





Defenders of Wildlife

- Mission: to protect native wild animals and plants in their natural habitats, with a focus on conserving biological diversity
- Focus: conservation policy and incentives for private lands
- Approach: collaboration, diverse partnerships







Outline of Talk



- Living Lands Project
- Strategic Conservation Planning for Biodiversity
- State Wildlife Action Plans
- Funding for Biodiversity Conservation
- Future Opportunities









Living Lands Project











- Increase the capacity of land trusts to enhance, restore, and protect wildlife habitat and biodiversity values
- First year of multi-year project
- Partnership with LTA
- Focus on easements







Biodiversity (Biological Diversity)



- The variety of life and natural processes:
 - Species
 - Genetic variation
 - Communities, ecosystems
 - Predation, symbiosis, etc.
 - Flood, fire, etc.







Why is Biodiversity Important?



- Balance of nature / natural processes
- Many species at risk or in decline
- Natural heritage and legacy
- Protection cheaper than recovery
- Clean air / water, food, medicine, recreation







Living Lands: Why Now?



- Standard 8: Evaluating and Selecting Conservation Projects
 - A. Identifying focus areas
 - B. Project selection and criteria
 - D. Public benefit of transactions
 - F. Documenting conservation value
 - G. Project planning
 - H. Evaluating the best conservation tool
 - I. Evaluating partnerships
- Standard 11: Conservation Easement Stewardship
 - D. Landowner relationships
 - E. Amendments







Living Lands: Why Now?



- Funders (public and private) want strategic planning and project selection
- IRS and the public want conservation donations to be worthy of a federal tax benefit







Opportunistic vs. Strategic

Opportunistic:

- Landowners are self-selected
- Landowners share values with land trust
- Projects are separate, scattered, not linked

Strategic:

- Identify highest priority conservation needs
- Seek opportunities to conserve these areas
- Projects linked to landscape-scale conservation





Life Cycle of a Land Trust

Stage	Activity	Approach	<u>Scale</u>
Stage 1 Forming	Need easements to prove concept	Opportunistic	Local
Stage 2 Progress	Criteria to accept easements	Opportunistic/ Proactive	Service Area
Stage 3 Mature	Accept and seek easements	Proactive	Service Area +
Stage 4 Advanced	Use many tools to create desired and permanent results	Strategic	Land- scape



Living Lands Survey



- Assessment phase: to determine the extent of local land trust work that contributes to biodiversity conservation
- Interviews with LTA staff, land trusts, conservation organizations
- Web survey, January 2006
 - Sent to ~800 land trusts
 - 135 responded (18%)
 - 28 states







Survey Responses



Their mission includes:

habitat	96%
biodiversity	66%

Most of their protected areas...

 have biodiversity conservation as a goal 	38%
 have a habitat management plan in place 	25%
 are managed for biodiversity 	29%
 are restored for biodiversity 	17%

Interested in increasing capacity...

Somewhat or very interested89%







Survey Responses



Barriers:

- Limited stewardship / monitoring funding
- Limited staff capacity
- Limited staff expertise
- Not a priority for funders
- Not a local community priority
- Uninterested landowners











- Assistance (or training) needs:
 - Conservation planning
 - Resource management
 - Species management
 - Restoration
 - Monitoring
 - Grants
 - Partnering / merging for effectiveness











Have used federal funding 51%

16 federal programs listed

Program not used70-90%

Program important**0-17%**

Help tap into federal funding

- Knowledge of sources
- Grant-writing
- Matching funds
- Conservation planning
- Management or restoration skills
- Closer relationships with NRCS or SWCD









Strategic Conservation Planning for Biodiversity









Landscape-level Planning

- Identify high priorities in your area from landscape level priorities:
 - Integrate priorities from an existing state or regional habitat conservation plan
 - Many already exist (TNC, SWAP, GAP, NH, land trust?)
 - If a good plan already exists, don't invent a new one!!







Landscape-level Planning



- If you develop a new landscape-level habitat conservation plan...
- Include partners and regional / statewide perspective
- Focus on:
 - At-risk / rare habitats
 - Habitats for multiple species, including at-risk species
 - Functioning ecosystems







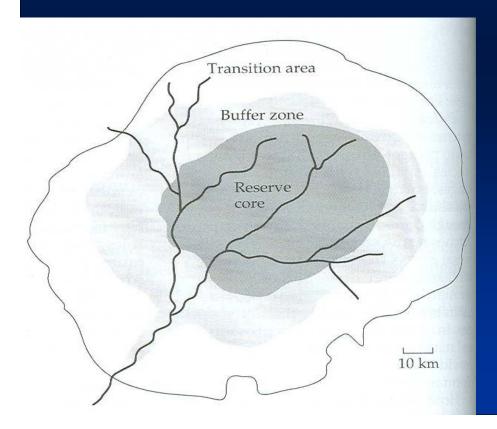
Site Selection

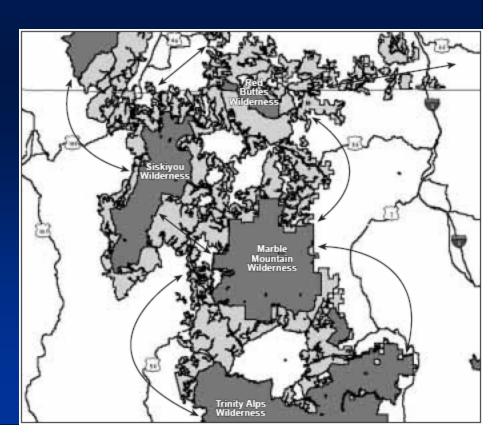


Find sites in your area that fit into landscape-scale priorities

Core, buffer, and transition areas

Core, buffer, and connectivity areas









- Inventory species, habitats, conditions:
 - Start with: What's there now?
 - Historical context: What was there?
 - Landscape context: What's nearby?









