Idaho Sage-grouse Local Working Groups

Statewide Annual Report 2015

Idaho Sage-grouse Advisory Committee
Technical Assistance Team
August 11, 2016

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Cover photo: Girl Scouts planting sagebrush in the 2013 Pony Complex Fire in the Mountain Home Sage-grouse Planning Area. Photo by Scott Bodle.

Idaho Sage-grouse Local Working Groups

Background

In 1997, the Idaho Sage-grouse Task Force, under direction of the Idaho Fish and Game Commission, completed the Idaho Sage-grouse Management Plan (Idaho Department of Fish and Game 1997). The 1997 Plan divided Idaho into sage-grouse management areas and called for the creation of local working groups (LWGs) that would develop sage-grouse management plans for each of Idaho's Sage-grouse Planning Areas (SGPA).

The Sage-grouse Advisory Committee (SAC) was formed in 2003, with members appointed by former Idaho Department of Fish and Game (IDFG) Director Steve Huffaker. The main purpose of the SAC was described as, " . . . helping all Idahoans, and especially Local Working Groups, by making sure they have the funding, support, and information they need to put meaningful sage-grouse conservation on the ground." In addition to representatives from key agencies, the SAC includes private citizens from agricultural and conservation groups and at least one member from each LWG. There are currently about 21 SAC members and 10 technical advisors (SAC Technical Assistance Team [TAT]).

In July 2006, the *Conservation Plan for the Greater Sage-grouse in Idaho* was completed and signed by a diverse group of cooperators (Idaho Sage-grouse Advisory Committee 2006). This updated plan provides the management framework for sage-grouse in Idaho and identifies LWGs as the heart of Idaho's sage-grouse conservation strategy. Prior to 2006, there were 5 established LWGs. The 2006 plan identified 13 SGPAs; since then 2 of the planning areas have merged into one (the West Magic Valley and East Magic Valley combined into the North Magic Valley LWG) (Figure 1). Several LWGs have since amended their planning area boundaries. Currently there are 12 active LWGs and 10 have completed plans.

This statewide annual report is the 9th compilation of annual reports from each LWG. This report documents Idaho sage-grouse LWG and SAC accomplishments in 2015; sage-grouse population and habitat trends; and sage-grouse conservation efforts. Previous year's reports are available at: http://fishandgame.idaho.gov/public/wildlife/sageGrouse/?getPage=174

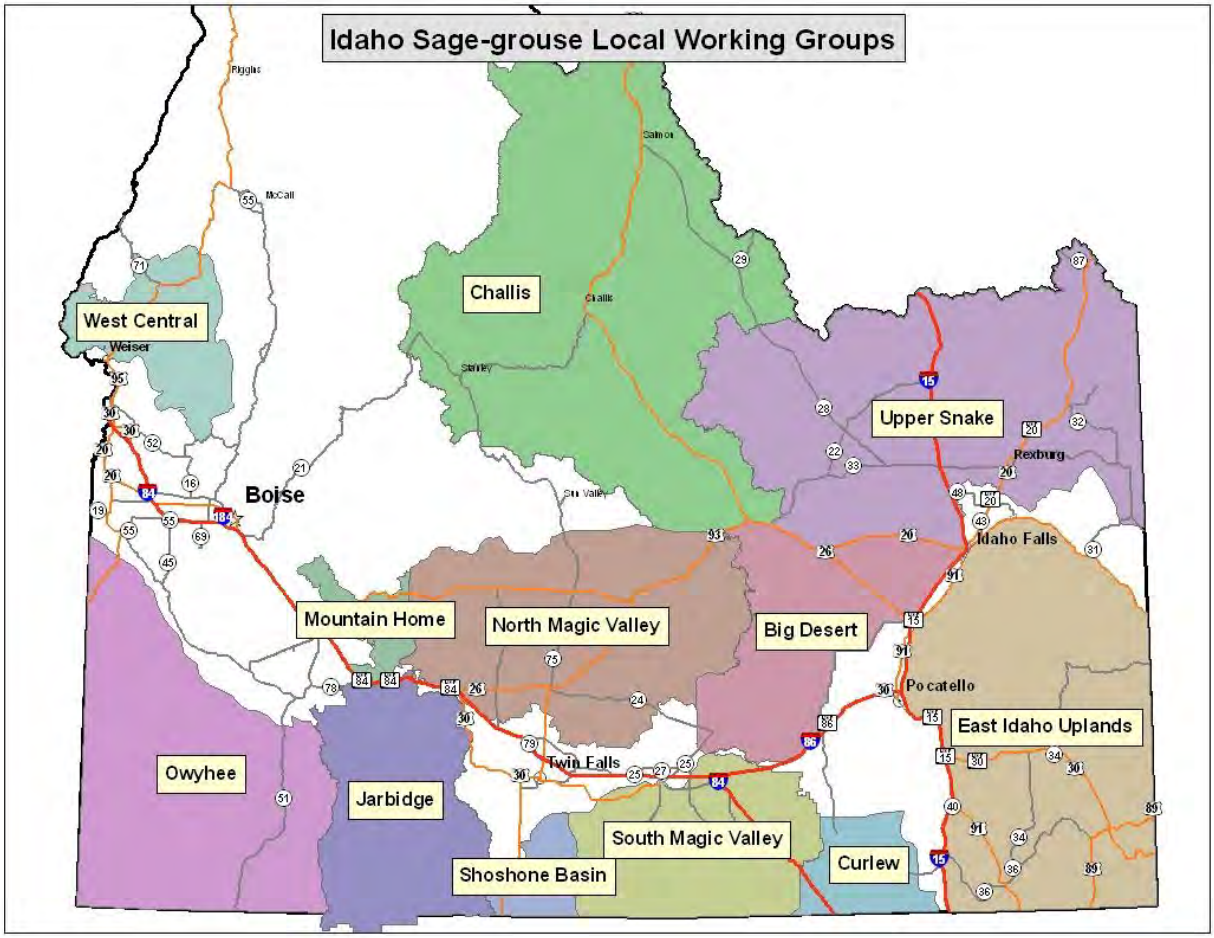

Figure 1. Idaho Sage-grouse Local Working Groups and associated Sage-grouse Planning Areas.

LWG and SAC Meetings

Eight LWGs submitted an annual report. Only 6 LWGs met in 2015. These 6 groups held a total of 25 meetings in 2015 with an average of 14 attendees per meeting. Overall 156 individuals attended 1 or more LWG meeting in 2015. While LWG participation is down statewide, several groups are still meeting regularly. Attendees were interested citizens and landowners, or represented various grazing associations, nongovernmental organizations, and state, county and federal agencies.

The SAC did not meet in 2015.

LWG Project Reports

LWGs reported on 137 projects or accomplishments that occurred in their planning areas in 2015 (Appendix A). Projects were reported by federal and state agency personnel, private landowners, and non-governmental organizations; many of the projects were cooperative in nature and involved several entities.

On-the-ground projects were targeted to benefit sage-grouse and sage-grouse habitat, and included habitat improvement and monitoring projects, fence marking, and sage-grouse monitoring (Table 1). Habitat improvement projects were categorized into general habitat improvement/restoration, improved grazing management, juniper removal, sagebrush seedling plantings, and weed control. Improved grazing management included grazing management plans, which often incorporated improved or changed fences and watering facilities to better manage or move animals. Improved fencing and watering facilities were also reported separately from grazing management plans. Habitat protection included conservation easements, land acquisition, and wet meadow fencing. Overall, LWGs reported 86,876 acres benefitted from habitat improvement or protection in 2015. In addition, 16.3 miles of fence were marked to reduce risk of sage-grouse collisions with barbed-wire fence and 5.8 miles of fences were converted to wildlife-friendly fencing. Fuel breaks and road improvements to facilitate fire suppression were implemented on 231.5 miles.

LWGs also worked in their communities and helped on school lek tours or participated in public involvement activities.

Challis LWG member Vince Guyer talking to the Salmon Zoology Class about sage-grouse biology. Photo by Chris Gaughan.

Table 1. Summary of types of projects reported by LWGs in 2015. See Appendix A for project descriptions and locations.

Project type	# of projects	# of acres/miles
Education and outreach	4	NA
Fence improvement or modification	5	5.8 miles
Fence marking	7	16.3 miles
Field tours	1	NA
Fuel breaks/fire protection	6	100 acres[a]/213.5 miles
Habitat improvement, restoration	12	3,177 acres[b]
Habitat monitoring	5	NA
Improved grazing management	21	40,305 acres[b]
Improvements to watering facilities	8	NA
Juniper removal	14	3,778 acres
Land acquisition, protection	6	3,891 acres
Lek monitoring	10	NA
Lek tour	3	NA
Public involvement	8	NA
Sagebrush seedling planting	6	2,390 acres
Sage-grouse monitoring, research	7	NA
Weed control	10	33,157 acres
Wet meadow protection	2	78 acres
Other	2	NA
Total	**137**	86,876 acres/235.6 miles

[a] 1 fuel break project reported in acres instead of miles.
[b] Not all projects reported acres

Fence marked on the Bear Lake Plateau in the East Idaho Uplands Sage-grouse Planning Area. Photo by Don Jenkins.

