

SGI 2.0 IN WY

Brian Jensen



Sage Grouse Initiative



- Remove threats to sage-grouse and improve sustainability of working ranches
- Implement enough of the right practices in the right places to benefit populations
- Assess effectiveness, quantify benefits, adapt program delivery, and tell the story



“What's good for the bird, is good for the herd”

Good for both

- Large, intact landscapes
- Healthy perennial grasses/forbs
- Invasive species management
- Well-designed grazing plan

Bad for both

- Fragmented landscapes
- Overgrazing, depleted perennial plants
- Conifer encroachment
- Weeds/annual grasses

Shared Vision

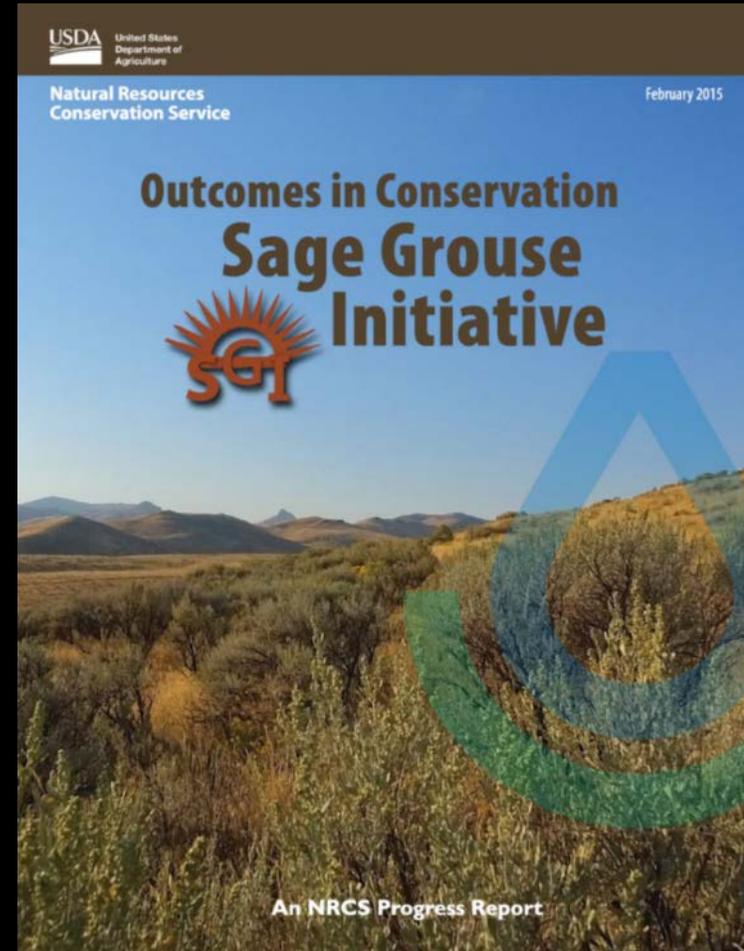
*Wildlife conservation through
sustainable ranching*



NRCS's long term commitment



- Quantified SGI outcomes from first 5 years
- Made long-term commitment to conservation of sagebrush ecosystem



Range-wide Accomplishments 2010-2015

- Worked with ~ 1,200 ranches
- 450K acres of conservation easement
- 405K acres of conifer removal
- 2.4 M acres of grazing system improvement
- Lots of fence marked
- Many other practices

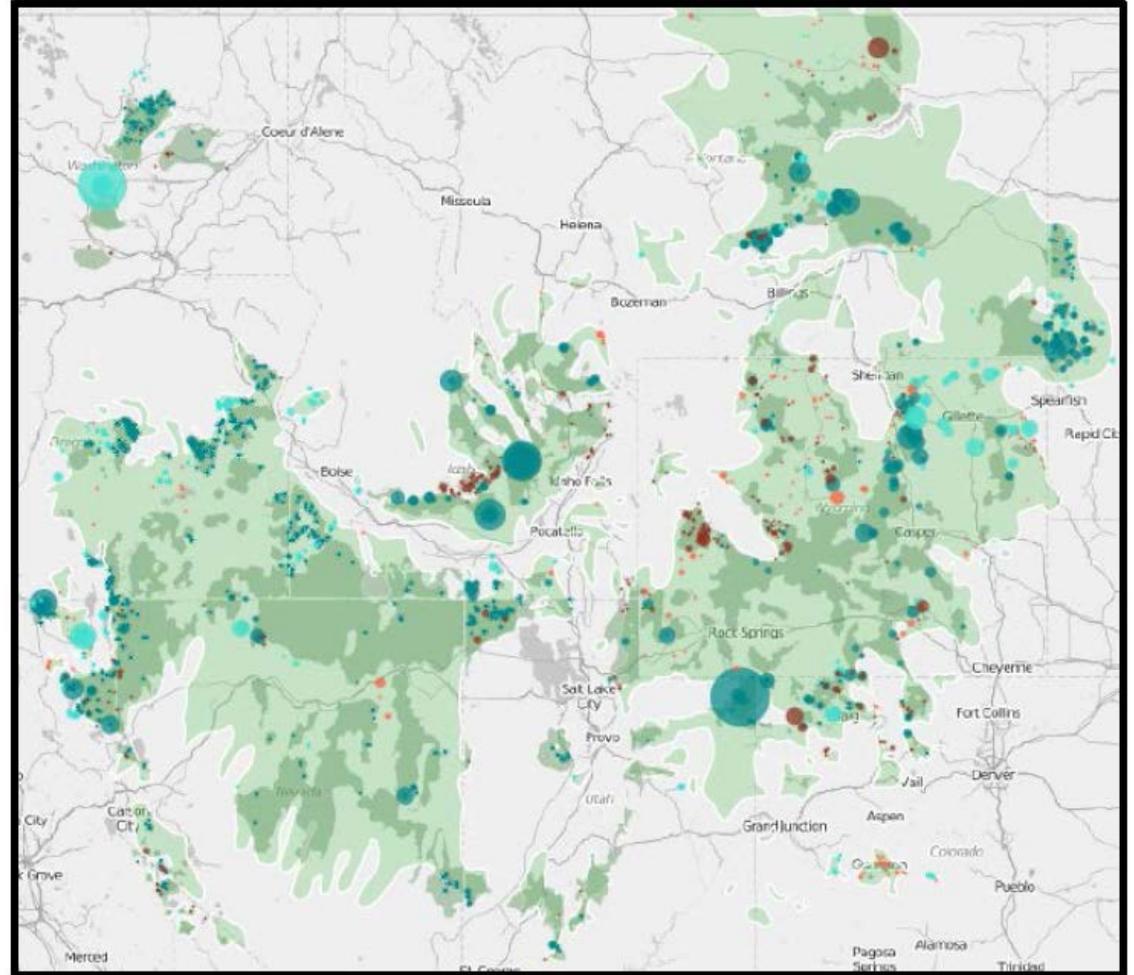


Figure 1. SGI (EQIP and WHIP; 2010-2014) contract locations are shown in blue. NRCS easements (WRP, GRP and FRPP; 1992-2013) are shown in brown. Light colors signify locations outside of PAC boundaries, and dark colors are located within PAC boundaries.

