

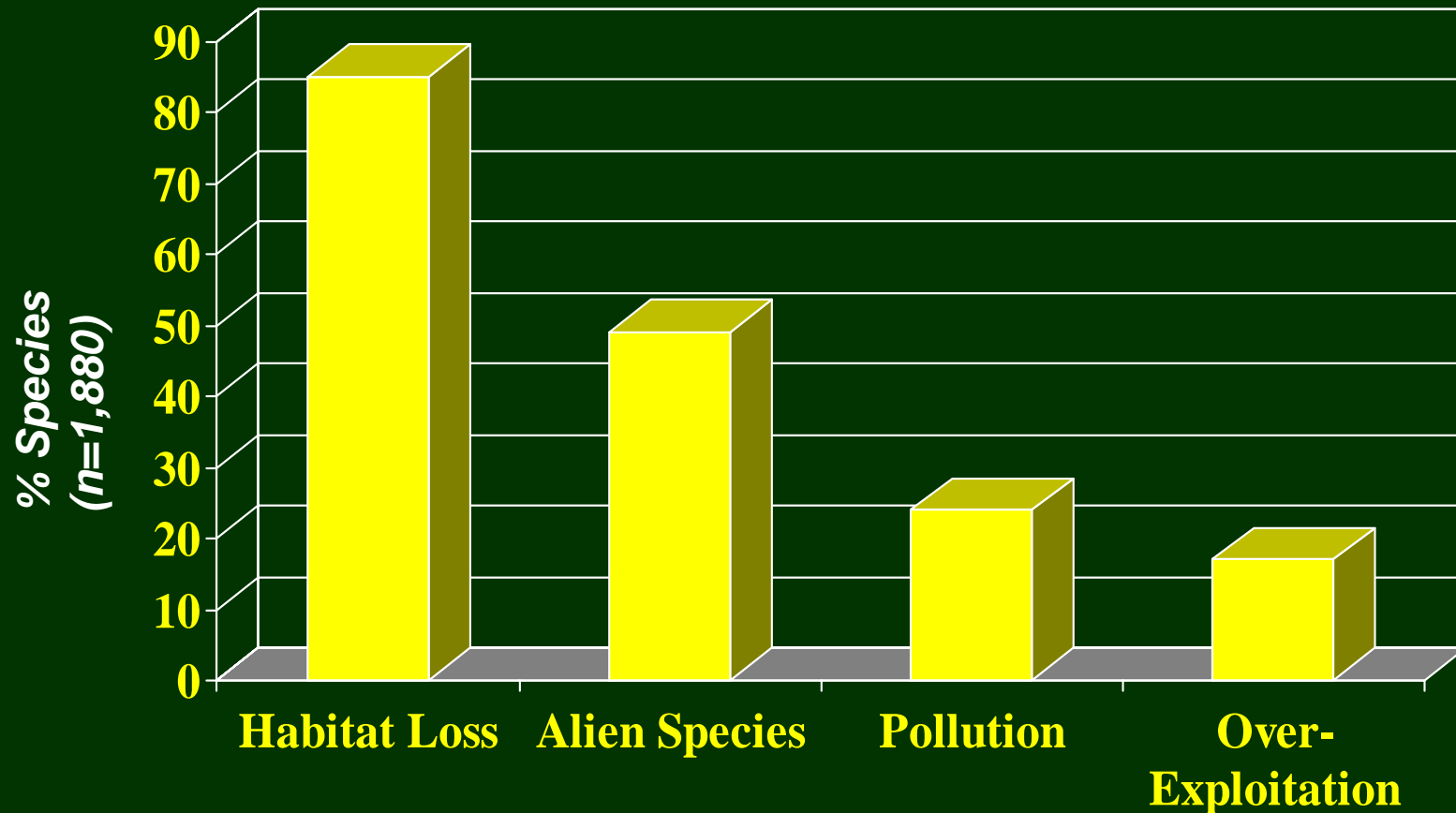
# Creating an Ecologically Functional Landscape in the Midwest

**Heather Rorer, Jeff Lerner, Rick Gauger**  
Defenders of Wildlife  
West Wisconsin Land Trust

# Outline

- Biodiversity planning
- State wildlife action plans
- Blufflands Alliance projects

# Habitat Loss: Leading Cause of Species Imperilment



Source: Precious Heritage, 2000

# Protecting Communities by Protecting Wildlife

## Wildlife Protection



Reddish Egret *J. Michalak*



Chinook Salmon *Mgjefferies'*



Karner Blue Butterfly  
*violetflm*



Jefferson's Salamander  
*Man of Mud*



Ramsey's Leopard Frog  
*Steve Collins*



Badger  
*rlw5663*



Northern Bobwhite  
*Jim Sullivan*

## Habitat Protection

Wetlands      Forests      Grasslands  
Riparian Buffers      Permeable Surfaces  
Open Space      Streams      Rivers



*J. Michalak*



*J. Michalak*

*J. Michalak*



*Photo Courtesy of NRCS*

## Ecosystem Services

Climate Stabilization  
Carbon Sequestration  
Air Filtration  
Nutrient Cycling  
Recreation  
Pollination  
Water Purification  
Flood protection  
Freshwater Supplies  
Ground water recharge  
Improved agricultural productivity

