

# Sage-grouse in Utah 2011

## an overview

Presented to County Commissions/Councils  
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# Outline

- Basic sage-grouse biology/ecology
  - What is a sage-grouse , what it needs where it lives, sage-grouse history
- 2009 Utah sage-grouse state wide plan
  - What is the state wide plan, state level actions/strategies
- Local working group plans
  - What it is, what we have been doing actions/strategies
- History and listing decision 2010
  - Candidate species, What this means for Utah and the County

# What is a sage-grouse

'cock' SAGR



'chick' SAGR



'hen' SAGR



SAGR lek



SAGR nest/eggs



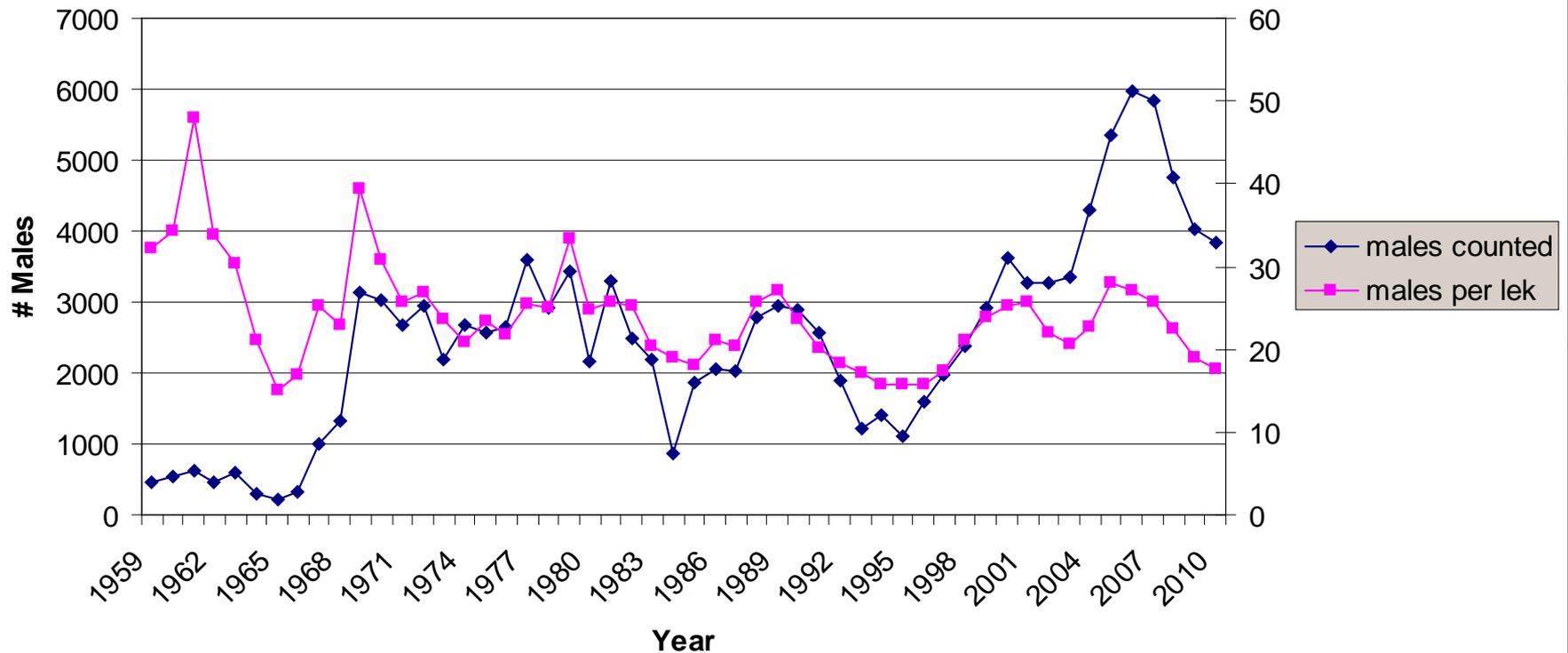
# What is a sage-grouse—Lek

- A *lek* is a gathering of males, of certain animal species, for the purposes of competitive mating display.
- Utah's SAGR lek typically mid March through early May.
- Leks are very traditional some leks in UT have been monitored/counted for over 50 years.
- Center point for population, population estimates and trends, hunting permit allocation