Acres certified complete or contracted by state, 2010-2014

State	Grazing Systems		Easements*		Conifer Removal		Seeding		Fences Marked or Removed	
	acres (% in PACs)		acres (% in PACs)		acres (% in PACs)		acres (% in PACs)		miles (% in PACs)	
California	64,204	(56)	15,187	(71)	63,299	(65)	987	(96)	65	(72)
Colorado	79,077	(56)	68,988	(86)	1,185	(19)	3,483	(72)	11	(85)
Idaho	249,653	(87)	69,609	(94)	47,830	(77)	5,235	(43)	79	(94)
Montana	409,594	(85)	70,111	(75)	168	(0)	5,442	(14)	104	(96)
Nevada	26,173	(90)	18,272	(100)	22,266	(75)	1,855	(62)	21	(66)
North Dakota	20,173	(100)					2,475	(88)	< 1	(100)
Oregon	26,571	(100)	6,701	(1)	199,203	(81)	296	(93)	11	(82)
South Dakota	312,295	(85)							5	(83)
Utah	173,733	(95)	17,229	(100)	70,011	(99)	27,666	(96)	11	(100)
Washington	83,073	(86)	4,369	(100)			677	(41)	29	(10)
Wyoming	993,100	(63)	181,418	(71)	1,280	(80)	4	(100)	14	(36)
Total	2,437,645	(75)	451,884	(79)	405,241	(81)	48,120	(76)	350	(79)

Rangewide totals of 15,509 acres of weed management and 179 acres of wet meadow restoration are not shown.

*Easement numbers include all NRCS easements in occupied range or PACs acquired between FY92 and FY13



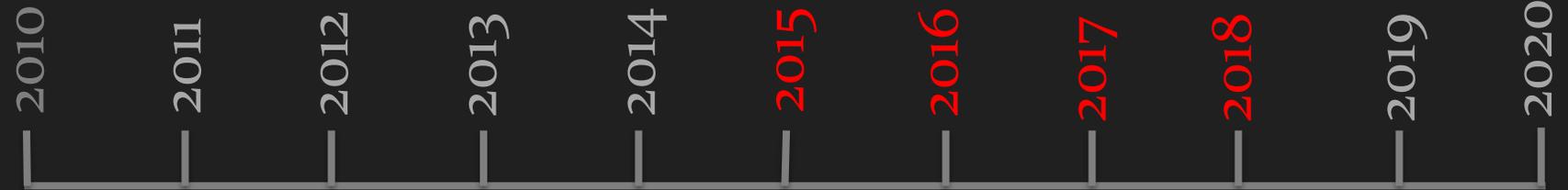
SGI 2.0

Directs \$211M

State-based plans

4 year planning horizon

Compliments partner plans



Proven Practices

Conifers



Subdivision



Infrastructure



Emerging Opportunities



Fire/Invasives



Cultivation



Mesic Areas



WYOMING SGI 2.0 BUSINESS PLAN



- ▶ Developed in conjunction with lots of local, state, and federal partners.
- ▶ Lacking some of the “science” that other states have to estimate size of certain threats.
- ▶ Repeatedly heard that we need to be more involved in invasive species management, especially cheatgrass.
- ▶ Followed guidance to identify priorities by PACs, but SG habitat and PACs are big in WY...

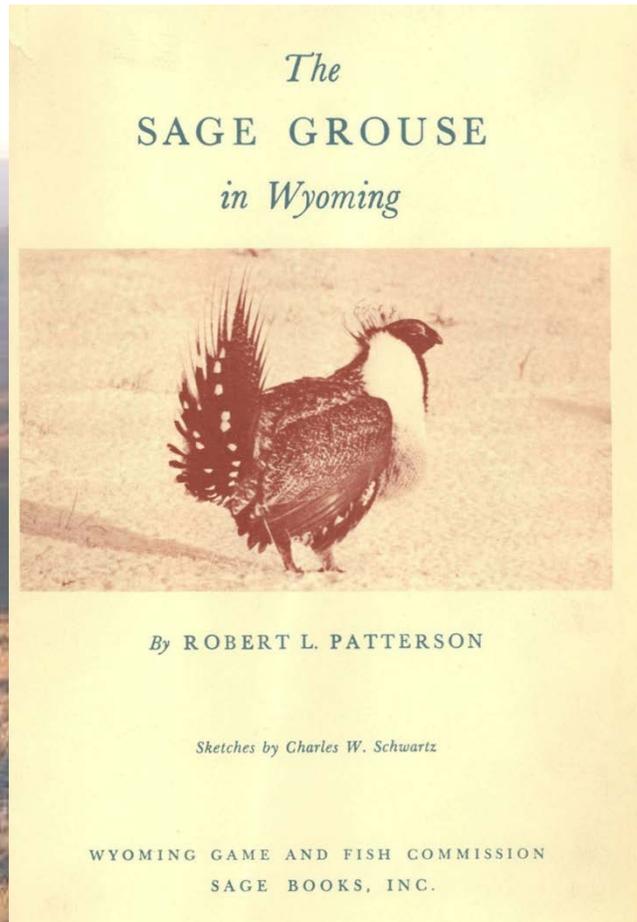
OUR PLAN

Wyoming Conservation Easements

- Permanently protecting sage grouse habitat from increasing development pressure, with primary focus on landscape urbanization using conservation easement dollars and leveraged funds from Land Trusts and the State of Wyoming.
- From 2010-2014 we were involved in 181K acres of conservation easement
- Priority will be given to properties located in areas identified as having high sage grouse value with high development potential as indicated by Copeland et al (2013).

Fiscal Year	Progress Measure (Units: ac, mi, etc.)	Resource Need (Farm Bill FA-\$)	Program (EQIP, ACEP, CSP)
2015	33,000 acres expected in applications for FY15 (FY15 goals 0 acres per allocation)	\$9 million expected in applications for FY15 (current FY15 allocation is \$0.0)	ACEP-SGI
2016	35,000 acres	\$10 million	ACEP-SGI
2017	35,000 acres	\$10 million	ACEP-SGI
2018	35,000 acres	\$10 million	ACEP-SGI
Total		\$40 million	ACEP-SGI

Historical perspective...



In his 1952 book, *The Sage Grouse in Wyoming*, Robert L. Patterson called for the preservation and maintenance of extensive and contiguous areas of native vegetation in order to conserve sage-grouse.