Regulatory Update

On May 27, 2015, Idaho Governor C.L. "Butch" Otter signed ***EXECUTIVE ORDER NO. 2015-04 ADOPTING IDAHO'S SAGE-GROUSE MANAGEMENT PLAN*** which directs all executive agencies, to the extent consistent with existing state law, for relevant permits and policies, adopt the Governor's Alternative and all supporting documentation, incorporated in its entirety into this Executive Order by this reference, hereinafter known as *Idaho's Sage-grouse Management Plan.* The Executive Order is on the Governor's Office website at: http://gov.idaho.gov/search.html

In September 2015, a Record of Decision was signed for the *Idaho and Southwest Montana Greater Sage-Grouse Approved Resource Management Plan Amendments*. These documents can be downloaded at https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=42003

In October 2015, the U.S. Fish and Wildlife Service (USFWS) concluded that listing the greater sage-grouse as a threatened or endangered species was not warranted at this time (USFWS 2015). The listing decision can be viewed at: https://www.federalregister.gov/articles/2015/10/02/2015-24292/endangered-and-threatened-wildlife-and-plants-12-month-finding-on-a-petition-to-list-greater

Wetland construction to benefit late brood-rearing habitat in the Owyhee Sage-grouse Planning Area. Photo by Ken Miracle.

Sage-grouse Populations

Leks

IDFG monitors sage-grouse breeding populations by counting males at leks each spring. A lek is a traditional display area, which is typically located in an open area in or adjacent to sagebrush-dominated habitats. There are currently 2,162 leks in the Idaho lek database. This number is lower than in 2015 because the sage-grouse data coordinator worked with regional biologists to remove 87 "not verified" leks. Not verified leks were lek locations from historical documents with zero birds recorded in the database. These lek locations have been recently visited on the ground, but no birds were detected. We assumed that many of these locations were likely a mapping error or that the original lek had been found in the general vicinity. These locations remain on file in an historical dataset.

IDFG and its partners have been counting leks on standardized lek routes for many years (Connelly et al. 2003). Lek routes have been the traditional tool to monitor population trends. About 25% of the known leks in Idaho are counted on 1 of the 79 lek routes (Figure 2).

A lek route is a count of male sage-grouse on a group of leks that are relatively close and represent part or all of a single breeding population. The following summarizes the standardized procedures for lek routes:

- All leks within a lek route should be counted on the same day within 1.5 hours.
- Lek routes should be run from 0.5 hours before sunrise to 1 hour after sunrise.
- Each route should be run 4 times during the spring lekking season (generally from late March to late April, depending on elevation.
- Lek routes should not be conducted under poor weather conditions (rain or snow or winds >15 mph).
- Lek route results are reported as the peak male attendance on one day for all leks in the route.

Until recently, the remaining leks in Idaho had been visited regularly to irregularly to monitor for occupancy status. However, with the formalization of *Idaho's Sage-grouse Management Plan* by Executive Order 2015-04, IDFG initiated a pilot program to strategically monitor leks to meet the population monitoring goals identified in the plan. *Idaho's Sage-grouse Management Plan* divides sage-grouse range into 3 Management Zones (Core, Important, and General) within 4 Conservation Areas (Figure 3). In addition to lek routes, IDFG is also monitoring population trend among all leks by the change in lambda, or the rate of increase, from year to year within Core and Important habitat in each Conservation Area. With funding from the Idaho State Legislature through the Office of Species Conservation (OSC), we are able to assure a sufficient number of leks are surveyed within each Management Zone and Conservation Area to estimate population trend.

We surveyed 1,245 leks statewide in 2015. Of all leks surveyed, 597 were active, 511 were inactive, while 115 had insufficient data to determine status (Table 2). We also reported 22

new leks in 2015. Because male grouse can occasionally display in random locations, "new" leks must be verified within the following 4 years.

We will continue to report lek route results in this statewide report. Lek route data can be reported in 2 ways: 1) average males per lek for all leks counted on routes; and 2) total males on lek routes that were visited each year from 2010 to 2015. Average males per lek allow comparisons within and among SGPAs (Table 3). The number of leks surveyed on a particular route might not be consistent among years; new leks are added as they are encountered while others might be dropped or not visited due to access issues. Because temporary or satellite leks can appear or disappear between years, the average can be negatively influenced. However, counts of 0 birds at leks are also important and should be maintained. A count of total males on lek routes, therefore, is another measure of trend, assuming all routes within an SGPA are surveyed each year. This method allows comparison among years within an SGPA and statewide (Table 4). However, because there are a variable number of lek routes in each SGPA, total males cannot be compared among SGPAs.

In summary, statewide 2015 total males at lek routes was up 7.6% from 2014, and up 3.9% from the previous 5-year average. Trends were mixed among SGPAs (Tables 3 and 4).

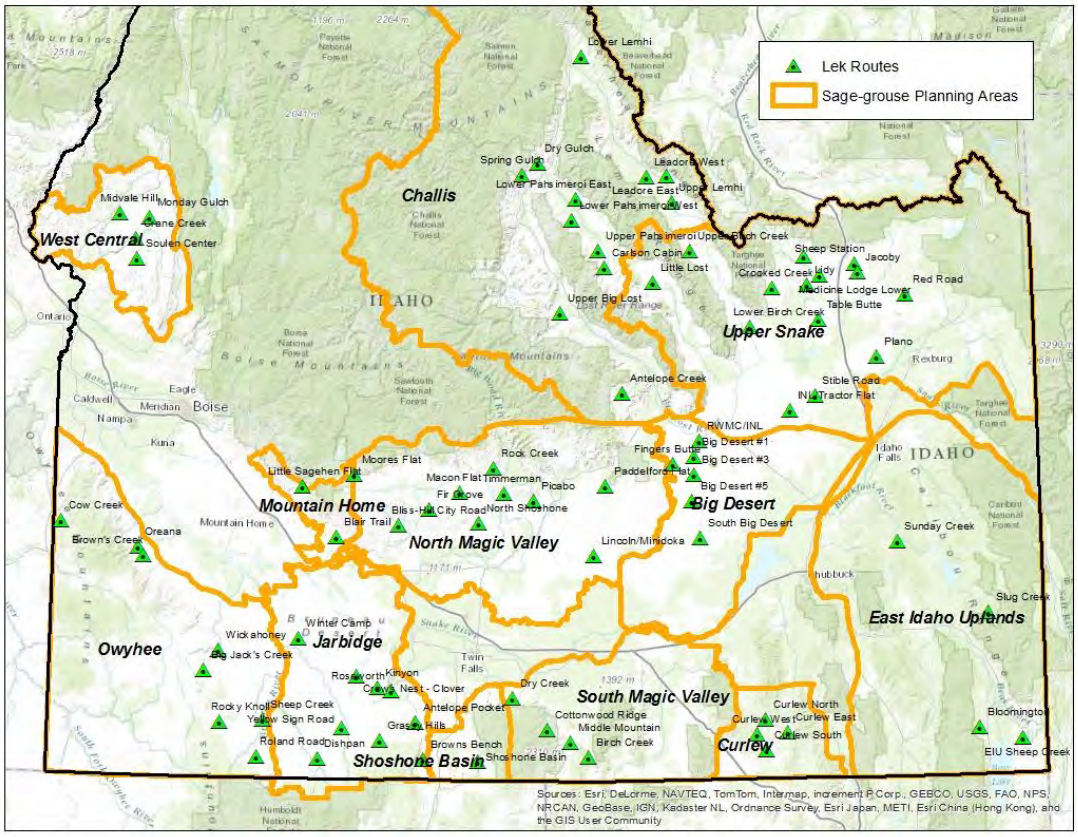

Figure 2. Location of sage-grouse lek routes by Sage-grouse Planning Area.