*Flavio Cruvinel Brandao's*



*tobyotter*



*Photos Courtesy of NRCS*



*TheManWhoWasn'tThere*

# 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)

# Site Selection

- Identify high priorities at landscape level:
  - Representation (types of sites)
  - Resiliency (size of sites)
  - Redundancy (number of sites)
  - Restoration (habitat potential)

# Conservation Network Design

- Patch Size
  - Proximity
  - Connectivity
  - Patch Shape
- 
- Module on network design at:  
[www.biodiversitypartners.org](http://www.biodiversitypartners.org)

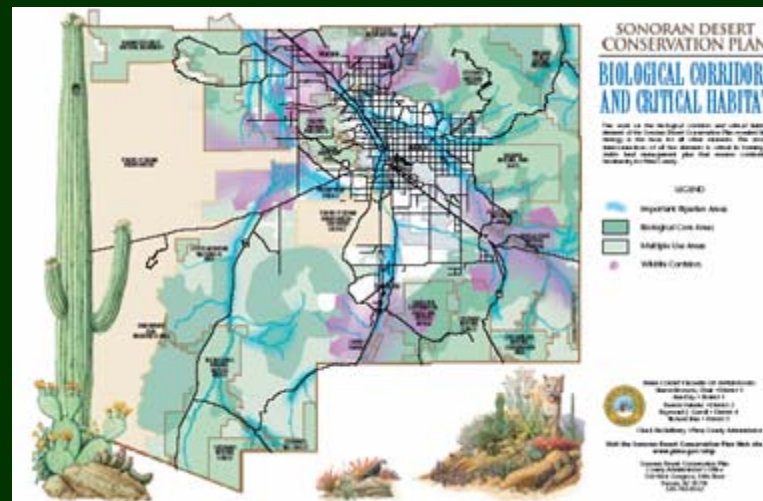
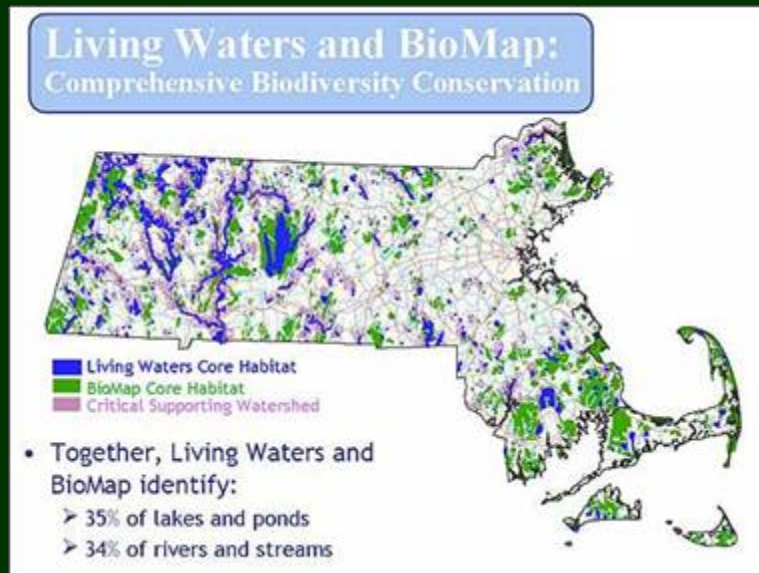
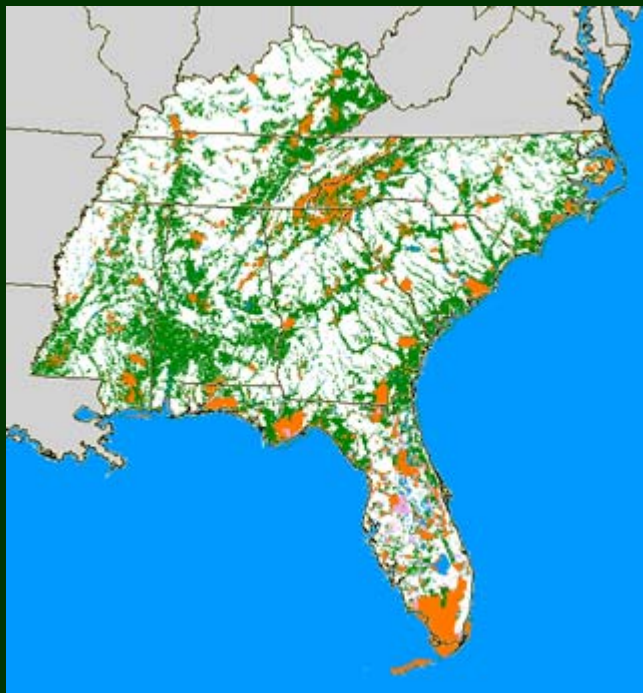
# Planning Process

- Identify biodiversity
- Assemble data
- Assess existing conservation network
- Set Goals
- Evaluate the viability of the occurrences
- Analyze data to select a network of conservation areas
- Assess threats and set priorities



