August 6, 2018

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Ron & Thad:

On behalf of the Intermountain West Joint Venture (IWJV) Management Board and staff, I extend our sincere appreciation to the Natural Resources Conservation Service (NRCS) for partnering with the IWJV on the Sage Grouse Initiative (SGI) Strategic Watershed Action Team (SWAT).

Please find attached the SGI SWAT NRCS Quarterly Report for April-June 2018. The report also contains the following appendix: Objectives and Evolution of the SGI SWAT.

Please give me a call at (406) 549-0287 if you have any questions. We look forward to reporting on future SGI SWAT successes!

Sincerely,

Dave Smith
IWJV Coordinator
The Sage Grouse Initiative (SGI) Strategic Watershed Action Team (SWAT) continued to make significant gains this past quarter in each of its three focus areas: people and partnerships, science and technology, and communications and outreach. The following reports on these accomplishments from April – June 2018.

PEOPLE & PARTNERSHIPS

SGI would like to thank U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) staff, partners, and ranchers for all of their great work and dedication to conserving sage grouse and the sagebrush ecosystem in 2018. The positive momentum for SGI’s proactive, voluntary working lands conservation model continues to grow following the U.S. Fish Wildlife Service’s (FWS) 2015 decision not to list sage grouse under the Endangered Species Act. Thanks to the many partners, SGI is proving that this new paradigm of cooperative conservation on working lands is making a difference for ranchers, wildlife and rural economies.

SWAT Field Staff

The SWAT field staff have continued to expand and accelerate SGI conservation delivery this quarter with support from local and state NRCS staff, funding partners, Pheasants Forever (PF) and the Intermountain West Joint Venture (IWJV). The team’s dedicated and enthusiastic range conservationists, wildlife biologists, and natural resource specialists not only help get conservation on the ground but also spread the shared vision of achieving wildlife conservation through sustainable ranching throughout the West. Below are some of the incredible highlights from the SWAT field staff and PF’s efforts to support SGI delivery this reporting period.

Conservation Implementation

PF and the IWJV maintain a detailed tracking system to document SWAT field staff progress on a quarterly basis. These contributions are rolled up with other NRCS actions and reported to the FWS, during the sage grouse status review process, to ensure landowner and partner efforts are considered in Endangered Species Act listing decision reviews.

Partner Positions Accelerate Conservation—The additional field capacity support provided by SWAT partner positions across the West has essentially enabled NRCS to double the amount of SGI conservation. Partner staff have helped plan or implement:

- **2,791,954 acres** of rangeland improvement to increase overall rangeland health and resiliency through sustainable ranching to benefit sage grouse and other wildlife.
- **327,194 acres** of conifer removal in key nesting, brood-rearing, and wintering habitats. Removing encroaching conifers from sagebrush rangelands to increase water availability and eliminate tall structures in otherwise suitable habitat. As birds re-colonize former habitats, increased bird abundance is anticipated.
- **228 miles** of “high-risk” fence near leks to be marked or removed. Marking fences is expected to reduce sage grouse fence collisions by 83%.

SWAT Position Update

SWAT field staff talent and work does not go unrecognized by NRCS and the other partner employers that work with us. As position vacancies arise, PF works with NRCS, hiring entities and funding partners to re-assess position locations to ensure technical assistance is focused where it’s needed most; positions are quickly refilled to minimize disruption to conservation delivery. Here are changes that occurred this quarter:
After discussions with Nevada NRCS and partners, one of two PF positions in Elko, Nevada, will be moved to Winnemucca from Elko to better meet the needs of the state. The position was vacated in early 2018 and is expected to be refilled soon. The other PF position will remain in Elko.

The hiring process is underway for the Marsing, Idaho, position (vacated by Zack Foster, who is now an Idaho Department of Lands Resource Specialist). Partners expect to have the position refilled in August 2018.

**SWAT Field Staff Calls & Webinars**

PF and the IWJV continue to host monthly coordination conference calls in which SWAT members receive SGI and agency updates, share accomplishments, experiences, and ideas, ask questions, and receive continuous technology transfer and training. Guest speakers this quarter included:

- **April:** Jay Kerby, The Nature Conservancy’s (TNC) Southeast Oregon Project Manager. Jay discussed TNC's Precision Restoration seeding project, which produces enhanced seed materials designed to increase successful restoration of native perennial vegetation in annual grass-prone rangelands.
- **May:** Brian Jensen, Wyoming NRCS State Biologist. Brian gave an overview of mitigation banks, easements, permanent protection of lands, and the conservation programs/opportunities available in Wyoming.
- **June:** Aaron Clausen, Pheasants Forever Farm Bill Biologist in South Central Montana. Aaron presented on pollinator-friendly plantings in range settings and the resources available when developing projects.