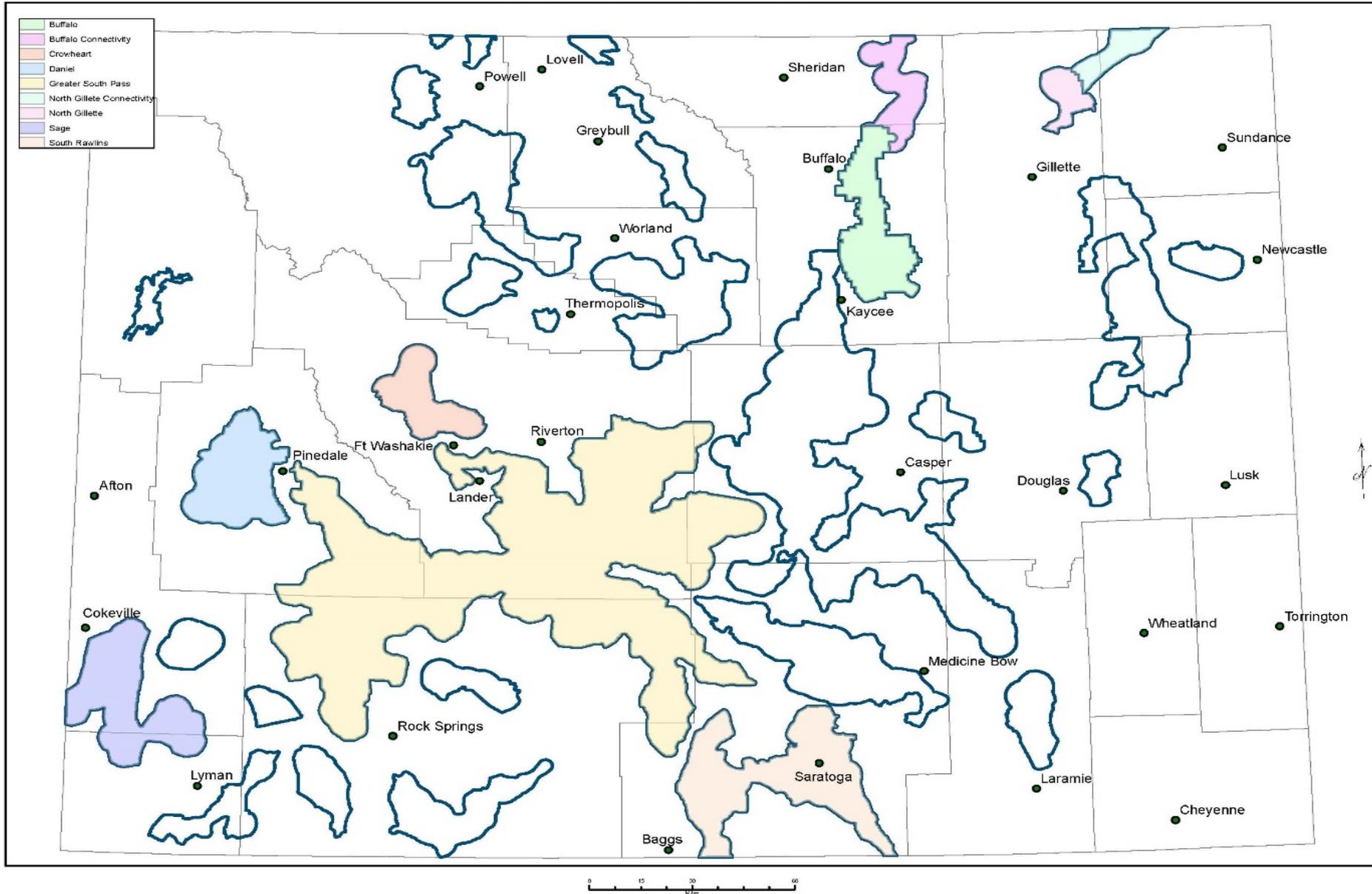
Science to Solutions



Predicting the Outcome of Wyoming's Sage Grouse Conservation Strategy

In Brief: Wyoming supports nearly 40% of the world's sage-grouse population, yet much of the state's sagebrush habitat is undergoing rapid transformation for energy and residential development. In 2008, the state enacted a proactive "core area" strategy to balance conservation with development. Will this strategy protect grouse? A recent study by The Nature Conservancy

Priority Core Areas for Conservation Easements

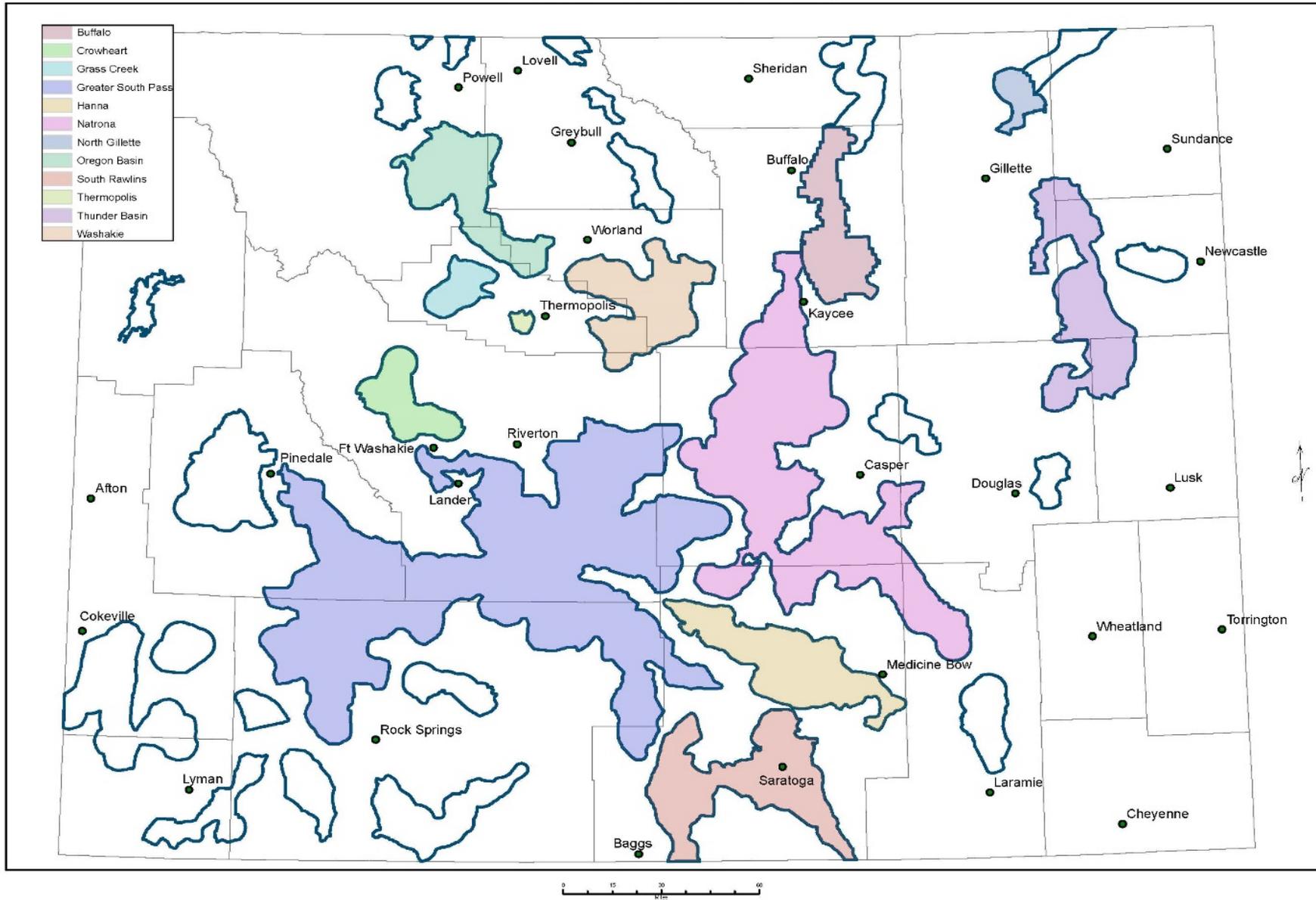


How we are going to use the EQIP – SGI program in Wyoming:

- Applying Prescribed Grazing (528) and facilitating practices like fence (328), livestock pipeline (516) and watering facility (614).
- Between 2010 and 2014, we developed plans on 993,000 acres.
- Continue to plan, contract and implement the same level of acres and practices as we have.

Fiscal Year	Progress Measure (Units: ac, mi, etc.)	Resource Need (Farm Bill FA-\$)	Program (EQIP, ACEP, CSP)
2015	200,000 acres	\$2,100,000	EQIP, CSP
2016	200,000 acres	\$2,000,000	EQIP, CSP
2017	200,000 acres	\$2,000,000	EQIP, CSP
2018	200,000 acres	\$2,000,000	EQIP, CSP
Total	800,000 acres	\$8,100,000	EQIP, CSP

Priority Core Areas for Prescribed Grazing



Wyoming Habitat Restoration:

- Controlling invasive conifers and cheatgrass using practices 314 (Brush Management) and 315 (Herbaceous Weed Control).
- Targeted in and near PAC/Core areas known to have conifers invading sagebrush habitat and cheatgrass invasion levels that threaten to alter fire regimes
- Let's get SMRRT!
- 2010-2014: 1,200 acres Huge growth industry 😊
- Couple with Prescribed Grazing???