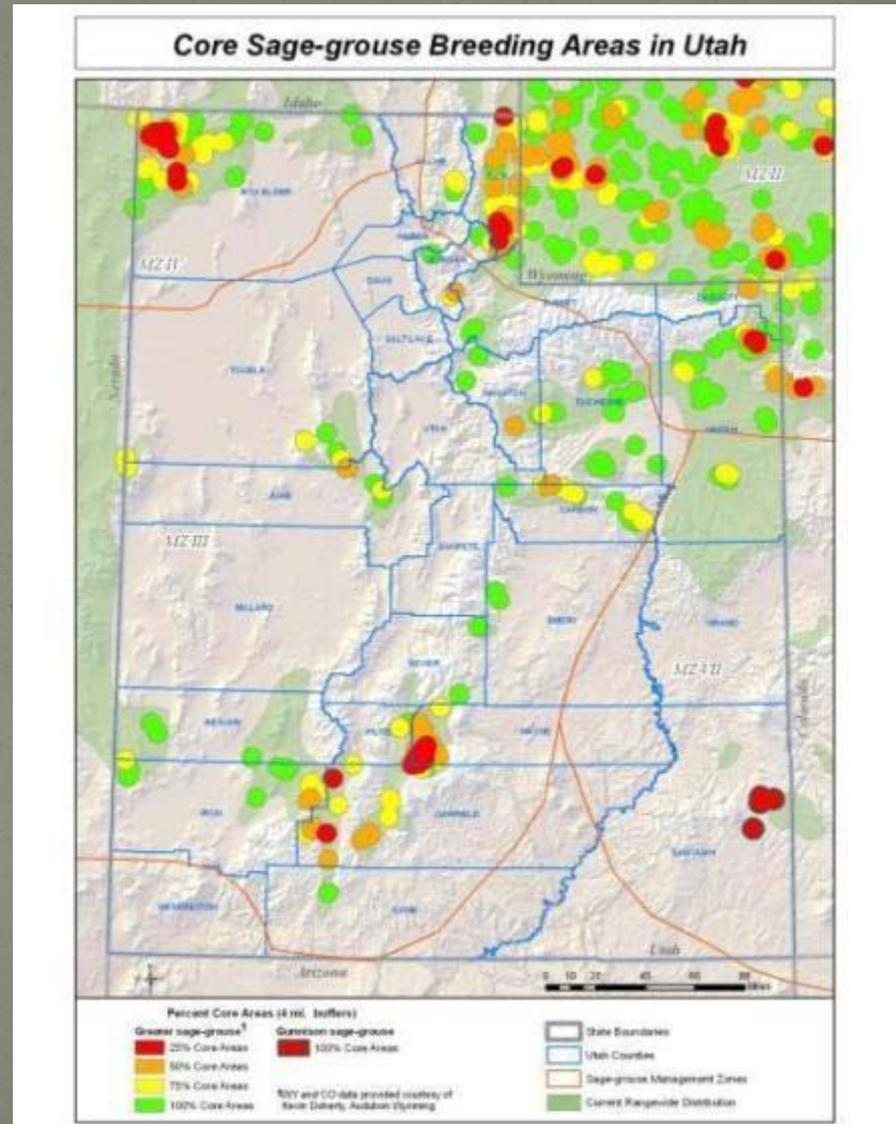
# Number of male sage-grouse counted in Utah

## Utah Sage-grouse Max Males Count



*Increased counts in the past 10 years probably reflect increased searching effort, new leks, and increases in populations*

# Sage-grouse core areas



# Sage-grouse—nesting habitat

- Most hens nest within 4 miles of a 'lek'
- Most nest under sagebrush
- 'Clutch' average ~8/nest
- 'Nest success' ~50%



# Sage-grouse—survival

- Survival rates are generally 50-70% for adults, much lower for chicks
- Generally need 2.25 juveniles/hen for increasing to stable population.
- Precipitation has a large influence on survival rates
- A variety of mortality factors including: Predation (raptors, canids, corvids, badgers), hunting, and disease.

