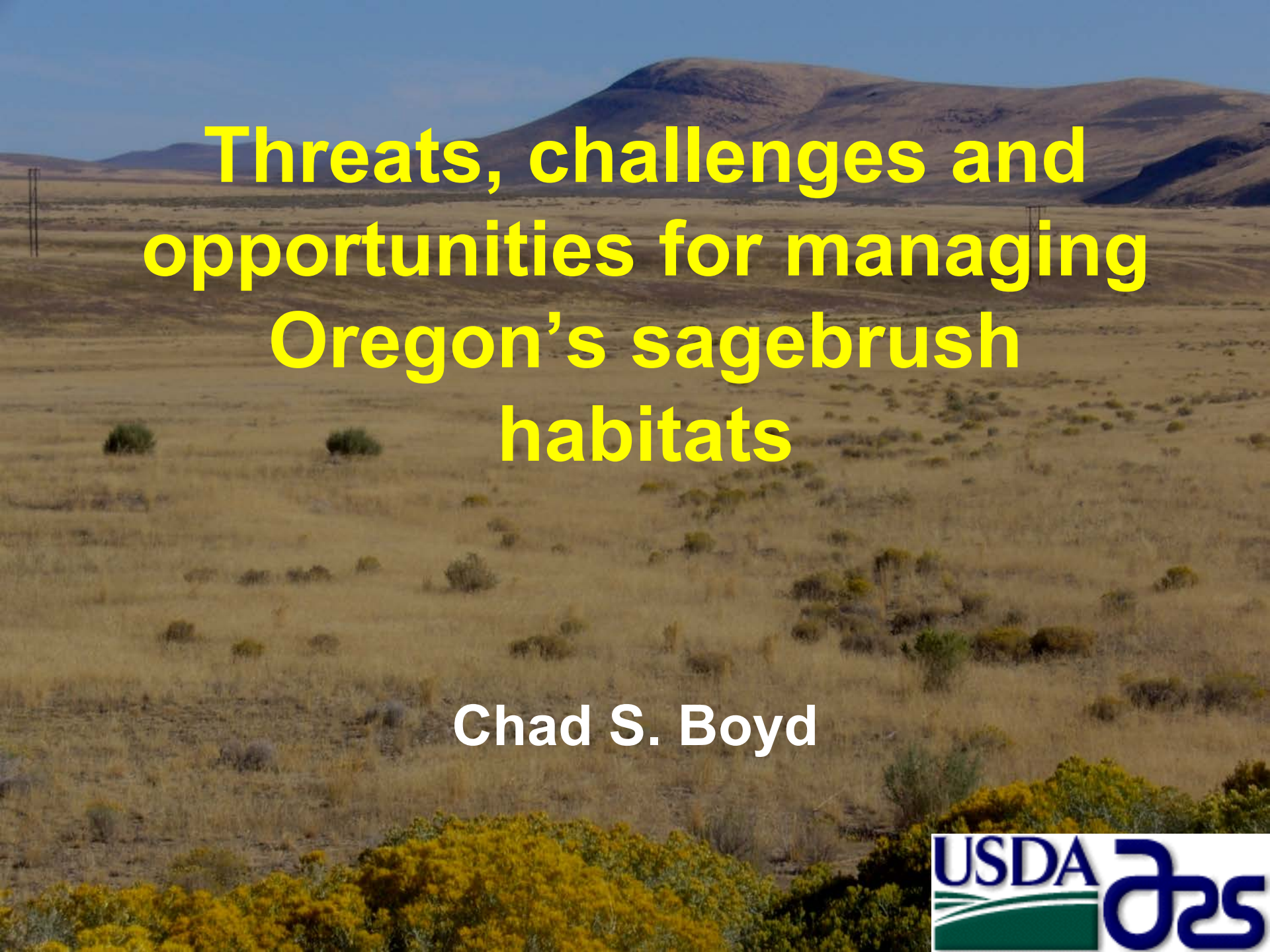
