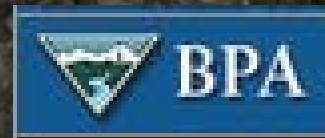


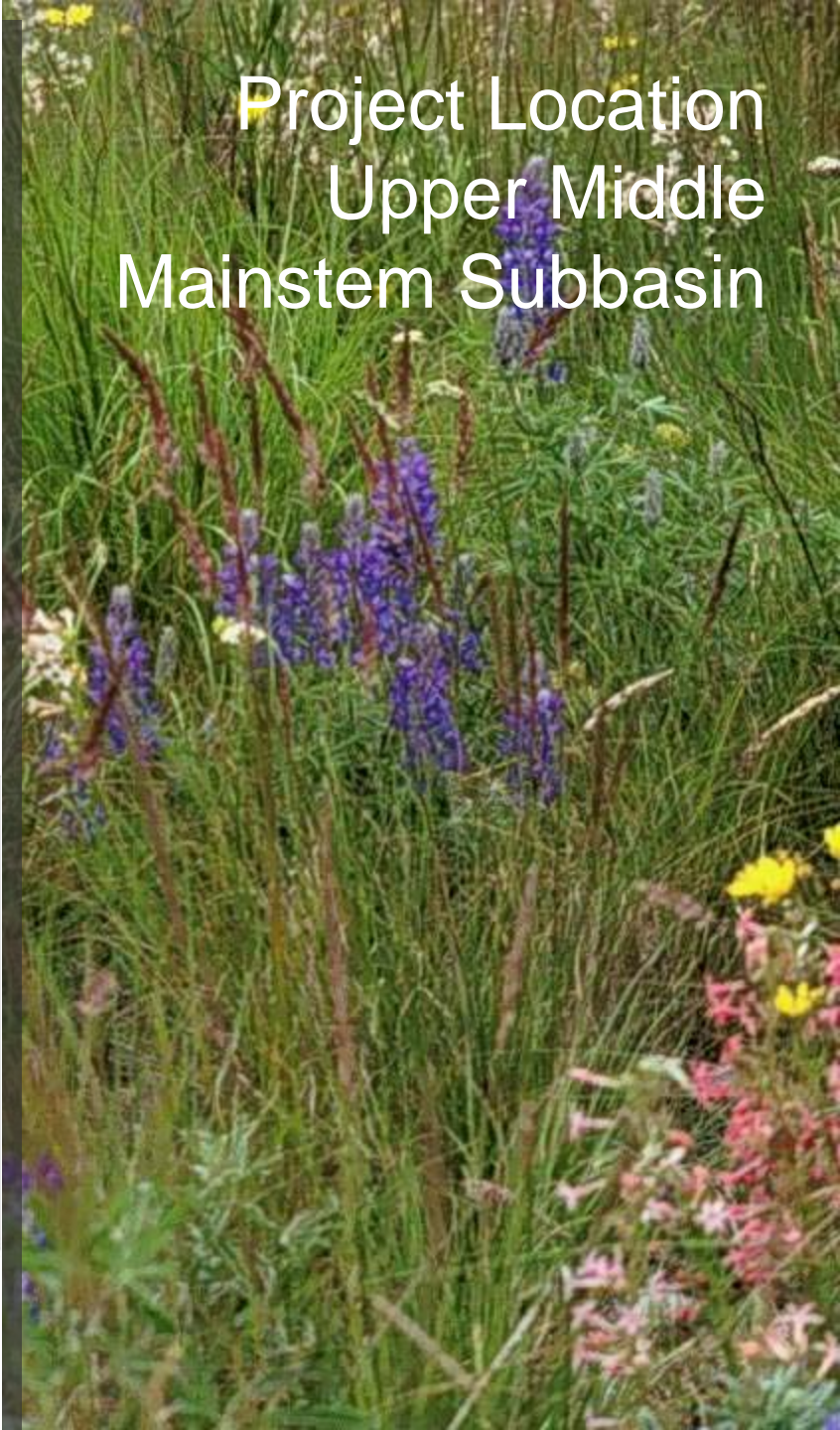
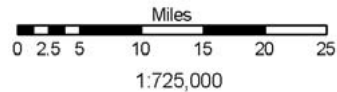
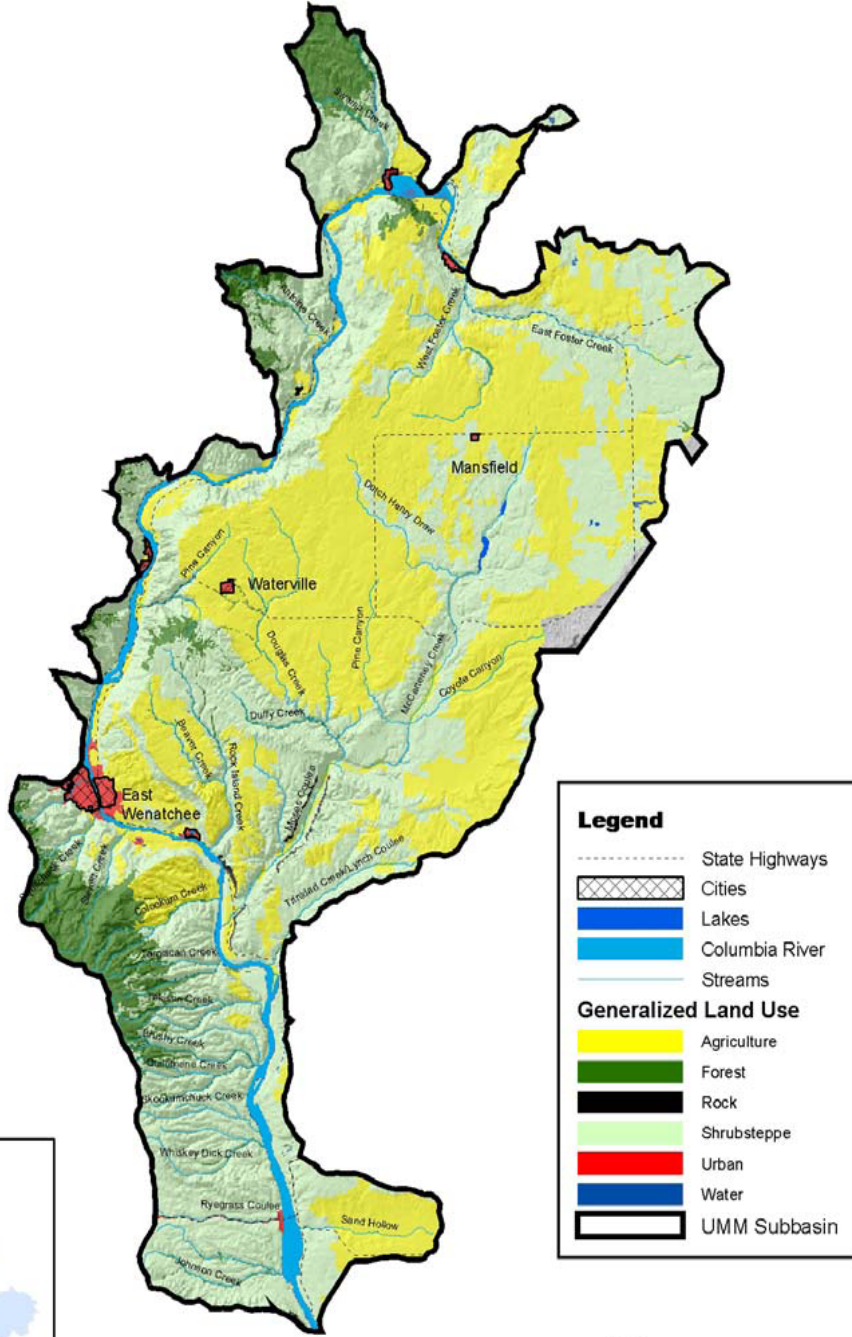
Sagebrush Flat Wildlife Area