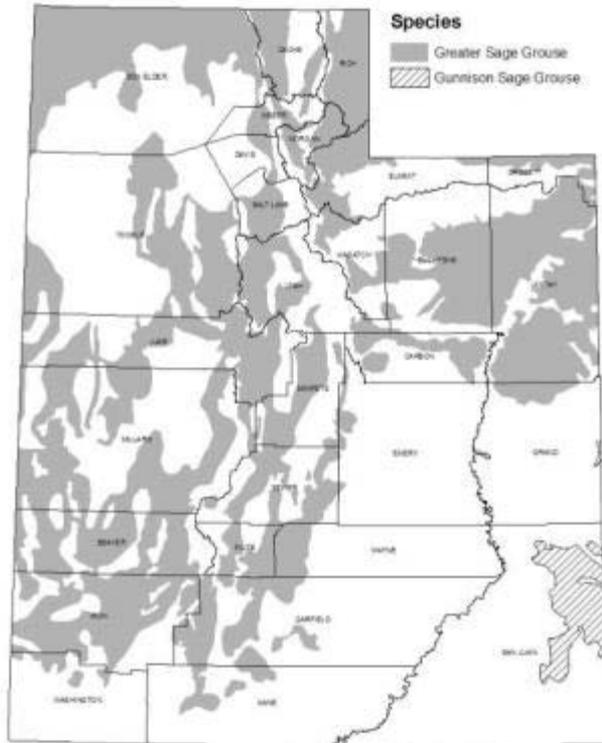


# Sage-grouse needs/habitat

- Sage-grouse need sagebrush
  - Large tracts/unfragmented
  - Eat sagebrush Oct--March
  - Grocery stores where they have a variety of Grasses/forbs=insects
  - Thermal escape cover winter
  - Not all sagebrush is good habitat
    - Black sage vs. big sage season of use



# Distribution of Sage-grouse in Utah



Historical Distribution



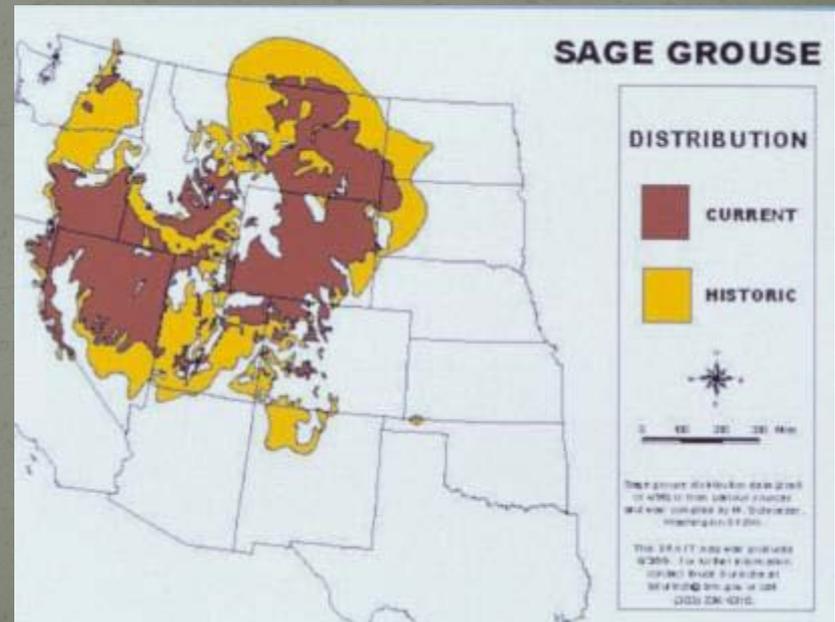
Present Distribution

*Historical distribution is based on the distribution of sagebrush habitat in Utah and early observations by early settlers and explorers. Utah's SAGR populations were likely connected through these large tracts of sagebrush which have been lost by fires, habitat conversion, development, and invasive species such as cheat grass and pinion/juniper encroachment. Presently SAGR populations are highly fragmented across Utah.*

