

Oregon Greater Sage-Grouse Population Monitoring

2022



**Skyler Vold, Sage-Grouse Conservation Coordinator
Oregon Department of Fish & Wildlife**

Annual Lek Monitoring Objectives

- Monitor > 50% of occupied and pending leks in each PAC
- Conduct multiple counts on > 50% of monitored leks
- Trend leks get 3 counts
- Count all leks in a PAC every 3–4 years



Annual Lek Monitoring Objectives

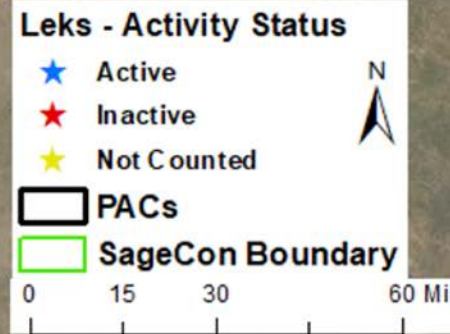
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2022 Lek Survey Season

- Weather conditions March–early April were mild
 - Lack of snow increases number of survey mornings
- Statewide lek survey effort was 4th highest in Oregon for the proportion known complexes surveyed
 - 5th highest for proportion of known leks surveyed

2022 Monitoring Effort - Results



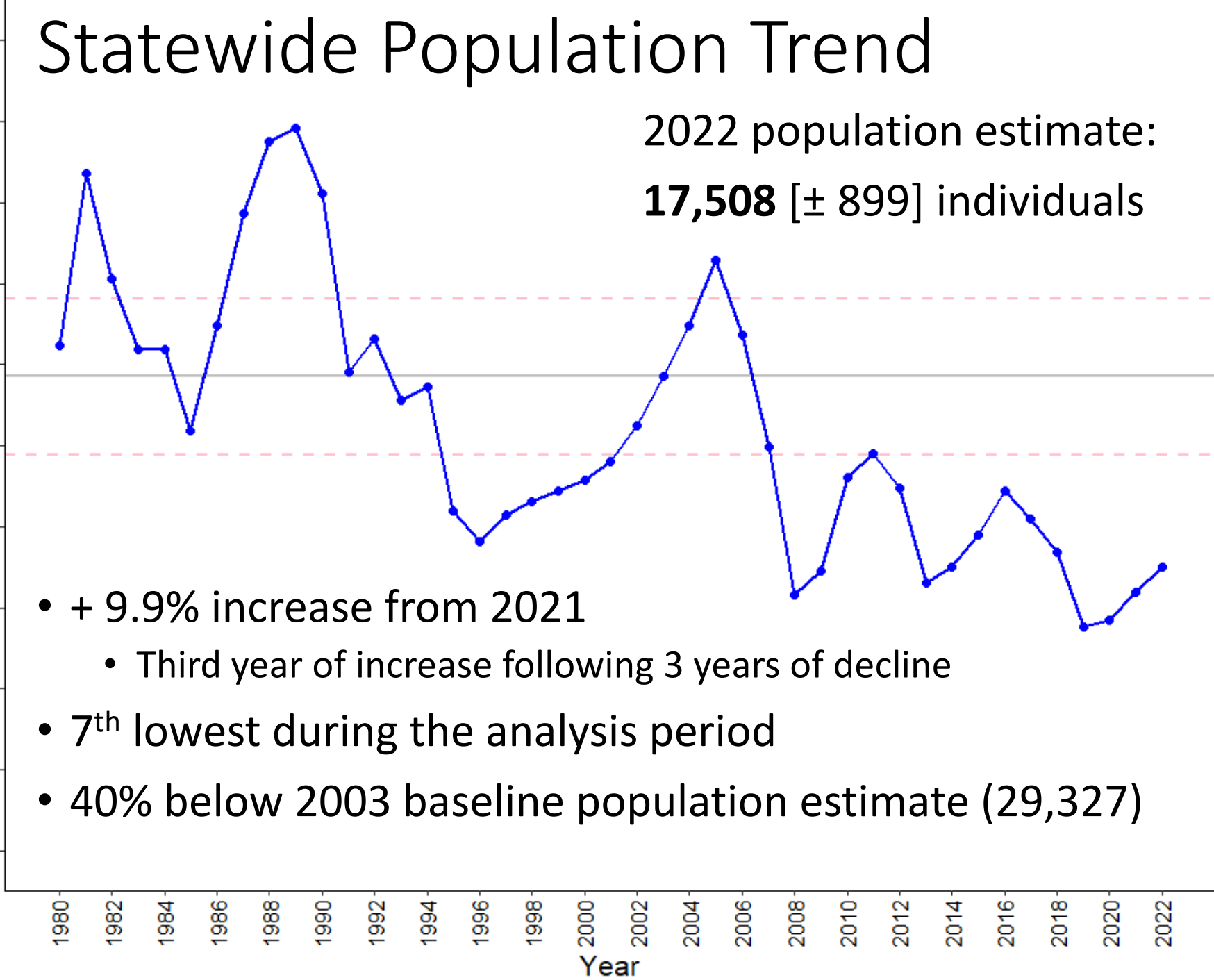
- Conducted **1,642** ground surveys and **163** aerial surveys
- **65.1%** leks surveyed (789 of 1,212 known leks)
- **2.3** surveys per lek
- **660** 0-dark-thirty count mornings
- **115** observers