**Annual SGI SWAT Workshop – May 22-23, 2018 in Boise, Idaho**

The 8th annual SGI SWAT workshop in Boise, Idaho, was a great success. This year’s event hosted over 150 federal, state and non-governmental organization participants from across the West. During the two-day workshop, participants heard from ranchers, firefighters, researchers, local non-profits and public land managers about the amazing results that come from working together locally to achieve a shared vision: healthy sagebrush rangelands for people and wildlife! They heard from these partners about the pre- and post-fire planning restoration efforts in Idaho.

Attendees at the 2018 SGI SWAT Workshop.
*Photo by Evan Barrientos/Audubon*

Participants also had the chance to hear from Noppadol Paothong, an award-winning wildlife photographer who recently released the book, *Sage Grouse: Icon of the West.* Paothong has spent 13 years photographing sage grouse and their habitat, instilling in him a deep appreciation for the bird, the people, and the wildlife who call the beautiful western landscape home.

*Right: Noppadol Paothong speaks at the 2018 SGI SWAT Workshop. Photo by Evan Barrientos/Audubon*
Workshop participants also learned about the ongoing efforts to restore more than 280,000 acres of sagebrush in Idaho and Oregon burned by the Soda Fire in 2015. The all-day field tour took participants to see the recovery efforts first-hand. They learned how quick action and a team-based approach has made the difference for repairing damage done by the Soda Fire. Presenters on the tour described how they prioritized restoration techniques and treatments based on topography, soils, and fire intensity. Plus, workshop participants were shown on the landscape how partners in Idaho and Oregon employed lessons learned from mistakes and successes on other past western wildfires.

We have received great reviews of the workshop from participants, and folks are already asking where the 2019 event will be and what it will cover. This demonstrates the high interest in these annual events and the impact that they have on the conservation community.

Additionally, a one-day training for the new SWAT staff was held in Boise on May 21, before the main workshop. It covered rangeland health indicators and featured presentations by the Idaho NRCS State Range Conservationist (Brendan Brazee), Washington NRCS State Biologist (Dominic Bachman), and Oregon NRCS Rangeland Management Specialist (Lars Santana). The staff spent the afternoon in the field learning how to read the landscape and how to think about landscape indicators when developing future conservation plans.

**SCIENCE & TECHNICAL TRANSFER**

On the SGI science front, the second quarter of 2018 included the release of a new genetic connectivity study and technical note, as well as several workshop presentations and webinars.

**Visualizing Sage Grouse Habitat As “Hubs & Spokes”**

A new collaborative study by researchers from the USDA Forest Service Rocky Mountain Research Station, U.S. Geological Survey, and the University of Waterloo entitled, *The genetic network of greater sage-grouse: Range-wide identification of keystone hubs of connectivity*, provides tools for decision makers to inform which areas of habitat are most critical to conserve for the bird. The research helps prioritize sage grouse conservation by ranking the importance of leks to the species’ overall genetic connectivity across the range.
Starter Guide For Healing Degraded Meadows With Hand-Built Structures In Sagebrush Country

Colorado NRCS released a new technical note – *Hand-Built Structures for Restoring Degraded Meadows in Sagebrush Rangelands: Examples and lessons learned from the Upper Gunnison River Basin, Colorado* – that explains how to use relatively simple, cost-effective structures to improve riparian areas and wet meadows on sagebrush rangelands. It's geared toward resource managers looking for relatively simple solutions for addressing shallow headcuts or small gullies impacting meadows and drainages in sagebrush rangelands.

