

CENTRAL SHORTGRASS PRAIRIE SPECIES AT RISK CONSERVATION PROJECT

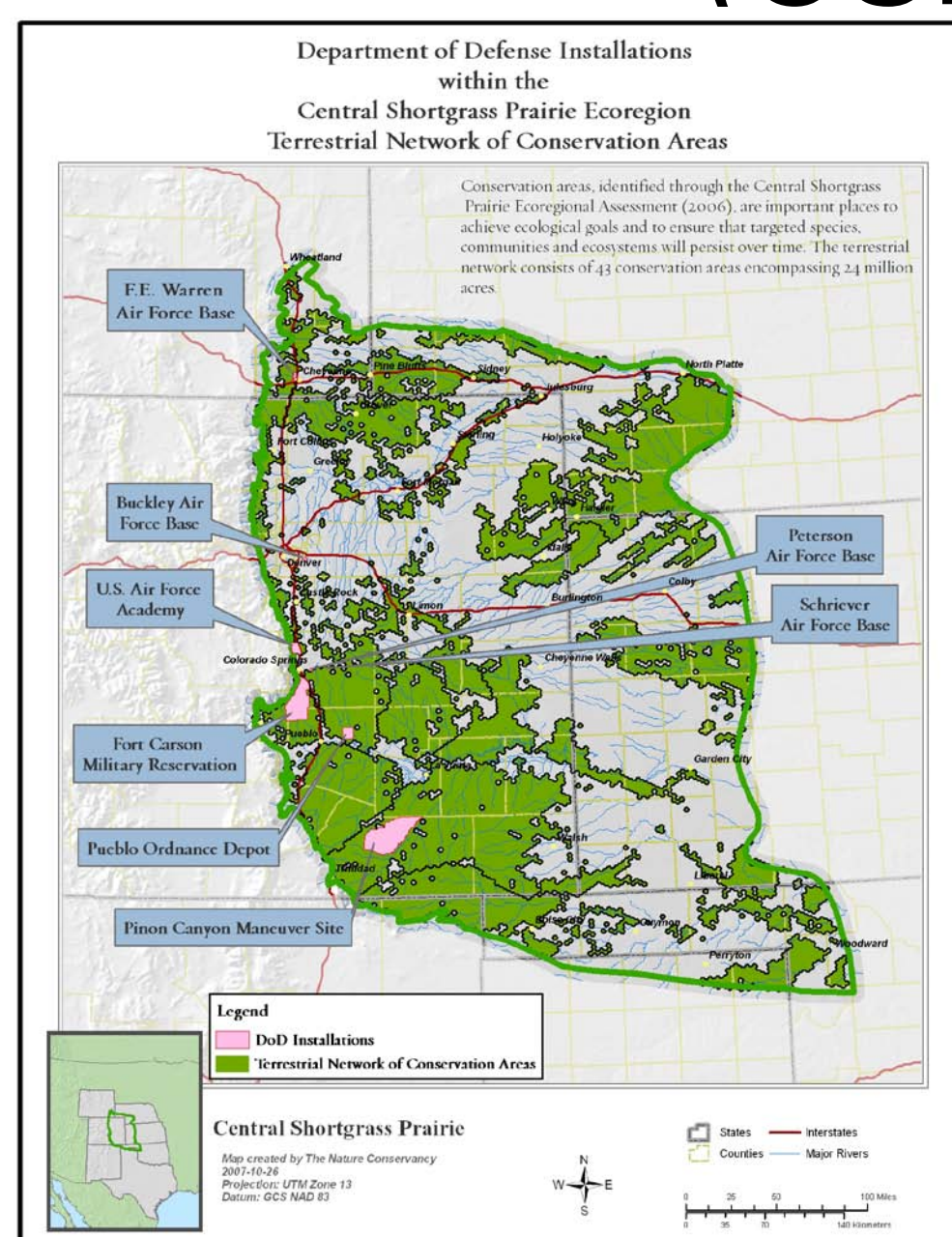
Beh, G., B. Neely, S. Kettler, L. Grunau, R. Rondeau, S. Gallagher, T. Toombs, E. Odell, K. Decker, and L. Hatzenbuehler. 2009. CSP Species at Risk Conservation Innovation and Implementation Project. Shortgrass Prairie Partnership. Funded by DoD Legacy Program (Project #08-214).