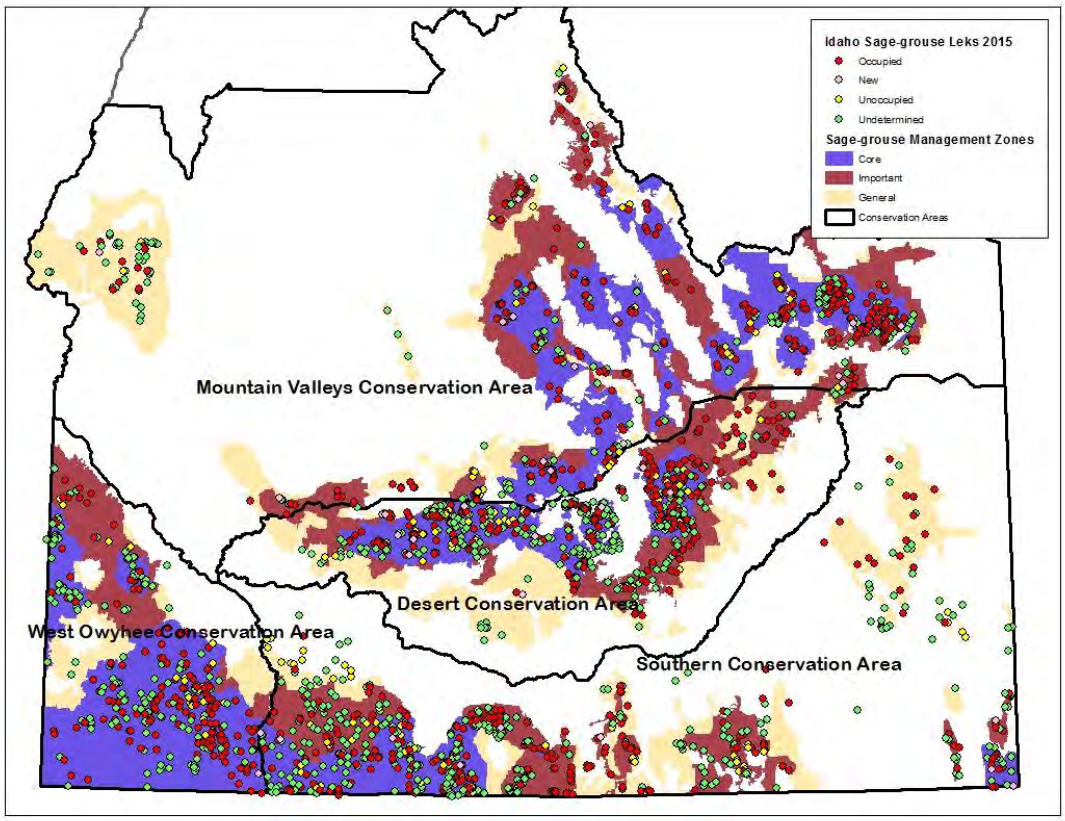

Figure 3. Sage-grouse leks by Management Zone and Conservation Area.

Table 2. Sage-grouse leks surveyed in 2015 and summary by annual lek status for each Sage-grouse Planning Area.

	2015 Leks Surveys					
Sage-grouse Planning Area	**# of leks in SGPA**	**Total leks surveyed**	**# active leks[a]**	**# inactive leks[b]**	**# unknown status leks[c]**	**# new leks**
Big Desert	213	119	56	58	97	2
Challis	144	100	63	32	47	2
East Idaho Uplands	93	34	16	16	60	1
Greater Curlew Valley	57	32	10	20	27	0
Jarbidge	221	139	46	62	110	3
Mountain Home	23	18	5	12	5	1
North Magic Valley	431	229	93	119	214	5
Owyhee	332	196	106	35	190	1
Shoshone Basin	113	57	21	35	56	1
South Magic Valley	150	93	55	34	59	2
Upper Snake	335	212	120	80	132	3
West Central	50	16	6	8	35	1
Statewide	**2,162**	**1,245**	**597**	**511**	**1,032**	**22**

[a] Active leks = leks with >1 displaying male sage-grouse in 2015.
[b] Inactive leks = leks with sufficient data that suggest there was no male attendance during 2015 breeding season.
[c] Unknown leks = leks that were not visited in 2015 or for which status as active or inactive was not documented during 2015 breeding season.

Table 3. Average number of males per lek for all lek routes in Idaho, 2010–2015.

Sage-grouse Planning Area	Average Number of Males per Lek											
	2010		2011		2012		2013		2014		2015	
	# leks	Avg	# leks	Avg	# leks	Avg	# leks	Avg	# leks	Avg	# leks	Avg
Big Desert	55	22	59	23	55	19	56	19	61	17	66	15
Challis	41	14	31	20	38	18	37	15	34	19	41	19
East Idaho Uplands	9	18	8	11	11	15	10	15	12	15	12	21
Greater Curlew Valley	14	12	15	16	17	10	17	8	17	7	17	6
Jarbidge	43	4	44	6	54	5	55	5	56	7	57	9
Mountain Home	4	7	6	9	5	10	5	12	6	14	6	16
North Magic Valley	92	7	100	9	95	9	114	7	113	8	124	7
Owyhee	29	18	37	20	38	17	39	15	38	16	39	22
Shoshone Basin	16	10	14	8	16	10	15	9	17	11	12	12
South Magic Valley	18	10	25	13	24	10	22	9	27	8	27	7
Upper Snake	119	15	111	18	123	16	125	12	126	12	125	12
West Central	14	11	12	7	13	7	13	4	13	4	14	2
Statewide	**454**	**12**	**462**	**15**	**489**	**13**	**508**	**11**	**520**	**11**	**540**	**12**

Table 4. Total number of males counted on leks routes that were counted each year in Idaho, 2010–2015.

Sage-grouse Planning Area	# of lek routes	Total Number of Males[a]					
		2010	2011	2012	2013	2014	2015
Big Desert	6	936	1,093	912	935	899	750
Challis[b]	12	498	669	617	611	643	764
East Idaho Uplands	4	142	102	112	126	105	190
Greater Curlew Valley	4	159	219	137	131	97	95
Jarbidge[c]	8	166	244	246	232	345	434
Mountain Home	3	36	44	48	52	83	93
North Magic Valley	9	550	796	678	690	670	654
Owyhee	8	620	693	600	527	566	837
Shoshone Basin	1	108	96	92	94	129	122
South Magic Valley	4	177	235	192	180	153	217
Upper Snake	14	1,572	1,454	1,361	1,130	1,203	1,131
West Central	4	129	74	76	45	47	28
Statewide	**75**	**5,093**	**5,719**	**5,071**	**4,753**	**4,940**	**5,315**

[a] Total number of males is the peak male attendance on one day for all leks on the lek route.
[b] Does not include Spring Gulch, which was not surveyed in 2011.
[c] Does not include Winter Camp, which was not surveyed in 2011.

Productivity

IDFG has been collecting wings from hunter harvested birds since 1961. Wings are collected in wing barrels and at sage-grouse check stations operated during opening weekend. Since 2006, IDFG has gathered additional wings through a mail-in wing program. From 2006–2009, IDFG sent out 1,000 wing envelopes, specifically targeting areas in the state that usually had a small sample size of wings. In 2010–2013 IDFG has sent out wing envelopes to 2,000 known sage-grouse hunters. We increased this to 2,500 wing envelopes in 2014 and 2015.

Sage-grouse productivity can be estimated by examining these wings. By closely examining the shape, condition, length and color patterns on wing feathers, biologists are able to determine the bird's age, gender, and whether or not the hen produced chicks that year. However, it is important to note that statisticians recommend at least 100 females wings in an area to adequately assess productivity (Autenrieth et al. 1982); therefore, there are usually inadequate samples within each SGPA. Recent work in Oregon demonstrated the number of wings needed is much larger, depending on the desired level of confidence and precision (Hagen and Loughin 2008). Over the past few years, few SGPAs have had a sufficient sample size of wings.

Productivity is reported as the number of chicks per hen. Sage-grouse hens lay an average of 6–7 eggs. Therefore, 'chicks per hen' represents the average number of chicks per hen alive during the hunting season in September and October. Connelly and Braun (1997) suggested that a ratio of ≥ 2.25 juveniles/hen in the fall should result in stable to increasing sage-grouse population.

We received 1,166 wings in 2015 with a statewide productivity of 1.80 chicks per hen with 95% confidence intervals of 1.57–2.05 chicks per hen (Hagen and Loughin 2008). This is the largest number of wings we have received since 2010. Since 1961, the 3 lowest production years were in 2007, 2012, and 2013 (Table 5 and Figure 3).

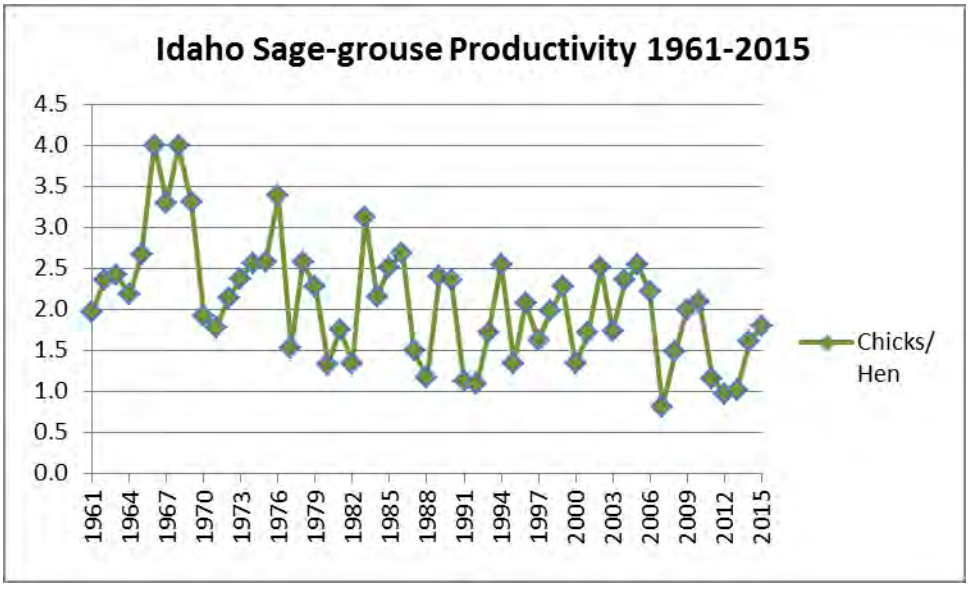

Figure 4. Sage-grouse productivity in Idaho, from wing collections, 1961-2015.

Table 5. Sage-grouse productivity by Sage-grouse Planning Area, as determined by wing collections in Idaho, 2010–2015.