# Sage-grouse Declines

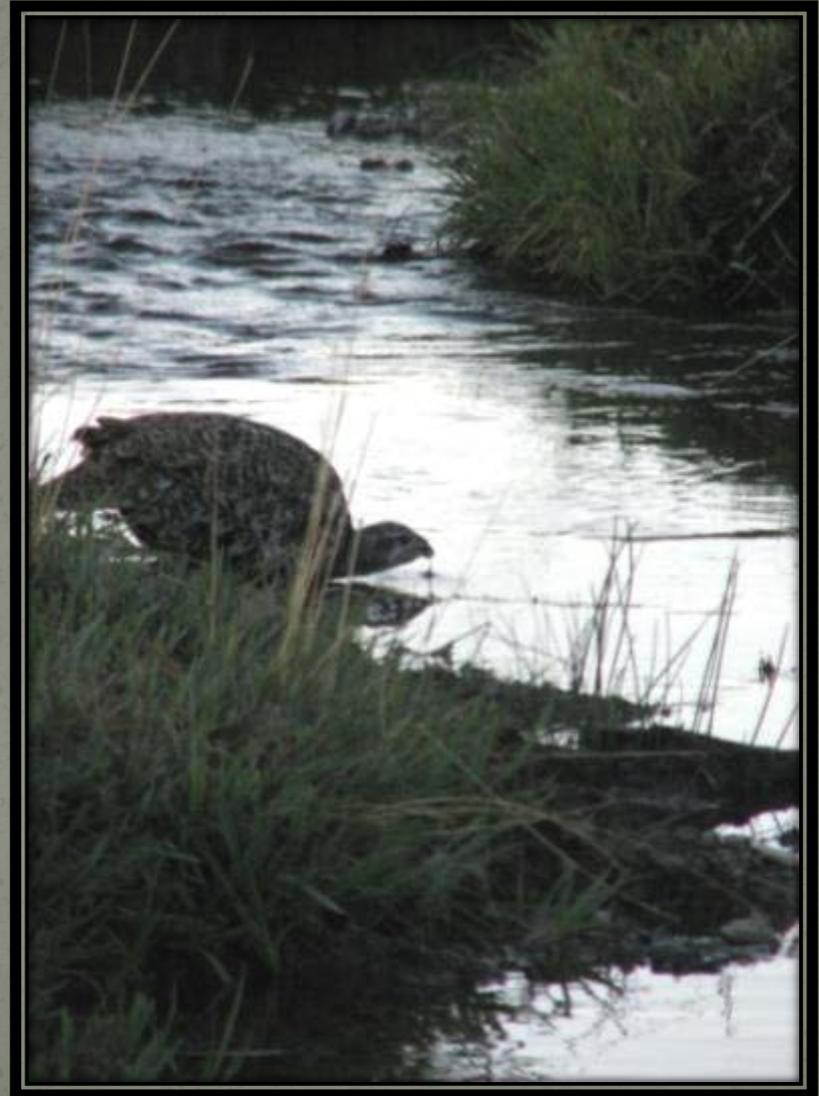
- Declining throughout western U.S.
  - Occupy 56% of pre-settlement habitat (Schroeder et al. 2004)
- Utah has suffered loss of habitat and populations

*Utah's SAGR populations were likely connected through these large tracts of sagebrush which have been lost by fires, habitat conversion, development, and invasive species such as cheat grass and pinion/juniper encroachment. Presently SAGR populations are highly fragmented across Utah.*



