



# F01: Pilot Projects for Biodiversity Conservation

LTA Rally 2007

**Living Lands Project  
Defenders of Wildlife**



# LIVING LANDS:

Helping Land Trusts  
Conserve Biodiversity



# 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.



# Living Lands: Why now?

- Standards 8, 11 and 12
- 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
- State Wildlife Action Plans



# Survey Responses

- Assistance or training needs:
  - Conservation planning
  - Habitat restoration and management
  - Monitoring
  - Identifying funding sources



# Living Lands Resources

- Land Trust Alliance regional conferences and Rally (2006, 2007, 2008)
- Written resources for land trusts:  
[www.defenders.org/livinglands](http://www.defenders.org/livinglands)
- Case studies
- Small grants for biodiversity pilot projects



# Pilot Projects Overview

- Purpose: to support and increase capacity of the land trust community to conserve biodiversity through technical and financial assistance.
- Types of projects considered:
  - capacity building
  - habitat restoration
  - remove a specific barrier to a project



# Pilot Project Overview cont'd

- Criteria summary:
  - Local, regional or statewide land trust
  - Up to \$10,000 for a biodiversity project
  - 1:2 match
  - 2 year grant period
  - Land must be permanently protected





# Pilot Projects

- Important dates
  - January 15, 2008 applications due
  - March 17, 2008 decisions made
  - May 5, 2008 grant period begins



# Pilot Projects

- Applications online
  - [www.defenders.org/livinglands](http://www.defenders.org/livinglands)
- Questions?
  - Aimee Weldon (Project Manager), [aweldon@defenders.org](mailto:aweldon@defenders.org)
  - 1130 17<sup>th</sup> St NW, Washington DC 20036
  - 202-682-9400



# 2007 Pilot Projects

- \$59,300 awarded to 7 land trusts
  - Greenbelt Land Trust, OR
  - Teton Regional Land Trust, ID
  - Nisqually Land Trust, WA
  - Washtenaw Land Trust, MI
  - Eastern Sierra Land Trust, CA
  - Taos Land Trust, NM
  - Sudbury Valley Trustees, MA

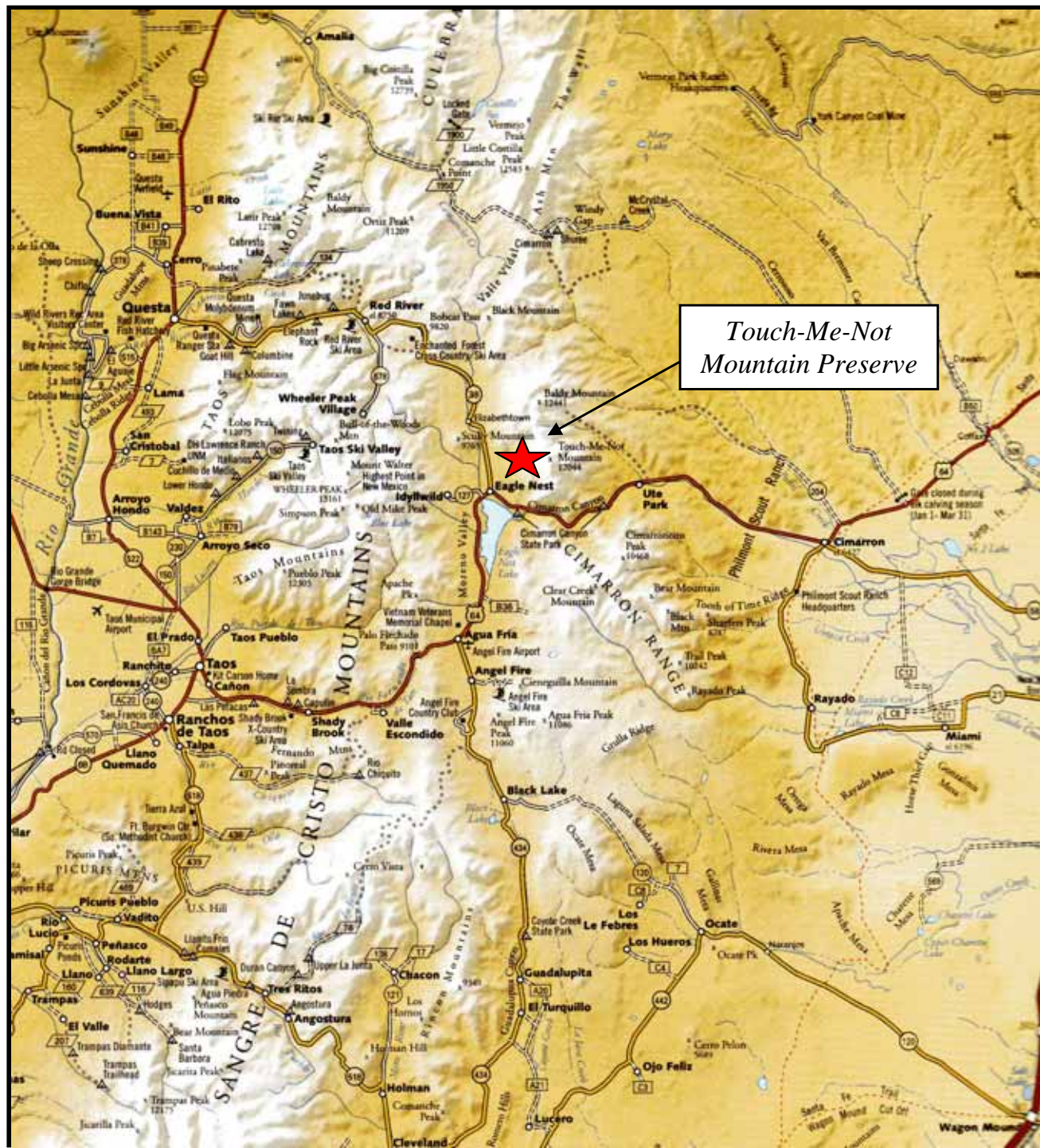


# *TAOS LAND TRUST*





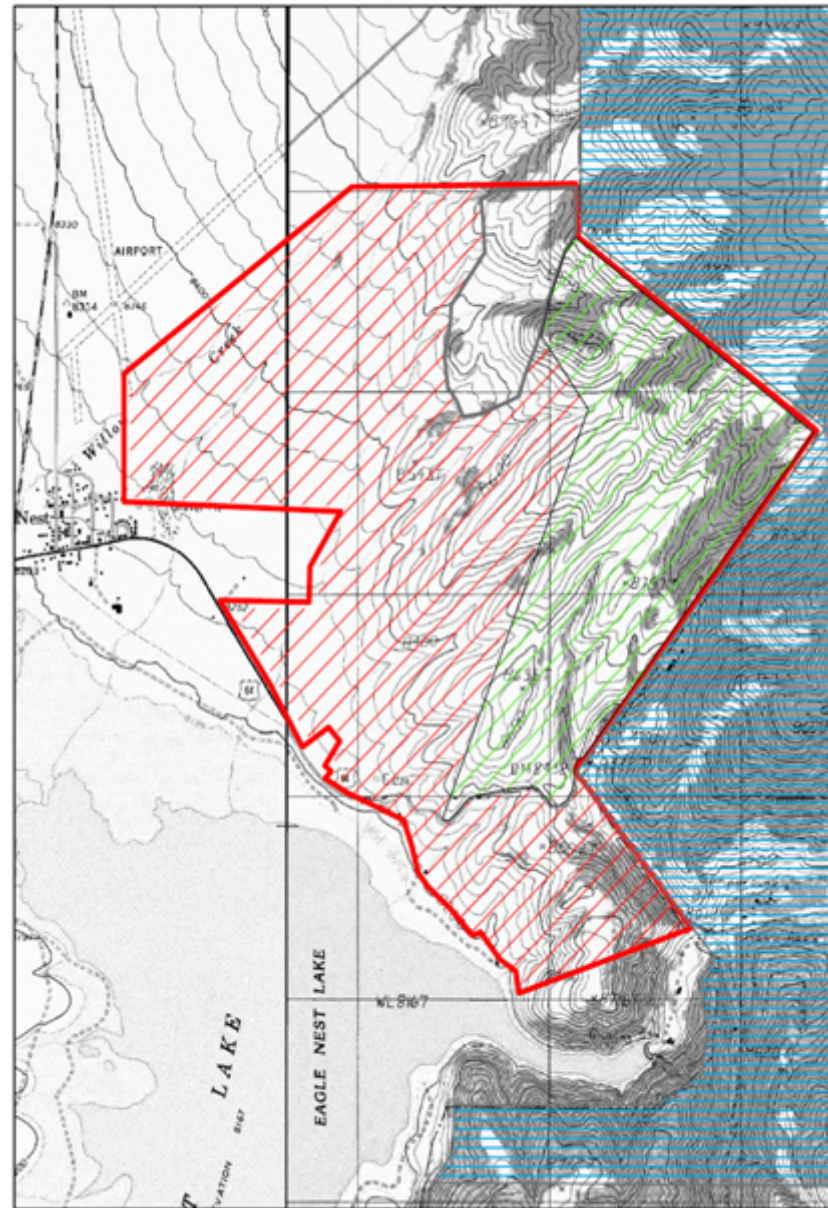
***Touch-Me-Not Mountain Preserve  
Eagle Nest, New Mexico***



*Touch-Me-Not  
Mountain Preserve*

# Touch-Me-Not Mountain Preserve

Eagle Nest, NM



-  Touch-Me-Not Mountain Preserve
  -  Existing Conservation Easement (Natural Habitat)
  -  Prospective Conservation Easement (Natural Habitat)
  -  Colin Neblett Wildlife Area
  -  Proposed Limited Residential Development
- \* These boundaries are all approximate





















