

Idaho Sage-grouse Local Working Groups

Statewide Annual Report 2013



Idaho Sage-grouse Advisory Committee Technical Assistance Team April 15, 2014

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Cover photo: Owyhee LWG field tour to Jacks Creek wet meadow restoration project.

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. The Owyhee LWG revised their plan in March 2013.

This statewide annual report is the 7th compilation of annual reports from each LWG. This report documents Idaho sage-grouse LWG and SAC accomplishments in 2013; 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



Sage-grouse trapping near Leadore with BLM biologist Vince Guyer, IDFG Biologist Chris Gaughan, and volunteer Heather Bolerjack. The collared birds in Lemhi and Custer Counties have contributed to the creation of detailed seasonal use maps in the Challis Local Working Group Area.

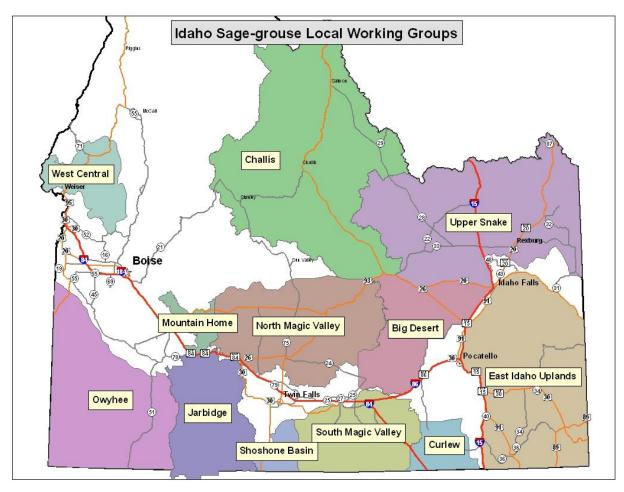


Figure 1. Idaho Sage-grouse Local Working Groups and associated Sage-grouse Planning Areas.

LWG and SAC Meetings

Twelve LWGs submitted an annual report. Eleven LWGs held a total of 37 meetings in 2013 with an average of 12 attendees per meeting. Three of these meetings included field tours. The number of meetings in a year for a LWG ranged from 0 to 11 (i.e. one LWG did not meet in 2013). Overall 188 individuals attended 1 or more LWG meeting in 2013. Attendance at LWG meetings has been declining since 2007 when 345 individuals attended. Attendees were interested citizens and landowners, or represented various grazing associations, nongovernmental organizations, and state, county and federal agencies. Prior to 2012, many LWGs were utilizing professional facilitators for meetings. However, due to recent budget constraints in the participating federal and state agencies, most LWGs are currently being facilitated by IDFG staff or by an appointed LWG member. This trend is likely to continue into the foreseeable future.

The SAC did not hold any meetings in 2013.

LWG Project Reports

LWGs reported on 126 projects or accomplishments that occurred in their planning areas in 2013 (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). There were 21 habitat improvement projects reported, totaling 31,763

acres. Of these, 19,550 acres were fire rehabilitation projects on public and private land in the Pony Complex Fire in the Mountain Home SGPA; several thousand more acres of fire rehabilitation seeding are planned for 2014. Other habitat improvement projects included seeding of grasses and forbs into Conservation Reserve Program fields and sagebrush seedling plantings. Sixteen juniper projects were reported for a total of 3,399 acres of junipers removed from sage-grouse habitat. Fifteen fence marking projects reported a total of 58 miles of fences that were marked to reduce risk of sage-grouse collisions with barbed-wire fence.



Lek tour for a school group in the Fairfield area.

LWGs also reported on field tours and other educational and public involvement activities. Several LWGs reported on lek tours in their planning area. Fifteen of these were lek tours and field trips for local schools. At least 10 other school tours were conducted in 2013, for a total of 25 statewide.

Table 1. Summary of types of projects report by LWGs in 2013. See Appendix A for project descriptions and locations.

	Number of		Number of
Project type	projects	Project type	projects
Dubois Grouse Days activities	3	Improvements to watering facilities	7
Fence improvements	5	Juniper removal	16
Fence marking	15	Lek tours	5
Field tours	4	Plan update	1
Fuel breaks	3	Predator surveys	2
Grazing management	7	Public involvement	6
Habitat improvement	21	Sage-grouse monitoring	13
Habitat mapping	2	Weed control	7
Habitat monitoring	6	Wet meadow protection	3

Regulatory Update

Idaho Governor's Office Sage-grouse Conservation Alternative

In March 2012, Idaho Governor C.L. "Butch" Otter convened the Governor's Sage-grouse Task Force to provide recommendations on regulatory mechanisms that would address primary threats and some secondary threats to sage-grouse as identified by the U.S. Fish and Wildlife Service's 2010 listing decision. The Task Force was composed of representatives from LWGs, conservation interests, county commissions, the state legislature, and industry. State agencies were technical assistance advisors to the Task Force. The Task Force submitted their recommendations to the Governor's Office in June 2012. The Governor's Office used the Task Force recommendations to write the *Idaho Governor's Office Sage-grouse Conservation* Alternative, which was submitted to the Secretary of Interior and Secretary of Agriculture for inclusion in the Idaho/southwest Montana Environmental Impact Statement (EIS) that would incorporate sage-grouse conservation regulatory mechanisms into federal land use plans. The Alternative addresses wildfire, invasive plants, large infrastructure development, recreation, West Nile virus, and livestock grazing management and associated small infrastructure. As of January 2014, the Governor's Sage-grouse Conservation Alternative is a co-preferred alternative in the Bureau of Land Management (BLM)/U.S. Forest Service (USFS) Draft Environmental Impact Statement (DEIS). A 90 day public comment period for the DEIS will end January 29, 2014. Idaho Department of Fish and Game is reviewing and commenting on the DEIS in conjunction with other state agencies and the Governor's Office. The Governor's Office will convene the Task Force on February 28, 2014. Idaho Department of Fish and Game along with other state agencies will provide technical assistant to the Task Force as they develop additional recommendation to improve the final alterative in the EIS. BLM/USFS are scheduled to have a Record of Decision for the EIS by September 2014.