- Goal: functioning ecosystems with diverse native species
- How: restoration or management to...
 - Restore or enhance habitat / native vegetation
 - Add missing structural elements
 - Control invasive species
 - Remove barriers / constraints
 - Mimic or restore natural processes









- Habitat restoration and management on easement lands
 - Easement:
 - Refer to a management plan?
 - Affirmative commitments?
 - Landowner: education / resources / goals
 - Other partners
 - Funding









- Improving biodiversity values on existing easements
 - Prioritize effort based on value of opportunity
 - Use existing or new inventory to identify at-risk species and priority habitats
 - Easement:
 - Refer to a management plan?
 - Affirmative commitments?
 - Landowner: education / resources / goals
 - Other partners
- − Funding







State Wildlife Action Plans









- Brand new, all 50 states
- Required for states to continue receiving State Wildlife Grants
- Approved by U.S. Fish and Wildlife Service
- Originally "State Comprehensive Wildlife Strategies" (some states use other names)
- Focus is "Species of Greatest Conservation Need" and their habitats









•	At-risk species	*
•	At-risk habitats	*
•	Threats	*
•	Conservation actions	*
•	Monitoring	*
•	Review	
•	Coordination	*
•	Public Participation	*









State Wildlife Action Plans: Other Useful Parts



- Ecoregions / watersheds
- Historic distribution of habitats
- Invasive species
- Restoration actions
- Other...







State Wildlife Action Plans: Easements



 44 states include easements in "conservation actions"

 All Northwest states mention easements in conservation actions







State Wildlife Action Plans: Maps and Priorities

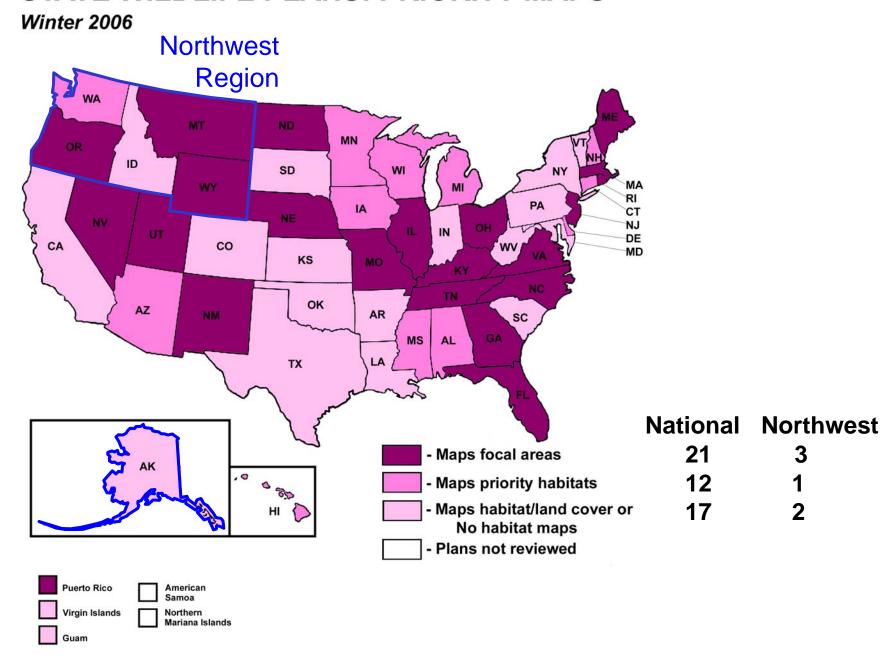


- Why map priorities?
 - Conservation planning is a spatial exercise
 - Maps help partners work together
- "Priority habitats" = at-risk or sensitive
- "Focal areas" = subset of at-risk habitats;
 best conservation opportunities (ecological significance, threats, opportunities)





STATE WILDLIFE PLANS: PRIORITY MAPS





Alaska: Overview



- www.sf.adfg.state.ak.us/statewide/ngplan
- 300 at-risk species
 - 74 "featured species"
 - no plants
- Did not map priorities:
 - Key habitats identified but not mapped
 - No focus areas identified











Alaska: Easements

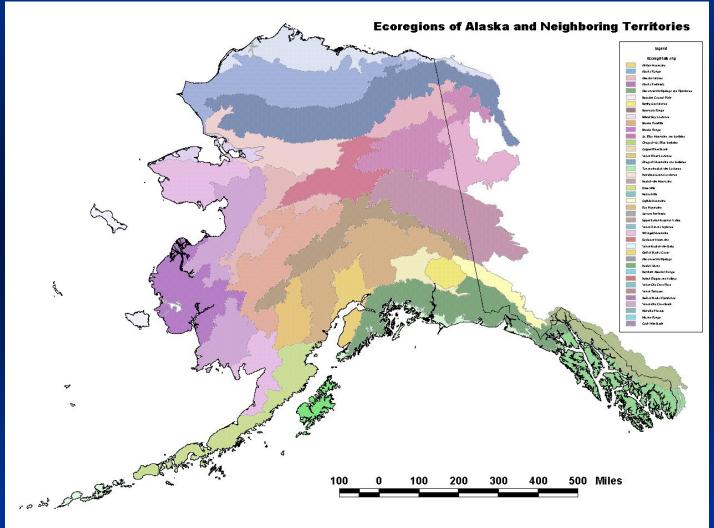
 Consider establishing a dedicated funding source for the purchase of conservation easements important for restoring or maintaining atrisk wildlife populations