Summary

The Shortgrass Prairie Partnership (SPP), a group of public agencies and private organizations, conducted a conservation assessment of the Central Shortgrass Prairie (CSP) Ecoregion in 2006, with funding by the DoD Legacy Program and support from the US Army/Fort Carson. With DoD Phase II funding, the SPP developed a Memorandum of Understanding and a strategic plan, and conducted research on species at risk (SAR).

With DoD 2008 funding, the SPP assessed 20 SAR and developed a program to facilitate collaborative conservation to offset/mitigate impacts to those species. This project was designed to help the DoD proactively improve the conservation status of SAR, reducing the need for future listings and potential conflicts that interfere with military readiness and range sustainability.

Central Shortgrass Prairie (CSP)



- 56 million acres
- 7 states: CO, KS, NE, WY, OK, NM, TX
- 92% private
- 5% state
- 3% federal
- 8 military installations encompassing 500,000 acres

Project Goal and Objectives

Goal: develop a conservation program to facilitate proactive, voluntary, collaborative conservation of multiple species at risk in the CSP.

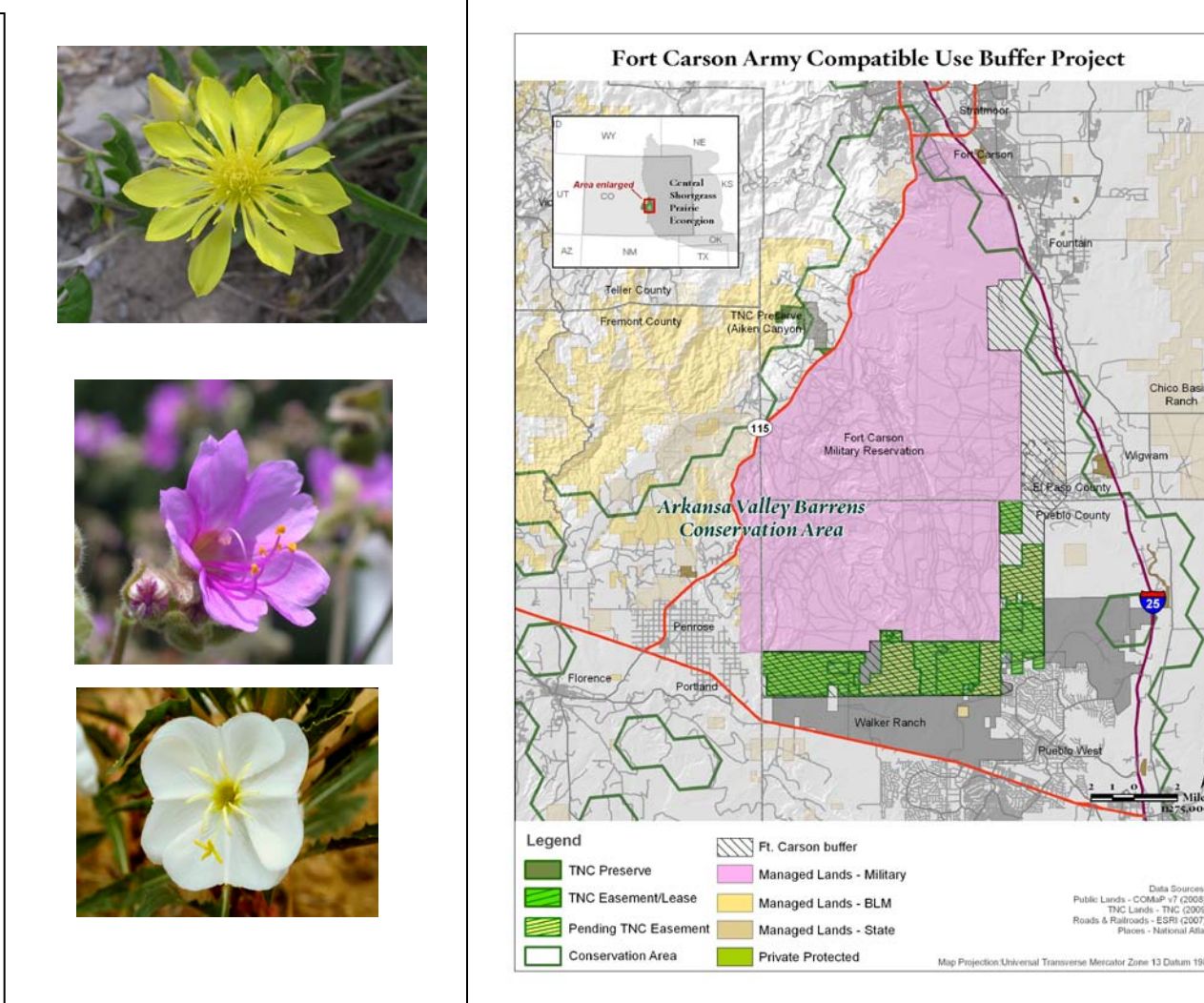
Objectives

1. Identify SAR that occur on DoD lands.
2. Conduct an impacts assessment of the SAR and habitats.
3. Identify SAR priority habitats to determine potential areas for off-site conservation projects.
4. Develop SAR-specific scorecards to measure progress over time.
5. Evaluate conservation tools and develop a framework for a conservation program.

DoD Benefits

1. Provides DoD with tools/framework for collaboratively improving the conservation status of priority SAR across the CSP by offsetting or mitigating impacts, helping to avoid future listings.
2. Offers reduced need for regulatory compliance, but if regulatory compliance is needed, provides roadmap for assisting with compliance offsite in a REPI framework.
3. Provides SAR maps/scorecard, set of supportive partners, helping DoD maintain flexibility to meet DoD training mission.

Fort Carson Army Compatible Use Buffer Project



This project builds off of the TNC-DoD partnership to address encroachment problems through conservation easements to protect valued training areas and imperiled plants near Fort Carson.

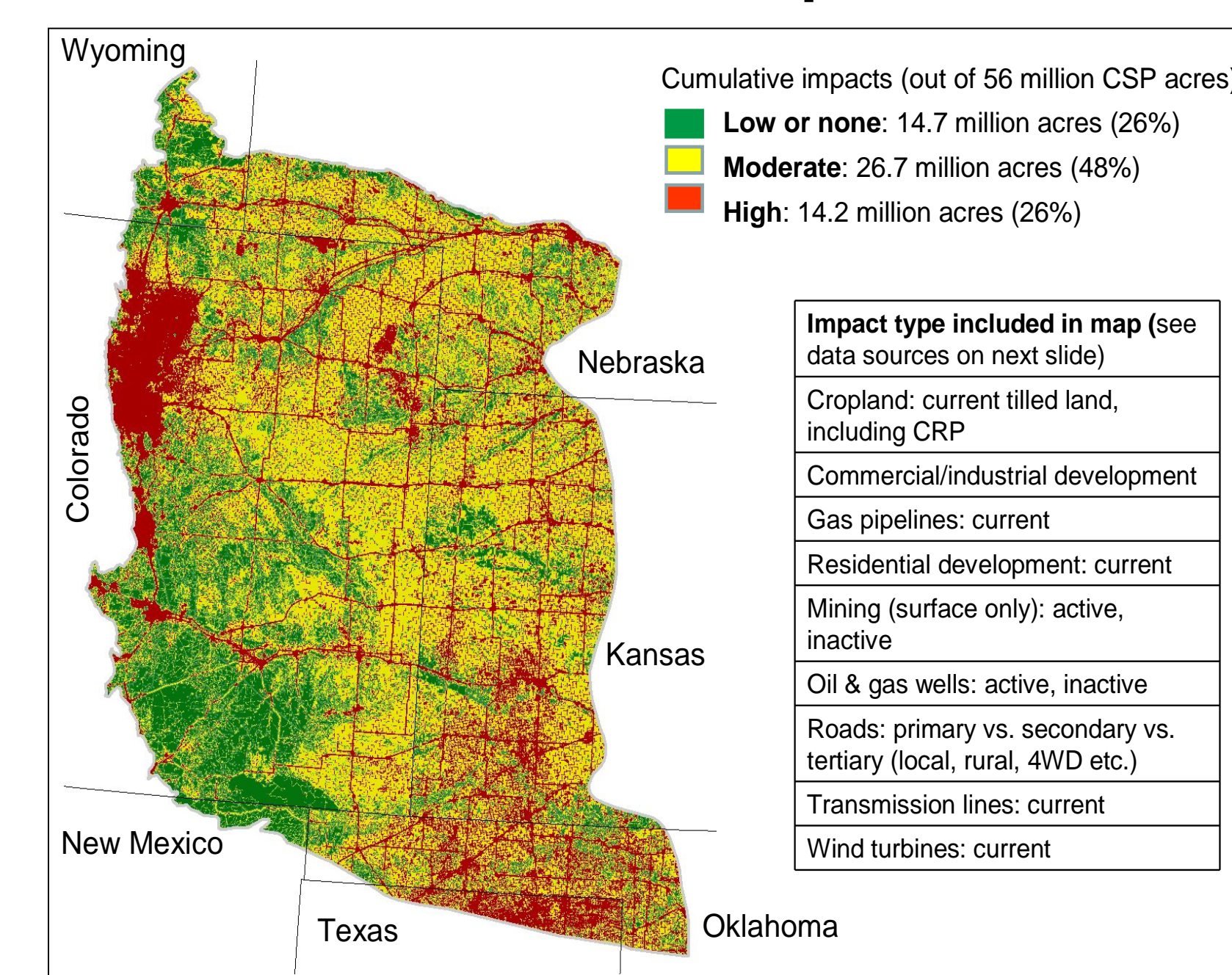
1. Species at Risk (SAR)