BLM and USFS Land Use Plan Amendments

The BLM and U.S. Forest Service continue to make progress on the Idaho and Southwestern Montana Greater Sage-grouse Plan Amendments. A Draft Environmental Impact Statement (DEIS) was released on November 1, 2013 for a 90-day public comment period. The DEIS identified two preferred alternatives – the sub-regionally developed alternative (Alternative D) and the State of Idaho developed alternative (Alternative E). Over 15,000 individual comments were received with numerous letters from several groups including American Wild Horse Preservation, Wild Earth Guardians and Defenders of Wildlife. Each of these letters was reviewed for substantive comments. The BLM and Forest Service are evaluating the substantive comments and working to incorporate and respond to comments as they prepare the Final EIS and Proposed Plan is expected for public release this fall with the Record of Decision to follow later in the fall.

Sage-grouse Populations

Leks

Sage-grouse breeding populations are typically monitored by counts of males at leks each spring. A lek is a traditional display area. The area is normally located in a very open site in or adjacent to sagebrush-dominated habitats. The quality of lek data in Idaho varies greatly, ranging from 1 helicopter survey over an area every 5 years to annual standardized counts on established lek routes.

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 (Connelly et al. 2003):

- 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 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).



Male sage-grouse. Photo by Owyhee LWG member Ken Miracle.

Lek route results are reported as the peak male attendance on one day for all leks in the route. Lek route data that have been correctly collected through time are the most appropriate data for assessing population trends.

We compiled lek data and survey effort for each planning area. Specifically we recorded the number of leks that were surveyed by air and ground in 2013, the number of lek routes in the area, and the average number of males per lek for leks on routes for the current year and compared to the past 5 years. Biologists and volunteers surveyed 1,042 leks statewide in 2013. Of these, 182 leks

were surveyed by helicopter and 508 leks were counted on 78 established lek routes (Table 2). The location and distribution of lek routes is shown in Figure 2.

We reported lek data in 2 ways for this report: 1) Average males per lek for all leks counted on routes; and 2) Total males on lek routes that were visited each year from 2007 to 2012. Average males per lek allow comparisons within and among SGPAs (Table 3). The average is, however, influenced by the number of leks surveyed. The number of leks surveyed on routes was not consistent among years, and in most cases, the number of leks surveyed increased each year. To get a better picture of trends, the SAC TAT also reported the total number of males counted on lek routes within an SGPA, but only used those lek routes that were counted each year from 2007

to 2012. This method allows a more valid 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 2013 male lek attendance was down 5% from 2012. Trends were mixed among SGPAs (Tables 3 and 4).

Table 2. Sage-grouse leks surveyed in each Sage-grouse Planning Area in Idaho, 2013.

	2013 Leks Surveys						
Sage-grouse Planning Area	Leks surveyed by air ^a	Individual leks ground surveyed ^a	Number of lek routes	Leks surveyed on routes ^a	Total leks surveyed		
Big Desert	0	50	6	56	106		
Challis	0	43	11	37	80		
East Idaho Uplands	1	16	4	10	26		
Greater Curlew Valley	0	20	4	17	37		
Jarbidge	0	22	9	55	77		
Mountain Home	0	3	3	5	8		
North Magic Valley	3	118	9	114	235		
Owyhee	179	37	8	39	189		
Shoshone Basin	0	22	1	15	37		
South Magic Valley	0	41	4	22	63		
Upper Snake	0	45	14	125	170		
West Central	0	1	4	13	14		
Statewide	182	418	77	508	1,042		

^a Some leks were surveyed by air and on the ground, so numbers may not total across the columns.

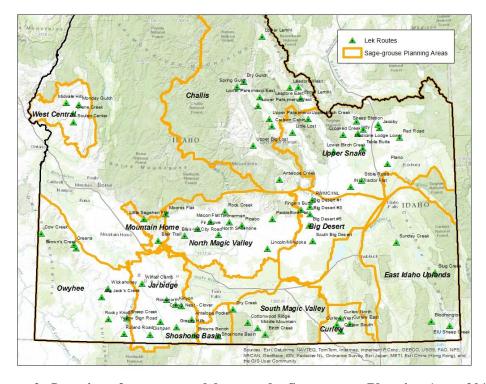


Figure 2. Location of sage-grouse lek routes by Sage-grouse Planning Area, 2013.

Table 3. Average number of males per lek for all lek routes in Idaho, 2008–2013.

Average Number of Males per Lek # # # # # # **Sage-grouse Planning** leks Area leks Avg leks Avg leks Avg Avg leks Avg leks Avg Big Desert Challis East Idaho Uplands Greater Curlew Valley Jarbidge Mountain Home North Magic Valley Owyhee **Shoshone Basin** South Magic Valley Upper Snake West Central Statewide

Table 4. Total number of males counted on leks routes that were counted each year in Idaho, 2008–2013.

		Total Number of Males ^a					
Sage-grouse Planning Area	# of lek routes	2008	2009	2010	2011	2012	2013
Big Desert	6	619	603	938	1,112	912	941
Challis	11	453	568	493	580	496	491
East Idaho Uplands ^b	2	52	65	129	82	127	100
Greater Curlew Valley	4	160	146	159	207	137	111
Jarbidge ^c	8	336	254	166	244	246	232
Mountain Home	3	33	44	36	50	48	52
North Magic Valley	9	461	482	494	752	653	653
Owyhee ^d	7	344	379	531	579	484	429
Shoshone Basin	1	148	110	108	96	92	94
South Magic Valley ^e	3	271	233	237	289	226	218
Upper Snake	14	1,853	1,575	1,572	1,534	1,462	1,234
West Central	4	99	98	129	74	76	45
Statewide	72	6,837	6,566	7,002	7,610	6,971	6,613

^a Total number of males is the peak male attendance on one day for all leks on the lek route.