Sage-grouse Planning Area	2010		2011		2012	
	Total Wings	Chicks per Hen	Total Wings	Chicks per Hen	Total Wings	Chicks per Hen
Big Desert	141	2.8	30	0.9[a]	67	0.5[a]
Challis	76	1.3[a]	61	1.5[a]	54	1.4[a]
East Idaho Uplands	Closed	--	Closed	--	Closed	--
Greater Curlew Valley	8	--	25	--	8	1.0[a]
Jarbidge	Closed	--	Closed	--	Closed	--
Mountain Home	0	--	0	--	Closed	--
North Magic Valley	209	2.4	97	0.9[a]	193	1.48
Owyhee	148	1.4	99	0.9[a]	147	1.13
Shoshone Basin	143	1.5	103	0.8	122	0.75
South Magic Valley			see Shoshone Basin[c]			
Upper Snake	495	2.3	113	1.6	273	0.82
West Central	Closed	--	Closed	--	Closed	--
Statewide	**1,240**	**2.1**	**753**	**1.2**	**864**	**0.97**

Sage-grouse Planning Area	2013		2014		2015	
	Total Wings	Chicks per Hen	Total Wings	Chicks per Hen	Total Wings	Chicks per Hen
Big Desert	46	1.31[a]	44	1.1[a]	59	1.32[a]
Challis	44	0.83[a]	60	1.8[a]	81	2.10[a]
East Idaho Uplands	Closed	--	Closed	--	Closed	--
Greater Curlew Valley	17	0.70[a]	Closed	--	Closed	--
Jarbidge	Closed	--	Closed	--	199	1.57
Mountain Home	Closed	--	Closed	--	Closed	--
North Magic Valley	120	1.34	119	1.6	139	1.12
Owyhee	98	1.31[a]	136	2.1	181	5.52
Shoshone Basin	147	1.24	169	2.1	117	1.18
South Magic Valley			see Shoshone Basin[c]			
Upper Snake	288	0.78	358	1.3	390	1.66
West Central	Closed	--	Closed	--	Closed	--
Statewide	**760**	**1.02**	**891[d]**	**1.6**	**1,166**	**1.80**

[a] Sample sizes too low for reliable productivity estimates. Results should be interpreted with caution.

[b] See Table 7 for sage-grouse hunting season structure by year and SGPA.

[c] Shoshone Basin and South Magic Valley wing estimates were combined in 2010 with statewide wing envelope program.

[d] Statewide estimate includes 5 wings from unknown locations.

Harvest

Since 2008, IDFG has followed the hunting season and bag-limit guidelines in the 2006 State Plan (Table 6). The IDFG Commission sets the sage-grouse hunting season in August, instead of in the spring when other game bird regulations are set. This allows biologists sufficient time to analyze lek data and information regarding the season's wildfires and West Nile virus (WNv) impacts. IDFG summarizes lek route data by Sage-grouse Reporting Zone (Figure 4) and compares data with the guidelines. These data are provided to IDFG regional staff and sage-grouse local working groups, who make recommendations for hunting seasons and bag limits. Following a public comment period, the recommendations are brought forward to the IDFG Commission, who sets the season structure in August. IDFG then publishes and distributes the *Sage-grouse Seasons and Rules* leaflet.

Most reporting zones met the restrictive season criteria in 2015. Previous closures in West Central, Elmore County, the Greater Curlew Valley and East Idaho Uplands were maintained (Figure 4). We reopened the Jarbidge (Zone 3A) to hunting, which has been closed since the 2007 Murphy Complex Fire. This zone met the Restrictive category in 2014 and 2015.

IDFG estimates sage-grouse harvest by utilizing survey sampling in a mail-in and telephone survey of hunters who purchased a sage/sharp-tailed grouse permit validation in that year. Harvest data are reported by Sage-grouse Reporting Zones, which are roughly compatible with SGPA boundaries (Figure 4). Statewide, hunters harvested an estimated 2,876 birds in 2015, which was up from the 2,400 birds harvested in 2014 (Table 7). Harvest has remained <3,000 birds since 2011.

Table 6. Idaho hunting season and bag-limit guidelines for sage-grouse populations.[a]

Option	3-year running average of lek counts	Days	Daily Bag
Closed	• Less than 100 males observed • Lek counts are less than 50% of 1996–2000 average counts • Lek data are not gathered for population	0	0
Restrictive	• Lek counts are between 50% and 150% of the 1996–2000 average	7	1
Standard	• Lek counts exceed 150% of the 1996–2000 average	23	2

[a]From Idaho Sage-grouse Advisory Committee 2006; Table 4-14, page 4-122.

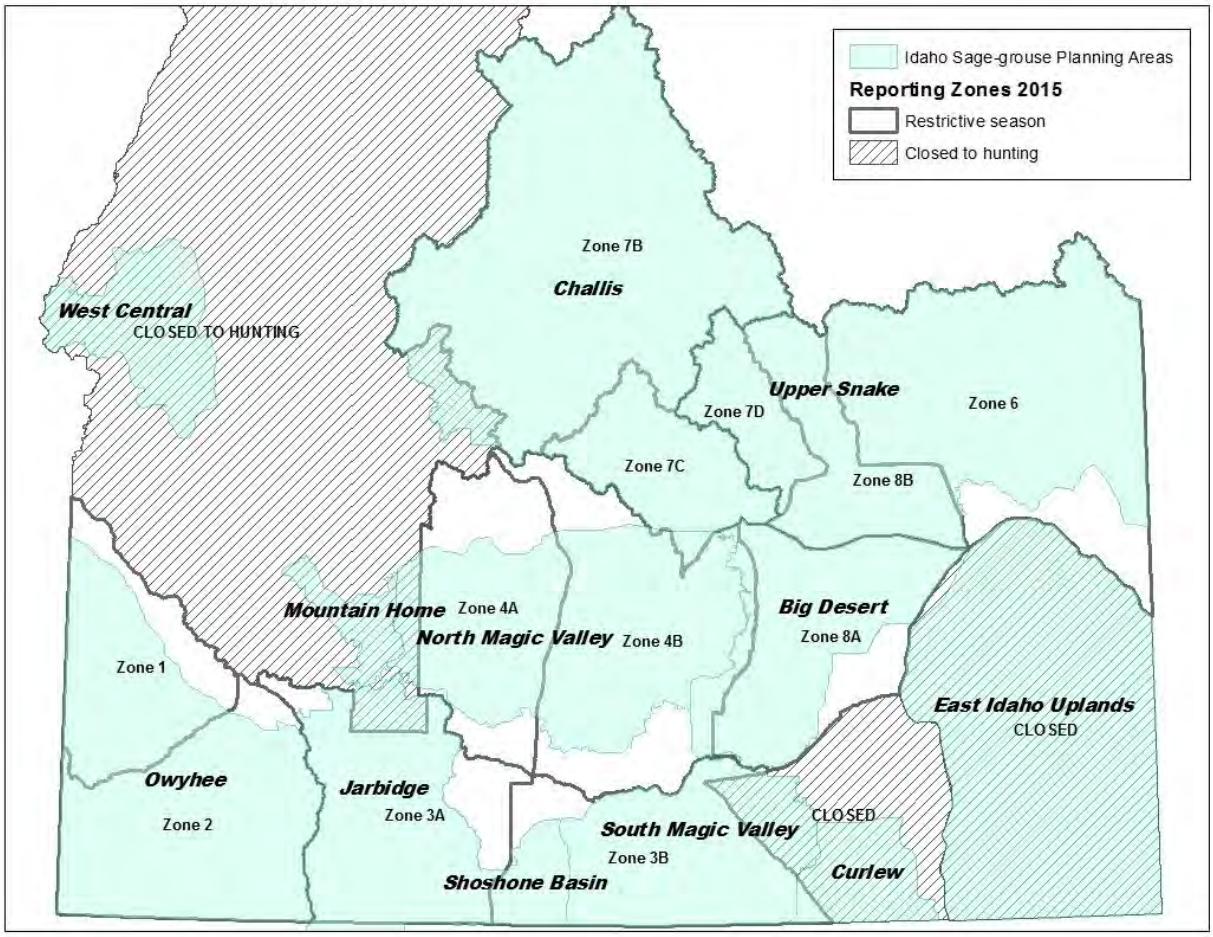

Figure 5. Sage-grouse Planning Areas, Reporting Zones, and 2015 sage-grouse hunting season structure.

Table 7. Estimated sage-grouse harvest and season structure by Sage-grouse Planning Area in Idaho, 2010–2015.