Fiscal Year	Progress Measure (Units: ac, mi, etc.)	Resource Need (Farm Bill FA-\$)	Program (EQIP, ACEP, CSP)
2015	314- 200 acres	\$24,000	EQIP
	315- 100 acres	\$3,000	
2016	314- 1000 acres	\$120,000	EQIP
	315- 10,000 acres	\$300,000	
2017	314- 5,000 acres	\$600,000	EQIP
	315- 25,000 acres	\$750,000	
2018	314- 10,000 acres	\$1,200,00	EQIP
	315- 100,000 acres	\$3,000,000	
Total	314- 16,200 acres	\$1,944,000	EQIP
	315- 135,100 acres	\$4,053,000	

National Soil Information System (NASIS)

NASIS

National Soil
Information
System



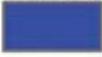
The focus of the National Cooperative Soil Survey (NCSS) is shifting from producing static printed soil survey reports to providing a dynamic resource of soils information for a wide range of needs. The National Soil Information System data system consists of multiple interrelated soil applications and databases. This data system aids in the collection, storage, manipulation and dissemination of soil information.

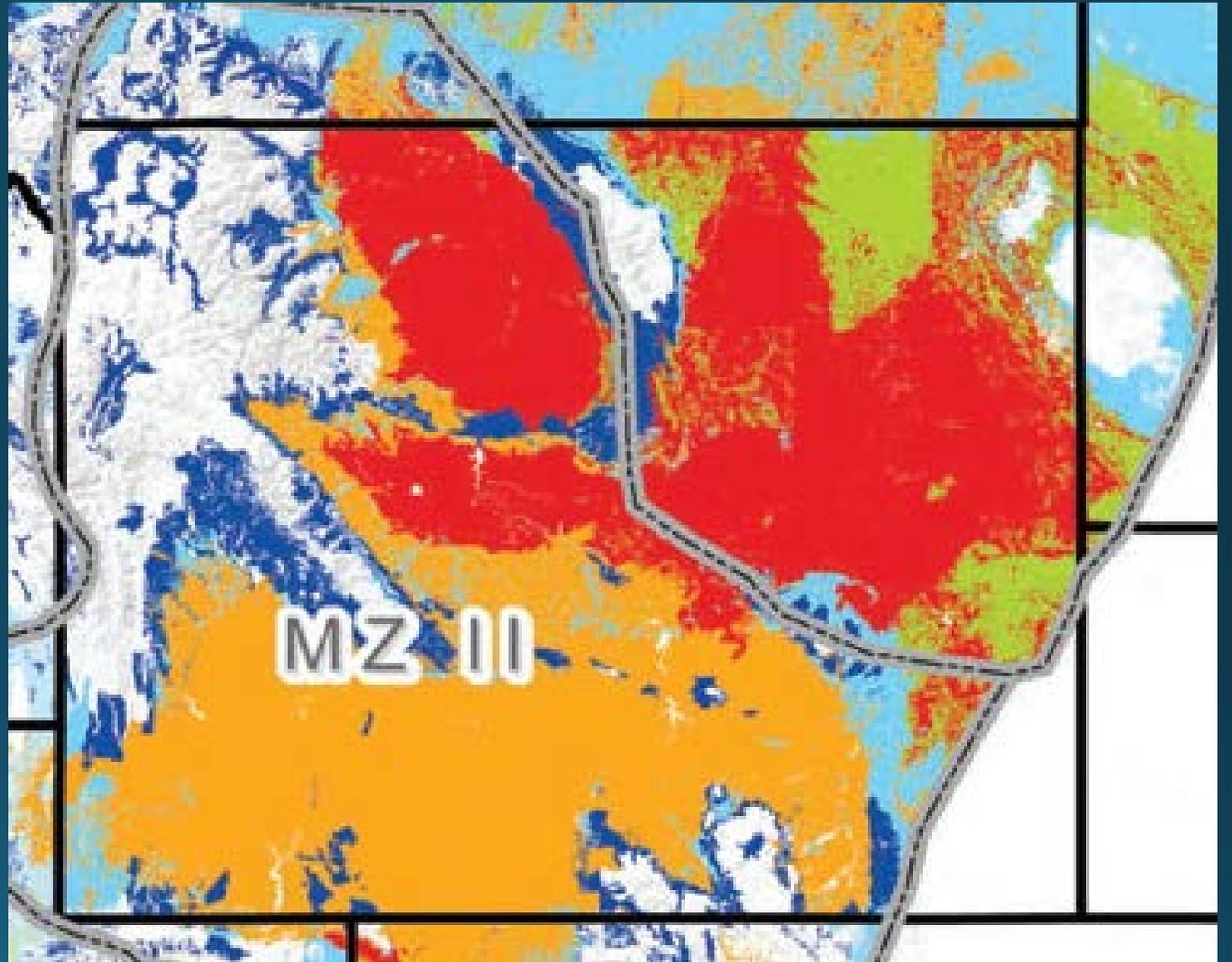
For more information about the National Soil Information System, call the National Soil Survey Center in Lincoln, Nebraska, at 402-437-5378 or 402-437-5379.

- > Bugs and Known Issues
- > Documents
- > Downloads
- > Frequently Asked Questions
- > Metadata
- > Overview
- > Release Notes
- > SBAAG Site
- > Soil Data Sources/Links
- > Subscription

----- Sage-grouse Management Zone (MZ)