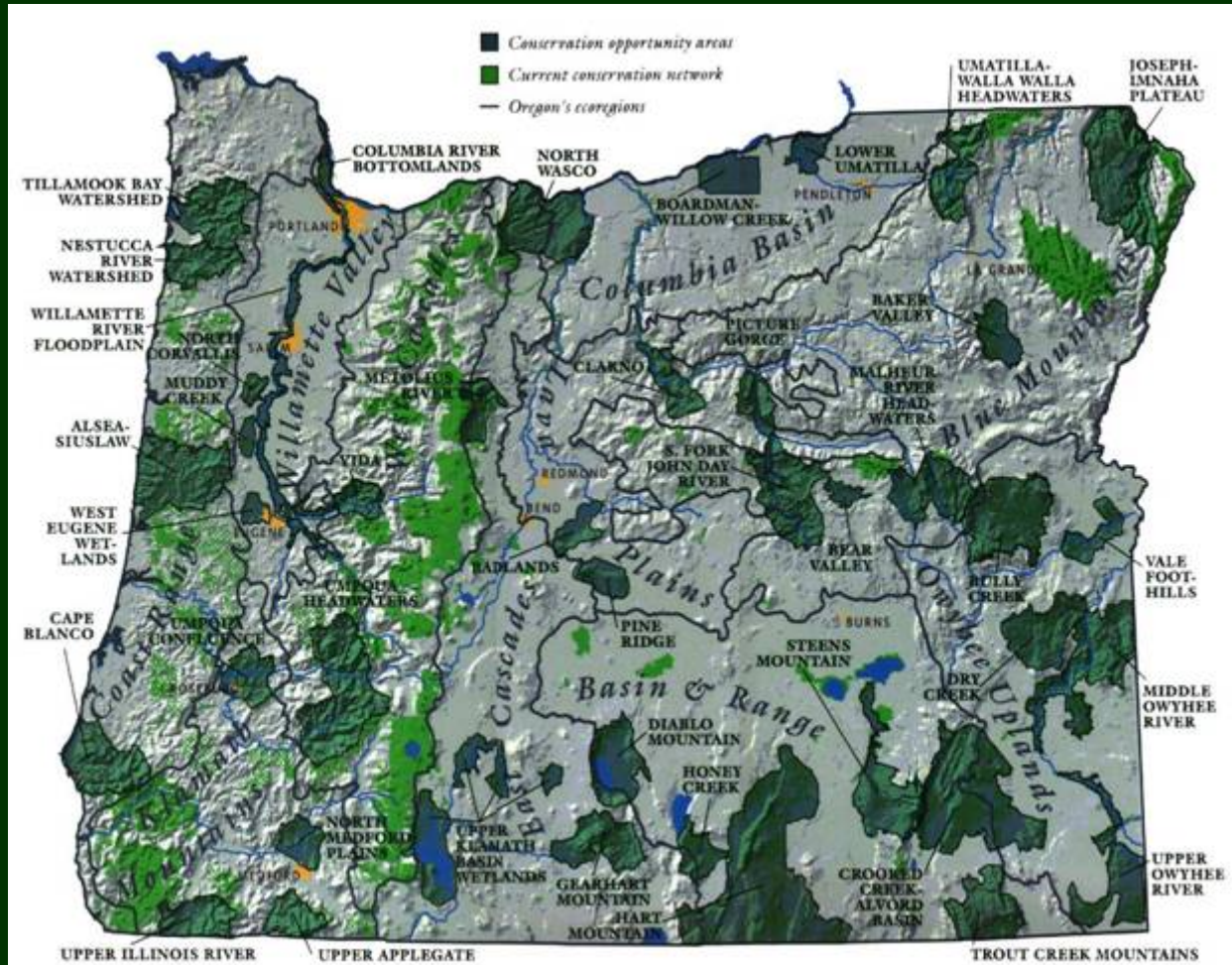
# Conservation Planning Solutions

Variety of:  
Methods,  
Scales,  
Jurisdictions



Living Lands Project

# Oregon Biodiversity Project



# State & Tribal Wildlife Grants Program

- 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 based on Fish & Wildlife Conservation Act of 1980
- State Comprehensive Wildlife Conservation Plans completed October 2005

# 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



# Wildlife Plans Review



## CONSERVATION ACROSS THE LANDSCAPE:

A Review of the State Wildlife Action Plans



This review was supported by  
The Doris Duke Charitable Foundation



- Comments on Plans
- Review Criteria
- Database
- Defenders Emphasis: In short, a good conservation plan will tell you what needs to be done (actions), where (maps) and in what order (prioritization)