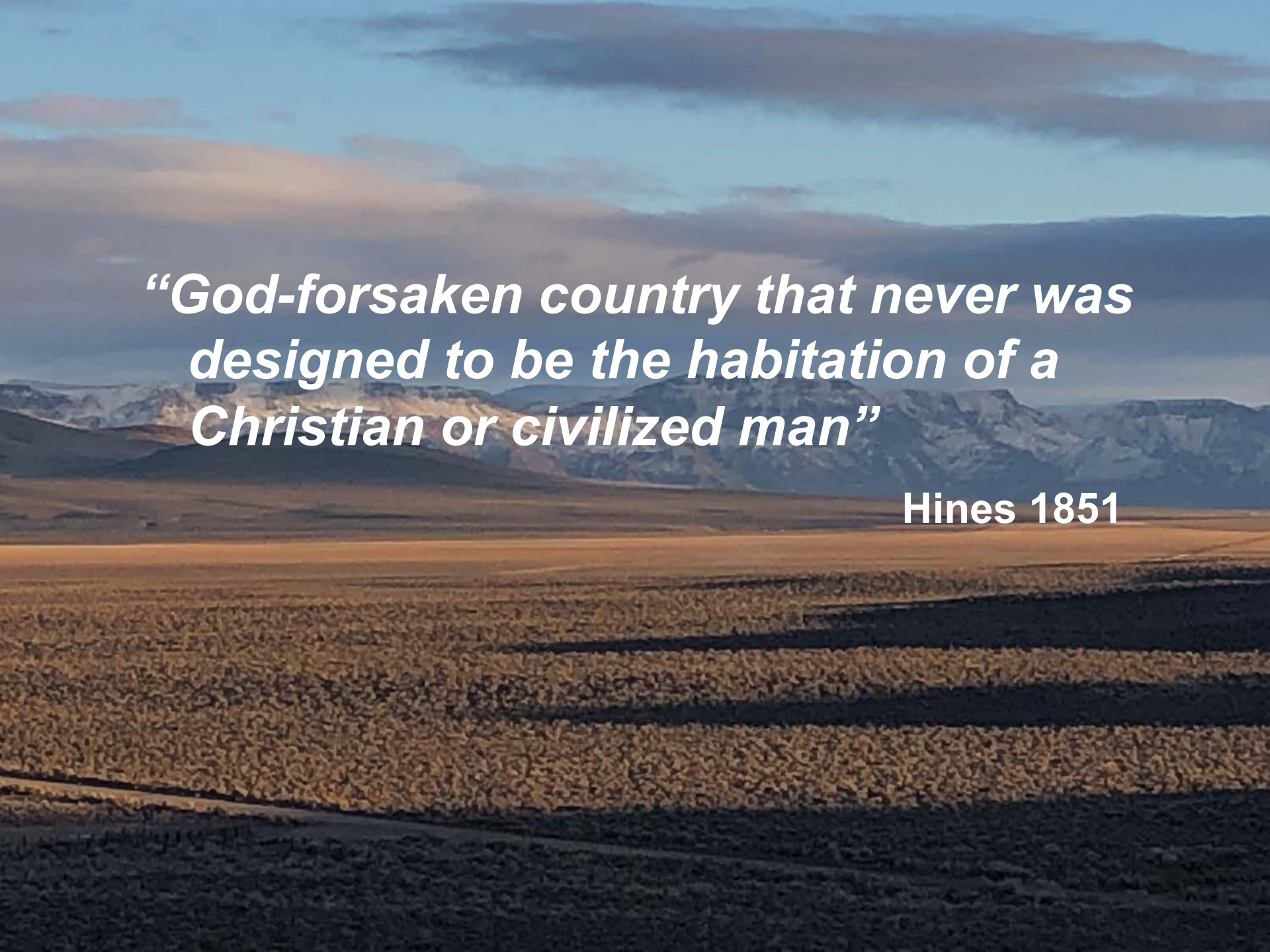