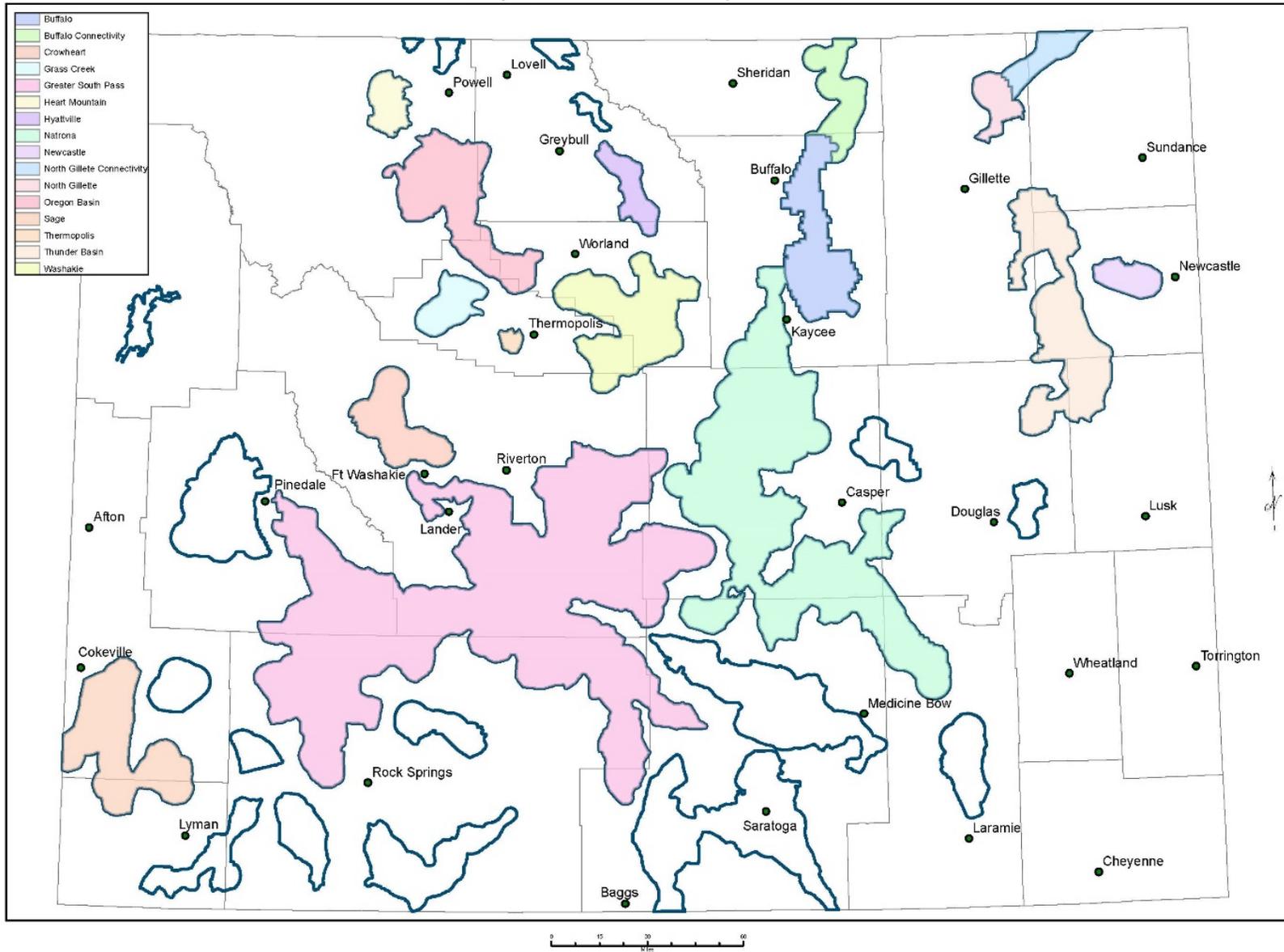
Soil Moisture & Temperature Regime

	Cold (Cryic)
	Cool and Moist (Frigid/Ustic)
	Cool and Moist (Frigid/ Xeric)
	Warm and Moist (Mesic/Ustic)
	Warm and Moist (Mesic/Xeric)
	Cool and Dry (Frigid/ Aridic)
	Warm and Dry (Mesic/ Aridic)
	Omitted or No Data



USDA Forest Service Gen. Tech. Rep. RMRS-GTR-326.
2014

Priority Core Areas for Invasive Species Control



Wyoming Dispersed Actions or Emerging Opportunities:

≤25% of resources:

- Easements, Prescribed Grazing (528) and Invasive Control (314 and 315) outside of priority areas
 - Consider funding the project if benefits sage grouse. Priority for outreach and ranking will be given to the priority areas identified for those practices.
- Control of invading Russian olive on important brood rearing and summer habitat using practice 314 (Brush Management)
 - NRCS will work with the WGFD to identify ephemeral draws and wet meadows invaded by Russian olive in priority sage grouse habitat.
- Establishing Firebreaks (394) in important sage grouse areas
 - Awaiting recommendations from the BLM's SMRRT on placement of Firebreaks within WY.
- Wet Meadow Restoration using a variety of practices
 - Prioritize wet meadow restoration to important wet areas in Wyoming soon to be identified using the same methodology used for the SGI Science to Solution publication.

OUTREACH, OUTREACH, OUTREACH

- STAC
- WACD
- W&P Districts
- SGEO Training Events
- SGIT
- WGFD Coordination Mtg
- “Big Dawg” Mtg
- BLM Resources
- Local FO Outreach
- WY Stock Growers
- Etc.
- Etc.

SGI 2.0 EQIP UPDATE

FY 2016

- Preapproved applications - Sign-Up #1

- 7 applications
- 100,382 acres

- Pending/Eligible applications – Sign-Up #2

- 5 applications
- ~ 59,710 acres

- Herbaceous Weed Control (315)

- Preapproved applications
 - 2,637 acres

- Brush Management (314)

