



**Bi-State Sage-Grouse
&
Conifer Expansion**

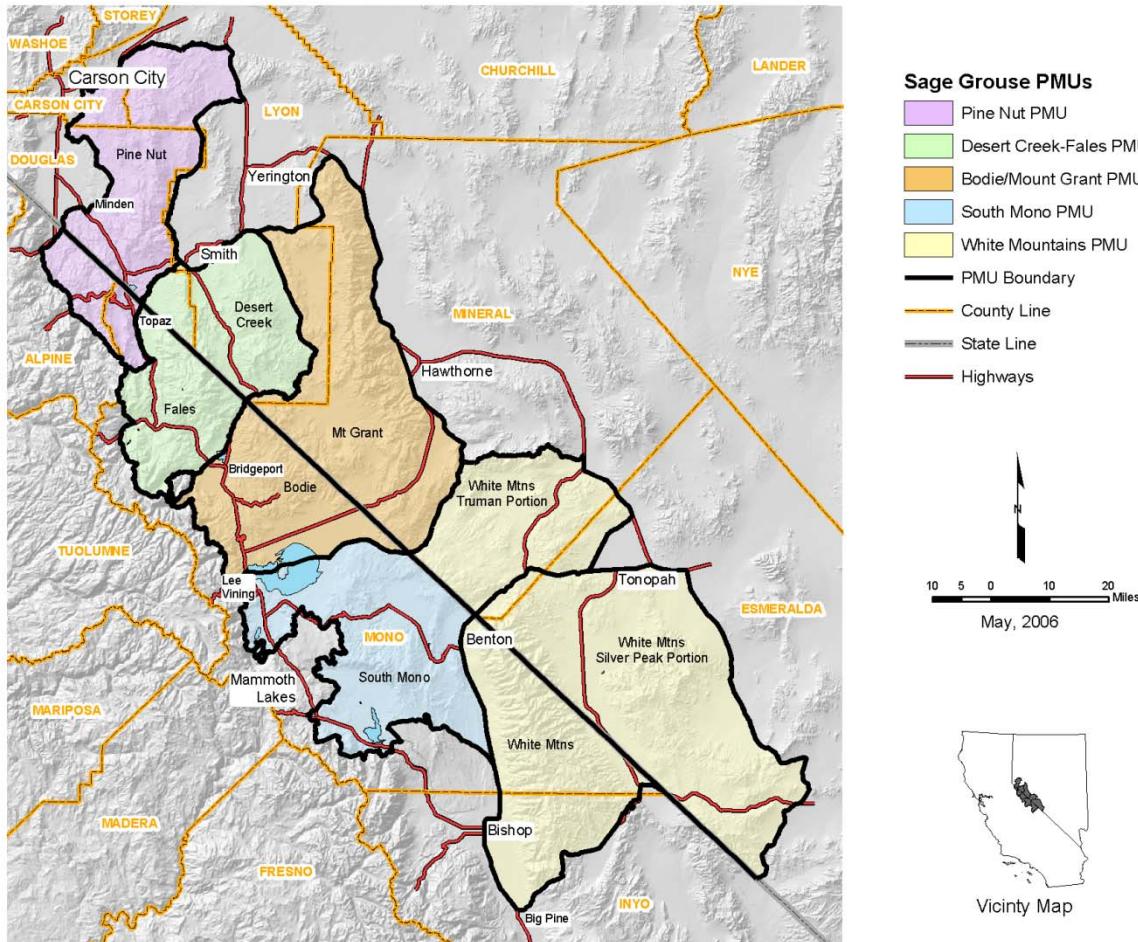
Sherri Lisius & Mark Freese



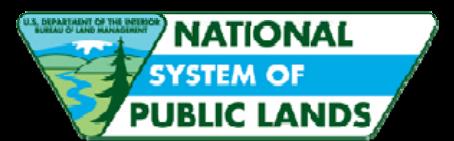
Before we get to the birds...

