INTERMOUNTAIN WEST
JOINT VENTURE
conserving habitat through partnerships

February 2, 2018

Ron Alvarado
State Conservationist
USDA NRCS
1201 NE Lloyd Boulevard
Suite 900
Portland, OR 97232

Thad Heater
Sage Grouse Initiative National Coordinator
USDA NRCS
1365 Corporate Boulevard
Reno, NV 89502

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 October-December 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: October 1 – December 31, 2017
Intermountain West Joint Venture
February 2, 2018

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 October – December 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 2017. 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:

- ***2,581,670 acres*** of rangeland improvement to increase overall rangeland health and resiliency through sustainable ranching to benefit sage grouse and other wildlife.
- ***327,159 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:

- Hayden Boll was selected for the PF position in Mountain Home, Idaho (vacated by Ed Contreras, who is now the IWJV's Working Wetlands Conservation Deliver Coordinator in the Southern Oregon-Northeastern California region). Hayden is a graduate of Oregon State University with a B.S. in Rangeland Science. Outside of school, he has worked with the Idaho Department of Fish and Game and the Bureau of Land Management (BLM) in Oregon, monitoring native vegetation and working with private landowners. Hayden started on January 8.

Hayden Boll

- Lauren Connell was selected for the new Bird Conservancy of the Rockies position in Gillette, Wyoming. Lauren completed a Master's in Rangeland Ecology at the University of Wyoming in November 2017. Prior to that, she obtained a Master's in Geographic Information Science and Bachelor's of Environmental Studies, both from Florida State University. Lauren's master's work in Wyoming examined the vegetation community and structural response to interactive effects of fire, grazing, and prairie dogs. Lauren starts January 29.

Lauren Connell

Michael Peyton

- Michael Peyton was selected for the PF position in Tremonton, Utah. Michael has been a Farm Bill Specialist with the North Dakota Association of Soil Conservation Districts in Hettinger for the past two years. His experience working with NRCS programs, as well as with some SGI contracts will be beneficial in his work further conservation efforts in the area. Michael will start February 5.

SWAT Position Orientation

With all of the new 2017 hires, a November two-day orientation and training was held in Bozeman, Montana. The training covered an overview of SGI and the partnerships that have been so critical to its success, as well as presentations from SGI and local NRCS staff on tools and resources that will be beneficial for the new staff. Additionally, Mandi Hirsch from Lander, Wyoming – the last original SWAT employee and who has been in her position since 2011 – presented on her time as a SWAT partner position and answered questions from the new staff.

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.

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

Planning for the annual SGI SWAT workshop in Boise, Idaho, is coming along nicely, and we are expecting another excellent turnout. A draft agenda has been created, and invitations will be sent out soon to staff and partners. This year's workshop is set to be another great event, highlighting the latest SGI science, range-wide collaboration, and the Soda Fire restoration partnership that is taking place. Noppadol Paothong, a photographer and creator of the new *Sage Grouse: Icon of the West* book, will be a featured guest speaker.

Noppadol Paothong
Photo courtesy www.npnaturephotography.com

SCIENCE & TECHNICAL TRANSFER

On the SGI science front, the fourth quarter of 2017 included the publication of two SGI research papers in *Restoration Ecology* and *Ecology and Evolution*, as well as an article by The Wildlife Society to highlight a previously announced SGI study and release of a *Science of Solutions* to accompany one of the new research studies.

A rancher in the Montana study area moves cattle back onto native sagebrush-grassland pasture after branding. Photo by Joe Smith

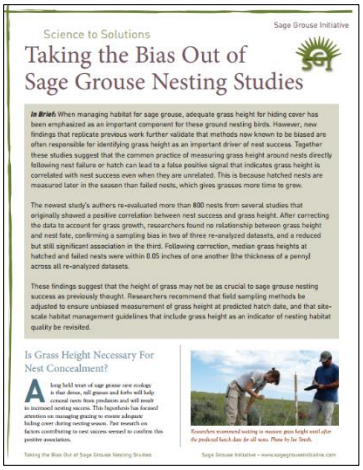
Grazing Shows Little Effect on Grouse Nesting