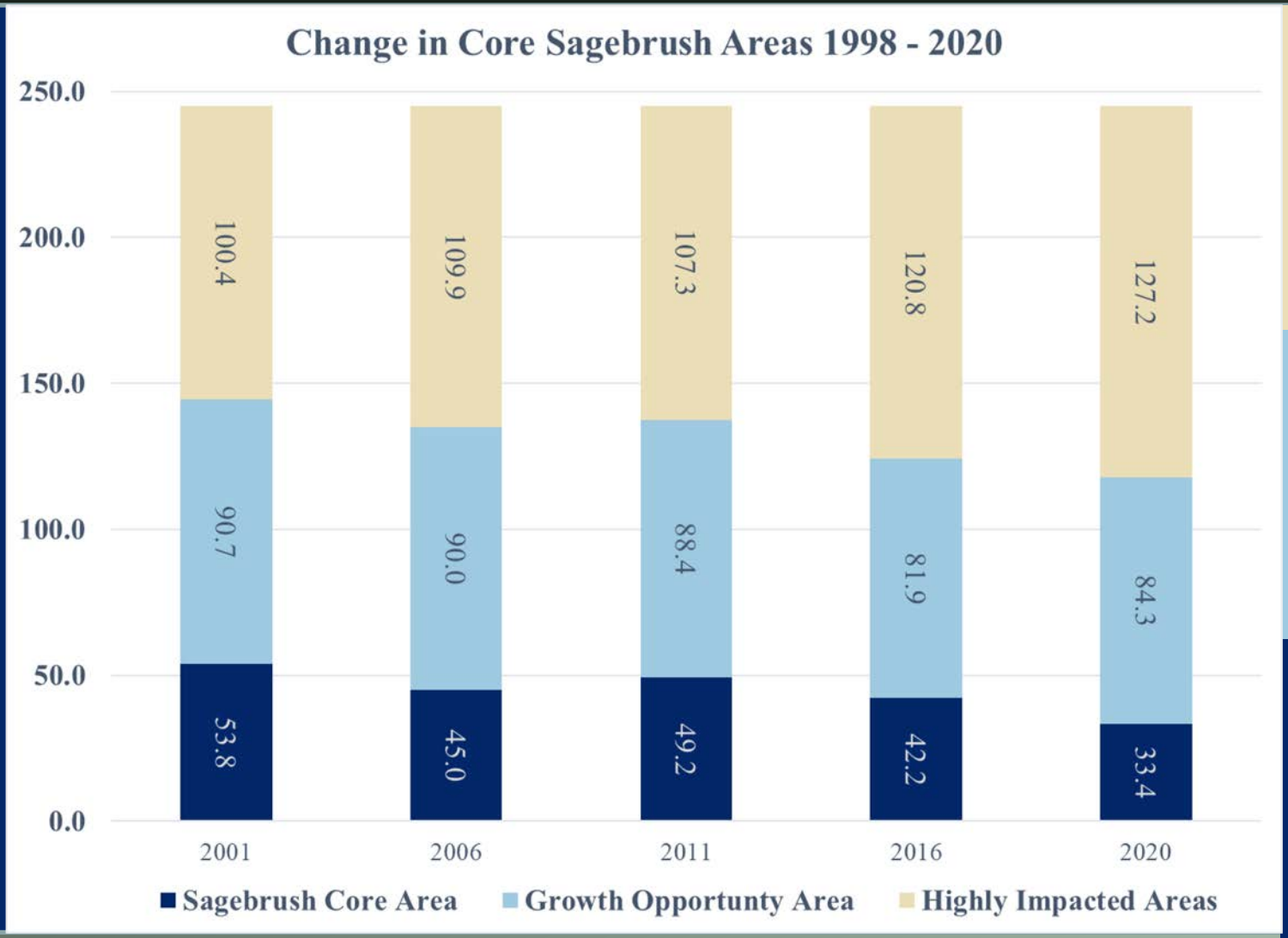


