INTERMOUNTAIN WEST
JOINT VENTURE
conserving habitat through partnerships

November 2, 2017

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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 July-September 2017. 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

Sage Grouse Initiative Strategic Watershed Action Team
Quarterly Report: July 1 – September 30, 2017
Intermountain West Joint Venture
November 1, 2017

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 July – September 2017.

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 2016. The positive momentum for SGI's proactive, voluntary working lands conservation model has continued 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 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—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:

- ***2,556,612 acres*** of rangeland improvement to increase overall rangeland health and resiliency through sustainable ranching to benefit sage grouse and other wildlife.
- ***326,904 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.
- ***227 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 other 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:

- Charlie Holtz was selected for the PF position in Vernal, Utah. Charlie has been working in the conservation field for the past 12 years including with FWS, Bureau of Land Management (BLM), Montana Fish, Wildlife & Parks, and as an environmental consultant. Most recently, Charlie was a Habitat Specialist for PF working on public land habitat management and improvement in Montana. Charlie has worked in Vernal in the past and is excited to be back in the area.

Charlie Holtz

- Oregon does not have full-time SWAT positions due to tightened Oregon partner budgets being unable to provide the necessary required match funding. PF worked innovatively with Oregon NRCS leadership and field offices with these changes and the available partner match to develop a two-year, summer seasonal (2017 and 2018) field technician program. PF and Oregon NRCS hired the four 2017 seasonal positions, filling an established position in each of the four NRCS Field Offices—located in Baker City, Hines, Lakeview, and Ontario. These SWAT members conducted field work for conservation planners and enhanced the ability of field staff to complete SGI projects and work with new landowners. For 2017, the four technicians were Bob Floyd, Don Slone, Cody Hamilton, and Kate Walker. They have completed their first summer of work, and it was a huge success. During this time, the positions assisted on 159 contracts—mainly focused on SGI but also some Conservation Reserve Enhancement Program projects (see table below for more details). The partners were very pleased with this year's successful efforts and are looking forward to next summer.

Location	Contract Assistance	Range Inventory (acres)	Juniper Cut Certification (acres)	Juniper Cut Flagged for Cutting (acres)	Stream Assessment (miles)	CREP Status Review (acres)	Cultural Review (acres)	Fence Inspection (miles)
Baker City	93		1,931			1,435	244	
Hines	23	14,623.4	801.5	684.7	59.87			1.5
Lakeview	30	1,949	4,926.9	8,298.3				
Ontario	13	6,377	3,005	2,619.0				
Totals	**159**	**22,949.4**	**10,664.4**	**11,602**	**59.87**	**1,435**	**244**	**1.5**

SWAT Field Staff Calls

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.

SCIENCE & TECHNICAL TRANSFER

On the SGI science front, the third quarter of 2017 included the release of two SGI research papers in *The Journal of Wildlife Management*, a webinar on Beaver Dam Analogues and their role in habitat restoration, as well as participation in a Farm Bill seminar at The Wildlife Society's Annual Conference and a riparian restoration workshop.

Left: Beaver dams help store spring snowmelt, releasing it slowly through the summer to keep streams flowing and meadows wet when wildlife and livestock need water most.

Grazing Management in Perspective: A Compatible Tool for Sage Grouse Conservation

New research (*Effects of rotational grazing management on nesting greater sage-grouse*) shows that – done right – livestock grazing may help conserve sage grouse habitat by keeping working ranches profitable and sustainable. A study conducted by scientists from Montana Fish, Wildlife & Parks, BLM, FWS, and USDA's Conservation Effects Assessment Project evaluated the effects of livestock grazing on sage grouse nest survival suggests that a variety of locally-appropriated range management strategies support grouse populations.

SGI researcher Joe Smith studied the impacts of local grazing practices on sage grouse nest survival in Montana.

Sage Grouse Need Intact Landscapes for Long-Distance Movement

Note: Announced on SGI website in March 2017 but research paper published – Longest sage-grouse migratory behavior sustained by intact pathways – in August 2017.

New science shows that keeping big landscapes healthy and connected is essential for maintaining bigger-than-expected sage grouse movements. A satellite-telemetry study of sage grouse that migrate between Saskatchewan and Montana found that this population migrates annually up to 150 miles roundtrip between seasonal ranges. During migration, grouse use pathways through intact habitat and rest and refuel at stopover sites.

