

Understanding Development in Sage-Grouse Habitat

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Human-Caused Threats

- Energy development
- Infrastructure
- Mining
- Urbanization
- Recreation



Human-Caused Threats

- Energy development

- Infrastructure

- Mining

- Urbanization

- Recreation

Habitat
fragmenta-
tion and loss

Large-scale
development
is a big
concern.



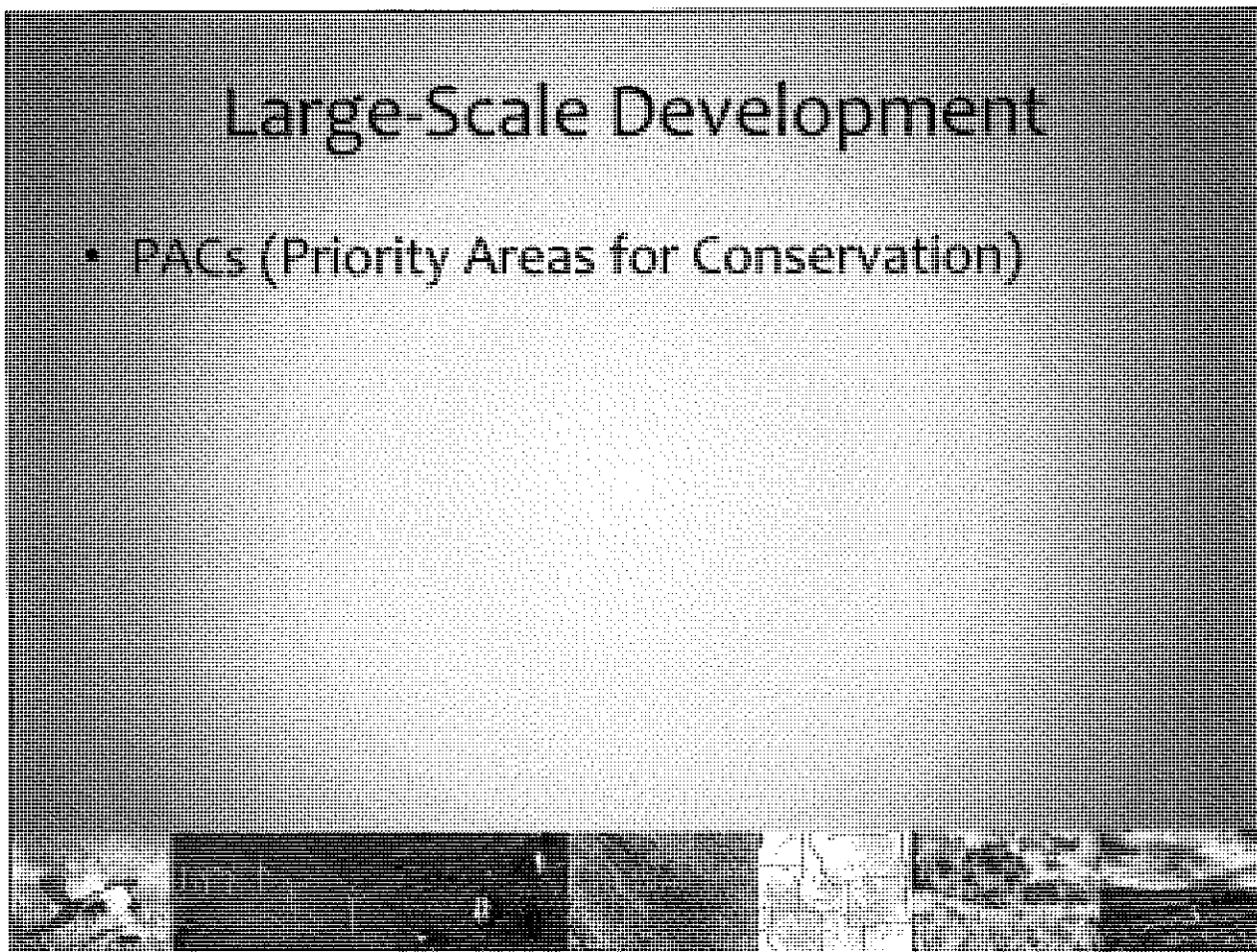
Activities Contributing to Large-Scale Development