# 2009 UT SAGR state wide plan

- 2 Species of sage-grouse in Utah
  - Gunnison sage-grouse (SJC)
  - Greater sage-grouse
- This plan addresses Greater SAGR
  - Existing plan for GUSAGR
- UT adopted 1<sup>st</sup> plan in '02
- This is an update/revision of that '02 plan
  - Assistance from a specially chartered Sage-grouse Plan Advisory Committee



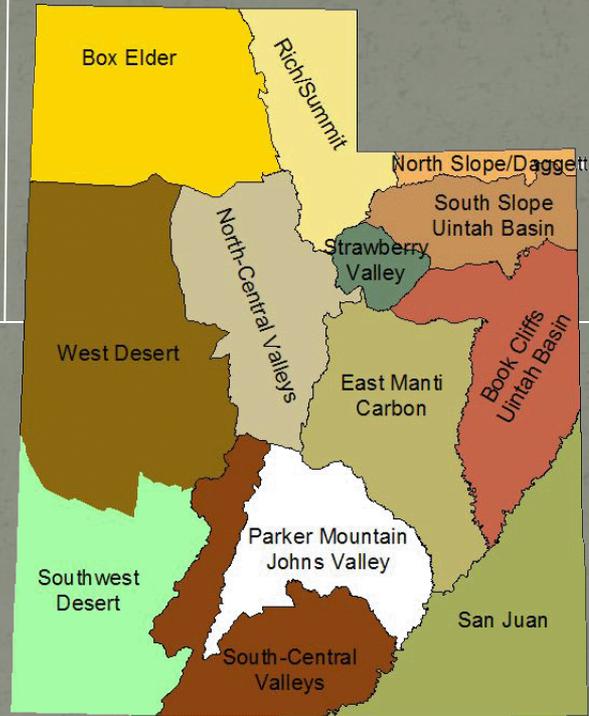
# 2009 UT SAGR state wide plan

- Dave Olsen UDWR; Upland Game Coordinator
- Jason Robinson UDWR; Upland Game Project Leader
- Anita Candelaria UDWR; Notes/Secretary
- Allan Smith Private lands/ranching
- Steve Madsen Bureau of Land Management
- Clint McCarthy U.S. Forest Service
- Kim Christy School and Institutional Trust Lands Administration
- Jan Anderson Utah Farm Bureau
- Joan DeGiorgio The Nature Conservancy/NGO
- Terry Messmer Utah Local Working Groups/Universities
- Dave Dahlgren Upland Game Advisory Committee/Research
- Ernie Perkins Utah Wildlife Board
- Jim Gaskill Utah Regional Advisory Committee
- Brian Maxfield UDWR; Region biologists
- Susan White Utah Division of Oil, Gas, and Mining
- Tom Clayson Anadarko Petroleum Corporation

# Local working group plans

1996: San Juan County local working group (SWOG) formed for the Gunnison Sage-grouse.

<http://utahcbep.org>



1997: Parker Mountain local working group (PARM) formed for Greater Sage-grouse.

**2002: Utah's Strategic Management Plan for sage-grouse was approved by the Wildlife Board**

13 geographic units  
Encompassed both SAGR and non-SAGR habitat  
Multiple agencies  
Multiple counties  
Multiple landowners

*Sage-grouse management **must** be a **cooperative effort** between federal and state land management agencies, Utah Division of Wildlife Resources, Tribal governments, private landowners, grazing and livestock interest, and other interested groups.*

# Local working group plans

- Formalize (a process), facilitate, and coordinate the sage-grouse local working group process in Utah.
- Work with all stakeholders to address population, habitat, and other issues.
- Complete, implement, monitor, and report on local sage-grouse conservation plans.
- Work with local stakeholders and state/federal agencies to identify, design, implement, and monitor management projects.