Project ID: 1994-04-400

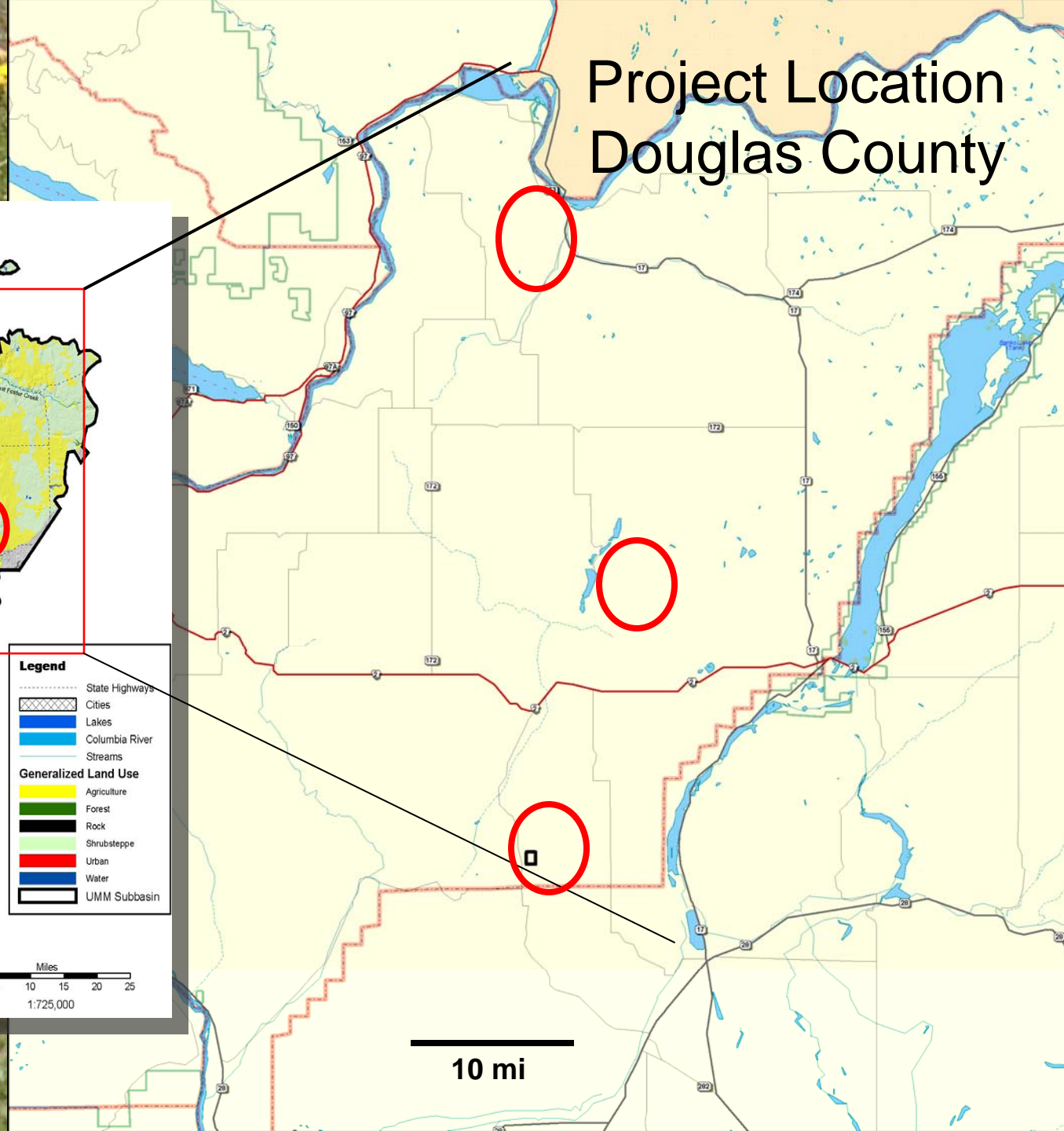
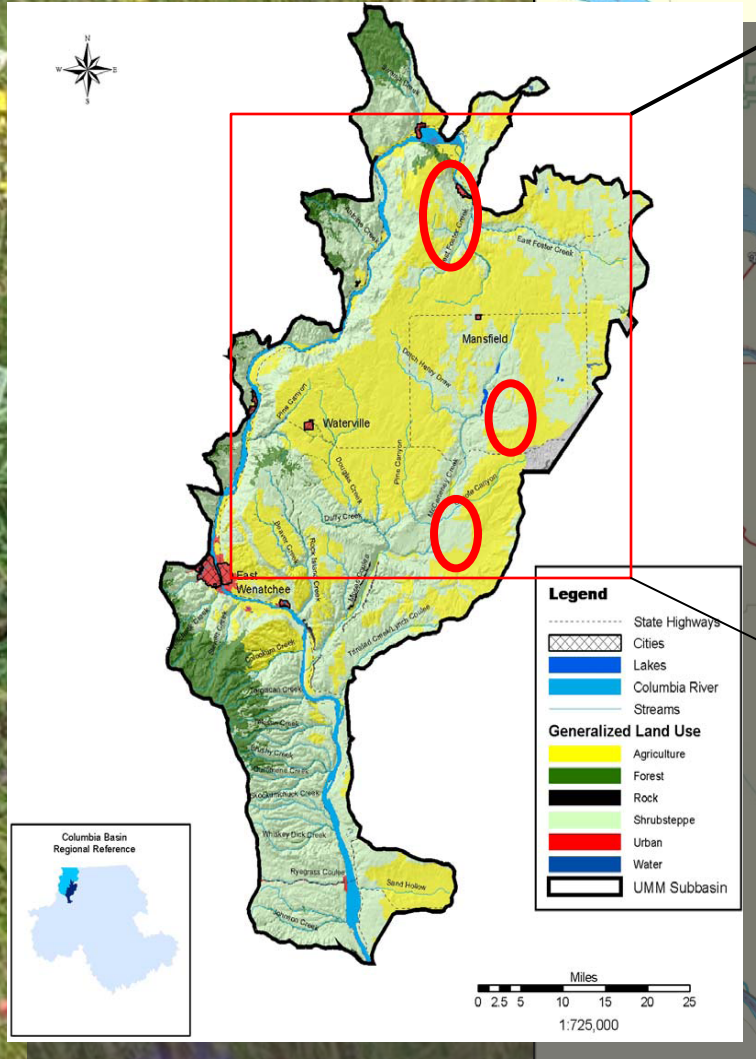
Marc Hallet & Dan Peterson