Sage-grouse Planning Area	2010		2011		2012	
	Estimated Harvest	Season Structure	Estimated Harvest	Season Structure	Estimated Harvest	Season Structure
Big Desert	583	Restrictive	86	Restrictive	136	Restrictive
Challis	361	Restrictive	110	Restrictive	244	Restrictive
East Idaho Uplands	--	Closed	--	Closed	--	Closed
Greater Curlew Valley	164	Restrictive	125	Restrictive	140	Restrictive
Jarbidge	--	Closed[c]	--	Closed	--	Closed
Mountain Home & North Magic Valley	579	Restrictive	356	Restrictive	335	Restrictive[f]
Owyhee	386	Restrictive	232	Restrictive	363	Restrictive
Shoshone Basin & South Magic Valley	507	Restrictive	288	Restrictive	300	Restrictive
Upper Snake	1,472	Restrictive	944	Restrictive	1,038	Restrictive
Unknown	0	NA	3	NA	0	NA
West Central	--	Closed	--	Closed	--	Closed
Statewide	**4,052**		**2,144**		**2,556**	

Sage-grouse Planning Area	2013		2014		2015	
	Estimated Harvest	Season Structure	Estimated Harvest	Season Structure	Estimated Harvest	Season Structure
Big Desert	147	Restrictive	117	Restrictive	217	Restrictive
Challis	133	Restrictive	204	Restrictive	311	Restrictive
East Idaho Uplands	--	Closed	--	Closed	--	Closed
Greater Curlew Valley	58	Restrictive	--	Closed[g]	--	Closed[g]
Jarbidge	--	Closed	--	Closed	249	Restrictive[c]
Mountain Home & North Magic Valley	350	Restrictive[f]	291	Restrictive[f]	350	Restrictive[f]
Owyhee	262	Restrictive	398	Restrictive	435	Restrictive
Shoshone Basin & South Magic Valley	383	Restrictive	394	Restrictive	377	Restrictive
Upper Snake	1,012	Restrictive	978	Restrictive	927	Restrictive
Unknown	12	NA	18		10	
West Central	--	Closed	--	Closed	--	Closed
Statewide	**2,357**		**2,400**		**2,876**	

[a] Season structure: Restrictive = 7 day season, 1 bird daily bag limit; Conservative = 23 day season, 2 bird daily bag limit.

[b] East Idaho Uplands closed in 2008 due to inadequate population information.

[c] Western portion of the Jarbidge planning area (i.e., eastern Owyhee County) was closed due to the Murphy Complex Fire; entire Jarbidge SGPA closed in 2010 and re-opened in 2015.

[d] In 2009 the Owyhee SGPA had a restrictive season in Zone 1 and a conservative season in Zone 2 (see Figure 4).

[e] West Central has been closed since 1984.

[f] Elmore County (Mountain Home SGPA and western portion of Zone 4A) closed in 2012 (see Figure 4).

[g] Greater Curlew Valley closed in 2014.

Sage-grouse Habitat

Wildfire

Statewide, 166,659 acres of key sage-grouse habitat burned in 2015 (Table 8); 164,052 of these acres were in the Soda Fire in Owyhee County. Key habitat is defined as, "areas of generally intact sagebrush that provide sage-grouse habitat during some portion of the year including winter, spring, summer, late brood-rearing, fall transition sites from winter to spring, spring to summer, summer/fall to winter. Key habitat may or may not provide adequate nesting, early brood-rearing, and winter cover due to elevation, snow depth, lack of early season forbs, limited herbaceous cover, or small sagebrush patch size" (Idaho Sage-grouse Advisory Committee 2006; Sather-Blair et al. 2000). Other habitats mapped include Potential Restoration Areas defined as perennial grasslands (R1); annual grasslands (R2); and conifer encroachment areas (R3). In 2015, 50,822 acres burned in R1 perennial grasslands and 14,602 acres in R2 annual grasslands.

In late August 2015, the Soda Fire burned 279,000 acres in southwest Idaho and southeast Oregon; 228,500 acres were in Idaho. The BLM is working cooperatively with IDFG, OSC, Idaho Department of Lands, the Natural Resources Conservation Service, and USFWS to restore affected sage-grouse habitat.

Drill-seeding on the Soda Fire, October 2015. Photo by Rick Raymondi.

Table 8. Number of acres of wildfire in key sage-grouse habitat by sage-grouse planning area and land ownership in Idaho, 2010–2015. Data courtesy of Idaho BLM.

Sage-grouse Planning Area	2010	2011	2012	2013	2014	2015
Big Desert	4,449	176	6,347	0	183	631
Challis	20	0	647	98	27	0
East Idaho Uplands	1,783	4	14,299	511	569	74
Greater Curlew Valley	0	231	0	12	0	0
Jarbidge	26,918	1,971	15,902	5,453	0	16
Mountain Home	5,635	56	2,622	69,356	0	1,144
North Magic Valley	7,692	20,044	27,599	40,230	9,337	143
Owyhee	2,866	21,772	54,247	3,437	534	164,052
Shoshone Basin	11,237	982	1,540	2,834	36	0
South Magic Valley	252	229	42,338	78	120	0
Upper Snake	64,003	30,897	1,921	0	0	599
West Central	0	830	1,721	2,274	0	0
Outside planning areas	256	0	17,441	37,562	0	0
Total	125,111	77,192	186,624	161,845	10,806	166,659

Threats to Sage-grouse Habitat

LWGs reported on the change of threats to sage-grouse and sage-grouse habitat in their planning areas. They also reported on new and significant threats in their planning areas (Table 9). Several LWGs continue to be concerned about wildfire risk and increasing abundance and expanded distribution of invasive plants. LWGs also reported on reduction in threats due to conservation actions in their planning area. Two LWGs reported on the benefits of the Rangeland Fire Protection Associations and their ability to respond quickly to fire starts. The Owyhee LWG and land management agencies continue to make progress on reducing the threat of juniper encroachment into sagebrush habitat. Additional sage-grouse conservation projects are reported in Appendix A.

Table 9. Changes in threats identified by Local Working Groups in Idaho, 2015.

Sage-grouse Planning Area	Threat	Change
Big Desert	Drought and wildfire	Project in 2015 including weed treatments, road improvements, fuel break efforts, sagebrush cover surveys, and stockwater improvements will help to mitigate some of the risk associated with future wildfire.
Challis	Invasive annual grasses	Increase in acres with invasive annual grasses. There is an increase in monitoring for and controlling cheatgrass in the Challis SGPA.
East Idaho Uplands	Transmission lines	• Hooper Springs transmission line proposed to cross 22-32 miles of EIU SGPA • Gateway West will cross approx. 65 miles of EIU SGPA and adjacent to Core habitat
	Phosphate mining	• Agrium Rasmussen Valley, scheduled to begin in 2016 • Lanes Creek – in progress • Caldwell Canyon – starting EIS process • East Smoky Panel – Smoky Canyon Mine – early planning phase • Paris Hills – in permitting process
	Brush treatment	Brush treatment on Crane Flats on state endowment lands
	Lack of information	Most of EIU does not have detailed information on populations, movements, etc.
	Wind development	Phase 2 Horse Butte wind farm, 30-40 towers
	General habitat designation	Most of EIU SGPA is in General habitat (as designated by Governor's plan) which affords very little protection for sage-grouse in this area.
Greater Curlew Valley	Habitat conversion	160 acres of important sage-grouse habitat on private land was mowed and plowed under
Jarbidge	Wildfire	Jarbidge area benefits from the Rangeland Fire Protection Association that provides quick response

Sage-grouse Planning Area	Threat	Change
		to fire starts.
Mountain Home	Energy development	Proposed Cat Creek Energy project
	Wildfire	Mountain Home SGPA benefits from the Rangeland Fire Protection Association that provides quick response to fire starts.
North Magic Valley	Habitat conversion	Observed increase in sagebrush mowing
	Wildfire and invasive annual grasses	Continued increase in acres affected
	Energy development	Proposed Cat Creek Energy project
Owyhee	Transmission line	Gateway West still a potential threat depending on siting decision
	Wildfire	Soda Fire impacts to sage-grouse and increased risk of long-term conversion to annual grasses

References

Autenrieth, R. E., W. A. Molini, and C. E. Braun. 1982. Sage grouse management practices. Western States Sage-grouse Committee Technical Bulletin Number 1. Idaho Department of Fish and Game, Twin Falls, Idaho.

Connelly, J. W., and C. E. Braun. 1997. Long-term changes in sage grouse (*Centrocercus urophasianus*) populations in western North America. Wildlife Biology 3(3/4):123-128.

Connelly, J. W., K. P. Reese, and M. A. Schroeder. 2003. Monitoring of greater sage-grouse habitats and population. Station Bulletin 80. College of Natural Resources Experiment Station, College of Natural Resources, University of Idaho, Moscow, Idaho.

Hagen, C. A., and T. M. Loughin. 2008. Productivity estimates from upland bird harvests: estimating variance and necessary sample sizes. Journal of Wildlife Management 72(6):1369-1375.

Idaho Department of Fish and Game. 1997. Idaho sage grouse management plan. Idaho Department of Fish and Game, Boise, Idaho.

Idaho Sage-grouse Advisory Committee. 2006. Conservation plan for the greater sage-grouse in Idaho. July 2006.

Sather-Blair, S., P. Makela, T. Carrigan, and L. Anderson. 2000. A framework to assist in making sensitive species habitat assessments for BLM-administered public lands in Idaho: Sage-grouse. Unpublished report. USDI Bureau of Land Management, Idaho State Office Branch of Resources and Science, Boise.

U.S. Fish and Wildlife Service. 2015. Endangered and threatened wildlife and plants: 12-month finding on a petition to list greater sage-grouse (Centrocercus urophasianus) as an endangered or threatened species. Federal Register 80(191):59858-59942.

