

**East Idaho Uplands Sage- grouse Local Working Group
Sage- grouse Conservation Plan**



Approved by Consensus, February 8, 2011

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Acronyms

BLM	Bureau of Land Management
CCRP	Continuous Conservation Reserve Program
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
EQIP	Environmental Quality Incentive Program
FMP	Fire Management Plan
FMU	Fire Management Unit
FSA	Farm Service Agency
GAP	Gap Analysis Program
GIS	Geographic Information System
GPS	Global Positioning System
IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
LWG	Local Working Group
NAGP	North American Grouse Partnership
NRCS	Natural Resources Conservation Services
OHV	Off Highway Vehicle
OSC	Office of Species Conservation
RA	Resource Assessments
SAC	Sage-grouse Advisory Committee
SGPA	Sage-grouse Planning Area
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
SGPA	Sage-grouse Planning Area
WAFWA	Western Association of Fish and Wildlife Agencies
WHIP	Wildlife Habitat Incentive Program

East Idaho Uplands Sage-grouse Local Working Group Sage-grouse Conservation Plan

I. INTRODUCTION

A. *Conservation Goals and Objectives for the East Idaho Uplands Sage-grouse Planning Area*

A. Conservation Goals

Utilize a collaborative effort that fosters and supports management of sage-grouse and sage-grouse habitat within the East Idaho Uplands Sage-grouse Planning Area (SGPA) (see Figure 1) by fostering effective coordination between government agencies, tribes, non-government organizations, landowners, livestock operators, and interested individuals; and integrating national, regional, and local input and knowledge.

This plan will provide information, guidance, and conservation tools for protecting and enhancing sage-grouse populations and their habitats in the East Idaho Uplands SGPA in a manner that supports sage-grouse as well as a healthy diversity and abundance of wildlife species and human uses. This will be a “working document” so as local and regional conditions change and new information, technology, and techniques become available, this plan may be refined to reflect these changes and information.

a. Population Conservation Objectives

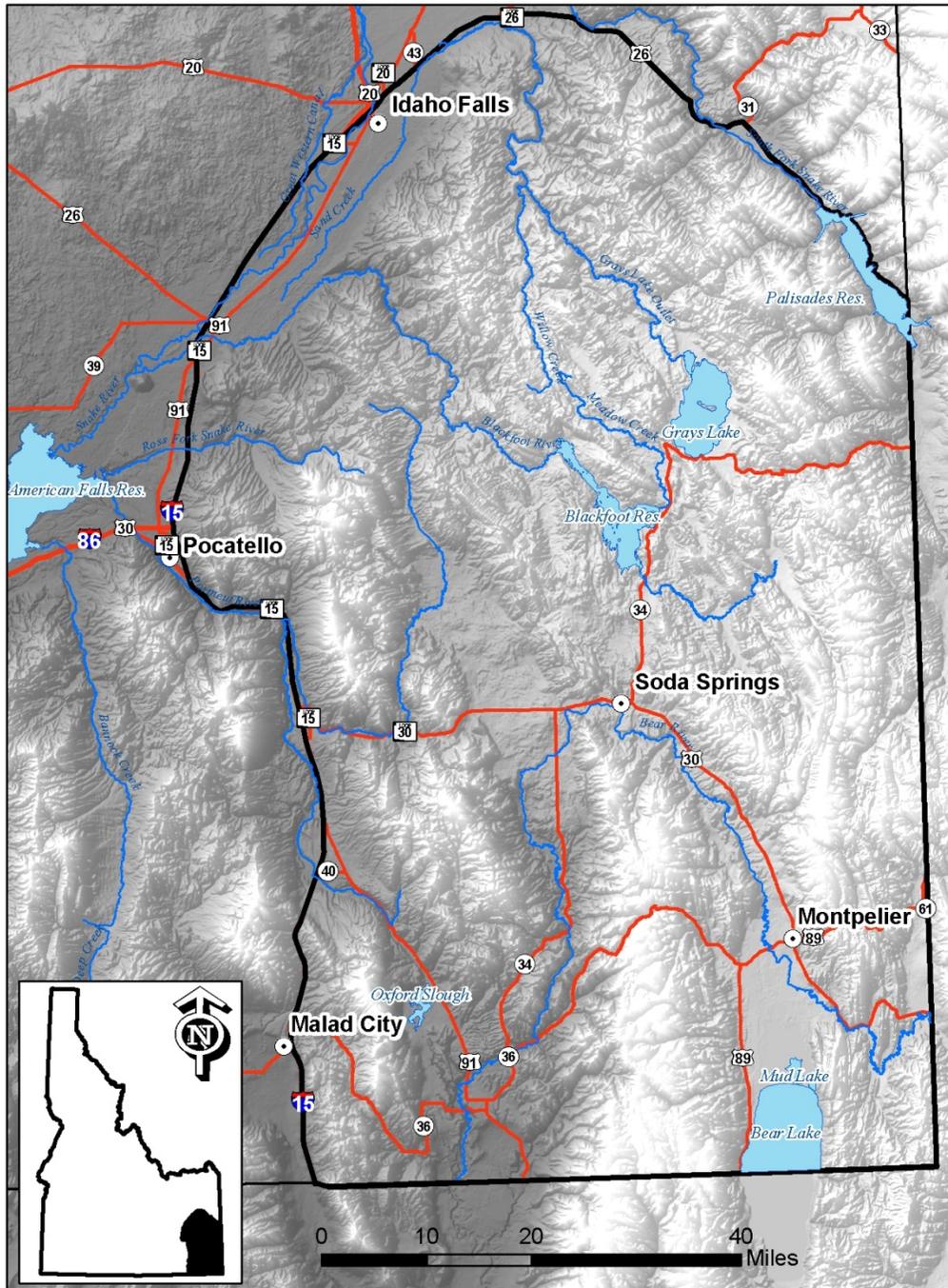
1. Determine the extent of current populations. Determine as well as possible, historical populations.
2. Determine the seasonal movements of sage-grouse in the East Idaho Uplands SGPA
3. Maintain and, where feasible, increase current distributions and abundance of sage-grouse within the East Idaho Uplands SGPA.
4. Reduce, eliminate, and mitigate the adverse impacts to sage-grouse within the East Idaho Uplands SGPA.
5. Share information and work collaboratively with various government (federal, tribal, state, and local) agencies, landowners, and other entities to develop a better understanding of the direct, indirect, and cumulative effects that land management decisions might have on sage-grouse populations.

b. Habitat Conservation Objectives

1. Maintain, rehabilitate, and restore sage-grouse habitats and the continuity of their habitats within the East Idaho Uplands SGPA.
2. Manage the sagebrush steppe ecosystems within the East Idaho Uplands SGPA for a diverse species composition of sagebrush, grasses, and forbs and diverse structural characteristics that promote rangeland health and sage-grouse habitat requirements.
3. Share information and work collaboratively with the various government (federal, state, and local) agencies, landowners, and other entities to develop a better understanding of the direct, indirect, and cumulative effects that land management decisions might have on sage-grouse habitat.

- Coordinate with land management agencies and other entities to map and monitor sage-grouse seasonal habitat, to identify and prioritize habitat rehabilitation and restoration projects, and document the effectiveness of projects and land management decisions.

Figure 1. East Idaho Uplands SGPA



B. *Summary of Local Working Group Participation and Planning Process*

The Idaho Sage-grouse Advisory Committee (SAC) completed the *Conservation Plan for the Greater Sage-grouse in Idaho* in July 2006 (hereafter referred to as the 2006 Sage-grouse State Plan). That plan directed that local working groups throughout the state develop local conservation plans addressing local conditions, threats, and opportunities. The efforts of the East Idaho Uplands Sage-grouse LWG began when the Idaho Department of Fish and Game (IDFG) hosted a kick-off meeting in February 2007.

