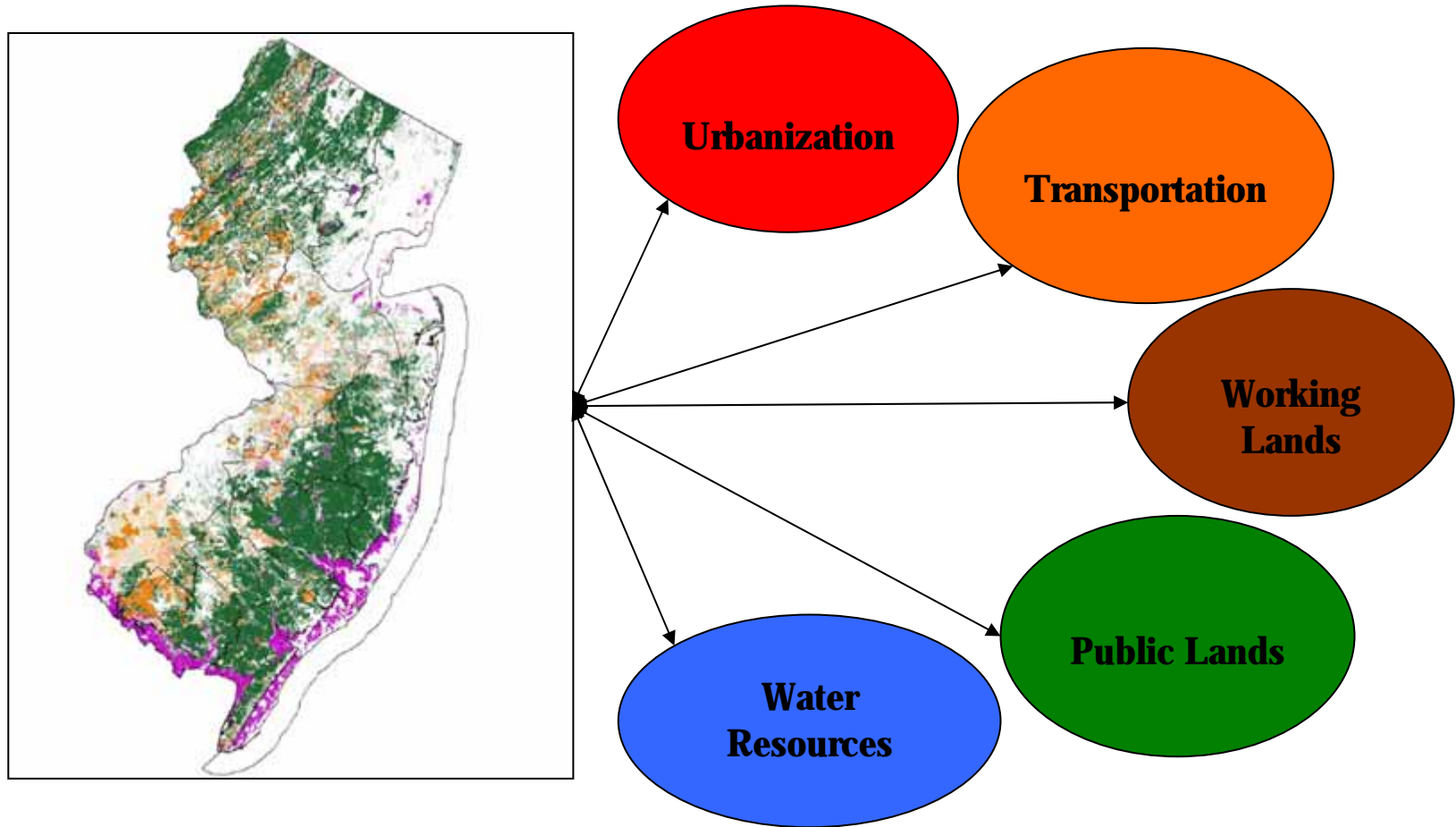
*Planning and Standards:*

Overall Rank	Action	Feasibility	Benefit	Cost
H	Explore ways to protect natural lands and commercial forests from conversion that are outside an Urban Service Boundary. Develop incentives to take into consideration wildlife, habitat, and available water resources.	L	VH	M
H	Convene a coalition of appropriate stakeholders (for example, conservationists, state natural resource agencies, agricultural interests, and major development and economic interests in Florida) to develop voluntary and incentive-based opportunities and methods for more ecologically friendly development and to develop additional resources to protect, acquire, and manage natural lands identified in the "Cooperative Conservation Blueprint" process.	M	H	M
M	Support retention of the designations of Areas of Critical State Concern ( <a href="http://ccgov.carr.org/plan-d/manchester/chapter8.pdf">http://ccgov.carr.org/plan-d/manchester/chapter8.pdf</a> ) for the City of Apalachicola, City of Key West, Green Swamp, Florida Keys (Monroe County), Big Cypress Swamp (Miami-Dade, Monroe, and Collier counties).	H	M	L
M	Encourage public/private partnerships to cooperatively help guide development design and implementation with the goal of maximizing protection and proper management of natural habitat identified in the "Cooperative Conservation Blueprint."	M	M	M





# Conservation Plans & Policy Connections



**Conservation plans should address land use decisions that cause habitat loss**

# Development threats to wildlife



- **All 51 Plans indicated that development is an issue for wildlife**
- 8 Plans indicate that development is *the greatest threat* to wildlife in their state
- 17 Plans indicated that development is *a top threat* to a specific region or habitat
- 12 Plans indicated that development is *a significant issue* of concern

# Funding: Strategic Investment in Habitat Conservation

- The U.S. spends approximately \$3 Billion a year on land conservation.
- State Wildlife Grants provides \$65 million a year for wildlife planning, research and some habitat conservation.
- More strategic use of land conservation spending for habitat values is critical and achievable with conservation plans.



# What Can Land Trusts Do?

- Learn about your state wildlife action plan
- Ask states to tell you where it is most important to protect wildlife habitat
- Invest your time and dollars strategically in those places
- Make use of incentive programs to restore or manage habitat and implement actions
- Help your state improve its wildlife plan



## Questions:

Was anyone involved in developing their state's wildlife action plan?

Do you see opportunities to use your state's information or plan?

**Defenders of Wildlife**





[www.defenders.org/statewildlifeplans](http://www.defenders.org/statewildlifeplans)

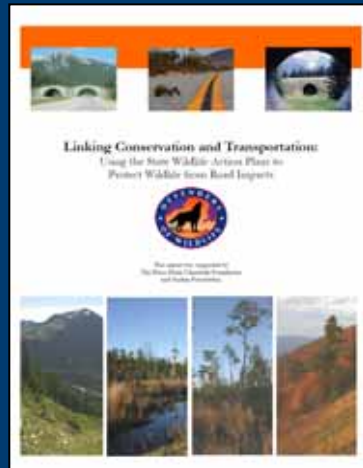
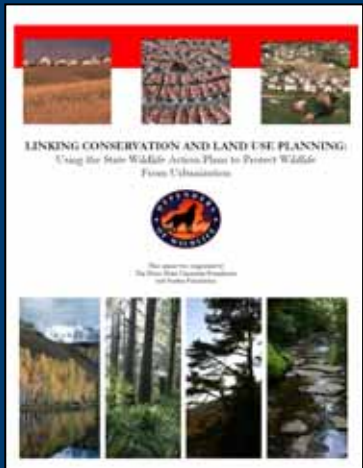
[www.wildlifeactionplans.org](http://www.wildlifeactionplans.org)

Contact:

Jeff Lerner

[jlerner@defenders.org](mailto:jlerner@defenders.org)

(202) 682 9400



**Defenders of Wildlife**





# Upper Midwest Wildlife Habitat Protection Initiative

# New DDCF

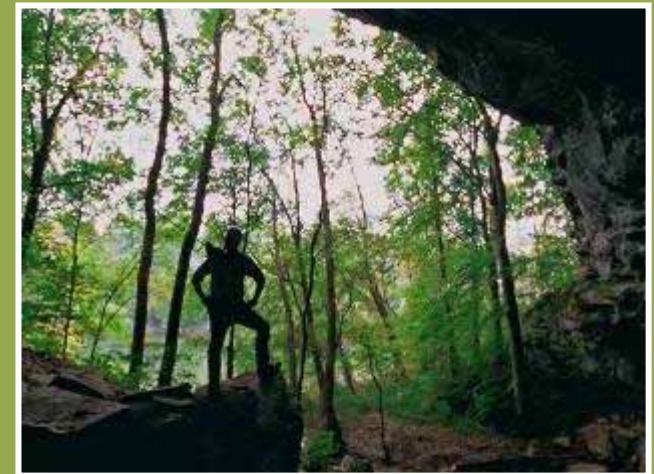
# Land Protection Initiatives

## Goals

- Protect key habitats
- Stimulate SWAP implementation
- Create a national wildlife conservation system
- Engage other funders

## Features

- Multi-state
- Multi-year
- Capital for land
- Implementation Activities





# Upper Midwest initiative:

5 states  
Multiple non-profit partners



**3 year initiative**

**\$59 million**

**\$10.8 million from  
Doris Duke  
Charitable  
Foundation**



A photograph of a person fishing in a river, surrounded by dense green forest. The person is wearing a light blue shirt and dark pants, and is holding a fishing rod. The river is calm, and the forest is lush with green foliage. The text is overlaid on the image.

**Major project elements:**

***Land protection***  
**and**  
***Amplification***

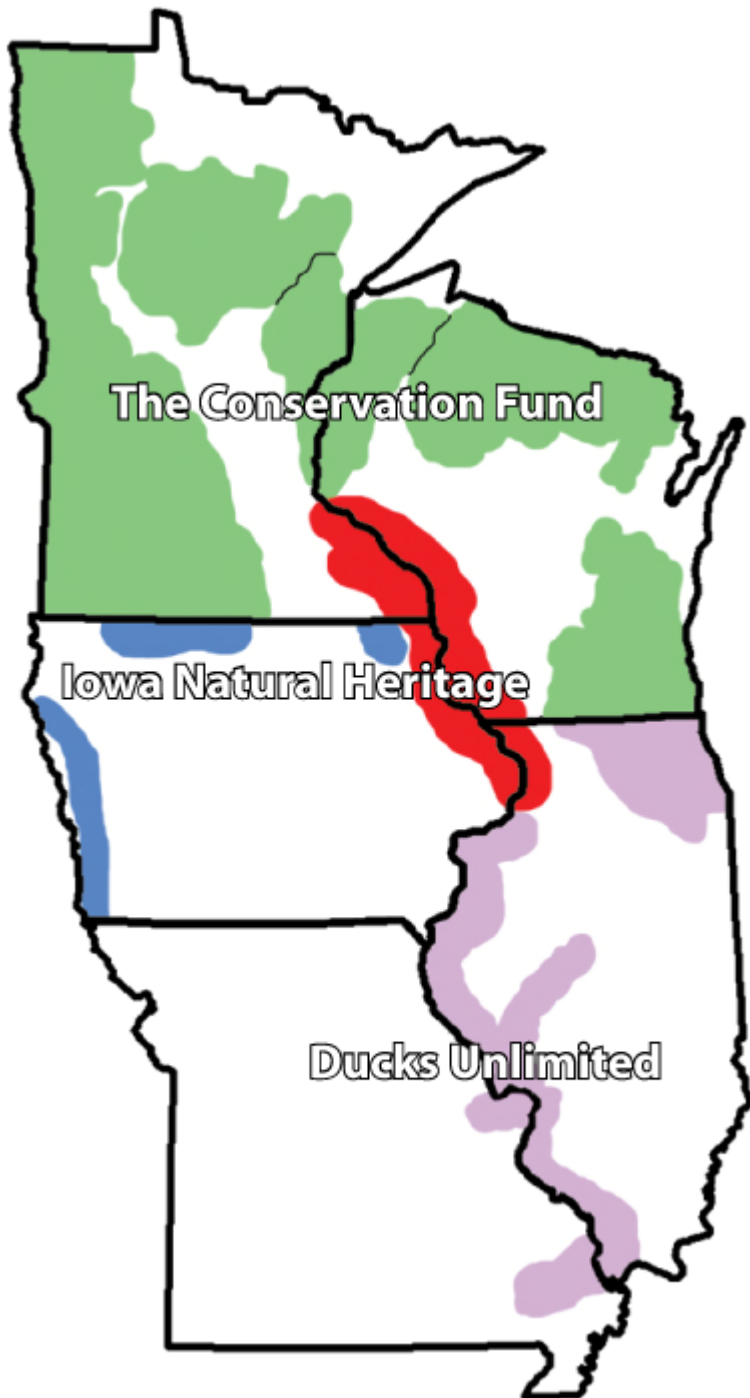
# Priority land protection regions

Based on

- SWAP
- Plans & priorities of partners
- Project potential
- Partner strengths

Several adjoin at state lines





## Lead Organizations

- MN & WI:  
The Conservation Fund
- IA and Blufflands:  
Iowa Natural Heritage Foundation
- MO & IL:  
Ducks Unlimited



# Capital for land protection

**\$9.5 million from DDCF**

- For land purchase or protection by conservation easement
- 5:1 match = \$57 million in total land protection value
- Investment income also goes to land



# Amplification

**Strategic  
communications**

**To create fertile  
ground for achieving  
more priority habitat  
protection**

**\$1.3 million from DDCF for  
amplification and  
administration**

**\$400,000 match needed for  
amplification**

# SWAP Advisory Group Meeting

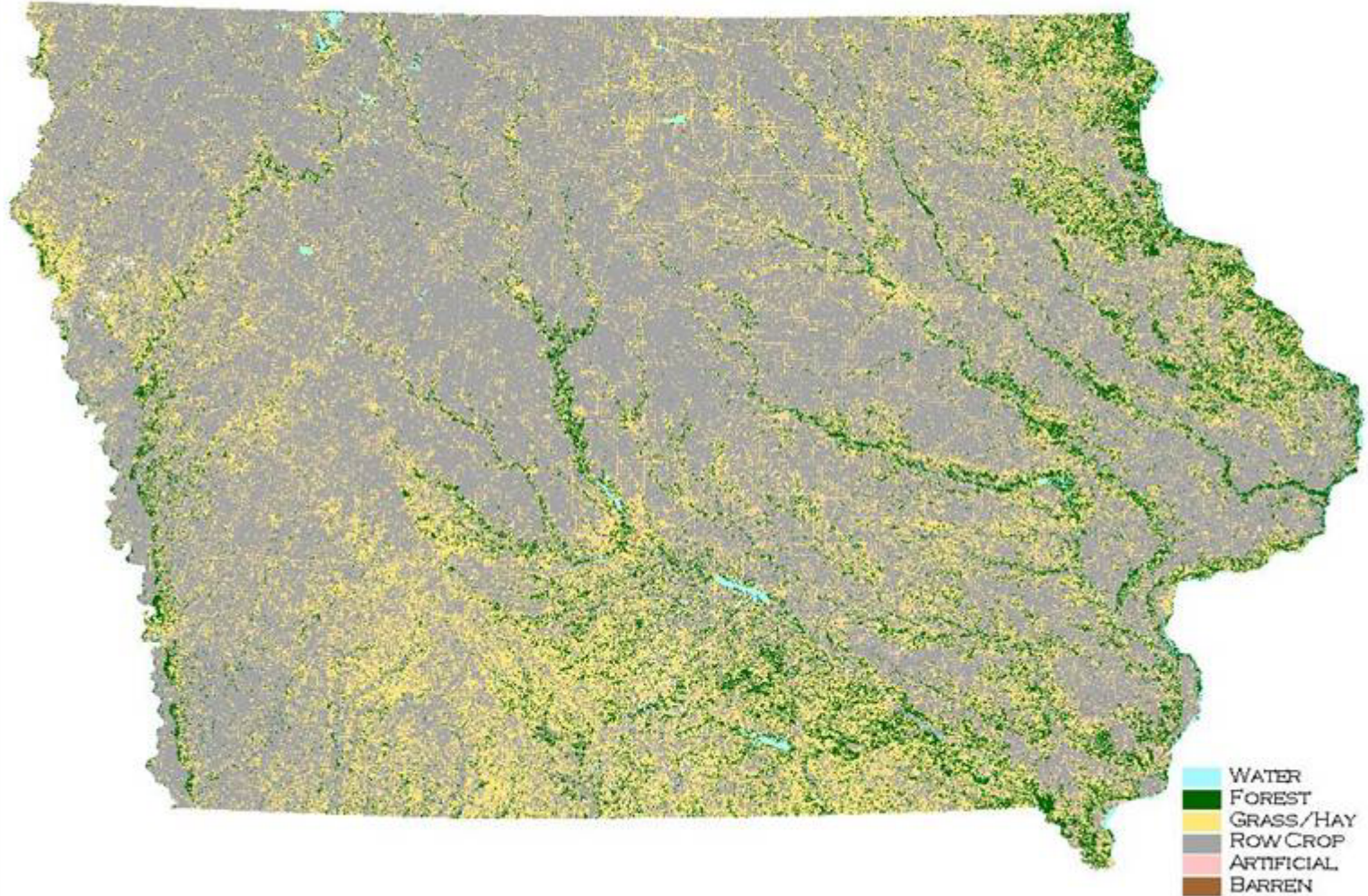
- **Des Moines**
- **92 Individuals**
- **59 Organizations**
- **36 Vision elements**
- **265 Strategies**