Alaska: 32 Ecoregions











Washington: Overview

- www.wdfw.wa.gov/wlm/cwcs
- 200 at-risk species (no plants)
- Mapped priorities:
 - At-risk habitats identified but not mapped
 - Priority areas identified and mapped for some ecoregions
- Easements = conservation tool







Washington: Easements

- Conservation of biodiversity on private lands needs many voluntary tools
 - Acquisition (including easements)
 - Incentives
- Funding for acquiring habitat, including conservation easements, is very limited
- Easements listed dozens of times in conservation actions for ecoregions, habitats, and species

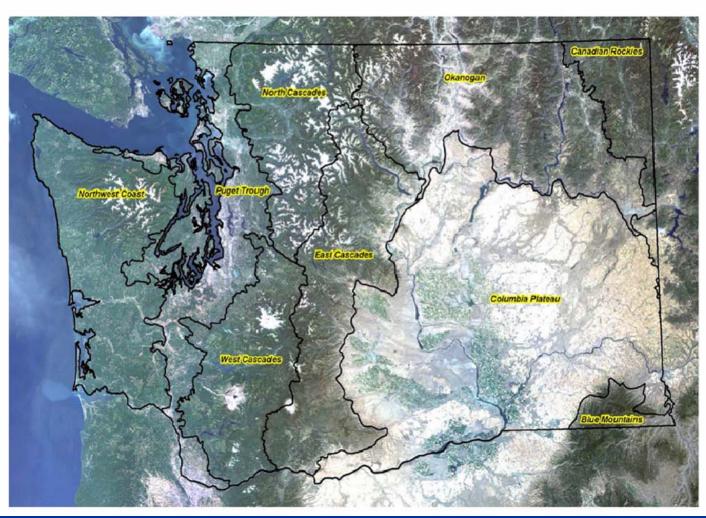






Washington: 9 Ecoregions

Ecoregions within Washington State







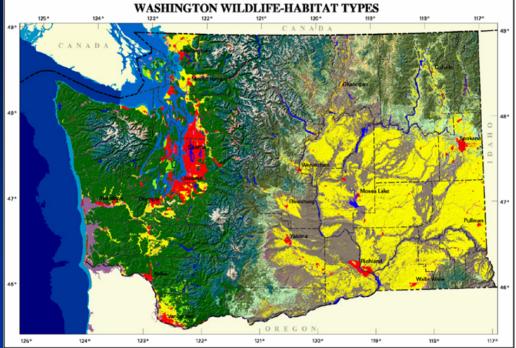
Washington: Historic and Current Habitats



Washington Wildlife-Habitat Types Forest & Woodland Habitats **Developed Habitats** Agriculture, Pasture & Mixed Environs Westside Lowland Conifer-Hardwood Forest Urban & Mixed Environs Westside Oak & Dry Douglas-fir Forest & Woodlands Southwest Oregon Mixed Conifer-Hardwood Forest **Aquatic & Riparian Habitats** Montane Mixed Conifer Forest Lakes, Rivers, Ponds & Reservoirs Eastside (Interior) Mixed Conifer Forest Herbaceous Wetlands Western Juniper & Mountain Mahogany Woodlands Westside Riparian - Wetlands Lodgepole Pine Forest & Woodlands Montane Coniferous Wetlands Ponderosa Pine & Eastside White Oak Forest & Woodlands Eastside (Interior) Riparian - Wetlands Upland Aspen Forest **Maritime & Coastal Habitats** Subalpine Parklands Coastal Dunes & Beaches **Grassland & Shrubland Habitats** Coastal Headlands & Islets Alpine Grasslands & Shrublands Bays & Estuaries Westside Grasslands Inland Marine Deeper Waters Ceanothus-Manzanita Shrublands Marine Nearshore Eastside (Interior) Canyon Shrublands Marine Shelf Eastside (Interior) Grasslands Shrub-steppe Dwarf Shrub-steppe Desert Playa & Salt Scrub

son and cartography by Chris Kilsgaard and Charley Barrett,

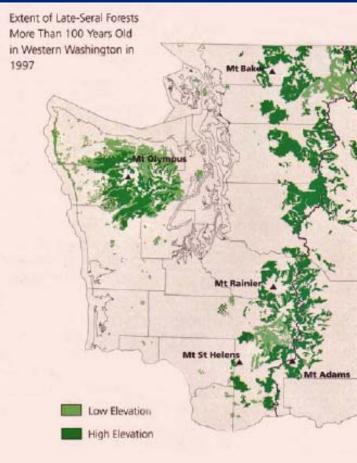
nington Shrub-Steppe data provided by John E. Jacobson, Washington Dept. of Fish and Wildlife





W. Washington: Forest Fragmentation











Washington: 20 Priority Habitats



Priority One

- Bays and Estuaries
- Eastside (Interior) Grasslands
- Shrub-steppe
- Eastside (Interior) Riparian-Wetlands
- Herbaceous Wetlands
- Marine Nearshore
- Ponderosa Pine Forest and Woodlands (includes Eastside Oak Woodlands)
- Westside Grasslands
- Westside Lowland Conifer-Hardwood (Mature) Forest
- Westside Riparian-Wetlands