# Review Criteria

## Eight Elements

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

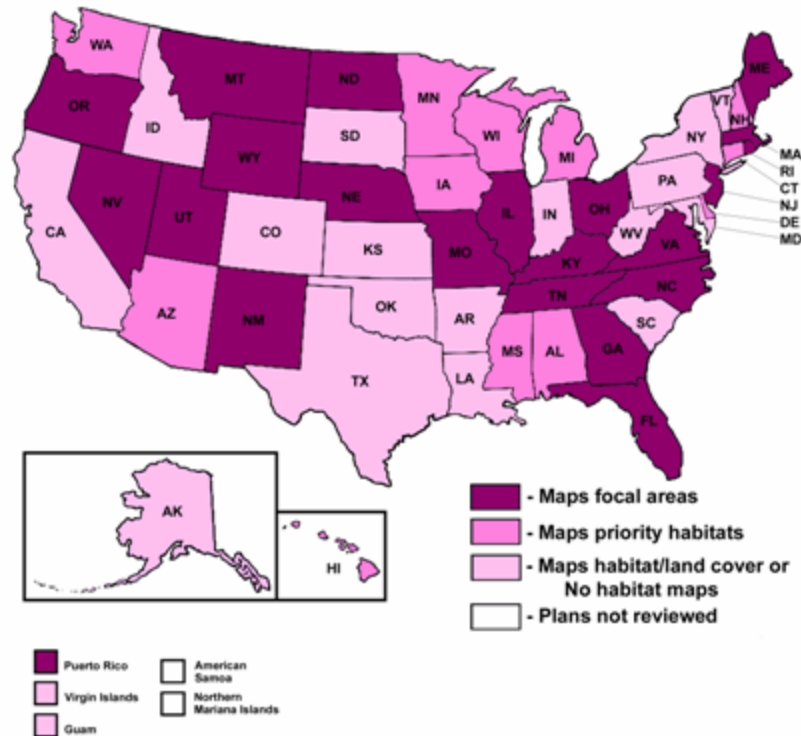
## Additional Categories

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

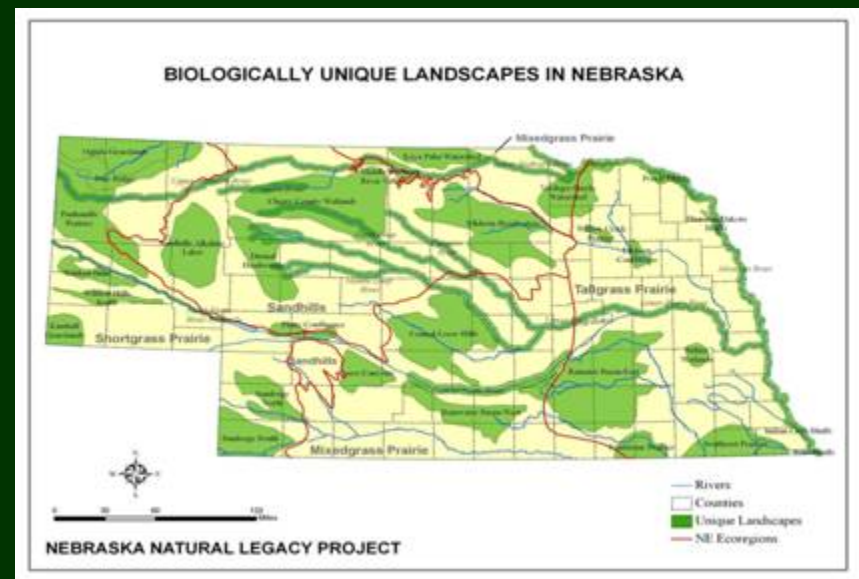