Aided by the services of a neutral facilitator, the East Idaho Uplands Local Working Group (LWG) met approximately once a month beginning in February 2007. Meetings have been scheduled in Pocatello, Lava Hot Springs, Soda Springs, and Montpelier to accommodate invited participants. The group's first task was to develop a Working Charter to guide its work during development of this plan. Another initial task involved development of a mailing list of interested individuals and organizations to invite to participate in the process. The Mailing List is included as Appendix A.

The East Idaho Uplands LWG then began a process of learning about sage-grouse and sagebrush ecology and considering the risk factors to the bird and its habitat in the East Idaho Uplands SGPA. Experts were invited to provide informational presentations. Members collected and reviewed available information on sage-grouse and the various factors that affect the bird's populations and habitat.

In August 2007, the group ranked the various threats faced by sage-grouse and habitat in the East Idaho Uplands SGPA into the following three categories.

High Risk to Sage-grouse and Habitat (listed alphabetically)

- Conversion of Conservation Reserve Program Lands
- Human Disturbance
- Infrastructure
- Isolated Populations
- Lack of Data
- Urban/Exurban Development

Medium Risk to Sage-grouse and Habitat:

- Livestock Impacts
- Mines, Landfills, and Gravel Pits
- Predation
- Sagebrush Control
- West Nile Virus

Low Risk to Sage-grouse and Habitat:

- Agricultural Expansion
- Annual Grasslands
- Climate Change
- Conifer Encroachment

- Falconry
- Insecticides
- Prescribed Fire
- Seeded Perennial Grasslands
- Sport Hunting
- Wildfire

In September 2007, the East Idaho Uplands LWG began reviewing the menu of conservation measures presented in the 2006 Sage-grouse State Plan. Relevant and appropriate conservation measures were adopted, and in some cases, adapted to the East Idaho Uplands SGPA. Irrelevant and inappropriate conservation measures were not included. Over the course of this effort, three categories of threats that had been ranked in August of 2007 were later combined with other threats as follows:

- Isolated populations was combined with lack of data and the combined threat was ranked as a high risk to sage-grouse/habitat within the EIU SGPA
- Sagebrush control was combined with prescribed fire. This category includes mechanical and chemical treatments as well as prescribed fire and was ranked as a medium risk
- Falconry was combined with sport hunting and ranked as a low risk.

Following completion of development of conservation measures to address all threat categories, the East Idaho Uplands LWG drafted additional sections for inclusion in the Conservation Plan in accordance with direction provided in the 2006 Sage-grouse State Plan.

The East Idaho Uplands LWG submitted the draft Conservation Plan to all relevant agencies for review and comment in March of 2010. All comments were considered; some resulted in changes to the document.

The East Idaho Uplands LWG then released the draft Conservation Plan for a public review period in September of 2010. All comments were considered; some resulted in changes to the document.

Before finalizing the final Conservation Plan, the LWG approved a Working Charter for future operations. That document is included as Appendix B.

The East Idaho Uplands LWG subjected the final plan to one final review. Following discussion to resolve any remaining concerns, the group reached consensus to call this Conservation Plan final on February 8, 2011.

Although not all participants supported working by consensus initially, the East Idaho Uplands LWG has accomplished all of its work to date through collaborative processes and all decisions through February 8, 2011 were made by consensus. Consensus is defined by the East Idaho Uplands LWG as “all understand and will support the final decision.”

After each meeting of the LWG conducted during the development of this final Conservation Plan, a “group memory” was developed by the facilitator and then distributed to all individuals on the mailing list (see Appendix A). Each group memory listed the individuals who participated in the meeting, described the work completed at the meeting, and documented decisions made by the LWG. Copies of all group memories as well as other documentation of the development of this plan are maintained by the Wildlife Bureau of IDFG and can be obtained upon request.

II. STATUS OF SAGE-GROUSE HABITAT AND POPULATION IN THE EAST IDAHO UPLANDS SGPA

A. *Population Overview*

The East Idaho Uplands SGPA is possibly the least studied and understood grouping of sage-grouse populations in Idaho. Limited seasonal access (due to winter conditions and associated snow depth over a longer timeframe), sagebrush fragmentation, complicated ownership patterns, and limited harvest data have all contributed to a lack of information. Local lore suggests in the past “the sky was black with sage chickens”. Sage-grouse hunting in Idaho has likely occurred throughout the state’s history; however, at least as far back as the 1940s legal harvest has been closely regulated. In some years, harvest within the East Idaho Uplands SGPA was closed entirely. In light of the lack of information on population levels and habitat priorities, the East Idaho Uplands SGPA working group made the recommendation to the Idaho Fish and Game Commission that hunting of sage-grouse within the planning area be curtailed. In 2008 the hunting season within the East Idaho Uplands SGPA was closed. Habitat alterations have been cited as reason for concern dating back to at least the 1960s. Though impacts from widespread rangeland fire such as in the Big Desert appear to be less critical, other habitat alterations cited include development associated with the phosphate mining industry and brush removal to serve agricultural interests. In a 1966 intra-departmental memo, an IDFG biologist expressed concern with road construction due to mining activity and brush spraying projects supported by federal farm programs. It was predicted that the downward trend in sage-grouse populations would continue. More recently residential development is beginning to encroach on habitat near Bear Lake, possibly impacting breeding and wintering habitat. In this and other locations, disturbance to wintering birds may be of concern as over the snow vehicles become increasingly popular for recreation.

1. **Population Surveys**

Since at least the 1960s, IDFG has been collecting sage-grouse population data in the form of lek searches, annual lek attendance, brood surveys, wing analysis, and harvest data. Lek information and other observations have also been provided by the Bureau of Land Management (BLM), Shoshone Bannock Tribes, U.S. Forest Service (USFS) and volunteers. Unlike some of the adjacent sage-grouse planning areas, the East Idaho Uplands SGPA has not been part of any IDFG sponsored research on productivity or habitat use.

Average lek attendance dating back to 1960 does not demonstrate a clear pattern as numbers for given leks have fluctuated over decades. In some areas such as the upper Blackfoot River drainage, the long term trend is decidedly downward, though lek location drift does not appear to be well understood or documented. The history of managing sage-grouse conservatively in the 1950s (closed hunting seasons), implies a concern with numbers at that time, which might be further interpreted as indicating higher numbers existed prior to recorded population surveys.

2. **Lek Attendance**

Sage-grouse leks have been monitored since the 1960s (Table 1). Some have been counted more or less as lek routes. Actual routes have not been designated or handled consistently as individual leks have dwindled away and new leks have been discovered. Some individual leks have been monitored for periods exceeding 30 years. Potential for additional formal lek routes