Priority Two

- Coastal Dunes and Beaches
- Coastal Headlands and Islets
- Eastside (Interior) Mixed
 Conifer Forest
- Inland Marine Deeper Water (Puget Sound)
- Lodgepole Pine Forest and Woodlands
- Montane Coniferous Wetlands
- Montane Mixed Conifer Forest
- Subalpine Parkland
- Upland Aspen Forest
- Westside Oak and Dry Douglasfir Forest and Woodlands

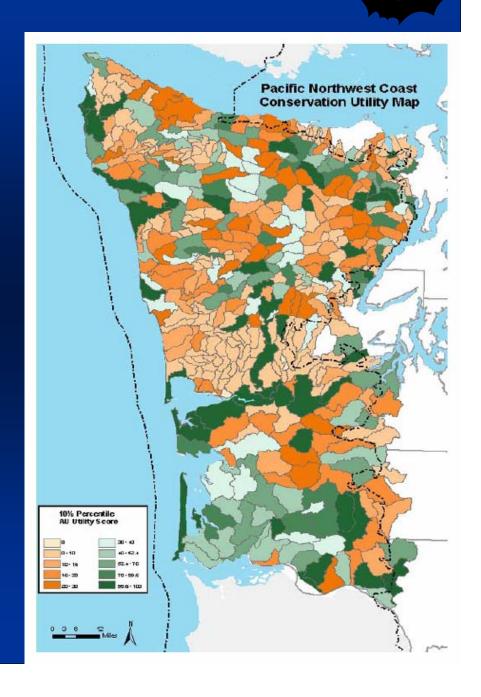






Washington: Conservation Utility Areas

- Priorities based on
 - Biodiversity value
 - Suitability for conservation
- Use for prioritizing funding for acquisition (easements) and restoration
- Not complete for all ecoregions









- www.dfw.state.or.us/conservationstrategy
- 286 at-risk species (including plants)
- Mapped priorities:
 - At-risk habitats (by ecoregion)
 - Conservation Opportunity Areas (by ecoregion)
 - Tied to funding opportunities (e.g. LIP)
 - Easements = conservation tool

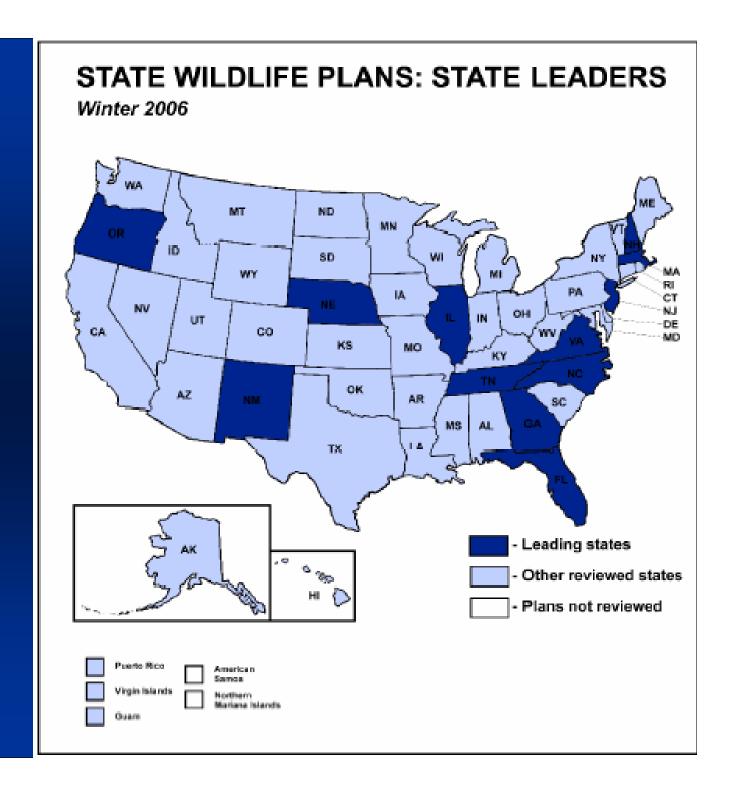




All plans reviewed by DOW

Best 12 plans in US









Oregon: Easements

- Land trusts included in process
- One of many voluntary conservation tools discussed
- Recommends funding for easements:
 - Preparation
 - Monitoring
 - Stewardship
 - Land management
 - Defense







Oregon: At-Risk Habitats



- Aspen woodlands
- Coastal dunes
- Estuaries
- Freshwater aquatic habitats
- Grasslands
- Late successional conifer forests
- Oak woodlands and savannas
- Ponderosa pine woodlands
- Riparian habitats
- Sagebrush steppe and shrublands
- Wetlands
- Specialized and local habitats