^b Does not include Sunday Creek or Slug Creek.

^c Does not include Winter Camp.

^d Does not include Big Jacks Creek.

^e Does not include Middle Mountain.

Productivity

IDFG has been collecting wings from hunter harvested birds since at least 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. Since 2010 IDFG has sent out wing envelopes to 2,000 known sage-grouse hunters.

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. Statewide the average productivity was only 1.01 chicks per hen in 2013. Since 1961, the 3 lowest production years were in 2007, 2012, and 2013. (Table 5 and Figure 3). Low productivity is assumed to be related to drought conditions, but further investigation is needed.

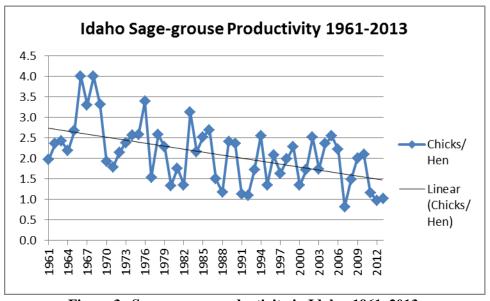


Figure 3. Sage-grouse productivity in Idaho, 1961–2013.

Table 5. Sage-grouse productivity by Sage-grouse Planning Area, as determined by wing collections in Idaho, 2008–2013.

	2008 2009		2	2010		
Sage-grouse Planning	Total	Chicks per	Total	Chicks	Total	Chicks per
Area	Wings	Hen	Wings	per Hen	Wings	Hen
Big Desert	126	1.6	72	3.5 ^a	141	2.8
Challis	160	1.0	62	1.9 ^a	76	1.3 ^a
East Idaho Uplands	Closed		Closed		Closed	
Greater Curlew Valley	2		5		8	
Jarbidge	62	1.1	83	0.8^{a}	Closed	
Mountain Home	0		0		0	
North Magic Valley	60	1.8^{a}	83	2.8^{a}	209	2.4
Owyhee	365	1.1	511	2.0	148	1.4
Shoshone Basin	94	0.9^{a}	83	0.7^{a}	143	1.5
South Magic Valley	0		51	2.67^{a}	see Shos	hone Basin ^c
Upper Snake	998	1.8	1,193	2.2	495	2.3
West Central	Closed		Closed		Closed	
Statewide	1,867	1.5	2,143	2.0	1,240	2.1
		2011	20)12	2	2013

	2011 2012			2013		
Sage-grouse Planning	Total	Chicks per	Total	Chicks	Total	Chicks per
Area	Wings	Hen	Wings	per Hen	Wings	Hen
Big Desert	30	0.9^{a}	67	0.5^{a}	46	1.31 ^a
Challis	61	1.5 ^a	54	1.4^{a}	44	0.83^{a}
East Idaho Uplands	Closed		Closed		Closed	
Greater Curlew Valley	25		8	1.0^{a}	17	0.70^{a}
Jarbidge	Closed		Closed		Closed	
Mountain Home	0		Closed		Closed	
North Magic Valley	97	0.9^{a}	193	1.48	120	1.34
Owyhee	99	0.9^{a}	147	1.13	98	1.31 ^a
Shoshone Basin	103	0.8	122	0.75	147	1.24
South Magic Valley			see Shosl	none Basin ^c		
Upper Snake	113	1.6	273	0.82	288	0.78
West Central	Closed		Closed		Closed	
Statewide	753	1.2	864	0.97	760	1.02

^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 2010-2013 with statewide wing envelope program.

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.

Following these guidelines, there were no new changes in 2013.

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. Prior to 2009, the reporting zone boundaries only roughly corresponded to SGPAs (with some areas combined). In 2009, with input from LWGs, IDFG split some zones to better reflect current SGPA boundaries (Figure 4). Therefore, 2009–2013 harvest estimates by SGPA are not directly comparable to previous years for the Big Desert, Challis, and Upper Snake planning areas. Statewide, hunters harvested an estimated 2,357 birds in 2013, which was similar to the 2,556 birds harvested in 2012 (Table 7). The previous 5-year average (2008–2012) was 4,734 birds annually.

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 	0	0
	• Lek counts are less than 50% of 1996–2000		
	average counts		
	 Lek data are not gathered for population 		
	• Lek counts are between 50% and 150% of the		
Restrictive	1996–2000 average	7	1
	• Lek counts exceed 150% of the 1996–2000		
Standard	average	23	2

^aFrom Idaho Sage-grouse Advisory Committee 2006; Table 4-14, page 4-122.

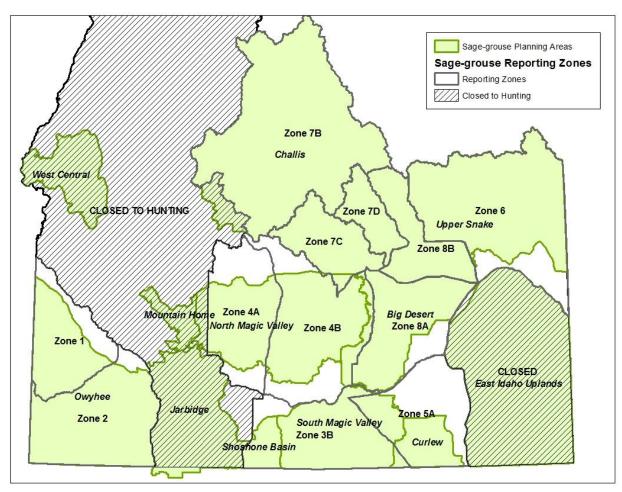


Figure 4. Sage-grouse Planning Areas and 2013 Sage-grouse Reporting Zones for harvest estimation.

Table 7. Estimated sage-grouse harvest and season structure by Sage-grouse Planning Area in Idaho, 2008–2013.