Threats, challenges and opportunities for managing Oregon's sagebrush habitats

Chad S. Boyd

USDA ARS


“God-forsaken country that never was designed to be the habitation of a Christian or civilized man”
Hines 1851



26.8 Million acre increase in **Other Rangeland Areas**

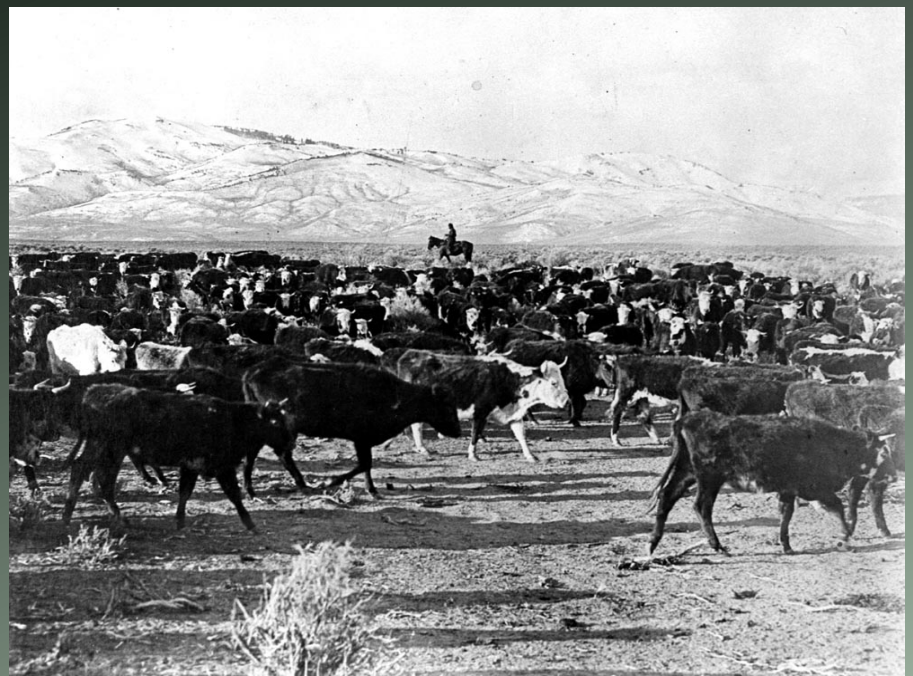
6.4 Million acre loss of **Growth Opportunity Areas**

20.4 Million acre loss of **Core Sagebrush Areas**

1.3 Million acres of *new, effective* conservation & restoration **per year** just to offset losses

How did we get here?

- 1850 - 1900
  - Homestead act of 1862
  - Human population increase…mining
  - Agriculture



How did we get here?

- 1850 - 1900
  - Completion of Transcontinental Railroad in 1869.

How did we get here?

- 1850 - 1900
  - Cheatgrass first reported in US (Colorado) in late 1800's.
  - First reported in PNW, 1889 near Spence's Bridge, B.C.
  - In US PNW near Ritzville, WA in 1893.
  - Spatially limited

How did we get here?

- 1850 - 1900

  Attitude = utilitarian delusion:

  Settlers in Columbia Basin assured that:

  "*…another class of vegetation, no less nutritious has succeeded it*"

Anderson 1882

How did we get here?

- 1900 - 1950
  - Exponential expansion
  - Near present-day distribution by 1950
  - Attitude = alarmed:

"…thousands of acres are being taken by this 'cheat.' Everyone is alive to the seriousness of the problem"

Wash. State Univ. 1914

" …one simply woke up on fine spring to find the range dominated by a new weed."

Leopold 1941

What can we do?

"When fear is unbounded, catastrophe is always in the confidence interval."