- Preapproved applications
 - 454 acres

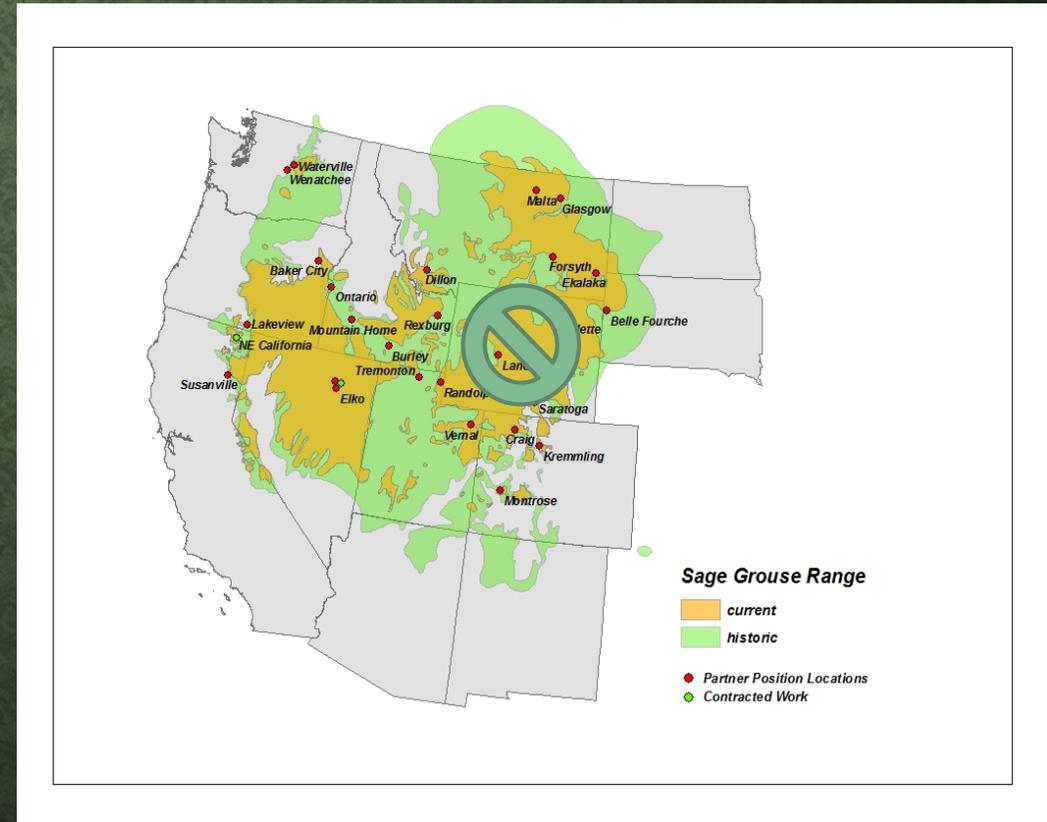
CSP-SGI UPDATE

FY2016

- Allocation - 48,403.2 acres
- Sign-Up deadline – March 31, 2016

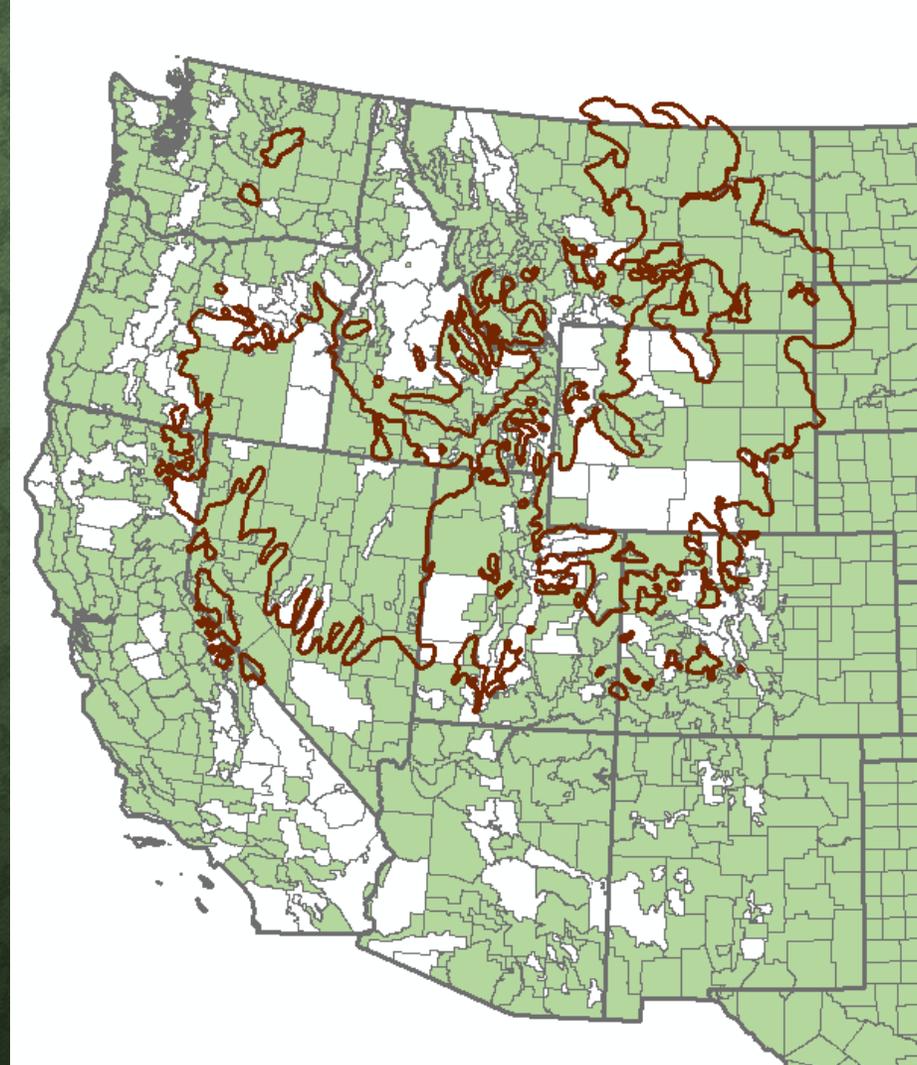
SWAT UPDATE

- Initially had 5 positions in WY- Buffalo, Powell, Lander, Pinedale, Saratoga
- And then there was 1...



RELATED ACTIVITIES AND CHALLENGES

- ESD Priorities
- Soils Mapping Priorities
- Science Needs





SAGE GROUSE INITIATIVE

Wildlife Conservation Through Sustainable Ranching



[ABOUT](#)

[OUR WORK](#)

[NEWS
& RESOURCES](#)

[SAGEBRUSH
COMMUNITY](#)

[GET INVOLVED](#)

Search



CONVERSATION SPROUTS CONSERVATION.

Fences to lean on, pots of coffee and a desire to do right by the land spur a growing list of on-the-ground successes.

Trust & Credibility ►

Science to Solutions

Grazing and Sagebrush Treatments: A 25-year Case Study in Utah



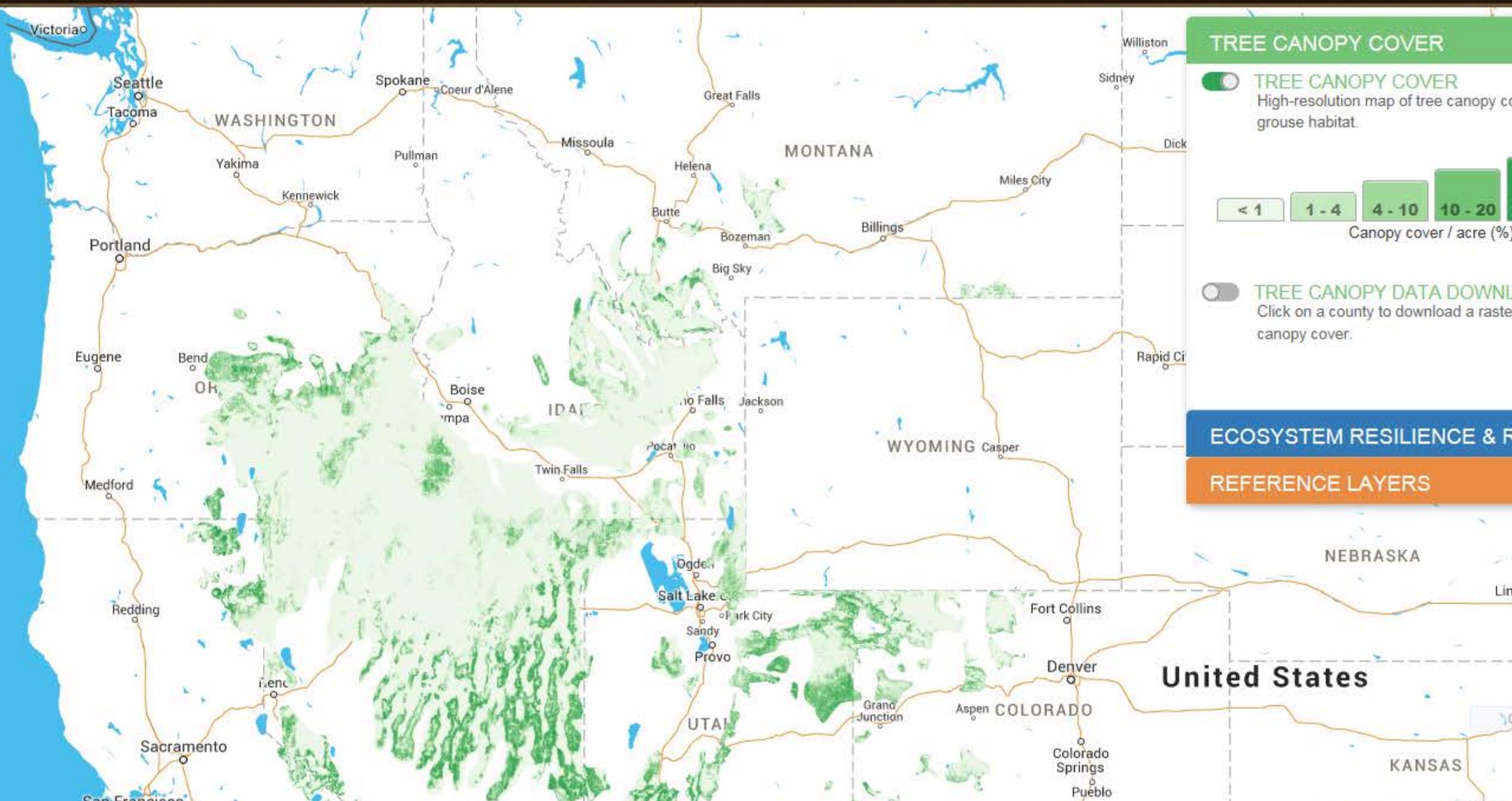
Sage Grouse Initiative

Science to Solutions

Sagebrush Songbirds Benefit from Sage Grouse Habitat Restoration



[HTTP://MAP.SAGEGROUSEINITIATIVE.COM/](http://map.sagegrouseinitiative.com/)



TREE CANOPY COVER

TREE CANOPY COVER
High-resolution map of tree canopy cover in sage grouse habitat.