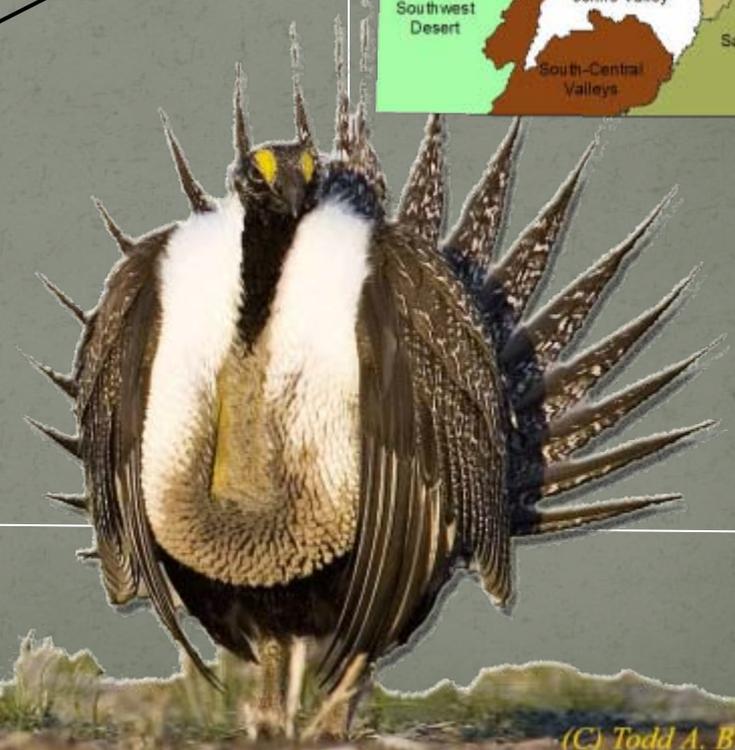
<http://utahcbcp.org>

Utah's Community Based Conservation Program

*“if its not good for the community its not good for wildlife”*



# Local Working Group Plans



# Local working group plans

Each plan identifies threats to sage-grouse

- Development
- Loss of quality habitat
- Drought and weather
- Parasitism/disease
- Fire management
- Predation
- Hunting
- Livestock grazing
- Invasive plants



# Local working group plans

Target	Key Attribute	Indicator	Indicator Ratings				Current Status	Current Rating	Desired Rating
			Poor	Fair	Good	Very Good			
Sage-grouse	Pop. Size	Average # males on leks	<50	51-150	151-500	300+	75	Fair	Good
Sage-grouse	Winter Habitat	Sage height and cover	Never above snow	Sometimes above snow	Often above snow	Always above snow	Often above snow	Good	Good

- Indicator ratings represent a **range of variation** in the target.
- Use whatever information you have but **don't be paralyzed by a lack of information or incomplete information!**

TNC CAP process

# Local working group plans

- By '06/'07 all 10 GSAGR LWG had completed plans.
- By '06/'07 started a 10 year implementation phase of the plans.
- LWGs meet (min) 3x per year with one field tour
- LWGs review and assess the CAP part of the plan as specified
- LWGs modify plan as new information is gleaned through research