Appendix A. Idaho Sage-grouse Local Working Group Accomplishments, 2015.

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Big Desert	Sage-grouse Lek Tour	DOE supported a sage-grouse lek tour with 4 DOE officials observing and discussing lek behavior, biology, and sage-grouse conservation	1 tour w/ 4 people	DOE	Quinn Shurtliff
Big Desert	Sagebrush Seedling Planting	DOE planted sagebrush seedlings on the INL Site south of highway 20/26 and west of the Big Lost River.	5000 seedlings on 60 acres	DOE	Jack Depperschmidt
Big Desert	Big Desert Sagebrush Recovery Monitoring	Monitoring sagebrush canopy cover in previously burned areas; mapped as Key Habitat-Potential Restoration Area Type 1	16,429 acres	BLM	Justin Frye
Big Desert	Guzzler Reconstruction	Constructed new wildlife guzzler in same location as an existing non-functional guzzler	1 guzzler	BLM	Justin Frye
Big Desert	Guzzler Construction	Constructed new wildlife guzzler near Wildhorse Butte	1 guzzler	BLM	Justin Frye
Big Desert	Guzzler Maintenance	Performed routine maintenance on numerous wildlife guzzlers within Big Desert	27 guzzlers	BLM	Justin Frye
Big Desert	Big Desert Fuel Breaks	Mechanically and chemically reduce the vertical and horizontal continuity of roadside fuels using agricultural mowers and roadside sprayers. Mechanical treatments reduced fuels to a height of approximately 8 inches within 150 feet of the roads, while chemical treatments reduced the density of annual grasses and shrubs within 40 feet of the roads.	56 miles (2,000 acres)	BLM	Ben Dyer
Big Desert	Big Desert Road Improvements	Improve designated access roads to facilitate and expedite the movement of fire suppression resources responding to wildland fires within the Big Desert.	20 miles (39 acres)	BLM	Ben Dyer
Big Desert	Big Desert Road Maintenance	Maintain designated access roads to facilitate and expedite the movement of fire suppression resources responding to wildland	70 miles (135 acres)	BLM	Ben Dyer

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		fires within the Big Desert.			
Big Desert	Big Desert Weed Treatments	Treated for rush skeletonweed, spotted knapweed, and thistle	~10,000 acres	BLM	Matt Clarkson
Big Desert	Newman Canyon Area Grassland Reserve Program Easement	Permanent conservation easement in sage-grouse habitat	1044.04 ac	Big Desert	Jesse Fullmer
Big Desert	Arco Area Grassland Reserve Program Easement	Permanent conservation easement in sage-grouse habitat	771.24 ac	Big Desert	Jesse Fullmer
Big Desert	Arco Pass Area Improved Stockwater Systems	Installed improved stockwater systems on two ranches to improve cattle distribution and facilitate prescribed grazing	2400 ac	Big Desert	Jesse Fullmer
Big Desert	Arco Pass Area Prescribed Grazing	Deferred grazing until fall	1600 ac	Big Desert	Jesse Fullmer
Big Desert	Arco Pass Area Fence Marking	Fence Marking within 0.6 miles of sage-grouse leks	7.6 mi	Big Desert	Jesse Fullmer
Big Desert	Little Lost Area Managed Haying	Contracted wildlife-friendly haying practices (primarily pattern of harvest). Multiple landowners.	3060 ac	Big Desert	Jesse Fullmer
Big Desert	Phase III Big Desert Project	Improved stockwater system and deferred rotational grazing implemented according to technical assistance plan.	12000 ac	Big Desert	Jesse Fullmer
Big Desert	Arco Area Upland Wildlife Habitat Management Project	Improved stockwater system and rest rotational grazing system implemented.	240 ac	Big Desert	Jesse Fullmer
Big Desert	Champagne Creek Area Improved Stockwater System	Installed additional troughs to improve cattle distribution and facilitate prescribed grazing to be contracted in future years.	4000 ac	Big Desert	Lara Fondow (PF)/Jesse Fullmer
Big Desert	Moore Area Pollinator Plantings	Pollinator plantings around hayfields	7 ac	Big Desert	Jesse Fullmer
Challis	Challis BLM FO Fence Marking	Marked Fence within 2 km with Reflective Bird Diverters around 6 leks	4.15 miles	BLM	Bart Zwetzig
Challis	Sage-Grouse Habitat Assessment Framework	Sage-grouse Habitat Monitoring	36,117 ac. or 33 Transects	BLM	Bart Zwetzig
Challis	Sage-Grouse Nest Assessments	Assessed Nesting habitat using HAF protocol for known nests	14 nest sites	BLM	Bart Zwetzig

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Challis	Pahsimeroi Allotment Spring Rehabilitation-Joint project with USFS and NRCS	4 fences were installed to manage livestock access to mesic areas in the Spring Hill/Spring Hill Flats pastures of the Pahsimeroi Allotment to improve water retention/quality in 4 ground water dependent ecosystems to promote food/cover for sage-grouse	10,950 ft of fence installed. (52 acres of fenced mesic areas)	USDA-NRCS	Rosana Rieth Rangeland Management Specialist
Challis	Retrofit watering facility for wildlife escape and to enhance access for bats and bird species	Installation of wildlife escape ramps in existing stockwater tanks to provide wildlife, including sage-grouse, a definitive means of escape while utilizing a livestock water facility as a water source.	6 tanks treated	USDA-NRCS	Jesse Fullmer Arco District Conservationist
Challis	Sage-grouse Lek Routes	Monitored all active and many inactive or historic leks in the CLWG area for a total of 98 leks visited between 1 and 4 times during the season	98 leks	IDFG, BLM	Chris Gaughan (IDFG), Vince Guyer (BLM)
Challis	Sage-grouse habitat assessments (Stiver 2010)	Completed on 4 allotments (Deer Park, Lee Cr, Swan Basin, and Hawley Cr)	~33,000ac	USFS	Mike Steck NZ Wildlife Biologist Salmon Challis NF
Challis	Sage-grouse capture, marking, and monitoring	Marked sage-grouse with radio-collars and rump mount GPS units in the Lemhi Valley	22 marked sage-grouse	IDFG/BLM/USFS	Chris Gaughan (IDFG), Vince Guyer (BLM), Cindy Haggas (USFS), Molly McDevitt (SVS)
Challis	Sage-grouse in the classroom	Led two in-classroom lectures for Salmon High School Biology and 7th grade students and led a lek tour with High School and 7th grade students	2 classroom and one bus tour	IDFG/BLM/SVS	Chris Gaughan (IDFG), Vince Guyer (BLM), Molly McDevitt (SVS)
Challis	Sage-grouse on private lands	Worked with the Lemhi Land Trust to engage private land owners in sage-steppe conservation		IDFG	Chris Gaughan (IDFG)

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Challis	Weed treatment	Lemhi County and the BLM treated 3026 acres of weeds. That includes the roadside acres for cheatgrass.	3026 acres	BLM/ Lemhi County	Chris Tambe, BLM Jeremey Varley, Lemhi County
Challis	Habitat Assessment	136 Habitat Assessment Framework Plots were performed by BLM with assistance from SVS and OSC	136 Plots	BLM/SVS/OSC	Vince Guyer, BLM
Challis	Barton Flat Area Pollinator Plantings	Pollinator plantings around hayfields	2 acres	Salmon-Challis	Jesse Fullmer
Challis	Cherry Creek Area Grassland Reserve Program Easement	Permanent conservation easement in sage-grouse habitat.	515.27 acres	Salmon-Challis	Jesse Fullmer
East Idaho Uplands	Indian Creek Fence	Fence marking	0.5 miles	IDFG	Don Jenkins
East Idaho Uplands	Blackfoot River SRMA	Request for comments on BLM Blackfoot River Special Recreation Management Area	Comment Letter	IDFG	Don Jenkins
East Idaho Uplands	Coordination with USDA-Aphis	Request for personnel to report sage grouse sightings while trapping or flying	Email	IDFG	Paul Wackenhut
East Idaho Uplands	Bear Lake Plateau Thesis	Finished thesis from the Bear Lake Plateau study area	Thesis completed	BLM/IDFG	James Kumm Paul Wackenhut
East Idaho Uplands	Sage-grouse season setting recommendation	EIU Local Sage Grouse Working Group sent a letter to the IDFG recommending no season in the EIUPA	Recommendation letter	IDFG	Paul Wackenhut
East Idaho Uplands	Lek Search ground	Dry Valley unit 76	5000 acres	IDFG	Don Jenkins
East Idaho Uplands	Lek search ground	10 mile pass unit 72	1900 acres	IDFG	Don Jenkins
East Idaho Uplands	Lek search ground	GSWMA	1900 acres	IDFG	Don Jenkins
East Idaho Uplands	Aerial search	Associated mining areas east of Soda Springs East Caldwell Study Area – Rail Transportation Corridor Study Area – Caldwell Canyon Study Area –	 5,640 acres 7,460 acres	Monsanto	Mike Vice