- Renewable energy development
- Locatable mining
- Roads, railroads
- Power lines
- Communication towers
- Other vertical structures










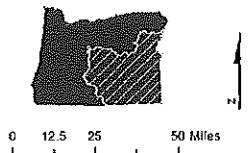
Large-Scale Development

- PACs (Priority Areas for Conservation)



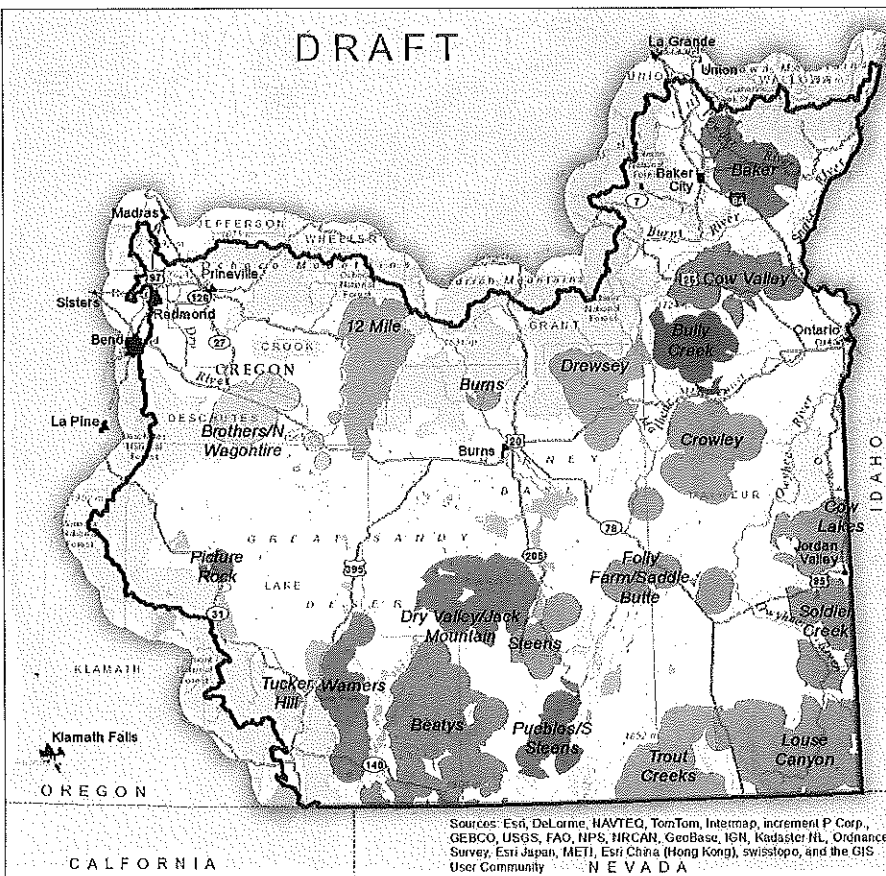
Oregon PACs

-  SageCon Study Area Boundary
-  State Boundary
-  County Boundary
-  City
-  Waterbody
-  Highway
-  River



Data Sources:
 Study Area Boundary and Cartographic layers (The Nature Conservancy, 2013)
 Highways, Rivers, City limit, County and State boundaries (Oregon Geospatial Clearinghouse)
 Basemap (ESRI - ArcGIS Online)

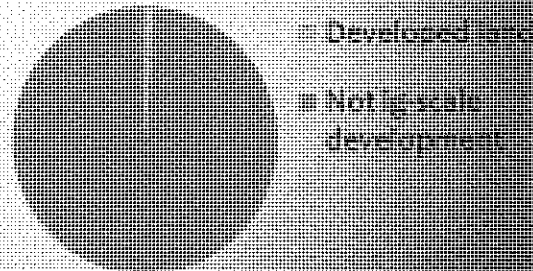
Map template created by The Nature Conservancy
 January 2014