Project Location Upper Middle Mainstem Subbasin



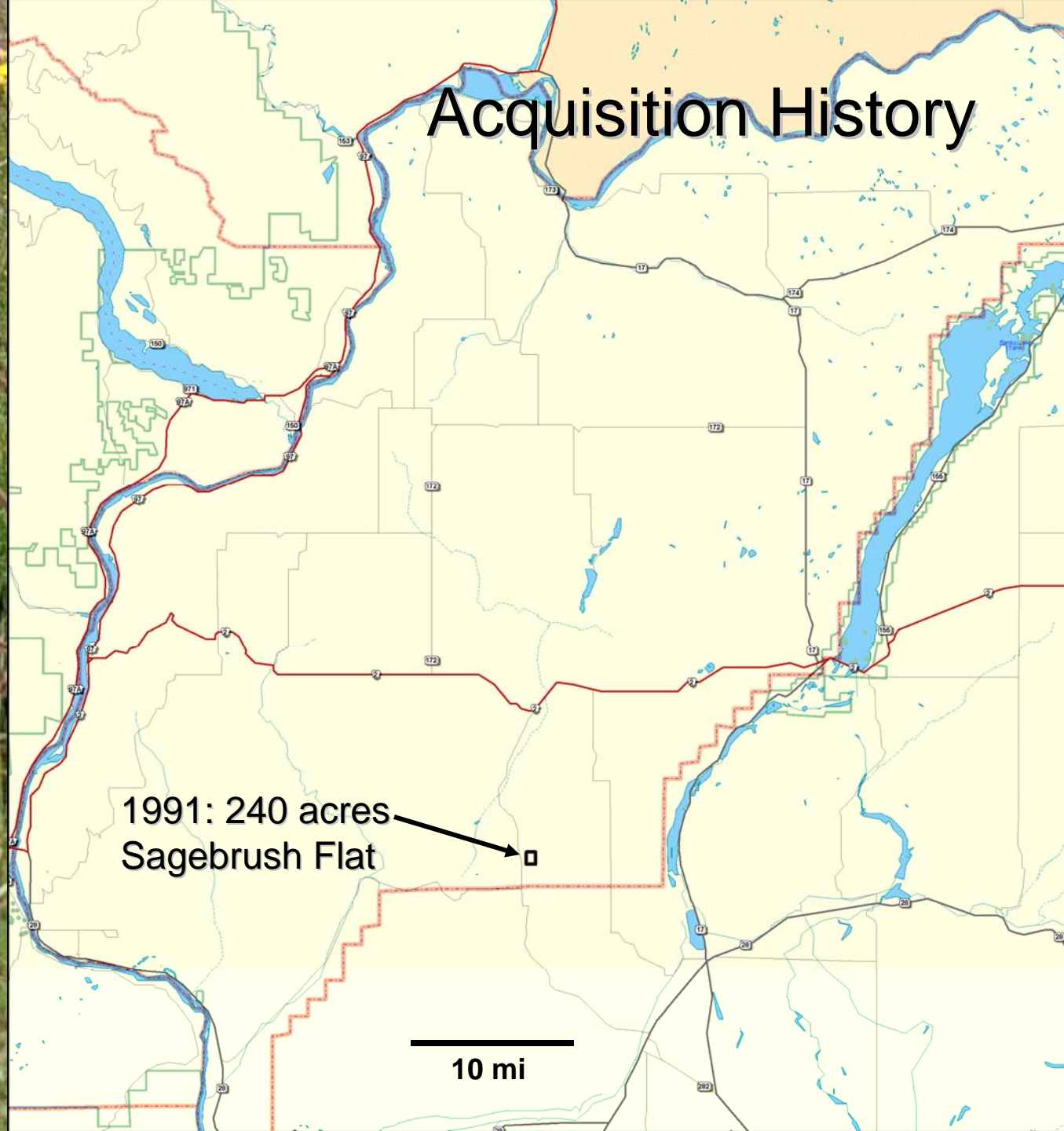
Project Location Douglas County

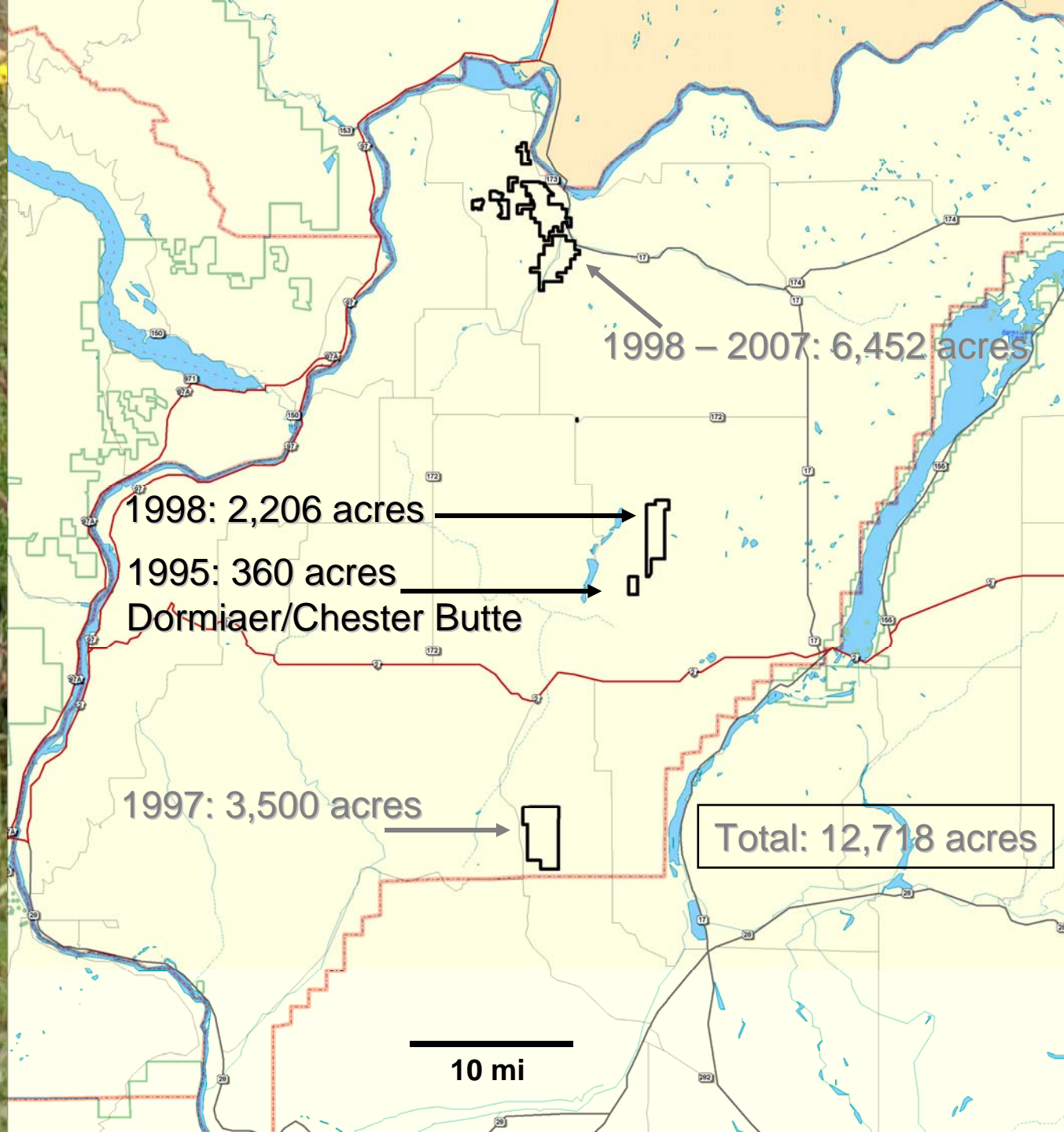


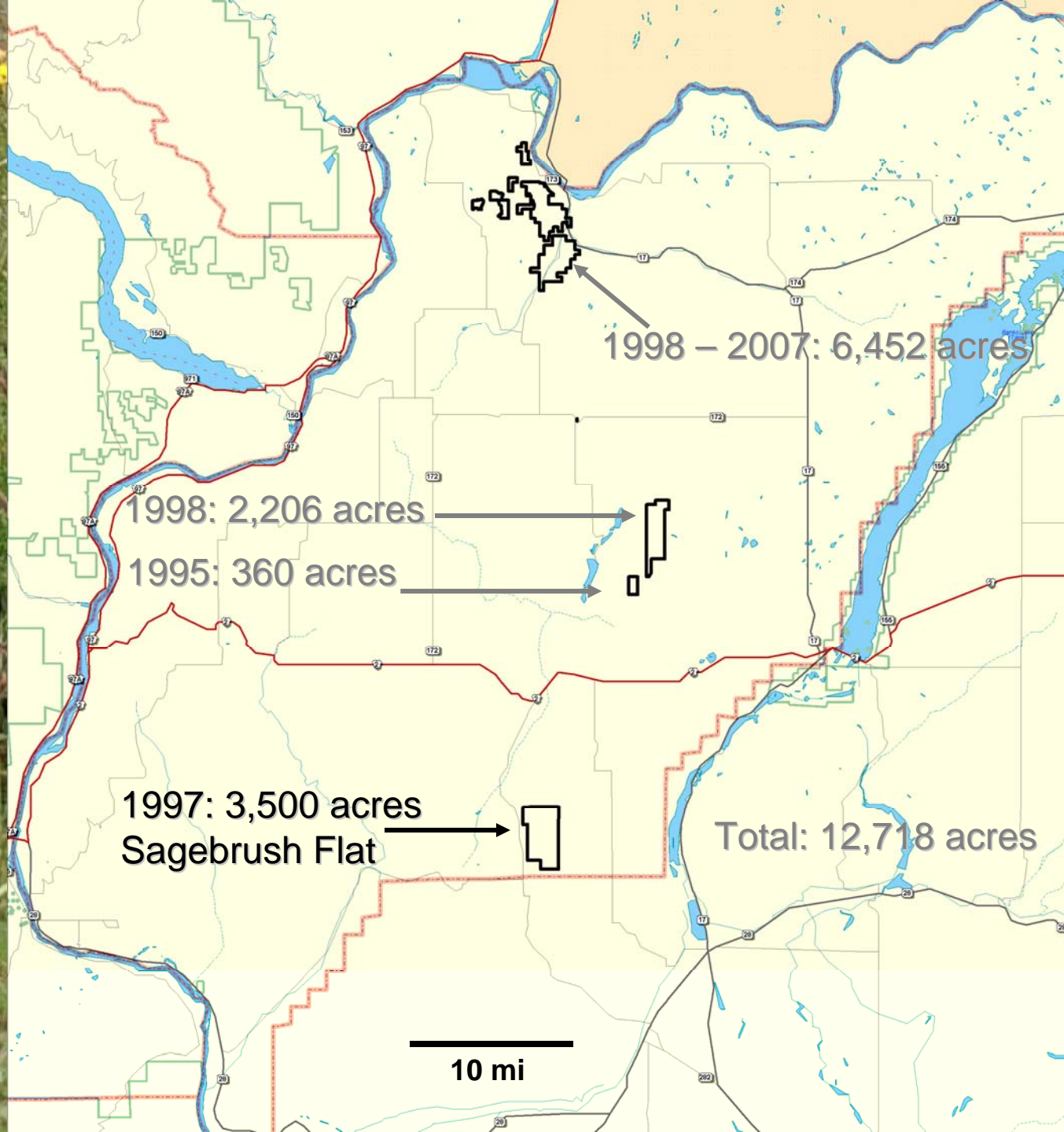
Acquisition History

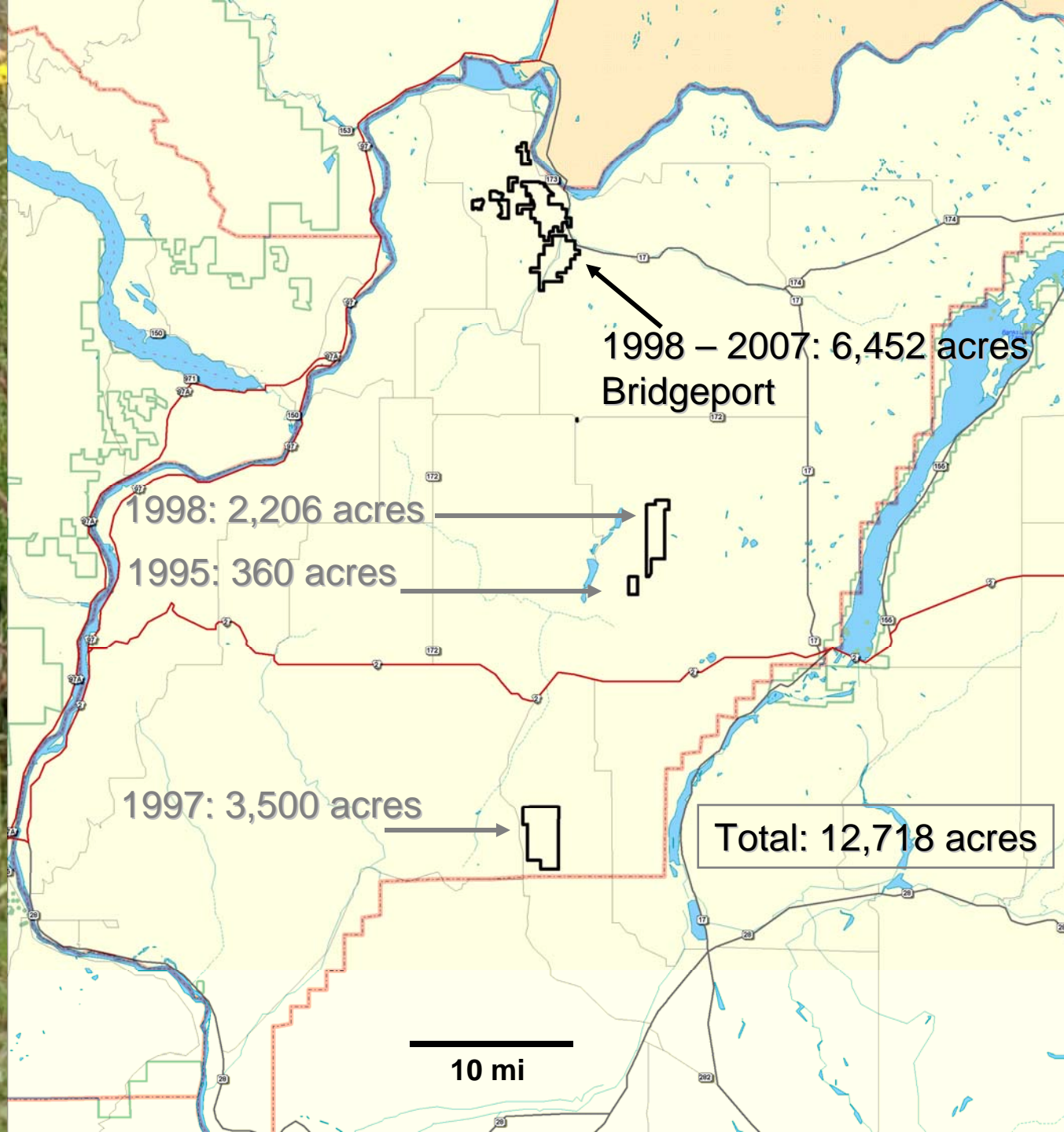
1991: 240 acres Sagebrush Flat 

10 mi







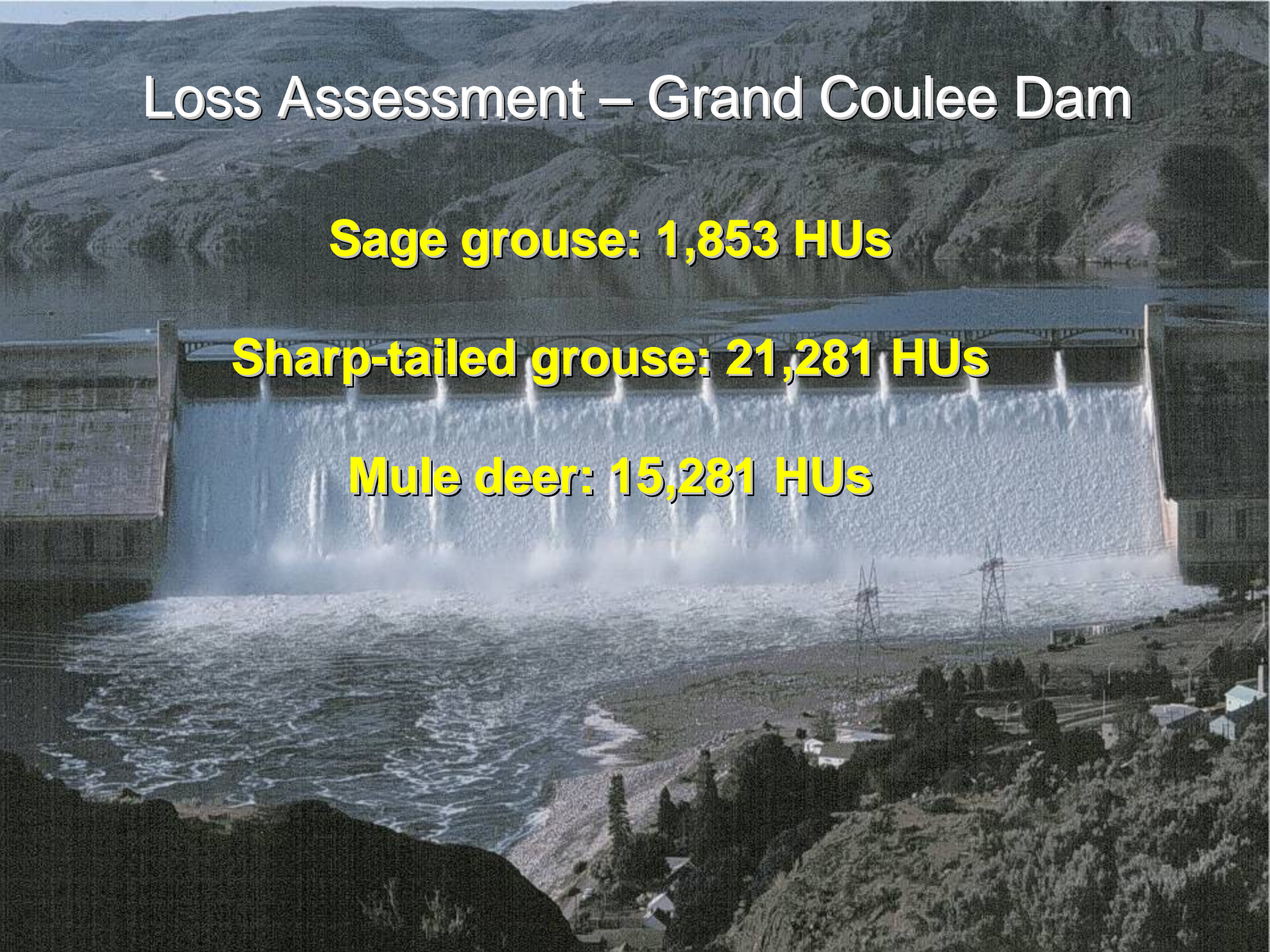


Loss Assessment – Grand Coulee Dam

Sage grouse: 1,853 HUs

Sharp-tailed grouse: 21,281 HUs

Mule deer: 15,281 HUs