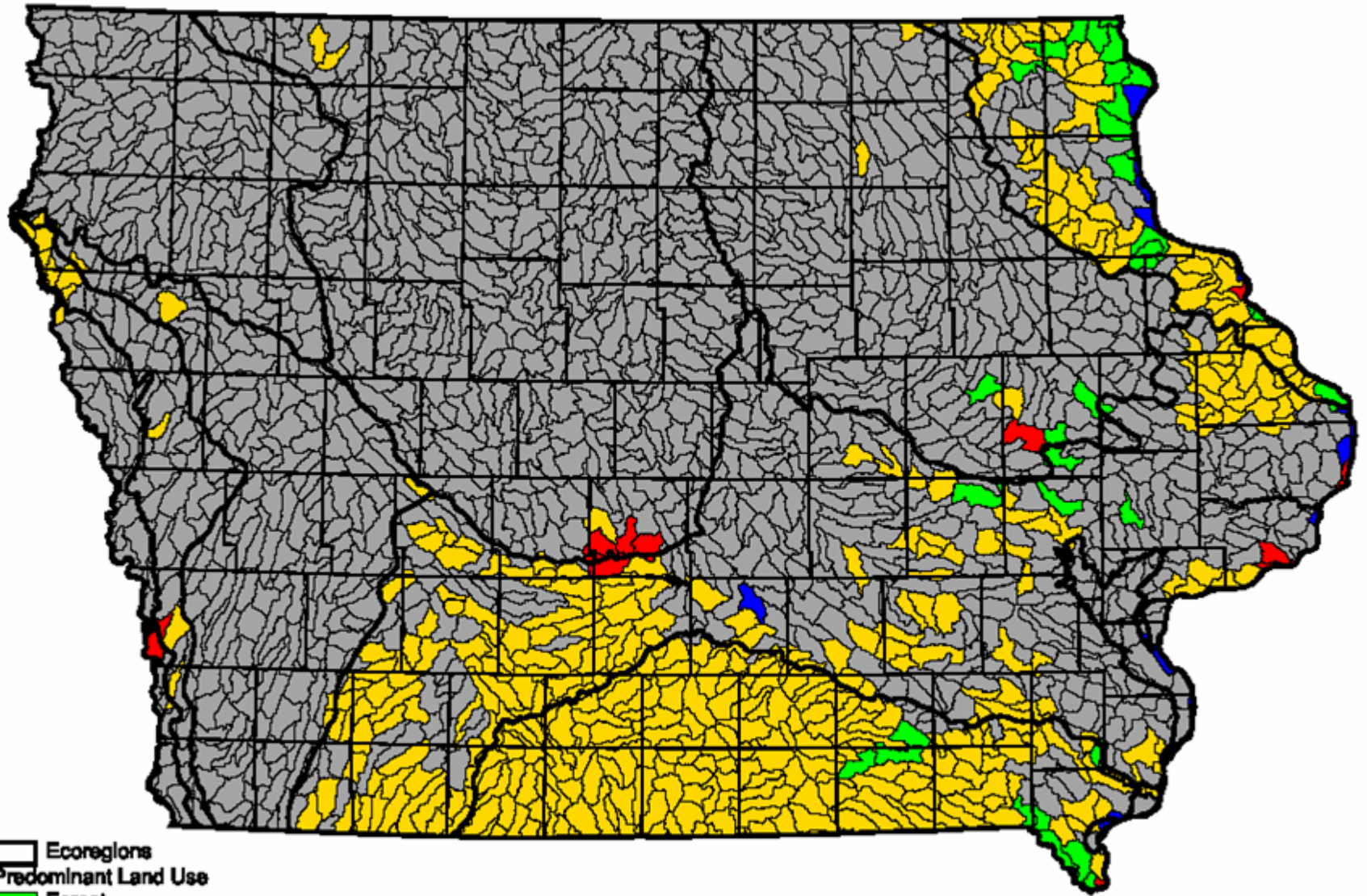


# LANDCOVER IN IOWA - 2000

2000 LANDCOVER OF IOWA



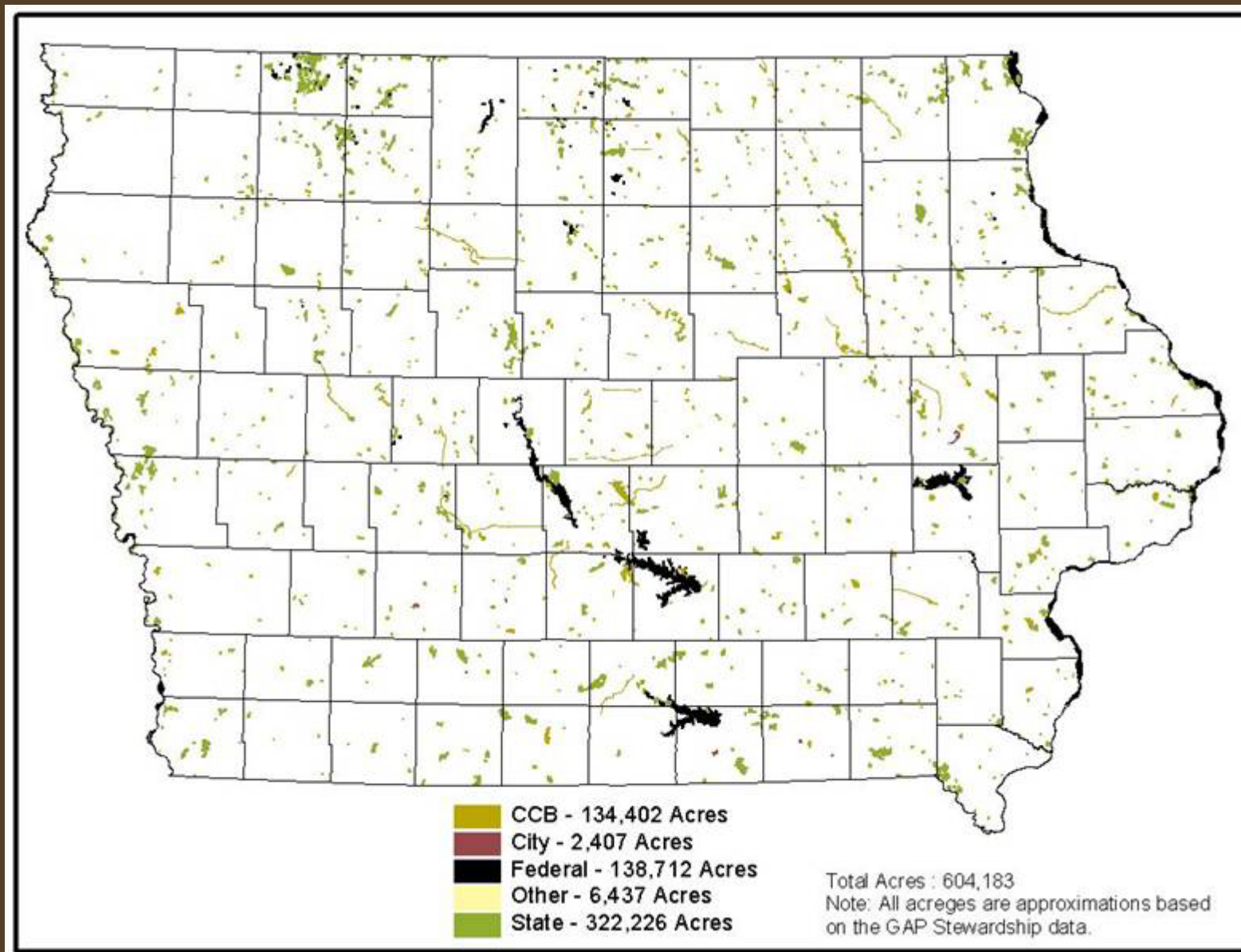
# Predominant Land Use by Watershed



- Ecoregions
- Predominant Land Use
- Forest
- Grass
- Row Crop
- Urban
- Water

Source: 2002 Land Cover Map of Iowa

# Publicly Owned Conservation Lands - To Scale



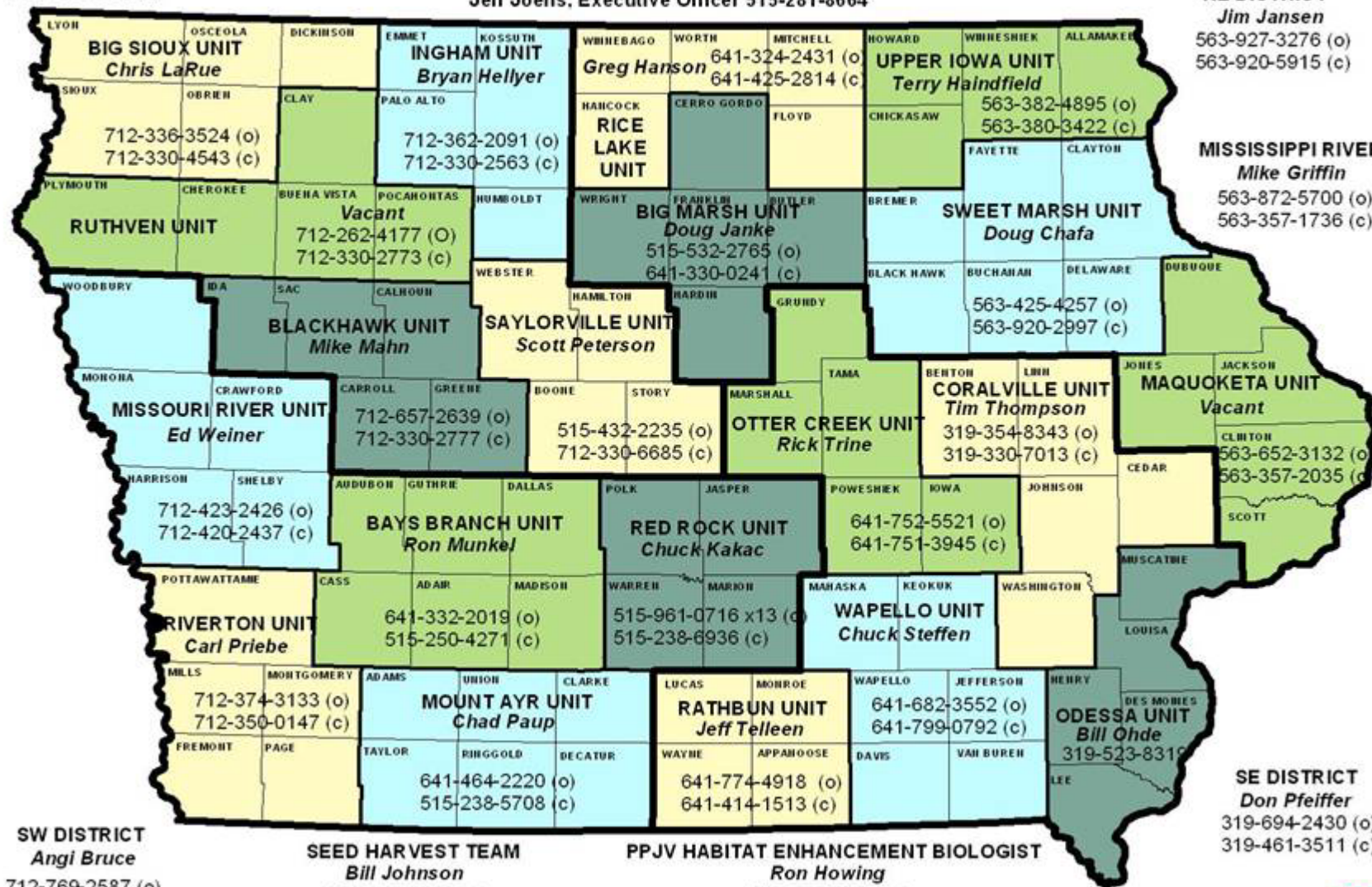
# IOWA DNR WILDLIFE MANAGEMENT STAFF

**NW DISTRICT**  
*Neil Heiser*  
 712-336-1840 (o)  
 712-330-2565 (c)

Dale Garner, Wildlife Bureau Chief 515-281-6156  
 Bob Dolan, Wildlife Management 515-281-8071  
 Jeff Joens, Executive Officer 515-281-8664

**NE DISTRICT**  
*Jim Jansen*  
 563-927-3276 (o)  
 563-920-5915 (c)

**MISSISSIPPI RIVER**  
*Mike Griffin*  
 563-872-5700 (o)  
 563-357-1736 (c)



**SW DISTRICT**  
*Angi Bruce*  
 712-769-2587 (o)  
 712-250-0746 (c)



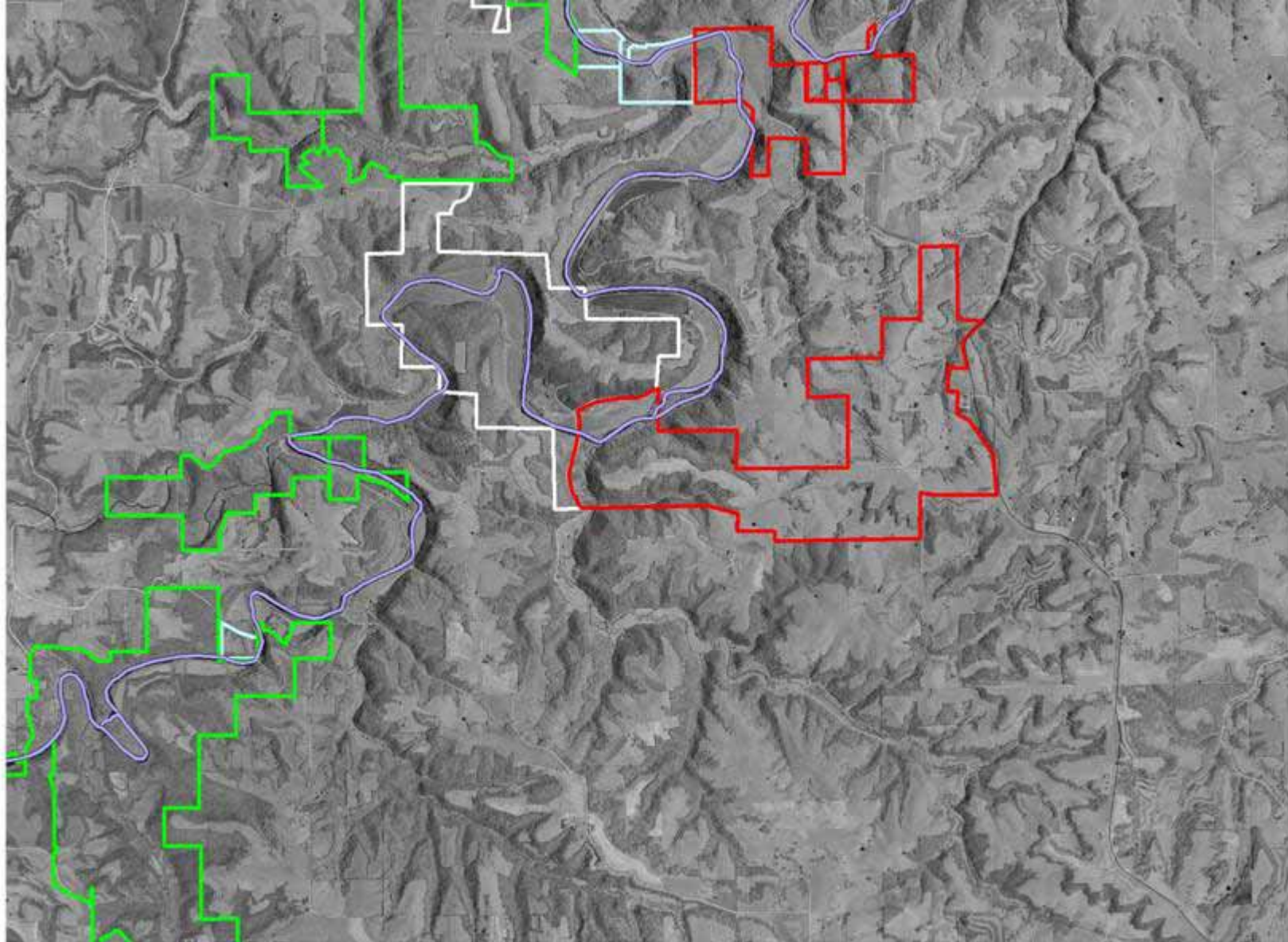


# 6 VISION ELEMENTS

- **Viabile Wildlife Populations**
- **Focus on Providing Habitat**
- **Manage for Biodiversity**
- **More Places to Enjoy Wildlife**
- **Iowans Will Value Wildlife**
- **Adequate and Stable Funding**

# IOWA's SWAP

- **Goal of doubling protected land**
- **Funding is the major issue**
- **Political feasibility of more land**
- **Management and restoration**
- **Private land protection**
- **Private land stewardship**



Upper Iowa River  
Iverson Bridge Area  
Allamakee and Winneshiek County



4000 0 4000 8000 Feet







# Bio-Blitz



Amplification



# INHF's Private Land Stewardship

- Protected Land
- LO participation
- Quality natural systems
- Land Stewardship interns
- Funded by LO and grants



An aerial photograph showing a wide river on the right side, with a dense forest of green trees along its left bank. In the upper left, there are open, light-brown fields. At the bottom left, a small cluster of white buildings and trailers is visible near a dirt road. The text 'Private land protection' is overlaid in white on the right side of the image.

Private  
land  
protection










# Easement language to reflect stewardship

- **Guide management plans and restoration practices**
  - **Allow for Farm Bill conservation programs, cost share programs, other stewardship assistance**
  - **Conduct land mgmt. on protected private land**
  - **“Right, but not the obligation, to perform stewardship activities on the Property”**
  - **Right to charge landowner mgmt. costs**
- 

# Opportunities from SWAP

- Identify and protect large blocks of wildlife habitat *quickly, before ecosystems are further fragmented*
- Improve the health of the land through mgmt. and protection
- Forge more, stronger partnerships
- Increase awareness of wildlife/conservation needs



# State Wildlife Action Plans: A Resource for Conservationists



D O R I S D U K E  
C H A R I T A B L E F O U N D A T I O N

Mark Shaffer  
Program Director for the Environment

*Funders Meeting on October 4, 2007*

# DDCF Environment Program



"...the preservation of wildlife, both flora and fauna..."

*- from the will of Doris Duke*

# How to fulfill her wish?



Accelerate habitat conservation for imperiled flora and fauna by *identifying critical lands* to maintain the nation's wildlife and by *directing existing and new funds* toward the protection of those lands

# A Vision



Over the next three decades, the country should commit itself to creating a national wildlife conservation system

# National Wildlife Conservation System

A quilt of many different fabrics and colors:



- Federal government (USFWS, NPS, BLM, NFS, etc.)
- State government (state parks, WMAs, etc.)
- Local government
- National, regional & local land trusts
- Conservation easements
- Private lands (working lands, etc)
- Rentals (CRP, WRP)

# Next Steps:

## Montana's Comprehensive Fish and Wildlife Conservation Strategy

Montana Fish, Wildlife & Parks  
2005

## A Comprehensive Wildlife Conservation Strategy for Wyoming

Prepared by:  
Wyoming Game and Fish Department  
5400 Bishop Blvd.  
Cheyenne, Wyoming 82006

Approved By the Wyoming Game and Fish Commission  
July 12, 2005

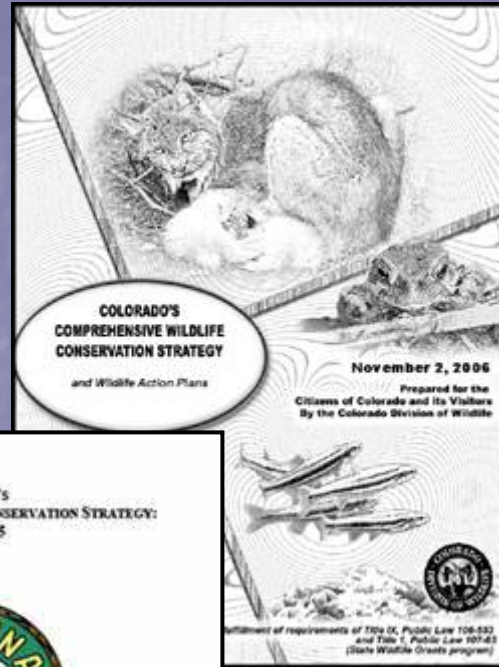
## Comprehensive Wildlife Conservation Strategy For New Mexico



Prepared by:  
New Mexico Department of Game and Fish

In cooperation with  
Over 170 public agencies, conservation organizations, commodity interests, municipalities, private partners, and tribal representatives.

September 21, 2005



## ARIZONA'S COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY: 2005-2015



Arizona Game and Fish Department  
2221 West Greenway Road  
Phoenix, Arizona 85023-4399

May 24, 2006



# Why Focus on State Plans?

- **Proactive** – Address species loss before crisis
- **State-based** – official status at right level of government in age of devolvement
- **Incentive-driven** – collaborative, not regulatory approach
- **Spatially explicit** – process enables maps to direct protection efforts
- **Leverage public and private funds** – can bring many partners to table



# DDCF Role To Date



- Encourage Development of Excellent Plans
- Support Outreach and Education about Plans
- Encourage Use of Plans by Non-Wildlife Agencies
- Stimulate New Conservation Finance
- Fund Training, Education and Research

# Using Action Plans



- Use Plans to Steer DDCF Land Investments
- Provide Resources to Capture Momentum in the Community
- Encourage Better Targeting of Existing Programs through Plans
- Expand State, Local and Private Funding Linked to Strategies
- Provide Federal Matching Grants Linked to Plans

# Land Protection Initiatives



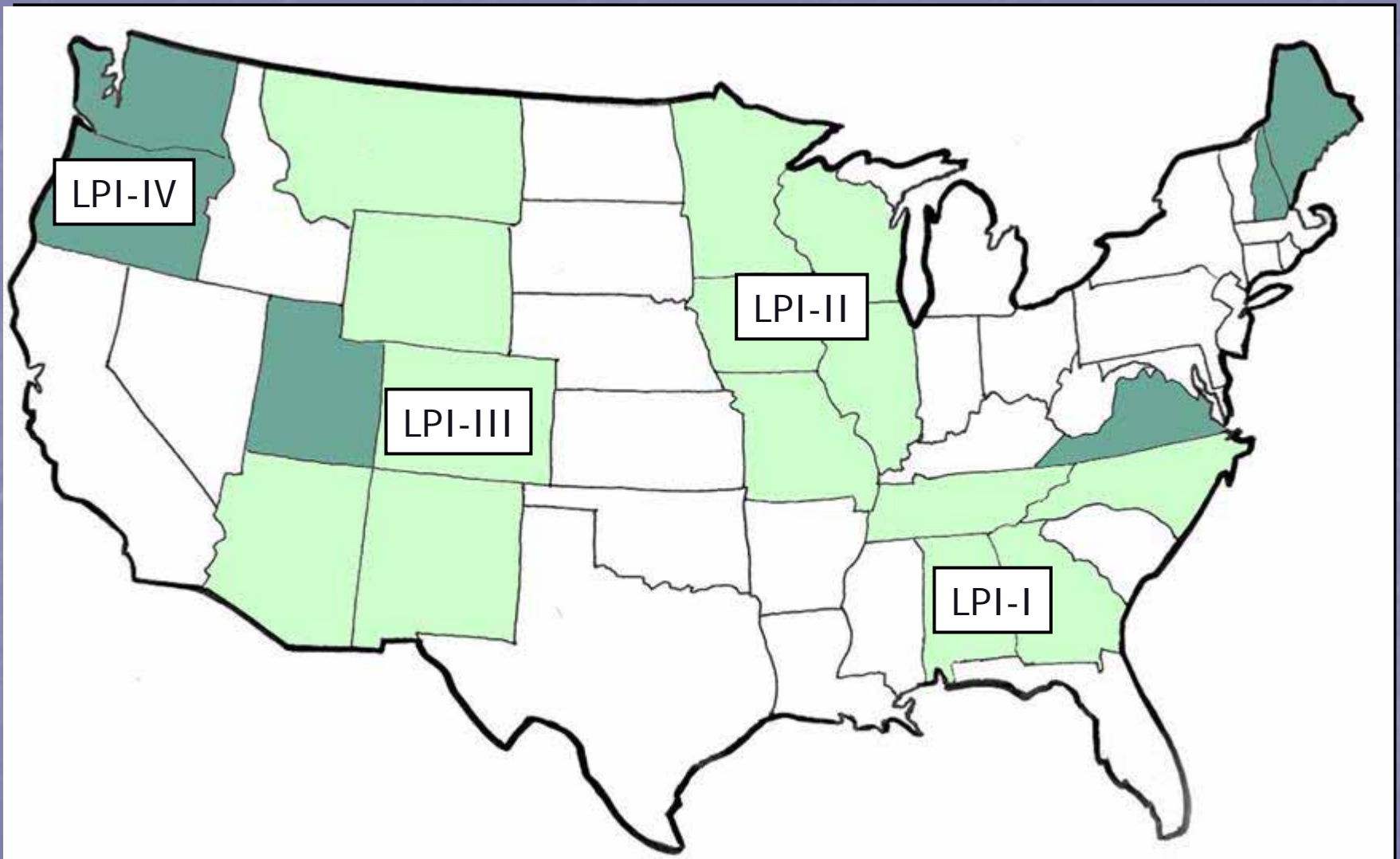
## Goals

- Protect key habitats
- Stimulate implementation
- Engage other funders
- Spillover effect