Kevin Doherty

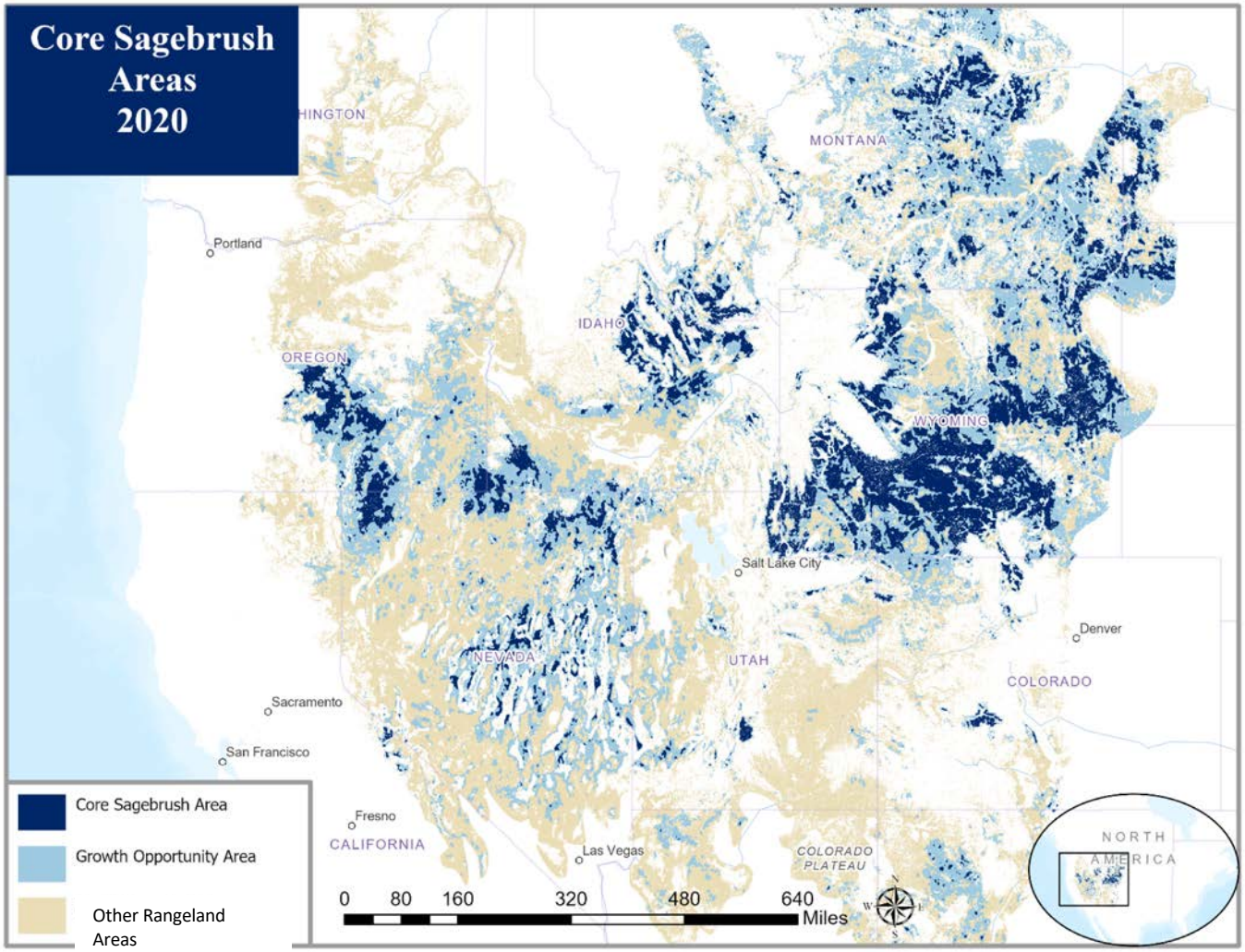
Money and effort **alone** won't fix the problem