# Local working group website

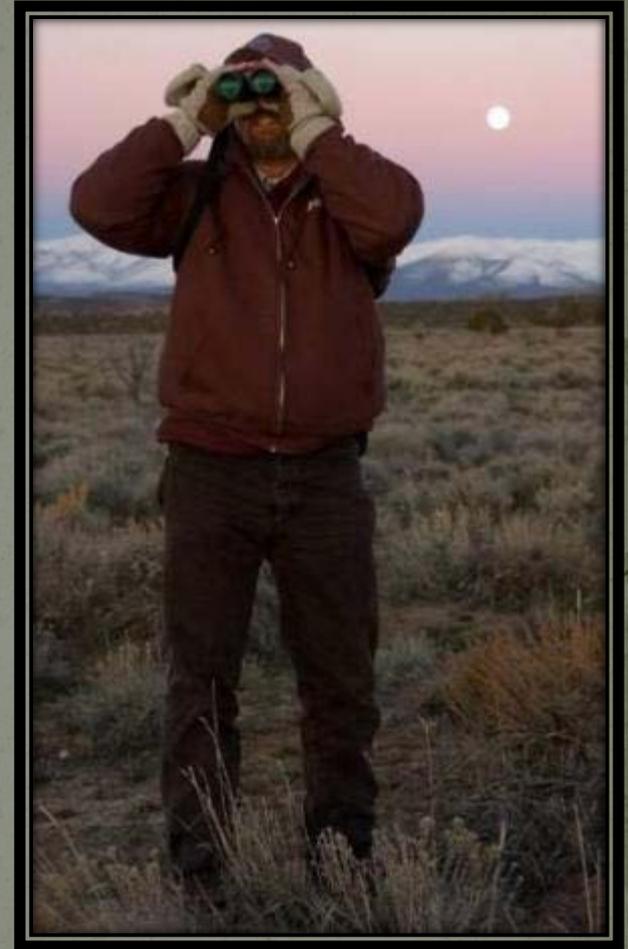
- USU Extension has a website for the Community Based Conservation Program (CBCP):
  - Local working group information
    - Local conservation plan
    - Meeting times
    - Research projects
  - Research publications
  - Annual progress reports
  - Useful references and links

<http://utahcbcp.org/>



# Local working group plans

- **BARM LWG SAGR Plan**
- **2006—2016**
- **Aspects of SAGR Ecology & management**
- **Threats (10 of them)**
- **Actions/Strategies**



<http://utahcbcp.org/html/groups/boxelder>

# Local working group plans

## Actions/Strategies

- **8. Strategy: By 2016, identify measures to protect key wintering areas available to sage-grouse.**
  - **8.1. Action: Use available grouse telemetry data in the Grouse Creek sub unit and local knowledge in other sub units to map these areas.**
  - **8.2. Action: Work with public and private partners to identify areas through winter locations (Dry Basin, Montgomery Ranch, South Kilgore, Dakes Pass).**
  - **8.3. Action: Use UDWR fixed wing winter surveys for big game to identify areas.**
- Partners: USU, USU Extension, BLM, USFS, UDWR, private partners.
- Threats Addressed: Vegetation management, fire, invasive/noxious weeds, development, powerlines, fences, and other tall structures, renewable and nonrenewable energy development, pinyon/juniper encroachment.
- Aspects of Sage-grouse Ecology Addressed: Population size, population distribution, connectivity of populations/subpopulations.



# Local working group plans

- **Actions/strategies (11 listed)**
- LWGs answering questions and gaining basic ecological information and understanding through research projects (3+ and still going covering 9 years)



# History and listing decision 2010

- Classified as an upland game species by Utah Legislature
- Utah State Sensitive Species
- Tier II species under the Utah Wildlife Action Plan (2005)
- Petitioned for listing under the ESA
- January 2005, found listing was not warranted
- January 2005 finding was in error, issued a second 12-month review (2007)
- 12-month status review was up in December 2008—fast forward to...
- March 5<sup>th</sup> 2010;

*The USFWS announced that a “protected status for the greater sage-grouse is warranted but precluded.” The decision means that the species could be listed, but because there are currently so many candidate species, the USFWS is unable to do so at this time.*



# Listing decision 2010

- What does this listing decision mean for Utah?
  - Business as usual
  - Data collection and monitoring
  - Continue current management and implementation of the State Management Plan
- How are we proceeding?
  - Reported and reviewed annually by USFWS
  - Still in implementation phase
  - UDWR provides annual updates on sage-grouse status
  - Continue with Local Working Group Efforts



# Listing decision 2010

- What does this listing decision mean for the county?

- Emphasis on LWG plans
- Support to implement
- Become aware of this species and its habitat requirements
- Consider sage-grouse in all types of developments (urban, rural, oil, gas, transmission lines, mines, etc.)
- Know your resources (LWG, UDWR website and personnel, USU extension, BLM, USFS, etc.)





Questions