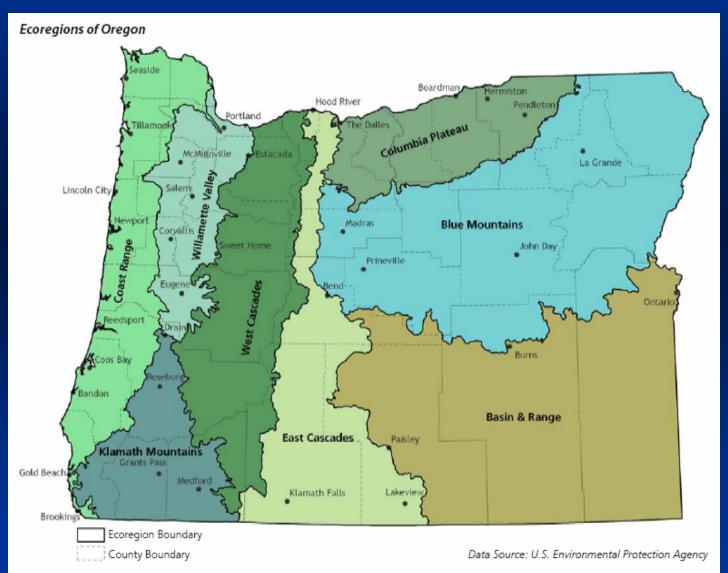






Oregon: 8 Ecoregions





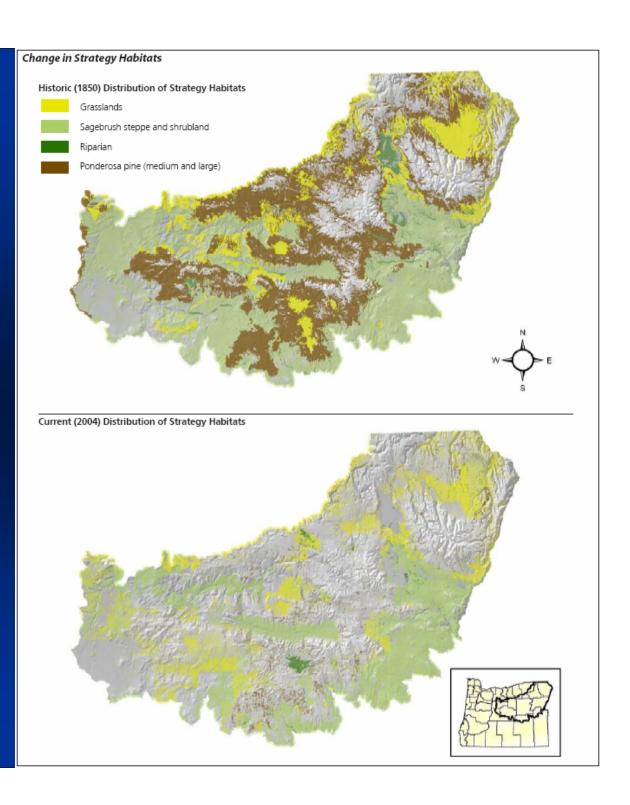




Oregon: At-Risk Habitats

- Blue Mountains
- Historic and current distribution

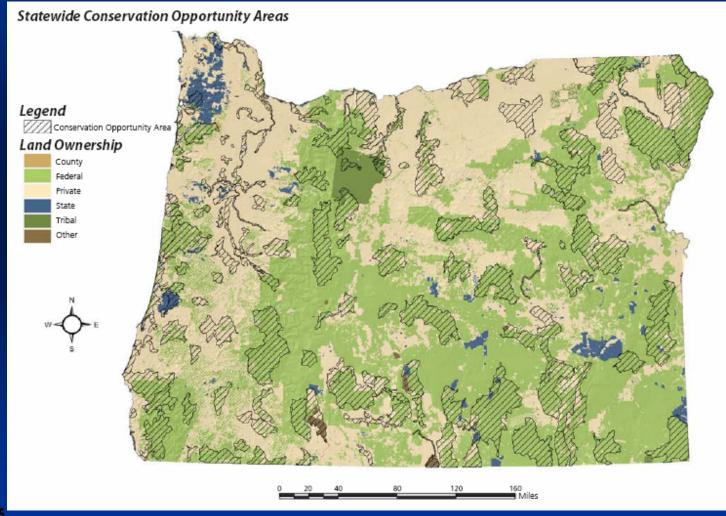






Oregon: Conservation Opportunity Areas















- ODFW online mapping tool for Conservation Opportunity Areas
 - http://nrimp.dfw.state.or.us/website/coaexplorer
- Online registry of conservation actions
 - Under development
- Oregon Explorer website (Willamette, North Coast)
 - www.oregonexplorer.info







Idaho: Overview



- www.fishandgame.idaho.gov/cms/tech/CDC (Click on Wildlife Strategy)
- 229 at-risk species (no plants)
- Priority areas
 - 15 priority habitats identified but not mapped
 - No focus areas
- Easements = conservation tools







Idaho: Easements



- Key conservation partners listed and described:
 - 10 local or regional land trusts
 - TNC and RMEF
- Easements mentioned in 12 specific conservation actions for species, habitats, or ecological sections