Statewide Population Trend

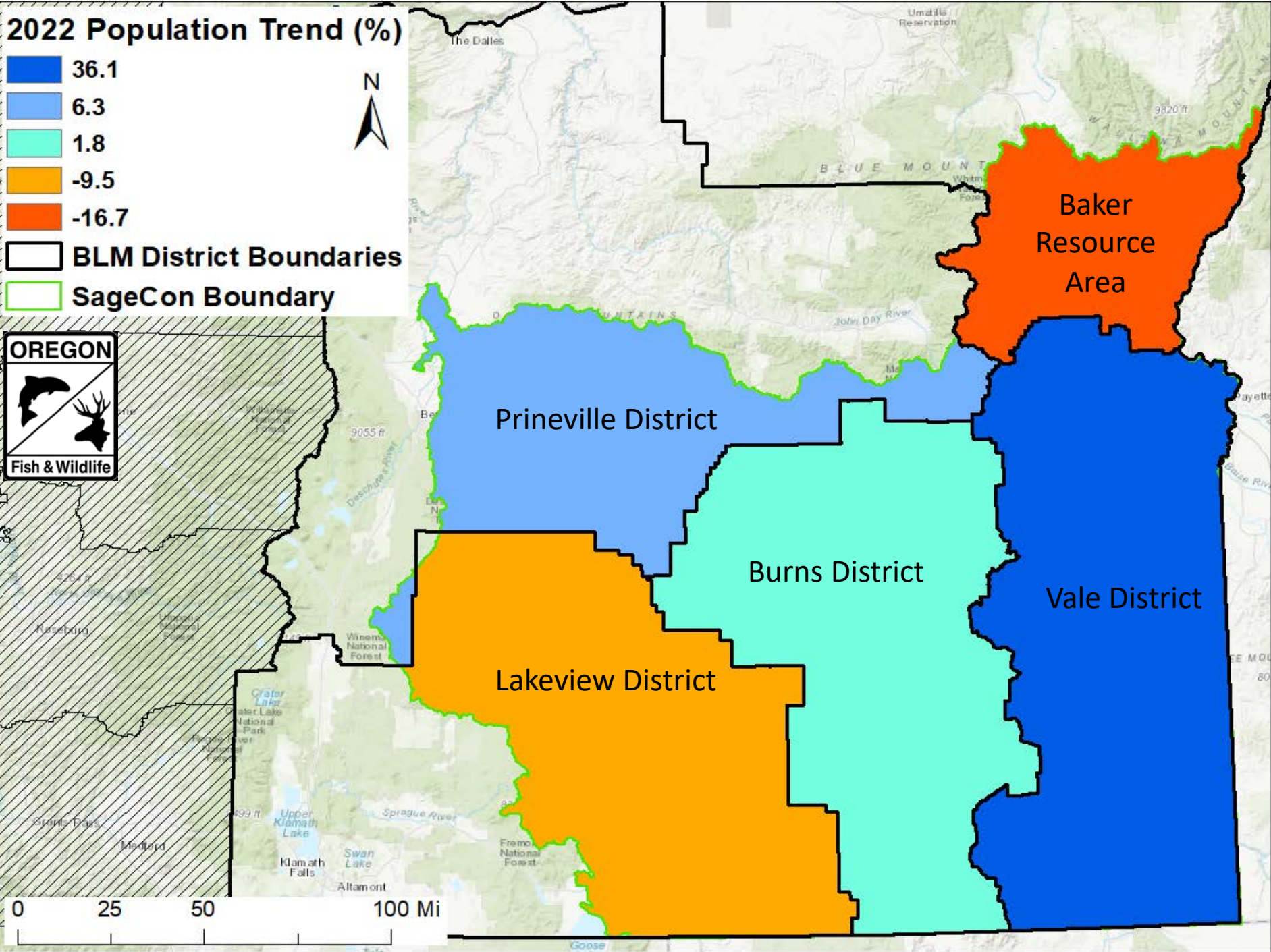
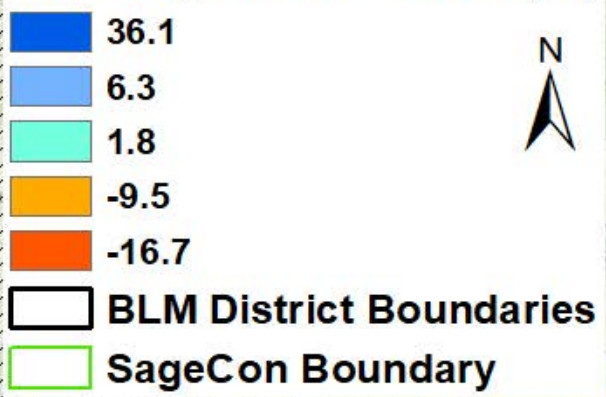
2022 population estimate:
17,508 [± 899] individuals