## Features

- Multi-state
- Multi-year
- Capital for land
- Implementation Activities

# Land Protection Initiatives



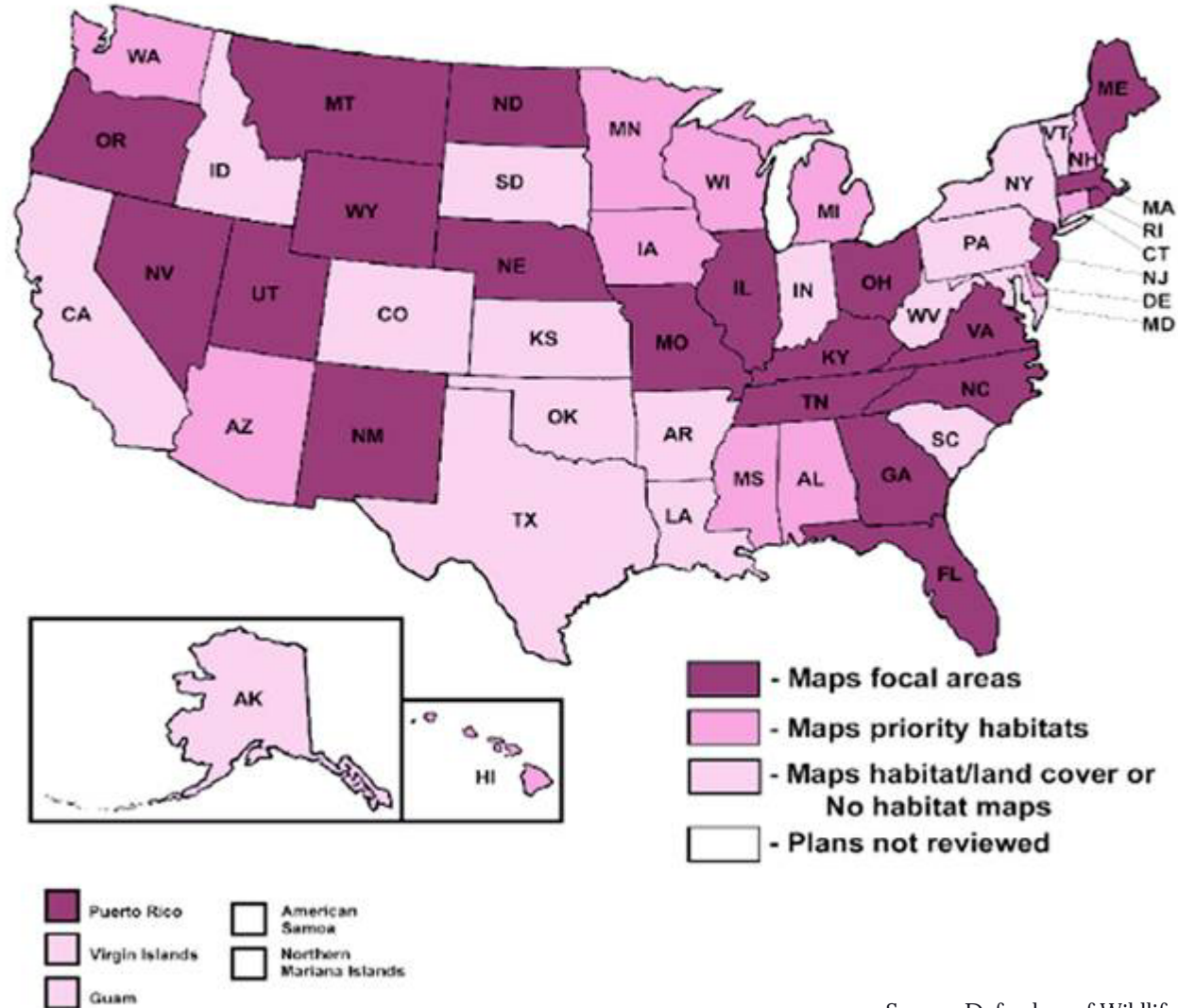
# Future DDCF Land Investments



Over the next two years, DDCF will provide capital and operating funds to two additional regional clusters of states, with grants likely to be equal or greater than those for the Southeast and the Midwest

# STATE WILDLIFE PLANS: PRIORITY MAPS

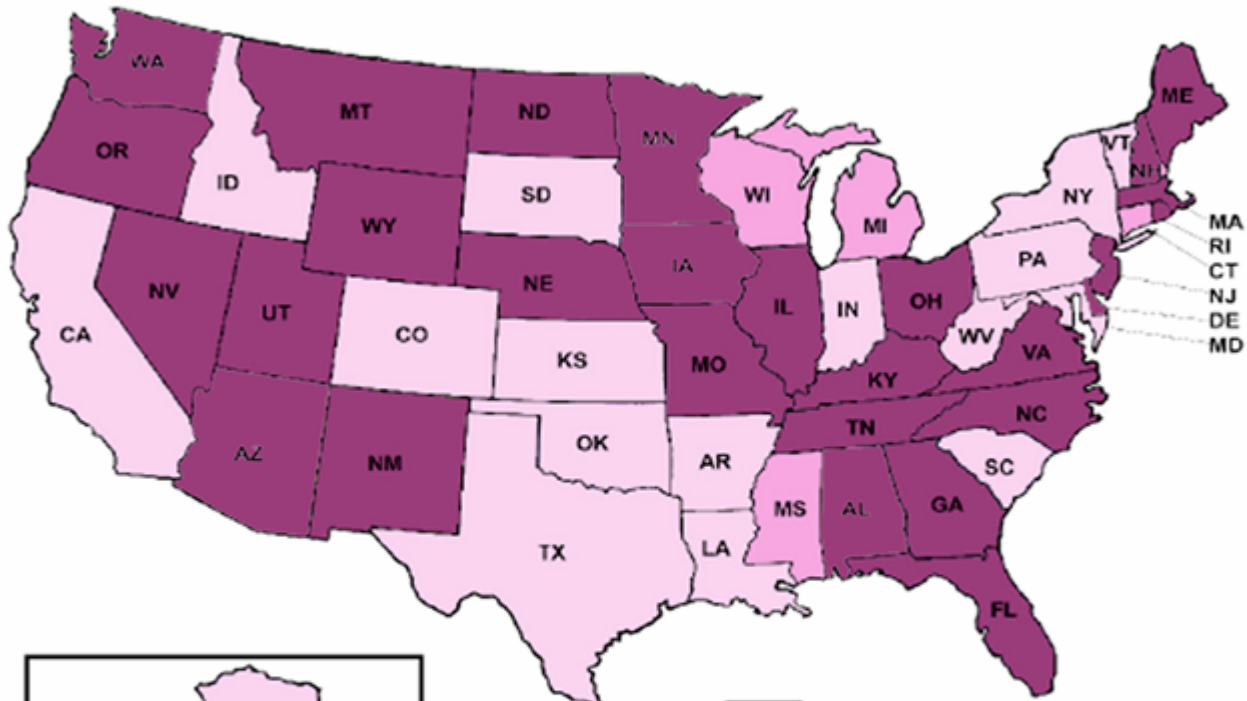
Winter 2006



Source: Defenders of Wildlife

# STATE WILDLIFE PLANS: PRIORITY MAPS

Summer 2007



- Maps focal areas
- Maps priority habitats
- Maps habitat/land cover or No habitat maps
- Plans not reviewed

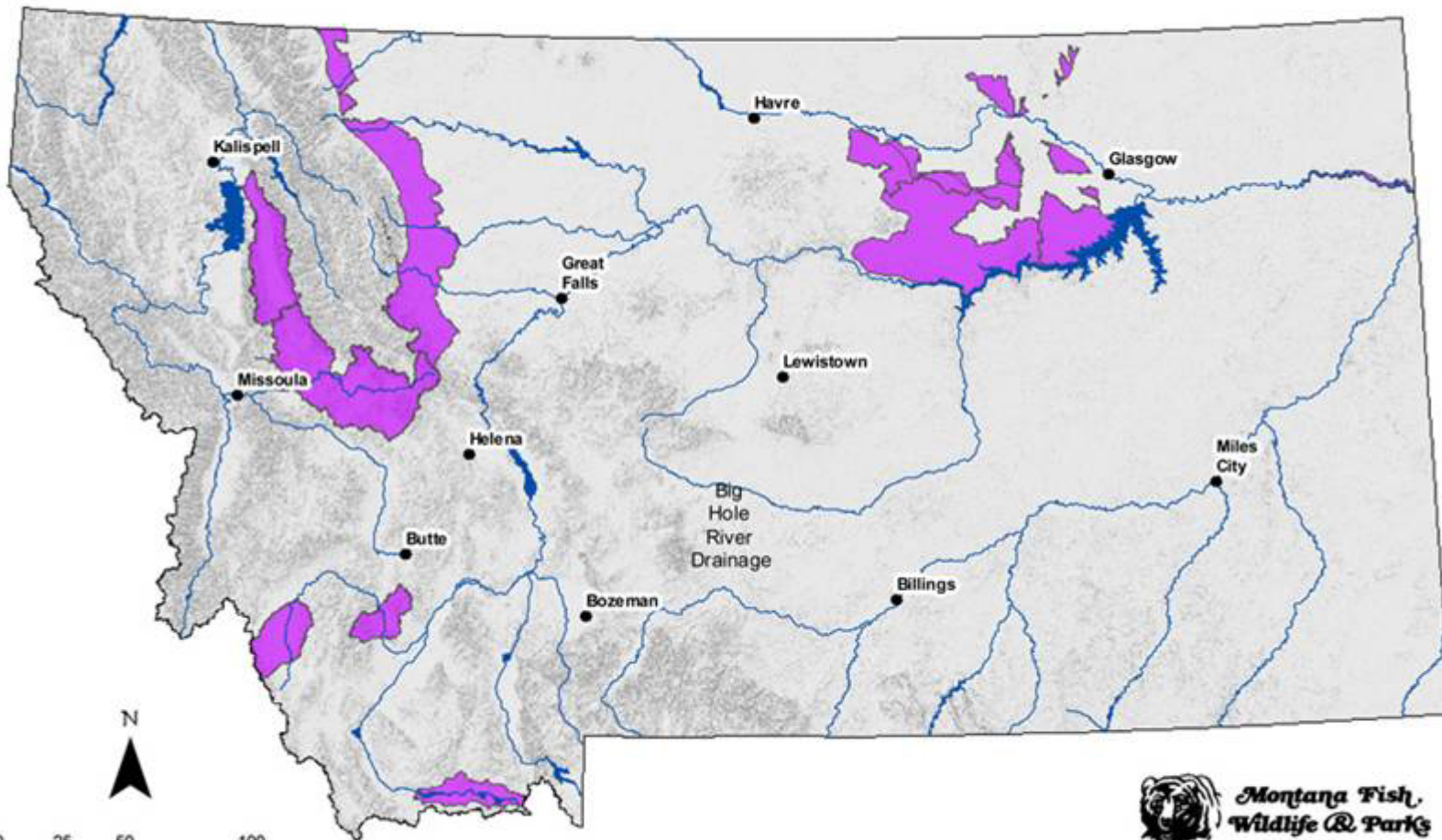
- Puerto Rico
- American Samoa
- Virgin Islands
- Northern Mariana Islands
- Guam

Source: Defenders of Wildlife

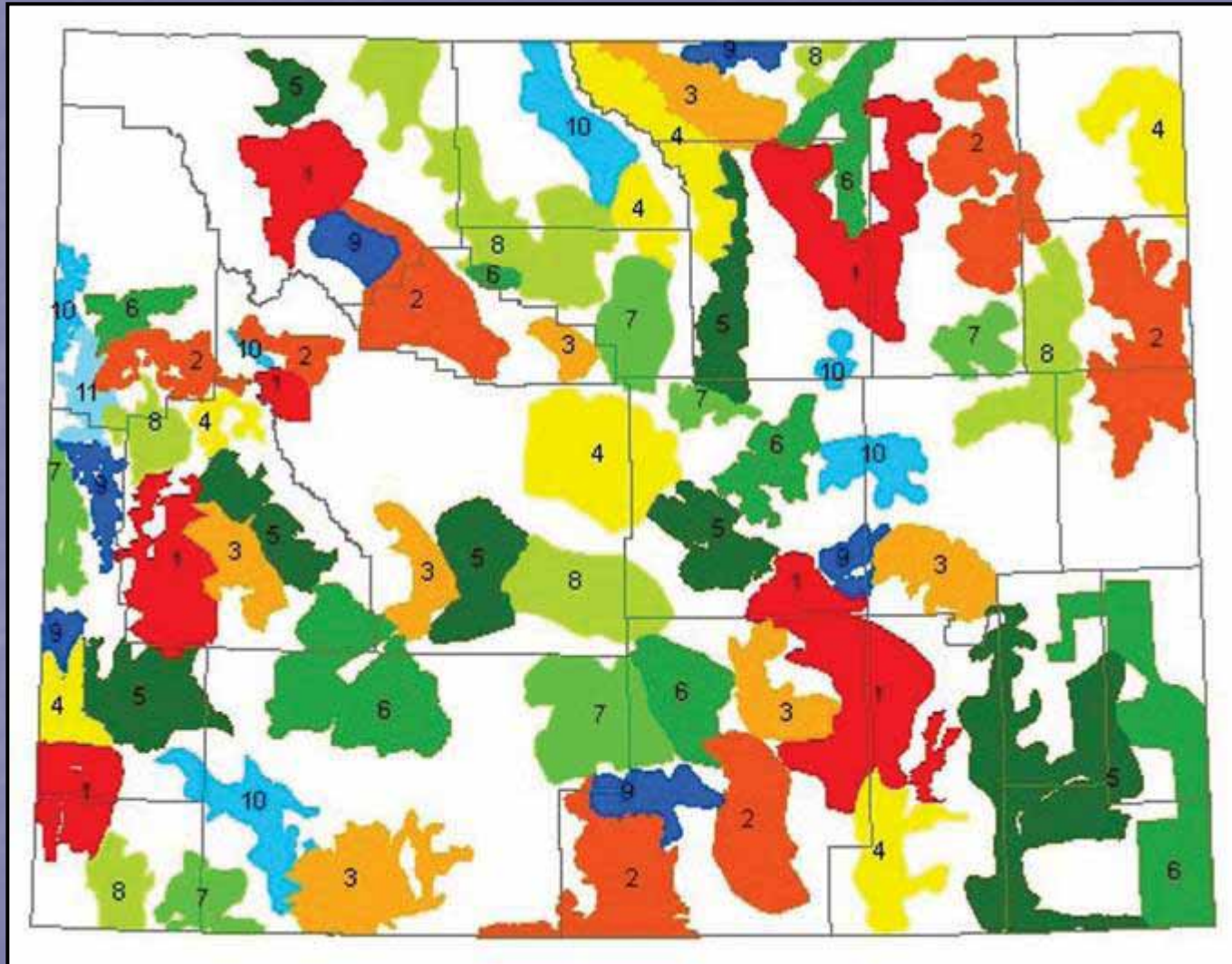


# Montana

Commonly Identified Conservation Focus Areas



# Wyoming



# Colorado

## STATE OF COLORADO

### OFFICE OF THE EXECUTIVE DIRECTOR

Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, Colorado 80203  
Phone: (303) 866-4211  
TDD: (303) 866-3543  
Fax: (303) 866-2114



DEPARTMENT OF  
NATURAL  
RESOURCES

Bill Ritter, Jr.  
Governor  
Harris D. Sherman  
Executive Director

July 6, 2007

Mr. Mark Shaffer  
Program Officer  
Doris Duke Charitable Foundation  
650 Fifth Avenue, 19<sup>th</sup> Floor  
New York, NY 10019

Dear Mr. Shaffer:

My consultations with Colorado Division of Wildlife staff suggest that the State of Colorado will require approximately two months to make appropriate improvements to the maps accompanying the plan. Shortly thereafter, the State of Colorado will formally append these maps to its wildlife action plan. Like the Doris Duke Charitable Foundation, we believe that the state wildlife action plan can be a valuable tool to guide strategic investments of public and private capital toward important wildlife habitat protection projects.

Sincerely,

Harris D. Sherman  
Executive Director

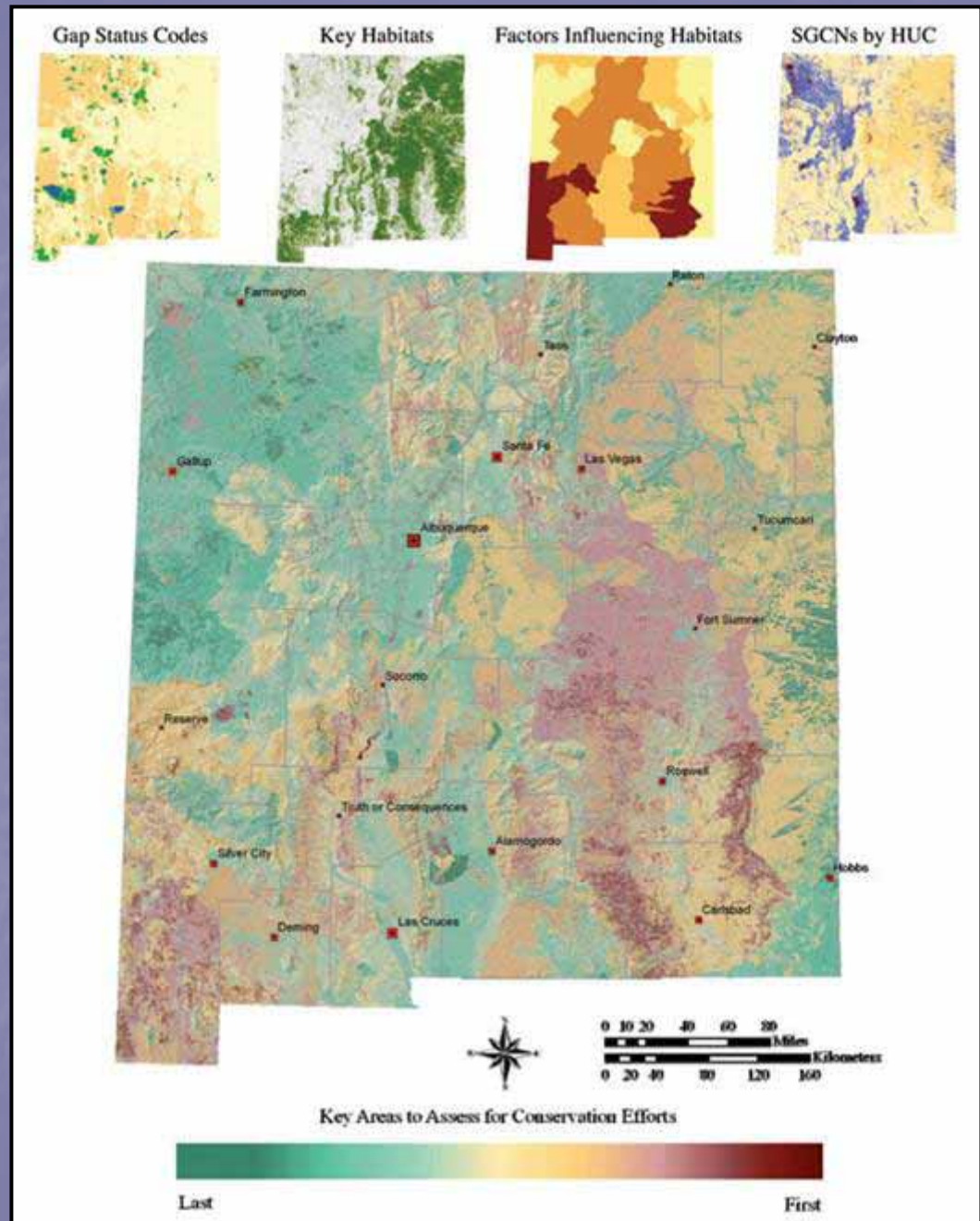
Board of Land Commissioners • Division of Recreation, Mining & Safety • Colorado Critical Path Survey  
Oil & Gas Conservation Commission • Colorado State Parks • Division of Forestry  
Water Conservation Board • Division of Water Resources • Division of Wildlife