	2008		2009		2010	
Sage-grouse Planning	Estimated	Season	Estimated	Season	Estimated	Season
Area	Harvest	Structure ^a	Harvest	Structure	Harvest	Structure
Big Desert	641	Restrictive	292 ^b	Restrictive	583	Restrictive
Challis	487	Conservative	357 ^b	Restrictive	361	Restrictive
East Idaho Uplands		Closed		Closed		Closed
Greater Curlew Valley	209	Restrictive	48	Restrictive	164	Restrictive
Jarbidge	70	Restrictive ^c	210	Restrictive ^c		Closed
Mountain Home &						
North Magic Valley	264	Restrictive	343	Restrictive	579	Restrictive
Owyhee	897	$Both^d$	1,000	$Both^d$	386	Restrictive
Shoshone Basin &						
South Magic Valley	439	Restrictive	471	Restrictive	507	Restrictive
Upper Snake	4,698	Conservative	4,475 ^b	Conservative	1,472	Restrictive
Unknown	19	NA	0	NA	0	NA
West Central		Closed		Closed		Closed
Statewide	7,724		7,196		4,052	
	2	011	2.	012	2.0)13

	2011		20	2012		2013	
Sage-grouse Planning	Estimated	Season	Estimated	Season	Estimated	Season	
Area	Harvest	Structure	Harvest	Structure	Harvest	Structure	
Big Desert	86	Restrictive	136	Restrictive	147	Restrictive	
Challis	110	Restrictive	244	Restrictive	133	Restrictive	
East Idaho Uplands		Closed		Closed		Closed	
Greater Curlew Valley	125	Restrictive	140	Restrictive	58	Restrictive	
Jarbidge		Closed		Closed		Closed	
Mountain Home &							
North Magic Valley	356	Restrictive	335	Restrictive ^e	350	Restrictive ^e	
Owyhee	232	Restrictive	363	Restrictive	262	Restrictive	
Shoshone Basin &							
South Magic Valley	288	Restrictive	300	Restrictive	383	Restrictive	
Upper Snake	944	Restrictive	1,038	Restrictive	1,012	Restrictive	
Unknown	3	NA	0	NA	12	NA	
West Central		Closed		Closed		Closed	
Statewide	2,144		2,556		2,357		

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

^b 2009 harvest estimates may not be comparable to previous years because of changes to reporting zone boundaries. Current changes more accurately capture SGPA boundaries (see Figure 5).

^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.

^d In 2008 and 2009 the Owyhee SGPA had a restrictive season in Zone 1 and a conservative season in Zone 2 (see Figure 5).

^e Elmore County (Mountain Home SGPA) closed in 2012 and 2013.

Sage-grouse Habitat

Wildfire

About 161,845 acres of key sage-grouse habitat burned in 2013 (Table 8, Figure 5). This total is considerably higher than the previous 5-year average of 84,955 acres. 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). In addition, 54,578 acres burned in R1/perennial grasslands; 37,271 acres in annual grasslands; and 2,058 acres in conifer encroachment areas (Figure 5). Burned areas occurring on public lands are often rehabilitated to sagebrush, grasses and/or forbs, as appropriate, and as funding allows; 2013 projects are included in Appendix A.

Table 8. Number of acres of wildfire in key sage-grouse habitat by sage-grouse planning area and land ownership in Idaho, 2008–2013.

Sage-grouse Planning						
Area	2008	2009	2010	2011	2012	2013
Big Desert	439	0	4,449	176	6,347	0
Challis	550	0	20	0	647	98
East Idaho Uplands	3,179	270	1,783	4	14,299	511
Greater Curlew Valley	220	0	0	231	0	12
Jarbidge	542	12	26,918	1,971	15,902	5,453
Mountain Home	0	0	5,635	56	2,622	69,356
North Magic Valley	20,583	37	7,692	20,044	27,599	40,230
Owyhee	80	440	2,866	21,772	54,247	3,437
Shoshone Basin	5,696	30	11,237	982	1,540	2,834
South Magic Valley	664	14	252	229	42,338	78
Upper Snake	1,550	325	64,003	30,897	1,921	0
West Central	100	408	0	830	1,721	2,274
Outside planning areas	707	0	256	0	17,441	37,562
Total	34,310	1,536	125,111	77,192	186,624	161,845

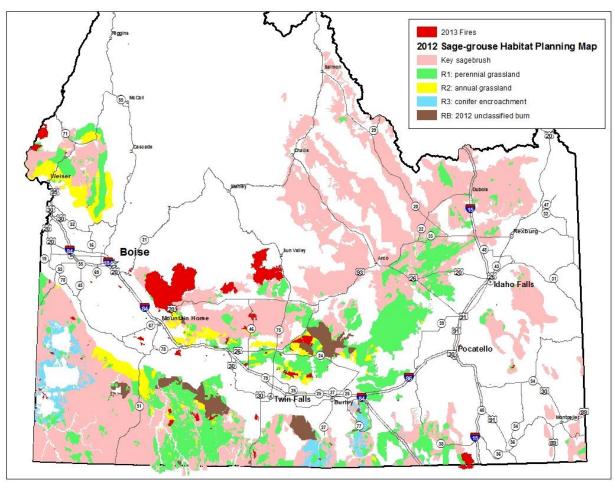


Figure 5. Sage-grouse Habitat Planning Map with 2013 fires in southern Idaho. Data courtesy of Idaho BLM State Office.

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, including a reduction in risk of sage-grouse fence collisions due to fence marking projects. The Owyhee LWG continues to make progress on reducing the threat of juniper encroachment into sagebrush habitat. Additional sage-grouse conservation projects are reported in Appendix A.

Juniper removal project in Owyhee County.

Table 9. Changes in threats identified by Local Working Groups in Idaho, 2013.