SAR group	Common name
1. Arkansas Valley Barrens rare plants	1. Arkansas Valley Fireflower
	2. Golden Blazing Star
	3. Arkansas Valley Evening Primrose
	4. Pueblo Goldenweed
	5. Round-leaf Four O'Clock
2. Burrow dependent reptiles group	1. Massasauga Rattlesnake
	2. Ornate Box Turtle
3. Shortgrass Community	1. Burrowing Owl
	2. Chestnut-collared Longspur
	3. Ferruginous Hawk
	4. Lark Bunting
	5. Long-billed Curlew
	6. McCown's Longspur
	7. Mountain Plover
	8. Prairie Dog, Black-tailed
	9. Swift Fox
4. Shrubland / mixed grass community	1. Brewer's Sparrow
	2. Cassin's Sparrow
	3. Grasshopper Sparrow
	4. Loggerhead Shrike

Note: This SAR list is based on meeting the DoD's future mitigation needs in the CSP. Sources: Photos from Renee Rondeau—Colorado Natural Heritage Program, Tom Blackman, Seth Gallagher, Tony Leukering, Ross Lock, Bill Schmecker—Rocky Mountain Bird Observatory, or public sources without copyrights.

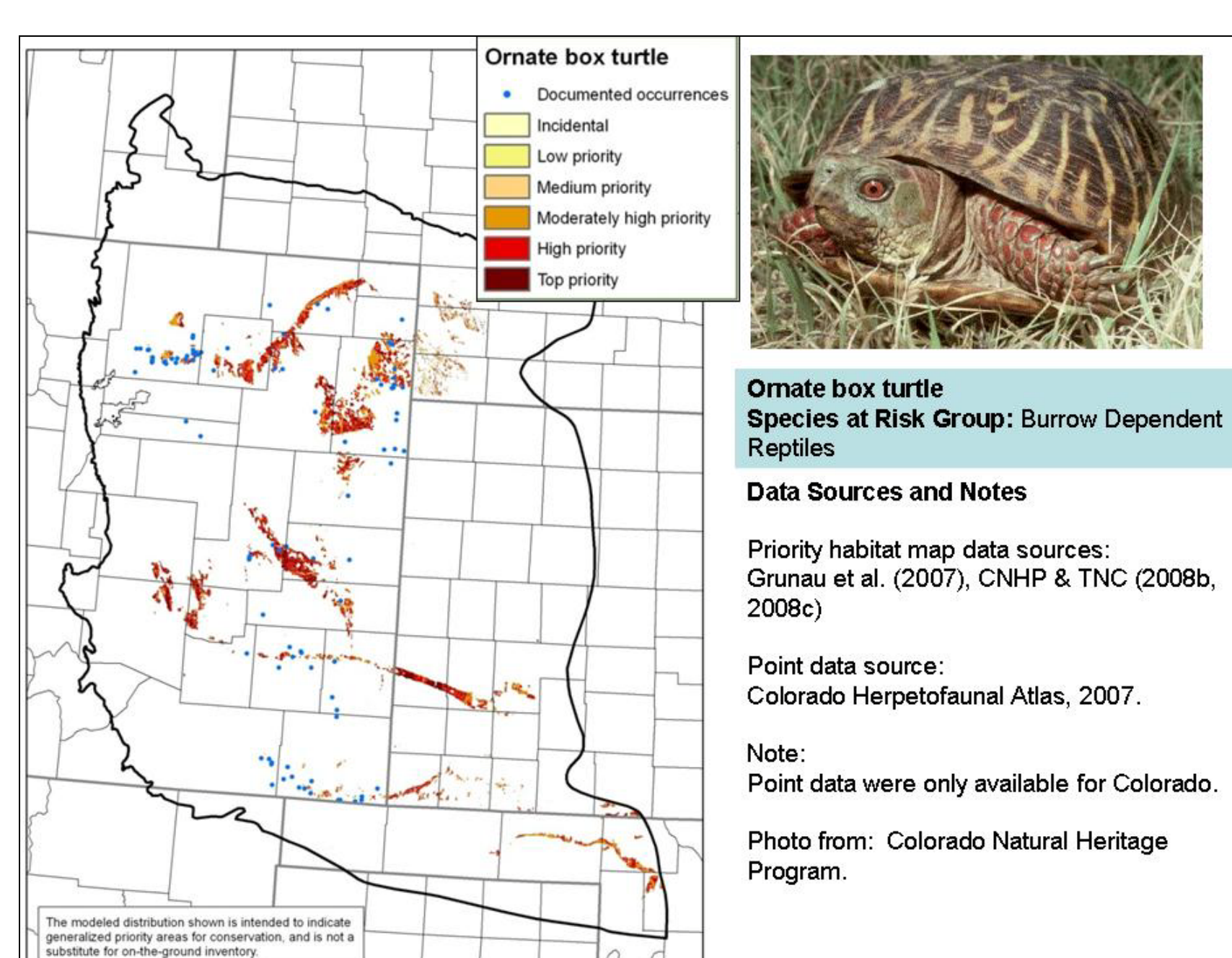
Four SAR groups with 20 species are highest priority for conservation in the Central Shortgrass Prairie.