1-508 P 02/02 P-017

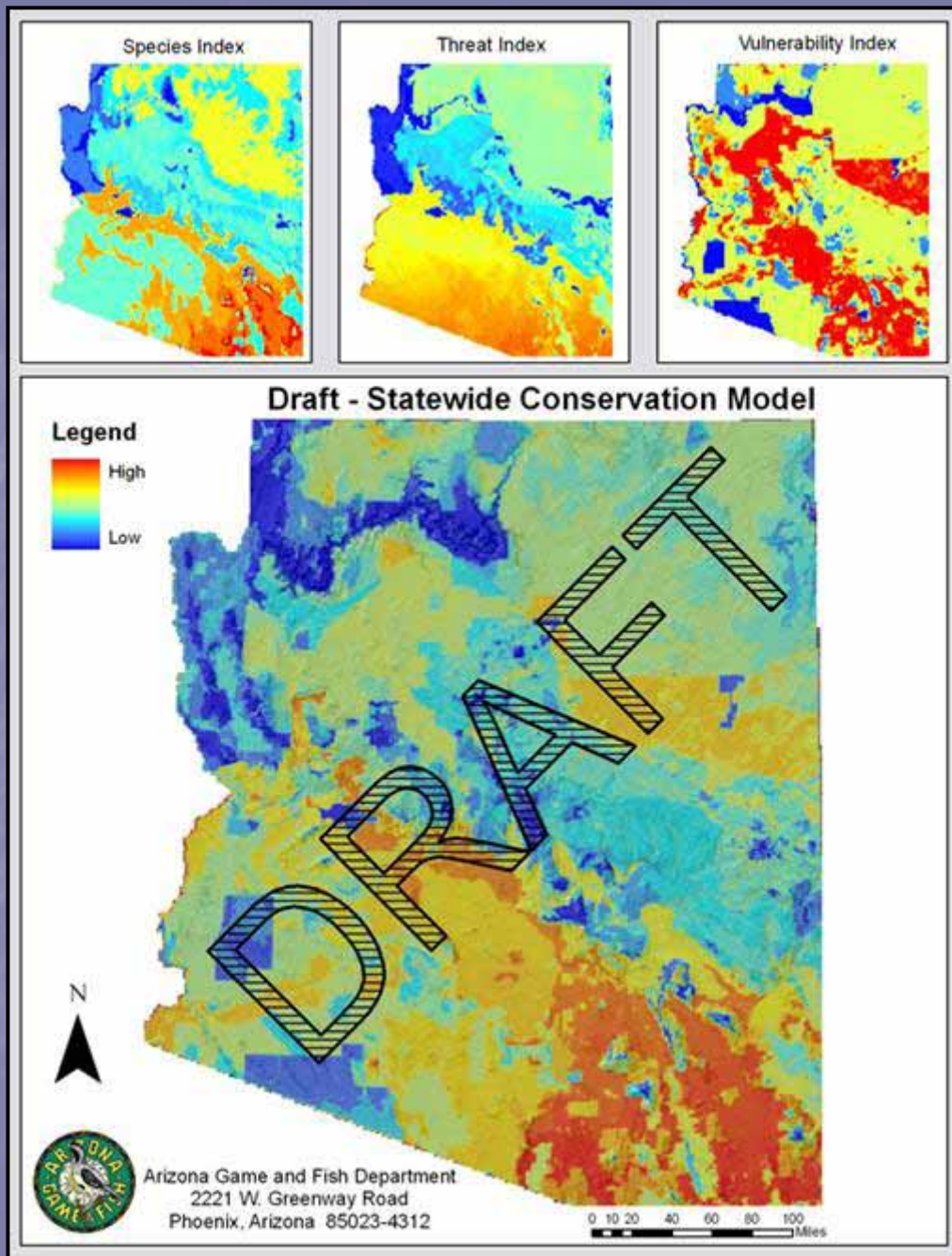
0036902115

07-10-07 01:11PM FROM:HR

# New Mexico



# Arizona



# Idaho Land Trusts and Implementation of the Idaho Comprehensive Wildlife Conservation Strategy



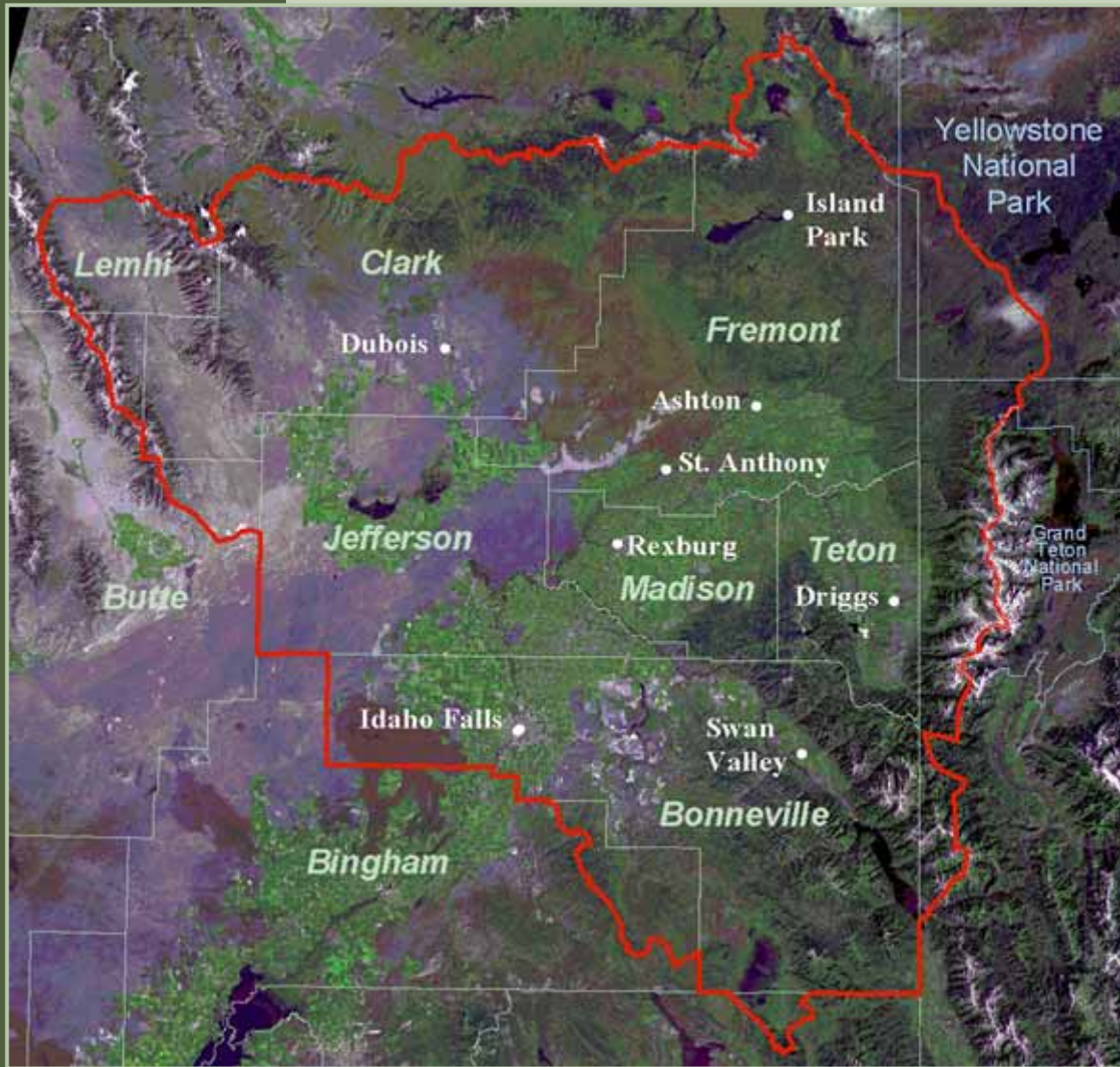
Idaho Department of Fish and Game  
Conservation Data Center



The Teton Regional Land Trust



# The Teton Regional Land Trust



## Our Mission

. . . to conserve agricultural and natural lands and to encourage land stewardship in the Upper Snake River Watershed for the benefit of today's communities and as a legacy for future generations.



# Willing Private Landowners

- Collaborative Conservation Planning
- Land Protection
- Stewardship
- Restoration
- Ecological Monitoring
- Land Management
- Outreach and Education

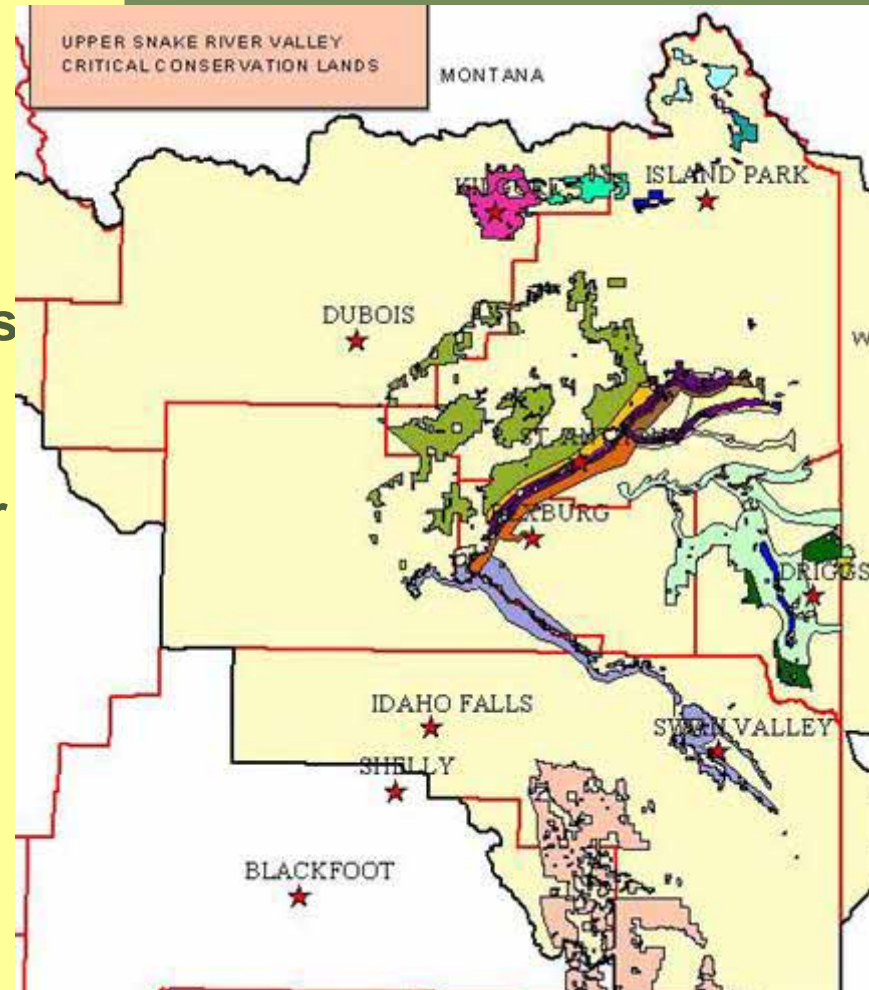






# Collaborative Conservation Planning

- ▶ Idaho Department of Fish and Game  
Crucial lands mapping
- ▶ Heart of the Rockies Initiatives,  
Greater Yellowstone Crucial Lands
- ▶ TRLT and Partners, Focal Area Planning  
(sub-watershed specific efforts for  
target species/habitats)
- ▶ Species guild focused initiatives,  
Idaho Partners in Flight, (IBIS)  
USFWS – Migratory Bird Office  
Trumpeter Swan Society
- ▶ Baseline Inventories/GIS Program



# IDAHO COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY

As submitted to the USDI Fish and Wildlife Service,  
National Advisory Acceptance Team

September 2005



Idaho Department of Fish and Game  
600 S. Walnut, P.O. Box 25, Boise, ID 83707



# Required Elements of the CWCS

- Distribution and abundance of indicative wildlife species;
- Locations and relative condition of key habitats;
- Descriptions of potential problems;
- Necessary conservation actions;
- Proposed monitoring plans;
- Procedures for periodic Strategy review;
- Plans for coordination among federal, state, and local agencies and Indian tribes;
- Broad public participation.



# Why is the ICWCS Timely?

Idaho has the third highest population growth rate in the nation

Rapid residential and resort development threaten important habitats



# Methodology

- 14 Ecological sections
- 229 Species of Greatest Conservation Need
- 55 Ecological Systems
- Conservation Strategies



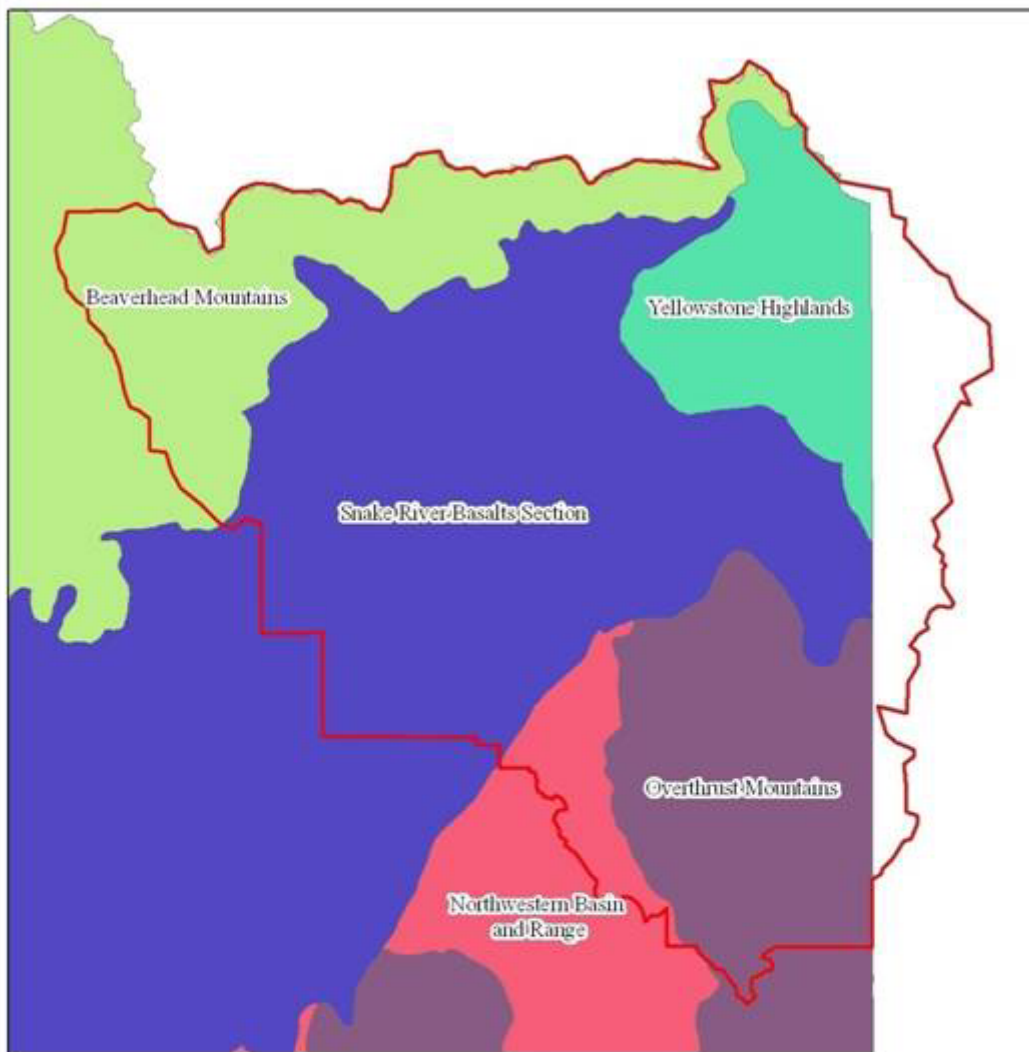
**Eco-sections of Idaho Established by  
Interior Columbia Basin Ecosystem Management Project, 2001**



Interior Columbia Basin Ecosystem Management Project, 2001, Map by Teton Regional Land Trust, 2007

# Regional Application

- 5 Ecological Sections
- Diverse Habitats in Idaho Portion of the Greater Yellowstone Ecosystem
- Important to many of Idaho's SGCN



**Eco-sections of TRLT Service Area Established by Interior Columbia Basin Ecosystem Management Project, 2001**

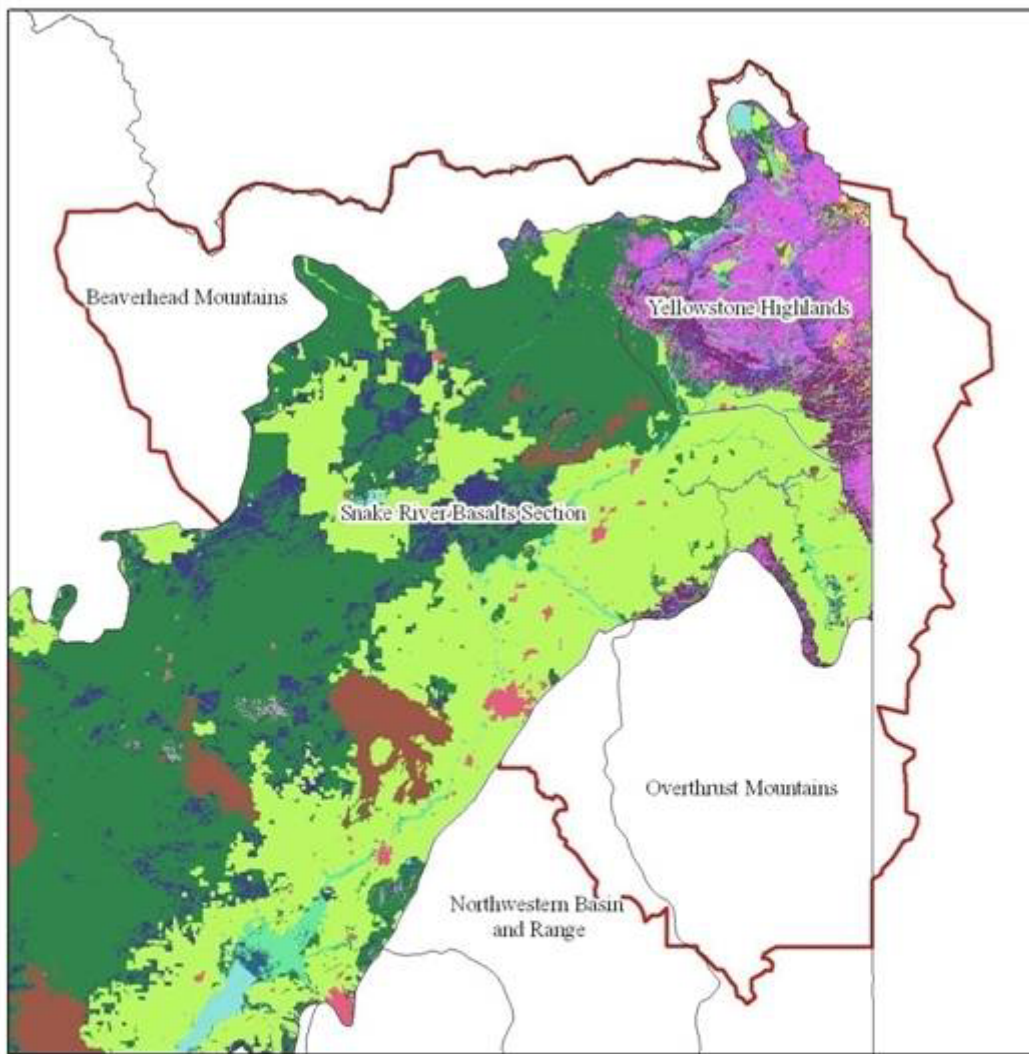


- |  |                               |
|--|-------------------------------|
| Teton Regional Land Trust Service Area | Overthrust Mountains Section  |
| Beaverhead Mountains Section           | Snake River Basalts Section   |
| Northwestern Basin and Range Section   | Yellowstone Highlands Section |

0 5 10 20 30 40 Miles

Interior Columbia Basin Ecosystem Management Project, 2001, Map by Teton Regional Land Trust, 2007

# Conservation Activities



**Habitat Types Employed by ICWCS  
Within Ecological Sections of Upper Snake River Valley**

- |  |                           |                                     |
|--|---------------------------|-------------------------------------|
| Teton Regional Land Trust Service Area | Mesic Deciduous Shrubland | Southern Xeric Shrubland and Steppe |
| Alpine                                 | Non-native Herbaceous     | Subalpine Forest                    |
| Arableland                             | Open Water                | Subalpine Grassland                 |
| Dry Conifer Forest                     | Riparian Woodland         | Upland Deciduous Forest             |
| Dry Grassland                          | Southern Wetland          | Urban                               |
| Dune, Canyon, and Rockland             | Southern Woodland         |                                     |

0 5 10 20 30 40 Miles

Map by Teton Regional Land Trust, 2007



(c)TomVezo.com

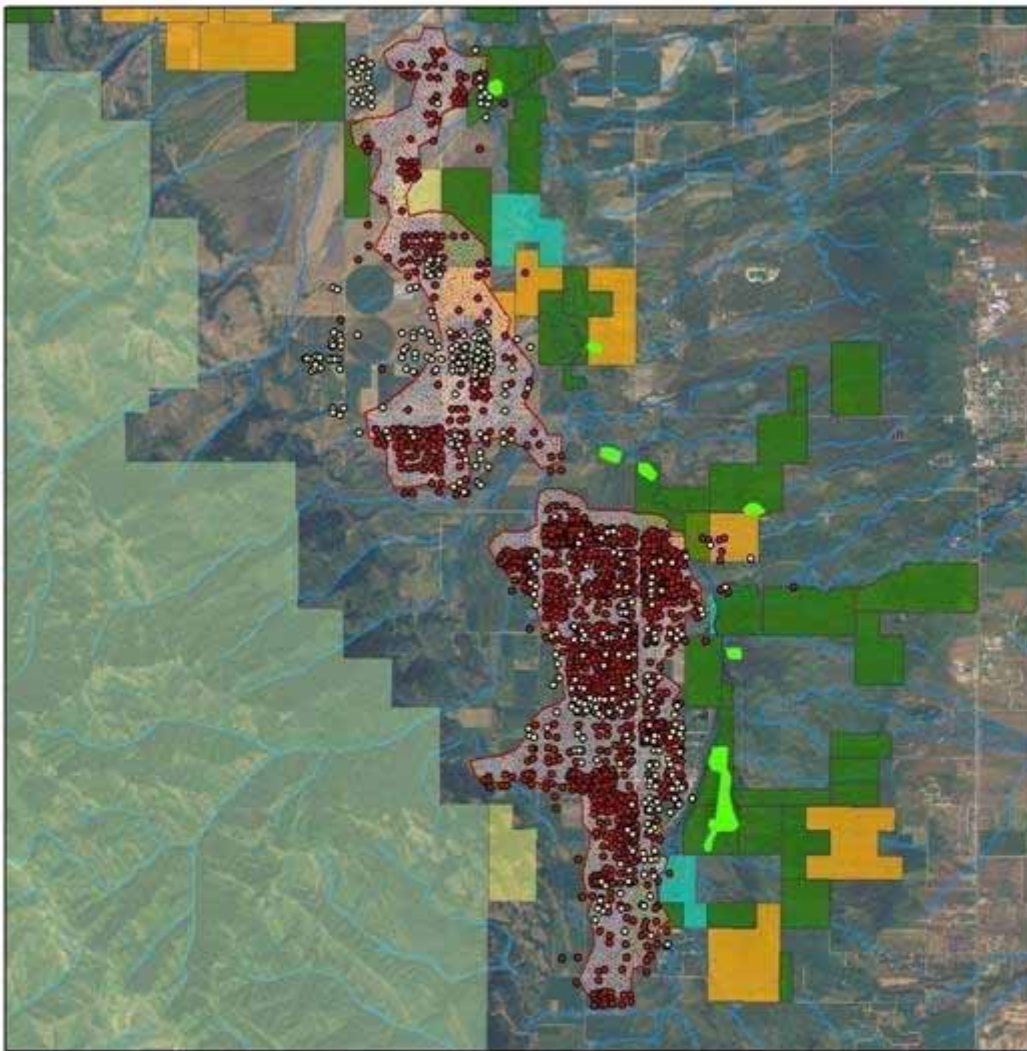


# Conservation Planning



“Substantial improvements are needed in annual surveys. . . .”