	Working Groups in Idano, 2013.
Threat	Change
Wildfire	Despite drought conditions, wildfire risk is being decreased with weed control projects, road improvements, and fuel breaks.
Fence strikes	Decreased risk of fence strikes on 8 miles of fence due to installation of fence markers.
Invasive plants	Increase in isolated areas of invasive plants and noxious weeds.
Infrastructure	 Gateway West transmission line project has been approved to cross 65 miles of the planning area. Hooper Springs transmission line proposed to cross 22-32 miles of the planning area.
Mines	 Paris Hills phosphate mine is currently in the permitting process 3 additional phosphate mines are in the early planning phases.
Wildfire, invasives, predation	Loss of 43,817 acres of important sage-grouse habitat due to Pony Complex Fire. Increased risk of weeds and invasive plants due to Pony Complex fire; sage-grouse expected to be at increased risk of predation with reduced sagebrush cover.
Wildfire	Loss of sagebrush habitat due to McCan, Beaver Creek, and Fir Grove fires.
Infrastructure	Gateway West transmission line approved, but no segments have been approved in SGPA.
Conifer encroachment	Reduction in threat of conifer encroachment with 2,874 acres of juniper removed in 2013.
Fence strikes	Decreased risk of fence strikes due to installation of fence markers.
Coordination and communication	Increased coordination and communication due to sage-grouse telemetry project in the Jim Sage area.
Sagebrush cover	Concern of areas with over-dense sagebrush cover.
Agricultural conversion Invasive plants	160 acres converted to pivots. Increase in weeds and invasive plants, including rusk skeletonweed, houndstongue, St. John's wort.
	Threat Wildfire Fence strikes Invasive plants Infrastructure Mines Wildfire, invasives, predation Wildfire Infrastructure Conifer encroachment Fence strikes Coordination and communication Sagebrush cover Agricultural conversion

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Appendix A. Idaho Sage-grouse Local Working Group Accomplishments, 2013.

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Big Desert	Water Replenishment	Delivered water to empty guzzlers/water storage systems in the Big Desert	32,000 Gallons	Private/IDFG	Sam Chandler
Big Desert	LWG Field Tour	Field tour of past and present projects	1 tour	BLM	Justin Frye
Big Desert	Boy Scout Fence Marking	Making/installing fence markers as Eagle Scout Projects	8 miles	BLM	Justin Frye
Big Desert	Post-fire Sagebrush Cover Survey	Cover transects to determine sagebrush recovery in Key Habitat – Potential Restoration Areas	55,691 acres	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.	2,000 acres (55 miles)	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.	7 miles	BLM	Ben Dyer
Big Desert	Big Desert Weed Treatments	Treated for rush skeletonweed, spotted knapweed, and thistle	~ 2,500 acres	BLM	Scott Minnie
Challis	Fence marking within 0.6 miles of a lek	Pasture fences on private rangeland at Goldburg marked with reflective strips	2.5 miles	NRCS	Rosana Rieth
Challis	Fence marking within 0.6 miles of a lek	Boundary fence at Lee Creek marked with reflective strips	1 mile	NRCS	Rosana Rieth
Challis	Fence marking within 0.6	Boundary fence near Leadville Allotment	1 mile	NRCS	Rosana Rieth

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
	miles of a lek	marked with reflective strips			
Challis	Fence marking within 0.6 miles of a lek	Boundary fence at Ennis Gulch marked with reflective strips	1 mile	NRCS	Rosana Rieth
Challis	Successional vegetation changes in brood-rearing habitat	Installed wildlife friendly jack fence along Morgan Creek riparian habitat	2,800 feet	NRCS	Rosana Rieth
Challis	Improper grazing management	Installed wildlife friendly wire and electric fence in Goldburg	4.3 miles	NRCS	Rosana Rieth
Challis	Cottonwood Fence	Installed the Cottonwood fence allowing for changes in grazing management to benefit nesting and late brood rearing habitats	9,664 acres	BLM/South Carmen Permittees	Vince Guyer
Challis	Buckwalter Habitat Project	Seeding project	320 acres	USFWS	Jason Pyron
Challis	Jakes Canyon Seeding	Aeration and Seeding of grass and forbs into a Wyoming big sagebrush stand	219 acres of seeding	BLM/NRCS/Jake's Canyon Permitee	Vince Guyer/ Rosana Rieth
Challis	Lemhi County CWMA	Spraying of weeds within key habitat. Species treated include: cheatgrass, leafy spurge, rush skeletonweed and thistle	141 chemical acres 597,126 inventoried/effec ted acres	Lemhi County CWMA/BLM	Jeremy Varley/ Chris Tambe
Challis	Challis area Lek Counts	Lek routes using IDFG protocol	13 lek routes with 50 leks counted	BLM	Bart Zwetzig
Challis	Salmon area Lek Counts	Counted all active leks in Lemhi County portion of LWG at least once	28 leks	BLM/IDFG/TNC/ USFS	Chris Gaughan
Challis	Sage Grouse presentations at local schools; including lek tours	Presented sage-grouse information to the Salmon High School, Salmon Alternative School and the Leadore High School. Students visited leks with biologists from	3 Schools/10 tours	IDFG/BLM	Chris Gaughan/ Vince Guyer

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		IDFG and BLM			
Challis	Lek tour	Envirothon - Challis	1 tour	NRCS	Rosana Rieth
Challis	BLM Habitat Assessment	Completed 66 HAF plots in the Kenney- Agency Landscape area.	28,826 acres	BLM	Vince Guyer
Challis	BLM Habitat Assessment	Assessments using Stiver Protocol	225,000 acres	BLM	Bart Zwetzig
Challis	USFS Habitat Assessment	Conducted HAF fourth order habitat assessments for nesting/early brood rearing/late brood rearing	15 pastures 103 monitoring transects	USFS	Mike Foster
Challis	Challis/Mackay telemetry work	Tracking of sage-grouse distribution and seasonal use in the Big Lost drainage	Captured and radio collared 5 males and 10 females Monitored 44 total radio collared sagegrouse	USFS	Mike Foster
Challis	Salmon/Leadore telemetry work	Tracking of sage-grouse distribution and seasonal use in the Lemhi Valley	Birds collared in 6 lek areas	USFS/BLM/IDFG	Cindy Haggas/ Vince Guyer/ Chris Gaughan
Challis	USFS and BLM sage- grouse seasonal habitat mapping	Updates to seasonal habitat use maps	GIS layers	USFS/BLM/IDFG	Mike Foster/ Chris Gaughan/ Vince Guyer/ Bart Zwetzig
East Idaho Uplands	Annual sage grouse season setting recommendation	Season setting recommendation letter to Idaho Department of Fish and Game	Letter	East Idaho Uplands Sage- Grouse Local Working Group	Paul Wackenhut
East Idaho Uplands	4B021 Fence Marking	Fence Marking	1.75 miles	IDFG	Zack Lockyer
East Idaho	Brush management tour	Field tour of past IDL brush treatments 8-	1 tour	IDFG, IDL	Paul