Loss Assessment – Chief Joseph Dam

Sage grouse: 1,171 HUs

Sharp-tailed grouse: 2,290 HUs

Mule deer: 1,991 HUs



Project Goals



Project Goals

1. Protect, enhance & increase existing habitat to benefit native wildlife species
2. Increase populations of sharp-tailed grouse, sage grouse and pygmy rabbits

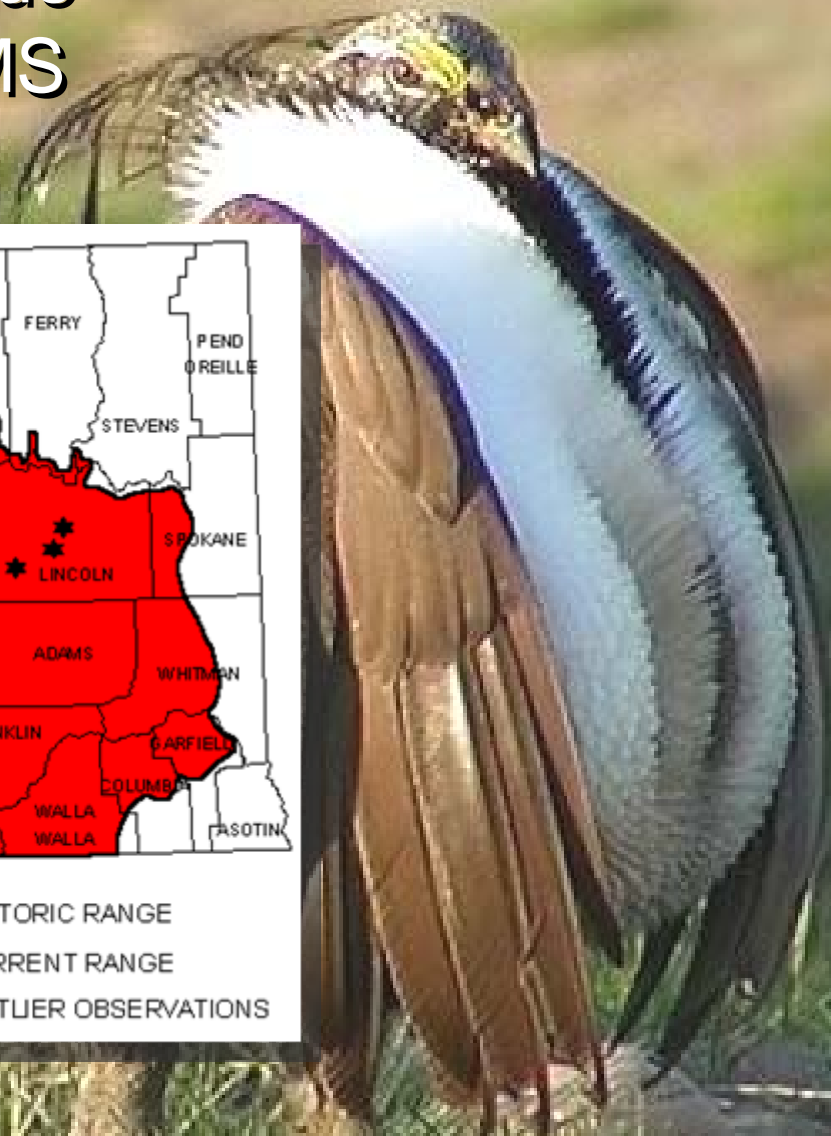
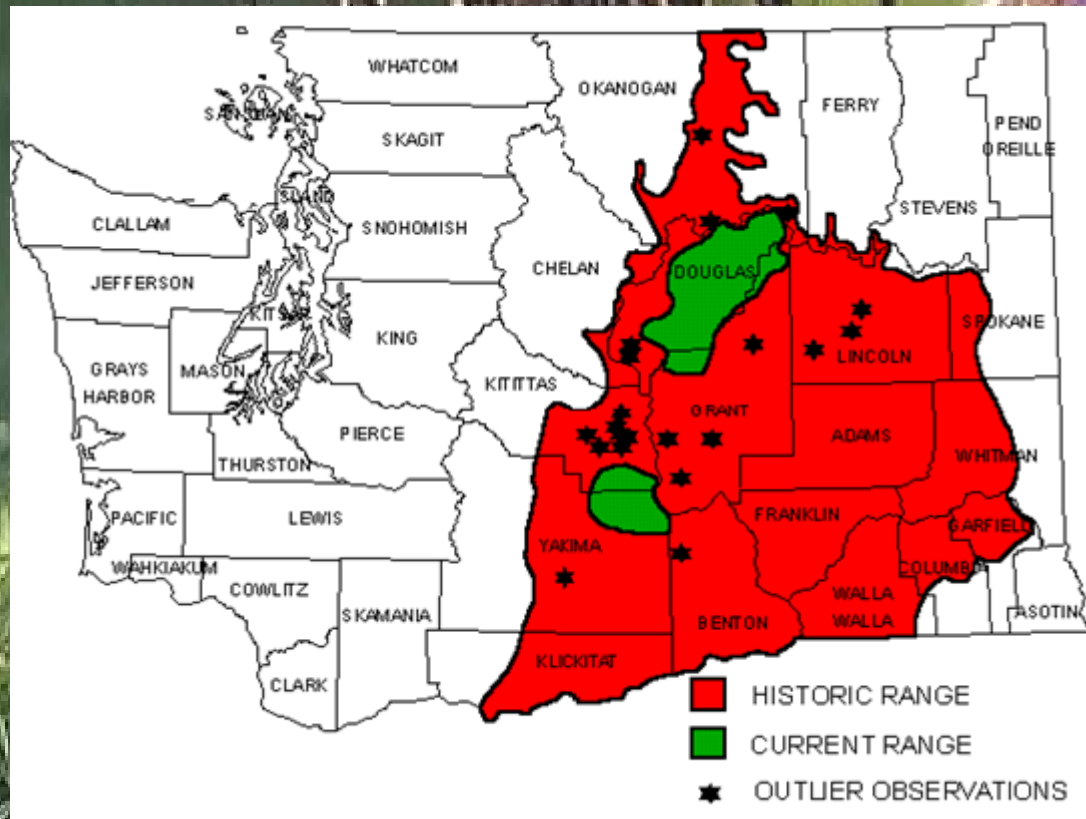


Focal Species



Sage Grouse

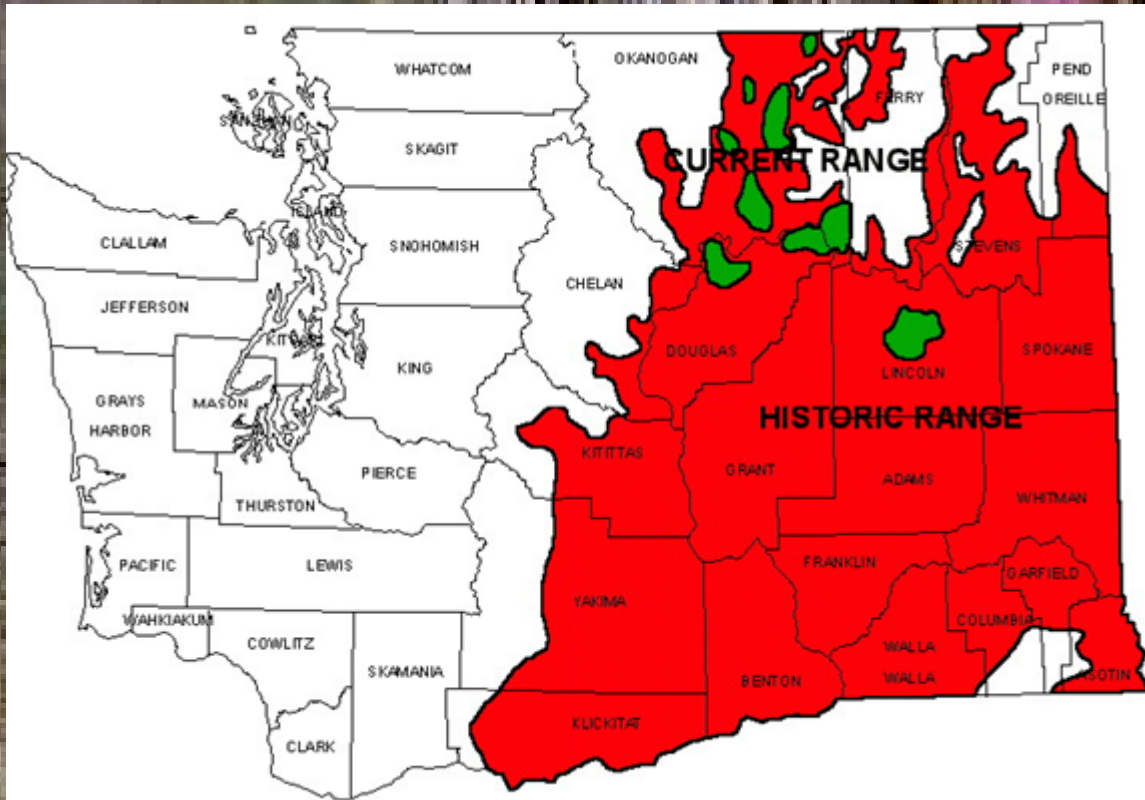
>77% decline statewide
>70% decline in UMMS