“Maintain grain fields and roost sites at traditional staging areas.”



2002-2005 Greater Sandhill Crane and Waterbird Migration-Foraging Habitat



- Spring Distribution
- Fall Distribution
- Sandhill Crane Night Roosting Areas
- Waterbird Migration-Foraging Habitat
- Existing TRLT Conservation Easements
- Pending TRLT Conservation Easements
- USFS
- BLM
- Idaho Fish and Game

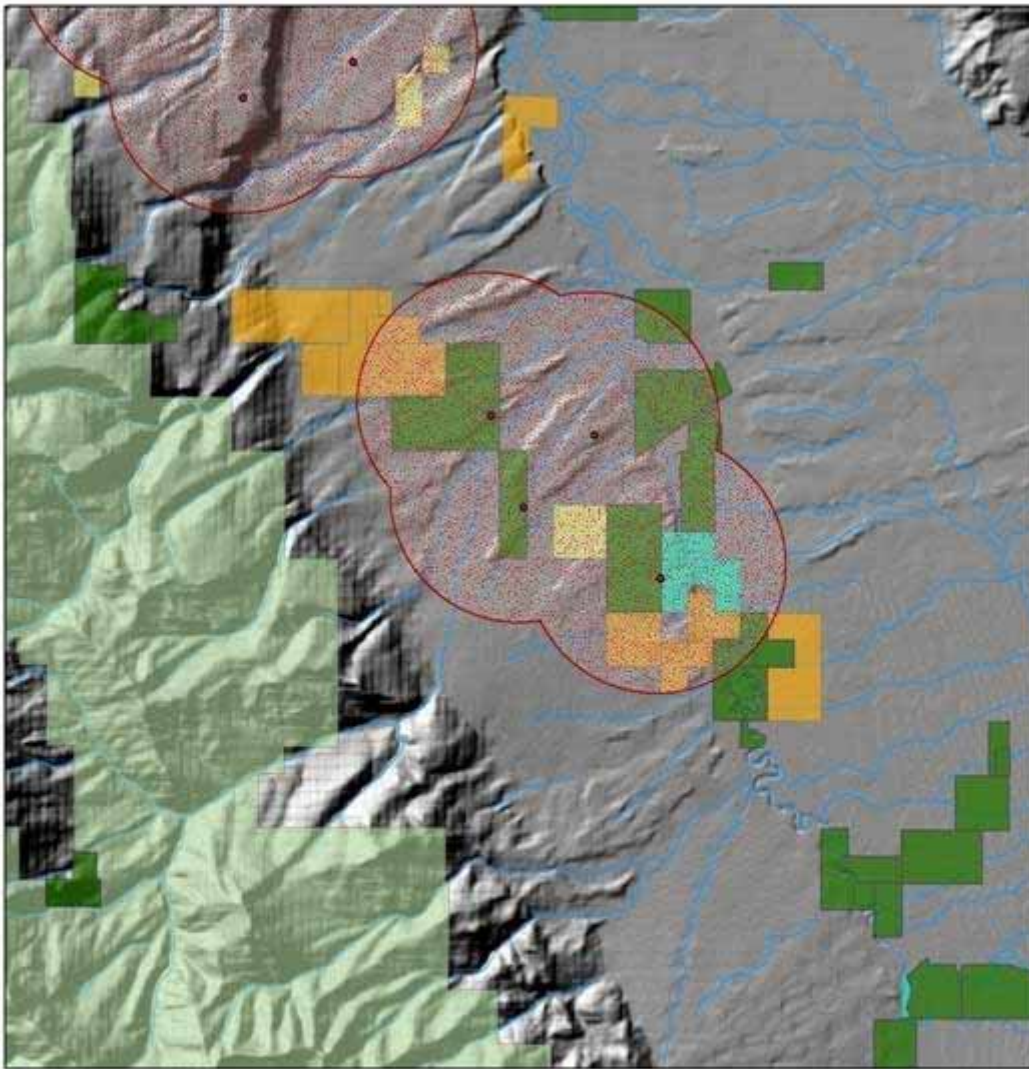
0 0.5 1 2 Miles



# Land Protection Terms



“Protect and maintain habitats, avoid disturbance to breeding complexes (lands within 2 km radius of occupied leks).”



**Columbian Sharp-Tailed Grouse Breeding Habitat**

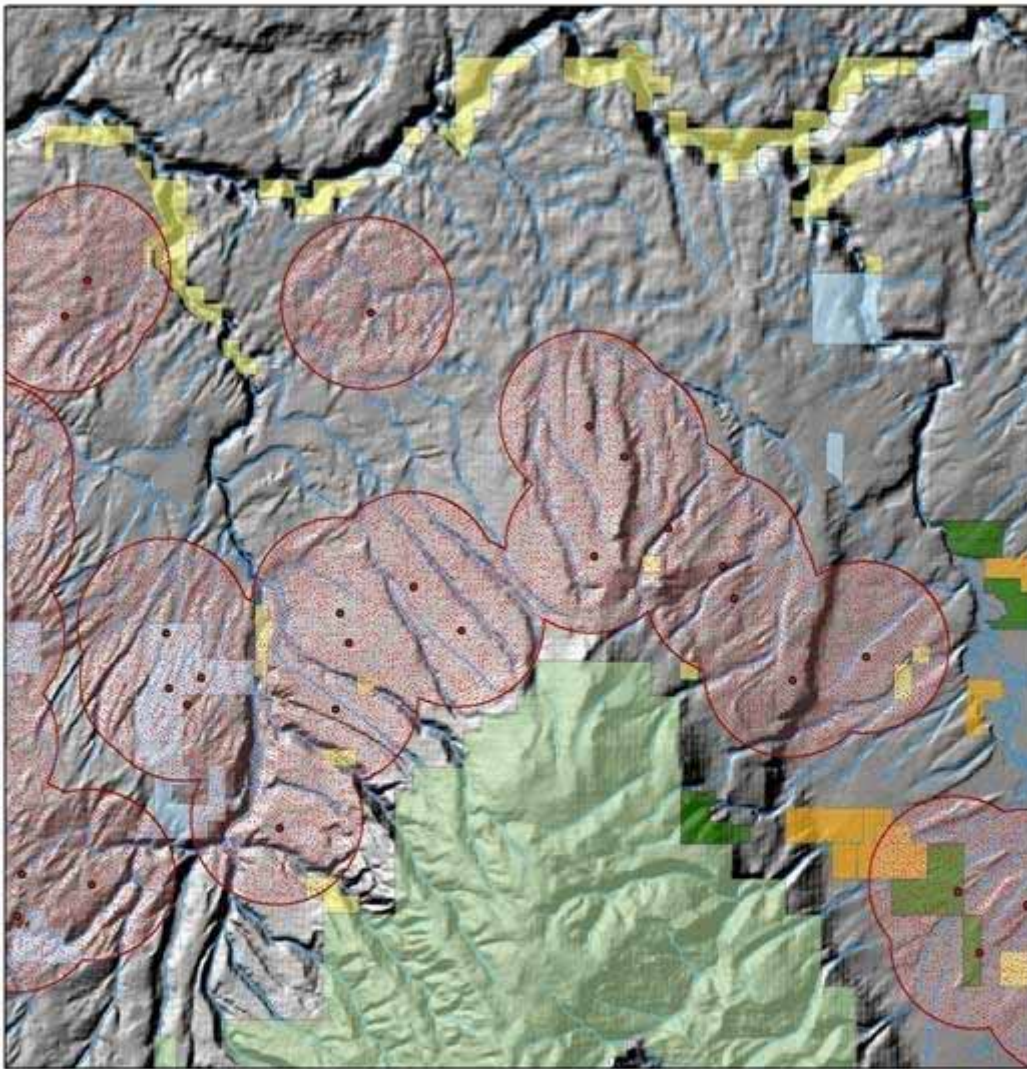


- Lek Locations
- Columbian Sharp-Tailed Grouse Breeding Habitat
- Existing TRLT Conservation Easements
- Pending TRLT Conservation Easements
- USFS
- BLM
- Idaho Fish and Game

0 0.5 1 2 Miles

Idaho Fish and Game 2003 LEK Data, Map by Teton Regional Land Trust, 2007

# Landscape Protection



**Columbian Sharp-Tailed Grouse Breeding Habitat**



- Lek Locations
- Columbian Sharp-Tailed Grouse Breeding Habitat
- Existing TRLT Conservation Easements
- Pending TRLT Conservation Easements
- USFS
- BLM
- STATE

0 1 2 4 Miles

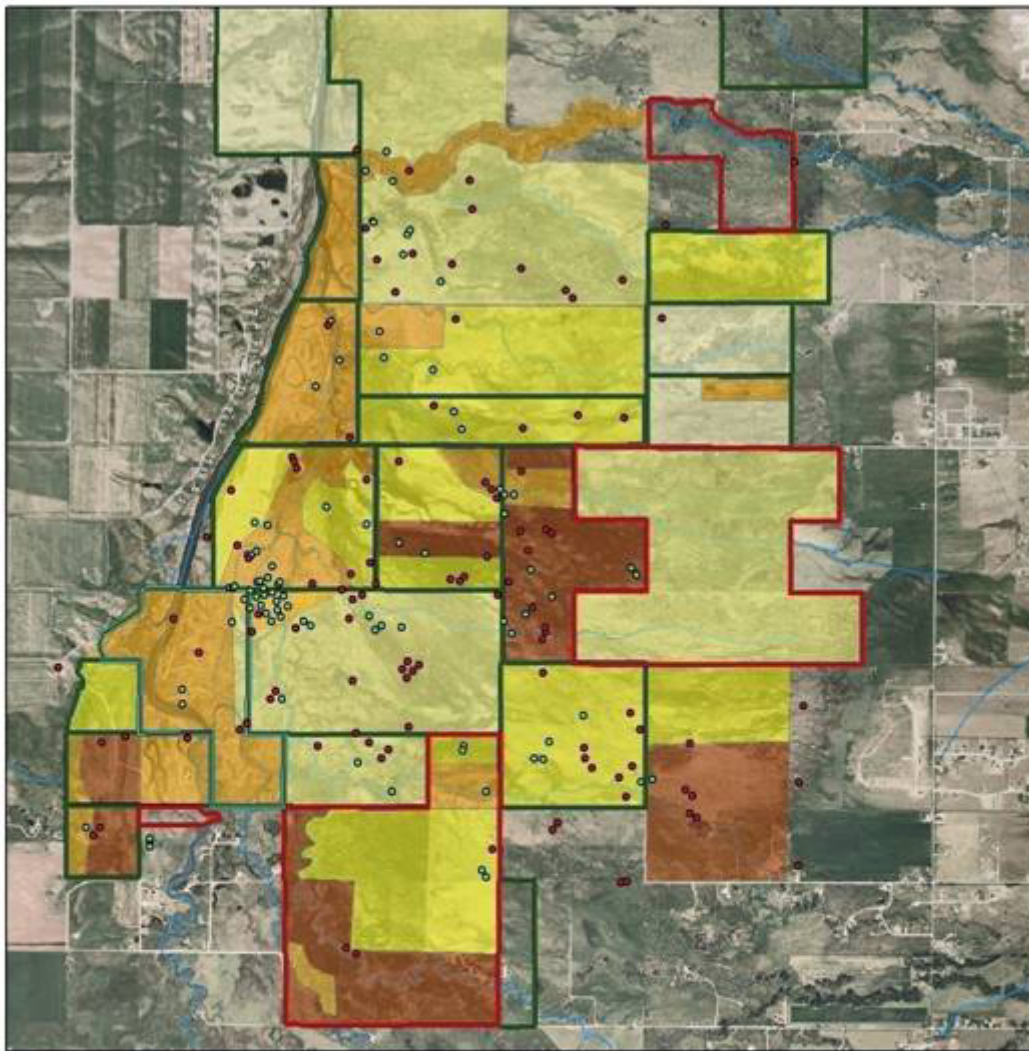
Idaho Fish and Game 2003 LEEC Data, Map by Tetra Regional Land Trust, 2007

Work at landscape scale to “protect and maintain habitats, avoid disturbance to breeding complexes (lands within 2 km radius of occupied leks).”

# Conservation stewardship



“Protect habitat areas that are >42 ha (enough habitat for at least one breeding pair). Protect nesting areas from disturbance. Contribute to regional monitoring effort.”



2004-2005 Teton Basin Curlew Distribution and Land Management

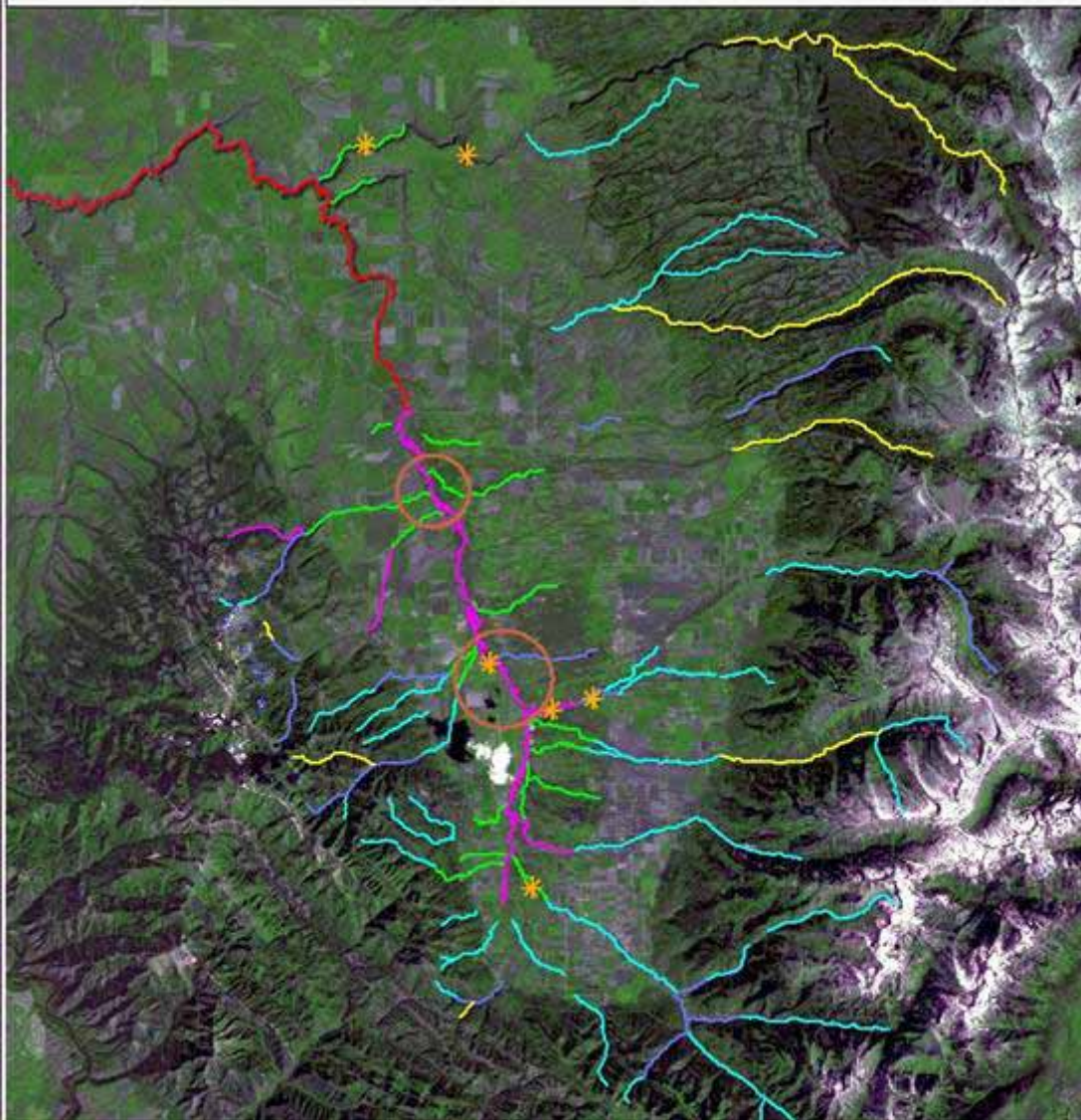


- April Distribution
- June Distribution
- TRLT Pending Easements
- TRLT Conservation Easements
- Idaho Fish and Game
- Light Grazing
- Moderate Grazing
- Heavy Grazing
- No Grazing
- Hay Ground

0 0.25 0.5 1 Miles

2006 USGS-FSA Aerial Photography, 2004-2005 Curlew Data, Map by Teton Regional Land Trust, 2007

# Teton Basin Trout Distribution



- Yellowstone Cutthroat Trout (YCT) Only
- No YCT
- YCT and Brook Trout
- YCT Telemetry Spawning Locations
- YCT Seasonally
- YCT and Rainbow Trout
- YCT, Brook and Rainbow Trout
- IDFG Population Monitoring Reaches

5 0 5 10 Miles

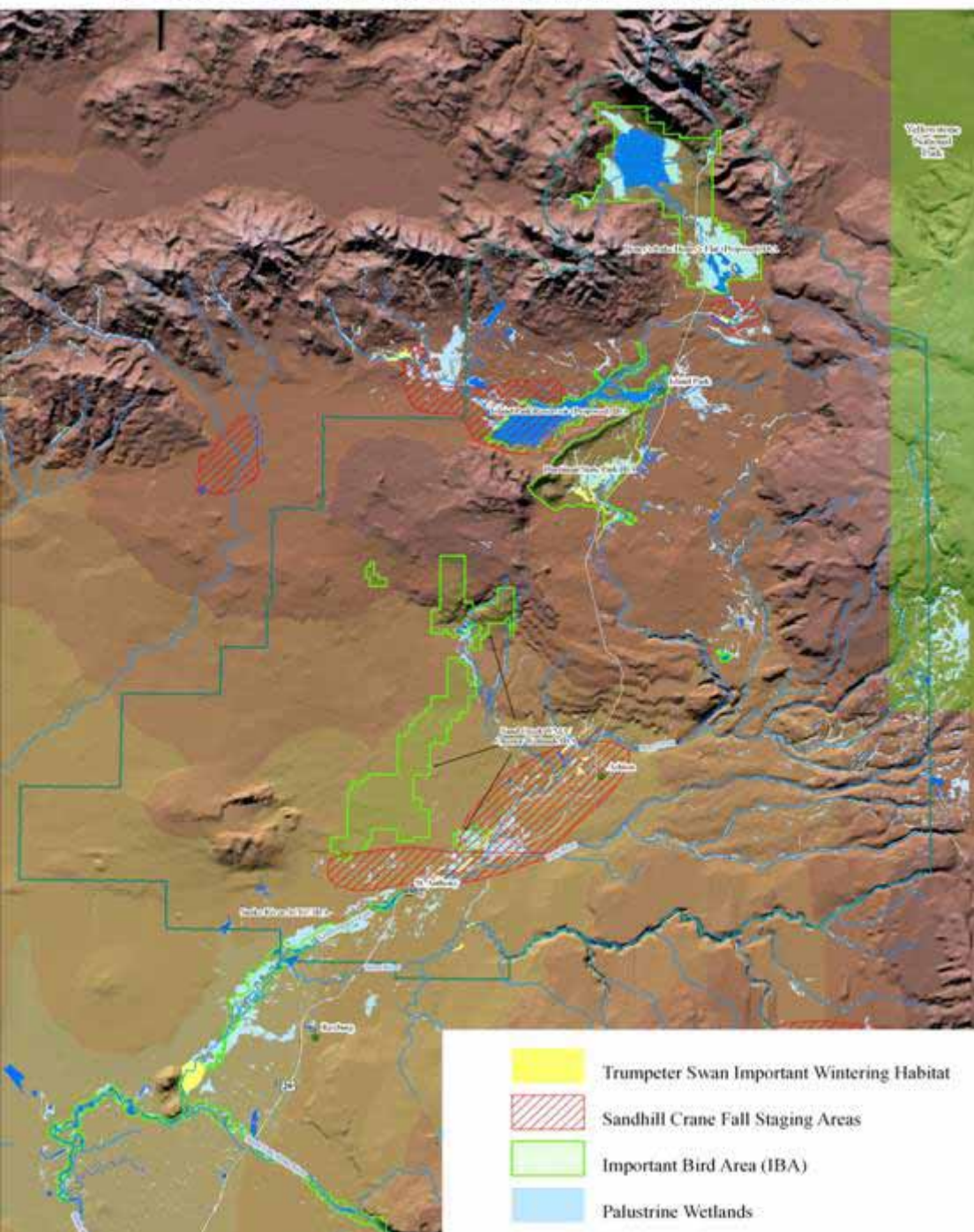
Data Source: Gregory Aquatics and the Henry's Fork Foundation, 2005

# Restoration



Follow “details on restoration activities for conservation of YCT.”