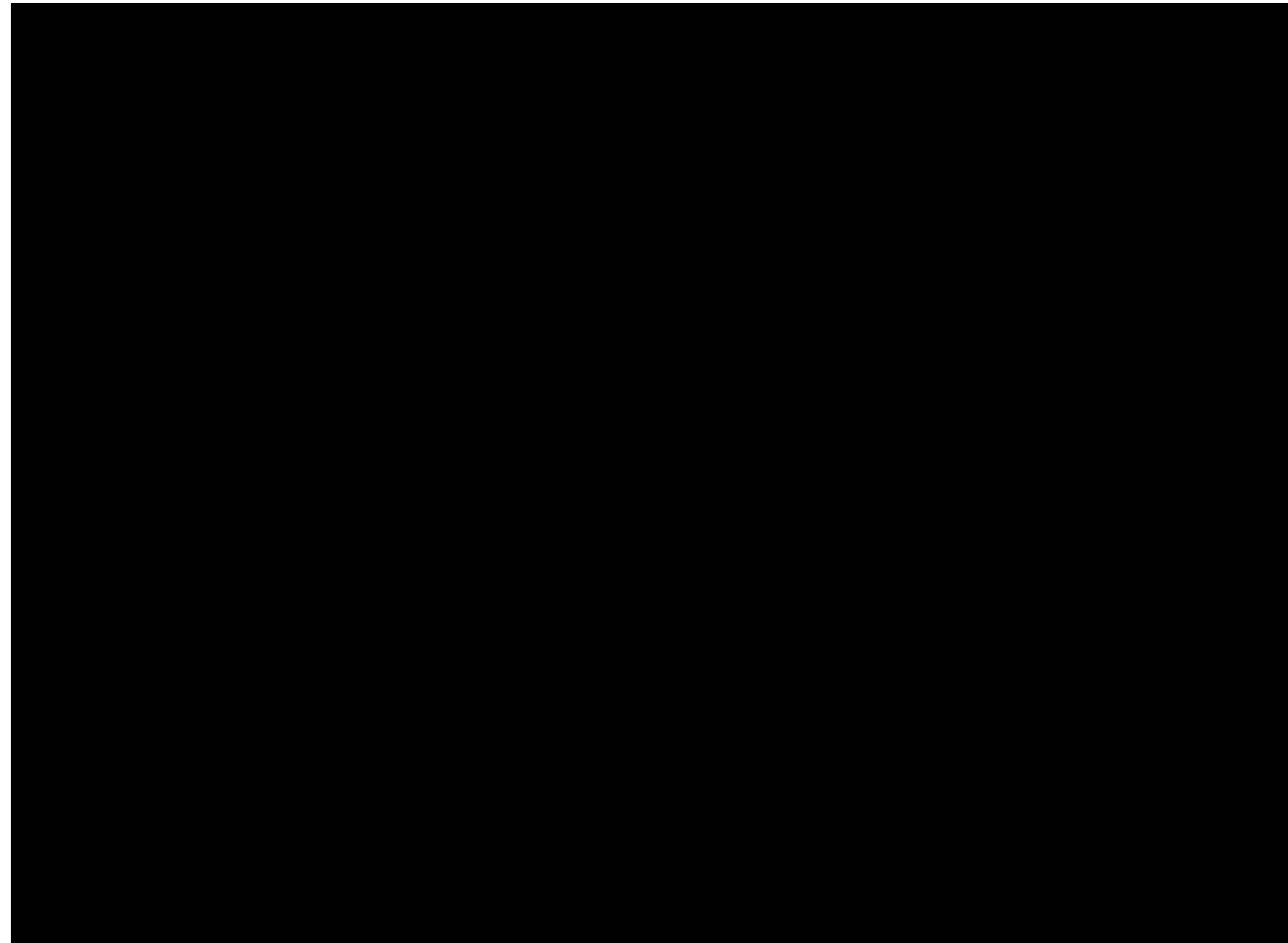


Bi-State Distinct Population Segment of Greater Sage-Grouse



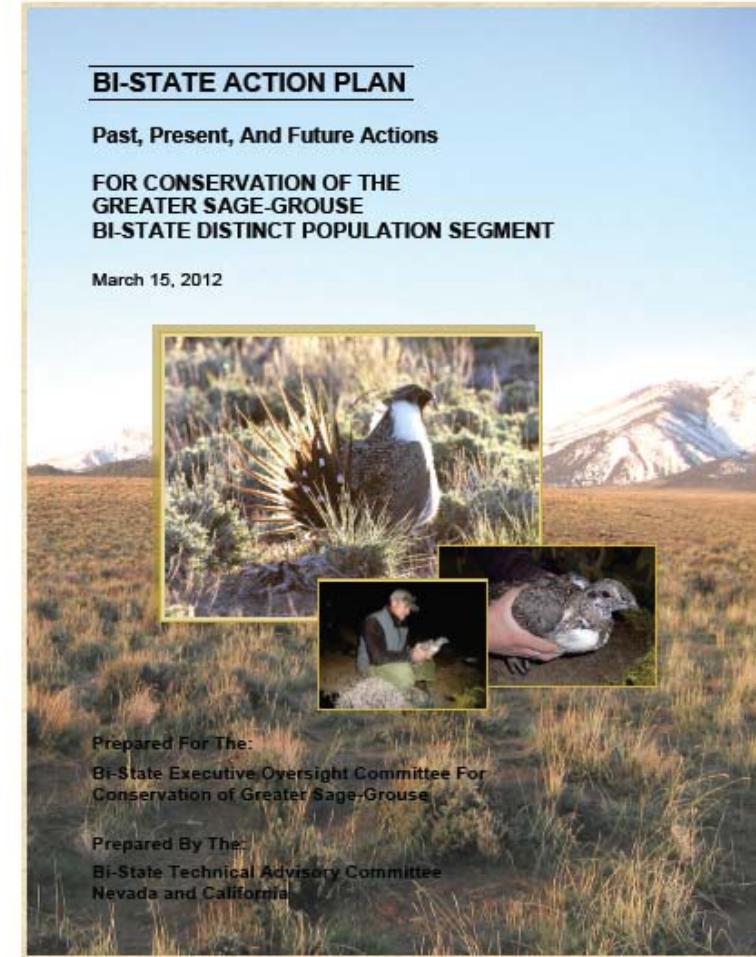
Why are we talking about them here?