Table 1. Peak lek attendance within the East Idaho Uplands SGPA, 1960-2008

Year	Angus Cr	Corral Cr	Allen Ranch (Lower)	Long Valley (Enoch)	Wooley Valley	Geneva Cemeter	Slug Cr One	Slug Cr Two	Worm Cr	Spring Cr	Dry Valley	Trail Creek	Sage Valley	Cow Cr One	Cow Cr Two	Bloom Mine	Bloom Bottom	Jacobs Cany	Little Vall	Indian Cr	Corbrid Ranch	State Line	Sheep Creek	Red Mtn	Trans Hollo	Tot Leks Cntd	Avg Peak Attend	
1960			72	--	--																					1	72	
1961			60	38	15																						3	38
1962			55	36	13																						3	35
1963			27	42	56																						3	42
1964			46	0	0																						3	15
1965			9	18	10																						3	12
1966			--	--	--																						0	--
1967	14		0	0	34	12																					5	12
1968	--		0	9	18	26																					4	13
1969	--	28	--	7	32	17	16		82	15																	7	28
1970	0	56	--	18	13	21	0		0	0	0																9	12
1971	0	50	0	6	10	41	0		0	0	--																9	12
1972	--	29	0	2	22	42	--		--	--	0																6	14
1973	--	17	--	3	20	42	33	6	--	--	--											6					7	18
1974	--	48	--	--	--	64	--	--	--	--	--											--					2	56
1975	--	13	--	3	--	105	--	--	--	--	--											--					3	40
1976	--	12	--	--	6	83	25	--	--	--	--											--					4	32
1977	--	1 ¹	--	--	17	66	12	--	--	--	--											--					4	24
1978	--	--	--	--	11	60	--	--	--	--	--	21										--					3	31
1979	--	--	--	--	21	53	13	4	--	--	--	43										--					5	27
1980	--	--	--	0	10	56	9	0	--	--	--	24										--					6	17
1981	--	--	--	--	13	36	8	--	--	--	--	23										--					4	20
1982	--	--	--	--	8	24	17	--	--	--	--	45										--					4	24
1983	--	--	--	--	7	14	15	--	--	--	--	34	3									--					5	15
1984	--	--	--	--	2	11	17	--	--	--	--	33	--									--					4	16
1985	--	--	--	--	0	14	12	--	--	--	--	24	0									--					5	10
1986	--	3	--	--	0	16	15	--	--	--	--	31	--									--					5	13
1987	--	--	--	--	0	23	15	--	--	--	--	38	--									--					4	19

Table 1. Peak lek attendance within the East Idaho Uplands SGPA, 1960-2008

Year	Angus Cr	Corral Cr	Allen Ranch (Lower)	Long Valley (Enoch)	Wooley Valley	Geneva Cemet	Slug Cr One	Slug Cr Two	Worm Cr	Spring Cr	Dry Valley	Trail Creek	Sage Valley	Cow Cr One	Cow Cr Two	Bloom Mine	Bloom Bottom	Jacobs Cany	Little Vall	Indian Cr	Corbrid Ranch	State Line	Sheep Creek	Red Mtn	Trans Hollo	Tot Leks Cntd	Avg Peak Attend	
1988	--	--	--	--	0	17	11	--	--	--	--	24	--								--					4	13	
1989	--	--	--	--	--	9	8	--	--	--	--	27	22	70							--	8					6	24
1990	--	--	--	--	--	4	8	10	--	--	--	32	--	80							--	24					6	26
1991	--	--	--	--	--	--	7	26	--	--	--	22	--	--							--	--					3	18
1992	--	--	--	--	--	0	8	24	--	--	--	28	--	32	6						--	--					6	16
1993	--	--	--	--	--	--	8	5	--	--	--	20	--	0	0						--	--					5	9
1994	--	--	--	--	--	0	6	10	--	--	--	13	--	12	0	14		19	16	1	--	--				10	9	
1995	--	--	--	--	--	--	1	0	--	--	--	8	--	0	--	13		7	20	--	--	--				7	7	
1996	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	25		--	--	--	--	--				1	25	
1997	--	--	--	--	--	--	2	3	--	--	--	6	--	--	--	35		--	--	--	--	--				4	12	
1998	--	--	--	--	--	0	2	0	--	--	--	12	--	0	--	25		--	--	--	--	--				6	7	
1999	0	--	--	--	--	0	4	6	--	--	--	8	--	0	0	29	67	--	--	--	--	--				9	13	
2000	0	--	--	--	--	0	--	--	--	--	--	10	--	--	--	27	15	8	36	--	--	--	45			8	18	
2001	--	--	--	--	--	--	0	0	--	--	--	15	--	--	--	23	10	0	30	--	--	--	63			8	18	
2002	--	--	--	--	--	--	0	0	--	--	--	15	--	--	--	15	8	--	--	--	--	--	38			6	13	
2003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	--	--	40			2	27	
2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	69			1	69	
2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	31	0	--	--	--	--	--	77			3	36	
2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	--	56	6		3	28	
2007	--	--	--	--	--	--	--	--	--	--	--	--	--	12 ²	8 ²	27	--	--	16 ²	32 ²	--	--	34	8	16 ²	8	19	
2008	--	--	--	--	--	22	--	--	--	--	--	--	--	--	--	21	--	0 ²	20 ²	33 ²	--	--	31	8	0 ²	8	17	

¹ File memo suggests monitoring be discontinued

² Ground search by BLM personnel

seems to exist in several areas within the East Idaho Uplands SGPA; however, higher elevations and persistent snow cover may preclude the establishment of conventional lek routes due to accessibility constraints. In some areas it may be more practical to carry out periodic aerial surveys.

The earliest lek monitoring records are from roughly ten leks in the Blackfoot River drainage and also near the Wyoming border east of Montpelier. Through 2008 eighty-three leks had been identified in the East Idaho Uplands SGPA, mostly concentrated in the vicinity of the Blackfoot River/Willow Creek drainages and Bear Lake. At least four additional leks are known to exist on the Shoshone Bannock Indian Reservation. Some leks are in close proximity to one another and likely represent breeding activity centers. As of 2008, eleven of the leks had been classified as “active”, with the remainder considered to be of “unknown” status. A scattering of leks is known to exist in the southwest portion of the planning area, but there has been no systematic monitoring or lek searches.

3. Lek Searches

Given the results of recent lek searches, it seems eleven active leks within the East Idaho Uplands SGPA is conservative. Beginning in 1964, aerial lek searches within the planning area have been conducted in ten separate years, including the most recent effort in 2009 (Table 2). These lek searches have contributed significantly to our knowledge of breeding activity centers and lead to long term monitoring. Incidental and concerted ground searches by various agency personnel as well as word-of-mouth knowledge from various land managers have contributed to this data base. Miscellaneous management activities, especially those conducted aurally, can contribute to our knowledge of lekking activity and other seasonal use patterns. For example, annual mule deer trend counts conducted by IDFG involve many hours of flight time each year. Observations of sage-grouse during mule deer winter counts would, undoubtedly, help identify sage-grouse winter habitat.

Table 2. Aerial lek search efforts

Year	Area Searched	No. leks observed	Date(s)
1964	West Bear Lake	4	4/28
1966	Georgetown/West Bear Lake/Geneva	1	4/29
1987	East Bear Lake	3	4/10
1988	West Blackfoot Reservoir	1	4/1
1999	East Bear Lake/West Bear Lake	15	4/13,14,15,16
2000	West Bear Lake/East Bear Lake/Blackfoot River/Chesterfield ^a	24 ^b	4/9,11,20,21,27,28
2001	Blackfoot River/Wyoming border	7	4/25,26
2004	East Bear Lake/Grays Lake	29 ^c	3/12,13; 5/4,5,6
2008	Tex Creek to Willow Cr	4	4/1,2,7,8,28,29;5/2

^a Included Sheep Creek , Geneva and Red Mtn. east of Montpelier
^b This survey and others through 2008 have not been thoroughly followed up with ground checks.
^c Many of these 'leks' are grouped and closely associated with previously known leks – none have been entered as new leks. The May counts should be entered as new leks.

4. Winter Activity

Winter use is not as well documented. Numerous incidental sightings have been recorded, but the information is not adequately pooled at this time. Many observations result from aerial surveys involving big game, but there are also ground based sightings provided by agency

personnel. Wintering birds have been observed in the Blackrock Canyon area east of Pocatello, in the foothills west of Chesterfield Reservoir, on Treasureton Hill Summit north of Preston, on both sides of Bear Lake and in higher elevations between Willow Creek and McCoy Creek, Tex Creek, Taylor Mountain, Fall Creek, and Grays Lake Outlet.