Science to Solutions

Sage Grouse Initiative

Sage Grouse Need Intact Landscapes For Long-Distance Movement

In Brief: Two new studies revealed unknown long-distance dispersal and migration movements in sage grouse that offer fresh insights for conservation. Using DNA from feathers dropped at leks, scientists discovered that some grouse (about 1% of populations) travel long distances to explore breeding areas up to 120 miles away—movements that can potentially boost populations and temper inbreeding. A separate satellite-telemetry study of sage grouse that migrate between Saskatchewan and Montana found that this population migrates annually up to 150 miles round-trip between seasonal ranges. During migration, grouse use pathways through intact habitat and rest and refuel at stopover sites. Taken together, these findings underscore the need to conserve intact sagebrush habitats across large landscapes on both public and private lands to sustain sage grouse movement pathways, their populations, and genetic diversity.

DNA and Satellites Reveal Unexpected Journeys

Innovative research techniques can shed new light on animal behavior and ecology, as well as supplement conventional knowledge about a species. Two recent studies took a fresh look at movements of sage grouse—a bird that returns faithfully to leks to breed in spring and is typically considered a home-body, moving short distances as necessary between seasonal ranges.

The first study examined dispersal movements of sage grouse between breeding sites, finding that about 1% of a population has a travel itch—rather than stay at known leks, they will disperse surprisingly long distances to new lek sites. The second study looked at the seasonal movement patterns of a population that migrates much farther than any grouse species known, making a 150-mile round-trip journey between breeding areas in Canada and winter range in the US.

Using further DNA and satellite telemetry, scientists recently discovered record-breaking longdistance movements by greater sage-grouse. Photos by John C. Carlson.

Sage Grouse Need Intact Landscapes For Long-Distance Movement

Sage Grouse Initiative • www.sagegrouseinitiative.com

Partnering with Beaver to Benefit Sage Grouse and Working Lands – Restoring Emerald Islands in the Sagebrush Sea

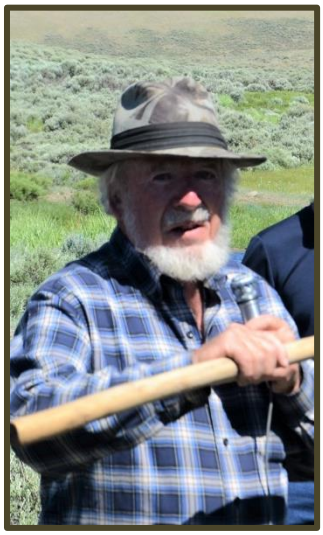
In the arid sagebrush ecosystem of the American West, wetlands and other mesic habitats – such as riparian areas and wet meadows – comprise less than two percent of the landscape, yet they are disproportionately important to people and wildlife. As summer heat dries out soils in sagebrush uplands, species like sage grouse – along with livestock and many other wildlife species – follow the green line seeking out wetter, more productive areas. These mesic habitats serve as grocery stores providing nutritious forage, including the protein-rich forb and insect foods that help newly hatched sage grouse chicks grow and thrive. With roughly three quarters of mesic areas in private ownership, western ranchers play an integral role in conserving these vital resources. Recently, NRCS SGI launched a campaign across 11 western states to accelerate protection, restoration, and enhancement of mesic habitats. Restoration opportunities abound, but techniques that are relatively simple, low cost, and effective are needed to engage more landowners and partners in conservation at ecologically meaningful scales. Increasingly, ranchers and agencies in the West are learning to partner with or mimic beaver as a 'cheap and cheerful' alternative for achieving a myriad of desired outcomes. This webinar discussed recent partner efforts to scale up riparian and wet meadow restoration with private landowners in sage grouse habitats, and in particular, how Beaver Dam Analogues and other beaver-assisted techniques are being employed as a low-cost restoration tool to boost habitat resilience for wildlife and working lands.