The Wildlife Society produced an article by David Frey on the SGI research study (announced last quarter) that was published in *The Journal of Wildlife Management* (*Effects of rotational grazing management on nesting greater sage-grouse*). "As habitat loss and fragmentation continue to threaten the greater sage-grouse (*Centrocercus urophasianus*), a study in Montana found livestock grazing seems to have little impact on the bird's nest success…"—excerpt from the article, see the full story here. The bottom line, as stated by Joe Smith at the University of Montana, "We know the importance of good grazing management to the long-term resilience of these ecosystems for a lot of other reasons. I guess the takeaway is that grazing management doesn't have quite as strong a link with nest success as we previously thought."

New Science: When Trees Are Cut, Grasses & Shrubs Return

Conifers decrease abundance of native sagebrush vegetation that wildlife and livestock rely on—but forage comes back if trees are removed. A new SGI research study – *Restoring Sage-grouse nesting habitat through removal of early successional conifer* – published in November in *Restoration Ecology* (the journal of the Society for Ecological Restoration) reinforces the fact that cutting conifers can quickly restore both habitat for wildlife and forage for livestock—especially in early stages of woody encroachment. Scientists found increases in herbaceous cover just three years after removing junipers in the Great Basin. Shrub height also increased, although it takes longer for shrubs to regenerate.

Removing conifers where native grasses and shrubs are still intact produces the best results for wildlife habitat in sagebrush country. Photo by Connor White


Science to Solutions

Taking the Bias Out of Sage Grouse Nesting Studies

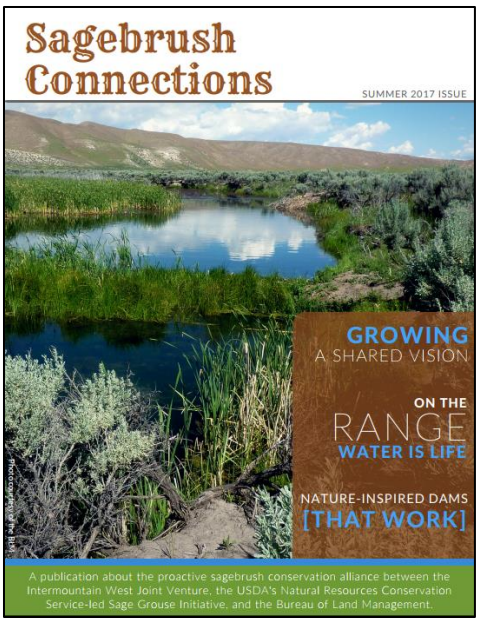
Sage Grouse Initiative

Taking the Bias Out of Sage Grouse Nesting Studies

New findings show that it's more accurate to measure grass height for all nests, failed or hatched, at the predicted hatch date. An SGI study – *Phenology largely explains taller grass at successful nests in greater sage-grouse* – published in November in *Ecology and Evolution* suggests that the common practice of measuring grass height around nests directly following nest failure or hatch can lead to a false positive signal that indicates grass height is correlated with nest success even when they are unrelated. A *Science to Solutions* article – Taking the Bias Out of Sage Grouse Nesting Studies – was produced to explain the study.

> *Good rangeland management remains key to conservation, but grass height does not appear to be the universal indicator of nesting habitat quality for sage grouse.*