Minimum Spring Population Estimate

- + 9.9% increase from 2021
 - Third year of increase following 3 years of decline
- 7th lowest during the analysis period
- 40% below 2003 baseline population estimate (29,327)



2022 Population Trend (%)



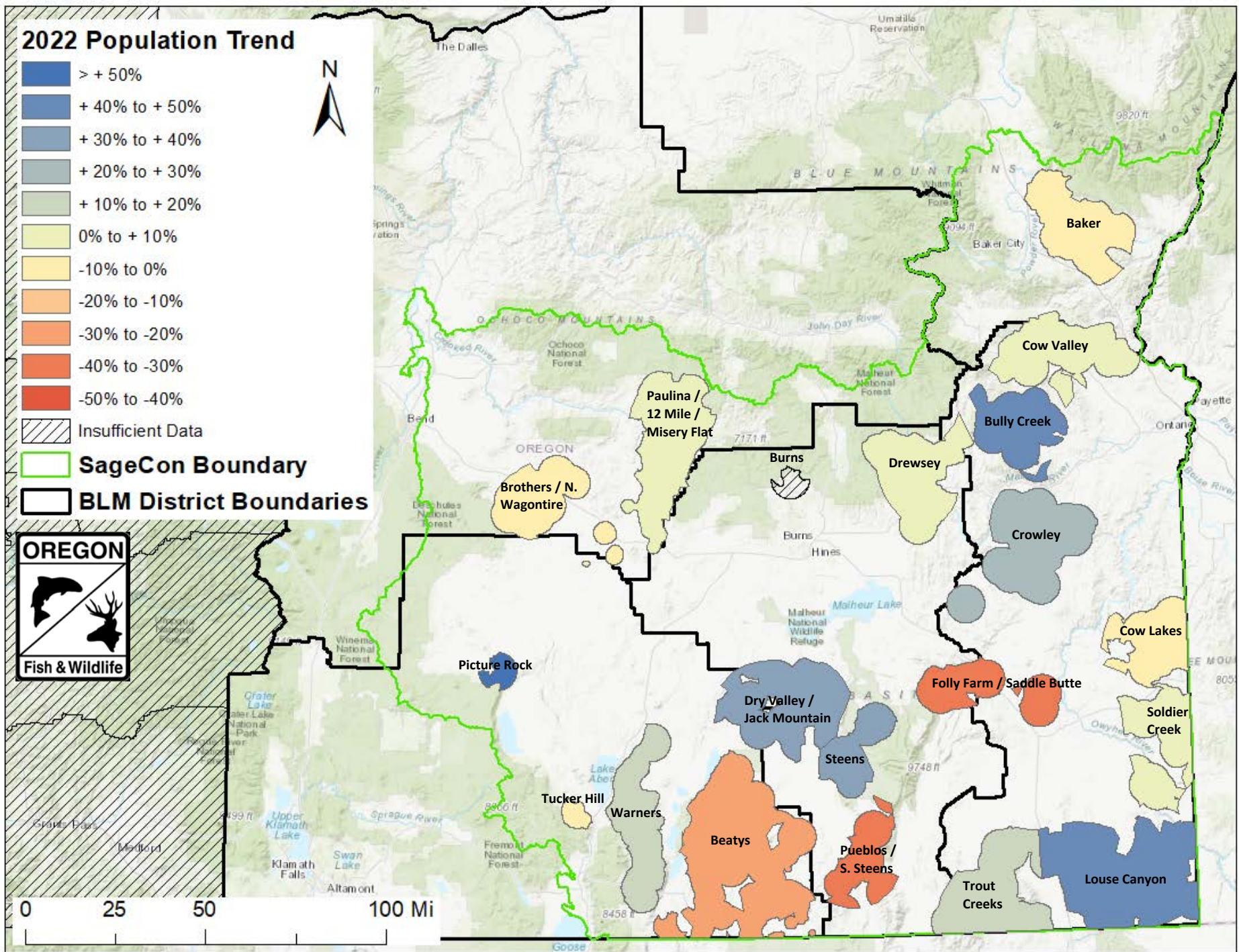
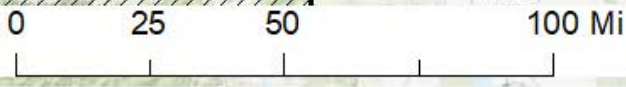
2022 Population Trend