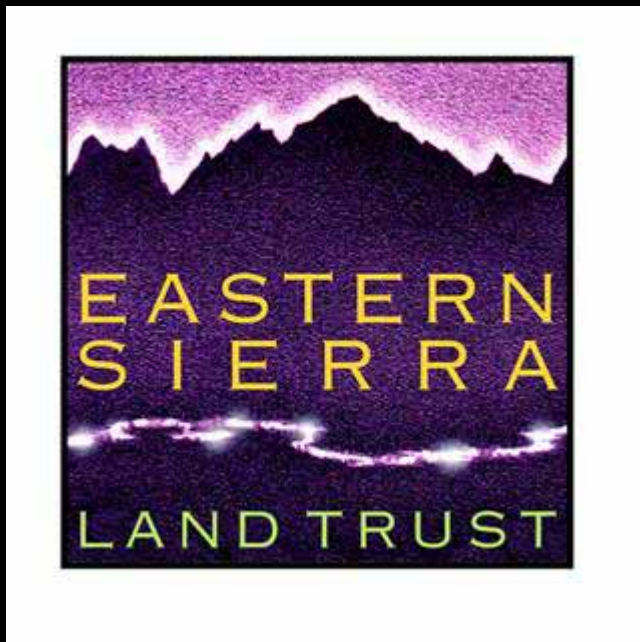




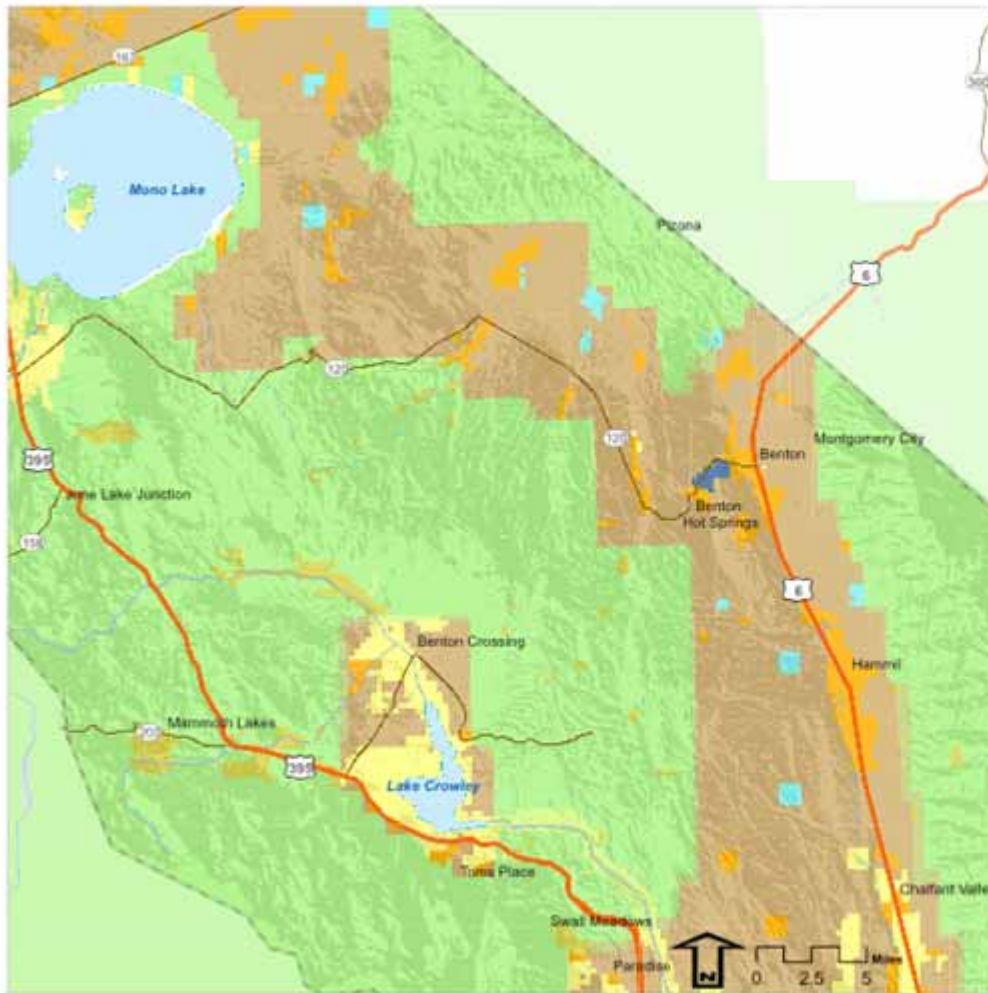
*Touch-Me-Not Mountain Preserve*  
*Eagle Nest, New Mexico*

# Preserving Special Resources in Mono County, CA

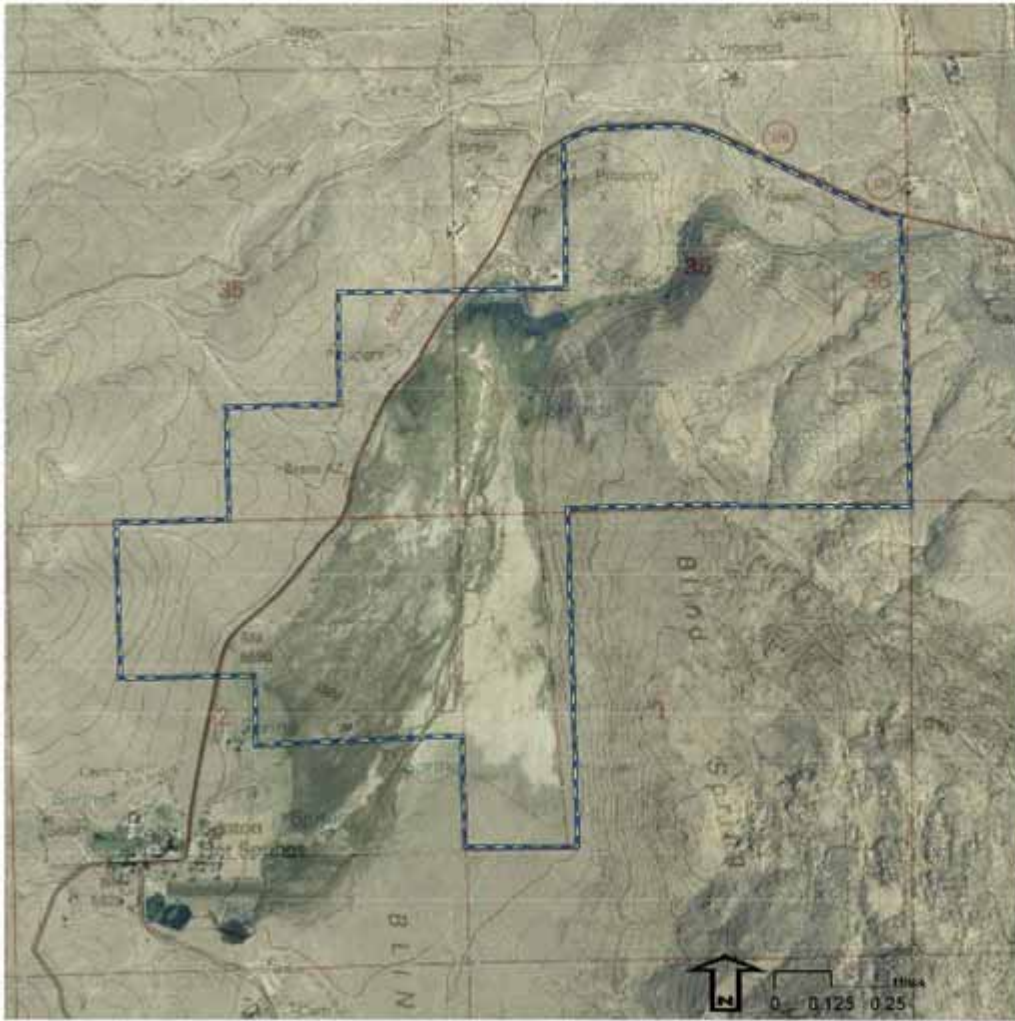
## *Benton Hot Springs Valley*







EXIST	<b>Benton Hot Springs Valley</b>
DOCUMENT	<b>N/A</b>
DATE	<b>September 24, 2007</b>
LEGEND	



PROJECT	<b>Benton Hot Springs Valley</b>
DATE	<b>N/A</b>
DATE	<b>September 24, 2007</b>
SCALE	







- CA Wildlife Action Plan recommends “agricultural and rangeland management practices that are compatible with wildlife and habitat conservation.”
- Mono County General Plan states that property should remain ag land and wildlife habitat



# Resources on the Property



- Agriculture
- Historic
- Wildlife
- Plants
- Wetlands
- Water
- Scenic



- 114 species of birds counted so far
- Bird list compiled by local Audubon Chapter



## Plant Habitats

- Sagebrush scrub
- Wet meadow
- Alkali meadow
- Ponds, springs and seeps
- Riparian



















# Goals and Tasks for the Project



- Learn what resources are on the property
- Create effective and efficient monitoring protocol based on experience with the property
- Utilize grazing to enhance habitat and biodiversity
- Educate and engage communities based on resources of the property

# Reserved Rights and Restrictions for Benton Hot Springs Valley Conservation Easement



- Landowner can continue to use and enjoy the property
- Limited eco-tourism activities
- No new roads, subdivision, or development
- Continued grazing as guided by an adaptive Conservation Plan
- No water export

# Conservation Plan for Grazing Management



- Collaboration with landowner to ensure that habitats and water resources are maintained
  - Timing of grazing
  - Number of cattle
  - Best management practices
  - Maintenance and monitoring of springs and wetlands
  - Invasive species control



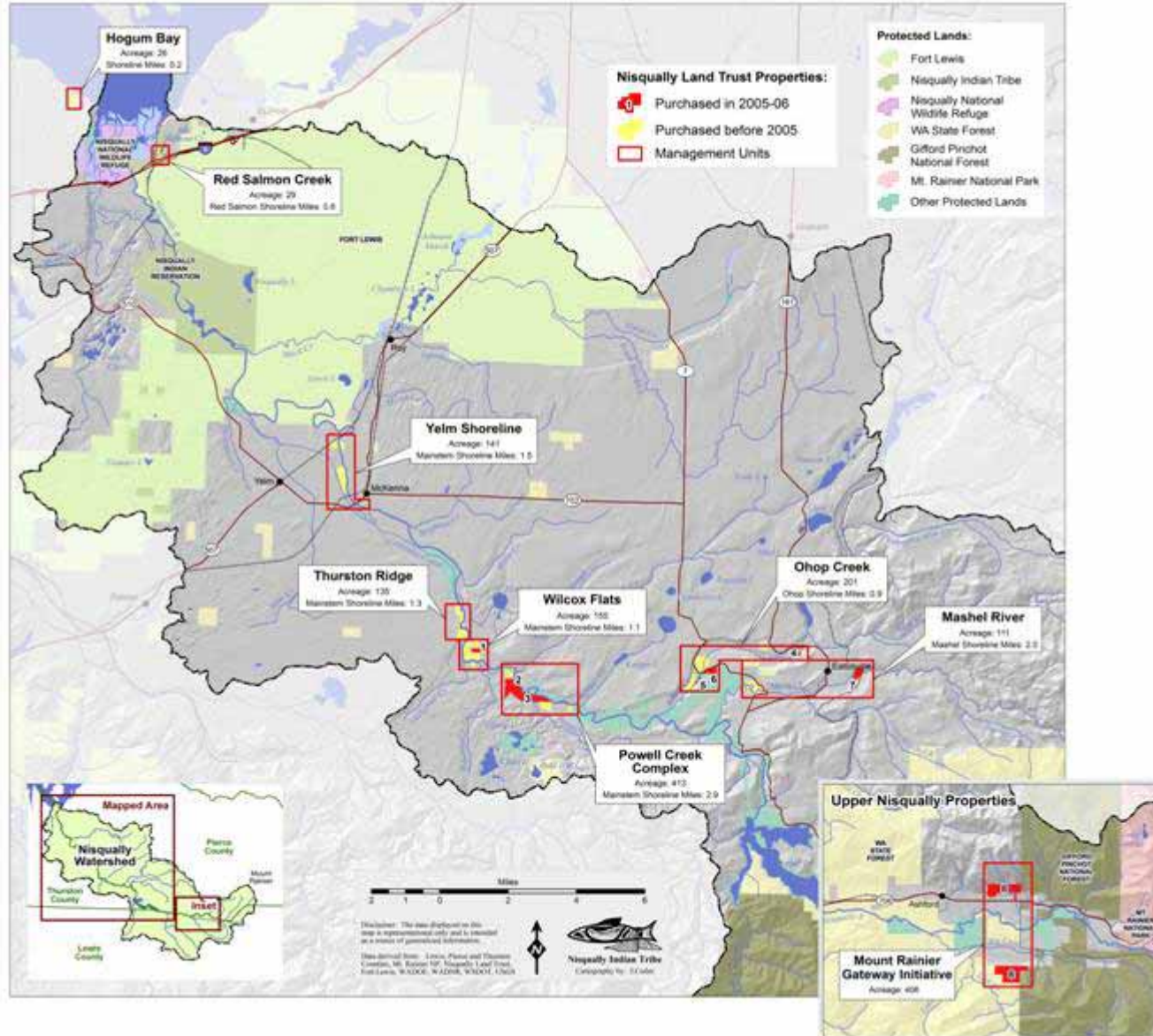
**Nisqually Land Trust  
Mount Rainier Gateway  
Initiative**