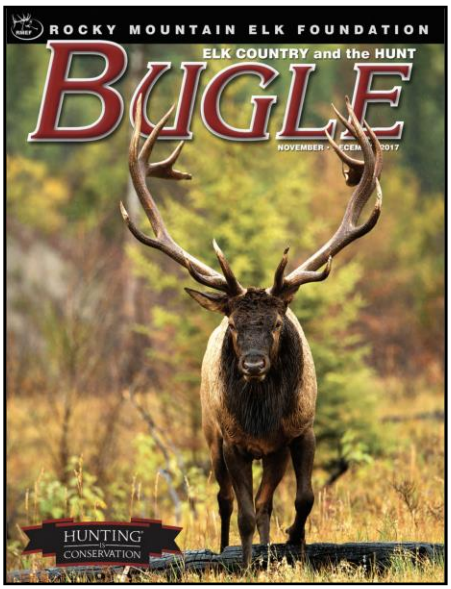
COMMUNICATIONS & OUTREACH



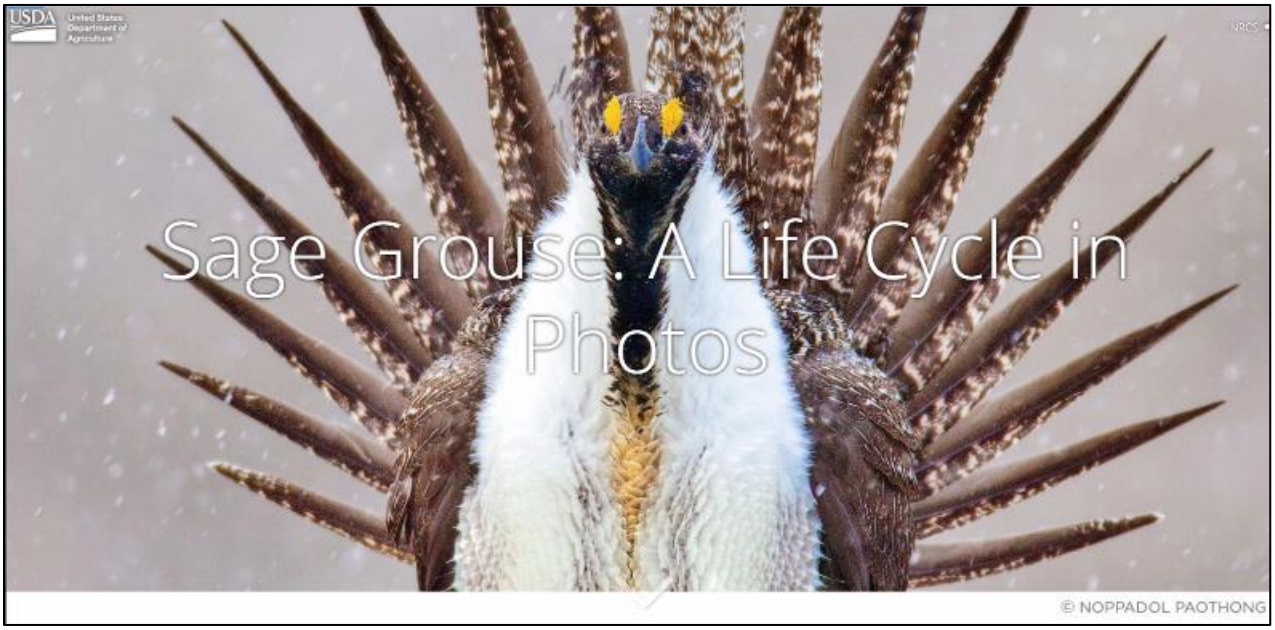
New Communications Products:

- **Partner Publications:**
  1) October (Summer 2017 Issue): *Sagebrush Connections* Magazine – Inaugural issue of SGI/BLM/IWJV partnership magazine focusing on conserving water resources in sagebrush country
  2) October: *Beef Magazine* | Rest-rotation grazing helps sage grouse survival
  3) October (November/December Issue): *Bugle Magazine* | Saving the Sagebrush Sea
  4) November: *Beef Magazine* | Thomas brothers make the ground better in Idaho's Owyhee mountains
  5) December (Winter 2017 Issue): *Fair Chase Magazine* | The Value of Sagebrush Country

- **SGI Multimedia:**
  1) October Sage Whiz Quiz | What Do You Know About Sage Grouse Chicks?
  2) October: Sage Grouse: A Life Cycle in Photos – A multimedia story featuring photos from the book, *Sage Grouse: Icon of the West* by Noppadol Paothong
  3) November: Videos (to accompany *Beef Magazine* article, Thomas brothers make the ground better in Idaho's Owyhee mountains): Meet the Thomas Family, Sustainable Ranchers in Idaho + Young Ranchers Improve The Land For Sage Grouse & Cattle In Idaho
  4) November: Introducing The New "Link Share" Option For The SGI Web App – New functionality helps share natural resource data far and wide, bolstering conservation outcomes across the American West
  5) December Sage Whiz Quiz | How Do Sagebrush Animals Survive Winter?