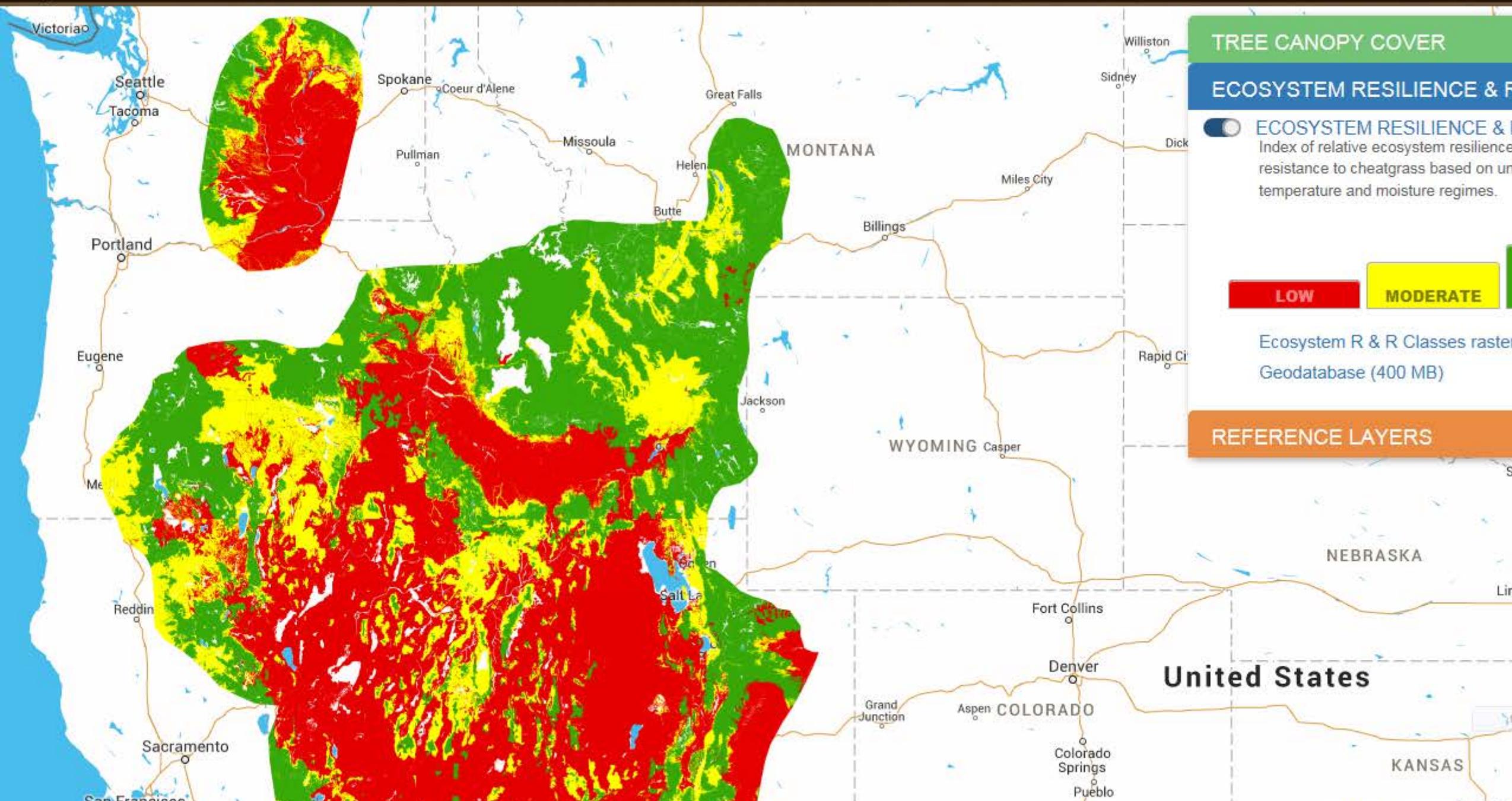


TREE CANOPY DATA DOWNLOAD
Click on a county to download a raster of tree canopy cover.

ECOSYSTEM RESILIENCE & R

REFERENCE LAYERS

United States



TREE CANOPY COVER

ECOSYSTEM RESILIENCE & R

ECOSYSTEM RESILIENCE & R
Index of relative ecosystem resilience
resistance to cheatgrass based on un
temperature and moisture regimes.

LOW

MODERATE

Ecosystem R & R Classes raster
Geodatabase (400 MB)

REFERENCE LAYERS

United States

KANSAS



United States
Department of
Agriculture

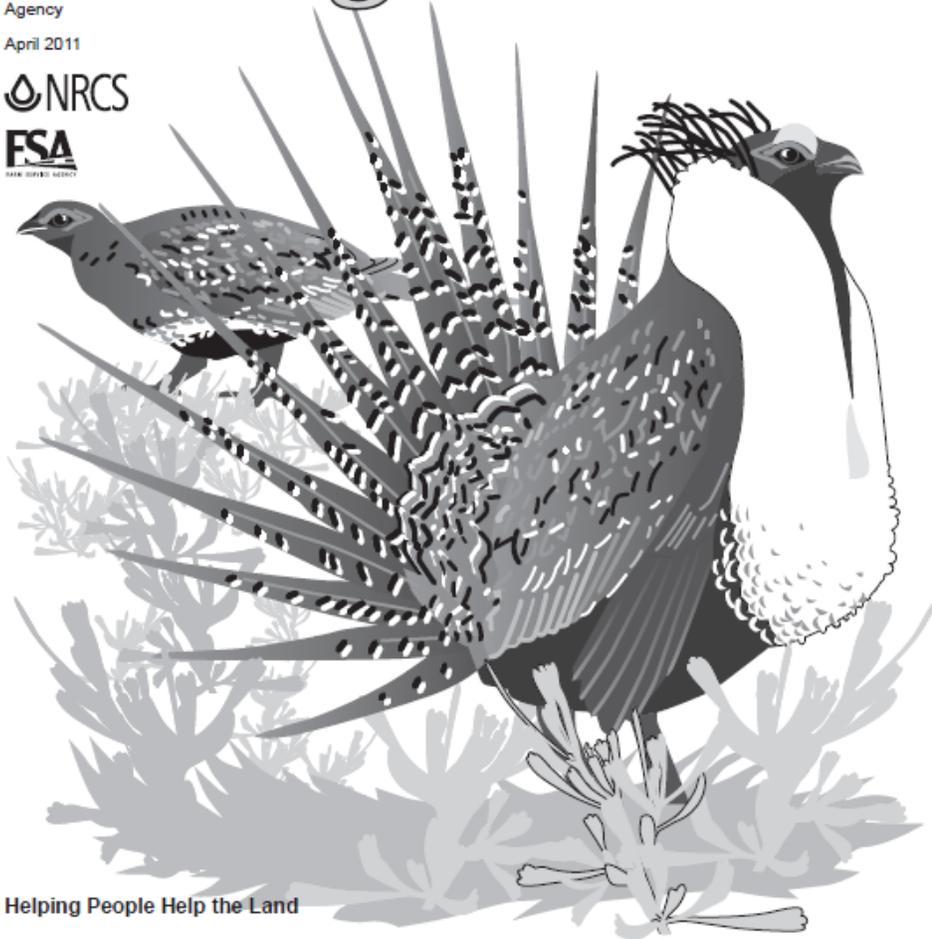
Natural
Resources
Conservation
Service

Farm Service
Agency

April 2011



Seriously Sage-Grouse



Helping People Help the Land



MEMORANDUM OF UNDERSTANDING
BETWEEN THE
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
AND
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
AND
DEPARTMENT OF AGRICULTURE
FOREST SERVICE



This MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into by and between the U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT, hereinafter referred to as the BLM, the U. S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, hereinafter referred to as NRCS, and the U. S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, hereinafter referred to as FS.