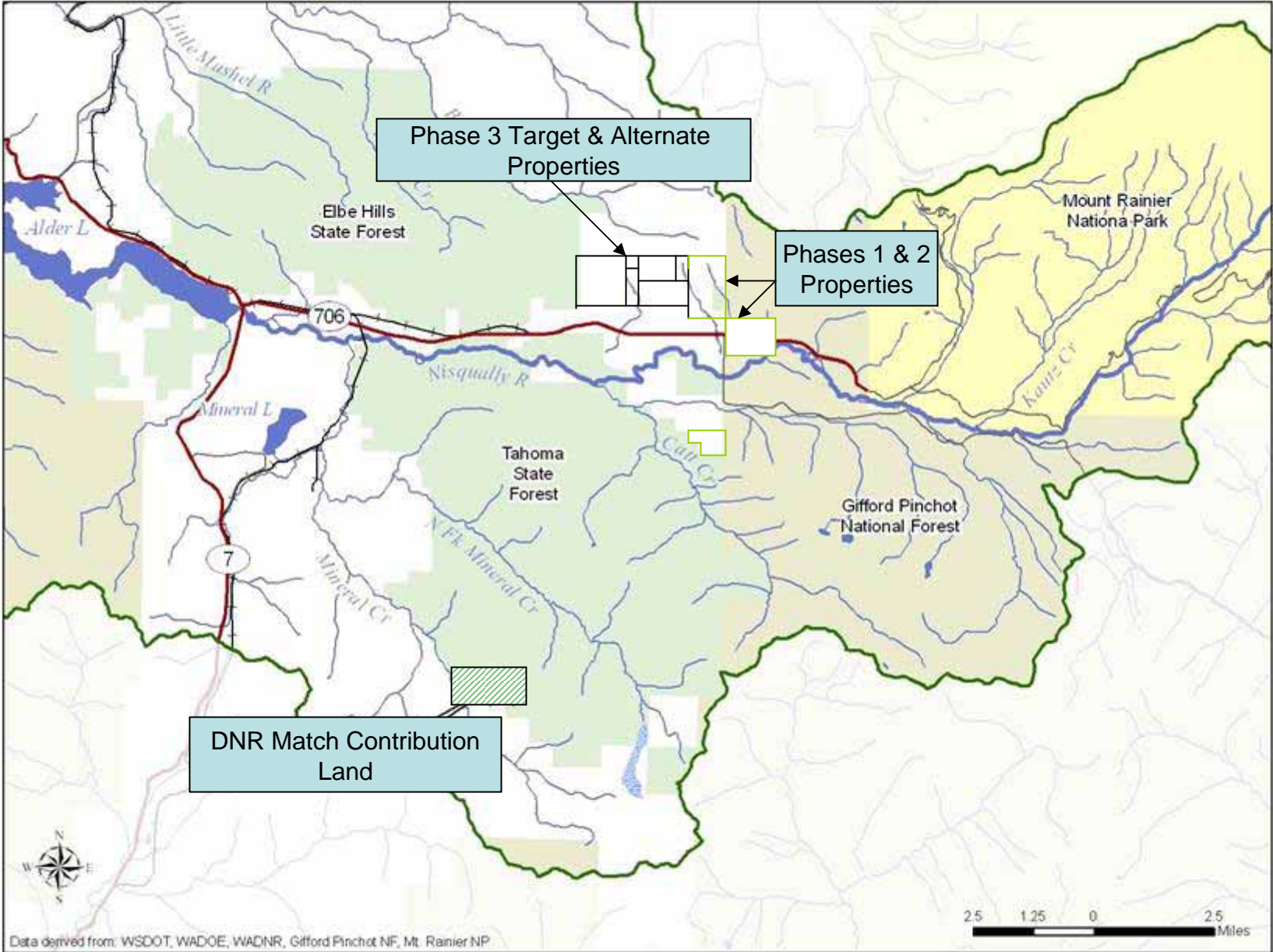






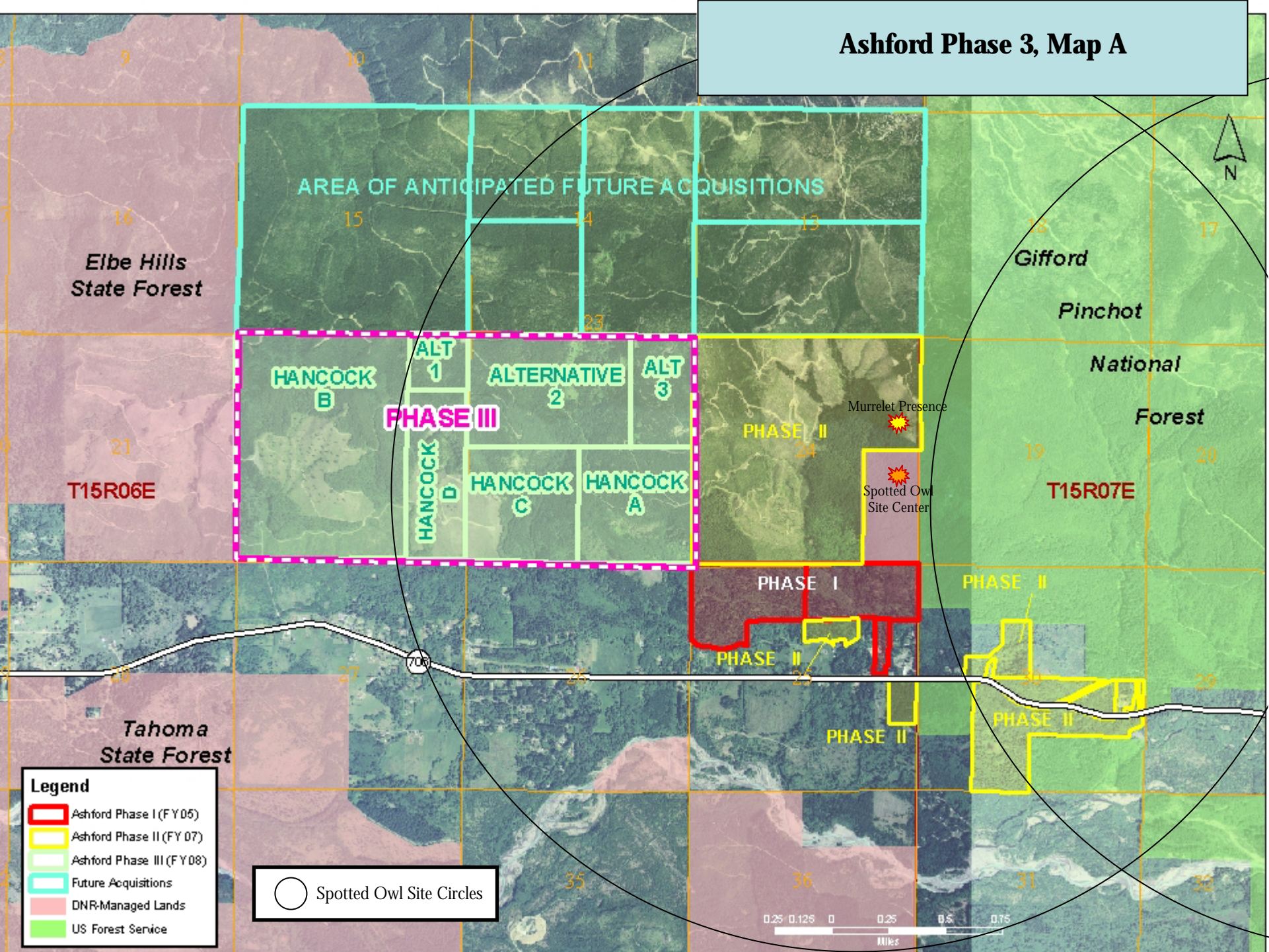
# Nisqually Land Trust Protected Properties 2006





Data derived from: WSDOT, WADOE, WADNR, Gifford Pinchot NF, Mt. Rainier NP

# Ashford Phase 3, Map A



**Legend**

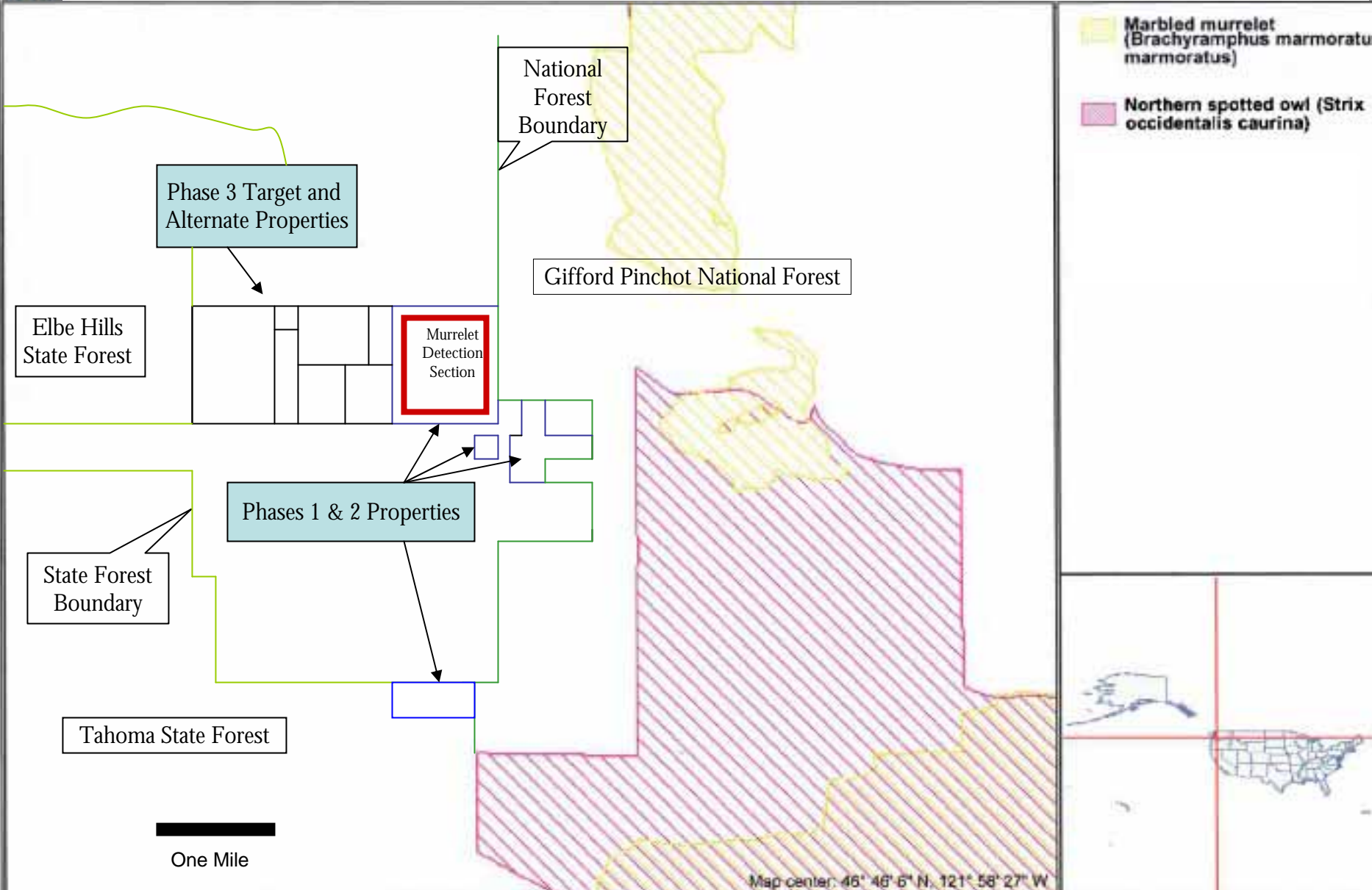
- Ashford Phase I (FY05)
- Ashford Phase II (FY07)
- Ashford Phase III (FY08)
- Future Acquisitions
- DNR-Managed Lands
- US Forest Service