Sharp-tailed Grouse

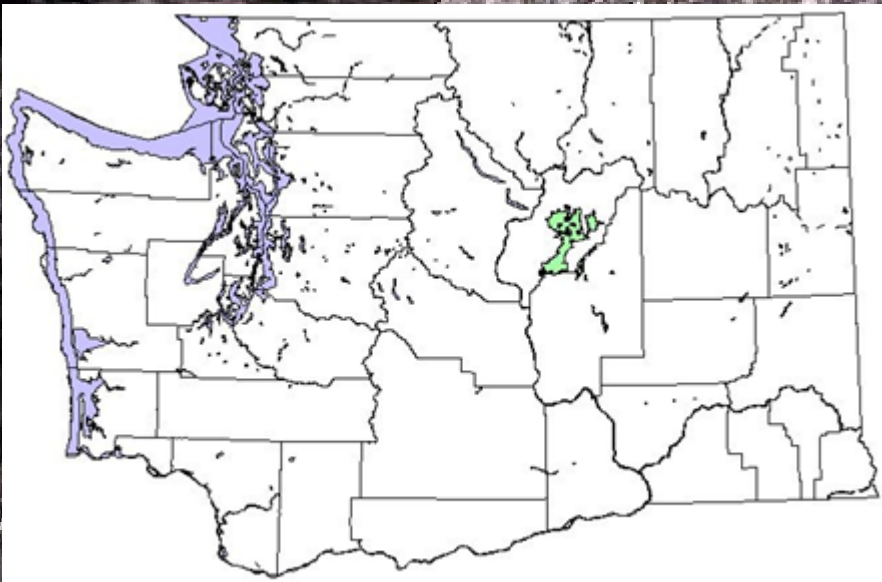
>90% decline statewide

>90% decline in project vicinity



Pygmy Rabbit

- Possibly extinct in the wild
- Genetically compromised
- Captive breeding program



Focal Habitat Types



Shrubsteppe

Focal Habitat Types



Focal Habitat Types



Focal Habitat Types



Cliff/talus

Ponderosa pine

Focal Habitat Types



Lakes, wetlands

Focal Habitat Types

A landscape photograph showing a rocky cliff on the left, a valley with dense green shrubs in the center, and rolling hills in the background under a clear blue sky.

Riparian

Limiting Factors

UPPER·MIDDLE MAINSTEM



Subbasin Plan
Prepared for the Northwest Power & Conservation Council

UPPER·MIDDLE MAINSTEM



Subbasin Plan
Prepared for the Northwest Power & Conservation Council

Limiting Factors

Shrubsteppe
Riparian wetlands
Herbaceous wetlands
pages 86-98

UPPER·MIDDLE MAINSTEM



Subbasin Plan
Prepared for the Northwest Power & Conservation Council

Limiting Factors

Lack of quality of
habitat due to:

Permanent removal

- agricultural
- urban
development

Degradation &
fragmentation

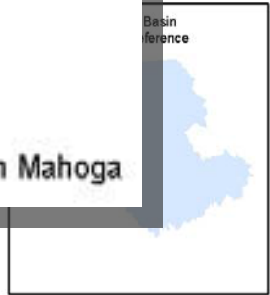
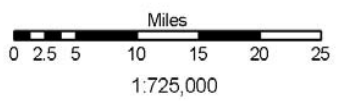
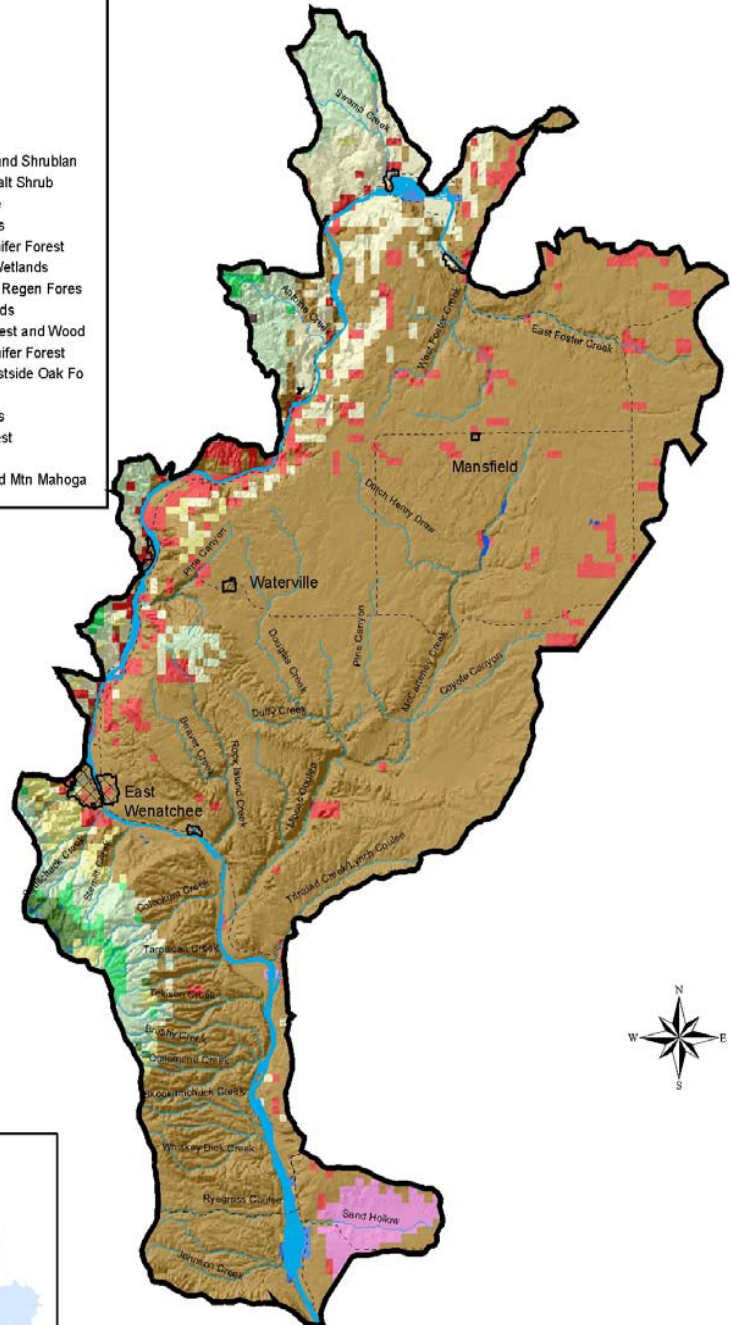
Historic Distribution w/in UMM Subbasin



- Legend**
- State Highways
 - ▣ Cities
 - ▣ Lakes
 - ▣ Columbia River
 - ▣ Streams
 - ▣ UMM Subbasin
- IBIS Historical Habitats**
- ▣ Alpine Grasslands and Shrublan
 - ▣ Desert Playa and Salt Shrub
 - ▣ Dwarf Shrub-steppe
 - ▣ Eastside Grasslands
 - ▣ Eastside Mixed Conifer Forest
 - ▣ Eastside Riparian Wetlands
 - ▣ Grass-shrub and/or Regen Fores
 - ▣ Herbaceous Wetlands

- State Highways
 - ▣ Cities
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 - ▣ Eastside Riparian Wetlands
 - ▣ Grass-shrub and/or Regen Fores
 - ▣ Herbaceous Wetlands
 - ▣ Lodgepole Pine Forest and Wood
 - ▣ Montane Mixed Conifer Forest
 - ▣ Ponderosa Pine/Eastside Oak Fo
 - ▣ Shrub-steppe
 - ▣ Subalpine Parklands
 - ▣ Upland Aspen Forest
 - ▣ Water
 - ▣ Western Juniper and Mtn Mahoga

- ▣ Lodgepole Pine Forest and Wood
- ▣ Montane Mixed Conifer Forest
- ▣ Ponderosa Pine/Eastside Oak Fo
- ▣ Dwarf Shrub-steppe
- ▣ Subalpine Parklands
- ▣ Upland Aspen Forest
- ▣ Western Juniper and Mtn Mahoga