2. Cumulative Impacts



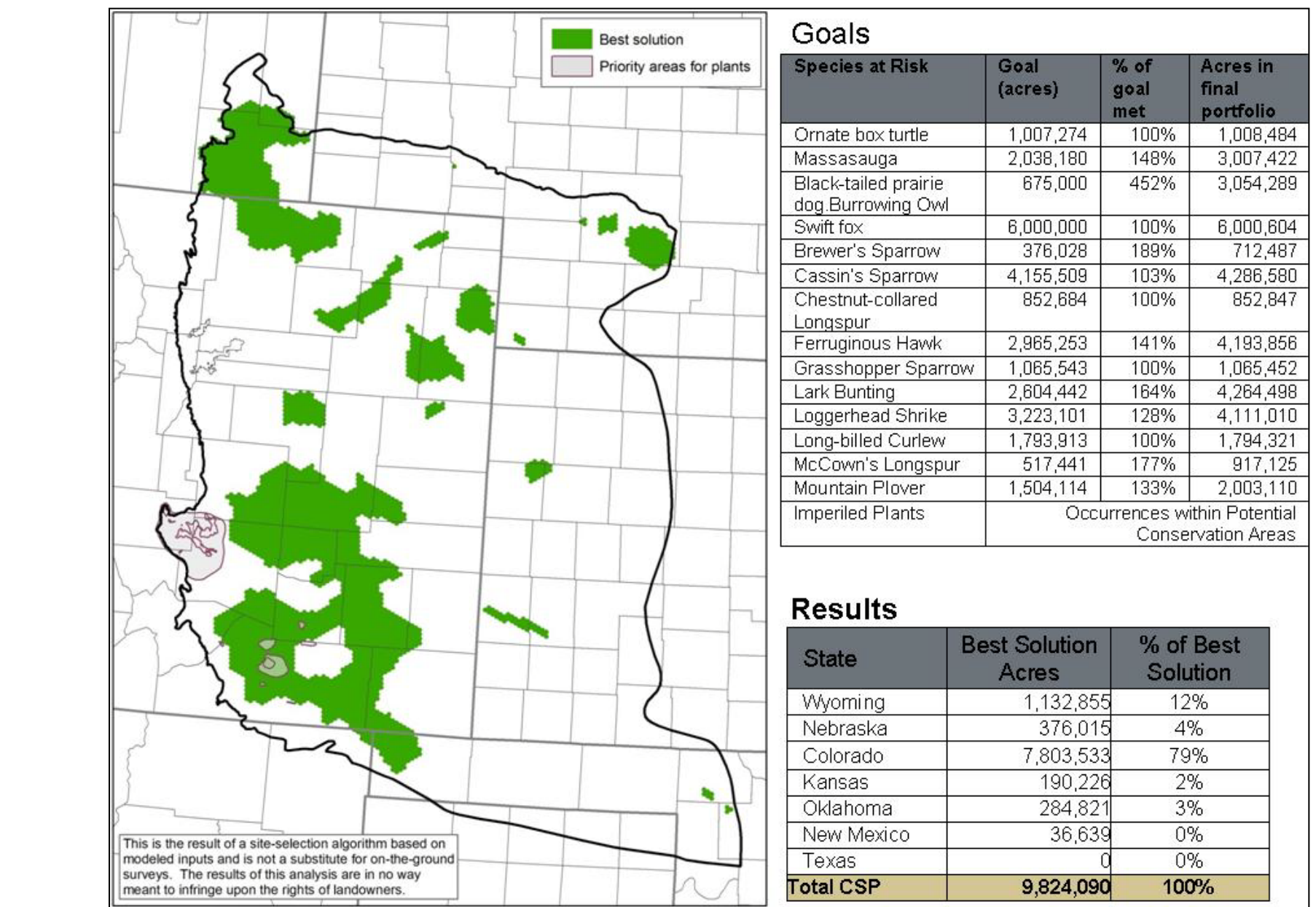
Cumulative negative impacts affecting SAR within the Central Shortgrass Prairie.