# Habitat Conservation: Mapping is Key

## STATE WILDLIFE PLANS: PRIORITY MAPS

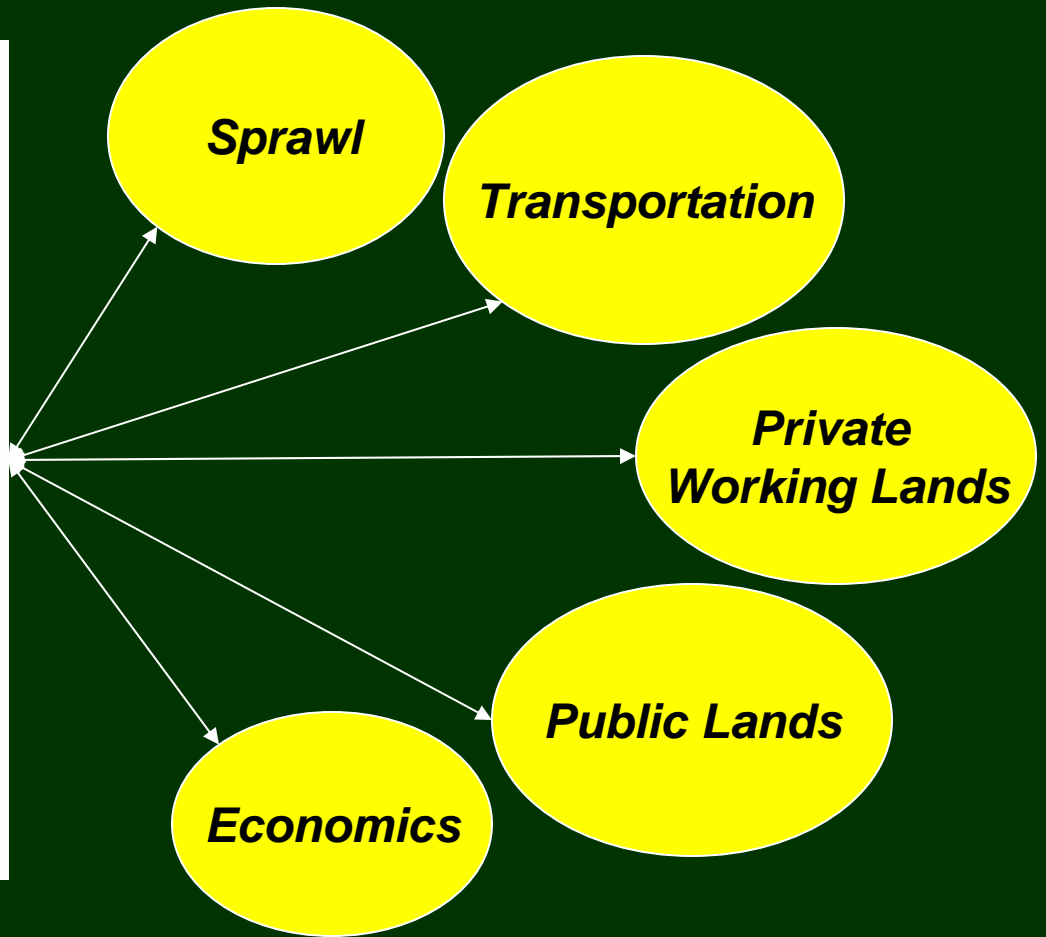
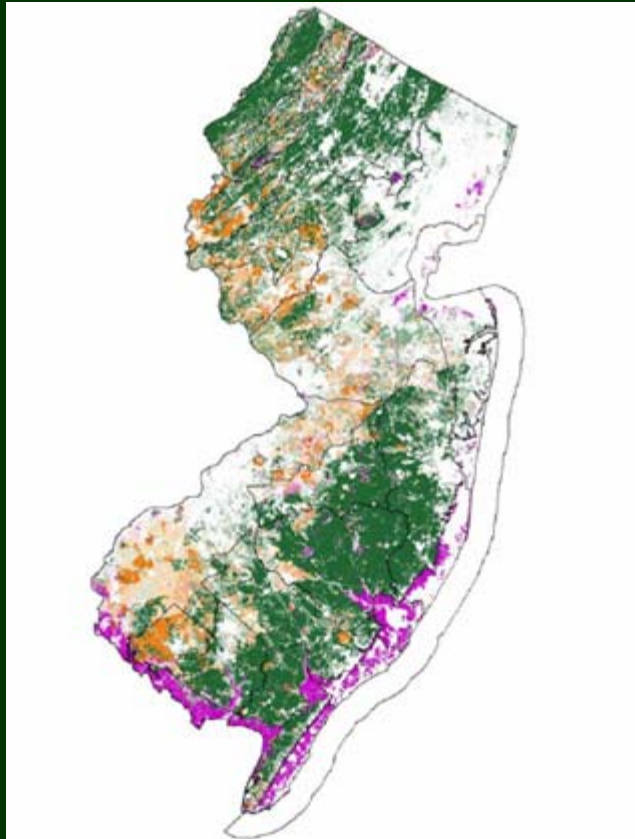
Winter 2006



40% of States produced maps showing conservation focal areas



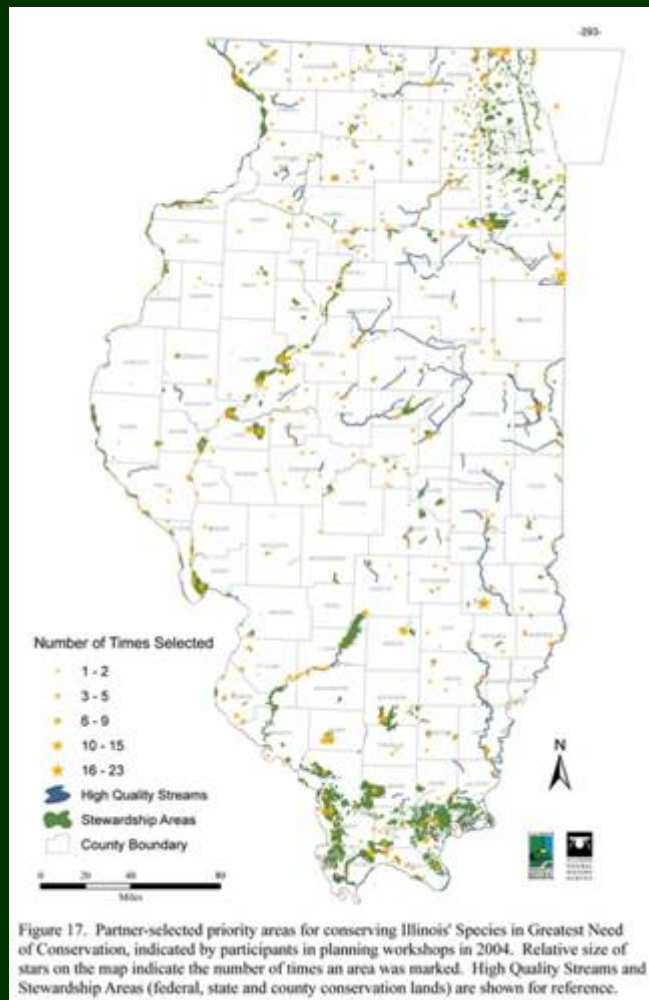
# Conservation Plans & Policy Connections