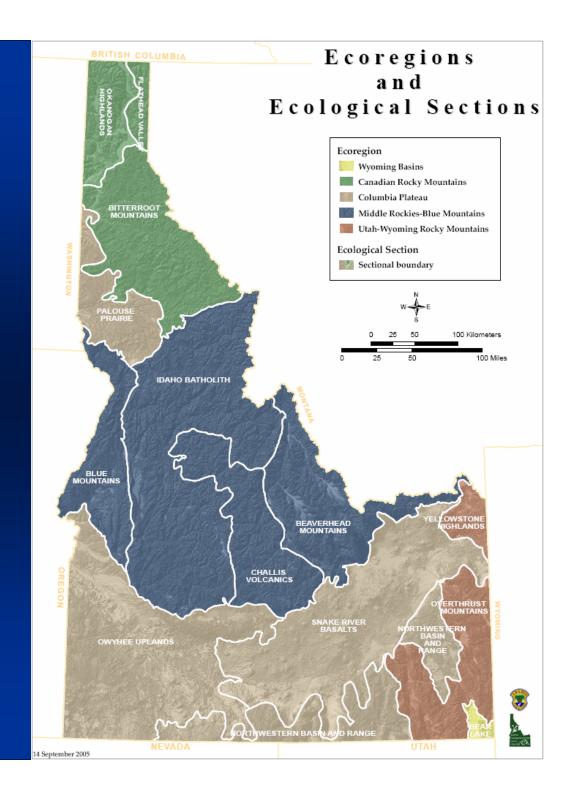






Idaho: Ecoregions

- 5 ecoregions
- 14 ecological sections

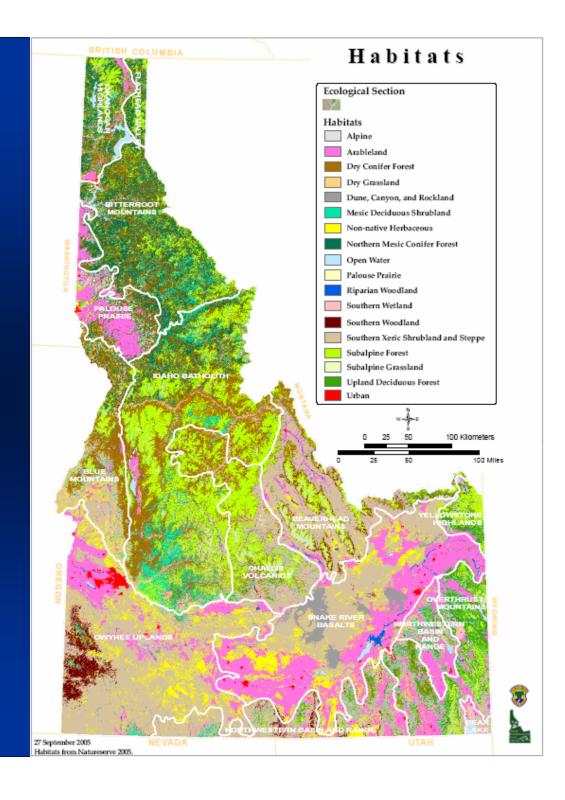






Idaho: Habitats

Priority habitats not mapped



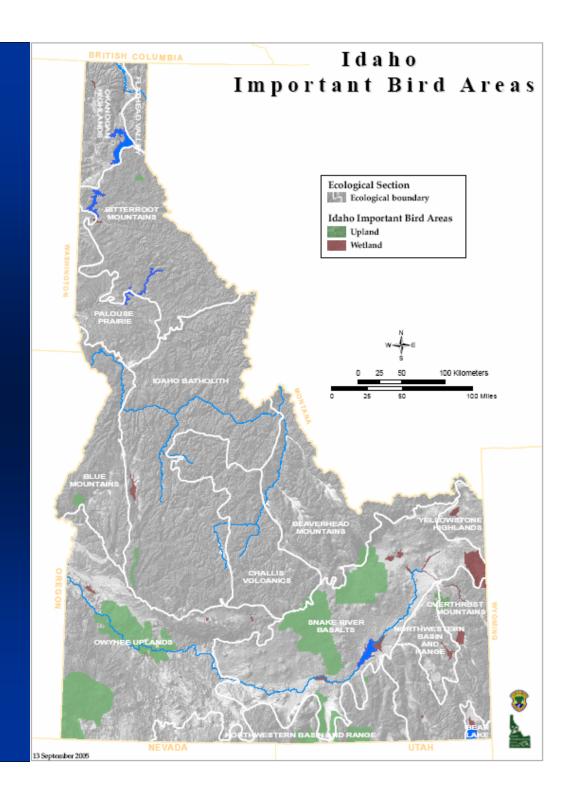




Idaho: Mapped Priorities

- Important Bird Areas
- Included without context or recommendations
- No other mapped priorities







Montana: Overview



- www.fwp.mt.gov/wildthings/cfwcs
- 60 at-risk species (no plants)
- Priorities mapped:
 - Focus areas mapped
 - 7 priority habitats mapped??
- Easements = conservation action







Montana: Easements



 Easements are included in conservation actions for priority habitats





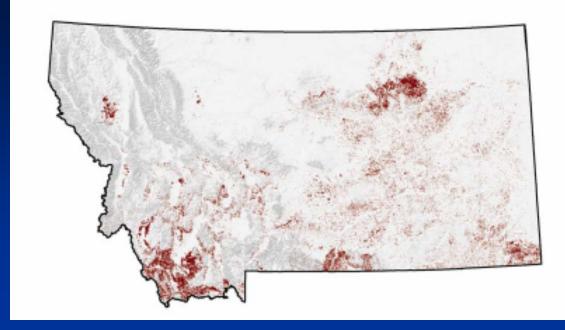


Montana: Priority Habitats

- Grassland Complexes
- Mixed Broadleaf Forests
- Mixed Shrub/Grass Associations

- Riparian and Wetland
- Sagebrush and Salt Flats
- Mountain Streams
- Prairie Streams

Sagebrush and Salt Flats (5,625,886 acres or 5.97% of Montana)