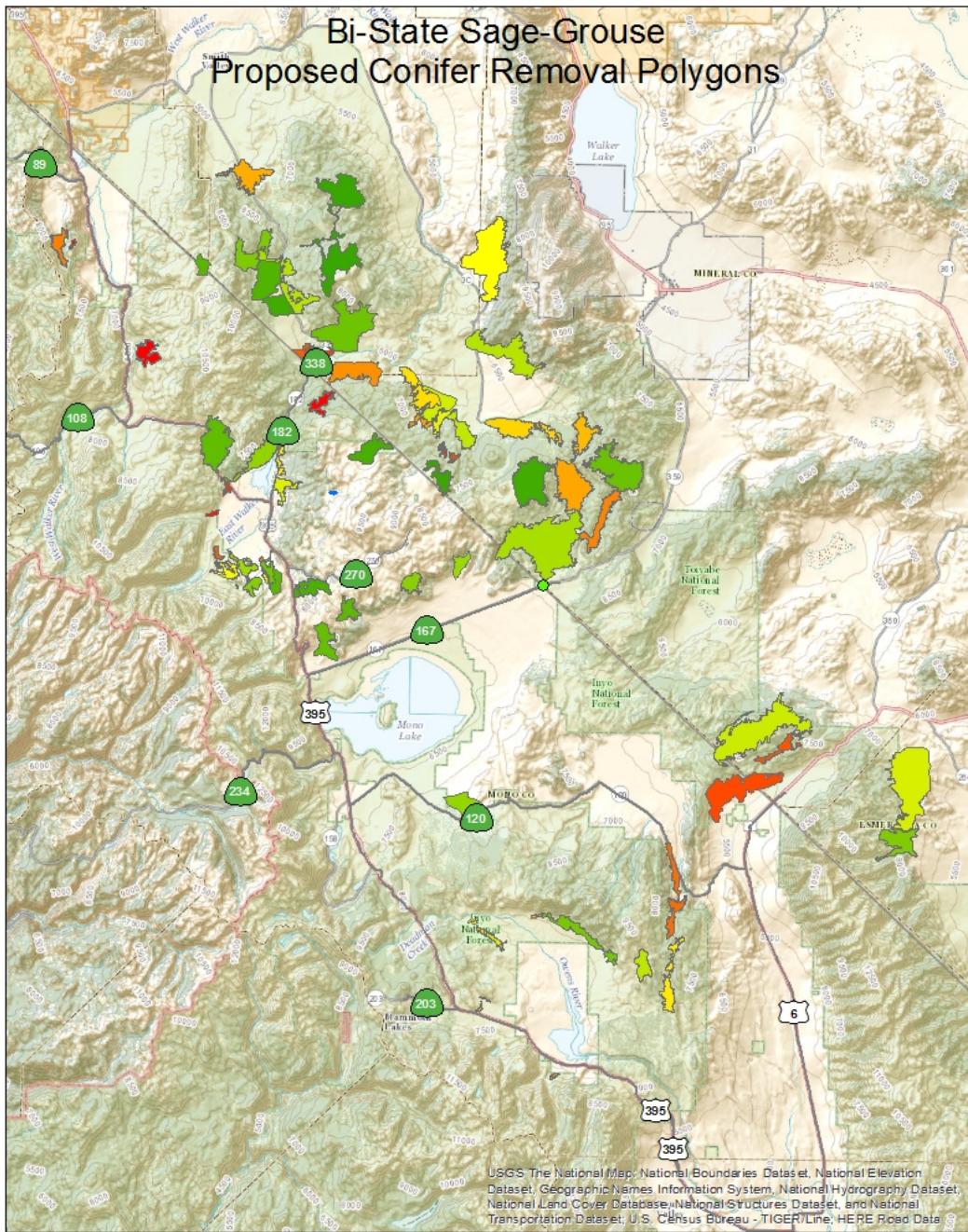
Bi-State Action Plan

- 2012 Action Plan:
“roadmap to
conservation” FWS
 - Best available
science
 - Collaboration,
LAWG, many
stakeholders
 - Addresses conifer +
other threats



How did we get here?