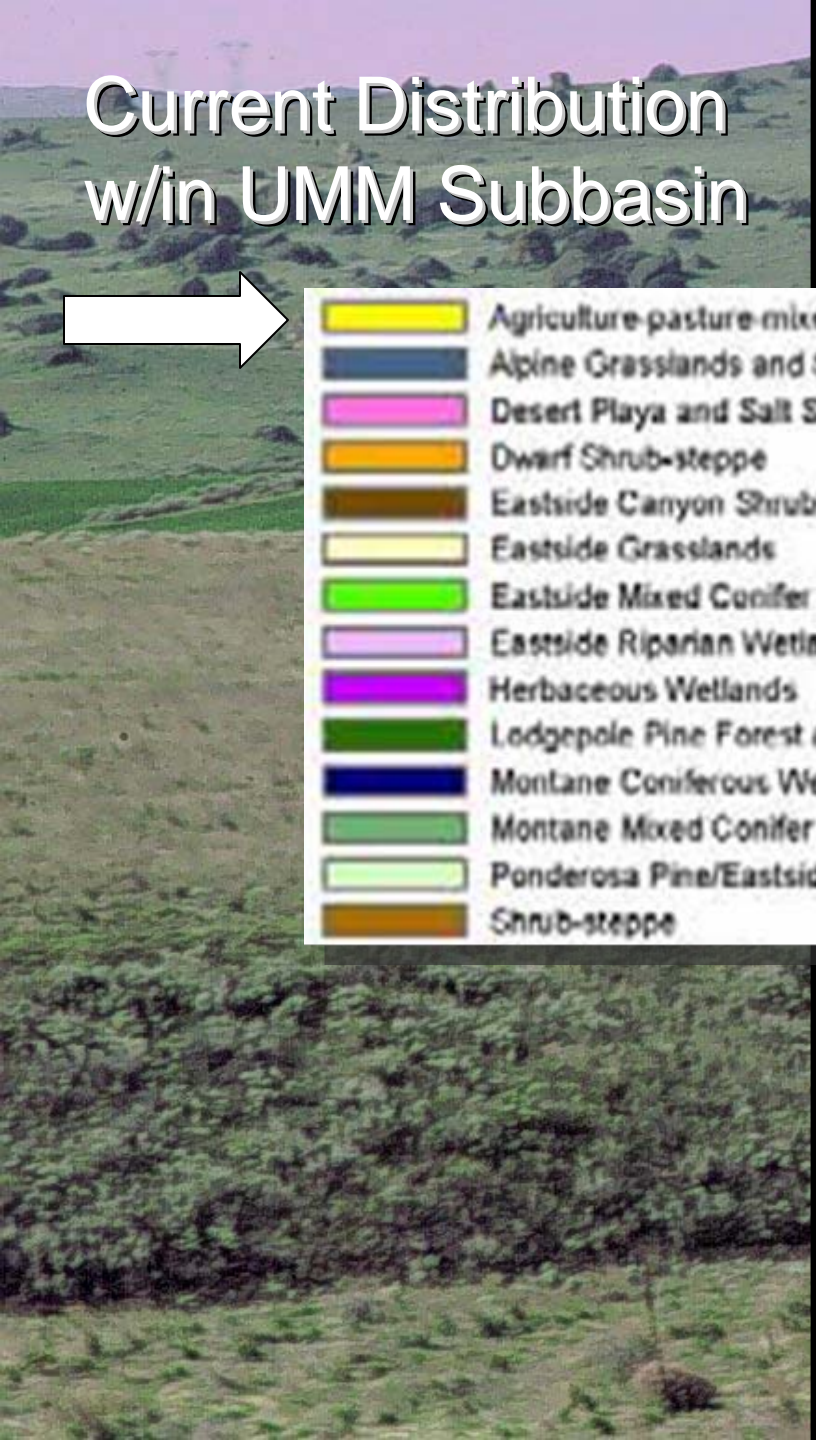
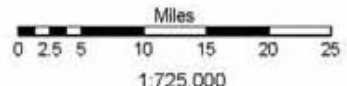
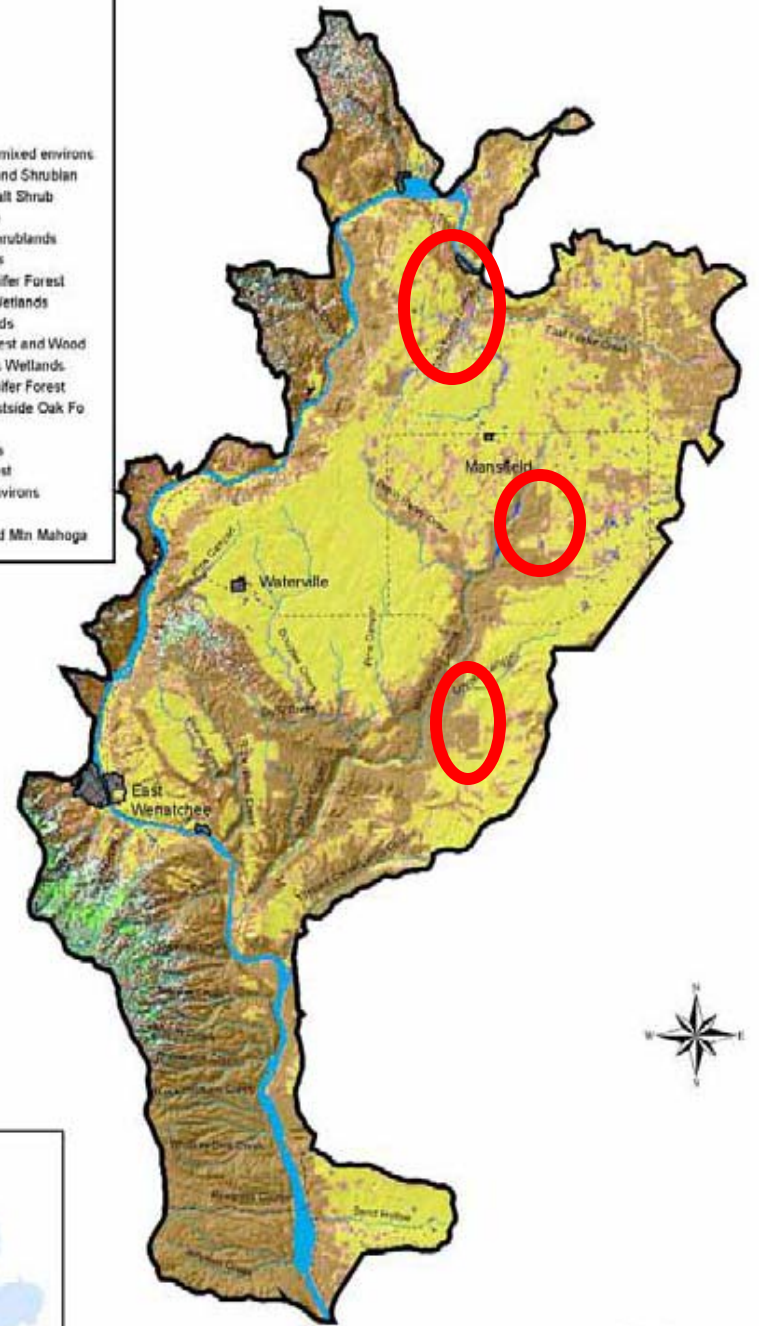
Current Distribution w/in UMM Subbasin



- Legend**
- State Highways
 - Cities
 - Lakes
 - Columbia River
 - Streams
 - UMM Subbasin
 - IBIS Current Habitat**
 - Agriculture-pasture-mixed environs
 - Alpine Grasslands and Shrubland
 - Desert Playa and Salt Shrub
 - Dwarf Shrub-steppe
 - Eastside Canyon Shrublands
 - Eastside Grasslands

- Agriculture-pasture-mixed environs
- Alpine Grasslands and Shrubland
- Desert Playa and Salt Shrub
- Dwarf Shrub-steppe
- Eastside Canyon Shrublands
- Eastside Grasslands
- Eastside Mixed Conifer Forest
- Eastside Riparian Wetlands
- Herbaceous Wetlands
- Lodgepole Pine Forest and Wood
- Montane Coniferous Wetlands
- Montane Mixed Conifer Forest
- Ponderosa Pine/Eastside Oak Fo
- Shrub-steppe

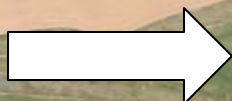
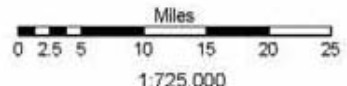
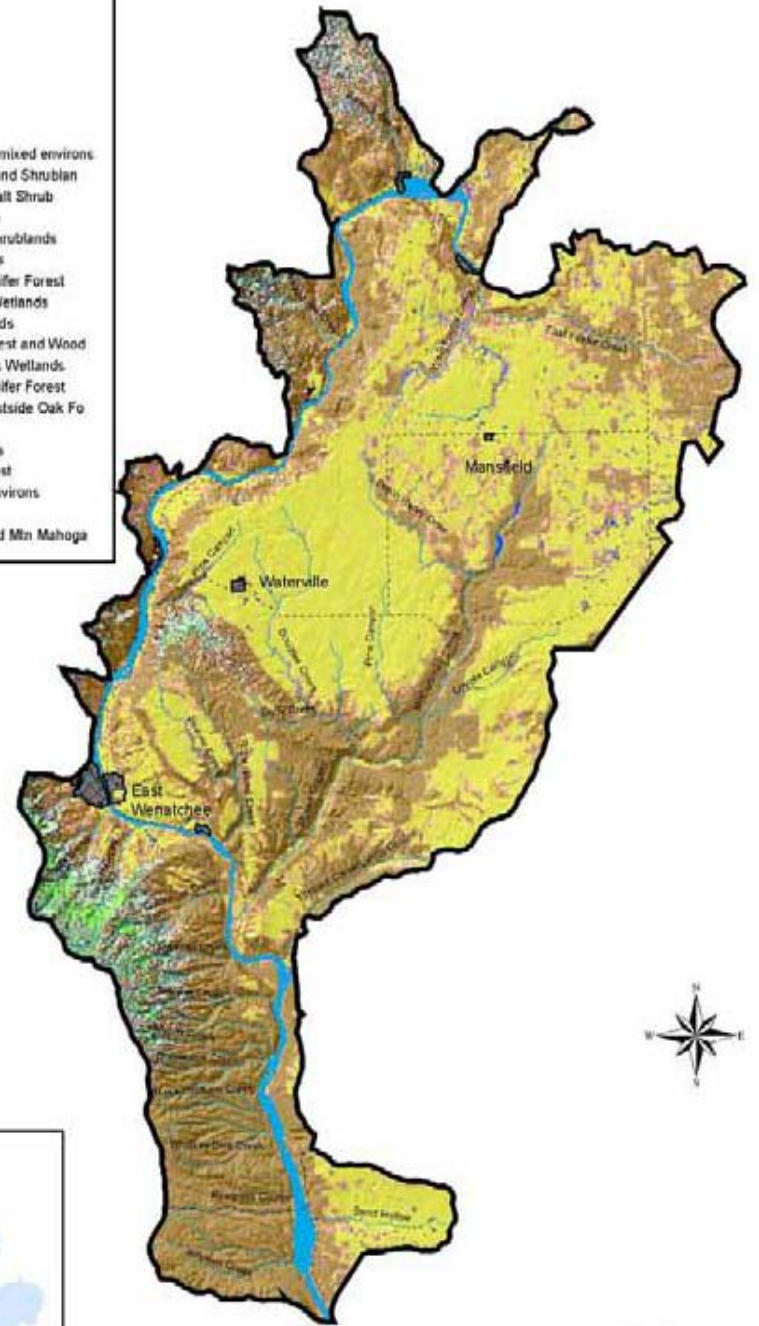
- Conifer Forest
- Wetlands
- Wetlands
- Forest and Wood
- roes Wetlands
- Conifer Forest
- Eastside Oak Fo
- lands
- Forest
- d environs
- and Mtn Mahoga