5. Production

Historically, production has been monitored by conducting “random brood counts”, and “brood trend routes” and through analysis of wings collected from wing barrels. More recently, production monitoring is based solely on wing analysis from harvested birds. Since 1985, wing barrels have been placed at a number of locations within the East Idaho Uplands SGPA which may have contributed to a pooled sample. Wing barrel locations have included the Bear River, Blackfoot River, Portneuf River and Willow Creek drainages, as well as the Bear Lake area. Hunters are instructed to provide one wing from each bird harvested and biologists then determine the age and sex of birds based on stage of molt and other visual characters. All East Idaho Uplands SGPA wings have been combined into one sample and analyzed annually to determine sage-grouse production from the previous spring. Production has varied annually, though in some years small sample size has produced questionable data (Table 3). However, the hunting season has been closed since 2008 in the East Idaho Uplands SGPA which hinders data collection and knowledge of annual production.

Year	N ^b	Juv:100 females ^c	Juv:100 adults ^d	Female Wings	% unsuccessful Females ^c
1988	38	383	153	6	--
1990	126	282	168	28	--
1991	113	110	92	49	57
1992	105	177	110	31	74
1993	26	767	767	3	33
1994	30	271	173	7	80
1995	19	260	217	5	43
1996	18	1,400	350	1	100
1997	14	200	133	4	25
1998	8	133	100	3	33
1999	19	50	36	10	40
2000	9	133	80	3	100
2001	3	--	--	0	--
2002	8	100	60	3	100
2004	26	300	136	5	80
2005	17	550	183	2	100
2006	7		600	0	

^a As described in Conservation Plan for the Greater Sage-grouse in Idaho (2006)

^b The only years that have sufficient sample size to interpret wing information is 1990, 1991, and 1992. The number of wings from other years is insufficient and resulting ratios are not accurate.

^c Females = adults + yearlings.

^d Adults = adults + yearlings.

6. Harvest Characteristics

Hunting seasons have traditionally run from the third weekend in September thru October. In areas open to hunting, extended seasons have traditionally been offered for falconry, with reduced bag limits for sage-grouse. Interestingly, some of the more conservative hunting seasons in the East Idaho Uplands SGPA occurred in the 1950s and 1960s, with more liberal seasons occurring in the 1970s, 1980s, and the early 1990s (Table 4). Portions of what is now the East Idaho Uplands SGPA were singled out in various years with particularly conservative regulations for Bear Lake County and portions of Bonneville County. For example, in addition to the area wide hunting closures during the 1950s, Bear Lake County was closed in 1982, along with portions of Bannock and Bingham Counties in 1988-1989. The Grays Lake area was more restricted from 1969-1979. Legal hunting seasons have been offered for all but thirteen of the last 60 years. Open seasons have ranged from 1.5 to 30 days in length with bag limits from one to three birds per day.

Table 4. Greater sage-grouse hunting seasons in the East Idaho Uplands SGPA, 1949-2008

Year	Season Length	Bag/Possession Limit
1949	1.5 ^a	2/2
1950	1.5	2/2
1951	Closed	N/A
1952	Closed	N/A ^b
1953	Closed	N/A
1954	Closed	N/A
1955	Closed	N/A ^b
1956	Closed	N/A
1957	Closed	N/A
1958	Closed	N/A
1959	Closed	N/A
1960	Closed	N/A
1961	Closed	N/A
1962	Closed	N/A
1963	2	2/2
1964	2	2/2
1965	2	2/2
1966	5	2/2
1967	5	2/2
1968	9	2/2
1969	9	3/3
1970	9	3/3
1971	9	3/6
1972	9	3/6
1973	9	3/6
1974	9	2/4
1975	9	2/4
1976	--	--
1977	14	3/6
1978	14	3/6
1979	14	3/6

Table 4. Greater sage-grouse hunting seasons in the East Idaho Uplands SGPA, 1949-2008

Year	Season Length	Bag/Possession Limit
1980	14	3/6
1981	14	3/6
1982	14	3/6
1983	14	1/1
1984	14	1/1
1985	14	3/6
1986	14	2/4
1987	14	2/4
1988	16	2/4
1989	16	2/4
1990	30	3/6
1991	30	3/6
1992	30	3/6
1993	30	3/6
1994	30	3/6
1995	30	3/6
1996	7	1/2
1997	7	1/2
1998	7	1/2
1999	7	1/2
2000	7	1/2
2001	7	1/2
2002	7	1/2
2003	7	1/2
2004	7	1/2
2005	7	1/2
2006	7	1/2
2007	7	1/2
2008	Closed	N/A

^a Days
^b Statewide closure

Check stations to monitor harvest have not been conducted within the planning area. Telephone survey data evaluating harvest has been collected since 1983, except for 2003. Prior to 2004, telephone survey data was collected and reported according to IDFG administrative region, and from 2004 to 2007 data was collected and reported by zone. Because of changes in the way hunters were surveyed, hunter and harvest data from 2004 through 2007 are not comparable with hunter and harvest data from earlier years. However, “birds harvested per hunter day” over the entire Southeast Region has ranged from 1.3 in 1986 to 0.3 in 2001. In the Upper Snake region, “birds harvested per hunter day” has ranged from 1.4 in 1989 to 0.5 in 2004. Data collected from hunter check stations in areas not within the East Idaho Uplands SGPA indicate a similar range of success rates as far back as 1957 (the lowest success rate recorded is 0.1 birds per hunter at the American Falls check station in 1993). Wing barrels have been used to collect hunter report card data in the Bear Lake Plateau area since 1986. This data has been kept separate so that limited harvest information pertaining to the Bear Lake Plateau is

available. The single highest harvest success rate recorded within either the Southeast or Upper Snake Regions is 1.5 birds per hunter, derived from Bear Lake Plateau report cards in 1990.

7. Management Implications

The East Idaho Uplands SGPA lacks sufficient data on populations and habitat use for reliable harvest recommendations, prioritization of habitat improvements, or assessment of habitat condition. Though it seems clear that at least some localized populations have declined, it is difficult to say whether overall numbers are stable or trending downward.

Steps could be taken immediately to set up standardized data collection pertaining to lek monitoring (annual lek routes or periodic aerial surveys). Telemetry work could also be initiated in areas where population centers have been identified to better understand seasonal use patterns. Additional aerial lek searches should be conducted in areas where population status is unknown such as portions of the Bear River drainage downstream from Montpelier to the Utah border and including upper Cottonwood Creek in Bannock, Caribou, and Franklin Counties. Future telemetry work to document habitat use should be focused on areas that are most threatened, such as those along the west side of Bear Lake which are currently threatened by development. Both lek searches and telemetry studies were recommended for a portion of the East Idaho Uplands SGPA in 2002. In 2008-09, the East Idaho Uplands LWG applied for grants with the Idaho Governor's Office of Species Conservation (OSC) and the U.S. Fish and Wildlife Service. One grant was approved which led to a lek search effort conducted in the spring of 2009. Similar proposals should be submitted for 2010. The East Idaho Uplands LWG should also work with BLM, IDFG, Idaho Department of Lands (IDL), Shoshone Bannock Tribes, and USFS to coordinate standardized monitoring of seasonal use, such as lek attendance. Observations made incidental to other management activities should be gleaned from available data and archived more reliably in the future. Radio marked hens will also provide information on productivity; however, in lieu of wing samples that are obtained from hunted populations, it may be appropriate to consider standardized brood surveys while hunting seasons remain closed.