Scale is a BIG DEAL

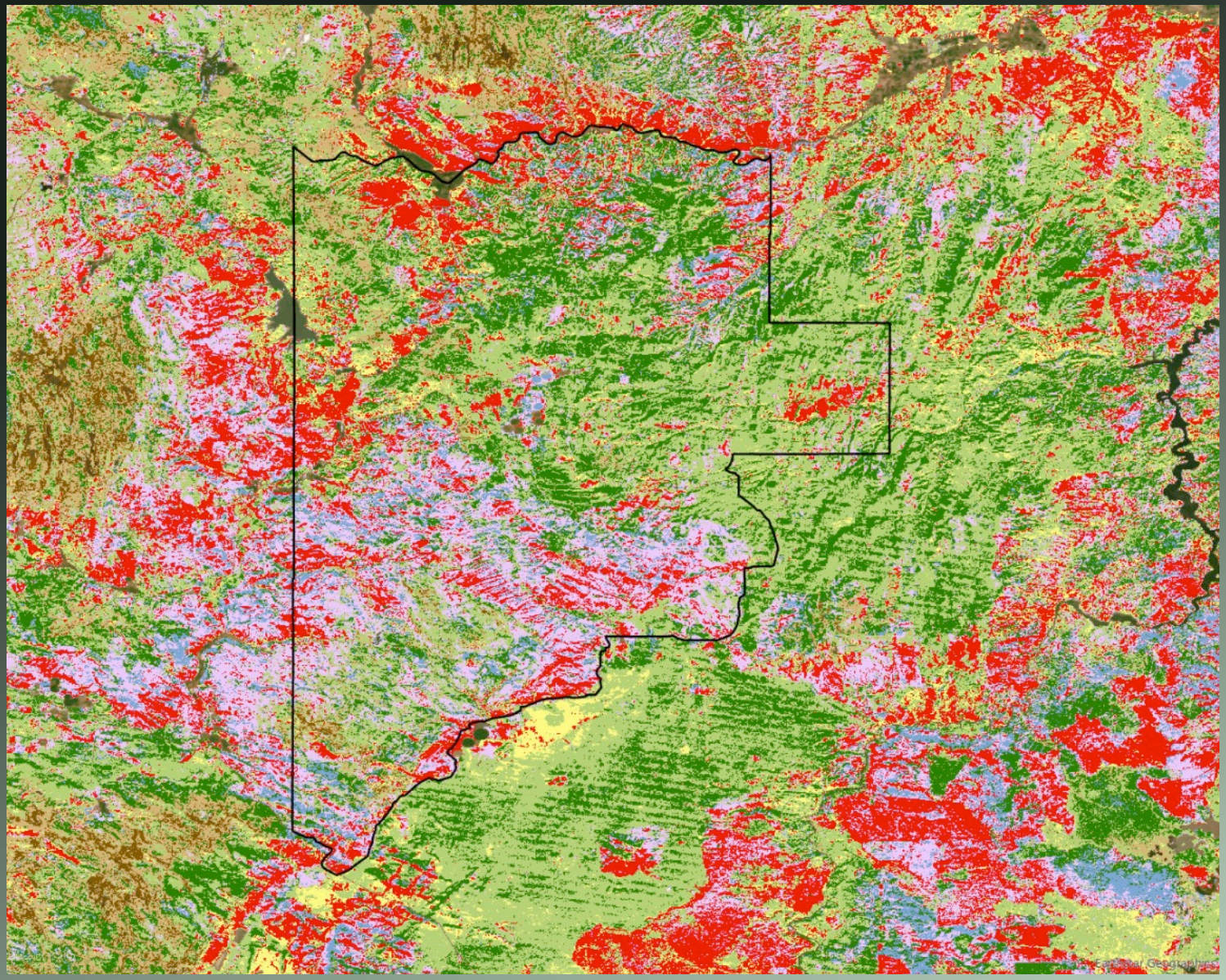
Focus on the 80%

Strategic Conservation

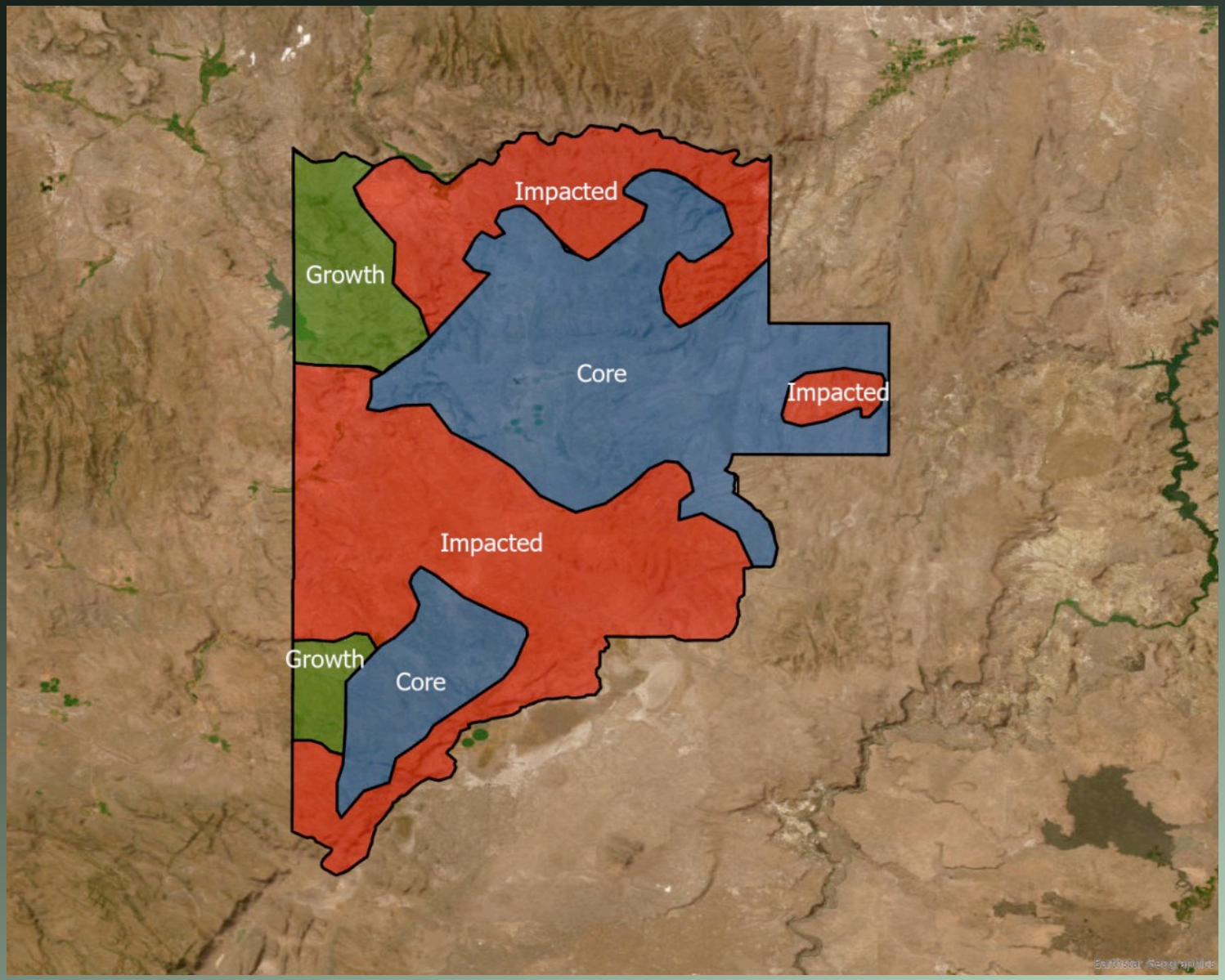
- Losing 1.3 mil acres/year
- Our efforts have been significant, but…
- Something needs to change
- Strategic conservation has to be a part of that change