31st Biennial Western Association of Fish and Wildlife Agencies’ Sage and Columbian Sharp-Tailed Grouse Workshop – June 18-21, 2018

Held every two years, this symposium is for resource professionals, academics, students, and interested persons to share current science and management of grouse and their habitats. Presentations focused on research, ecology, and management of Gunnison Sage-grouse, Greater Sage-grouse, and Columbian Sharp-tailed Grouse. The following SGI science projects were presented at the workshop, held in Billings, Montana:

- Conserving the longest ever migration for sage grouse and pronghorn in Montana’s Hi-Line – Jason Tack
- Killing conifer to benefit grouse: an integrated approach to assessing population response – Andrew Olsen
- Effects of livestock grazing on sage-grouse nesting ecology in central Montana – Joe Smith
- The genetic network of greater sage-grouse: range-wide identification of keystone hubs of connectivity – Todd Cross
- A decision support tool for conifer removal: maximizing benefits to sagebrush and woodland-obligate species – Jason Tack

2018 Webinar Series – Moving the Needle on Cheatgrass: Putting What We Know into Practice

Several webinars were held during the quarter, as part of the 2018 series – *Moving the Needle on Cheatgrass: Putting What We Know into Practice* – which is providing information on integrated management approaches using specific strategies and proven tools. The webinars are hosted by the Great Basin Fire Science Exchange, SGI, USDA NRCS, Bureau of Land Management (BLM), USDA Agricultural Research Service (ARS), and the USDA Forest Service (USFS). The following webinars were held this quarter:

- **April:** Herbicides for downy brome (cheatgrass) control: What works?
  Richard Lee (BLM National Operations Center Integrated Pest Management Specialist) presented on existing products that are effective and how they are applied in different situations. It will also introduce new emerging herbicides. The webinar can be viewed [here](#).
April: Grazing to maintain perennial bunchgrasses and reduce nonnative annuals. Kirk Davies (USDA ARS Lead Rangeland Scientist) presented on the benefits of altering timing of grazing to reduce annuals and maintain perennial bunchgrasses, as well as the detrimental impacts of repeated spring defoliation on perennials. The webinar can be viewed here.

April: Capitalizing on strategic opportunities to reduce cheatgrass: Examples from the field. Brian Mealor (University of Wyoming Associate Professor/Sheridan Research and Extension Center Director) and Mike Pellant (retired BLM Ecologist) presented on strategic opportunities where land managers can intervene to move the needle on cheatgrass, as well as post-fire opportunities, cheatgrass die-off areas, and strategic targeted grazing of fine fuels. The webinar can be viewed here.

May: Ecologically-based invasive plant management for reducing cheatgrass: Lessons learned from area-wide demonstration projects. Roger Sheley (USDA ARS Ecologist) presented on the process and take-home messages from area-wide demonstration projects on cheatgrass reduction. The webinar can be viewed here.

COMMUNICATIONS & OUTREACH

SGI produced the following stories during the second quarter of 2018:

RANCHER MULTIMEDIA STORY | #FridaysOnTheFarm: Restoring Sagebrush Country With ‘Modern Wildfire’ – This multimedia story, produced in partnership with Oregon NRCS, features SGI-enrolled landowners who are removing juniper to improve working rangeland. TOP VIEWED POST!

NEW RESOURCE | New NRCS Technical Note provides a case study from Colorado’s Gunnison Basin to help partners replicate cost-effective watershed restoration techniques – SGI wrote this story to promote the new NRCS Technical Note, which helps partners replicate cost-effective watershed restoration techniques pioneered in Colorado’s Gunnison Basin. TOP VIEWED POST!

NEW SCIENCE | Visualizing Sage Grouse Habitat As “Hubs & Spokes” – Research by Todd Cross (funded in part by SGI) shows that sage grouse genetic connectivity is similar to airline hubs, which gives hope for sustaining the iconic species.

FEATURE | Idaho Models “3 C’s”: Collaboration, Cooperation, Conservation – This news story set the stage for the annual SGI Workshop in Boise in May. It showcases how agencies and landowners are working together across boundaries in southwestern Idaho to restore sagebrush country.

ASK AN EXPERT | What Causes Wildfires In The West? – Wildfires are now more frequent and more intense in sagebrush country due to invasive annual grasses. This interview with Nevada BLM Zone Fire Planner Darcy McDaniel illustrates how to mitigate the risk of mega-fires. TOP VIEWED POST!
PHOTO FEATURE | Lessons & Photos from SGI’s 8th Annual Workshop: Combating Wildfire & Weeds – These visuals recap the 2018 SGI field tour and presentations. In addition, SGI helped coordinate approximately two dozen sagebrush communicators who attended the workshop to gather – and share – photos, videos, and stories about what’s working to thwart fire and invasive grasses in sagebrush country.

USDA BLOG | Wildfire and Weeds: 5 Things Ranchers Should Know – This roundup by NRCS was cross-posted on SGI’s site and the USDA Blog during the annual SGI Workshop. It explains what ranchers should know about invasive weeds, why they lead to wildfires, and how to combat them.