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Uplands		15-13 in the Willow Creek drainage			Wackenhut
East Idaho Uplands	New CRP/CCRP	CRP and SAFE acres planted	9827 acres	NRCS/FSA	Brett Gullett
East Idaho Uplands	Lek searches	Ground truth aerial lek counts and leks that had not been visited for some time.	20 leks	IDFG	Paul Wackenhut
East Idaho Uplands	Lower Blackfoot River occupied sage grouse habitat search	Search for sage grouse with trained dogs to find more occupied habitats	72 km	IDFG	Jack Connelly
East Idaho Uplands	Tex Creek juniper removal	Juniper removal in sage steppe habitat	25 acres	BLM	Benjamin Dyer
East Idaho Uplands	Bear Lake Plateau study	Continued progress on Bear Lake Plateau study	Progress on thesis – one chapter left to go	Utah State University	Jack Connelly
East Idaho Uplands	Eastern Idaho Grazing Association presentation	Sage grouse status report and sage grouse searches to Eastern Idaho Grazing	1 presentation	IDFG	Jack Connelly
East Idaho Uplands	BLM fence marking	Lower Blackfoot River fence marking along river	3.7 miles	BLM	James Kumm
East Idaho Uplands	Monitoring of brush treatments	Brush treatment proposal monitoring	3	IDL	Chad Taylor
Greater Curlew Valley	Curlew Sagebrush Planting	Tractor planting sagebrush seedlings	40 acres	BLM/IDFG	James Kumm/Brad Lowe
Greater Curlew Valley	Curlew Sagebrush Protection Project	Mow/masticate fuel breaks along roads to increase potential to control wildfire and protect existing stands of sagebrush. This is an extension of the treatments (315 acres) that were done last year (2012). An additional 60 acres were completed this year (2013). This project will be continued over the next few years.	60 acres	USFS	Chris Colt

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Greater Curlew Valley	Curlew Fence Marking Project	Mark 1.5 miles of range allotment fence for increased visibility by sage-grouse near leks.	1.5 miles	USFS	Chris Colt
Greater Curlew Valley	Curlew Wet Meadow/Riparian Protection Project	Construct livestock exclosures around wet meadows/spring sources and key riparian areas for improved sage-grouse brood rearing habitat.	22 acres	USFS	Chris Colt
Greater Curlew Valley	Habitat Plantings Upper Daniels / NW Malad	Vegetative mixes of grass & forbs were planted in farmed fields providing permanent cover for Sage Grouse in habitat areas.	377.3 acres	Private	Laren Nalder
Greater Curlew Valley	Habitat Plantings Mid Arbon Valley / E Side	Vegetative mixes of grass forbs and shrubs were planted in previously farmed fields providing permanent cover for Sage Grouse in habitat areas.	231 acres	Private	Laren Nalder
Greater Curlew Valley	Habitat Plantings Roy / Saliers Area	Vegetative mixes of grass forbs and shrubs were planted in previously farmed fields providing permanent cover for Sage Grouse in habitat areas.	26.5 acres	Private	Laren Nalder
Greater Curlew Valley	Habitat Plantings 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.	72.8 acres	Private	Laren Nalder
Greater Curlew Valley	Wildfire Recovery Deferred Grazing in Sage Grouse Habitat Areas, South Samaria Area	Deferment of livestock grazing in sage grouse habitat areas that were annually grazed, to help vegetative stands recover from wildfire & improve grass, forb & shrub health and productivity.	2817.7 acres	Private	Laren Nalder
Jarbidge	Field Tour	Visited some past projects			Brad Lowe
Jarbidge	Fence Marking	Attached vinyl markers to fences within 1km of active sage-grouse leks	12.7 miles of fence	IDFG	Brad Lowe

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Jarbidge	House Creek	Implementing improved grazing management through fence installation to reduce grazing pressure on riparian and defer grazing on remnant nesting habitat	2720 acres	NRCS/Private	
Jarbidge	Little House Creek	Rangeland manipulation (mowing) of selected areas with >25% mountain big sagebrush cover to improve brood rearing habitat	240 acres	NRCS/Private	
Mountain Home	2013 MH 1 SGI	Prescribed grazing	17, 953 acres	NRCS	Connie Tharp
Mountain Home	2013 MH 2 SGI	Prescribed grazing	1410. acres	NRCS	Connie Tharp
Mountain Home	2013 MH 3 EQIP	Brush management	72. acres	NRCS	Connie Tharp
Mountain Home	2013 MH 4 SGI	Watering Facility	3 watering facilities	NRCS	Connie Tharp
Mountain Home	2013 MH fires1	EQIP/WHIP seeding 11,321.8 (planned)	8750 acres	NRCS	Connie Tharp
Mountain Home	2013 MH fires 2	EQIP/WHIP wildlife friendly fencing 121,440' (planned)	7920 feet	NRCS	Connie Tharp
Mountain Home	2013 MH 5 SGI	Watering Facility	1 watering facility	NRCS	Connie Tharp
Mountain Home	2013 MH 6 SGI	Wildlife friendly fence	10,012 feet	NRCS	Connie Tharp
Mountain Home	2013 MH 7 SGI	Critical Area planting	1 acre	NRCS	Connie Tharp
Mountain Home	2013 MH 8 SGI	Range seeding	140 acre	NRCS	Connie Tharp
Mountain Home	2013 MH 9 SGI	Wildlife friendly fence	500′	NRCS	Connie Tharp
Mountain Home	Pony Fire Rehab IDL Land, Phase I	Aerial seeding of mountain big sagebrush, alfalfa, and small burnet on east side of	7,127 acres	IDL and IDFG	Ann Moser, Ruth Luke