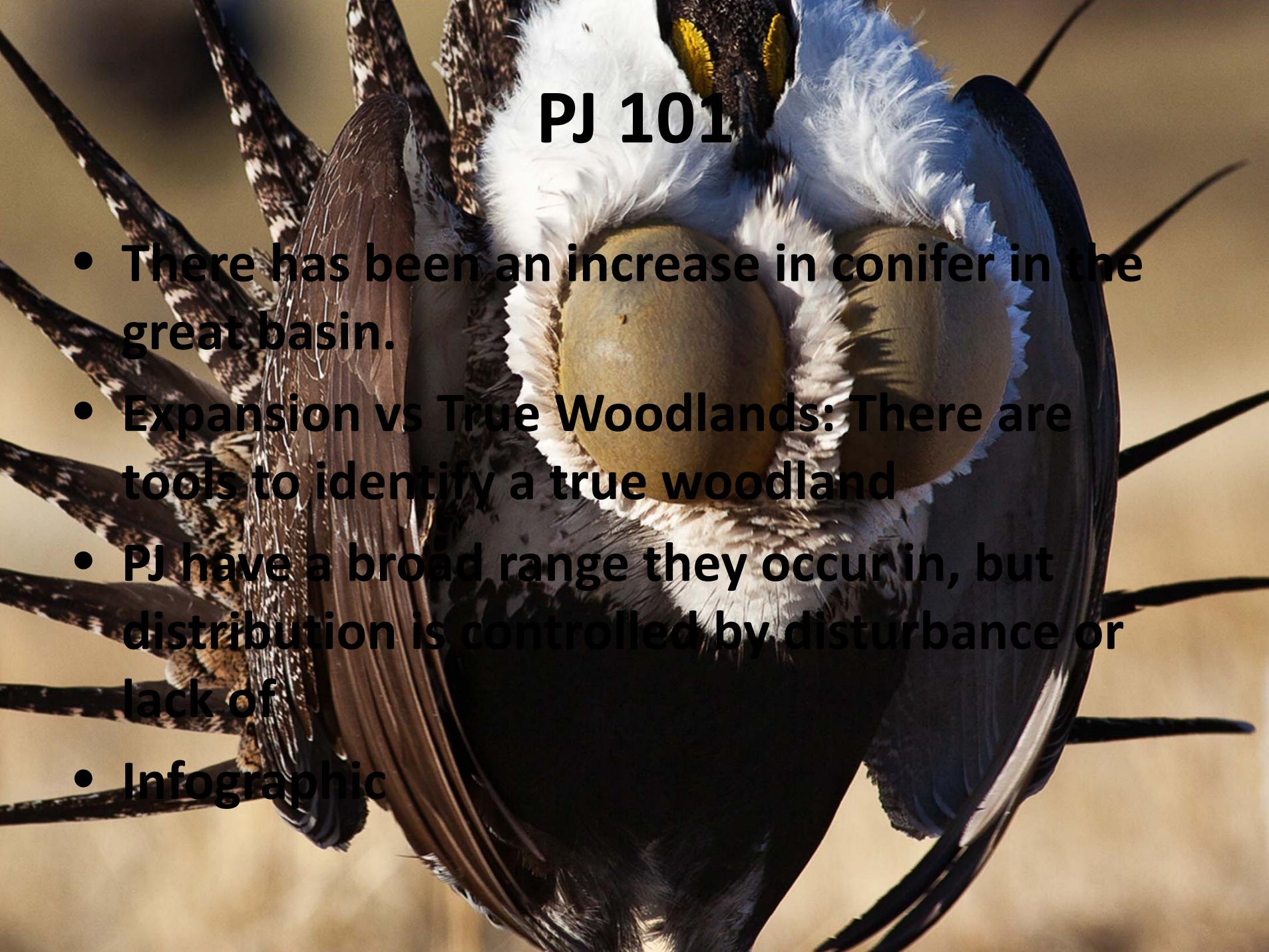




10 year plan
Broad polygons, not every acre cut

PMU	Potential Conifer Treatment Areas
Pine Nuts	46,673
Mt. Grant	67,220
Desert Creek/Fales	25,903
Bodie	18,403
South Mono	18,033
White Mountain	26,994
Outside PMUs	120
Total	203,346

Habitat	Acres	Percent age
Not Pinyon-Juniper	2,058,146	45%
Pinyon-Juniper Cover Class 1 (1-10% Pinyon-Juniper Cover)	1,501,893	33%
Pinyon-Juniper Cover Class 2 (10%-20% Pinyon-Juniper Cover)	526,260	12%
Pinyon-Juniper Cover Class 3 (20%-30% Pinyon-Juniper Cover)	441,530	10%
All Pinyon-Juniper in Bi-State	2,469,683	55%



PJ 101

- There has been an increase in conifer in the great basin.
- Expansion vs True Woodlands: There are tools to identify a true woodland
- PJ have a broad range they occur in, but distribution is controlled by disturbance or lack of
- Infographic



Sage-grouse

- Sage-grouse need contiguous diverse sagebrush systems
- Avoid conifer even at low densities (as little as 3%)
- Survival is reduced if they use conifer
- Birds move in post treatment

A close-up photograph of grouse feathers, showing a mix of brown, white, and blue colors. The feathers are textured and layered.

Where to Treat?

- Site specific goals and objectives
- Treating early expansion is important for grouse:
Cover class 1
- 20% tree canopy lose 50% shrub cover
- Treat before you lose it
- Maintains existing ecological integrity, before it
is altered by increased conifer
- Cheaper, we know the response, less weed risk...

A close-up photograph of grouse feathers. The feathers are primarily dark brown or black, with some white and yellowish-tan feathers visible, particularly around the eye area. The lighting highlights the texture and color of the feathers.

Treatment response

- Various methods depending on site specific objectives
- Removing conifer can result in increased perennial grasses, increased water availability
- Benefits grouse-more diversity and cover
- Can reduce fire severity

A close-up photograph of a bird's head and upper body. The bird has dark, iridescent feathers on its back and wings, and bright white feathers on its neck and chest. Its eyes are yellow with black pupils. The background is a soft, out-of-focus yellow.

Other resource values

- Pine nuts & other culturally important areas
- Habitat for other wildlife (Bodie)
- Livestock industry values
- Collaboration and partnerships
- Trust building



Tools for Prioritization

- Resistant & resilient
- Conservation Planning Tool
- FIAT
- ESD

A close-up photograph of a Greater Sage-Grouse. The bird's head is turned slightly to the right, showing its yellow iridescent wattle and dark feathers. Its body is covered in white, textured feathers. In the background, several long, dark, spiky feathers, likely from another grouse, are visible against a warm, golden-brown sky.

You will make
mistakes...but
learn from them