Conservation plans should address land use decisions that cause habitat loss

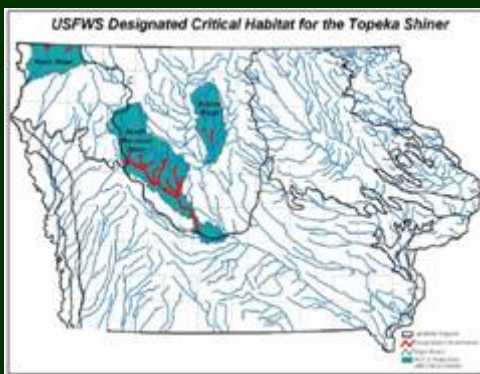
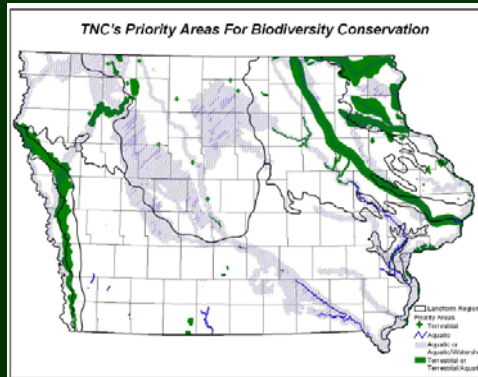
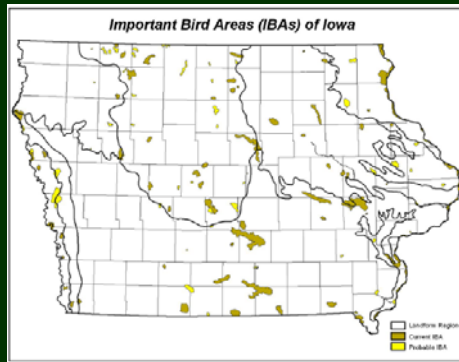


# Illinois

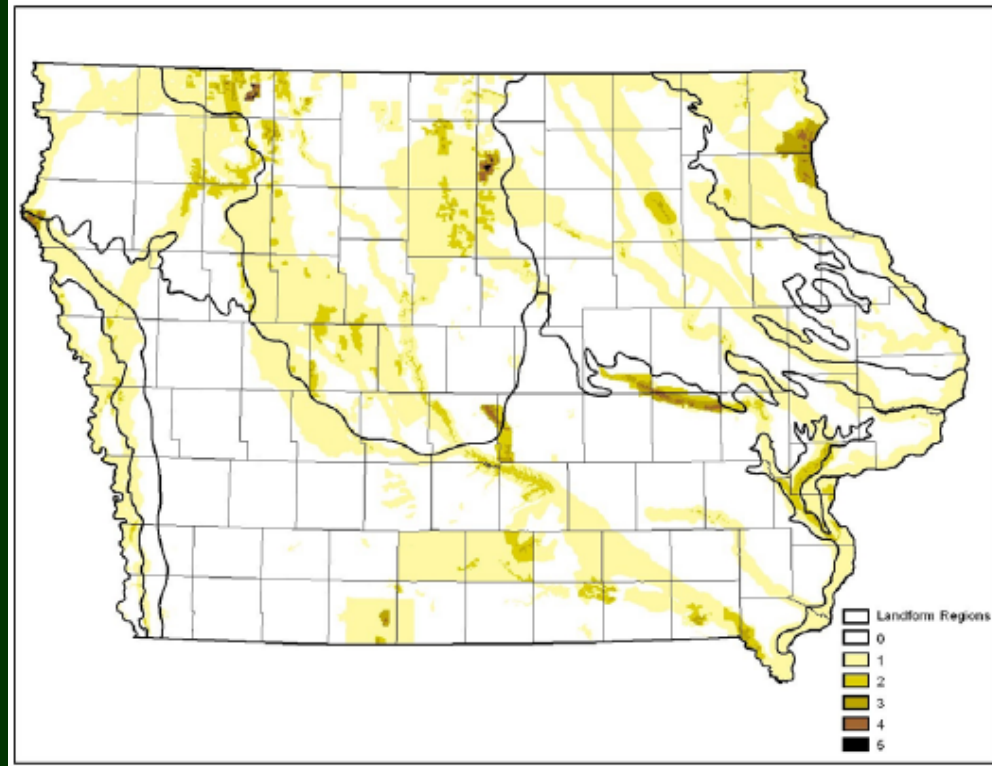


- Target easements to achieve desired wildlife and habitat benefits, based on sound principles of reserve design, patch size, and long-term viability
- Restoration / enhancement / stewardship funding for new easements
- Specific tool for several conservation opportunity areas