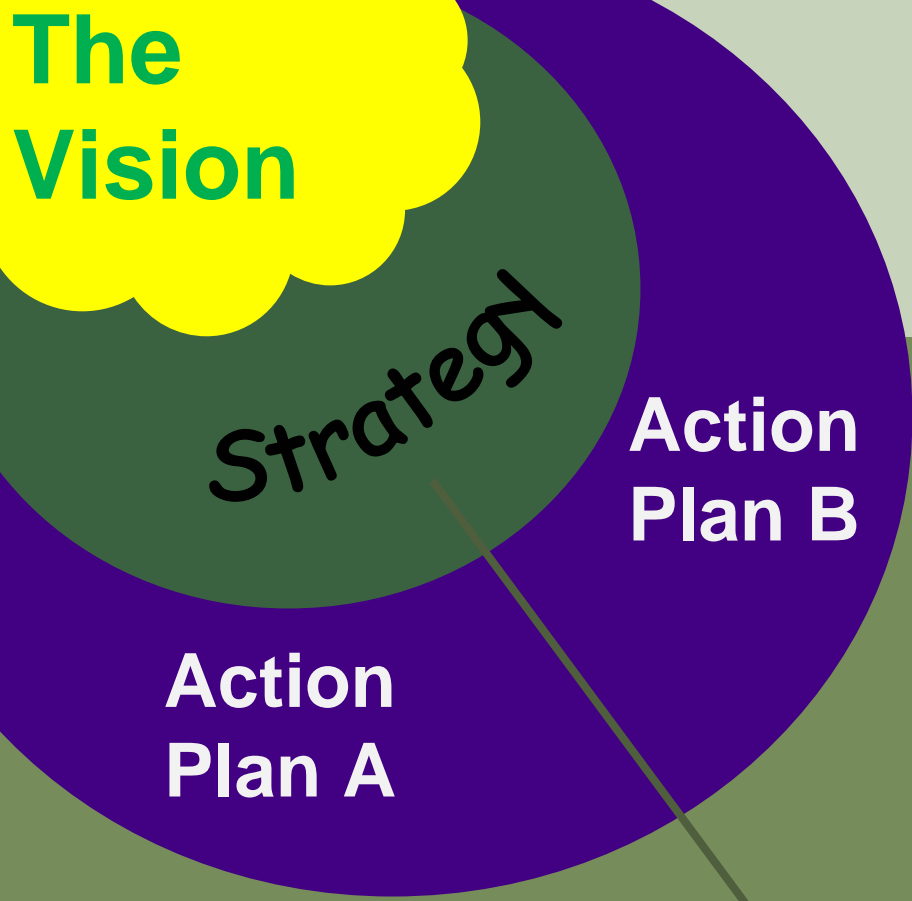




## Focal Area Application

- Conservation planning for crucial private land habitats
- Potential work with willing landowners on voluntary basis

**The Vision**



# State-wide Steps for Wildlife Conservation Strategy = Action Plans

Leona Svancara

University of Idaho



**Action Plan A**

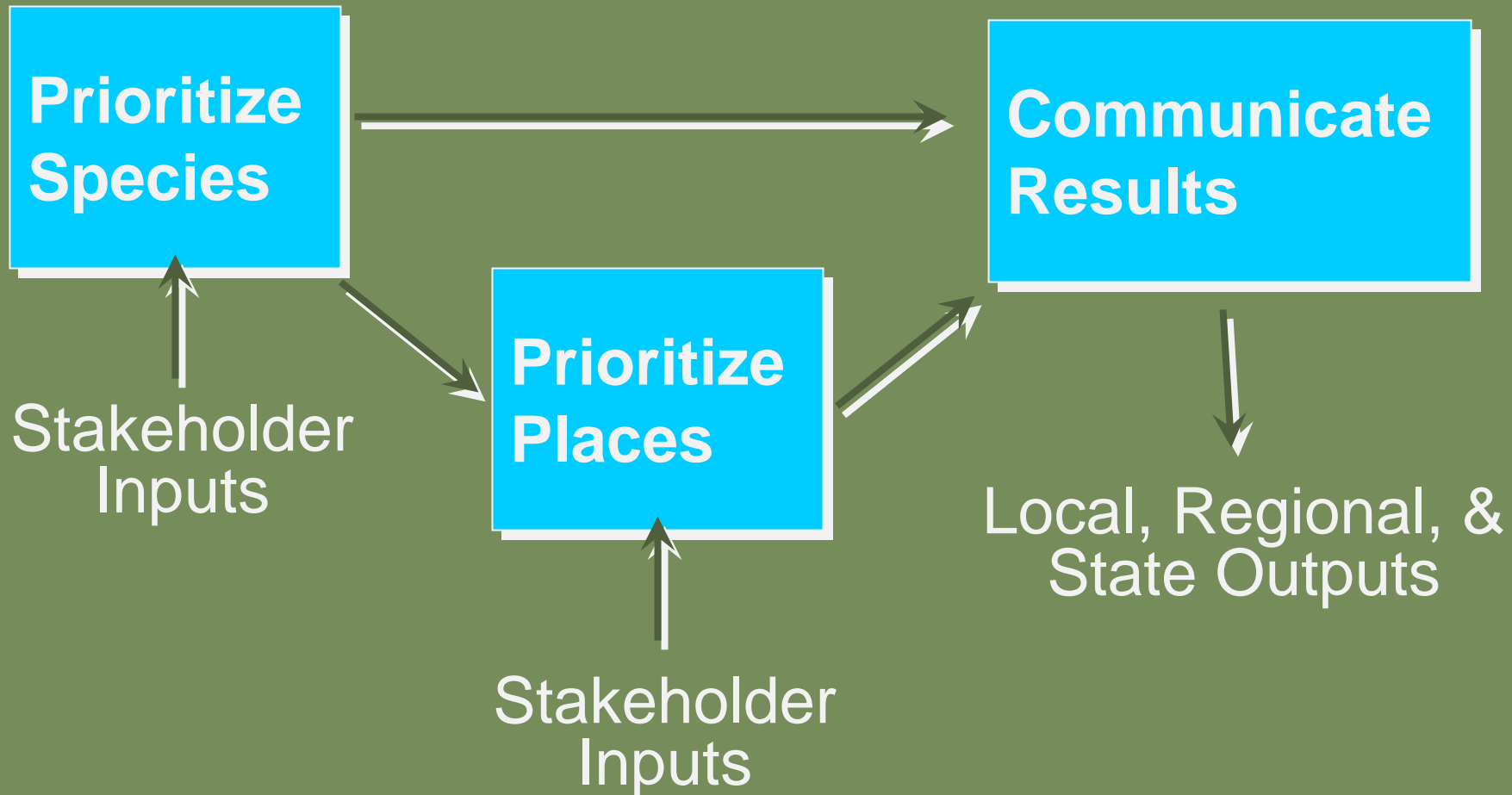
- Objective 1
- Objective 2
- Objective 3

**Action Plan B**

- Objective 1
- Objective 2
- Objective 3
- Objective 4

... provide a common framework to allow partners to jointly implement a long-term approach to conservation of SGCN

# Recruit state and regional stakeholders to jointly implement a long-term approach to conservation of SGCN



# A species oriented approach . . .

MS Excel pivot table with simple filters based on user interests.

Microsoft Excel - priority\_species\_083007.xls

File Edit View Insert Format Tools Data Window Help

B24 Lyre Mantleslug

**Priority Ranking for Species of Greatest Conservation Need by Ecological Section**

Answer the following questions to develop a customized list of priorities:

- Do you want to address all species, or a selected group? (All)
- Do you want to include species lacking substantial information for determining conservation status? (All)
- Do you want to include species with a significant portion of their range in the section? (All)
- Do you want to include regional endemics? (All)
- Do you want to include species listed under the ESA? (All)

Select the Ecological Section(s) of Interest

Average of C-Rank	Section	Scientific Name	Species	Bitterroot Mountains	Flathead Valley	Other
		Anguispira nimapuna	Nimapuna Tigersnail			
		Cryptomastix mullani blandi	An Oregonian	1.0		
		Cryptomastix magnidentata	Mission Creek Oregonian			
		Oncorhynchus tshawytscha	Chinook Salmon (Snake River fall-run)	1.0		
			Chinook Salmon (Snake River spring/summer)	1.0		
		Cryptomastix mullani tuckeri	An Oregonian (Lower Clearwater River)	1.0		
		Paraleptophlebia traversae	A Mayfly			
		Cryptomastix mullani latilabris	An Oregonian (Lower Salmon River)			
		Cryptomastix populi	An Oregonian (Hells Canyon)			

This pivot table provides CWCS. Priority ranks a Global status. In addition, at this time, only a subset of species identified represents those species AND a significant portion AND are regional (N Idaho)

Microsoft Excel - priority\_species\_083007.xls

Section	Name	Species	Scientific Name	CVCS RANK	SUM_PRA
Palouse Prairie	Anglican	Woodhouse's Toad	Bufo woodhousei	1	Yes
Bitterroot Mountains	Anglican	Wallops Slit Salamander	Desmognathus amabilis	1	Yes
Palouse Prairie	Anglican	Melano Slit Salamander	Desmognathus oregonus	1	Yes
Flathead Valley	Anglican	Clonal of River Salamander	Phylloniscus sibilans	1	Yes
Chungen Highlands	Anglican	Clonal of River Salamander	Phylloniscus sibilans	1	Yes
Bitterroot Mountains	Anglican	Clonal of River Salamander	Phylloniscus sibilans	1	Yes
Palouse Prairie	Anglican	Clonal of River Salamander	Phylloniscus sibilans	1	Yes
Bitterroot Mountains	Anglican	Northern Leopard Frog	Rana sierrae	1	Yes
Flathead Valley	Anglican	Wood Frog	Rana sylvatica	1	Yes
Chungen Highlands	Anglican	Wood Frog	Rana sylvatica	1	Yes
Bitterroot Mountains	Red	Western Salamander	Ambystoma occidentale	1	Yes
Flathead Valley	Red	Western Salamander	Ambystoma occidentale	1	Yes
Palouse Prairie	Red	Western Salamander	Ambystoma occidentale	1	Yes
Bitterroot Mountains	Red	Boreal Owl	Bubo borealis	1	Yes
Flathead Valley	Red	Boreal Owl	Bubo borealis	1	Yes
Chungen Highlands	Red	Boreal Owl	Bubo borealis	1	Yes
Palouse Prairie	Red	Boreal Owl	Bubo borealis	1	Yes
Bitterroot Mountains	Red	Black-legged Kittiwake	Rissa tridactyla	1	Yes
Palouse Prairie	Red	Northern Pintail	Recurvirostra americana	1	Yes
Bitterroot Mountains	Red	Northern Pintail	Recurvirostra americana	1	Yes
Flathead Valley	Red	Northern Pintail	Recurvirostra americana	1	Yes
Palouse Prairie	Red	Northern Pintail	Recurvirostra americana	1	Yes
Bitterroot Mountains	Red	Shoreland Owl	Nyctaleus californicus	1	Yes
Chungen Highlands	Red	Shoreland Owl	Nyctaleus californicus	1	Yes
Palouse Prairie	Red	Shoreland Owl	Nyctaleus californicus	1	Yes
Flathead Valley	Red	Shoreland Owl	Nyctaleus californicus	1	Yes
Bitterroot Mountains	Red	Least Sandpiper	Actinophalaria leucostriata	1	Yes
Chungen Highlands	Red	Least Sandpiper	Actinophalaria leucostriata	1	Yes
Palouse Prairie	Red	Least Sandpiper	Actinophalaria leucostriata	1	Yes
Bitterroot Mountains	Red	Least Sandpiper	Actinophalaria leucostriata	1	Yes
Palouse Prairie	Red	Black Tern	Chelidon nigricans	1	Yes
Bitterroot Mountains	Red	Black Tern	Chelidon nigricans	1	Yes
Palouse Prairie	Red	Yellow-billed Cuckoo	Coccyus americanus	1	Yes

Species sorted based on an overall conservation rank



# A place oriented approach . . .

Use a Spatial Decision Support System (NatureServe Vista) to incorporate:



- Ecological integrity or viability
- Scientific uncertainty
- Stakeholder values

To answer:

Where do priority species occur?

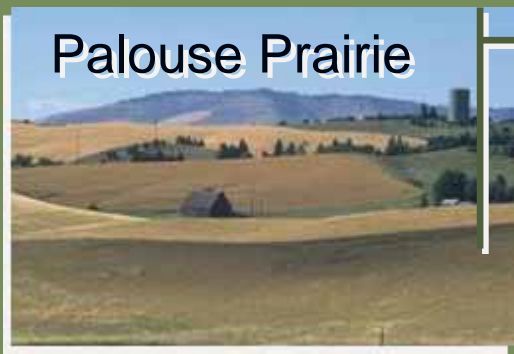
Are there overlaps with other state-, regional-  
or section-wide priorities?

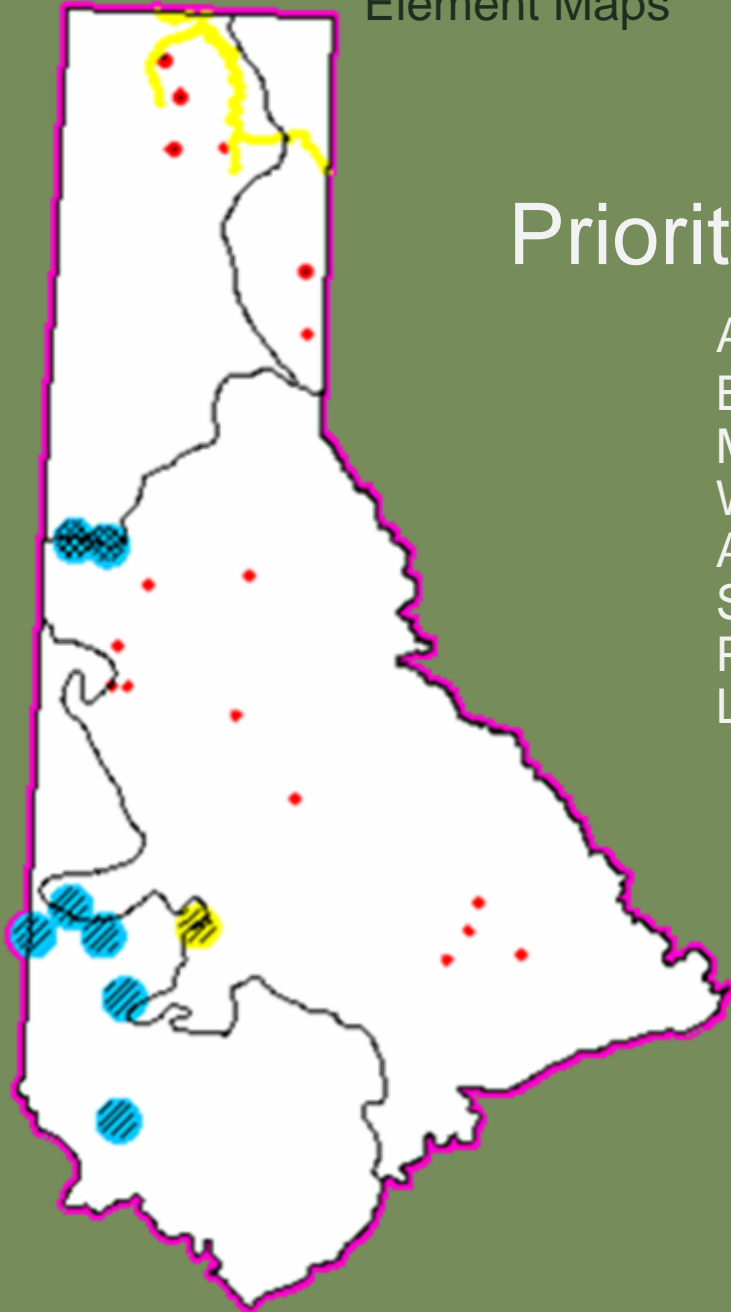
How do they compare with other  
agency/stakeholder priorities?