I. Purpose

The purpose of this MOU is to provide a collaborative framework for BLM, NRCS, and FS to accomplish common goals related to the conservation of Greater Sage-Grouse and its habitat. The five major emphasis areas of the MOU are:

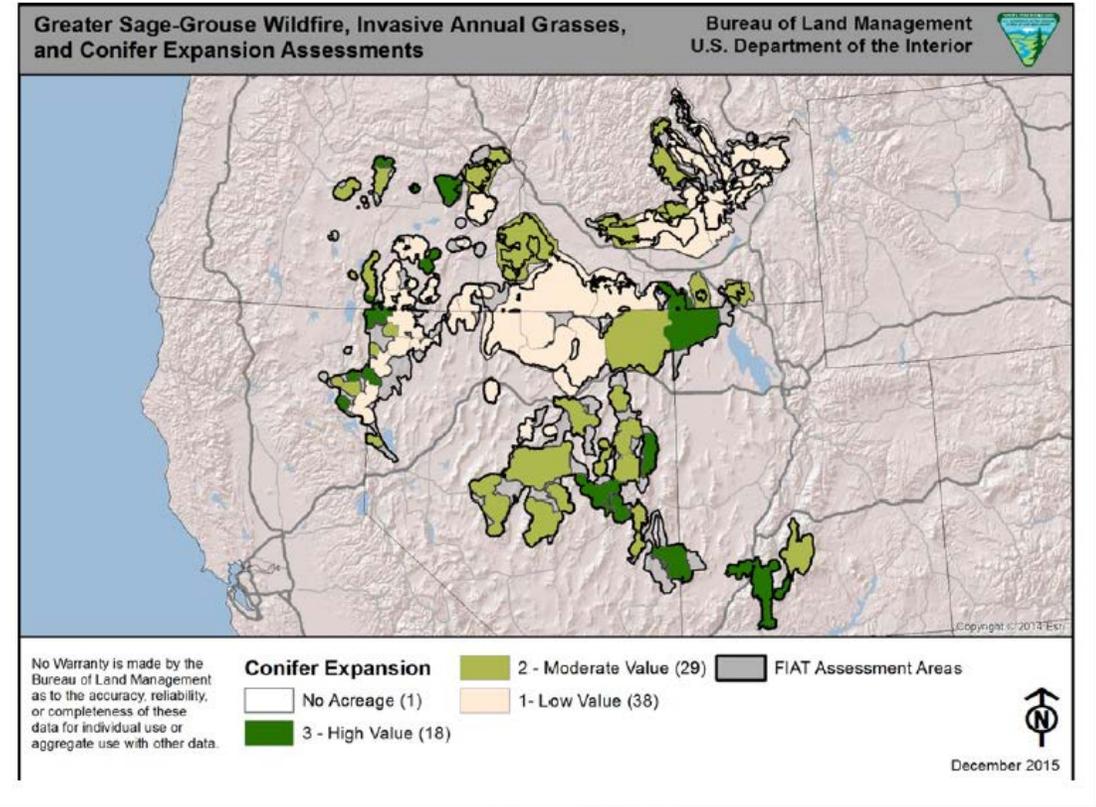
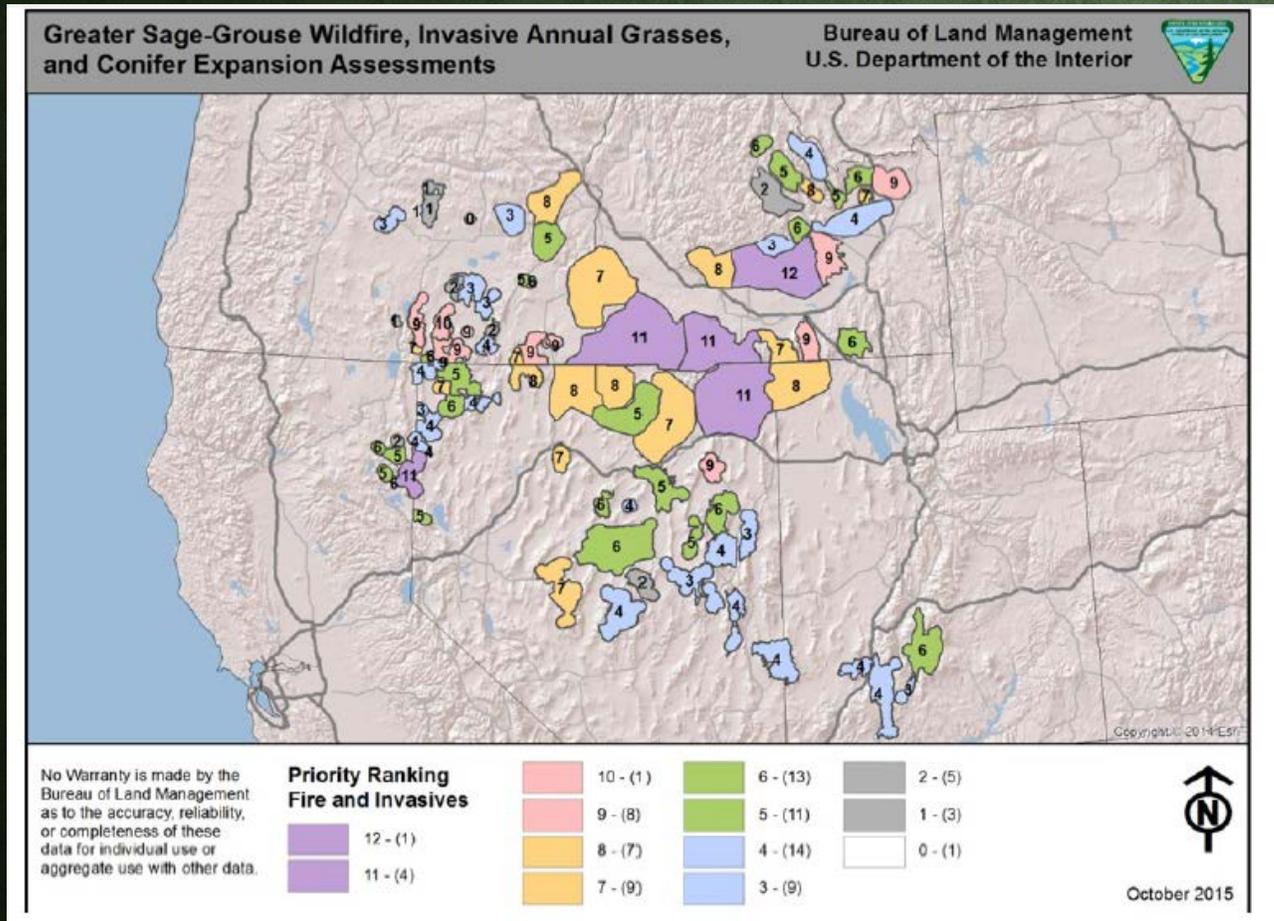
- a. Collaboration on control of invading conifers in mutually agreed priority watersheds.
- b. Collaboration on implementation of practices across landownerships designed to reduce the risk of fire and invasive species as identified by the Fire and Invasive species Assessment Tool (FIAT) in the Great Basin, and in the Rocky Mountain states when similar tools become available.
- c. Collaboration on the restoration and enhancement of wet meadow habitats in mutually agreed priority watersheds.
- d. Collaboration on development of science tools that refine delivery of priority conservation practices, jointly track implementation, assess benefits of such practices, and quantify resulting biological outcomes.
- e. Collaboration on communications to amplify outcomes achieved in conservation.
- f. Coordinate, where appropriate, the planning and implementation of range structural improvements

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Figure 1-Map of Priority FIAT PPAs for Conifer Focus (Removal)



RECIPES

- **Sage Grouse Supreme**

- **Ingredients**

- 2 , sage grouse, , filleted and cut into 1-inch cubes
flour seasoned with generous amounts of paprika, garlic salt, onion salt and pepper

SAUCE:

- 1 cup brewed coffee
- 1 (15-ounce) can tomato sauce
- 3 tablespoons grape jelly
- 1 cup red wine
- 1 (14-ounce) can mushrooms , drained

- **Directions:**

- Fillet and cut 2 sage grouse into 1-inch cubes. Soak in milk for several hours or overnight. Drain and pat dry. Coat with seasoned flour (to flour add generous amounts of paprika, garlic salt, onion salt, and pepper--flour should have a red tint). Brown in hot oil. Place in Dutch oven.

Add sauce ingredients. Cover and cook using 8-10 briquets underneath the Dutch oven and 15-18 briquets on the lid, or in a 350F oven. For adult birds, which may be tough, plan on cooking about 2 1/2 hours. You'll need to freshen your charcoal for the last hour. Check periodically and add more wine or water if needed. Serve with rice or noodles and a green salad. Serves four. This is a good recipe for old as well as young birds. Pheasant can be substituted for sage grouse.

QUESTIONS?

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- **brian.m.jensen@wy.usda.gov**