B. Habitat Conditions Overview

The East Idaho Uplands SGPA encompasses approximately 3.9 million acres in southeast Idaho (Figure 1). This area lies within the northern extent of the Great Basin Region (the Snake River Plain) and the western edge of the Wyoming Basin Region. In general, it is cold desert habitat with variable precipitation and harsh climatic conditions; an area of mountain ranges rising from semi-arid sagebrush plains and agricultural valleys with scattered urban or developed areas. Forestlands, mainly above 6,000 feet in elevation, support stands of Douglas-fir, subalpine fir, lodgepole pine, Engelmann spruce, and aspen. Shrubs and trees such as sagebrush, rabbitbrush, maple, serviceberry, snowberry, and/or juniper dominate the non-forested (range) areas.

The area within the East Idaho Uplands SGPA contains inter-mixed land ownership and varying land uses. Approximately 49% of the planning area is privately owned and 7.3% are tribal lands (Shoshone-Bannock Tribe/Fort Hall Reservation). The USFS administers 28% of the planning area, IDL 7.4%, BLM 6.3%, and other federal agencies (Bureau of Reclamation, US FWS) 1.5%. The remaining 1% is administered by other state agencies (IDFG and Idaho Department of Parks and Recreation).

The planning area contains seven land/vegetation cover types derived from the Gap Analysis Program (GAP; Scott et al, 2002); the best information available at the East Idaho Uplands SGPA scale. This data estimates current vegetation cover to the dominant or co-dominant plant species. Based on the GAP data, approximately 30% of the planning area is classified as

having big sagebrush as the dominant overstory plant species. The GAP data, while useful, does have its limitations; of particular note is the fact that three-tip sagebrush is included within the big sagebrush classification. The percent and acres of land/vegetation cover types by land ownership within the East Idaho Uplands SGPA is presented in Table 5.

Land & Cover Classification (% Total Planning Area)	Land Ownership (% and Acres)						Total Acres
	USFS	Private	BLM	IDL	Other – IDFG, Idaho Parks and Recreation, BOR, NWR	Tribal Lands	
Big Sagebrush (30.4%)	22.5% 267,562	42.2% 500,899	11% 130,598	11.4% 135,195	1.3% 14,772	11.6% 137,620	1,186,646
Forest - Coniferous & Deciduous (26.8%)	65.1% 683,139	18% 188,767	5% 52,212	8.6% 90,544	0.1% 1,049	3.3% 34,737	1,049,399
Agriculture (26.0%)	Trace	91.9% 934,347	2.4% 24,377	0.7% 7,062	0.8% 8,424	4.2% 43,042	1,017,252
Mountain Brush (6.9%)	25.1% 67,329	41.5% 111,407	9.4% 25,236	8.6% 23,097	0.1% 268	15.3% 41,126	268,195
Herbaceous (4.3%)	30.2% 50,579	44.9% 75,210	5.2% 8,669	9% 14,985	Trace	10.7% 17,960	167,403
Riparian (2.7%)	29.3% 31,221	44.8% 47,808	4% 4,328	12.4% 13,266	1.1% 1,203	8% 8,495	106,689
Wetland (1.6%)	Trace	49% 30,810	2.5% 1,562	0.8% 534	47% 29,569 NWR	0.7% 414	62,889
Low Sagebrush (1.7%)	12.6% 8,435	41% 27,430	15.7% 10,527	18% 12,068	0.4% 267	12.3% 8,246	66,874
Water (1.2%)	NA	NA	NA	NA	NA	NA	48,623
Urban (0.8%)	NA	NA	NA	NA	NA	NA	31,309

Key sage-grouse habitat is defined in the 2006 Sage-grouse State Plan 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, and summer/fall to winter.

Historically, there was likely more key sage-grouse habitat within the planning area than currently exists. Given the topography, elevation, and precipitation, the LWG believes it likely that there was always a mosaic of sagebrush steppe intermixed with conifer, mountain brush, and aspen communities. Pioneers to the area converted some areas to cultivated land and economic incentives after World War II encouraged additional land to be brought under cultivation, fragmenting sage-grouse habitat.

Two fur trappers, Richard Leigh and Osborne Russell, reported seeing numerous bison in this area prior to 1840. Prior to World War II, the area was grazed extensively by multiple bands of sheep. After the war, overall sheep numbers began to decrease as operators shifted to cattle. Much of the preferred sage-grouse habitat within the East Idaho Uplands SGPA area remains open range for cattle and sheep grazing.

Historical (pre-European) data on the distribution and condition of sagebrush steppe that occurred in the East Idaho Uplands SGPA is incomplete, and Ecological Site Potential has not been modeled. This lack of data makes habitat management for sage-grouse more difficult. In some cases there may be data on when or where treatments have been applied, or changes in sagebrush steppe ecosystem production or species composition stored in agency files. If this data were compiled it may provide a better understanding of how plant communities respond to treatment or the ecological potential of the area.

It is unknown if these habitat changes have affected the number and distribution of sage-grouse in the East Idaho Uplands SGPA. Anecdotal information suggests that sage-grouse were more abundant and occurred in areas several decades ago where they are relatively scarce today. In order to manage the habitat for sage-grouse, it will be necessary to maintain accurate records of habitat improvement projects and treatments as well as changes in species diversity and production. It would also be necessary to monitor sage-grouse more intensively to develop a better understanding of how changes in habitat are affecting sage-grouse numbers and distribution.

Habitat condition varies throughout the East Idaho Uplands SGPA

- Some areas have sagebrush canopy cover greater than 25%.
- Beginning as early as the 1960s, some of the area has been repeatedly sprayed with herbicides to reduce sagebrush in order to improve pasture. This may have reduced some of the diversity and abundance of native forbs that historically occurred within the sagebrush steppe where this type of treatment occurred.
- Since the introduction of Conservation Reserve Program (CRP) in the mid 1980s, some of the agricultural lands were seeded to non-native perennial grasses.
- There is also a general belief that three-tip sagebrush may be increasing over some of the area.
- Wildfires have not been a major influence throughout the area, but prescribed fires have changed the landscape in some areas.
- In some areas stream function has been impacted by roads, agriculture, livestock grazing, and the loss of beaver.
- Since the 1950s, mining and associated infrastructure development has resulted in loss of habitat in portions of the planning area.
- Urban development and associated infrastructure development has reduced sage-grouse habitat.
- Noxious and invasive species have become established in some areas and may become more problematic in the future.

All of these influences not only decreased the amount of sage-grouse habitat, but they have also resulted in the fragmentation of historically suitable habitat.



Figure 2. 2003 View of Bear River Valley near Montpelier, Idaho demonstrating conversion and fragmentation of sage-grouse habitat in the East Idaho Uplands SGPA.

The following is a description of the conditions of land managed by the land management entities. Each land management agency has its own set of management constraints/direction and allowed practices that can positively or negatively impact sage-grouse habitat.

1. Idaho Department of Lands

The IDL administers 7.4% of the lands within the planning area. IDL's current policy requires completion of an Endowment Land Resource Assessment (RA) for all expiring grazing and cropland leases prior to expiration (typically every 10 years). During the process, a resource description is developed for both upland and riparian vegetation. This includes a description of the community type, common/dominant species, existence/absence of noxious weeds, wildfire risk, erosion concerns, and a rating of range condition and plant vigor. Range condition is based on the composition of vegetation, plant vigor, and soil stability. Condition is the observer's estimate of what the land is now producing as compared with site potential in regard to plant cover, species composition, and production.