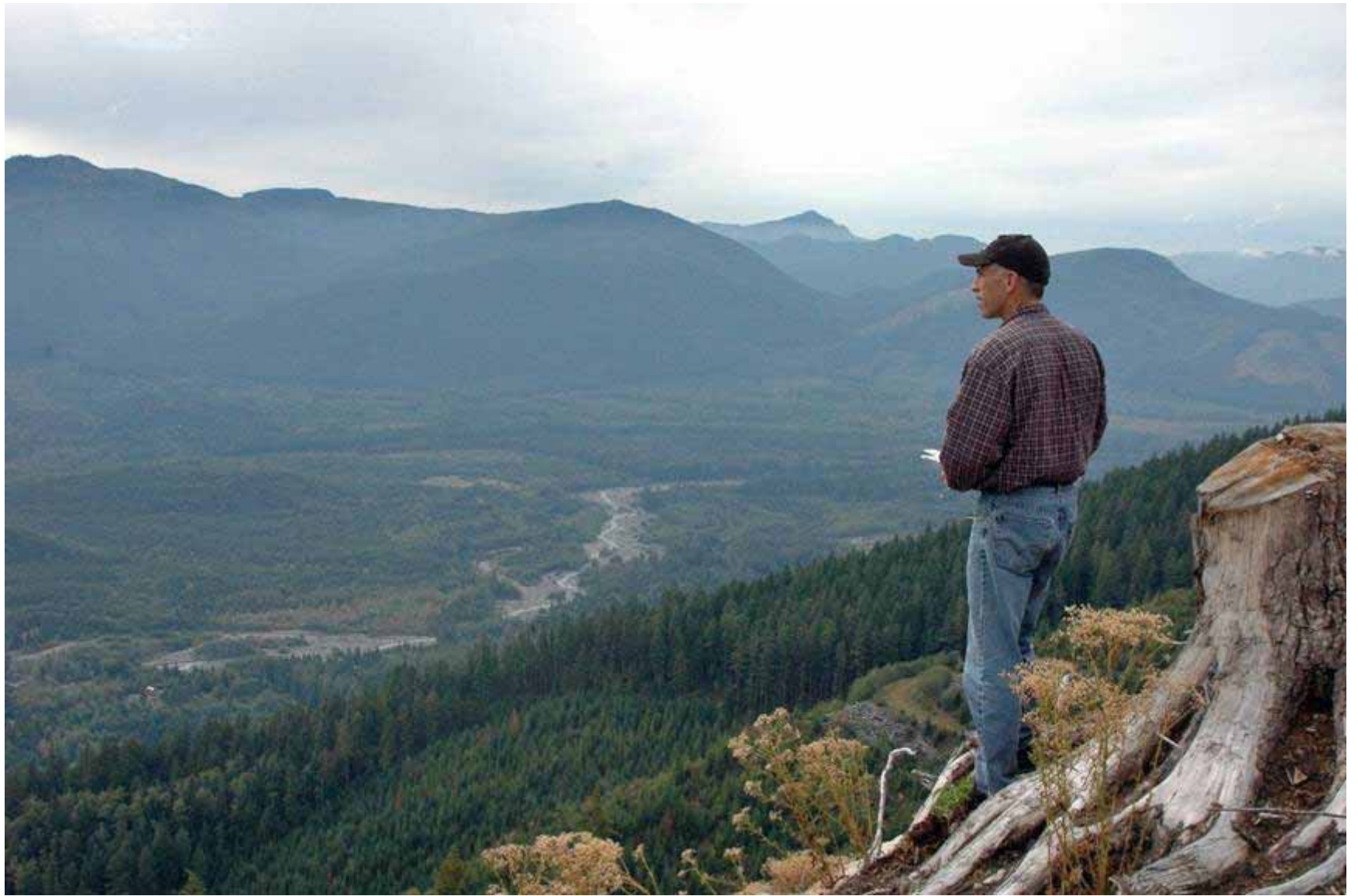
Spotted Owl Site Circles





### Spotted Owl and Marbled Murrelet Federal Critical Habitat













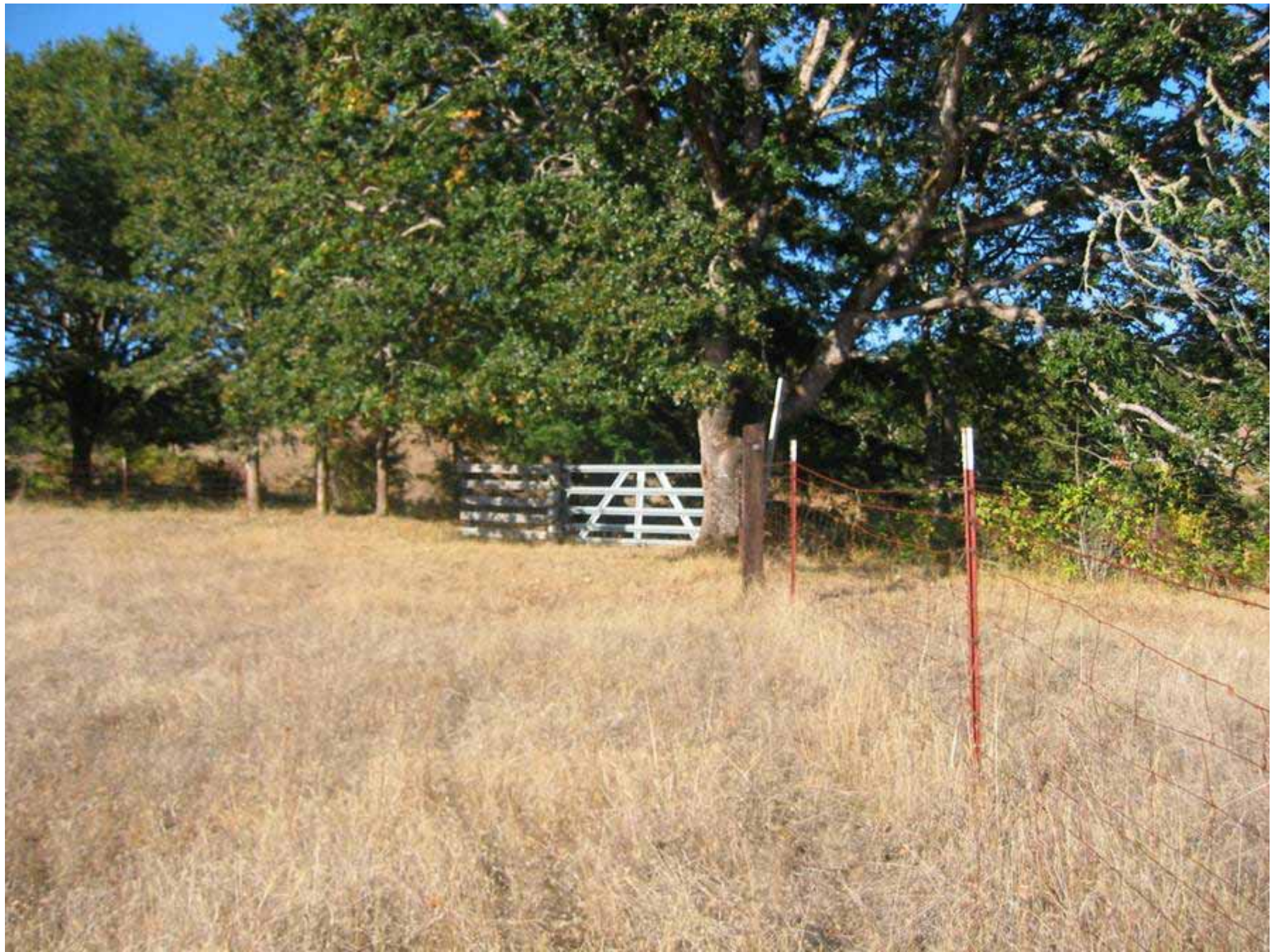


# Lone Star Ranch Easement

199 acres in  
Willamette Valley Oregon

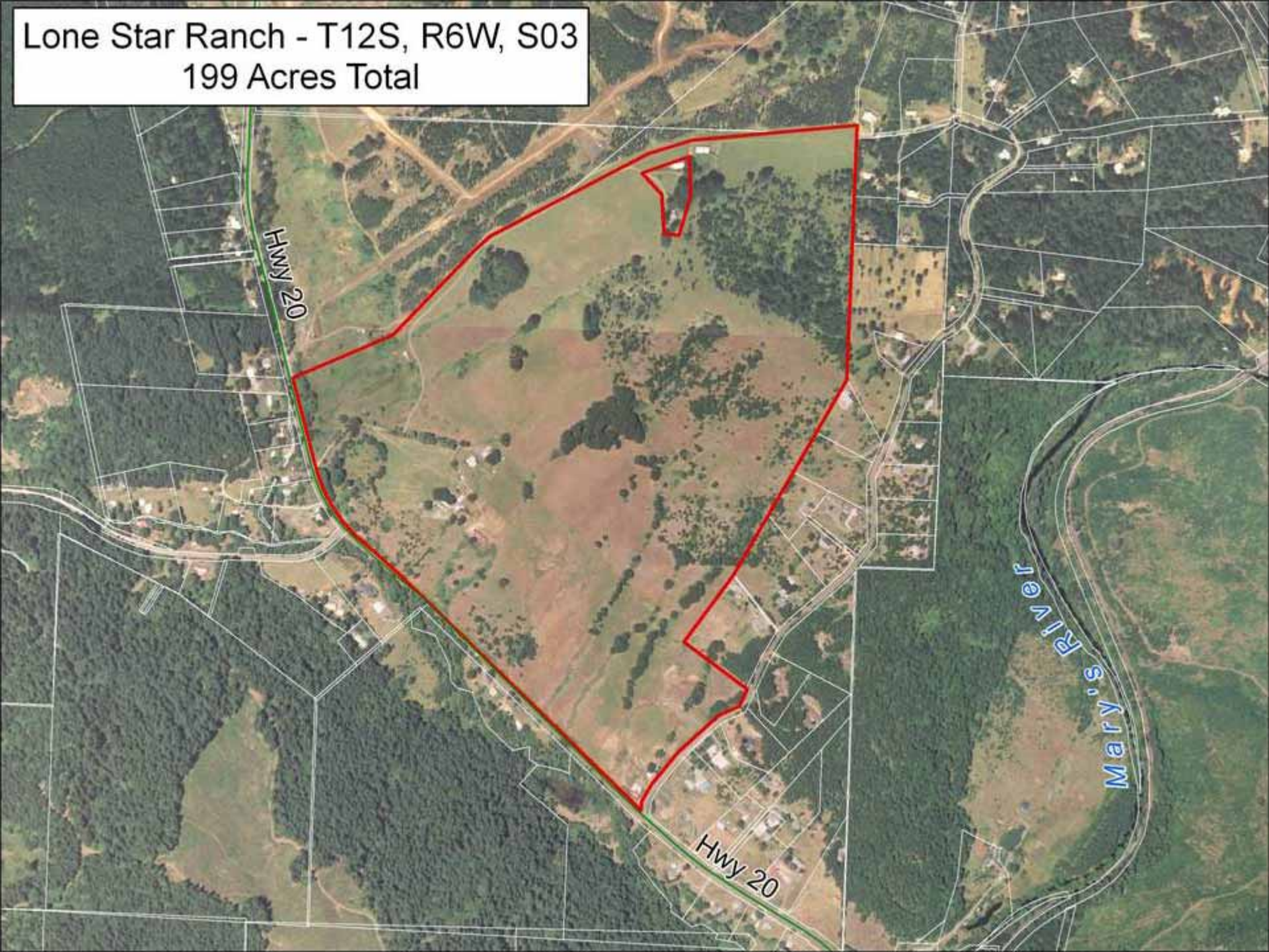




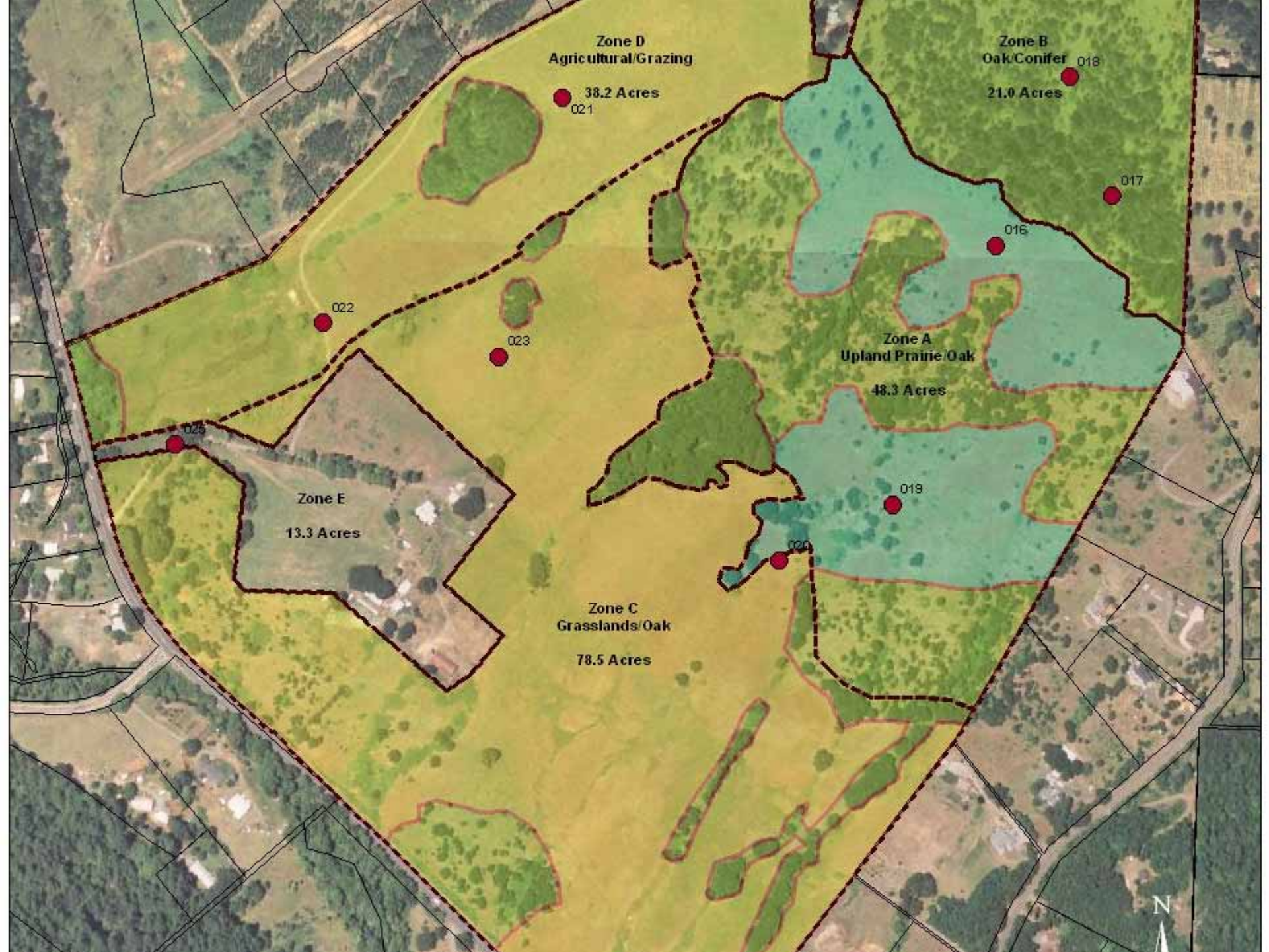




Lone Star Ranch - T12S, R6W, S03  
199 Acres Total







**Zone D**  
Agricultural/Grazing

38.2 Acres  
021

**Zone B**  
Oak/Conifer

21.0 Acres

**Zone A**  
Upland Prairie/Oak

48.3 Acres

**Zone E**  
13.3 Acres

**Zone C**  
Grasslands/Oak

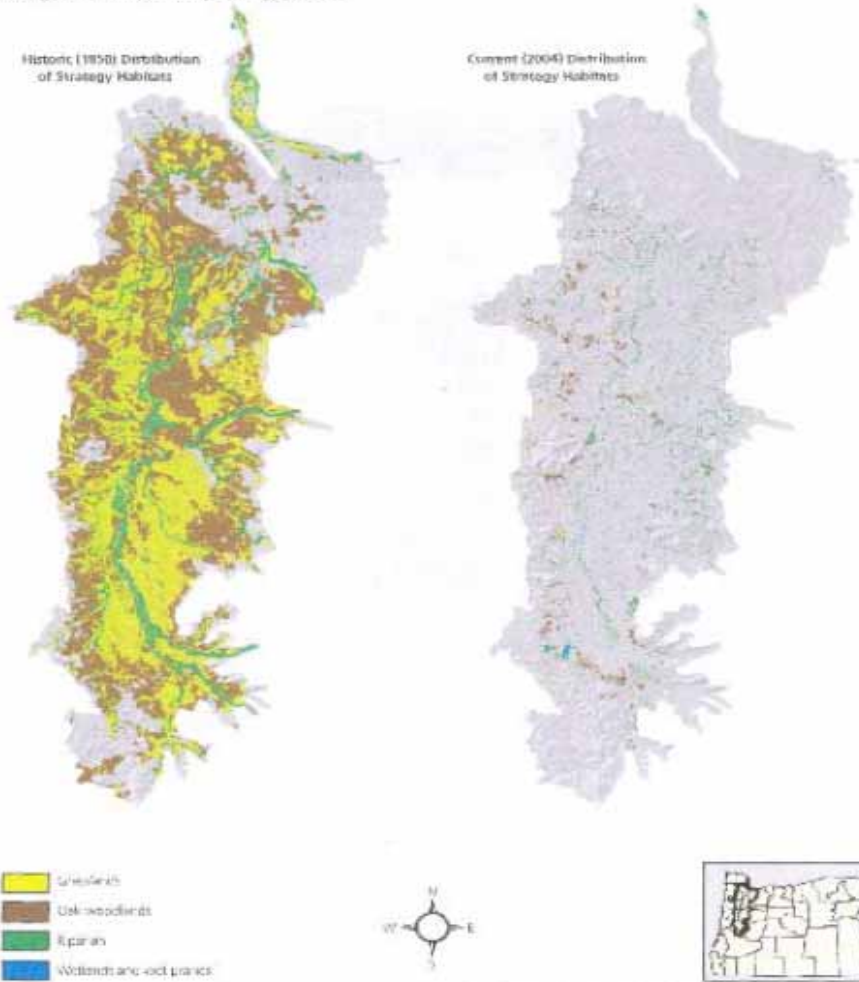
78.5 Acres

N

### Summary List of Strategy Habitats

Strategy Habitats in the Willamette Valley ecoregion include: oak woodlands, grasslands (including oak woodland savannas (including wet prairie)), riparian, and wetland habitats.

### Change in Willamette Valley Strategy Habitats



Data Source: Oregon Natural Heritage Information Center, 2007



# I live in the Willamette Valley ecoregion



The Willamette Valley ecoregion is the most urban in the state. It is also the fastest-growing ecoregion—it has nine of Oregon's ten largest cities. Fertile soil and abundant rainfall make the valley the most important agricultural region in the state. Culturally, the Willamette Valley is a land of contrasts. Bustling urban areas are nestled within productive farmland. Pressure on valley ecosystems from population growth, land-use conversion and pollution is likely to increase as more people make the Valley their home.

Learning about the at-risk species and their habitats in your ecoregion gives you the information you need to get involved in conserving Oregon's fish and wildlife for your enjoyment and that of future generations.

## Strategy Habitats and Species

Important habitats in the ecoregion include oak woodlands, grasslands (including oak savanna), wetlands, riparian and aquatic.

Strategy species in need of help include western gray squirrel, northern red-legged frog, foothill yellow-legged frog, northwestern pond turtle, western meadowlark, western bluebird, Oregon chub, Pacific lamprey and Fender's blue butterfly. See back of sheet for more information.



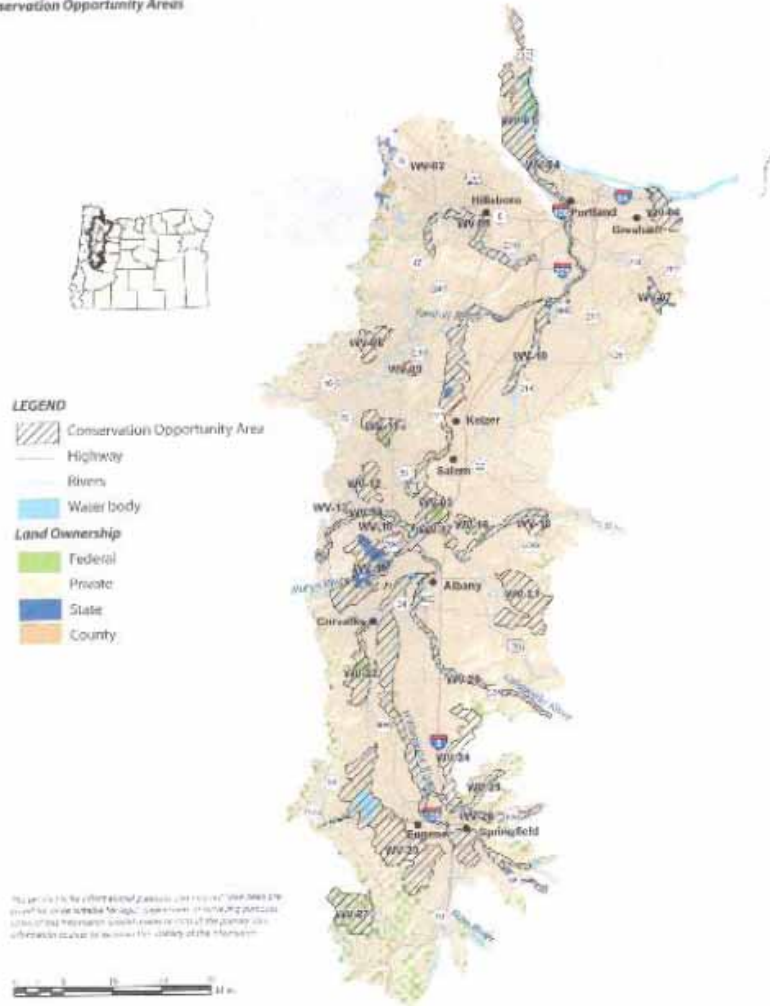