Current Distribution w/in UMM Subbasin



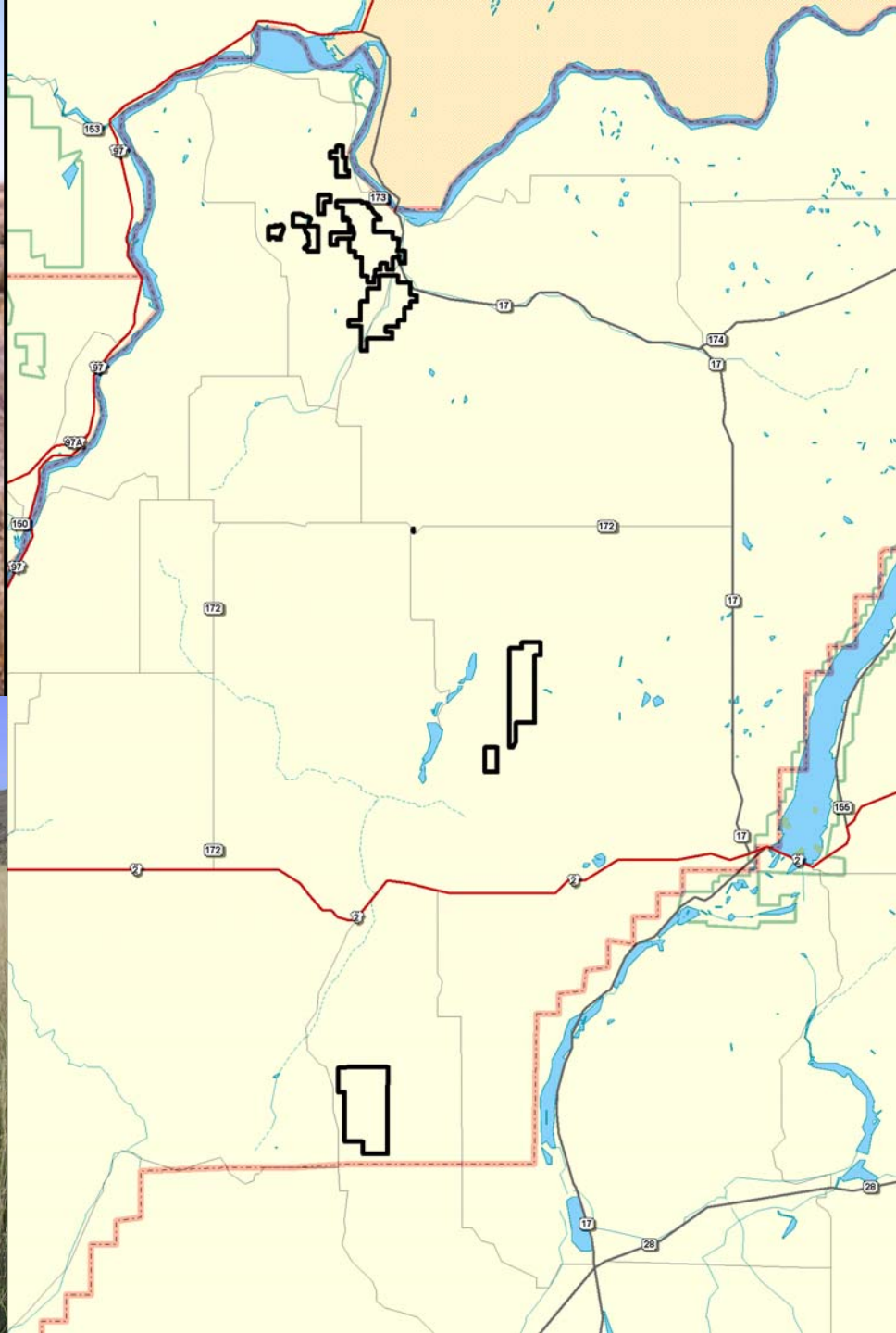
Conifer Forest
 Riparian Wetlands
 Forest and Wood
 roes Wetlands
 Conifer Forest
 Eastside Oak Fo



Shrubsteppe loss:
 39% loss w/in subbasin

Approx. 85% loss in
 project vicinity

Major Accomplishments?