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
		Danskin block			
Mountain Home	Little Sagehen Flat forb seedling plantings, Pony Fire	Hand planted 755 forb seedlings of 5 species on BLM land near the Little Sagehen Flat lek	35 acres	IDFG and BLM	Ann Moser, Joe Weldon
Mountain Home	BLM drill seeding, Pony Fire	Drill seeded bluebunch wheatgrass and Idaho fescue	3,588 acres	BLM	Bruce Schoeberl
Mountain Home	BLM ground broadcast forbs, Pony Fire	Broadcast seeded 4 forb species	50 acres	BLM	Bruce Schoeberl
Mountain Home	Mountain Home sage- grouse telemetry project	Radio-collared 3 additional birds in 2013, plus continued to monitor 3 others from 2012	6 radio-collared sage-grouse	IDFG	Ann Moser, Neil Hillesland
Mountain Home	Mountain Home sage- grouse habitat assessment	Completed vegetation sampling in Ditto Creek (all other data were collected in 2012); presented draft report to LWG	N/A	IDFG	Ann Moser
North Magic Valley	Reviewed BLM Special Use Permit	The LWG reviewed proposed expansion of the SUWS program in sage grouse habitat north of Gooding and Shoshone	0	BLM	Tara Anderson
North Magic Valley	Reviewed Governor's Alternative	LWG members attended a joint LWG meeting on the Governor's Alternative for the BLM/FS LUP Amendment EIS on 6-17-2013	0	USFS/Sportsmen	David Skinner, Walt Locke, Pail McClain
North Magic Valley	Conducted lek tours with Students	Guided lek tours, fence marking, and telemetry practice with Camas and Gooding High Schools, and private "Sage" School from Blaine County	3 tours	USFS/IDFG	David Skinner
North Magic Valley	Volunteer lek counts	Members of North Magic Valley participated in lek counts		IDFG	Regan Berkley
North Magic Valley	Fence marking	Mark fences near leks to reduce fence collisions by sage-grouse	8.6 miles	IDFG	Regan Berkley
Owyhee	Plan Revision	Completed revision of the plan March 2013		Owyhee County LWG	Donna Bennett

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Owyhee	Jacks Creek Basin Phase II	Wet meadow restoration. See photos and report		Owyhee County LWG	Art Talsma
Owyhee	Juniper Mastication on State Lands	Removal through mastication of juniper. Peer Field and OK Corral- Ted Payne	Peer 200 ac treated 1000 ac habitat Ok Corral 300 ac treated 1700 ac habitat	Owyhee County LWG	Art Talsma
Owyhee	Field tour	Field Tour of project sites May 29, 2013		Owyhee County LWG	Karen Steenhof
Owyhee	Diamond Basin	Juniper mastication	135 ac masticated 600 ac habitat created	Joyce Ranches	Paul Nettleton
Owyhee	Brunzell	Juniper mastication	125 ac masticated 215 ac habitat created	Joyce Ranches	Paul Nettleton
Owyhee	Pedracini	Juniper mastication	285 ac masticated 300 ac habitat created	Joyce Ranches	Paul Nettleton
Owyhee	Pete Wilson	Juniper mastication and lop and lay	150 ac treated 400 ac habitat	O6 Ranch	Dennis Stanford
Owyhee	2013 BR 1 WHIP	Brush management-juniper	125.0 ac	NRCS	Connie Tharp
Owyhee	2013 BR 2 SGI	Brush management-juniper	483.3 ac	NRCS	Connie Tharp
Owyhee	2013 BR 3 SGI	Brush management-juniper	80. ac	NRCS	Connie Tharp
Owyhee	2013 BR 4 SGI	Brush management-juniper	240. ac	NRCS	Connie Tharp
Owyhee	2013 BR 7 SGI	Brush management-juniper	482 ac	NRCS	Connie Tharp
Owyhee	2013 BR 8 SGI	Brush management-juniper	361 ac	NRCS	Connie Tharp

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
Owyhee	2013 BR 9 SGI	Brush management-juniper	145 ac	NRCS	Connie Tharp
Owyhee	2013 BR 10 SGI	Brush management-juniper	168 ac	NRCS	Connie Tharp
Owyhee	2013 BR 11 SGI	Brush management-juniper	95 ac	NRCS	Connie Tharp
Shoshone Basin	Shoshone Basin Habitat Mapping	Further refinement of a map depicting sage-grouse nesting habitat quality. These data will be used to assess where we are in relation to our management objectives and to set new objectives within the planning area.		BLM	Jesse Rawson
Shoshone Basin	Lek Surveys	Coordinate with volunteers to conduct lek routes and surveys	Multiple counts on 37 leks	IDFG	Randy Smith
Shoshone Basin	Shoshone Basin Access and Habitat Collaborative	IDFG contracted with SharedVision, Inc. to help the LWG implement projects, facilitate the exchange of new ideas and develop a long-term vision for the direction of the group.	SharedVision hosted a well attended breakfast meeting, attended 2 LWG meetings and met privately with many of the landowners. A progress report of their accomplishments was prepared.	IDFG	Randy Smith
South Magic Valley	Raft River and Craters of the Moon Sage Grouse Monitoring	Monitoring of 82 Male and Female Sage Grouse from spring to winter through radio and GPS collars.		BLM Assistance Agreement implemented by IDFG	Ross Winton, Jeremy Bisson
South Magic Valley	Burley Landscape Sage Grouse Habitat	Mitigate Juniper Encroachment in the Jim Sage area	10,000 Acres	Pheasants Forever, NRCS,	Scott Scroggie