## Northern red-legged frog: I live in the Willamette Valley ecoregion

Red-legged frogs like cool damp forests and wetlands. Adults have red underlegs, hence their name. Their decline in the northwest is due, in part, to habitat loss and invasive bullfrogs.

Fun fact: It's unlikely you'll ever hear a red-legged frog call. They call underwater.



Willamette Valley Ecoregion  
Conservation Opportunity Areas



## Partial list of Oregon Conservation Strategy Willamette Valley Ecoregion Strategy Species and Invasive Species

*Strategy species* are species of greatest conservation need; they have low or declining populations due, many times, to habitat loss and degradation. *Invasive species* are non-native plants or animals that can negatively impact native habitats both economically and environmentally.

### STRATEGY SPECIES

#### Mammals

Townsend's big-eared bat  
Western gray squirrel

#### Plants

Golden paintbrush  
Kincaid's lupine  
Neilson's checker-mallow  
Peacock larkspur  
Willamette daisy

#### Amphibians and Reptiles

Northern red-legged frog  
Foothill yellow-legged frog  
Northwestern pond turtle  
Western painted turtle

#### Invertebrates

American grass bug  
Fender's blue butterfly

#### Fish

Chinook salmon (Lower Columbia River ESU, spring run)  
Coastal cutthroat trout (SW Washington, Columbia River ESU)  
Coho salmon (Oregon Coast ESU)  
Oregon chub  
Pacific lamprey  
Steelhead (Lower Columbia River ESU, summer run)  
Western brook lamprey

#### Birds

Acorn woodpecker  
Slender-billed nuthatch  
Streaked horned lark  
Western bluebird  
Western meadowlark  
Western purple martin  
Yellow-breasted chat

### INVASIVE SPECIES

#### Invasive Animals

Amur goby  
Asian clam  
Bullfrog  
Carp (common, grass)  
Eastern gray squirrel  
Eastern snapping turtle  
European starling  
Fathead minnow  
Feral swine  
Fox squirrel  
Goldfish  
House sparrow  
Mosquito fish (Gambusia)  
Mute swan  
Nutria  
Oriental weather fish  
Red-eared slider turtle  
Virginia opossum

#### Invasive Plants

Brooms (Scotch, Spanish, Portuguese)  
Butterfly bush  
English ivy  
Eurasian watermilfoil  
False brome  
Garlic mustard  
Gorse  
Himalayan blackberry  
Knotweeds (Japanese, giant, Himalayan)  
Kudzu  
Meadow knapweed  
Purple loosestrife  
Reed canary grass  
St. Johnswort  
Tansy ragwort  
Yellow flag iris

A complete list of Strategy species can be found on the ODFW Web site. Click Conservation Strategy on the home page.