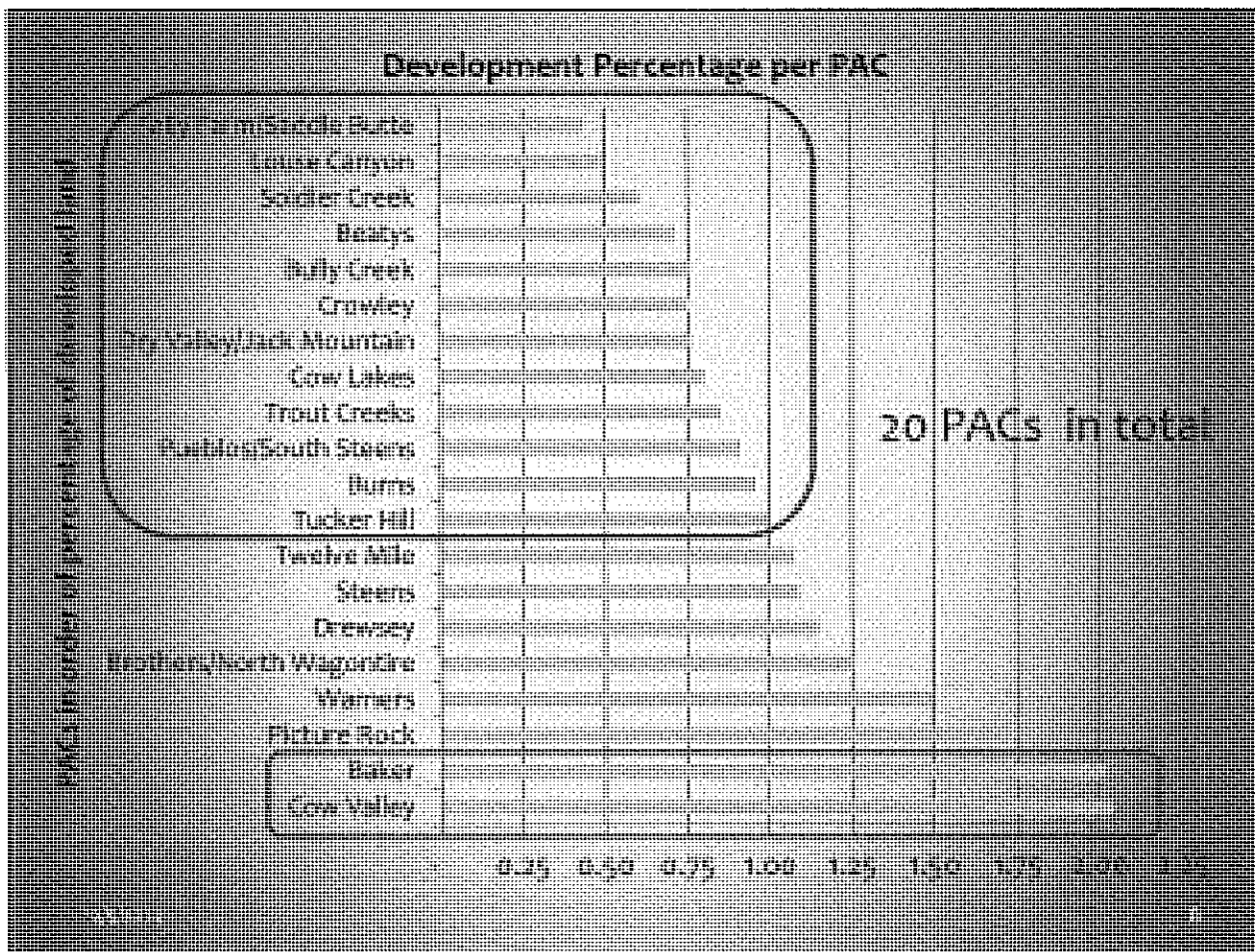


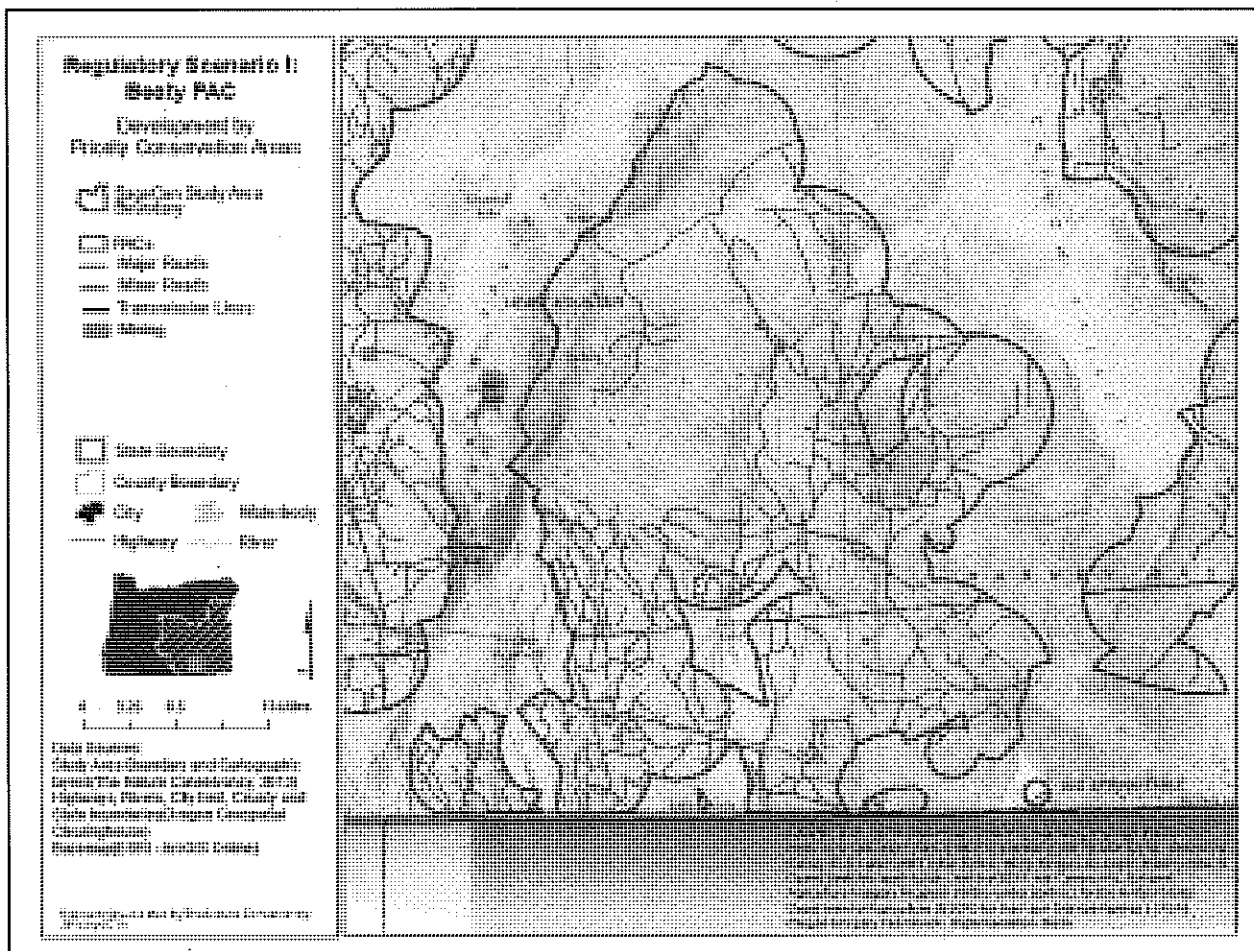
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

Large-Scale Development

- PACs (Priority Areas for Conservation)
- Total area of PACs: 6,566,000 ac (10,250 mi²)
- Percentage of private land in PACs: <25%
- Developed land in PACs: 64,000 ac
 - 100 sq. mi.
 - <1% of PAC land base







Take Away

- Science points to a 3% threshold for sage-grouse of developed land near leks
- Data supports some flexibility
 - All habitat is not equally at risk
 - Highlight areas in need of protection
 - Direct development to lessen impacts
- Monitoring is very important, but possible.



Questions?