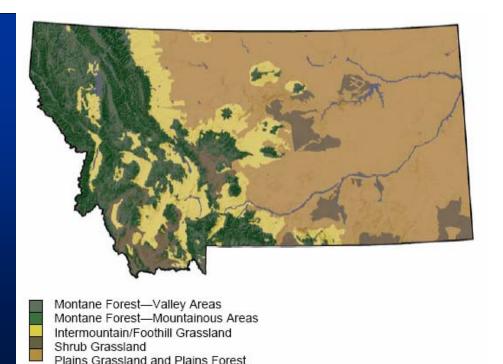


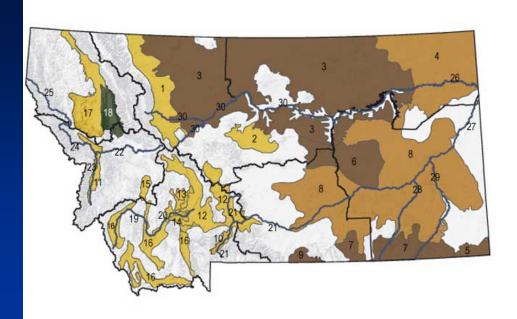
Montana: Ecotypes

5 ecotypes

Focus areas by ecotype

Profile of each focus area











- http://gf.state.wy.us/wildlife/CompConvStrategy
- 279 at-risk species (no plants)
- Mapped priorities:
 - Key habitats identified but not mapped
 - Focus areas mapped
- Easements = conservation tool











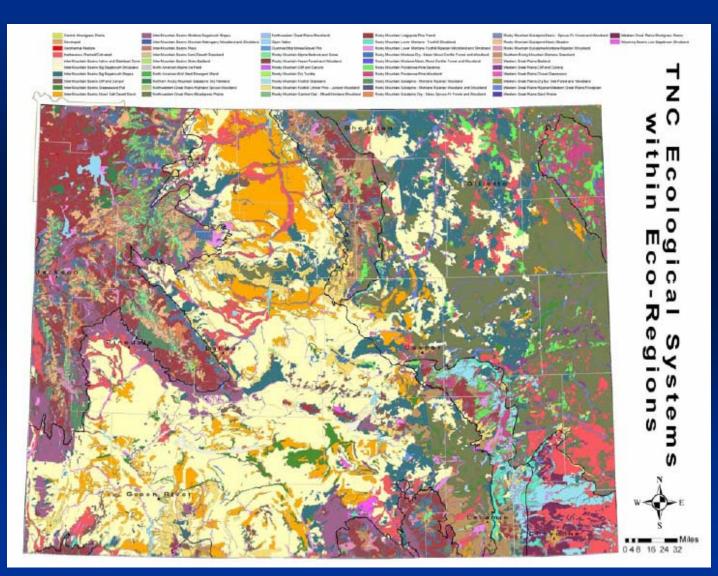
 Easements identified as a conservation tool for riparian areas and wetlands







Wyoming: 7 Ecoregions



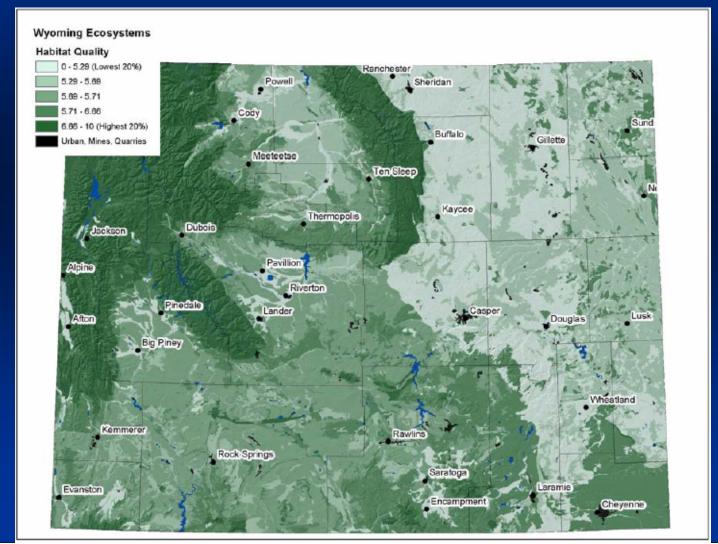






Wyoming: Habitat Quality

Habitat intactness





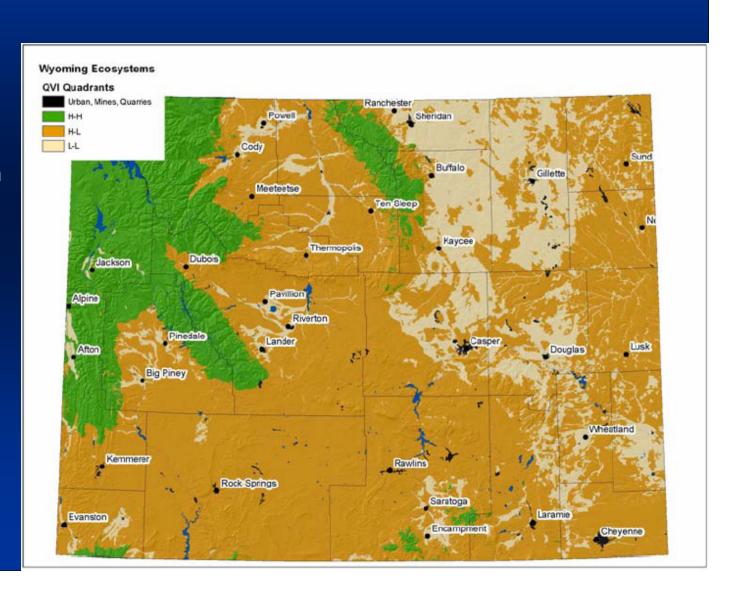




Wyoming: Conservation Opportunities

- Green
 - High quality
 - High Protection
- Brown
 - High quality
 - Low protection
- Tan
 - Low quality
 - Low protection