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
			11,735 acres		
East Idaho Uplands	Lek search ground	Bear Lake Area	350 acres	BLM	Chris Berger
East Idaho Uplands	Lek search ground	Tygee Cr. Caribou Co. To verify 3C030-033 in	2000 acres	IDFG	Paul Wackenhut
East Idaho Uplands	Lek search ground	King Cr. Caribou Co. investigate historic activity	4000 acres	IDFG	Paul Wackenhut
East Idaho Uplands	Lek search Ground	Lincoln Cr. Bingham Co. 4B032 verified lek	800 acres	Shoshone-Bannock Tribe	Dan Christopherson
East Idaho Uplands	New CRP/CCRP	CCRP and SAFE acres planted including mid contract management	1397 acres	NRCS/FSA	John Oneill
East Idaho Uplands	Walker Property	Acquired	760 acres	IDFG	Don Jenkins
East Idaho Uplands	Dog Tooth Property	Acquisition in process	400 acres	IDFG	Ryan Walker
East Idaho Uplands	Morgan Bridge-Blackfoot River Property.	Acquisition in process. Bingham Co	400 acres	BLM	David Price
East Idaho Uplands	Vegetation Treatment	Rhizomatous grass treatment	325 acres	IDFG/IDL	Ryan Walker
East Idaho Uplands	Blackfoot Bridge Mine	Mine Reclamation	28 acres	Monsanto	Mike Vice
East Idaho Uplands	Little Valley Livestock water Development, prescribe grazing, and livestock water development.	Cross fence installed to improve management of livestock and facilitate rotational grazing system. Livestock water facility installed to alleviate pressure from livestock on riparian areas and mesic areas. Spring also fenced to control livestock access. Grazing plan implemented. Bear Lake Co.	2 troughs 4300’ of cross fence and 300’ of fence to protect spring and associated riparian area.	USDA-NRCS	Dustin Ford
East Idaho Uplands	Bear Hollow. Install water troughs and escape ramps.	Water troughs with escape ramps installed to help reduce mortality to Sage grouse and other wildlife. Grazing plan will also be implemented. Bear Lake Co.	2 troughs	USDA-NRCS	Dustin Ford
East Idaho Uplands	Slug Creek. Livestock Water	Fenced Riparian Area, installed off-site water & stream crossing. Grazing plan implemented. Caribou Co.	456’ fence marked, escape ramp on 1 trough	USDA-NRCS	Larry Mickelsen

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
East Idaho Uplands	CSP Chesterfield Rangelands.	Escape ramps on troughs. Caribou Co.	5 escape ramps installed	USDA-NRCS	Cameron Williams
East Idaho Uplands	Data capture	Gathered sage-grouse data from historical big game survey sheets	Excel table initiated	IDFG	Paul Wackenhut
East Idaho Uplands	Fence Markers	Provide landowner with fence markers	1400 markers	IDFG	Don Jenkins
Greater Curlew Valley	Kurtz Riparian Exclosure	Fenced 26 acres of riparian/wet meadow and adjacent sagebrush vegetation for the protection of sage-grouse brood rearing habitat.	26 acres	USFS	Chris Colt
Greater Curlew Valley	Curlew National Grassland Fence Marking	Marked 1.5 miles of barbed wire fence near lekking and brood rearing habitat to increase visibility by sage-grouse and Columbian sharp-tailed grouse.	1.5 miles	USFS	Chris Colt
Greater Curlew Valley	Habitat Planting & improvement- Upper Daniels / NW Malad	Vegetative mixes of grass forbs and shrubs were planted in previously farmed fields providing permanent cover for Sage Grouse in habitat areas.	10.5 Acres Private	USDA-FSA/ NRCS	Laren Nalder
Greater Curlew Valley	Habitat Planting & improvement- Mid Pocatello Valley	Vegetative mixes of grass forbs and shrubs were planted in previously farmed fields providing permanent cover for Sage Grouse in habitat areas.	309 Acres Private	USDA-FSA/ NRCS	Laren Nalder
Greater Curlew Valley	Habitat Planting & improvement-Mid Arbon Valley	Vegetative mixes of grass forbs and shrubs were planted in previously farmed fields providing permanent cover for Sage Grouse in habitat areas	269.5 Acres Private	USDA-FSA/ NRCS	Laren Nalder
Greater Curlew Valley	Deferred Grazing & Wildfire Recovery -Samaria / Holbrook divide area	Deferment of livestock grazing in sage grouse habitat areas to improve productivity of degraded or burned vegetative stands and reduce livestock pressure during the nesting season.	1837.5 Acres Private	USDA/NRCS	Laren Nalder
Greater Curlew Valley	Mabey Canyon Fire (HT4J) ESR Sagebrush Seedling Planting	30,000 shrubs were hand planted March of 2015	100 acres	BLM - PFO	Karen Kraus

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Greater Curlew Valley	Curlew Sagebrush Planting*	Planted sagebrush in areas burned in 2006/2007	80 acres	BLM - PFO	Shelli Mavor
Greater Curlew Valley	Mabey Canyon Fire (HT4J) ESR Weeds Treatment	Treatment of noxious weed species within fire perimeter	52 acres	BLM - PFO	Karen Kraus
Greater Curlew Valley	State Fire (HUH5) ESR Weeds Treatment	Treatment of noxious species within the fire perimeter	15 miles along roadways	BLM - PFO	Karen Kraus
Greater Curlew Valley	Curlew/Pleasantview weed treatment	Treated noxious and invasive weeds	100 acres	BLM - PFO	Shelli Mavor
Greater Curlew Valley	Mabey Canyon Fire (HT4J) ESR Weeds Inventory	Inventory of fire perimeter was conducted to located and document noxious species for future treatment	669 acres	BLM - PFO	Karen Kraus
Greater Curlew Valley	Ten Mile Pass Fire (GZ7J) ESR Weeds Inventory	Inventory of fire perimeter was conducted to located and document noxious species for future treatment	48 acres	BLM - PFO	Karen Kraus
Greater Curlew Valley	State Fire (HUH5) ESR Weeds Inventory	Inventory of fire perimeter was conducted to located and document noxious species for future treatment	15,964 acres	BLM - PFO	Karen Kraus
Greater Curlew Valley	Curlew/ N.Pleasentview/ Southstone/Hansel weed inventory	Inventory noxious species to document locations for future treatments	3,298 acres	BLM - PFO	Shelli Mavor
Greater Curlew Valley	Curlew Road Maintenance*	Road maintenance within Sage-grouse habitat to improve fire suppression access and response times	54 miles	BLM - PFO	Shelli Mavor
Greater Curlew Valley	Curlew RIP's (Spring Development) on/off valve replacement*	Placement of valves/float systems on spring developments to prevent water flow during non-use. Project intention is to return water to the spring source – restoration of natural (quasi) hydrologic function and West Nile Virus abatement.	5+ springs (ongoing)	BLM - PFO	David Price
Jarbidge	Cheatgrass Control	Plateau spray on Saylor Creek Range	2555	USAF	Carl Rudeen
Jarbidge	Sagebrush mowing	Target brush w/ >25% canopy…mosaic pattern	290 acres	NRCS	Mike Cothern
Jarbidge	Fence Marking	Within 0.6 miles of 50-bird lek	1.5 miles	NRCS	Mike Cothern
Jarbidge	Upland Wildlife Habitat Mgt.	Prescribed grazing and treatment monitoring on entire fields that were only partially mowed	3889 acres	NRCS	Mike Cothern

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		in 2013			
Jarbidge	Sagebrush/Bitterbrush Planting	Volunteer groups planting sagebrush and bitterbrush to rehabilitate areas burned by the Murphy Complex Fire	120 acres, 10,100 plants	IDFG	Eric Freeman
Mountain Home	Sagebrush Seedling Planting	7 month old sagebrush seedlings were out planted in sage-grouse habitat impacted by the 2013 Pony Complex fire. A contract crew and volunteers out-planted approximately 45,000 plants. Seed was collected locally by IDFG volunteers and the BLM and Institute for Applied Ecology funded the outgrow and plantings.	45,000 plants across 230 acres	BLM	Joe Weldon
Mountain Home	Sagebrush Seedling Planting	Sagebrush and bitterbrush seedlings planted on FS land with the 2013 Pony Complex Fire. Planting areas were near the Dixie lek.	1,800 acres	USFS	Scott Bodle
Mountain Home	2015 MH 1- EQIP	Fence-wildlife friendly	13,200 ft	NRCS	C. Tharp-DC
Mountain Home	2015 MH 2-EQIP	Prescribed Grazing	3050.0 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 3-EQIP	Prescribed Grazing	3029.4 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 4-EQIP	Fence-wildlife friendly	8050 ft	NRCS	C. Tharp-DC
Mountain Home	2015 MH 5-EQIP	Fence-wildlife friendly	4966 ft	NRCS	C. Tharp-DC
Mountain Home	2015 MH 6-EQIP	Prescribed Grazing	323.0 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 7-EQIP	Prescribed Grazing	320.0 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 8-EQIP	Fence-wildlife friendly	4500 ft	NRCS	C. Tharp-DC
Mountain Home	2015 MH 9-EQIP	Prescribed Grazing	636.8 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 10-SGI	Prescribed Grazing	533.0 acres	NRCS	C. Tharp-DC