Insufficient Data

SageCon Boundary

BLM District Boundaries



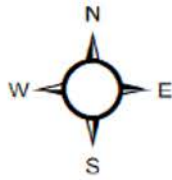


2022 Aerial Lek Searches

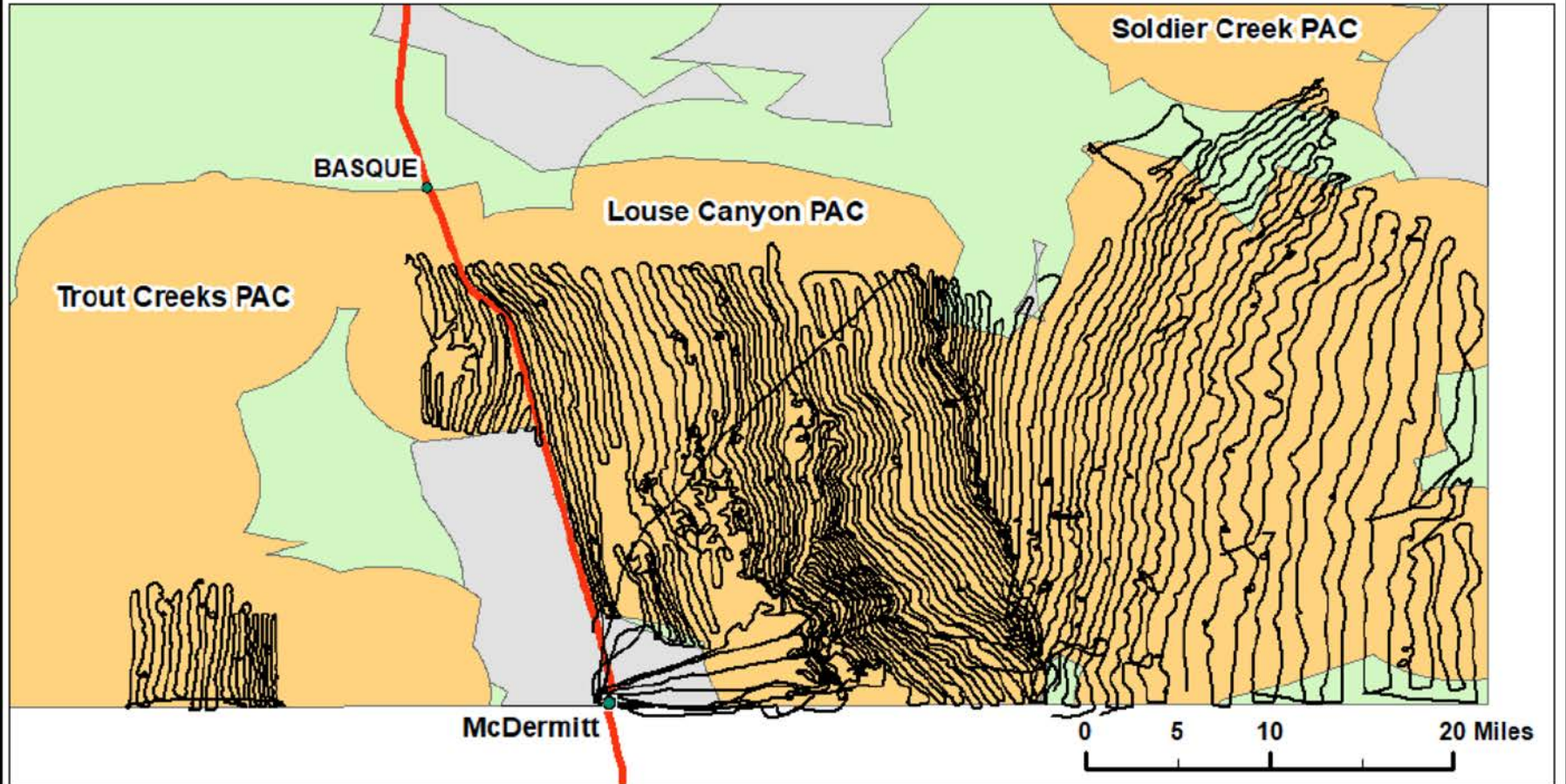
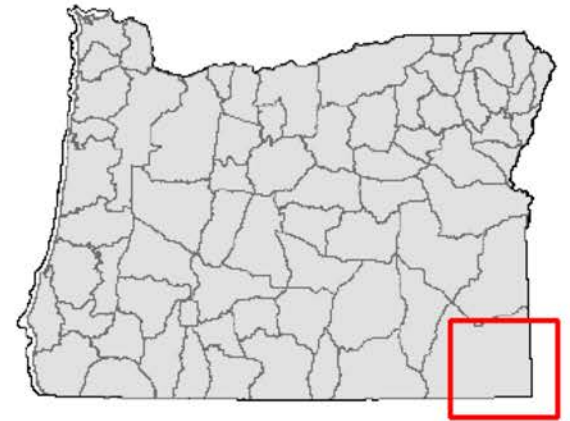
- Helicopter searches conducted in Louse Canyon and Trout Creeks PACs
 - Contracted 70 hours flight time
 - Aerial lek searches covered 2,800 mi
 - Located 9 new leks (confirmed)
 - 7 Louse Canyon, 2 Trout Creeks
 - Additional leks located, not yet confirmed