Based on the RAs and coupled with detailed vegetation inventories, the IDL has specific vegetation cover and condition classes for the land they administer. The information for the large land blocks has been compiled and mapped. There are approximately 290,000 acres administered by IDL within the planning area and 71% of those lands are included in large land blocks (Eastern Idaho block, Brockman block, Idaho Citizen's block, Cottonwood block).¹

- The Eastern Idaho block encompasses approximately 43,750 acres of endowment land, and with the private lands included, IDL has vegetation cover data for 80,012 acres. Overall range condition of endowment lands in the Eastern Idaho block is good with a few areas in fair condition.
- The Brockman block is approximately 37,575 acres of endowment land, and with the private lands included, IDL has vegetation cover data for 49,505 acres. Overall range condition of endowment lands ranges from fair to good across the Brockman block.
- The Idaho Citizen's block includes 80,686 acres of endowment lands, and with private lands included, the IDL has vegetation cover data for 120,719 acres. Range condition of endowment lands on the Idaho Citizen's block is good with a few areas in fair condition.
- The Cottonwood block includes 41,905 acres of endowment lands, and with private lands included, the IDL has vegetation cover data for 49,505 acres. Range condition of endowment lands on the Cottonwood block is good, with few areas in fair.

¹ The data collected by IDL provides more specific vegetation cover data than the GAP analysis data. When IDL collected vegetation cover data for the large blocks, they included vegetation cover data for private lands associated with endowment lands.

IDL has vegetation inventory for approximately 313,989 acres of private and endowment land within the planning area. Specific vegetation cover types for the IDL blocks are in Table 6.

Table 6. Vegetation Inventory Type for Endowment (IDL) and Associated Private Lands in Planning Area		
Dominant Overstory/Understory Species	Acres	% of Total (%)
Mountain big sagebrush/mixed perennial grasses	97,715	31.1
Mountain big sagebrush/mixed mountain brush/mixed perennial grasses	52,740	16.8
Three-tip sagebrush/mixed perennial grasses	34,554	11.0
Aspen/mixed perennial grasses	24,844	7.9
Aspen/scattered conifer with sagebrush bunchgrass	23,813	7.6
Coniferous forest types	22,116	7.0
Grass/sedge meadow	16,701	5.3
Three-tip sagebrush/mixed mountain brush/mixed perennial grasses	15,235	4.9
Aspen/big sagebrush/mixed perennial grasses	6,528	2.1
Riparian/willow	6,060	1.9
Mixed mountain brush/mixed perennial grasses	4,989	1.6
Juniper/mixed perennial grasses	2,421	0.8
Low sagebrush/mixed perennial grasses	2,273	0.7
Silver sagebrush/mixed perennial grasses	1,094	0.3
Improved grasslands	973	0.3
Other	1,933	0.6

2. BLM

The primary method of determining rangeland health, condition, and trend on BLM Idaho managed lands is the use of “Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management, 1997”. The Standards for Rangeland Health are used as the BLM’s management goal for the betterment of the environment, protection of cultural resources, and sustained productivity of the range. Rangelands have to meet the Standards for Rangeland Health or be making significant progress toward meeting the standards. Indicators are used to determine if rangelands are meeting the standards. The indicators are a list of typical physical and biological factors and processes that can be measured or observed.

The BLM assesses each allotment to determine if rangeland health standards are being met. Livestock grazing permits are typically issued for 10 year periods. The overall allotment(s) that each livestock grazing permit is attached to must be determined to meet, or be making significant progress toward meeting, rangeland health standards prior to any grazing permit being issued.

The following eight standards are used by BLM Idaho:

Standard 1 (Watersheds) - Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, and landform to provide for proper nutrient cycling, hydrologic cycling and energy flow.

Standard 2 (Riparian Areas and Wetlands) - Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling and energy flow.

Standard 3 (Stream channel/Floodplain) - Stream channels and floodplains are properly functioning relative to the geomorphology (e.g. gradient, size, shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard 4 (Native Plant Communities) - Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

Standard 5 (Seedings) - Rangelands seeded with mixtures, including predominately non-native plants, are functioning to maintain life form diversity, production, native animal habitat, nutrient cycling, energy flow, and the hydrologic cycle.

Standard 6 (Exotic Plant Communities) - Exotic plant communities, other than seedings, will meet minimum requirements of soil stability and maintenance of existing native and seeded plants. These communities will be rehabilitated to perennial communities when feasible cost effective methods are developed.

Standard 7 (Water Quality) - Surface and ground water on public lands comply with the Idaho Water Quality Standards.

Standard 8 (Threatened and Endangered Plants and Animals) - Habitats are suitable to maintain viable populations of threatened, endangered, sensitive, and other special status species.

Within the planning area, BLM estimates that 79% of their allotments are meeting standards. About 13% are not meeting standards, but actions are being taken to make progress towards meeting standards. Another 6% are estimated as not meeting standards. Approximately 1% of BLM is not assessed for rangeland health since it is not grazed.

3. Caribou National Forest

According to the USFS Handbook 2209.21, rangeland health is defined using the terms functioning, functioning-at-risk, or not functioning rangelands. Rangelands are defined as functioning when they 1) are meeting a desired condition identified in long term specified management objectives, standards, and/or guidelines and 2) have the capability across the landscape for renewal, for recovery from a wide range of disturbances, and for retention of ecological resilience. Rangelands are defined as functioning-at-risk when short-term objectives are being met but functionality criteria are not yet present. For example, if the objective is to achieve 90% ground cover with the desired plants present and these objectives is met, the rangeland is functioning. If the short-term objective is to move from 40% to 70% ground cover in five years and the long-term objective is 90% ground cover, and the desired plants are increasing with no noxious weeds present, then satisfactory progress is being made toward meeting the long-term objective, but the rangeland is functioning-at-risk because those long-term objectives are not yet present.

The following four criteria indicators are used to determine rangeland health:

Non-Native Invasive Plant Species. If non-native invasives or noxious weeds are present, the rangeland is functioning-at-risk at best; and if the non-native invasives plant population is abundant and/or dense, the rangeland is not functioning, even if adequate ground cover is present. This interpretation is made because of the aggressive nature of non-native invasives in both pristine and disturbed landscapes.

Ground Cover. If ground cover is greater than a described threshold to prevent adverse soil impacts, the rangeland is functioning from a watershed sustainability standpoint. A minimum of 60 % ground cover is a general standard for limiting water erosion for the Intermountain Region. Ground cover is basal vegetation, litter, moss/lichen, or rock greater than three-fourths inch diameter.

Shrub Cover. This rangeland health indicator only assesses the properly functioning aspect of an entire shrub cover type and is essentially a landscape level indicator. The desired mix of cover classes for sustainable and functional sagebrush ecosystems for all ecological purposes and needs is:

10 % of the sagebrush area has 0-5 % shrub canopy cover.

50 % of the sagebrush area has 6-15 % shrub canopy cover.

40 % of the sagebrush area has greater than 15 % shrub canopy cover.

If the mix of sagebrush cover is outside the desired cover class distribution, the cover type may be functioning at risk for the overall ecological health and diversity of a sustainable sagebrush community at a landscape level.

Species Composition. Determining if the proper vegetation is present on a site is the most difficult question in determining rangeland health. A general evaluation may be conducted using a basic species composition list or a community/cover type; however, species lists may need to be revised to adequately assess a site's ability to meet more specific health or other management objectives if the site is in a depressed stable state or if the site is occupied by invasive species.