PARTNERSHIP SPOTLIGHT | NEW Story Map Highlights Rural Communities & Positive Partnerships – This interactive map focuses on places where local groups are working with BLM, SGI, or USFS on projects that address three main threats facing our vast western rangelands: conifer encroachment, fire and invasive grasses, or loss of wet meadows.

WILDLIFE HIGHLIGHT | Watch Sage Grouse Mating Dance Live On This Lek Cam – Anyone was able to live-stream feisty dance moves from our favorite bird every morning through mid-May via this wildlife camera, which was made possible by TNC and FWS. TOP VIEWED POST!

MOST DOWNLOADED RESOURCES:
1. TECHNICAL NOTE: Hand-Built Structures for Restoring Degraded Meadows in Sagebrush Rangelands (107 downloads)
2. WEBINAR FLYER: 2018 Webinar Series – Moving the Needle on Cheatgrass (69 downloads)
3. ‘Conserve Our Western Roots’ POSTCARD (46 downloads) and POSTER (84 downloads)

VIEWING STATS:
- The SGI website received ~27,000 total page views (down by 15% due to changing requirements for our Google Ad grants, which accounts for ~30% of traffic on the website).
- The SGI Interactive Web App received ~2,100 page views (half of last quarter, likely due to the fact that we did not release a new layer).
- SGI’s sagebrush multimedia stories are the most popular wildlife-related USDA NRCS story maps!
  - Healthy Sagebrush Communities – 20,582 views to date (#1 most visited)
  - Life Cycle of Sage Grouse – 9,351 views to date (#3 most visited)

TOP SOCIAL MEDIA POSTS:
TWITTER (April) | 39 retweets, 102 likes, 19,200 views | Live-stream our favorite bird’s fancy dance moves every morning through mid-May via this #sagegrouse lek cam, thanks to @nature_org & @USFWS: bit.ly/2EkpPD8

FACEBOOK (May) | 226 likes, 15 shares, 5,900 views | Over 100 sage grouse congregate on a lek in Colorado to mate. What a splendid sight! Photo by Julio Mulero https://buff.ly/2JlnNGm

SageGrouseInitiative

Follow

Live-stream our favorite bird’s fancy dance moves every morning through mid-May via this #sagegrouse lek cam, thanks to @nature_org & @USFWS: bit.ly/2EkpPD8

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39 Retweets 102 Likes

Page 6 of 9
INSTAGRAM (May) | 121 likes | DYK: After they choose a male and mate, sage grouse hens fly to a few miles away to make a nest under sagebrush. Photo: Noppadol Paothong #mating #spring #naturephotography #wildlife #birdsofinstagram #birds #sagebrush #west #sunrise

TWITTER (May) | 38 retweets, 96 likes, 20,400 views | "It's all about energy!" The males that can dance the longest get all the girls...watch the @idfg lekking video here: bit.ly/2JPUlsl

FACEBOOK (June) | 111 likes, 12 shares, 2,300 views | FEMBOT ALERT! Learn why scientists are using a robotic hen to infiltrate leks: Scientists Built a Sage Grouse Sexbot Out of a Taxidermy Bird – Spoiler: It’s a sagegrouse sexbot. (WIRED.com: Why Scientists Turned This Taxidermy Bird Into A Robot by Matt Simon)

SUMMARY

The SGI SWAT is a model for science-based, landscape-scale habitat conservation—and a model for the future. It represents a landmark step forward in helping NRCS – through partnerships with FWS, state fish and wildlife agencies, and others – address many of the bottlenecks that have long prevented Farm Bill conservation programs from realizing their true potential for wildlife habitat conservation in the West.
NRCS SGI SWAT AGREEMENT PERFORMANCE METRICS

a) **Efforts for outreach to, and participation of, beginning farmers or ranchers, and Native American Tribes within the project area.** No new Indian Tribes, Socially Disadvantaged, Limited Resource, or Beginning Producers were contacted by the SWAT field capacity staff this quarter.

b) **Assistance provided to program participants to help meet local, state, and/or federal regulatory requirements.** The intent of SGI is to proactively conserve sage grouse habitat to negate the need for additional regulations. Participating producers are highly committed to sage grouse conservation, and SGI provides an excellent vehicle for addressing threats to sage grouse populations at very large scales.