SGI Presents at Symposium on Farm Bill Conservation Programs

SGI and Working Lands for Wildlife team members presented on how Farm Bill conservation programs deliver benefits for wildlife at The Wildlife Society's 24th Annual Conference in September. The special symposium – Farm Bill Conservation Programs: Perspectives on Delivery and Wildlife Benefits – highlighted recent trends in documenting wildlife benefits from Farm Bill conservation programs, including how outcome-based monitoring can inform effective conservation delivery and how emerging technologies can help fill data gaps.

Zeedyk Workshop

In September, Bill Zeedyk, a riparian restoration expert, led a workshop in Dillon, Montana, on methods for repairing meadows in sagebrush country. Land managers, conservationists, and SGI representatives were in attendance for this multi-day workshop that included field demonstration projects. Mesic wet meadow habitats provide sage grouse with additional brood rearing habitat. Restoring them not only benefits sage grouse but also other wildlife and the landowners.



Bill Zeedyk is called the stream whisperer for his ability to read the landscape and restore wet meadow habitat. Photo by Brianna Randall

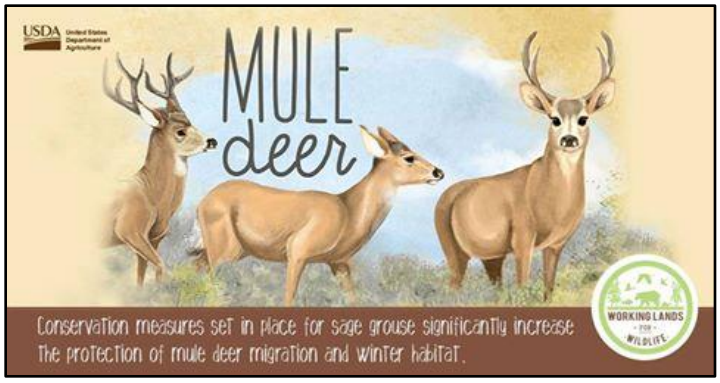
COMMUNICATIONS & OUTREACH

New Communications Products:

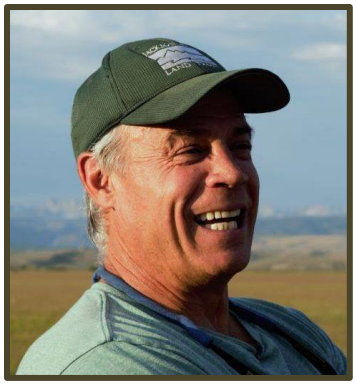
- Poster + Multimedia Story | Healthy Sagebrush Communities
- Rancher Success Multimedia Story | #HabitatHero Mike Fenn: Leaving A Legacy For Wildlife In Wyoming
- *Science to Solutions* | Grazing Management In Perspective: A Compatible Tool For Sage Grouse Conservation
- Ask An Expert | Tom Toman, Rocky Mountain Elk Foundation Science & Planning Director | Do Elk Need Sagebrush?
- Sage Whiz Quiz | Do You Know Your Western Roots?
- The Nature Conservancy's *Cool Green Science* blog post | *The Stream Whisperer: "Thinking Like Water" Restores Sage Grouse Habitat*
- 21 total website posts + hundreds of social media posts

Recent Campaigns:

- ***'Healthy Sagebrush' Social Media*** – With help from NRCS Headquarters, SGI has been promoting monthly "fun facts" about how healthy sagebrush communities come full circle for people and wildlife. We feature a graphic (like the one above) on Facebook and Twitter and also send out the graphic + fact to three email list-servs: SGI E-News, GovDelivery, and Wildlife Bytes. These have been very successful and well-received, with over 4,000 views!