# Examples . . .

- ❖ Prioritized species
- ❖ State habitat priorities
- ❖ Ecological Section habitat priorities
- ❖ Wetland important bird areas
- ❖ Big game (elk) winter range

# A North Idaho Application . . .





# Prioritized Species

- A Stonefly (*Capnia zukeli*)
- Burbot (*Lota lota*)
- Mission Ck Oregonian (*Crptomastix magnidentata*)
- White-winged Crossbill (*Loxia leucoptera*)
- An Oregonian (*Crptomastix mullani blandi*)
- Smoky Tailedropper (*Prophyaon humile*)
- Pygmy Slug (*Kootenaia burkei*)
- Lyre Mantleslug (*Udosarx lyrata*)

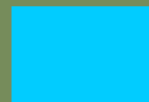
## Integrity



High

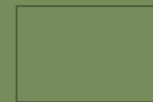


Med



Low

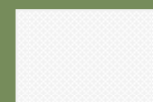
## Confidence



High



Med



Low

Element Maps

Integrity

Confidence



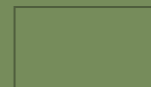
High



Med



Low



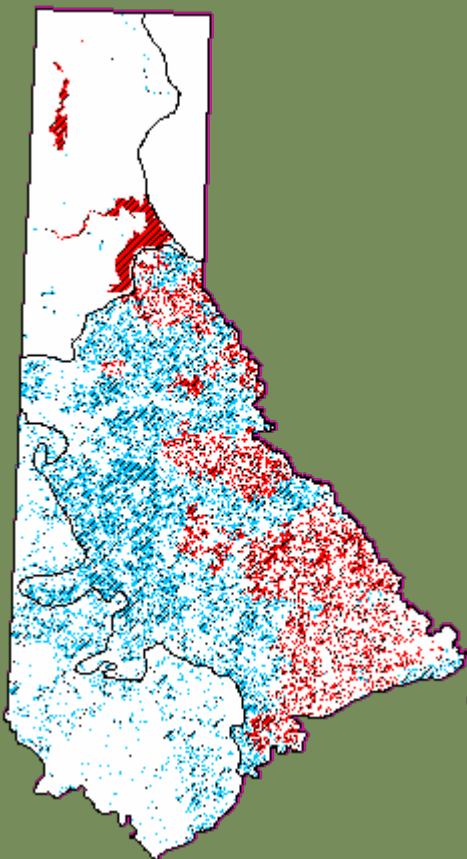
High



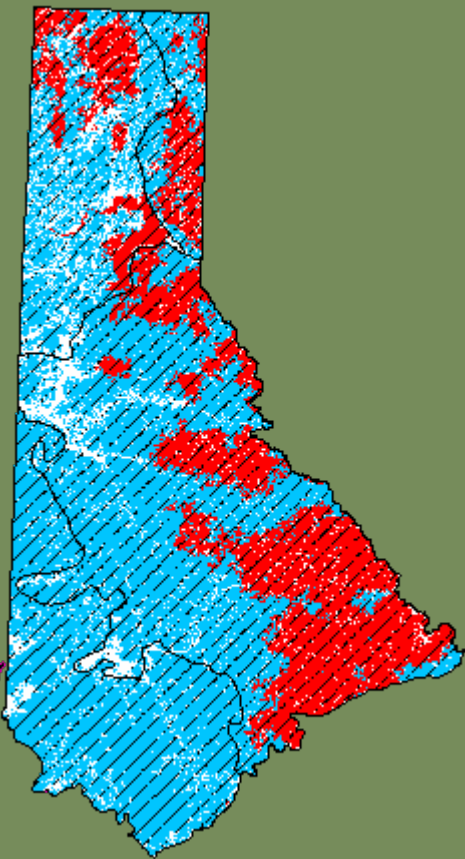
Med



Low



State Habitat  
Priorities



Section Habitat  
Priorities



Wetland  
IBAS



Elk Winter  
Range

## Priority Species

Species = 1  
Wetland IBAs = 0.5  
State Habitat = 0.5  
Section Habitat = 0.5  
Elk Range = 0

## All Things Equal

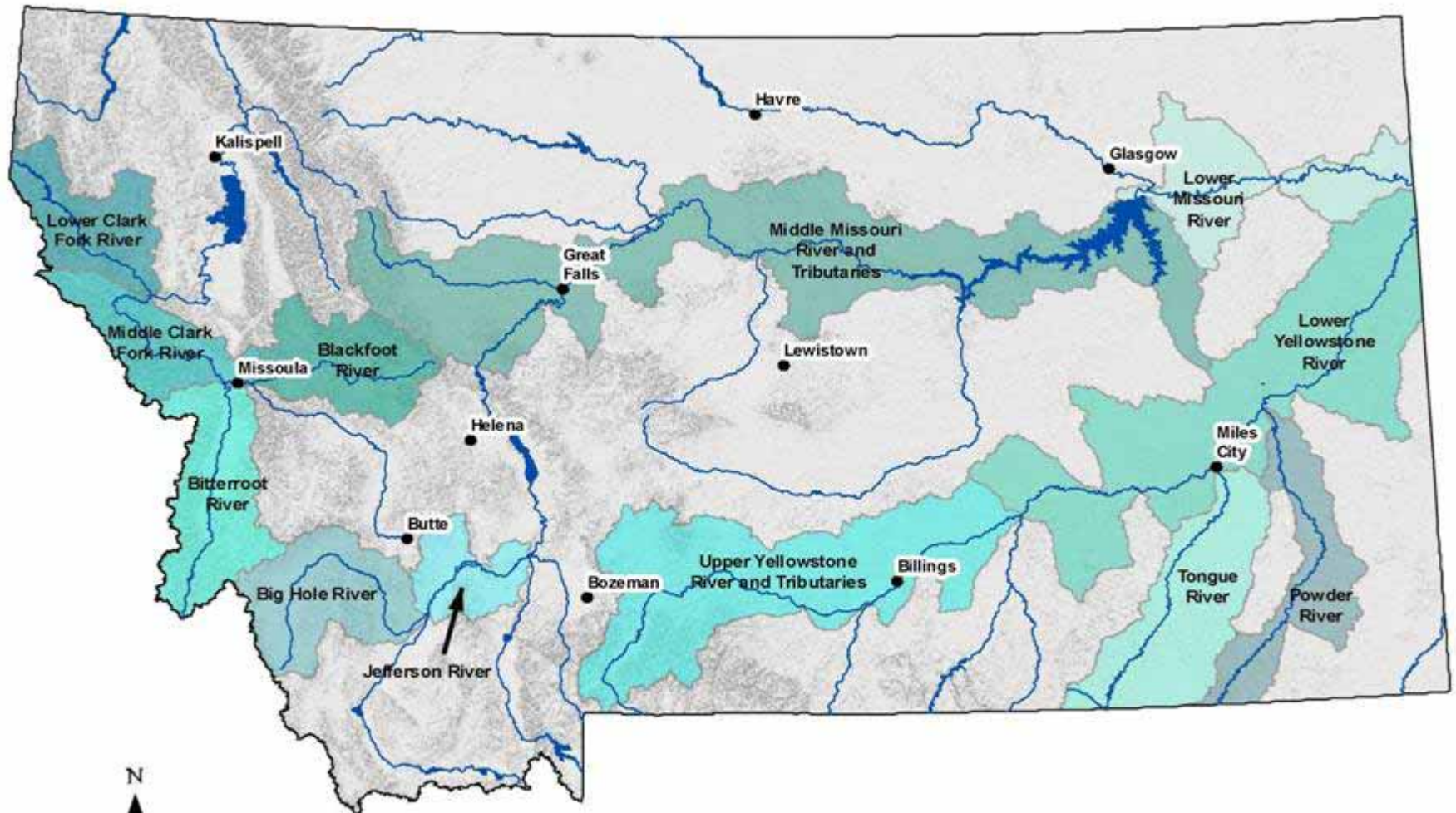
All Weights = 1

High

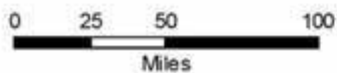
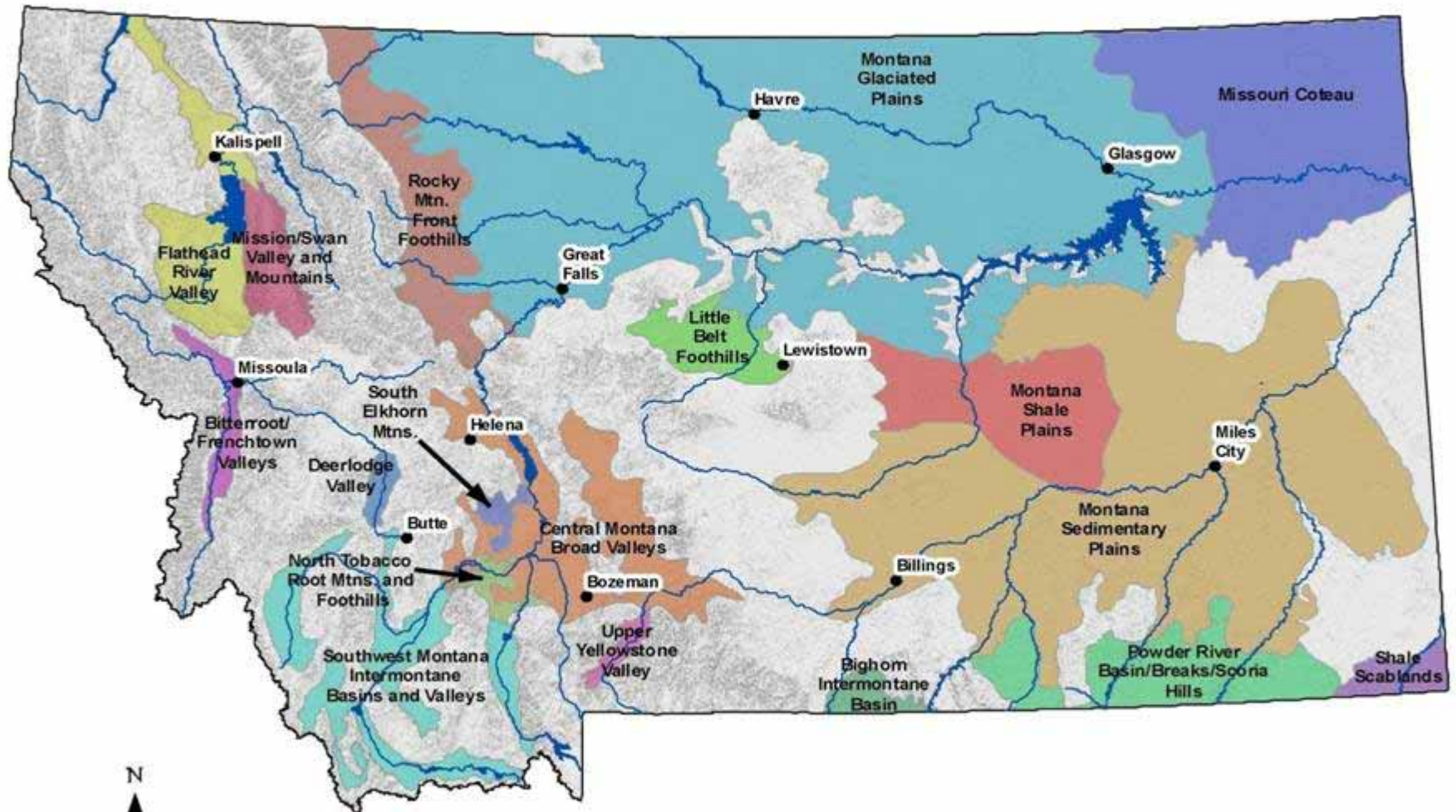
Low

(Integrity, confidence, and weights included)

# Montana Fish, Wildlife, and Parks Comprehensive Fish and Wildlife Conservation Strategy Aquatic Focus Areas

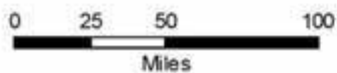
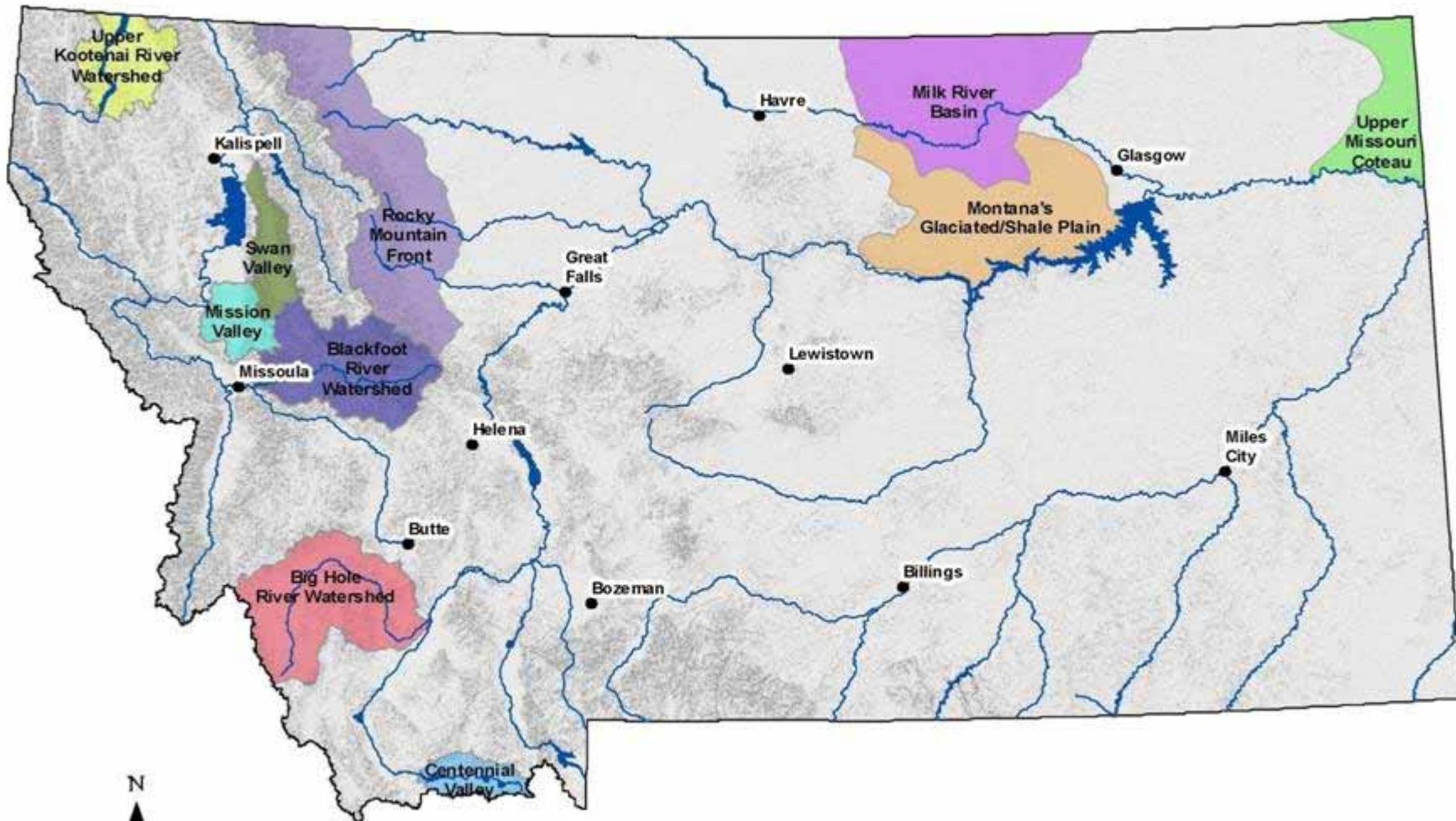


# Montana Fish, Wildlife, and Parks Comprehensive Fish and Wildlife Conservation Strategy Terrestrial Focus Areas





## Partners for Fish and Wildlife Focus Areas



Additional Information :

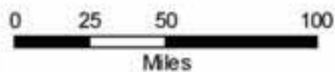
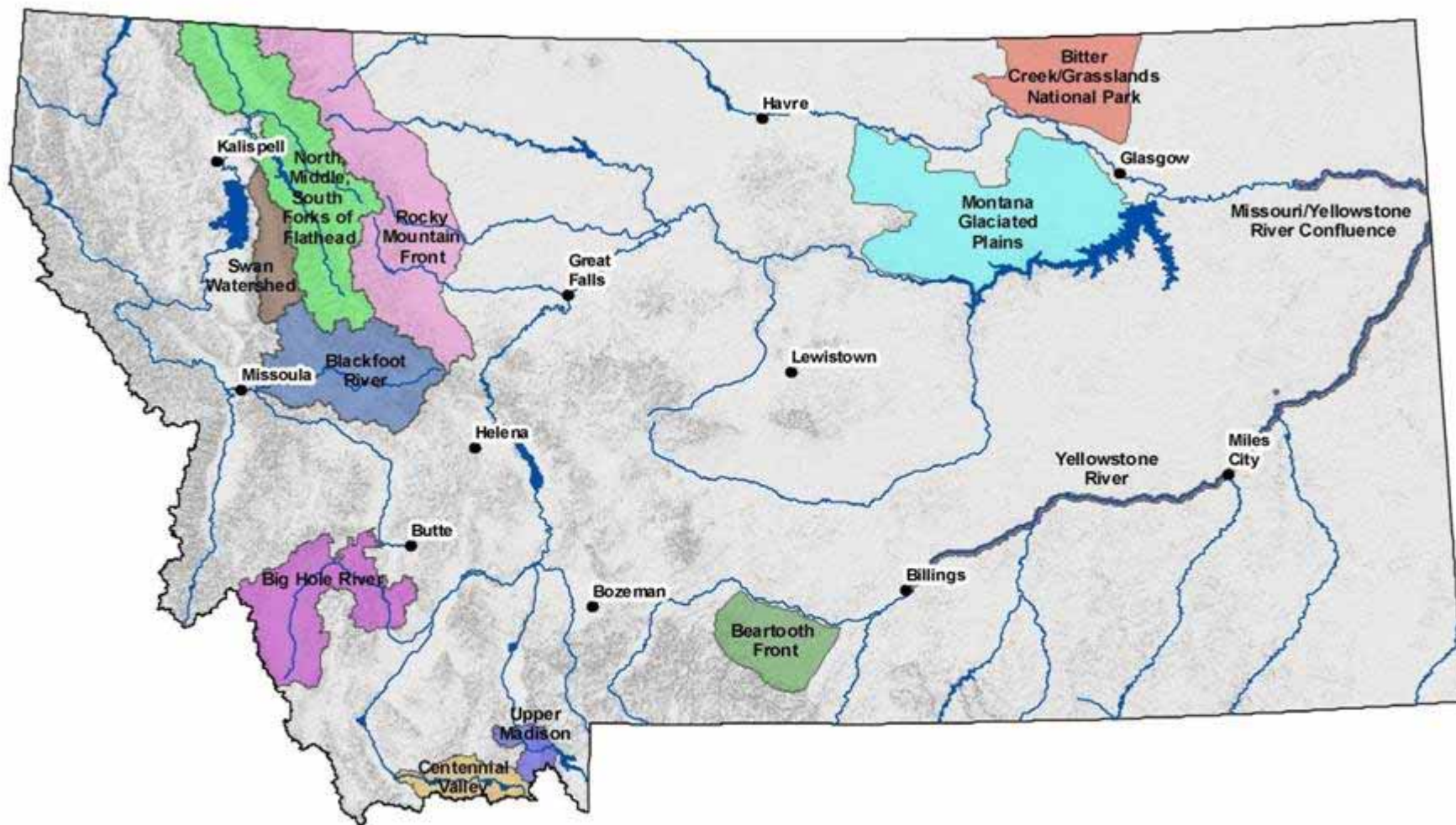
<http://partners.fws.gov>

<http://ecos.fws.gov/docs/partners/web/pdf/163.pdf>



**Montana Fish,  
Wildlife & Parks**

# The Nature Conservancy Priority Areas



Additional Information:

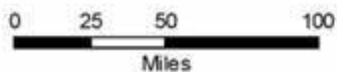
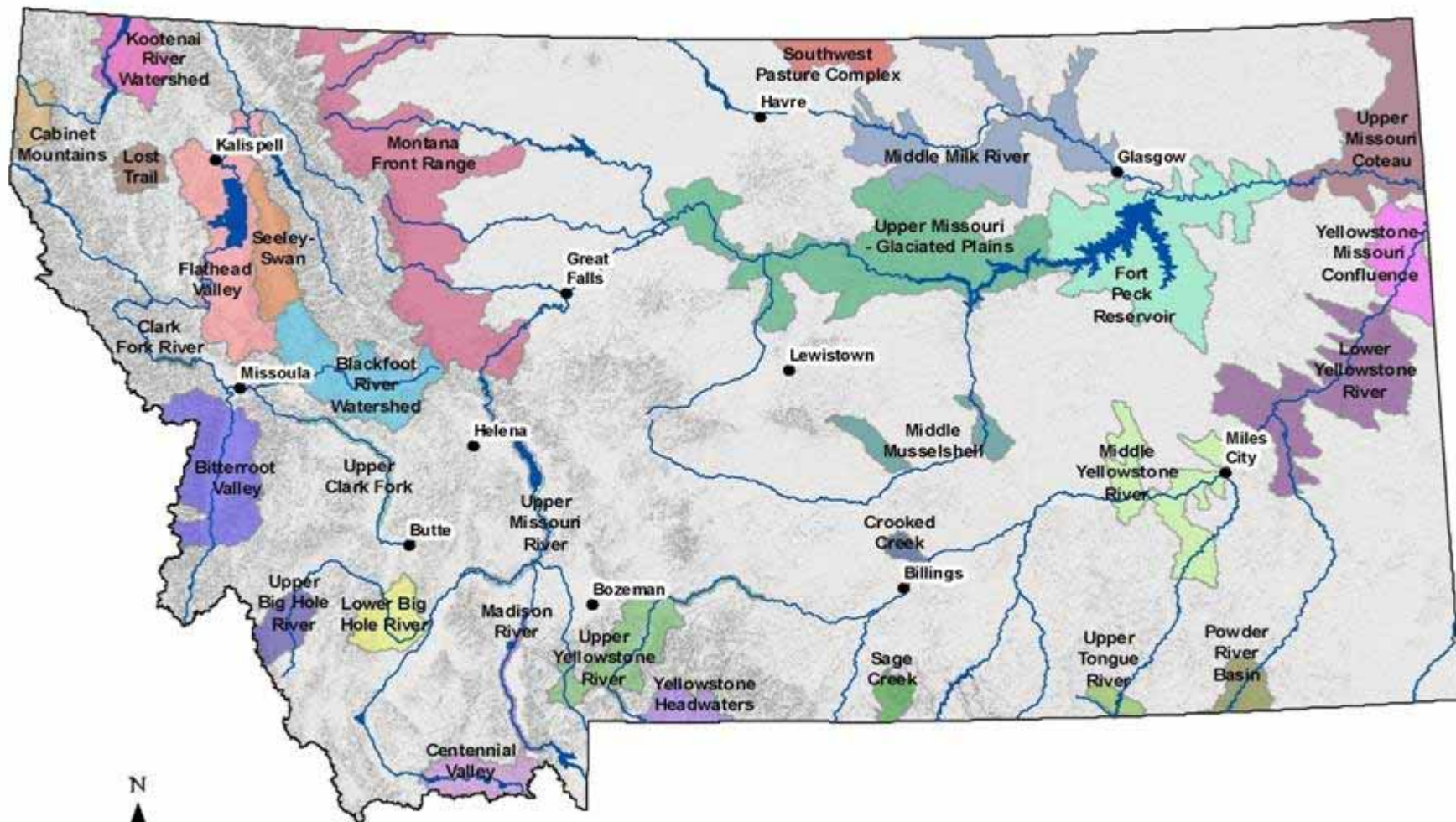
<http://www.nature.org/wherewework/northamerica/states/montana/preserves/>