3. SAR Priority Habitats



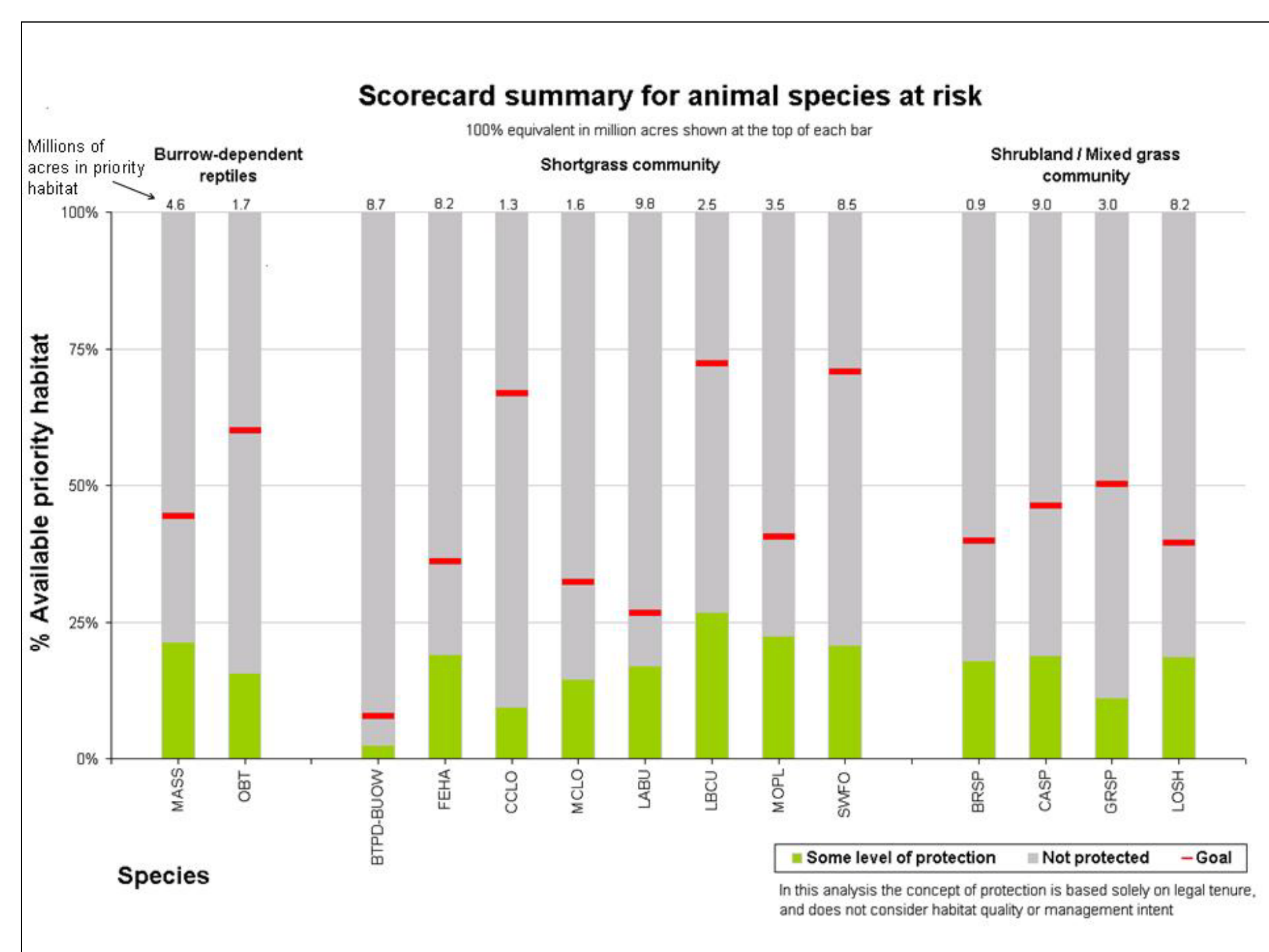
Six habitat classes ranging from optimal habitat with few impacts to degraded habitat with many impacts.