# Iowa: Priority Areas



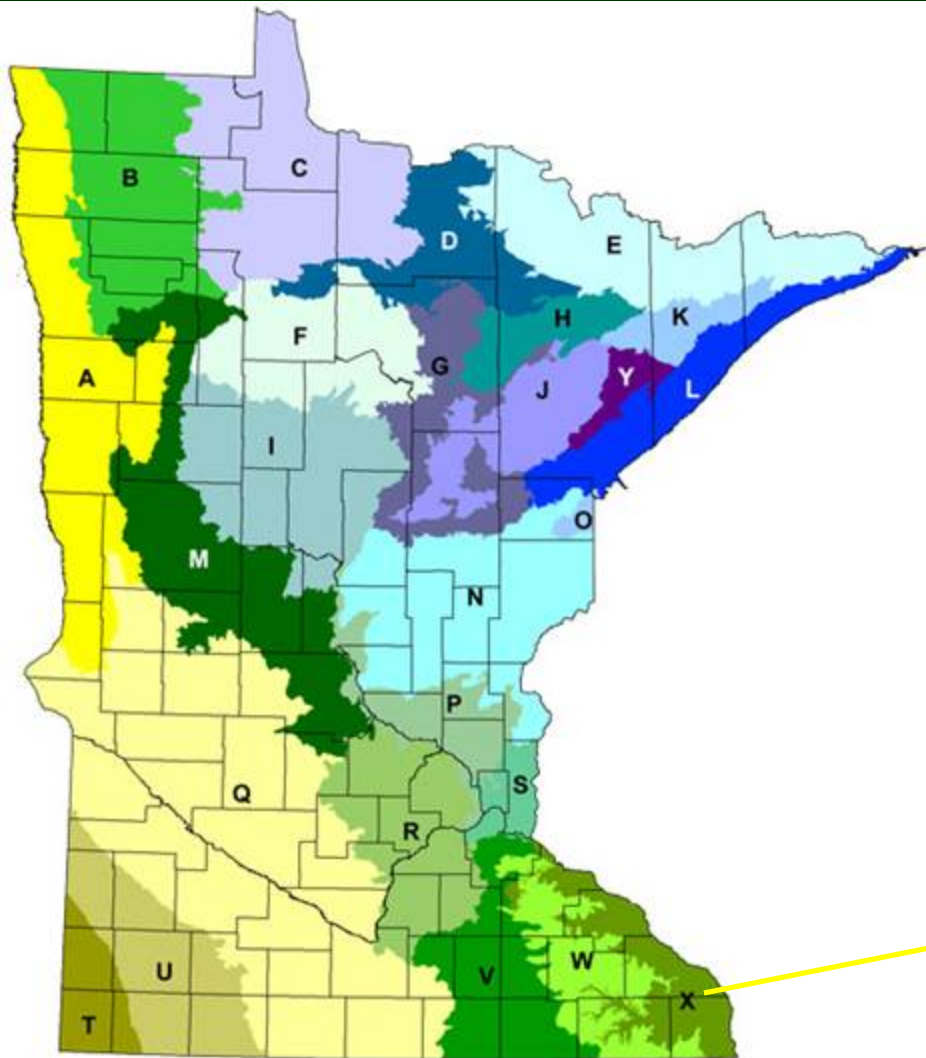
Map 8-17. High Priority Areas for Cooperative Conservation Actions



Goal: By 2030, the amount of permanently protected wildlife habitat in Iowa will be doubled.

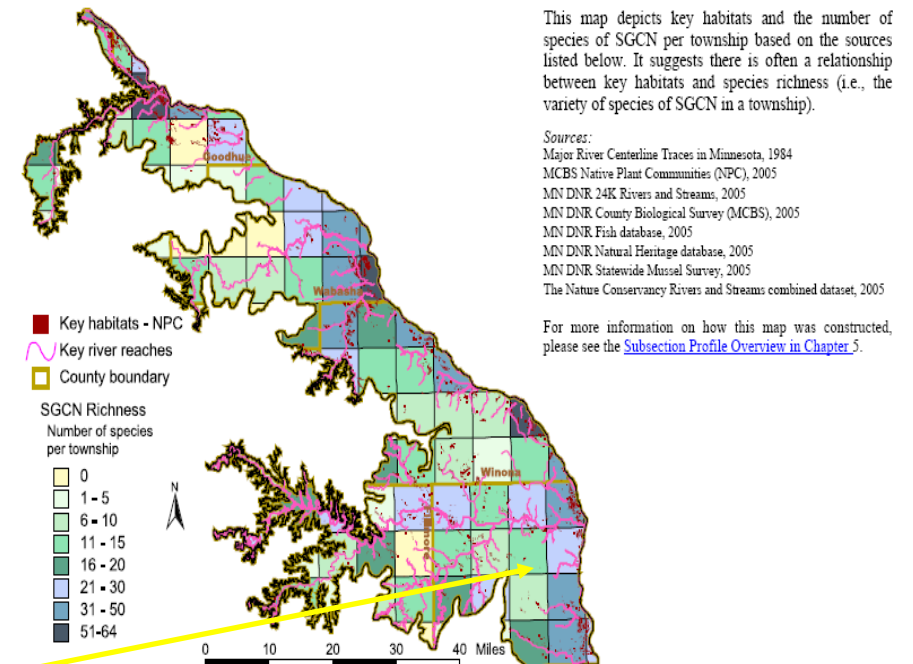
# Minnesota: Priorities

- Ecological provinces:  
25 “subsections”