<http://www.biogeog.ucsb.edu/projects/tnc/overview.html>



Montana Fish,  
Wildlife & Parks

# U.S. Fish and Wildlife Service Conservation Focus Areas of the Great Divide

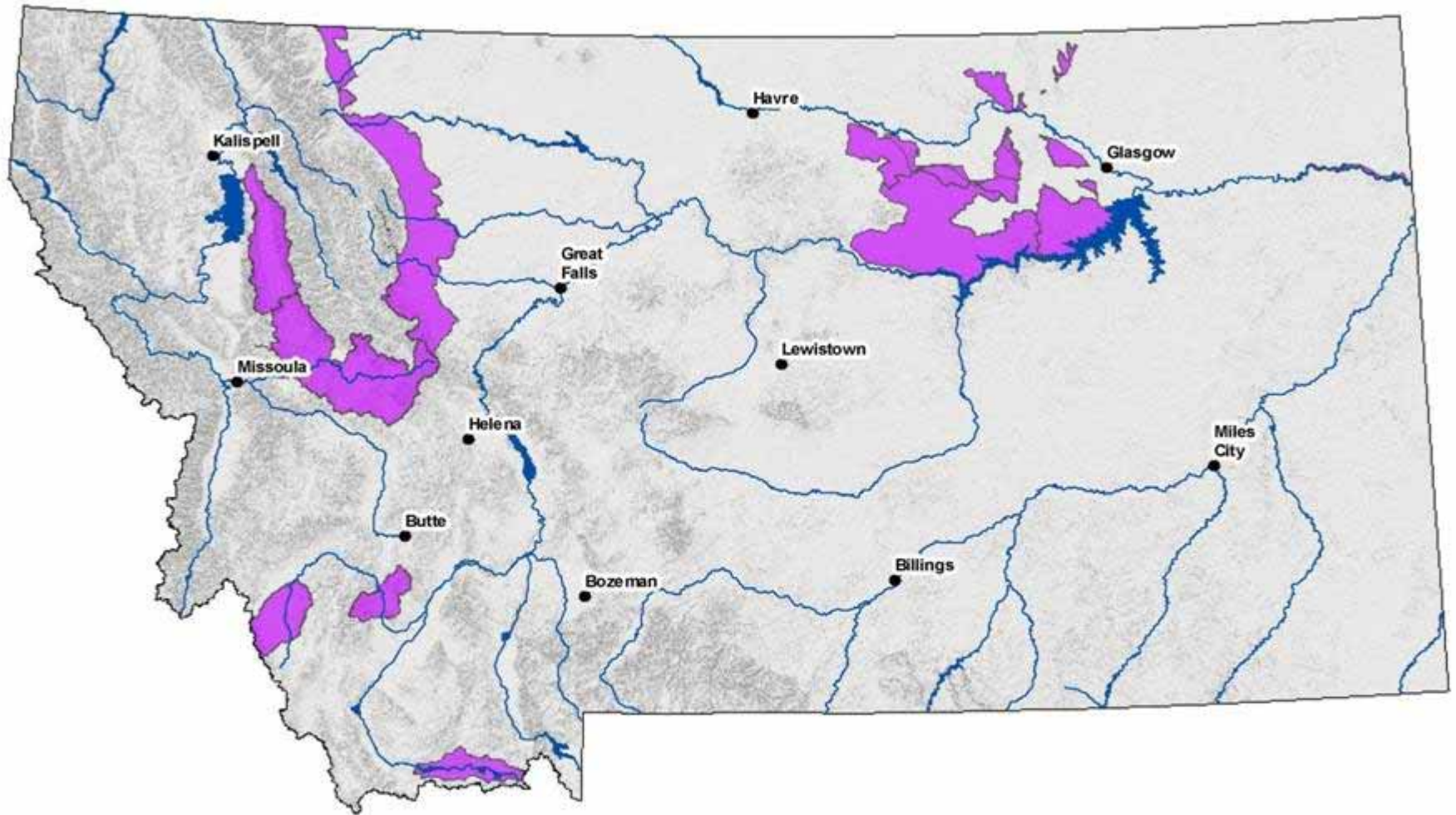


Additional Information :  
<http://www.fws.gov/moyoco>



**Montana Fish,  
Wildlife & Parks**

## Commonly Identified Conservation Areas



N

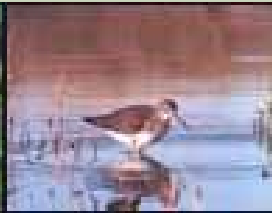


0 25 50 100  
Miles

Intersection of Focus Areas includes:  
Montana Fish, Wildlife, and Parks CFWCS Tier One Focus Areas  
USFWS Conservation Focus Areas of the Great Divide  
Partners for Fish and Wildlife Conservation Focus Areas  
Nature Conservancy Priority Areas



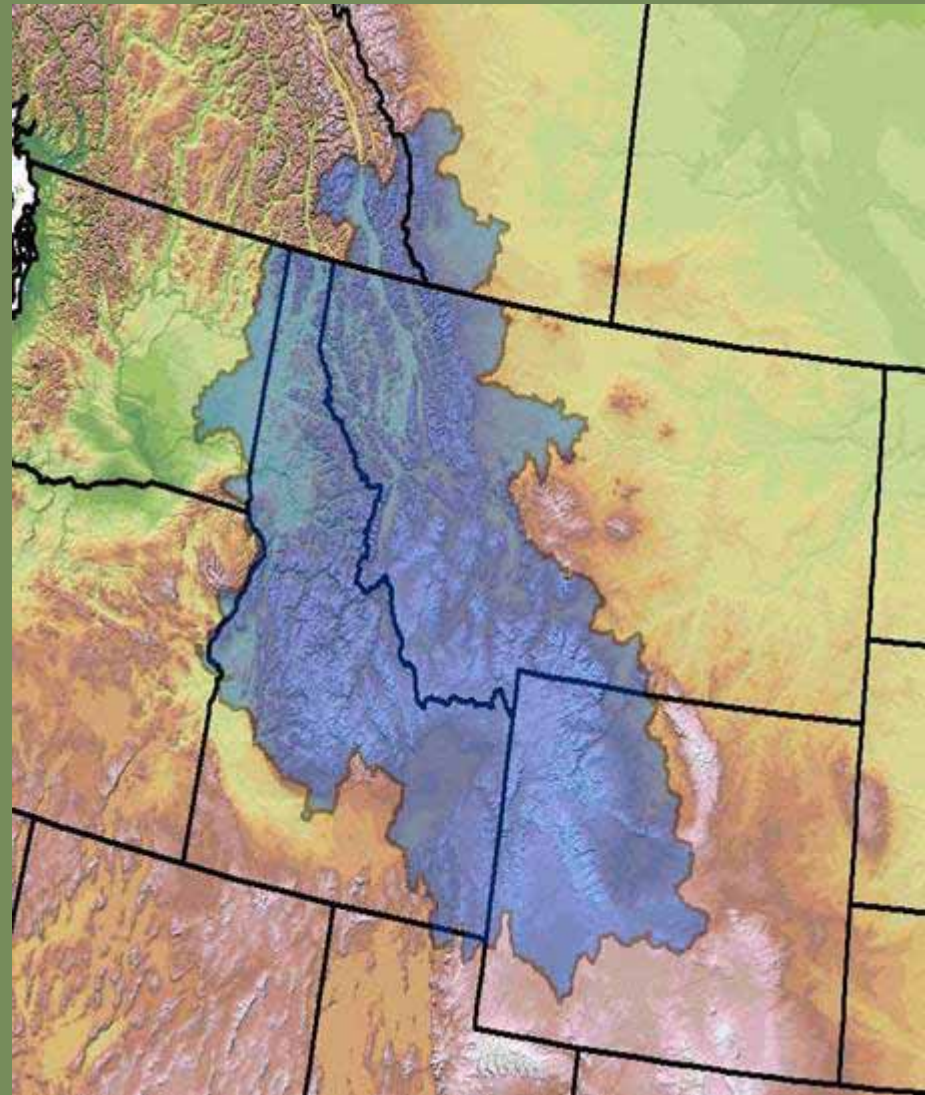
Montana Fish,  
Wildlife & Parks



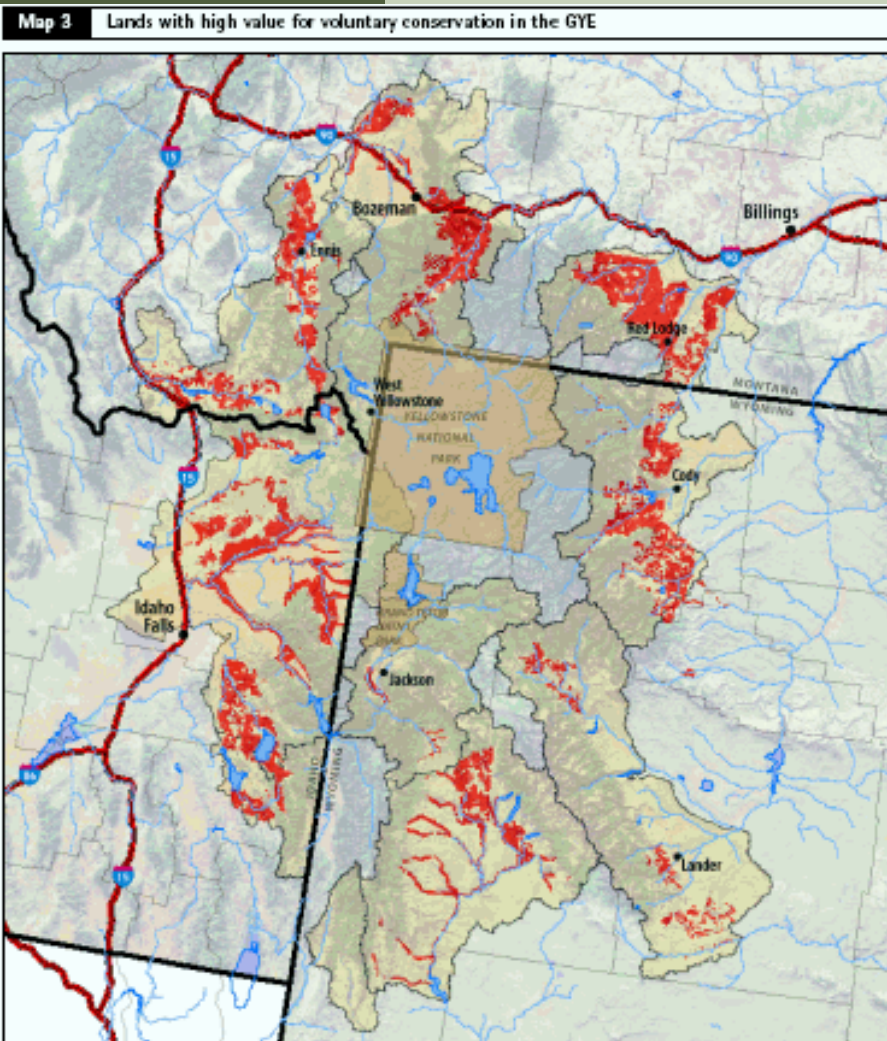
The Wyoming Department of Game and Fish and land trusts in Wyoming are partnering with the Wyoming Wildlife and Nature Trust to develop large landscape initiatives to conserve priority habitats.

# Heart of the Rockies Initiative

American Land Conservancy  
Bitter Root Land Trust  
Clark Fork-Pend Oreille Conservancy  
The Conservation Fund  
Five Valleys Land Trust  
Flathead Land Trust  
Gallatin Valley Land Trust  
Green River Valley Land Trust  
Inland Northwest Land Trust  
Jackson Hole Land Trust  
The Land Conservancy of BC  
Montana Land Reliance  
The Nature Conservancy – ID, MT & WY  
Lemhi Regional Land Trust  
Nature Conservancy of Canada – Alb & BC  
Prickly Pear Land Trust  
Rocky Mountain Elk Foundation  
Sagebrush Steppe Land Trust  
Trust for Public Land  
Teton Regional Land Trust  
Wyoming Stock Growers Agricultural Land Trust  
Vital Ground Foundation



# Conservation Plan for the Greater Yellowstone Ecosystem



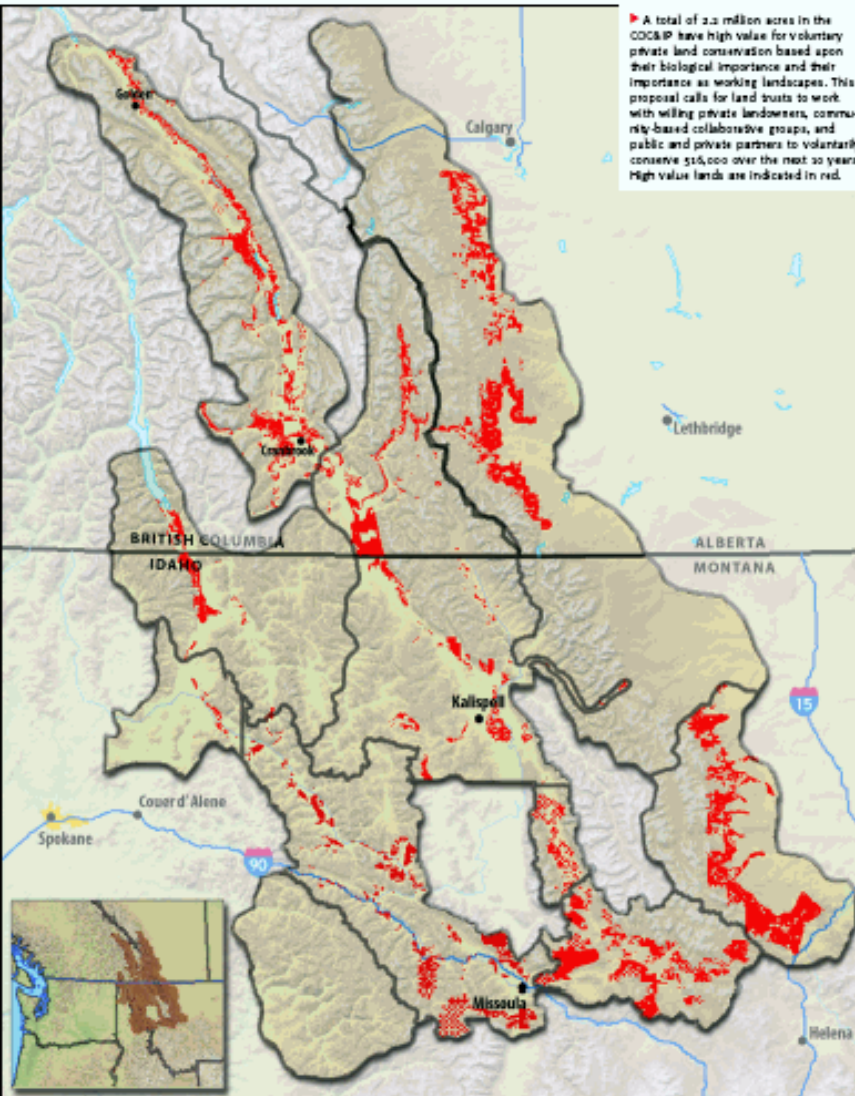
- 12 land trusts in GYE
- Biological value, agricultural value & community support
- Identifies 2.8 million acres with high conservation value
- 10 year goal to conserve 1 million acres

▲ A total of 2.8 million acres in the GYE have high value for voluntary private land conservation based on their biological importance and their importance as working landscapes. This proposal calls for land trusts to work with willing private landowners to

voluntarily conserve 1 million of these acres over the next 10 years. Through the use of donated and bargain-purchased conservation easements, this land would be protected from inappropriate subdivision and development.

# Conservation Plan for Crown of the Continent and Idaho Panhandle

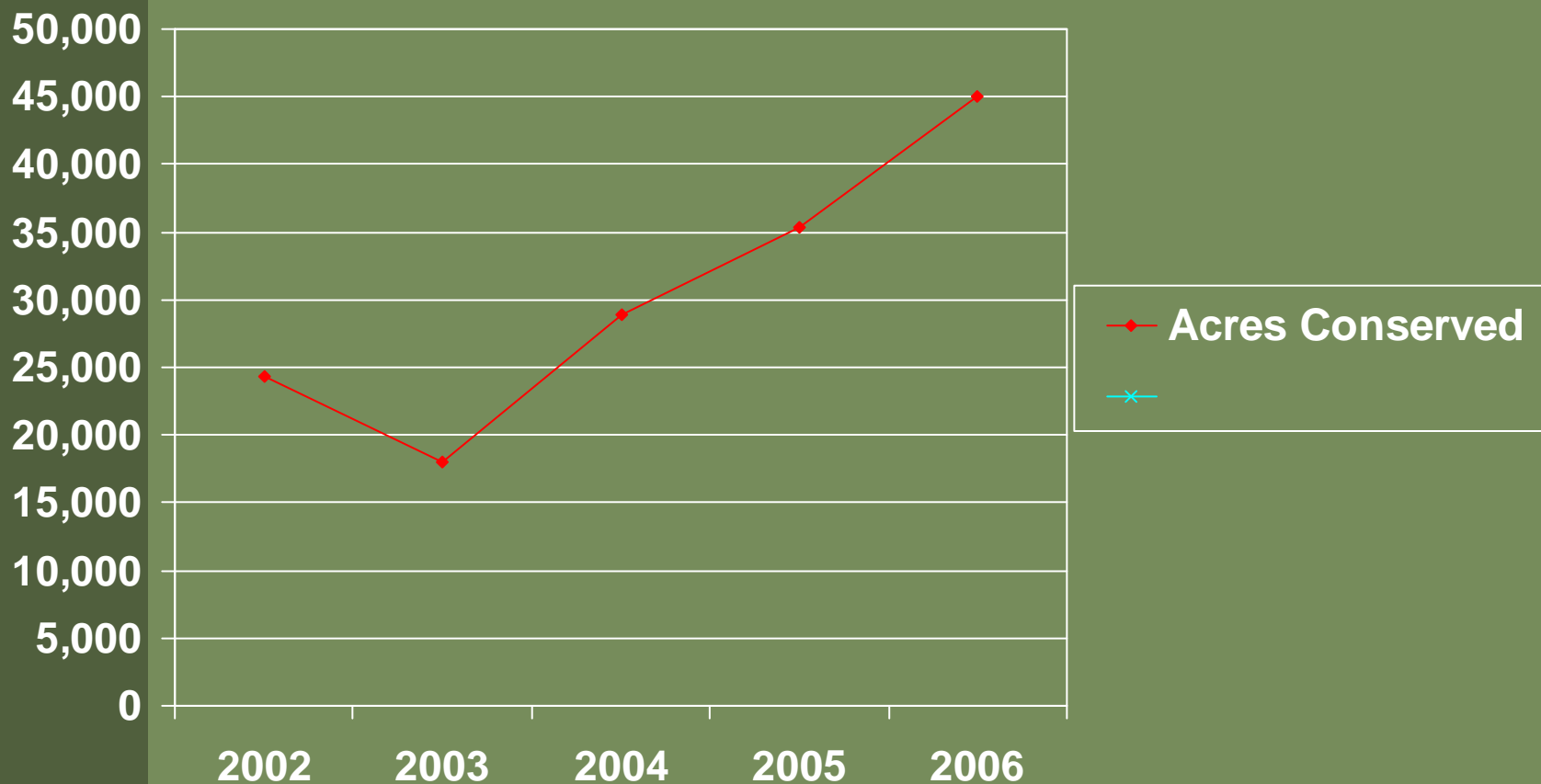
Map 3 Lands with High Value for Voluntary Conservation in the COC&IP



- 14 land trusts
- Biological value, agricultural value & community support
- Identifies 2.2 million acres with high conservation value
- 10 year goal to conserve 516,000 acres



# Conservation of “High-Value” Private Land by HOTR Land Trusts in the GYE, 2002-06 (Acres/year)



HOTR Land trusts in the GYE have conserved a cumulative total of 186,743 acres since 2002



# Some Next Steps for Wildlife Action

1. Refine statewide and regional maps to inform conservation priorities, engage stakeholders.
2. Collaboratively expand private land considerations in planning (with a willing landowner perspective).
3. Continually expand public involvement and awareness.
4. Address “the broad range of wildlife and associated habitats”, within SGCN focus, to include habitats for aquatic species.
5. Broaden collaboration to fully leverage existing programs to achieve habitat goals.
6. Build collaboration to advocate for new public programs and funding to achieve conservation goals (e.g. new tax incentives).

## *Acknowledgments*

Thanks for collaborative thinking to:

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IDF&G and ICDC
- Paul Sihler and HOTR

TRLT graphics, GIS by:

- Angie Rudolph

Photos provided by:

- Tom Vezo
- Howard Stoddard
- Florence McCall
- TRLT Staff and Board

Willing landowners who leave a legacy