Left: Ranchers Seth, Bob, and Logan Thomas (left to right) partnered with the Sage Grouse Initiative to improve thousands of acres of sagebrush range for livestock and wildlife.
Photo: Brianna Randall



- **SGI Features:**
  1) October Ask An Expert: Noppadol Paothong, Conservation Photographer – What's It Like To Photograph Sage Grouse?
  2) November – *Science to Solutions*: Taking the Bias Out of Sage Grouse Nesting Studies
  3) 18 total published stories and posts on our website

Multimedia Story Stats:
The following three SGI stories are within the top five most viewed NRCS multimedia stories published in its 'wildlife' category! Pageviews below reflect all-time user data as of December.

1) Bringing Healthy Sagebrush Communities Full Circle (9,566)
2) Sage Grouse: A Life Cycle in Photos (4,053)
3) On the Range, Water Is Life (2,919)

Most Downloaded Resources:
1) *Science to Solutions* – Grazing Management In Perspective (148)
2) *Science to Solutions* – Taking The Bias Out Of Sage Grouse Nesting Studies (125)
3) *Bugle Magazine* – Saving the Sagebrush Sea (92)
4) *Restoration Ecology* – Restoring Sage-grouse nesting habitat through removal of early successional conifer (53)
5) Conserve Our Western Roots poster card (42)

Grass height may not be as crucial to nesting success as previously thought, since hatched nests are measured later than failed nests, giving grasses more time to grow. Photo by Joe Smith

Day-old sage grouse chick.
Photo by Tony Apa, Colorado Parks & Wildlife

Top Website Posts:

Note: The SGI website received ~34,000 total pageviews last quarter (up from 24,000 in the summer quarter, which is typically slow for web traffic). The SGI Interactive Web App received ~2,500 pageviews, and the "Mesic Resources" layer was the most viewed.

1) Taking The Bias Out Of Sage Grouse Nesting Studies (830 views)
2) Job Announcement: Private Lands Wildlife Biologist in Wyoming (713 views)
3) Sage Whiz Quiz | What Do You Know About Sage Grouse Chicks? (649 views)
4) New Science: When Trees Are Cut, Grasses & Shrubs Return (514 views)
5) *Bugle Magazine* | Saving the Sagebrush Sea (Sage Grouse + Elk = Peanut Butter & Jelly) (485 views)
6) Ask An Expert: Tom Toman, Director of Science & Planning, Rocky Mountain Elk Foundation – Do Elk Need Sagebrush? (posted last quarter) (467 views)
7) Ask An Expert: Noppadol Paothong, Conservation Photographer – What's It Like To Photograph Sage Grouse? (361 views)

Top Facebook Posts:

SGI successfully reached **10,224 followers** by the end of December 2017, a new benchmark that offers broader reach for our communications products.

1) November – 1,500 ranchers have teamed up with the Sage Grouse Initiative on win-win conservation practices that benefit 5.6 million acres. Join us: https://buff.ly/2yi1MT9 (26,563 people reached, 54 shares, 863 likes)
2) October – BREAKING SCIENCE! Just published by *The Journal of Wildlife Management*, these research findings suggest that "a variety of locally appropriate grazing strategies focused on fundamental range health principles may provide adequate habitat quality for nesting sage-grouse." (16,002 people reached, 60 shares, 228 likes)
3) November – So very grateful for the lands and water that sustain us all … and for all of you who help conserve #SagebrushCountry. Happy Thanksgiving!!! (Video Feature) (12,269 people reached, 106 shares, 261 likes)
4) December – DYK: In the winter, it's not uncommon to see hundreds of sage grouse flock together to avoid predators. Learn more: https://buff.ly/2C7bLxa Photo: Noppadol Paothong (3,072 people reached, 16 shares, 106 likes)

Top Twitter Tweets:
SGI's Twitter account gained 131 new followers during the quarter, for a total of 3,019 followers.