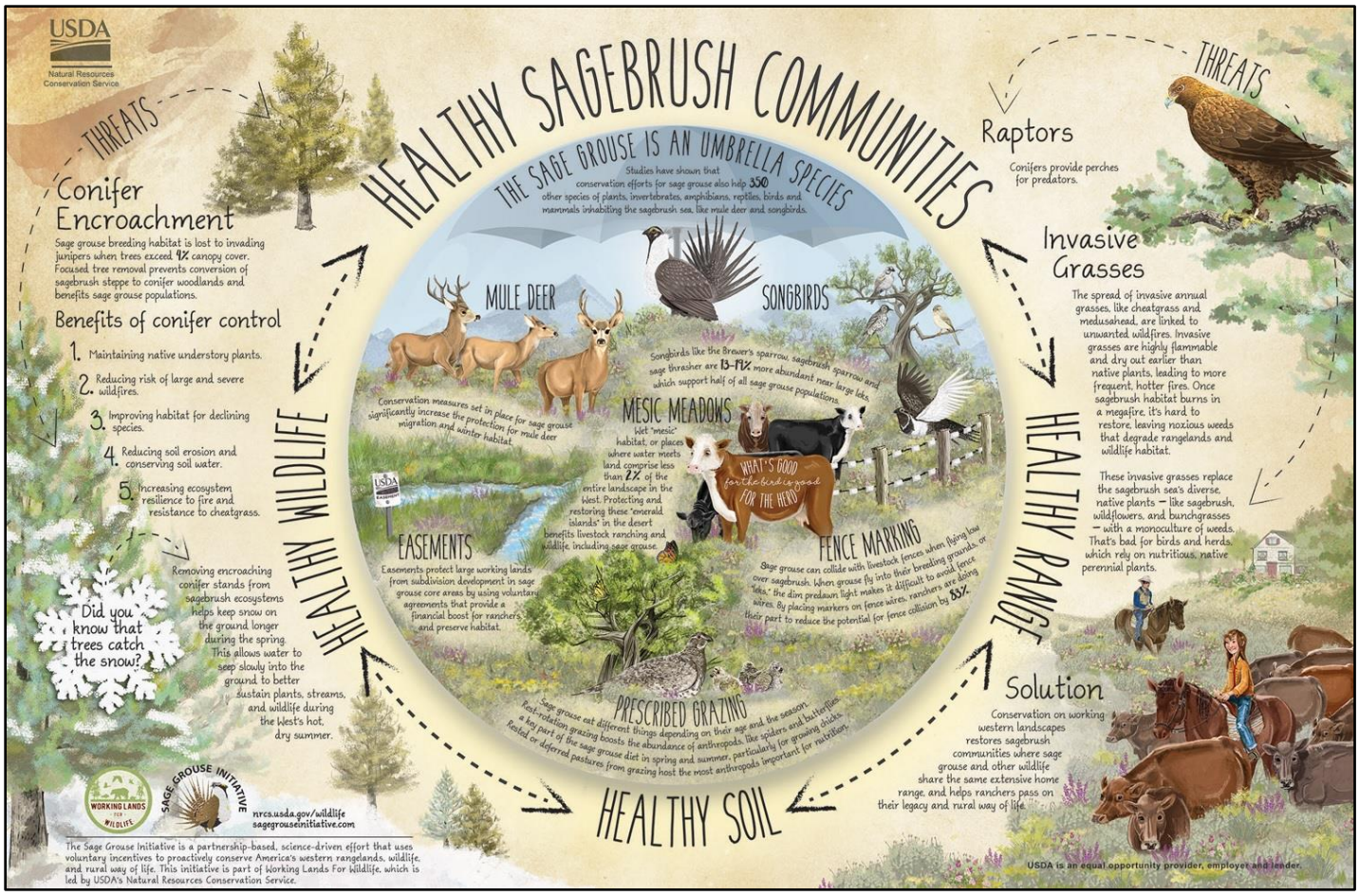
- ***#SagebrushCountry*** – During the month of September, SGI and NRCS partnered with a dozen other organizations to promote integrated social media posts that highlight different people living and working in sagebrush country. These twice-weekly posts (on a host of social platforms) highlighted ranchers, hunters, tribal members, teachers, conservationists and more. The two ranchers that we featured through this campaign helped boost the number of visitors to our #HabitatHero NRCS multimedia stories for SGI-enrolled ranchers Greg Peterson (Colorado) and Mike Fenn (Wyoming). The effort was organized by SageWest, a non-partisan group working together to enhance the efficiency and effectiveness of communications around sagebrush habitat.