#### ODFW OFFICES

**Northwest Region Office,**  
Clackamas  
(971) 673-6000

**South Willamette Watershed Office,** Corvallis  
(541) 757-4186

**Sauvie Island Office**  
(503) 621-3488

**Springfield Office**  
(541) 726-5515

Find your local Watershed Council.  
(541) 682-8323  
[www.oregonwatersheds.org/](http://www.oregonwatersheds.org/)

For more information on the Oregon Conservation Strategy, visit the Oregon Department of Fish and Wildlife Web site.  
[www.dfw.state.or.us](http://www.dfw.state.or.us)



Oregon Department of  
Fish and Wildlife

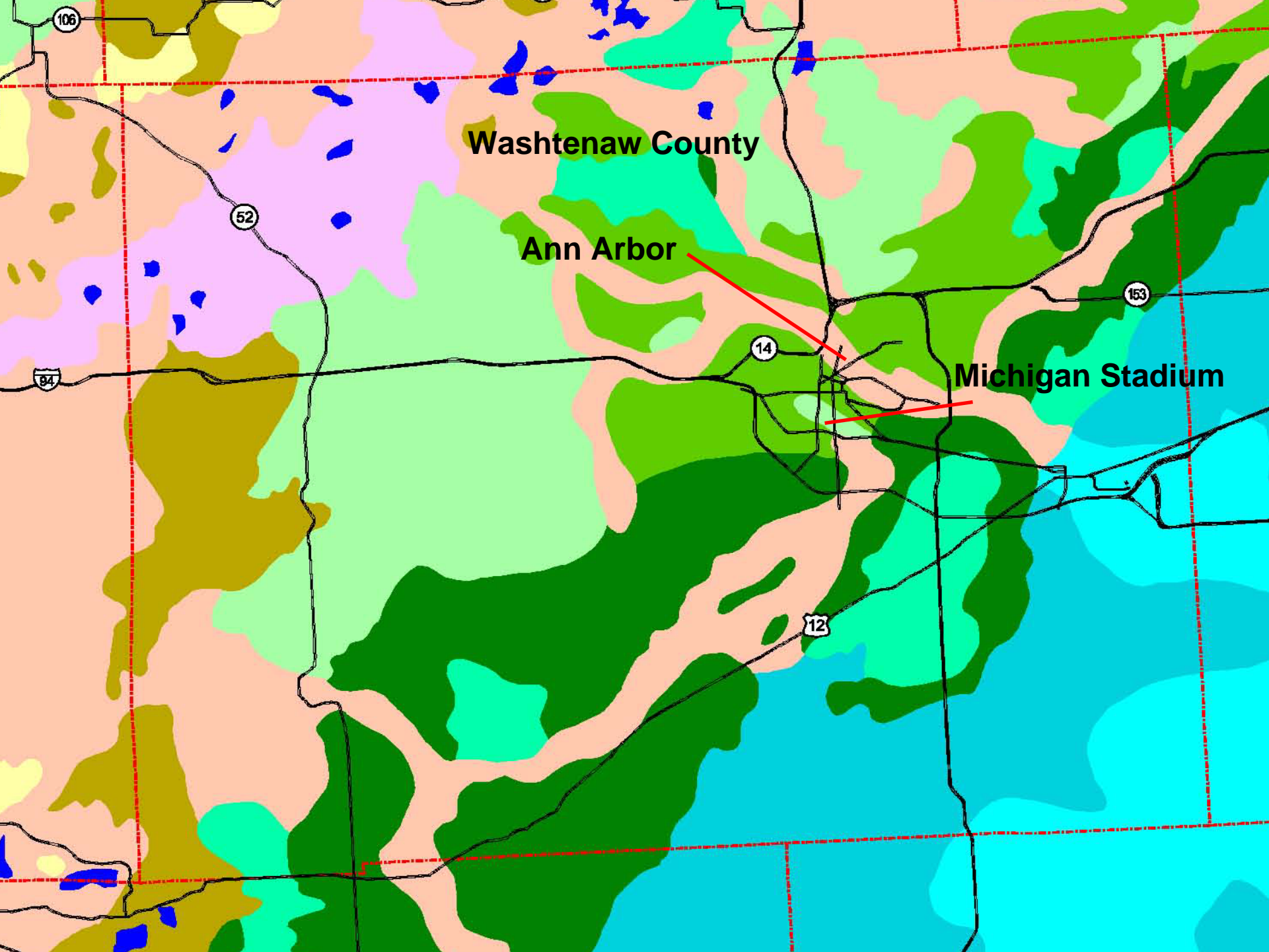
3406 Cherry Avenue NE  
Salem, OR 97303  
503-947-6000



# The Mill Creek Fen Project – Species Protection in Southeast Michigan

Presented by Mark Patrick  
Land & Operations Manager  
Washtenaw Land Trust, Ann Arbor, MI



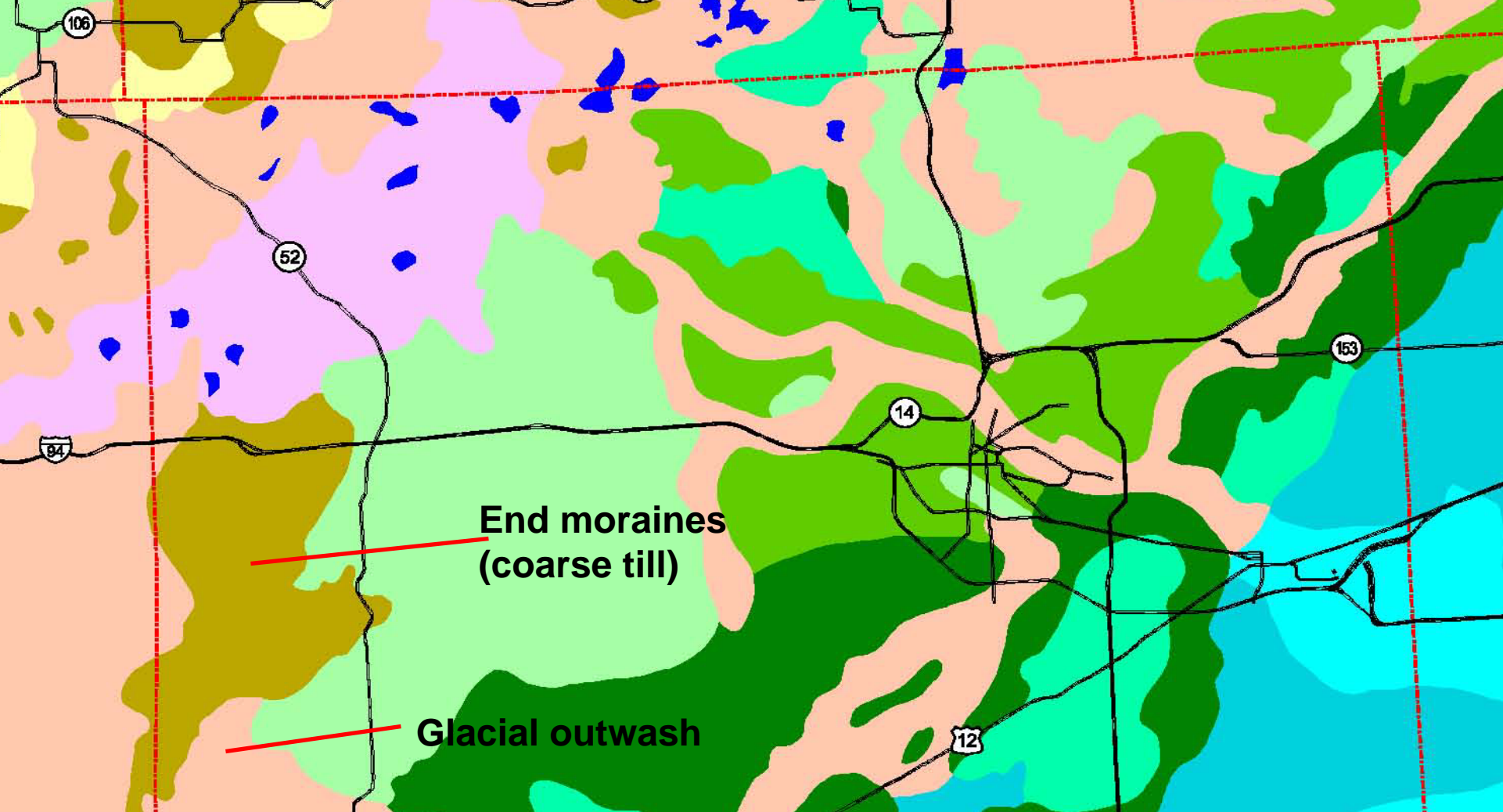


Washtenaw County

Ann Arbor

Michigan Stadium





**End moraines  
(coarse till)**

**Glacial outwash**

## Quaternary Geology

### Washtenaw County



Data Source: Quaternary Geology of Michigan, 1998. Michigan Natural Features Inventory (MNFI) and Michigan Department of Natural Resources (MDNR). Digital version of the Quaternary Geology maps of Northern and Southern Michigan, at a scale of 1:500,000, from W.R. Farrand and D.L. Bell, 1982.

MSU Extension programs and materials are open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status or family status.

#### Legend

- Major Roads
- County Lines

#### Geology class

- Water
- Peat and muck
- Postglacial alluvium
- Dune Sand
- Lacustrine clay and silt
- Lacustrine sand and gravel
- Glacial outwash sand and gravel and postglacial alluvium
- Ice-contact outwash sand and gravel
- Fine-textured glacial till
- End moraines of fine-textured till
- Medium-textured glacial till
- End moraines of medium-textured till
- Coarse-textured glacial till
- End moraines of coarse-textured till
- Thin to discontinuous glacial till over bedrock
- Exposed bedrock surfaces
- Artificial fill



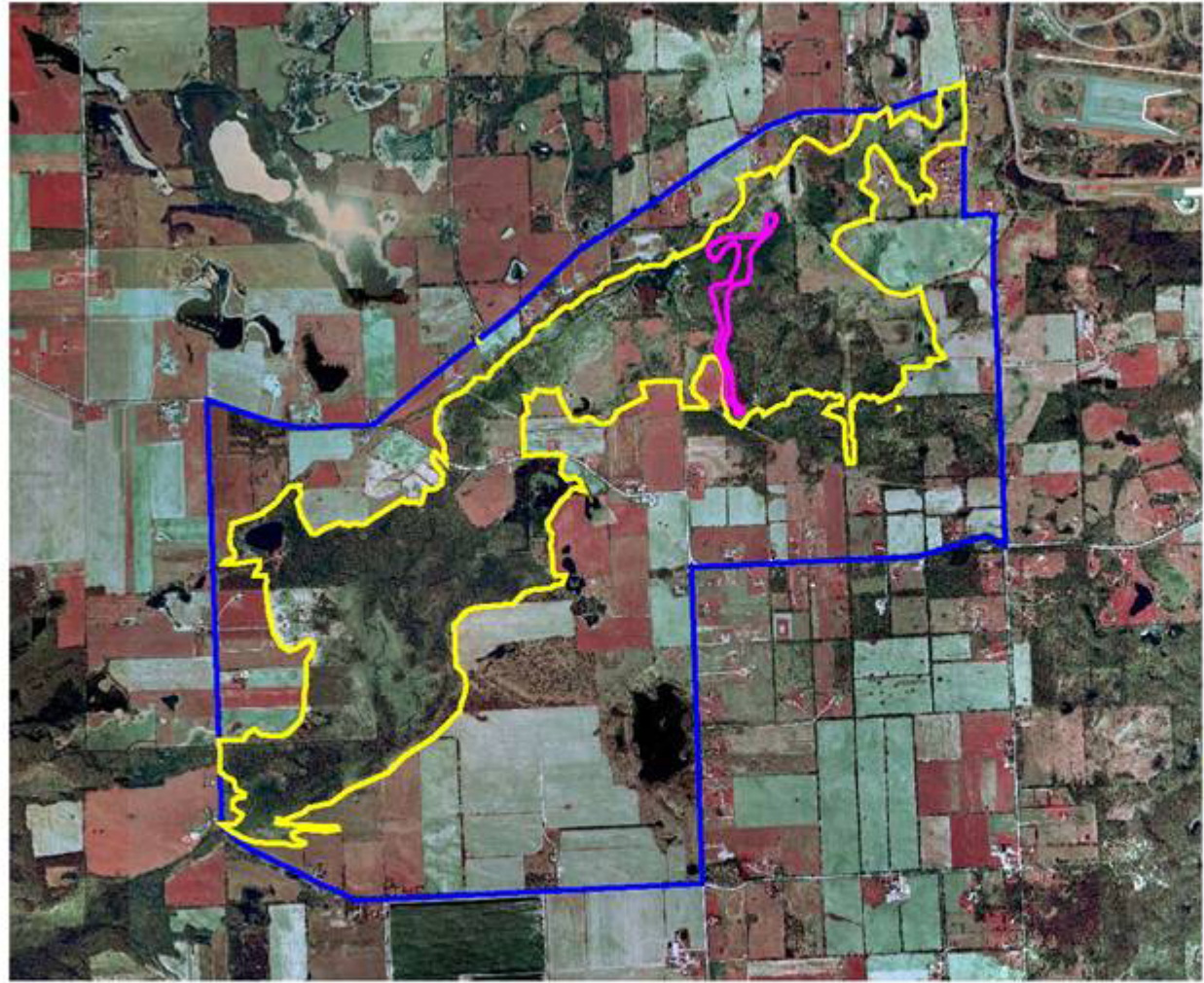
2003 7 14



# Mitchell's Satyr

- Federally listed endangered species
- Only 21 known active sites (19 in MI)
- Seems restricted to calcium/magnesium rich areas (tamarack fens)