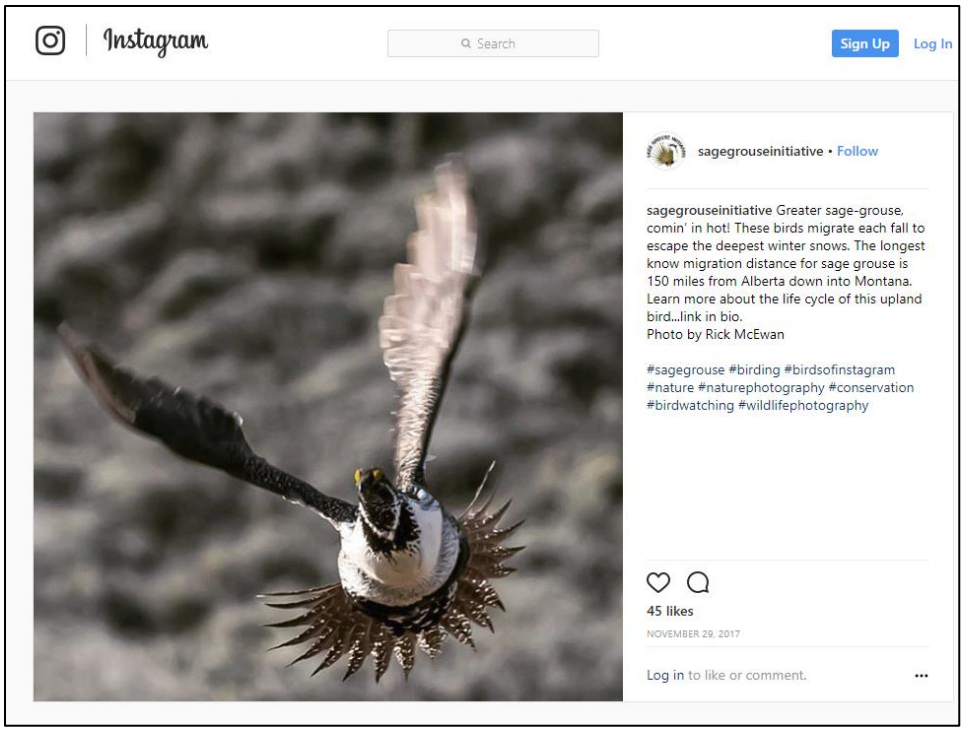
1) December – Sage grouse eat 100% sagebrush leaves during the winter … and actually gain weight: bit.ly/2AduYQd (29 retweets, 46 likes)
2) November – DYK: Wild turkeys eat frogs. Learn more about this seasonal icon in @nature_brains "Ultimate Guide to the Wild #Turkey": bit.ly/2zaDaQJ (17 retweets, 26 likes)
3) October – What goes together better than peanut butter & jelly? Elk & sage grouse, of course! Thanks for the story, @RMEF: bit.ly/2yxFMHf (10 retweets, 17 likes)

Top Instagram Posts:
Based on recommendations from the SWAT positions and partners, SGI launched an Instagram account on November 15, 2017. So far, we have 221 followers.

December – Nothing says cute like a sage grouse chick! Did you know that just 5 weeks after hatching, these chicks are already strong flyers? Photo by @coparkswildlife #grouse #wildlifephotography #babybird #birding #naturephotography #animals #sagebrush (74 likes)

December – In the winter, it's not uncommon to see hundreds of sage grouse flock together to avoid predators. Photo: Noppadol Paothong #birdwatching #winter #sagebrush #wildlifephotography #naturephotography #naturelovers #birds #funfact #didyouknow (65 likes)

November – Greater sage-grouse, comin' in hot! These birds migrate each fall to escape the deepest winter snows. The longest know migration distance for sage grouse is 150 miles from Alberta down into Montana. Learn more about the life cycle of this upland bird…link in bio. Photo by Rick McEwan #sagegrouse #birding #birdsofinstagram #nature #naturephotography #conservation #birdwatching #wildlifephotography (45 likes)



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 five 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 9,185.25 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 2,581,670 acres of grazing systems; 327,159 acres of conifer removal; 1,200,774 feet (227 miles) of fence marking or removal; 8,822 acres of wetland restoration; 29,833 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 $1,020,747 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 $66,652,365!***

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.