2022 Aerial Sage-Grouse Lek Searches

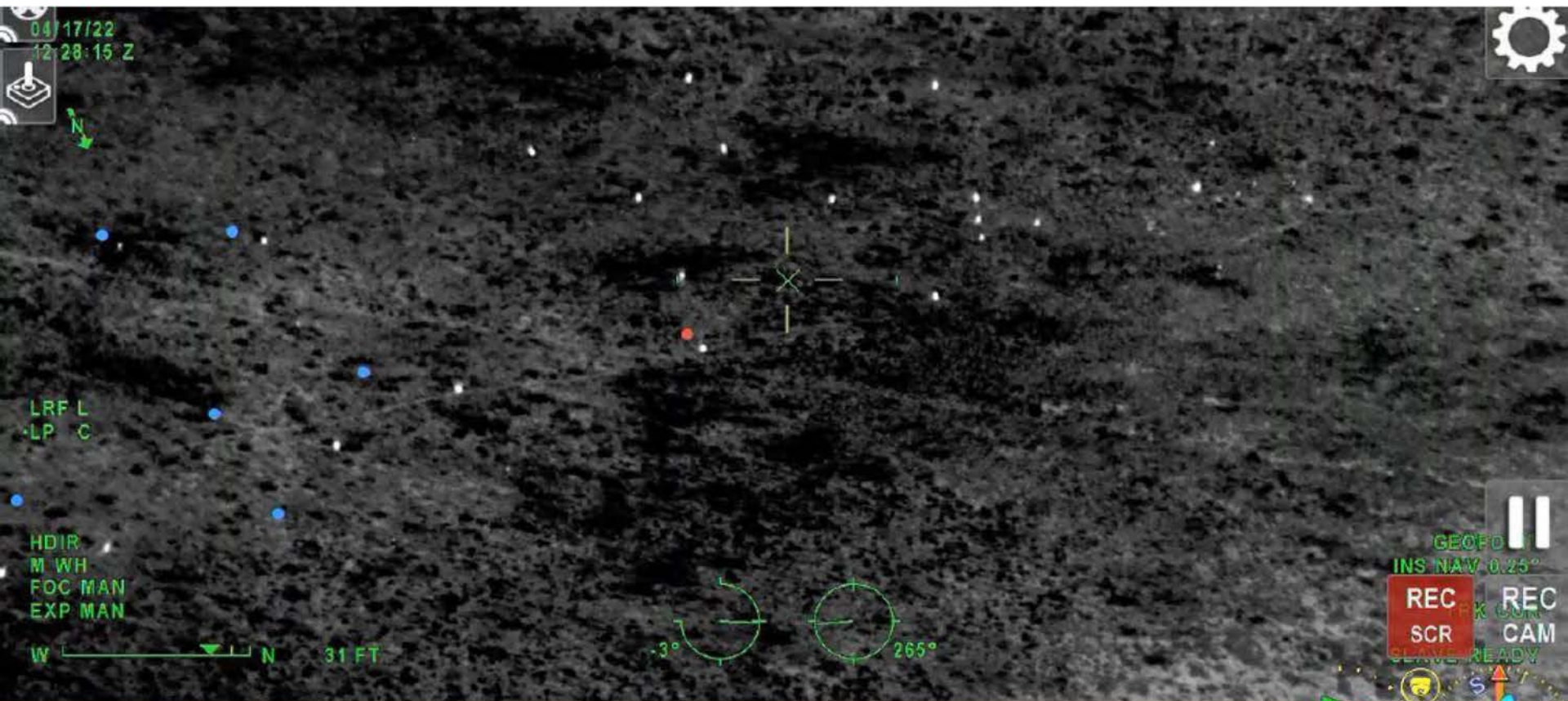


- Cities
- Helicopter Tracks
- Highways
- PACs
- Low Density
- Oregon



2022 Aerial Infrared Surveys

- Aerial infrared (AIR) surveys conducted in spring 2022
 - 2 surveys were conducted at 42 leks in Cow Valley PAC
 - ~70% of known leks in Cow Valley PAC are inaccessible



AIR Validation: 2020–2022

- 45 active leks surveyed by AIR were ground surveyed
 - AIR surveys: 6.80 males/lek
 - Ground: 8.62 males/lek
 - Two-sample $t(44) = 2.02$, $p = 0.12$
 - Counts were moderately correlated [Spearman's $r = 0.46$]



AIR Validation: 2020–2022

- Uncertainty around AIR surveys
- Similar counts between methods suggests AIR may still be useful for surveying inaccessible leks
 - 2+ visits required



Oregon Sage-Grouse Core & Low-Density Habitat Revision, 2022–23

- ODFW is updating Oregon's Sage-Grouse PACs and Low-Density habitat
- Scoping letter sent out to partners March 2022
- Drafting initial map, using similar methodology to 2011 Oregon Sage-Grouse Conservation Assessment
 - Includes new leks (148 discovered since 2011), GPS locations from research projects, new habitat suitability models
- Align with BLM's 2022–23 Sage-Grouse Resource Management Plan amendment process
- Draft product for partner review and input early 2023

Questions?

- For more details, please see the 2022 Oregon Greater Sage-Grouse Population Monitoring Report
 - <https://www.dfw.state.or.us/wildlife/sagegrouse/>
- With specific questions, please contact me at:
Skyler.T.VOLD@odfw.oregon.gov



Thank You!