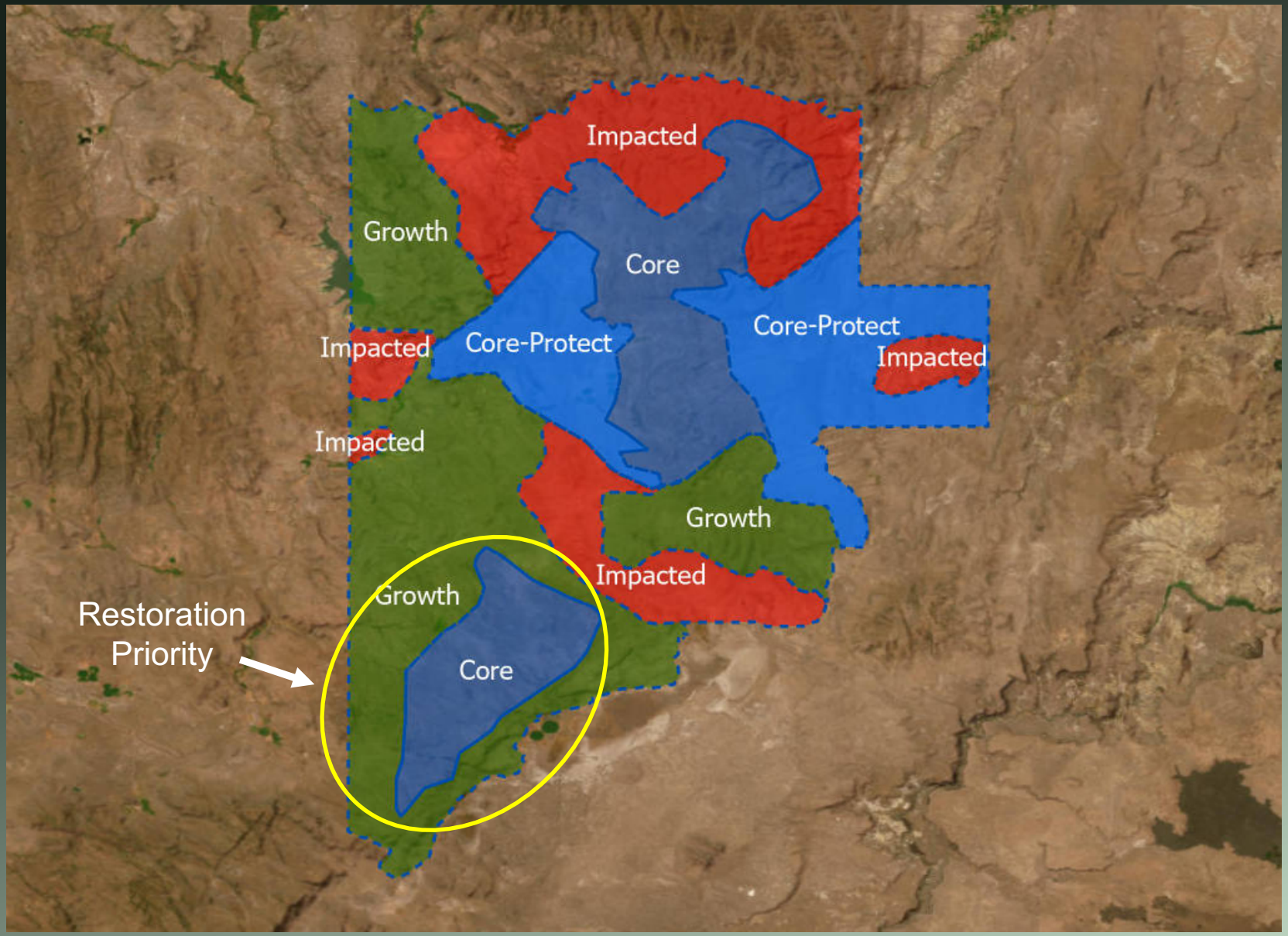
Operationalizing Strategic Conservation



Operationalizing Strategic Conservation



Operationalizing Strategic Conservation



Toward a new management paradigm

- Management targets ***are not*** driven by opportunity…they **are** driven by a strategic framework for increasing Core habitat acres

- Manager success ***is not*** measured at the project scale, ***it is*** the change in core acres over the maximum extent of management influence and across a management lifetime.

Take Home's

- Challenges facing sagebrush ecosystem are intimidating but not insurmountable
- Meeting those challenges will require changes that increase our management effectiveness
- Strategic Conservation will be a key part of that change