

Invasive Species and Wildfire: A FWS Perspective

Ted Koch Nevada State Supervisor U.S. Fish and Wildlife Service November 2014

Greater Sage-Grouse

Not our first ESA status review:

- 2010 Finding: Candidate
- Determination by September 30, 2015

Seeking new information





The Sagebrush Ecosystem



Photo credit: Rich Keen









Primary Threats in the Great Basin

- Invasive plants: cheatgrass; Piñyon-Juniper
- Fire cycle amplified by cheatgrass –
 "catastrophic regime shift" (Reisner et al. 2013)



Not All Wildfire is Harmful

 Fire is a natural part of sagebrush ecosystems



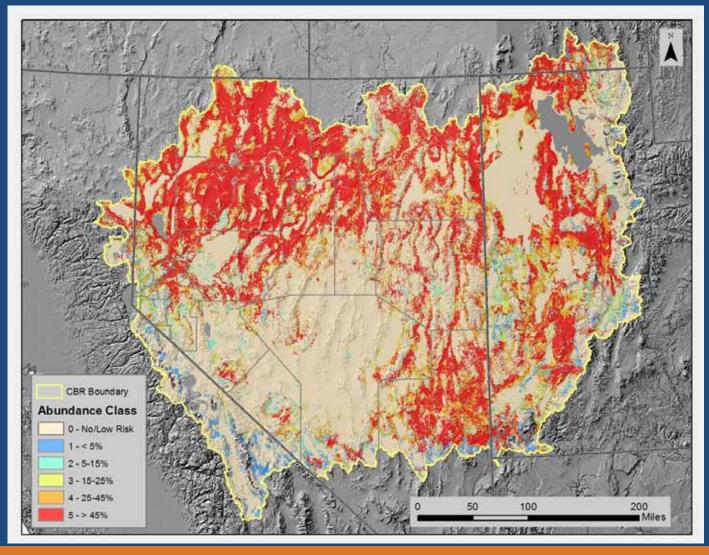
Cheatgrass and the "catastrophic regime shift" is unnatural, irreversible





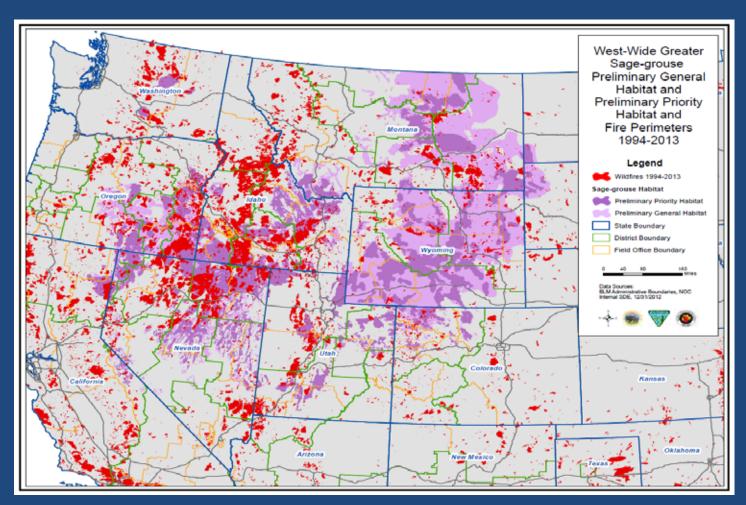


Cheatgrass Risk Map





Wildfires from 1994-2013 in Sage-Grouse Habitat



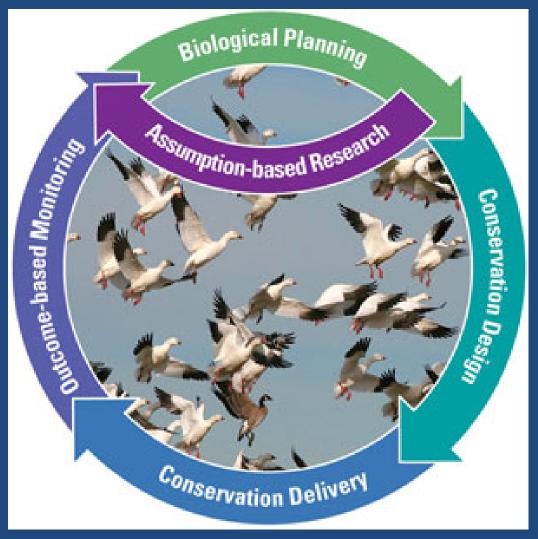


SHC

Principles:

- Plan, design, deliver strategically
- Greater transparency
- Increase accountability
- Coordinate, share outcomes.

Strategic Habitat Conservation





Landscape-Scale Coordination Fire & Invasives **Resistance &** Assessment **Resilience Tools Treatments** Team (FIAT) Adaptive

Management

Monitoring

FISH A WILDLIFE SERVICE

Implementation Effort

- FIAT report, subregional teams
 - Proactive: FuelsManagement, HabitatRestoration
 - Reactive: Fire Ops,Rehabilitation





Implementation Information

- WAFWA GAP Report
- WAFWA Fire Report
- USFS Resistance & Resilience Report
 - Low, Moderate, High cheatgrass risk
 - 15 actions to reduce risk
- WAFWA Invasive Species Report (pending)
- Interagency Seed Strategy (pending)



Moving Forward

- Before- Adjust focus
 of Fuels Mgt.
 accomplishments
 before fire
- 2. <u>During</u>- Biologists on GMAC during fire
- 3. <u>After</u>- Adjust focus of Stabilization & Rehabilitation efforts after fire



Photo credit: James Yule



Take Home Messages

- Sage grouse and sagebrush ecosystems are declining
- Main threat in Great Basin is invasive species, wildfire
- Proactive, dedicated funds
 & effort to conserve
 ecosystem function
- Long-range planning to reduce the risk of "catastrophic regime shift"