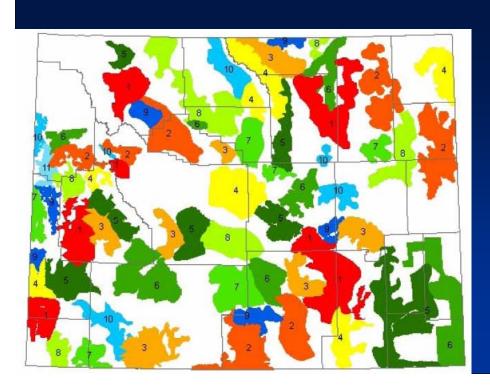


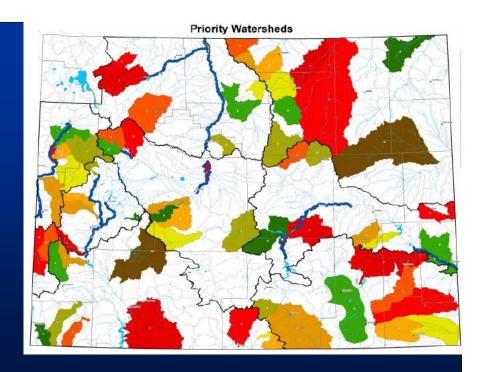


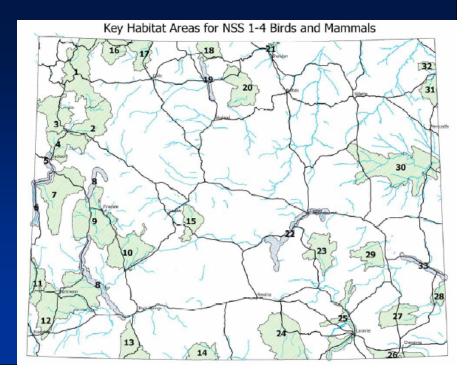


Wyoming: Priority Conservation Areas

- Strategic Habitat Plan (2001)
- Bird / mammal priority areas
- Priority watersheds
- NEED TO INTEGRATE









Other Habitat Conservation Planning Efforts

- The Nature Conservancy ecoregional assessments, portfolio sites
- Audubon Important Bird Areas
- Conservation International Biodiversity Hotspots
- Gap Analysis Program (GAP)









Funding for Biodiversity Conservation

(Federal Programs)

www.biodiversitypartners.org/incentives







Federal Incentive Programs



- Purchase conservation easements
- Cost share (restoration, conservation)
- Rental payments
- Incentive / bonus payments



Technical assistance





Easement Programs (NRCS)



- Emergency Watershed Protection Program (EWPP)
 - Floodplains after flooding, restoration too
 - Permanent
- Farm and Ranch Lands Protection Program (FRLP)
 - Agricultural lands
 - Permanent; held by land trust
- Grassland Reserve Program (GRP)
 - Grasslands vulnerable to conversion
 - 30 year or permanent
- Wetlands Reserve Program (WRP)
 - Restore farmed wetlands
 - 30 year or permanent







Easement Programs (not NRCS)

- Healthy Forests Reserve Program (HFRP; USFS / NRCS)
 - Forests with at-risk species
 - 10, 30, 99 year easements
- Forest Legacy Program (FLP; USFS / states)
 - Environmentally sensitive forest land
 - Permanent easement or acquisition
- Landowner Incentive Program (LIP; USFWS / states)
 - Listed and at-risk species, multiple species
 - Long term or permanent benefits → can be used for easements
 - Some states link to State Wildlife Action Plan









Cost Share Programs (NRCS)

- Environmental Quality Incentives Program (EQIP)
 - 4 priorities include at-risk species habitat
 - Focus is livestock operations and water quality
- Wildlife Habitat Incentives Program (WHIP)
 - All private land and some public land are eligible
 - State NRCS develops priorities







Cost Share Programs (USFWS)



- North American Wetlands Conservation Act Grants Program (NAWCA)
- Partners for Fish and Wildlife (PFW)
- Private Stewardship Program (PSP)







Cost Share Programs (USFS)



- Forest Land Enhancement Program (FLEP)
- Healthy Forests Reserve Program (HFRP)







Rental Programs (NRCS)



- Conservation Reserve Program (CRP)
 - Highly erodible lands
 - Recently expanded rare and declining habitats
- Conservation Reserve Enhancement Program (CREP)
 - State / federal partnership; not all states
 - Often for riparian restoration for habitat and/or water quality











- Rewards ongoing stewardship on producing land
- Whole-farm approach
- Available to all producers (any size, crop)
- Offered by watershed
- Tier III requires wildlife component







Challenges



- Programs opportunistic
- Programs complex
 - Many programs, many agencies
 - Applications complex
- Lack of funding
 - Demand > funding
 - Technical assistance
 - Ag > forestry
- Lack of knowledge of programs
 - Landowners
 - Land trusts



Restoration: landowner pays up front







Future Opportunities









Opportunities

- Partnerships with State Wildlife Action Plans
- NRCS State Technical Advisory Committees
 - Is a local land trust on yours?
- Oregon Sustainable Agriculture Resource Center (OSARC)
 - one-stop shopping for programs, regulations, certification
 - model for other states









Living Lands Project: Opportunities



- Case studies
- Pilot projects (2007, 2008)
 - Funding
 - Assistance
- Trainings
 - Rally 2006 and 2007, Biodiversity Track
 - LTA Leadership course
- Revolving fund for up-front cost of restoration
- Other resources
 - Sample easement language
 - Sample conservation plans
 - Online resources, links







Closing Thoughts on Biodiversity Conservation...

 Identify priorities at the landscape level

 Restoration and management may be needed

 Living Lands Project: assistance and resources