# Mill Creek East Fen Complex






-  Primary Conservation Zone
-  Secondary Conservation Zone
-  Tertiary Conservation Zone

Figure 5. Mill Creek East Fen Complex

# E. Massasauga Rattlesnake

- State species of special concern
- Federal candidate species

# Blanding's Turtle

- State species of special concern



# Goldenseal



- State threatened species



# Mill Creek Timeline

- **1832 – Family given land in Michigan Land Grant**

# Mill Creek Timeline

- 1832 – Family given land in Michigan Land Grant
- **1950's – Family allows researchers on fen**

# Mill Creek Timeline

- 1832 – Family given land in Michigan Land Grant
- 1950's – Family allows researchers on fen
- **1958 – over 500 Mitchell's satyrs found in area**

# Mill Creek Timeline

- 1832 – Family given land in Michigan Land Grant
- 1950's – Family allows researchers on fen
- 1958 – over 500 Mitchell's satyrs found in area
- **1965 – 1 Satyr found**

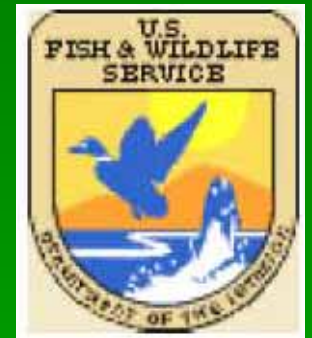
# Mill Creek Timeline

- 1832 – Family given land in Michigan Land Grant
- 1950's – Family allows researchers on fen
- 1958 – over 500 Mitchell's satyrs found in area
- 1965 – 1 Satyr found
- **2000 – 17 Satyrs found**

# Mill Creek Timeline -cont.

- **2005 – Court orders resolution of family estate among siblings, potentially through sale of land**

# Mill Creek Project Partners



# Accomplishments

- Survey & Appraisals done Spring 2007
- Land/property disputes resolved
- Easement finalized September 2007
- 124 acres protected, including primary conservation zone

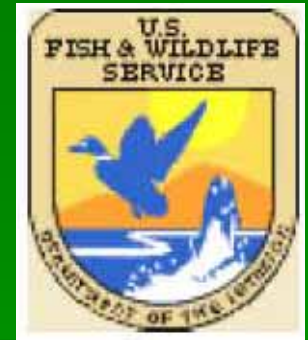


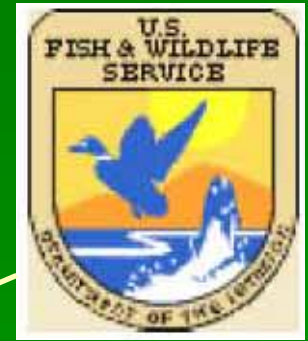
# Challenges

- Balancing habitat management vs. landowner's needs – burn example
- Grazing concerns
- Boundary dispute (from 1837!)

# Long Term Goals

- Additional conservation easements on surrounding properties
- Permanent protection of 100% of Mitchell's satyr colonies
- Partner with Huron River Watershed Council to implement water quality plan
- Support MNFI, MDNR(LIP), in maintaining fen habitat





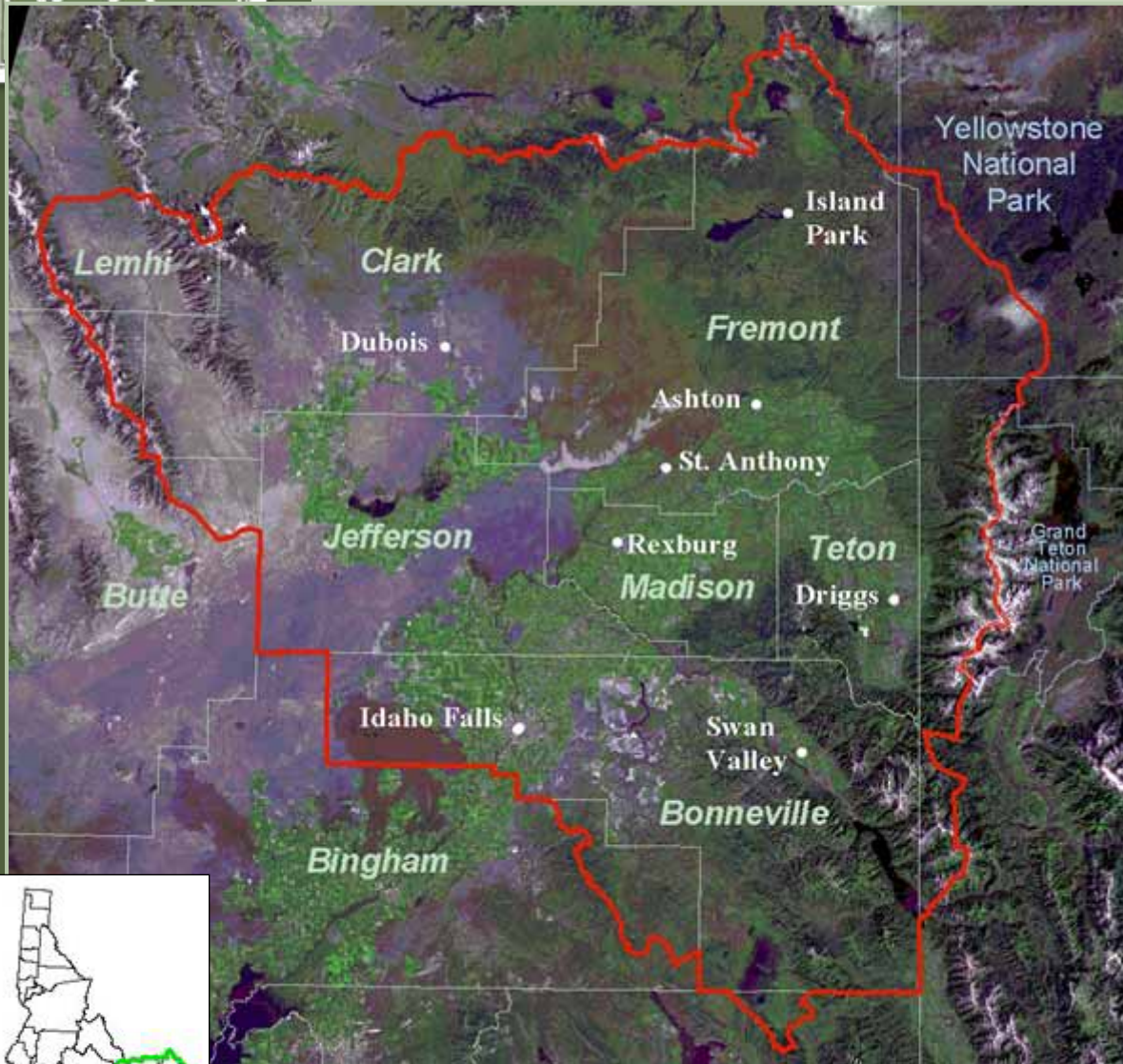
# Teton Regional Land Trust



**Riparian Biodiversity Restoration and Capacity  
Building—Teton River Restoration Project**



# Our Service Area



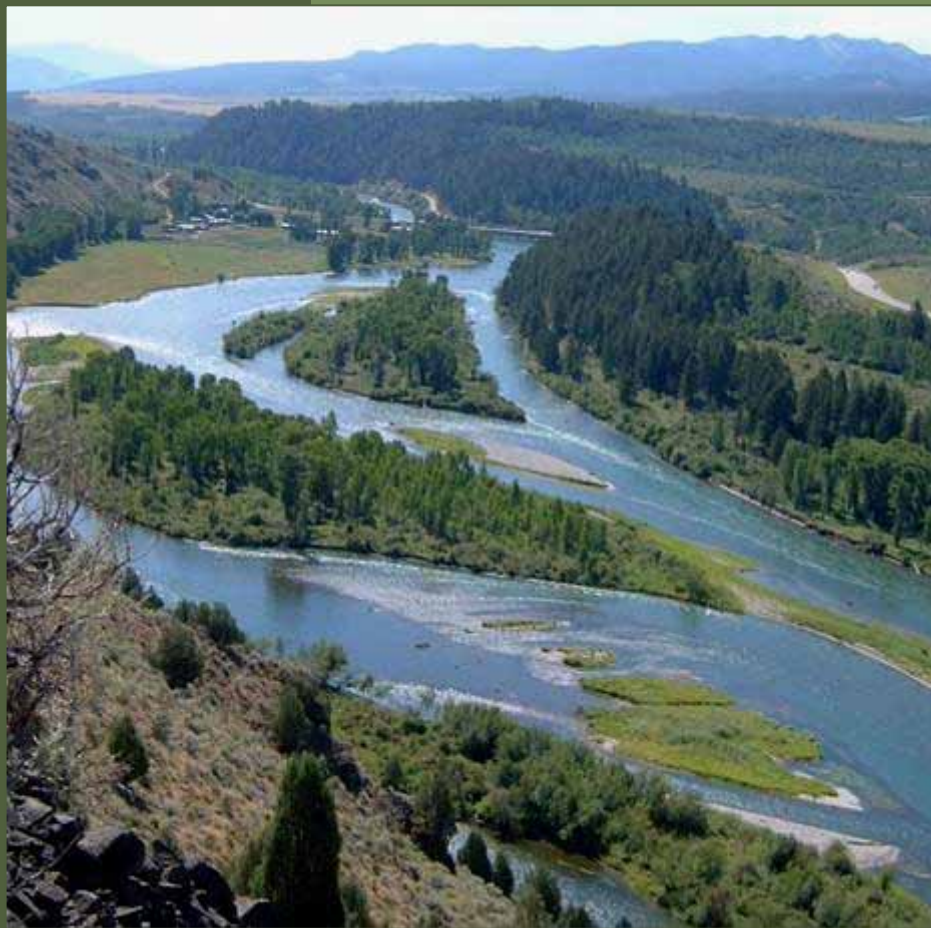
## Our Mission

... 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.