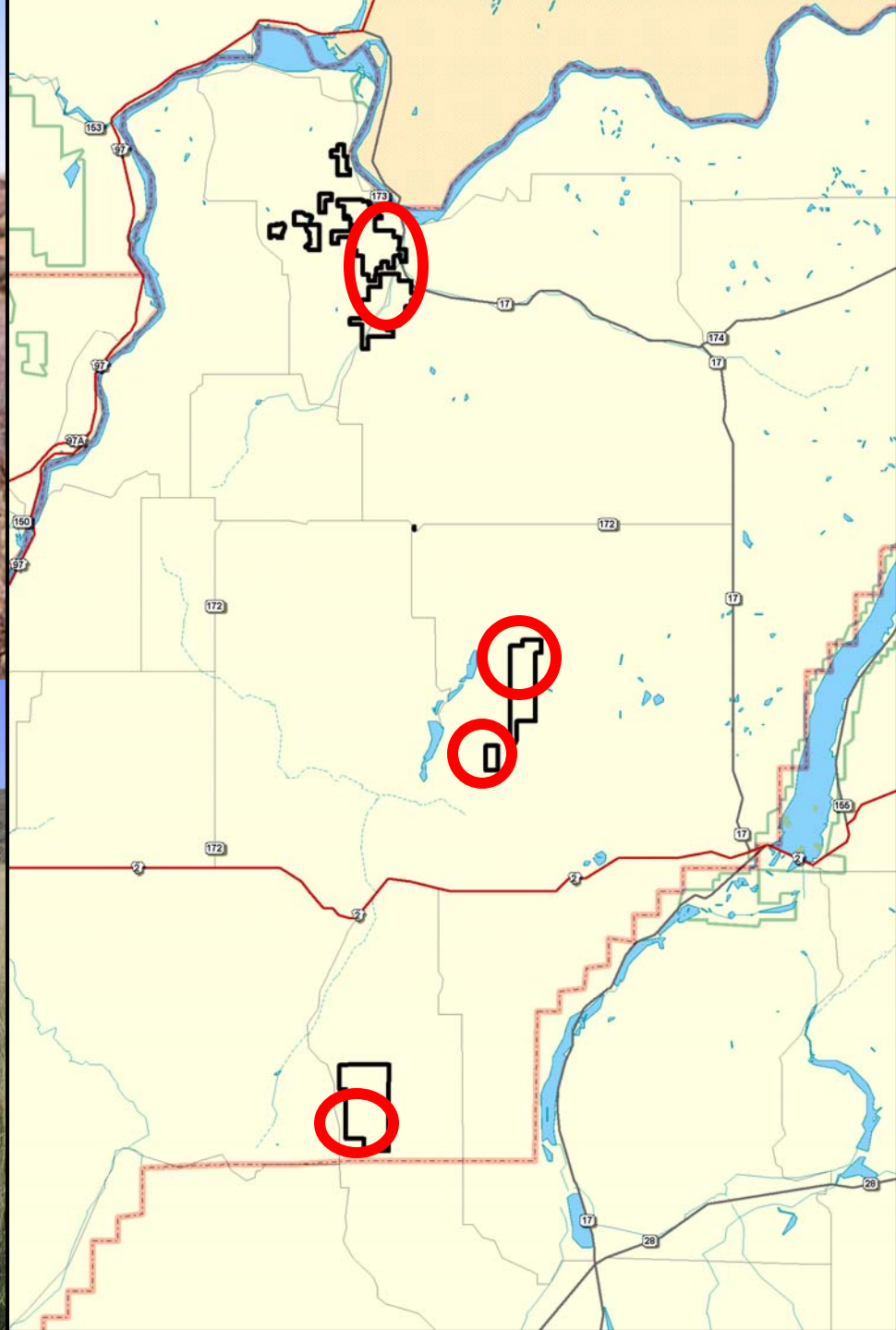


Major Accomplishments

Shrubsteppe restoration / enhancement:
800 acres



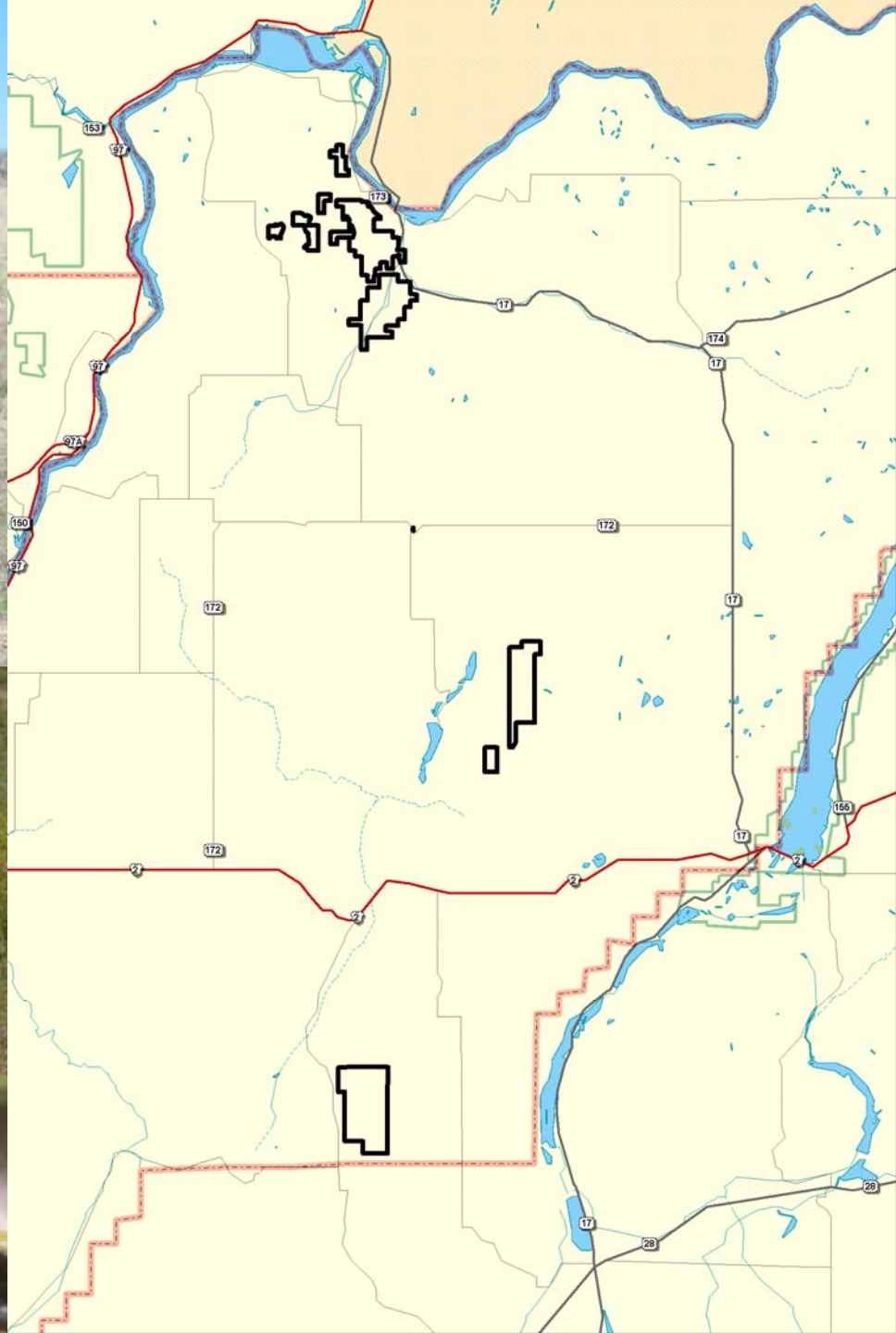
3 years post planting



Major Accomplishments

Weed Control:
Integrated pest
management

Dalmatian toadflax

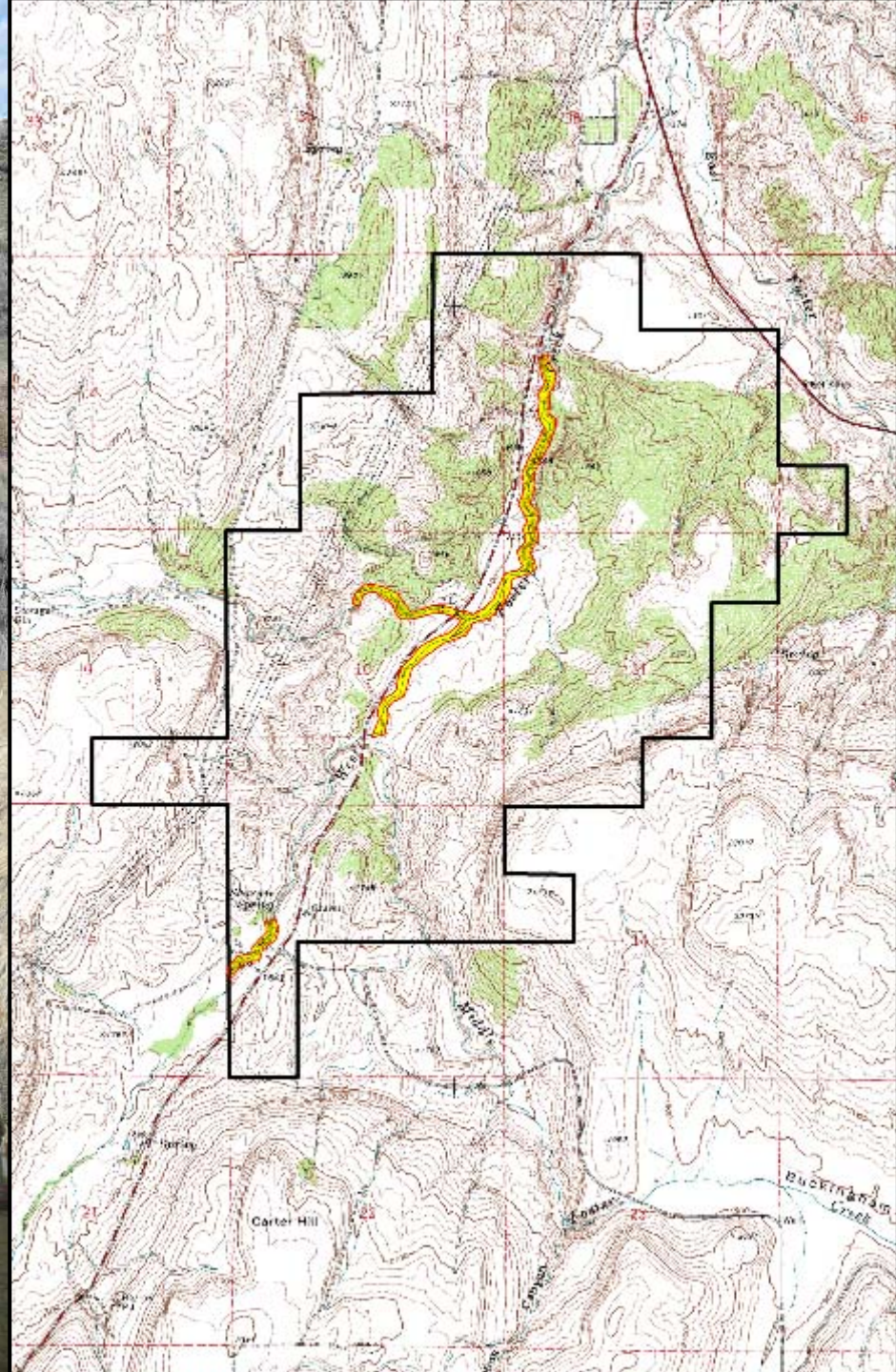


Major Accomplishments

Riparian enhancement:
>15,000 trees & shrubs



Willow cuttings



Major Accomplishments

Riparian enhancement:
Deer exclosures

4 years after planting



3 years after fencing

Major Accomplishments

Riparian enhancement:
Irrigated water birch plots



2 years after planting









HEP Results



HEP Results




Grassland/Shrub-steppe Habitat Units

Area/Unit	Baseline*	2007	HU Gain	Percent Gain
Bridgeport	2230.62	2981.95	751.33	33.68
Chester Butte	1437.77	2946.06	1508.29	104.90
Dormaier	448	482.92	34.92	7.79
Total	4116.39	6410.93	2294.54	55.74

* Baseline surveys performed in 1996 and 1999

HEP Results



Grassland/Shrub-steppe HEP Results - Habitat Suitability Index (HSI)

Area/Unit	Species	Baseline-96-99	2007	HSIGain/Loss	Percent Gain/Loss
Bridgeport	Mule Deer	0.27	0.45	0.18	66.67
Bridgeport	Sharp-tailed Grouse	0.46	0.7	0.24	52.17
Bridgeport	W. Meadowlark	0.4	0.37	-0.03	-7.50
Chester Butte	Mule Deer	0.34	0.54	0.20	58.82
Chester Butte	Sage Grouse	0.22	0.62	0.40	181.82
Dormaier	Pygmy Rabbit	0.4	0.65	0.25	62.50
Dormaier	Mule Deer	0.5	0.48	-0.02	-4.00
Dormaier	Sage Grouse	0.5	0.62	0.12	24.00

Major Accomplishments

Sharp-tailed grouse
translocation 2005 -
2008



Major Accomplishments

Sharp-tailed grouse translocation 2005 - 2008

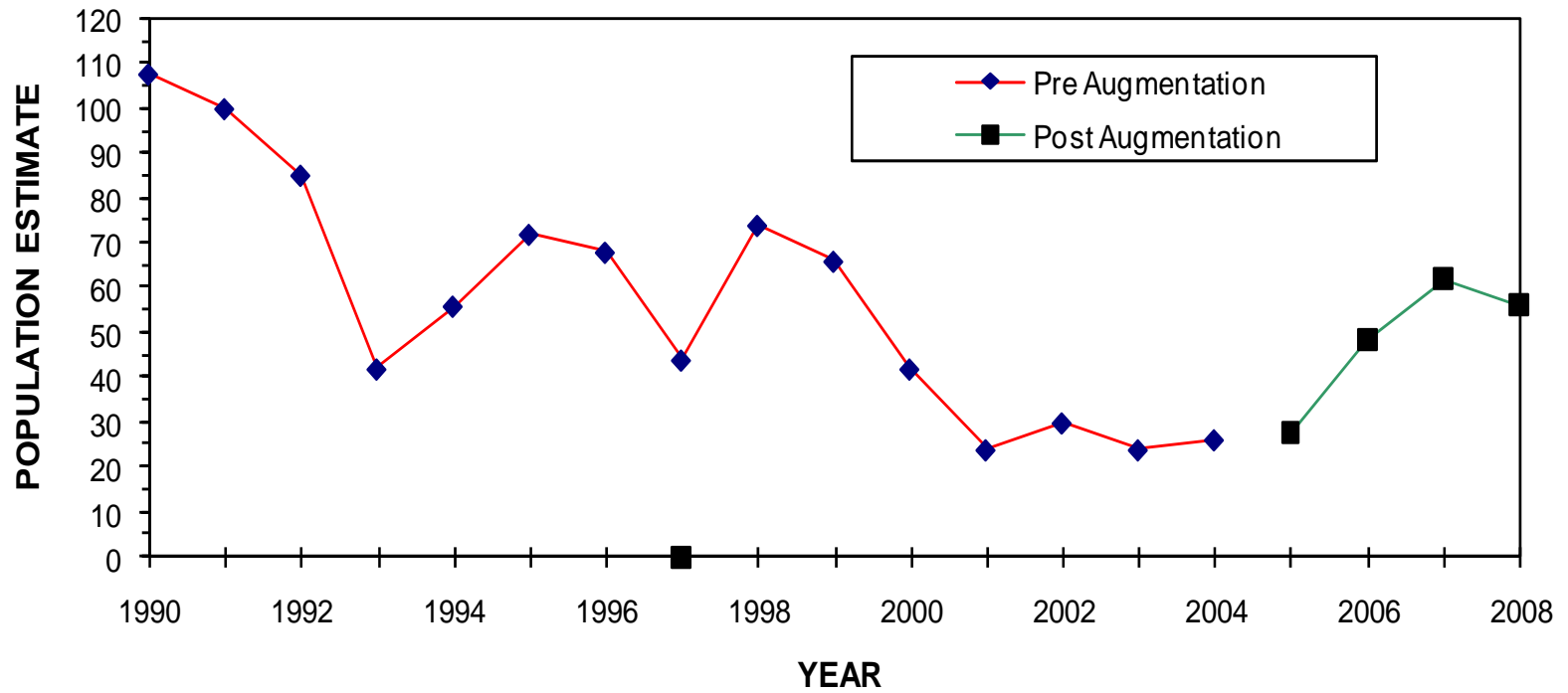


Major Accomplishments

58 released on the Bridgeport Unit



Sharp-tailed Grouse



Wildlife Monitoring



Wildlife Monitoring

Breeding bird surveys

Reptile & amphibian surveys

Small mammal surveys



2010 and beyond



2010 and beyond

- Integrated pest management
 - Replace exotic vegetation with native species
 - Herbicide applications
 - Release biocontrols



2010 and beyond

- Maintain prior enhancements
- Maintain existing deer and livestock fences
- Construct additional deer and livestock fences
- Maintain and repair equipment and facilities



2010 and beyond

Translocation efforts:

Sharp-tailed grouse

Sage grouse

Pygmy rabbit



Funding Request

FY 2010: \$313,064

FY 2011: \$308,001

FY 2012: \$309,952

Three Year Total: \$931,017

Provides personnel, goods & services, equipment purchases, overhead necessary to protect and maintain project enhancements and facilities.

Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



Questions?