Left: Mike Fenn is a SGI-enrolled rancher in Wyoming who improved habitat for grassland and wetland bird species while also benefiting his agricultural operations. Photo by Brianna Randall

Most Downloaded Resources:

1. *Science to Solutions* – Grazing Management In Perspective (148)
2. Healthy Sagebrush Communities poster (84)
3. *Rangeland Ecology & Management*: Pretreatment Tree Dominance and Conifer Removal Treatments Affect Plant Succession in Sagebrush Communities (77)
4. *Science to Solutions* – Sage Grouse Need Intact Landscapes For Long Distance Movement (54)
5. *Ecosphere* – Next-generation restoration for sage-grouse: a framework for visualizing local conifer cuts within a landscape context (42)

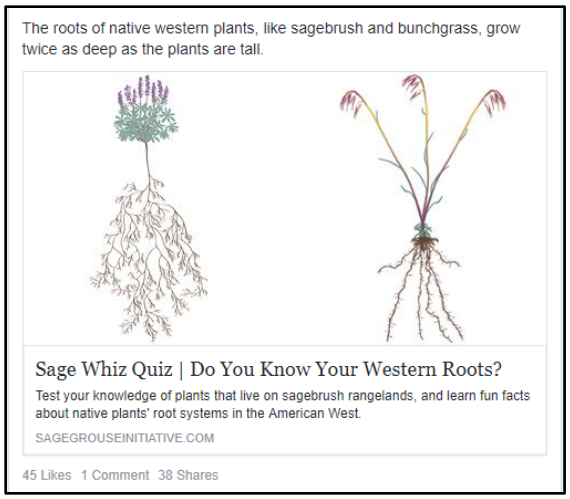


Top Website Pages & Posts:

Note: The SGI website received ~25,000 total page views this quarter, while the SGI Interactive Web App received ~3,000 page views.

1. Multimedia Story | Healthy Sagebrush Communities (4,175)
2. Sage Whiz Quiz | Do You Know Your Western Roots? (909)
3. Rancher Success Multimedia Story | #HabitatHero Mike Fenn: Leaving A Legacy For Wildlife In Wyoming (868)
4. The Nature Conservancy's *Cool Green Science* blog post | *The Stream Whisperer: "Thinking Like Water" Restores Sage Grouse Habitat* (618)
5. Latest Science Reveals Most Effective Conifer Removal Treatments (603)
6. *Science to Solutions* – Grazing Management In Perspective (478)

Top Facebook Posts:



1. July 30 *(167 reactions and 6,792 people reached)*: The roots of native western plants, like sagebrush and bunchgrass, grow twice as deep as the plants are tall. Sage Whiz Quiz | Do You Know Your Western Roots? Test your knowledge of plants that live on sagebrush rangelands, and learn fun facts about native plants' root systems in the American West.
2. August 31 *(228 reactions and 5,341 people reached)*: GOOD NEWS! A research study in Montana suggests that a variety of locally-appropriate livestock grazing strategies can support grouse populations. Grazing Management In Perspective: A Compatible Tool For Sage Grouse Conservation – Sage Grouse Initiative
3. July 1 *(197 reactions and 3,863 people reached)*: Like for sage grouse, fences can be deadly for pronghorn, too. Removing or modifying existing fences can make the difference between life or death for both of these species. How Can the Pronghorn Cross the Fence? Pronghorns may be the second fastest land mammal on earth, but a simple fence can stop them in their tracks.

Top Twitter Tweets:

1. July 20 *(80 likes and 44 retweets)*: Healthy sagebrush communities are good for both wildlife—like the Greater Sage-Grouse—and ranchers. ow.ly/TA3Q30dMVbX @SageGrouseInit
2. August 13 *(44 likes and 28 retweets)*: Half of sagebrush lands have disappeared. Ranchers are bringing it back: bit.ly/2vgkag0
3. September 7 *(41 likes and 18 retweets)*: Meet Greg, a rancher who's conserving Colorado's #SagebrushCountry: bit.ly/2gHqo00 #350species @SageGrouseInit
4. July 26 *(30 likes and 12 retweets)*: Conservation makes working ranch lands productive and possible. bit.ly/2uuw1W1

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.* The SWAT field capacity staff worked directly with three Indian Tribes, Socially Disadvantaged, Limited Resource, or Beginning Producers 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 9,096.25 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 2,556,612 acres of grazing systems; 326,904 acres of conifer removal; 1,200,774 feet (227 miles) of fence marking or removal; 8,822 acres of wetland restoration; 28,368 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 $607,785 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 $65,631,618!***

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 to strengthen NRCS' capacity to implement SGI. Six 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.