Table 7. Acres and % Vegetation Type, by Ranger District							
Cover Type	Ranger District					Caribou National Forest (total all districts)	Revised Forest Plan, 2003
	Soda Springs	Montpelier			Westside		% total
		Preuss	Bear	Malad	Pocatello		
Aspen/conifer	50,072	17,753	39,903	1,532	808	110,068	10.56%
Aspen/maple	0	0	0	18,546	195	18,741	1.80%
Aspen	31,379	35,148	46,344	15,623	29,147	157,641	15.12%
Douglas-fir	55,379	10,954	39,432	17,298	19,805	142,868	13.71%
Lodgepole pine	46,748	7,827	11,967	3	14	66,559	6.39%
Mixed conifer	35,292	5,772	18,416	0	2,023	61,503	5.90%
Mixed conifer 2	0	163	12,189	0	0	12,352	1.19%
Total, Timberland	218,870	77,617	168,251	53,002	51,992	569,732	54.66%
Juniper	7	0	0	10,967	961	11,935	1.15%

Table 7. Acres and % Vegetation Type, by Ranger District							
Cover Type	Ranger District					Caribou National Forest (total all districts)	Revised Forest Plan, 2003
	Soda Springs	Montpelier			Westside		% total
		Preuss	Bear	Malad	Pocatello		
Mahogany	0	617	11,132	6,401	1,827	19,977	1.92%
Total, Woodland	7	617	11,132	17,368	2,788	31,912	3.06%
Maple	364	0	24,307	0	0	24,671	2.37%
Mountain brush	4,889	1,164	0	0	33,271	39,324	3.77%
Total, Brush	5,253	1,164	24,307	0	33,271	63,995	6.14%
Grass-shrub	127,648	73,089	58,791	62,029	43,702	365,259	35.04%
Riparian	1,389	1,088	910	0	776	4,163	0.40%
Rock	5,535	1,076	0	109	308	7,028	0.67%
Water	19	144	21	3	2	189	0.02%
Total	358,721	154,795	263,412	132,511	132,839	1,042,278	100.00%

III. THREATS TO SAGE-GROUSE AND SAGE-GROUSE HABITAT IN THE EAST IDAHO UPLANDS SGPA

The East Idaho Uplands LWG ranked the various threats faced by sage-grouse and habitat in the planning area into three categories based of the level of risk posed to sage-grouse and habitat within the East Idaho Uplands SGPA. Risks are listed alphabetically within each of the three categories.

High Risk Threats to Sage-grouse and Habitat

- Conversion of Conservation Reserve Program Lands
- Human Disturbance
- Infrastructure
- Isolated Populations/Lack of Data
- Urban/Exurban Development

Medium Risk Threats to Sage-grouse and Habitat

- Livestock Impacts
- Mines, Landfills, and Gravel Pits
- Predation
- Sagebrush Control (including Chemical and Mechanical Treatments and Prescribed Fire)
- West Nile Virus

Low Risk Threats to Sage-grouse and Habitat

- Agricultural Expansion
- Annual Grasslands
- Climate Change
- Conifer Encroachment
- Insecticides
- Seeded Perennial Grasslands
- Sport Hunting (including Falconry)
- Wildfire

IV. CONSERVATION MEASURES TO ADDRESS LOCAL THREATS

This section presents conservation measures that were discussed and approved through consensus within the East Idaho Uplands LWG. Threats were ranked as high, medium, and low, then alphabetized within the above categories. The conservation measures to address all threats are presented in the same order in this section.

In addition, each section presents monitoring measures that the East Idaho Uplands LWG has agreed are needed to assess the implementation of the Conservation Plan. There are three primary reasons for monitoring sage-grouse populations and sage-grouse habitat in the East Idaho Uplands SGPA.

1. The first reason is to collect data on sage-grouse populations and the condition of sage-grouse habitat that will be used to direct management of sage-grouse and sage-grouse habitat.
2. The second reason is to determine the results of all management actions taken by the East Idaho Uplands LWG, agencies, landowners, and livestock operators to maintain or increase sage-grouse numbers and/or maintain or improve sage-grouse habitat in the East Idaho Uplands SGPA.
3. The third reason is to develop and maintain files and GIS layers that contain data on sage-grouse numbers and distribution, sage-grouse habitat condition and change, and management actions taken. These files and layers will be updated annually to accommodate new data and information by the appropriate agency and/or East Idaho Uplands LWG. Adequate monitoring and reporting will allow the East Idaho Uplands LWG, land management agencies, landowners, and livestock operators to develop databases that provides a history of what has taken place and what is changing in the East Idaho Uplands SGPA, and also help the East Idaho Uplands LWG, agencies, landowners, and livestock operators prioritize and implement management actions that are beneficial to sage-grouse and sage-grouse habitat.

Development of a comprehensive GIS project for the planning area is essential in order to monitor the impacts of existing and proposed threats and to plan and evaluate habitat conditions, projects and sage-grouse populations, The East Idaho Uplands LWG recommends that a single project be developed that is accessible to all agencies and depicts the following:

- Sage-grouse population data including lek sites, lek routes and harvest management data

- Sage-grouse habitat data including:
 - Key habitat delineation
 - Seasonal habitats
 - Migration areas and connectivity
- Threats to habitat including existing:
 - Roads and trails
 - Railroad right of ways
 - Utility lines and associated structures
 - Communications towers and associated structures
 - Fences
 - Oil, gas and mining operations
 - Wind energy developments
 - Conifer encroachment
 - Noxious weeds
- Land Uses:
 - Land ownership
 - Grazing allotments
 - Conservation Reserve Program enrolled lands²
 - Fire history
 - Project history³
 - Projects intended to improve habitat for sage-grouse
 - Forage reserves for grass banking

All data necessary for the complete development of this project are not currently available, notably, sage-grouse distribution and habitat use. As this data is developed, it should be added to this project.

This GIS project should be updated annually and new threats should be identified.

A report of all changes in sage-grouse numbers and distribution, changes in sage-grouse habitat, and management actions taken by the East Idaho Uplands LWG, agencies, landowners and livestock operators will be prepared annually. All 18 (Sections A through R) of the conservation threats identified by the East Idaho Uplands LWG in this Sage-grouse Conservation Plan will be included in the annual report. If no new data was collected and/or no management action taken for a threat during the year, the report will simply include a sentence to this effect. If an action was planned, but not done the report should state that the planned action was not done and the reason why it was not done.

The LWG's annual report will serve as a record of sage-grouse numbers and distribution, habitat condition and change, and management actions implemented within the East Idaho Uplands SGPA. In addition to digital files of the data, a copy of each annual report will be contained in an appendix to this plan for documentation of changes and management actions, and future reference for the East Idaho Uplands LWG and agencies. This appendix will provide a history of sage-grouse populations and sage-grouse habitat in the East Idaho Uplands SGPA and all management actions taken by the East Idaho Uplands LWG, agencies, landowners, and

² Because private landowner data cannot be provided by NRCS or FSA, it is assumed this data will be reported in aggregate.

³ Ibid.

livestock operators. The LWG will provide a copy of this report to the Idaho Sage-grouse Coordinator and to the Idaho SAC.

In order to monitor and track the current status and changes in sage-grouse distribution and habitat in the East Idaho Uplands SGPA, some new GIS layers will need to be developed and others brought up to date. The East Idaho Uplands LWG will ensure that an agency, or agencies are responsible, and the layers are developed and kept current. The East Idaho Uplands LWG will also ensure that an agency, or agencies assume responsibility for developing and maintaining necessary files of all data collected. These layers and data files will be accessible to applicable field and district offices of all land management agencies managing lands within the area, the applicable Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) field offices, and IDFG Sage-grouse Data Coordinator, and regions 5 and 6. Maps developed from the appropriate layers should be made available upon request to private landowners within the area, livestock operators grazing livestock within the area, research institutions doing research within or adjacent to the area, fire crews deployed in the area, and the East Idaho Uplands LWG.

A. High Risk to Sage-grouse and Habitat

The threats that are ranked as posing high risk to sage-grouse and habitat within the East Idaho Uplands SGPA by the LWG are addressed below, in alphabetical order.

I. Conversion of Conservation Reserve Program Lands

Following World War II, a large proportion of the land that lies within the boundaries of East Idaho Uplands SGPA was converted from native rangeland to cropland. Much of this land was marginal farmland, and was subsequently enrolled in the U.S. Department of Agriculture (USDA)'s Farm Service Agency (FSA) Conservation Reserve Program (CRP). It is felt by the LWG that this sequence of events may have resulted in reducing winter habitat for sage-grouse and the lack of winter habitat may now be a limiting factor for local sage-grouse populations.