4. Priority Habitats for 20 SAR



Overall priority habitat map for all SAR estimating the least amount of area (9.8 million acres) to meet conservation goals for SAR (produced using SITES site-selection tool).

5. Scorecard Summary for SAR



- Vertical bars show the total available priority habitat for each species, defined as the top 3 habitat classes.
- Green portions represent the proportion of available habitat with some level of legal protection.
- Red lines represent SAR conservation goals.

6. Recommended Conservation Tools

Legend: Currently used by DoD in CSP (Dark Blue), New recommended tools (Light Blue)

Temporary conservation (e.g., 5–20 years) were preferred 2:1 by landowners interviewed during this project.

Permanent conservation easements preferred by the project working team over fee title changes

Onsite Conservation (DoD)	Offsite Conservation (92% private)
Sites Act and Title 10, Section 2014 cooperative agreements	REPIACUS management agreements*
Multippecies CCA†	Multippecies COAA†
Grass cooperative: Air Force†	Grass cooperative: lease model†
Grass cooperative: Army†	Farm Bill Facilitation†
	Grass cooperative: co-owned model†
	Voluntary offsite mitigation fund†
	REPIACUS conservation easements*
	Land exchanges†

Footnotes:

1. Most applicable for species with the greatest risk of being listed.
2. On Air Force land (Warren and Schriever AFBs 4–5k acres) and/or on Army land (e.g., Pueblo Chemical Depot). Although these would be small grass cooperatives, using these lands for grass cooperatives would be environmentally preferable to other more intensive residential or commercial uses and could help improve relations with neighbors.
3. In the past has been used to conserve rare plants predominantly found on and around DoD land, can be used in the future for SAR rare plants as well.
4. Readiness and Environmental Protection Initiative/Army Compatible Use Buffer program. DoD's policy is to achieve conservation through purchase of the least interest possible in a property necessary to achieve their goals. At Fort Lewis, offsite management is funded as part of a CCA on state lands and other protected lands (TNC owned). ACUE cooperative agreements mandate that the private landowner assumes all management responsibilities. In the lease grass cooperative model, the grass cooperative remains in private ownership; DoD could fund annual conservation operations and maintenance costs.
5. In the lease model, DoD could fund management of a grass cooperative that does not have a conservation easement. In the co-owned grass cooperative model, DoD could fund conservation easements on the grass cooperative or on the home ranches of participating ranchers, as well as operations of the grass cooperative.
6. Farm Bill Facilitation means creating a funding source to provide landowner technical support and cost-share to increase landowner interest and utilization of existing Farm Bill programs both temporary and permanent to benefit SAR species.

Next Steps

1. Agree on tools to implement with partners and launch implementation teams around each tool selected.
2. Adopt SAR scorecard to monitor progress and measure success.
3. Develop a mitigation accounting framework/system to evaluate impacts and determine offset needs for SAR on DoD lands.
4. Assess impacts of climate change on SAR and their habitats, and develop adaptation strategies.

The Shortgrass Prairie Partnership provides agencies, non-profit organizations, landowners, & land managers the opportunity to collaboratively work together to conserve the shortgrass prairie while promoting economically productive landscapes that sustain local communities.

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Poster by Betsy Neely (TNC)
bneely@tnc.org

and
Steve Kettler (USFWS)
steve_kettler@fws.gov