A legacy of Lands in the Upper Snake River Valley



# Priority Natural Resources Dependent on Private Lands



- Wetlands, Wetland-dependent Birds
- Native Trout, Riparian Corridors
- Big Game Winter Range & Migration Corridors
- Rare Upland Birds
- Rare Plants and Communities
- Strategic Ranch Lands
- State High-Quality Farmland

A legacy of Lands in the Upper Snake River Valley



# Strategic Program for Protecting Priority Natural Resources



- Strategic land protection
- Collaborative conservation planning
- Resource surveys-  
Ecological monitoring
- Targeted restoration-  
benefits to high priority  
conservation species
- Partnerships

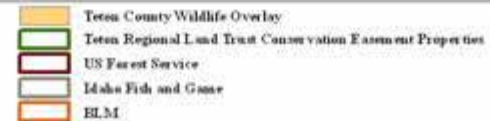
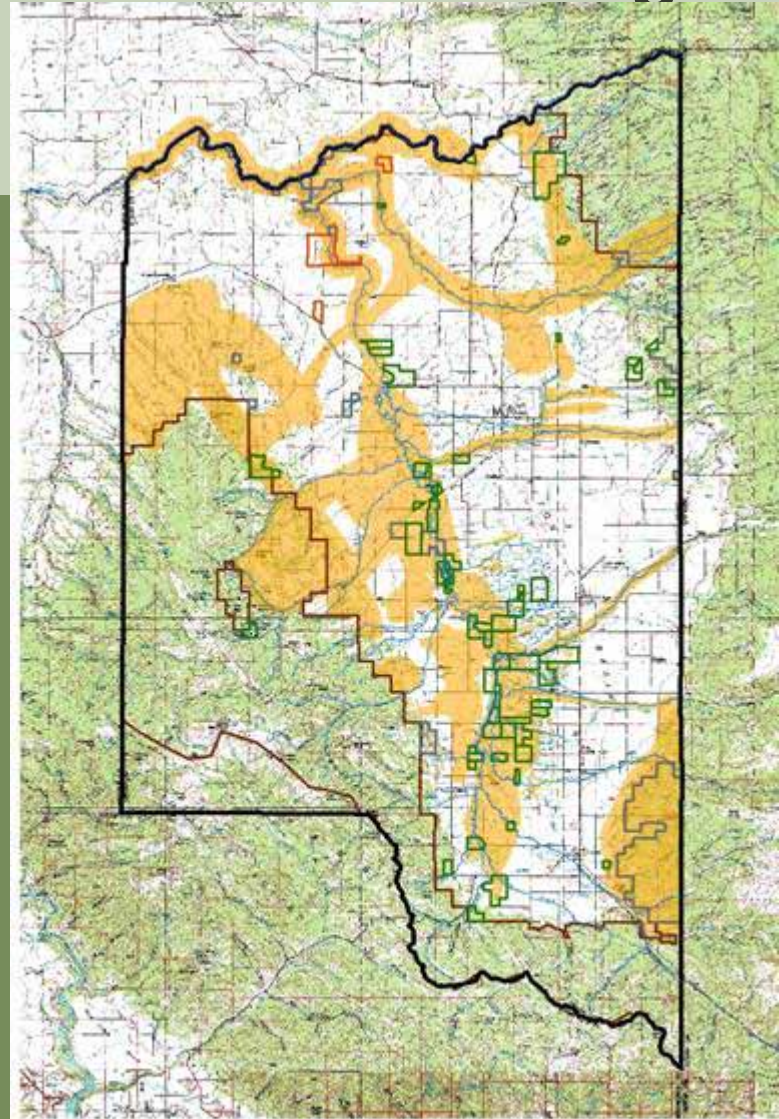
A legacy of Lands in the Upper Snake River Valley





# Collaborative Conservation Planning

- Working with multiple partners
- Identify priority habitats and wildlife use areas
- Strategic land protection
- Targeted restoration/enhancement



Source: USGS Topographic Map 1:100,000





# Restoration

- *Program guided by BOD-approved policies*
- *Project must be approved by the BOD*
- *Willing landowner, on easement-protected land*
- *Suitable management scenario for protecting investment*
- *Target priority species and have landscape-scale benefits*

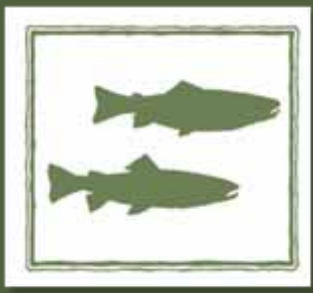
Riparian, wetland and upland restoration



# Riparian Biodiversity Restoration and Capacity Building—Teton River Restoration Project



- Landowner action and initiative
- Located on 200-acre easement property protecting ~1 mile of the Teton River
- Property is active cattle ranch
- Managed for fish and wildlife



# Project Background





# Project Goals

## Short-Term

- Develop restoration plan to optimize property's value to conservation priority species
- Have restoration expert mentor Land Trust staff during project planning & implementation
- Implement restoration plan using contractors & volunteers

## Long-Term

- Improve instream & riparian habitat conditions for conservation priority species
- Cooperatively steward the project with landowner to maximize biodiversity
- Increase Land Trust staff ability to complete large-scale restoration





# Priority Species

- Idaho Comprehensive Wildlife Conservation Strategy—*Species of Greatest Conservation Need*
- Rocky Mountain Population Trumpeter Swan Implementation Plan
- Idaho Department of Fish and Game Fisheries Management Plan
- Idaho Partners in Flight Plan
- Teton Basin Important Bird Area



A legacy of Lands in the Upper Snake River Valley

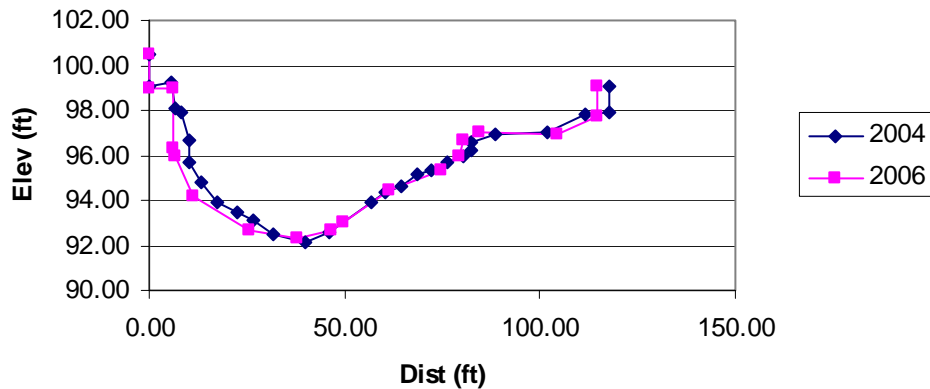


# Project Accomplishments



- Reach Assessment by restoration expert
- Land Trust staff training

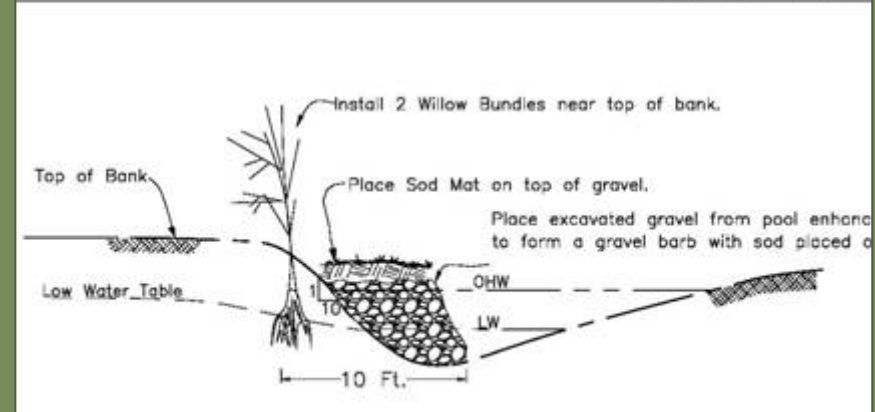
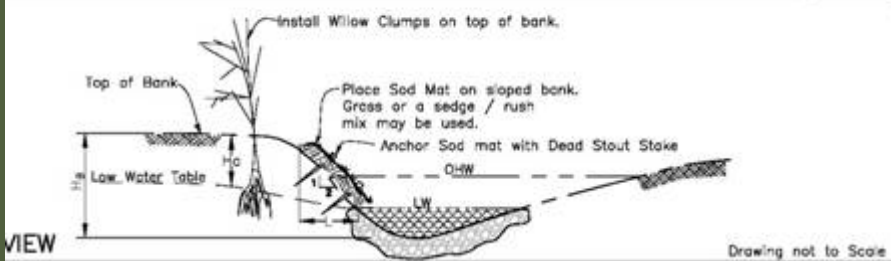
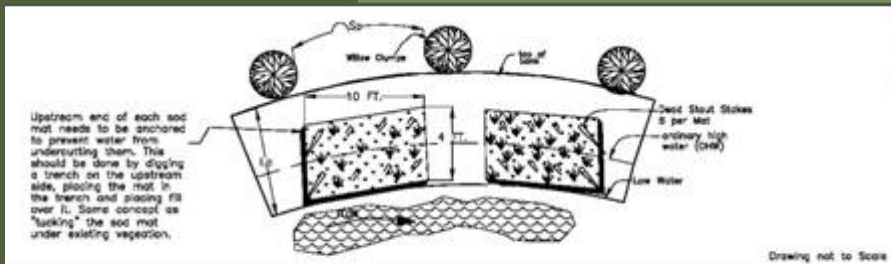
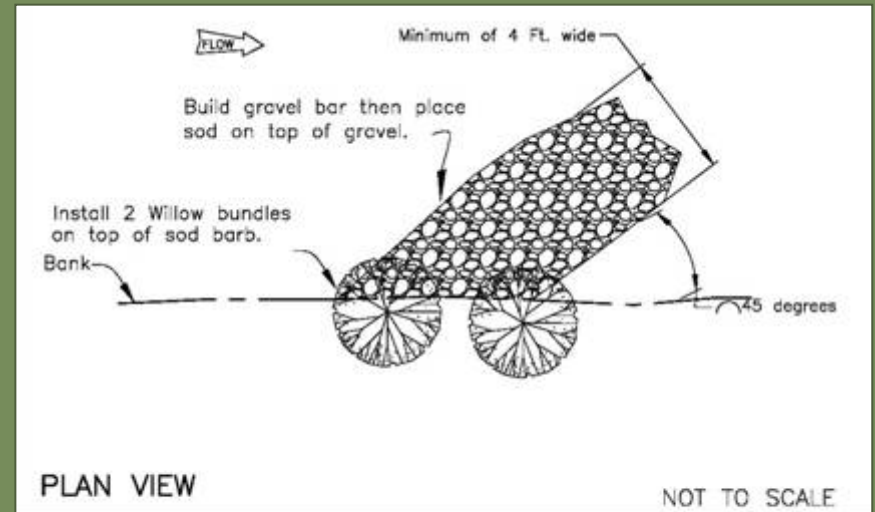
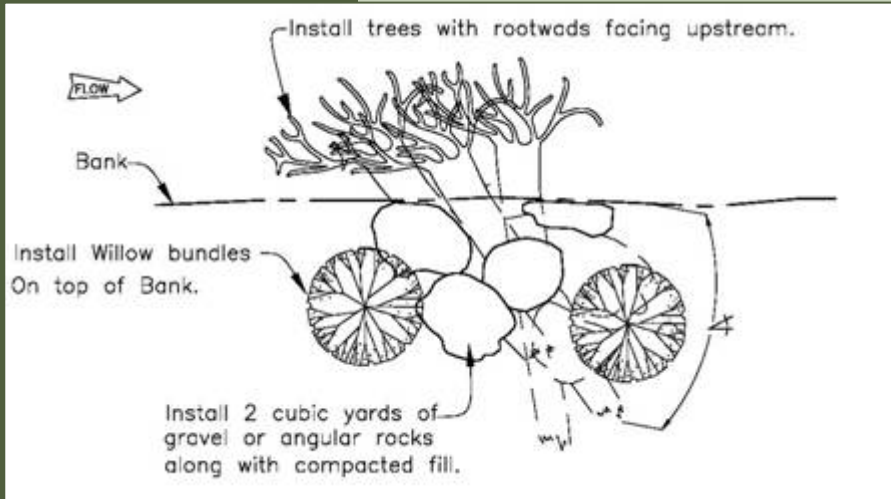
FTR L2, Transect 4



# Project Accomplishments



- Design development







# Project Accomplishments



- Photopoint establishment





# Capacity Building



- Restoration expert mentoring through:
  - Technical review
  - Project and staff evaluation during and after implementation
  - Final report evaluating project, staff



A legacy of Lands in the Upper Snake River Valley



# Project Monitoring



A legacy of Lands in the Upper Snake River Valley

# Partnerships



- Landowners
- Volunteers
- NRCS
- US Fish and Wildlife Service
- National Fish and Wildlife Foundation
- Defenders of Wildlife
- Trout Unlimited
- Foundations
- Idaho Dept Fish & Game