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Mountain Home	2015 MH 11-SGI	Prescribed Grazing	160.0 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 12-SGI	Livestock Watering Facility	2 no.	NRCS	C. Tharp-DC
Mountain Home	2015 MH 13-SGI	Prescribed Grazing	1409.9 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 14-SGI	Prescribed Grazing	1530.8 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 15-SGI	Prescribed Grazing	1589.1 acres	NRCS	C. Tharp-DC
Mountain Home	2015 MH 16-SGI	Range Seeding	539.0 acres	NRCS	C. Tharp-DC
Mountain Home	Paradigm fuel break (private land parcels)	As part of the larger project, the Southern Cohesive Strategy grant has helped fund fuel breaks that cross private land. To date, phase 1 (disking) had been completed on 2 contracts. Although the fuel breaks are outside sage-grouse habitat, they are designed to protect sage-grouse habitat and other values outside the Interstate 84 corridor.	100 acres to date	Pheasants Forever	Randy Phelan
Mountain Home	Paradigm fuel break (state land parcels)	See above. 13.5 miles of fuel breaks were also completed on state endowment lands.	271 acres/13.5 miles	Idaho Dept. of Lands	Ruth Luke
Mountain Home	Fence marking	Volunteers re-marked fences near the Wild Horse lek with reflective markers after 2 sage-grouse were found deceased and intact at the fence line.	1 mile	IDFG, BLM	Ann Moser, Neil Hillesland, Joe Weldon
Mountain Home	Monitoring sage-grouse response to the Mountain Home Country Music Festival, July 24-August 8, 2015	The Mountain Home LWG supported and coordinated a project to monitor the potential response of 12 radio-collared sage-grouse to the Mountain Home Country Music Festival. The concert location was 1.2 miles south of the Wild Horse Lek. Eleven volunteers monitored birds 7 days prior to the concert, during the 3 days of the concert, and for 6 days after. Although several birds were in the vicinity of	NA	IDFG	Ann Moser, Neil Hillesland, Brad Seymour

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		the Wild Horse lek during the concert, we could find no difference in the distance birds moved before, during, or after the concert.			
North Magic Valley	CCAA (draft)	Discussion of potential CCAA (with Conservation Districts)		NRCS	Stephan Thompson
North Magic Valley	Fuel Break	Initiation of potential project (fuel break along Highway 75 in important winter habitat)	8 miles	IDFG, BLM	Daryl Meints
North Magic Valley	Lek tour with Gooding High School	Visited active lek, telemetry practice, and falconry exhibit	1 tour, approx. 30 students	USFS	David Skinner
North Magic Valley	Volunteer Lek Counts	Determine Activity	268	IDFG	Daryl Meints
North Magic Valley	Harvest Monitoring	Check Station	1	IDFG	Daryl Meints
North Magic Valley	Harvest Monitoring	Wing Barrels	10	IDFG	Daryl Meints
North Magic Valley	Harvest Monitoring	Wing Bee	1	IDFG	Daryl Meints
Owyhee	LWG Outreach	LWG Mailing list now has 120 people. In 2015 LWG Secretary sent 70 messages to the group that informed members about upcoming meetings, research findings, and other news about sage- grouse conservation and management		Owyhee LWG	OC LWG Secretary Karen Steenhof
Owyhee	Annie Basin Phase II	Juniper Mastication	544 acres	Owyhee LWG	Art Talsma
Owyhee	4/23/15 Field Tour	Juniper Control tour			
Owyhee	Rimrock High School FFA Project	FFA members are constructing Signs and fence markings to benefit Sage Grouse			
Owyhee	Comment on BLM Bruneau/Owyhee FO Sage Grouse Habitat Project	In coordination with Owyhee County Natural Resources Committee (NRC) developed comment for County Commissioners.		Owyhee LWG and OC NRC	
Owyhee	Comment on IDL Draft Sage Grouse Conservation Plan	Owyhee County Natural Resources Committee (NRC) developed comment for County Commissioners		Owyhee LWG and OC NRC	
Owyhee	Comments for Inclusion in	Owyhee County Natural Resources Committee		Owyhee LWG and	

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
	Governor's Consistency Revue of BLM's Sage Grouse Plan	(NRC) developed comment for County Commissioners		OC NRC	
Owyhee	Comments On BLM Sage Grouse Final EIS	Owyhee County Natural Resources Committee (NRC) developed comment for County Commissioners		Owyhee LWG and OC NRC	
Owyhee	Juniper mastication projects	The LWG partners again led and assisted juniper mastication projects on state and private ranches in cooperation with the USFWS, OSC, IDFG, Owyhee County, IDL, TNC, NRCS-SGI, CWMA and Owyhee Watershed Council in four core sage grouse areas. At Anne Basin we continued our multi-year project by contracting with Branch Enterprises to open up approximately 500 acres of wet meadow complex along the Mud Flat Road. The contractor completed 200 acres before deep snow covered the work site on Dec 23th. The stage 1 & 2 juniper mastication will continue into 2016 until Anne Basin phase 2 is complete. The primary funding source for phase 2 is coming from OSC and USFWS. In addition, the LWG partners continued to assist ranchers with SGI projects at Wilson Meadows, West Juniper Mountain, and upper Cow Creek to clear over 3,000 acres of encroaching juniper in priority sage grouse areas in Owyhee County. Both lop and lay and mastication methods have been successful in clearing juniper from these important brood rearing areas to benefit sage grouse populations in SW Idaho.			
Owyhee	Wetlands Workshops and Construction of Wetlands	LWG participants assisted the USFWS and ranchers in construction of 11 small wetlands on 6 ranches in Owyhee County in 2014 and			

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		2015. Wetland Design Workshops were held at 2 locations where over 90 participants attended 2 day courses in wetland design and construction. Construction of wetlands and associated wet meadows not only contribute significantly to waterfowl and amphibian populations but in arid landscapes they benefit species like sage grouse, sage sparrow, and curlews. This assistance is provided at no cost to landowners, many of which have ranching operations in sage grouse country.			
Owyhee	Soda Wildfire-Cooperative Sage-grouse Rehabilitation	LWG participants jumped into action to help ranchers and state lands begin to recover from the huge Soda Wildfire. In the fall of 2015 many wildfire recovery actions needed to be coordinated on both private and public lands in SW Idaho and Oregon. A few highlights of this community conservation effort that will benefit wildlife include; coordination of providing large quantities of native and introduced seed mix to ranchers for fall seeding, assisting ranchers with rehab plans to include cheatgrass and medusahead control prior to seeding, and restoration of wet meadows important to sage grouse. Branch Enterprises, for example, drill seeded approximately 10,000 acres near highway 95 and ranchers seeded several thousand acres of private meadows next to BLM land along Cow Creek, Succor Creek, McBride Creek, Jump Creek and Reynolds Creek watersheds. These restoration efforts focused on priority sage grouse areas identified by IDFG, USFWS, CWMA and BLM that will complement the huge rehab efforts on public lands. These			

LWG[a]	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		coordinated recovery efforts will continue throughout 2016.			
Owyhee	School Lek Tours Program	LWG continues to support and participate in the school lek tours program			
Owyhee	2015 BRD 1 SGI	Brush Management-Juniper removal	119.8 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 2 SGI	Brush Management-Juniper removal	404.0 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 3-EQIP	Brush Management-Juniper removal	92.1 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 4-SGI	Brush Management-Juniper removal	426.0 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 5-SGI	Brush Management-Juniper removal	276.8 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 6-SGI	Fence-Wildlife friendly	3920 ft	NRCS	C. Tharp-DC
Owyhee	2015 BRD 7- SGI	Brush Management-Juniper removal	195.7 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 8-SGI	Brush Management-Juniper removal	162.0 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 9-SGI	Prescribed Grazing	1520.0 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 10-SGI	Brush Management-Juniper removal	181.2 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 11-SGI	Brush Management-Juniper removal	342.2 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 12-SGI	Brush Management-Juniper removal	143.2 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 13-SGI	Prescribed Grazing	236.0 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 14-SGI	Brush Management-Juniper removal	422.2 acres	NRCS	C. Tharp-DC
Owyhee	2015 BRD 15-SGI	Brush Management-Juniper removal	469.1 acres	NRCS	C. Tharp-DC

[a] Acronyms used in this table: AF = Air Force; BLM = Bureau of Land Management; BRD = Bruneau Resource District; CCAA = Candidate Conservation Agreement with Assurances; CCRP = Continuous signup, Conservation Reserve Program; CRP = Conservation Reserve Program; CWMA = Cooperative Weed Management Area; DOE = Department of Energy; EIUPA = East Idaho Uplands Planning Area; ESR = Emergency Stabilization and Rehabilitation; EQIP = Environmental Quality Incentives Program; FO = Field Office; FSA = Farm Service Agency; HAF = Habitat Assessment Framework; IDFG = Idaho Department of Fish and Game; IDL = Idaho Department of Lands; INL = Idaho National Lab; LWG = Local Working Group; MH = Mountain Home; NRCS = Natural Resources Conservation Service; OC NRC = Owyhee County Natural Resources Committee; OSC = Office of Species Conservation; PFO = Pocatello Field Office; SAFE = State Acres for Wildlife Enhancement; SGI = Sage-grouse Initiative; SVS = Salmon Valley Stewardship; TNC = The Nature Conservancy; USDA = U.S. Department of Agriculture; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service.