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
	Restoration Project			BLM, IDFG	
South Magic Valley	Fence Marking	Marking of fences in the LWG planning area	No consolidated number from all collaborators	NRCS, BLM	Scott Scroggie
Upper Snake	Salmon-Challis NF Sage grouse distribution, seasonal use area delineation	Radio tagged 4 male and 5 female sage-grouse in the Little Lost drainage. Monitored their location on a weekly basis. Location data being used to refine Forest Service sage-grouse seasonal habitat map. FS seasonal habitat map is used to determine appropriated HAF fourth order habitat assessment to be conducted within livestock grazing pastures. Monitoring data is provided monthly to BLM and IDFG. Efforts will expand in 2014.	na	USFS	Mike Foster
Upper Snake	Lek Tour	Lek tours for BYU-I to see sage-grouse lekking behavior	12 students and one instructor	IDFG	Terry Thomas
Upper Snake	Sand Creek lek search	Visited known leks and searched area for new leks. Area of search was East of Red Road, West of Sand Creek road and north of the White Sands. Verified 22 leks as either active or inactive and found 19 new leks.	~ 80 square miles	IDFG	Eric D. Anderson
Upper Snake	Lek tours	Lek tours for DOE personnel	4 tours for 12 people	GSS	Quinn Shurtliff
Upper Snake	Weed control	DOE weed control efforts	1368 acres	DOE	Jack Depperschmidt
Upper Snake	Habitat Improvement Projects on Mud Lake WMA	Weed Control in sage-steppe habitat	350 Acres	IDFG	Curtis Hendricks

	LWG accomplishment or			Lead agency or	Contact
LWG ^a	project name	Description	Units	organization	information
Upper Snake	CRP SU 45	CP1-40pt – perennial grass seeding w/ at least 3 grasses and 1 forb	92.6 acres	NRCS	J. O'Neill
Upper Snake	CCRP - SAFE	CP38E-2 – native grass and forb seeding w/ at least 4 native grasses and 4 forbs	294.1 acres	NRCS	J. O'Neill
Upper Snake	TNC-Crooked Creek Fence Marking	Fence marking at TNC's Crooked Creek Preserve	4.26 miles	TNC	
Upper Snake	Fence Marking	High Collision Risk Fence near Table Butte	4 Miles	BLM/ Eagle Scout Project	Devin Englestead
Upper Snake	Fence Marking	High Collision Risk Fence near Medicine Lodge	4 Miles	BLM/ Eagle Scout Project	Devin Englestead
Upper Snake	Fence Marking	High Collision Risk Fence near Menan Buttes	4 Miles	BLM/IDFG	Devin Englestead, Andrew Sorensen
Upper Snake	Upper Snake Field Office (BLM) annual on-going noxious weed treatments	Chemical (Herbicide) Treatments	12,550 acres	BLM	Scott Minnie
Upper Snake	Upper Snake Field Office (BLM) annual on-going noxious weed treatments	Mechanical Treatments	15 acres	BLM	Scott Minnie
Upper Snake	Lemhi County CWMA annual on-going noxious weed treatments	Chemical (Herbicide) Treatments	1.0 acres	Lemhi Co. CWMA	Jeremey Varley
Upper Snake	Breazeale Springs	Fencing	2,800 feet of wildlife friendly jack fence around the springs to exclude it from cattle grazing. (about 13 acres)	NRCS/BLM/Permi ttee	Rosana Rieth, Vince Guyer
Upper Snake	Fence Removal	Removed fence on Mud Lake WMA	10 miles	IDFG/NRCS	Curtis

LWG ^a	LWG accomplishment or project name	Description	Units	Lead agency or organization	Contact information
					Hendricks
Upper Snake		Raven monitoring		Private Citizen	Justin Naderman
Upper Snake	Predator Management	Raven monitoring		INL	Jack Depperschmidt
Upper Snake	Dubois Grouse Days	Annual two day celebration	85 attendees, second highest ever	Dubois Grouse Days Committee	Jeff Liday
Upper Snake	Presentation at Dubois Grouse Days	Presented Sage-Grouse Population and Movement Data to Attendees	1 presentation	IDFG	Curtis Hendricks
Upper Snake	Guided tour bus at Dubois Grouse Days	Answered questions and discussed sage- grouse and other wildlife information	1 Tour Guided	IDFG	Curtis Hendricks
Upper Snake	Hunting season Recommendations	As a local working group developed hunting season recommendations to present to IDFG		Upper Snake Sage-grouse LWG	Terry Thomas
West Central	Native range seeding	Seeded 31 acres of private land	31 acres	NRCS	Michael Raymond
West Central	Upland wildlife habitat management	Implement prescribed grazing program on private land	18,852 acres	NRCS	Michael Raymond
West Central	Fence		5,600 feet	NRCS	Michael Raymond
West Central	Spring development		1 spring development	NRCS	Michael Raymond
West Central	Livestock pipeline		155 feet	NRCS	Michael Raymond
West Central	New watering facility		1 watering facility	NRCS	Michael Raymond
West Central	Watering facility retrofit	Retrofitted existing watering facility to make it wildlife friendly	1 watering facility	NRCS	Michael Raymond

^a Acronyms used in this table: BLM = Bureau of Land Management; BYU-I = Brigham Young University-Idaho; CCRP = Continuous signup, Conservation Reserve Program; CRP = Conservation Reserve Program; CWMA = Coordinated Weed Management Area; DOE = Department of Energy; ESR = Emergency Stabilization and Rehabilitation; EQIP = Environmental Quality Incentives Program; FSA = Farm Service Agency; GIS = Geographic Information System; GPS = Global Positioning System; HAF = Habitat Assessment

Framework; IDFG = Idaho Department of Fish and Game; IDL = Idaho Department of Lands; LWG = Local Working Group; NRCS = Natural Resources Conservation Service; PR = Pitman Robertson; RAC = Resource Advisory Committee; SAFE = State Acres for Wildlife Enhancement; SGI = Sage-grouse Initiative; TNC = The Nature Conservancy; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; WHIP = Wildlife Habitat Incentives Program; WMA = Wildlife Management Area.