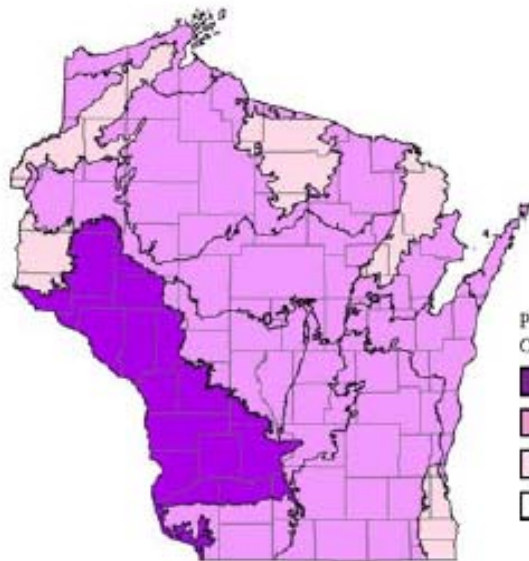
- X: Blufflands
- Distribution of key habitats and species richness by township
- Local partnerships identify conservation opportunities

## DISTRIBUTION OF KEY HABITATS AND SPECIES RICHNESS BY TOWNSHIP



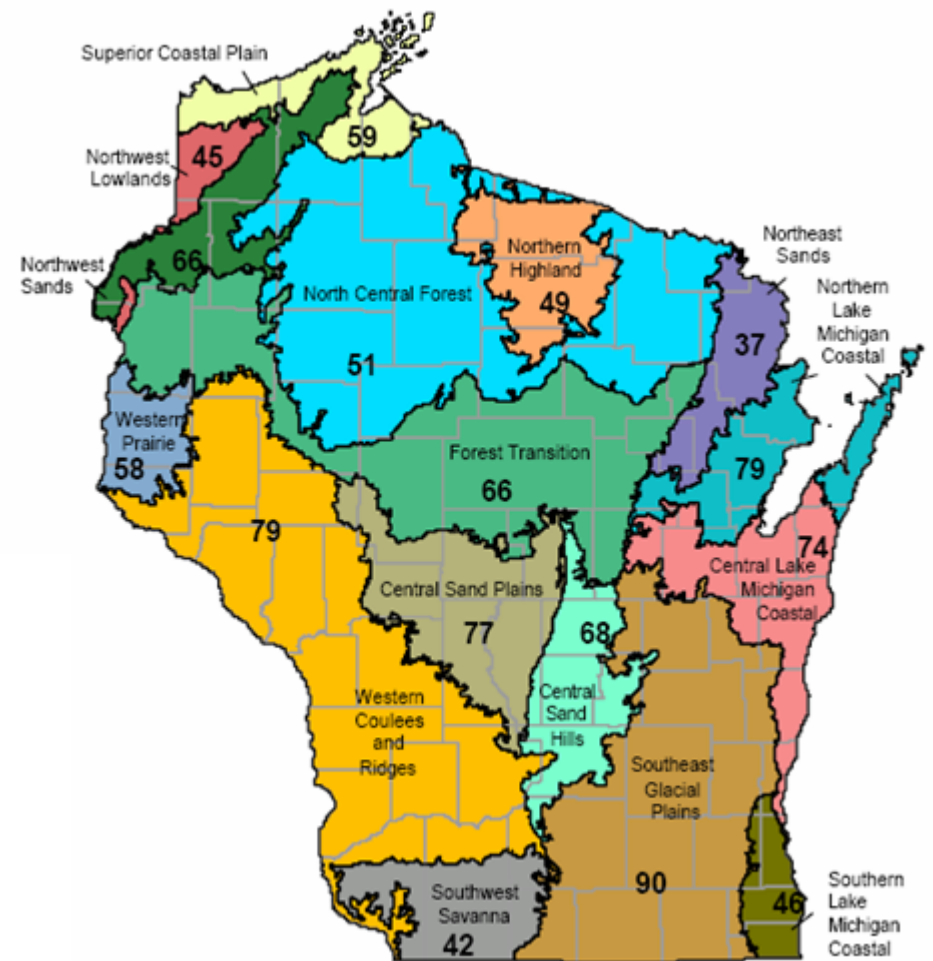
# Wisconsin

- Ecological Landscapes
- Species Distribution by Landscape



Probability of Occurrence

- High
- Moderate
- Low
- Absent



Living Lands Project



# Wisconsin Land Legacy



# Conclusions

- Land uses that impact habitat will continue to put species at risk
- ESA implementation will continue to be controversial, upstream solutions are needed
- Numerous plans and tools exist in each state, including a comprehensive wildlife conservation plan, with potential to provide strategic direction for wildlife protection and public benefits
- Opportunities for land trust involvement in strategic habitat protection, restoration, policy and funding

# What Can Land Trusts Do?

- Learn about your state wildlife action plan or other regional/statewide biodiversity plans
- 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

**For more information:**

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

**[www.biodiversitypartners.org](http://www.biodiversitypartners.org)**

**Jeff Lerner**

**Director, Conservation Planning**

**202-772-0291**

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



**Living Lands Project**



# Blufflands Alliance