c) **Numbers of NRCS program participants assisted and/or cooperating in the project effort.** The SWAT partner positions made 1,409 contacts (field visits, etc.) with 641 different agricultural producers as of December 31, 2012. The reporting system was revised in 2013, and we now track Technical Assistance days. Since January 1, 2013, the SWAT provided 9,420.25 Technical Assistance days. This level of technical assistance provision is indicative of how the SWAT will ratchet up SGI implementation over the next few years.

d) **Number of Full-time Equivalents (FTE) being employed through the SWAT agreement.** Twenty-six and three-quarters (26.75) FTEs (20.0 Field Delivery Capacity Partner Position FTEs, 1.0 SGI Field Capacity Coordinator FTE, 1.0 SGI Communications Coordinator FTE, 0.75 IWJV FTEs, and 4.0 Science Support FTEs) were employed during the reporting period.

e) **Acres of project area addressed in NRCS program contracts and/or extents of conservation activities implemented in the project area.** The SGI SWAT, to date, resulted in the following accomplishments: conservation planning for 2,791,954 acres of grazing systems; 327,194 acres of conifer removal; 1,202,035 feet (228 miles) of fence marking or removal; 8,822 acres of wetland restoration; 31,104 acres of rangeland seeding; and 34,908 acres of conservation easements.

f) **NRCS program dollars obligated in agreements in the projects area by program.** A total of $1,302,183 in Environmental Quality Incentives Program funds were obligated during the reporting period. *This brings the total amount contracted by the SWAT, to date, to an impressive $68,216,188!*

g) **Other partner or resource contributions from other agencies or organizations which help implement provisions of the agreements.** We have secured or leveraged a total of $7.4 million in partner contributions to date.
Appendix A
Objectives & Evolution of the Sage Grouse Initiative Strategic Watershed Action Team

Launched in 2010, the USDA Natural Resources Conservation Service’s (NRCS) Sage Grouse Initiative (SGI) is a highly targeted and science-based working landscape approach to delivering the right conservation practices in the right places, in order to elicit a positive sage grouse population response to management. SGI uses dedicated Farm Bill conservation program funds, at appropriately large scales, to alleviate threats that otherwise fragment habitats—the primary reason for the species “candidate” designation under the federal Endangered Species Act. SGI targets Farm Bill resources to high sage grouse abundance centers, or “core areas,” to maintain large and intact habitats, rather than providing palliative care to small and declining populations.

The SGI Strategic Watershed Action Team (SWAT) was established in 2011 to strengthen NRCS’ capacity to implement SGI. Over seven years later, SGI SWAT has continued building field capacity and strengthening the science guiding SGI, as well as bolstering communications capacity through partnerships. SGI SWAT objectives include:

- Increase field-level capacity by placing specialized human skill sets at critical geographic “pinch points” to increase SGI benefits.
- Increase science capacity to better focus SGI implementation, assess biological outcomes, and continually improve program delivery.
- Improve and enhance outreach and communication strategies to increase partner buy-in and SGI participation from landowners.
- Expand SGI partnership to further leverage NRCS contributions resulting in increased outcomes and participation.

This work has been facilitated through agreements with two major partners. In 2011, NRCS entered into an Interagency Agreement (IA) with the U.S. Fish and Wildlife Service (FWS). The Intermountain West Joint Venture (IWJV) was charged with implementation of the IA on behalf of FWS. NRCS obligated $9.3 million to the IA, which the IWJV leveraged to raise an additional $7 million from an array of conservation partners including FWS, state wildlife and agricultural agencies, conservation districts, non-governmental conservation organizations, and energy companies. Between 2011 and 2016 – the term of the IA – the combined $16.3 million resulted in:

- 2,443,193 acres of rangeland improvements; 308,144 acres of conifer removal; and 218 miles of high-risk fence marked or removed.
- Completion of 14 major research projects that evaluated outcomes of conservation practice implementation or identified future conservation investments.
- Establishment of a robust communications program with a top-notch website, strong social media presence, and innovative written series including Rancher Success Stories and Science to Solutions.
- A network of conservation partners focused on sagebrush habitat conservation, as well as a new partnership between the IWJV and the U.S. Bureau of Land Management (BLM) that seeks to expand the SGI SWAT model to public lands, specifically those managed by BLM.

In June 2016, NRCS executed a Cooperative Agreement with Pheasants Forever (PF), obligating an additional $5 million to continue the SGI SWAT effort through September 2018. PF is committed to working with partners in providing over $2.68 million in match to the agreement.