The CRP was established by the federal government in the mid 1980s, to provide federal assistance to farmers for taking highly erodible land out of cultivation, placing it in permanent vegetation, and helping stabilize crop prices. Subsequent reauthorizations of the Farm Bill have resulted in increasing emphasis on managing CRP land to benefit wildlife. The current purpose of the CRP is to reduce soil erosion, protect the Nation's ability to produce food and fiber, reduce sedimentation in streams and lakes, improve water quality, establish wildlife habitat, and enhance forest and wetland resources.

Participants in the CRP receive an annual rental payment for the term of the multi-year (usually 10 year) contract. Cost sharing is provided to establish the vegetative cover practices. Upon enrollment in the program, landowners must agree to stipulations for managing the land, including some that benefit wildlife. With the large amount of CRP land within the East Idaho Uplands, there may be an opportunity to increase/improve sage-grouse habitat as the lands are enrolled/reenrolled.

Approximately 228,000 acres in the East Idaho Uplands SGPA are currently enrolled in CRP. Of this, approximately 130,000 acres are scheduled to expire by 2012.

There are two issues related to CRP that may pose a threat to sage-grouse habitat in the East Idaho Uplands area.

- First, some CRP lands are not being managed in a manner that provides substantial benefit to sage-grouse. Sage-grouse were not a concern at the point in time when the CRP was established. As a result, when most of the CRP lands were initially enrolled, stipulations were not designed to benefit sage-grouse.

- Second, the amount of land being managed under CRP in Idaho presently exceeds national USDA-FSA program goals and some counties are “over-subscribed.” At least one county in the East Idaho Uplands SGPA is currently over-subscribed beyond the 25% cap and most likely some of the cropland currently enrolled in CRP may not be eligible for re-enrollment. Future management of those former CRP lands may result in land use decisions that pose a threat to sage-grouse or habitat.

a. Conservation Measures

Allowing CRP lands to revert back to a “tall sagebrush” cover type and reducing the loss of CRP and other acreages that lie within key sage-grouse areas to development have the greatest potential to improve sage-grouse populations. The LWG recommends the following conservation measures:

Management of CRP lands. To address issues associated with management of CRP lands the East Idaho Uplands Sage-grouse East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

1. The East Idaho Uplands LWG will work with the FSA committees to request consideration of adding new stipulations to land-owner agreements that would benefit sage-grouse habitat during periodic agreement renewal.
2. The East Idaho Uplands LWG will work with the FSA committees to request mid-contract management changes that would introduce forb and shrub vegetation through interseeding.
3. If a county is over-subscribed in CRP and reductions must be made, the East Idaho Uplands LWG will ask the relevant FSA committees to consider sage-grouse habitat needs during ranking for continued participation.
4. Limited livestock grazing may be presently allowed on CRP land when specific conditions are met and approved by the State committee. The East Idaho Uplands LWG will ask the FSA committees to consider allowing grazing on CRP lands when it might provide an opportunity to allow periodic resting of grazing leases on public land. Livestock grazing of CRP land may also be used as a tool to reestablish forbs and shrubs in existing grass stands.
5. The East Idaho Uplands LWG will work to help educate CRP participants regarding sage-grouse habitat needs and encourage those landowners to refer to conservation measures in the “Perennial Grasslands” section.
6. In cooperation with the FSA committees, the East Idaho Uplands LWG will promote/encourage flexibility in the management of the CRP to accomplish habitat improvement for sage-grouse in addition to other program objectives.

Retirement of CRP lands. To address issues associated with retirement of private ground from participation in the CRP, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

7. The East Idaho Uplands LWG will urge landowners coming out of participation in the CRP to consider the needs of sage-grouse when evaluating management options. For example, grazing is more complimentary with sage-grouse habitat needs than converting land-use to mining, infrastructure development, cultivated cropland, or housing developments.
8. The East Idaho Uplands LWG will encourage landowners coming out of participation in the CRP to pursue funding opportunities for management, restoration and/or permanent easement programs (US Fish and Wildlife Service [USFWS], NRCS, and FSA programs)

and/or working through the East Idaho Uplands LWG to apply for funding from the Idaho Governor's OSC to improve habitat conditions to better meet the needs of sage-grouse.

9. The East Idaho Uplands LWG will encourage the possibility of considering the needs of sage-grouse under the Continuous CRP (CCRP). For example, the FSA committees might be willing to establish a state-wide CCRP that specifically addresses the needs of sage-grouse.
10. The East Idaho Uplands LWG will help educate landowners about the availability of funding and technical assistance for habitat conservation practices and projects that would benefit sage-grouse.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report on implementation of the ten conservation measures, how effective the collaboration has been, and how that effort has affected habitat within the planning area.

2. *Human Disturbance*

a. Conservation Measures

To address issues associated with human disturbances to sage-grouse and sage-grouse habitat, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Off-Highway Vehicle (OHV) Use. The following conservation measures are designed to address disturbances to sage-grouse populations and habitat caused by OHV use:

1. Limit OHV use to existing designated roads and trails to eliminate or minimize disturbance to sage-grouse and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel. Consider a "closed unless posted open" approach where appropriate.
2. Discourage the creation of new roads and trails in sage-grouse breeding or winter habitat. Re-route existing trails and route new trails in a manner that minimizes disturbance.
3. Where existing roads or OHV trails are near occupied leks, apply use-restrictions where needed and appropriate to minimize nonessential activity between 6:00 PM to 9:00 AM. In general this guideline should be applied from approximately March 15 through May 1 in lower elevation habitats and March 25 through May 15 in higher elevation habitats where OHV or vehicular disturbance is a problem.
4. Work collaboratively with OHV user groups to increase awareness of the potential adverse impacts of OHVs on sage-grouse and other wildlife, and develop solutions to reduce conflict.
5. Where there is evidence that snowmobile use is having negative impacts on sage-grouse population on winter range, limit snowmobile use to designated areas and encourage seasonal closures.

Human Activities Associated with Livestock Management. The following conservation measures are designed to address disturbances to sage-grouse populations and habitat caused by human activities associated with livestock management:

6. Avoid creating unnecessary disturbances related to livestock management activities near occupied leks whenever possible. Livestock operators may be granted exceptions for administering their federal permits.
7. Use lek route or other relevant information to identify leks where the placement of sheep camps, bed grounds, herding, or related activities is repeatedly disturbing displaying birds

on active leks. Dates of concern are from March 15 through May 1 in lower elevation habitats and March 25 through May 15 in higher elevation habitats. If such leks are identified, land management agencies should work closely with sheep ranchers, East Idaho Uplands LWGs and the IDFG to identify mutually agreed upon alternative sites or herding routes that eliminate or reduce disturbance. In selecting alternative sites/routes, focus on areas away from leks that do not provide breeding habitat characteristics, where feasible. If such lek-specific conservation measures cannot be developed (due to time or logistical constraints), domestic sheep grazing activities described above will be avoided within the lesser of 0.5 mile or direct line of sight of any such lek during the lekking periods. Livestock operators and agency personnel are encouraged to report those lek locations where livestock management activities have been observed disturbing sage-grouse.

Human Disturbance Associated with Wildlife Appreciation, Viewing and Photography.

The following conservation measures are designed to address disturbances to sage-grouse populations and habitat caused by wildlife appreciation, viewing, and photography at leks:

8. Wildlife viewing and appreciation should be promoted; however, the viewing of sage-grouse on leks should be conducted so that disturbance to birds is minimized or eliminated. Where photography or viewing activities are increasing to the extent those activities appear problematic, consider designating 1-3 lek locations for public viewing and photography. Other possible actions include establishing seasonal blinds for public use, utilizing trained personnel to guide viewers/photographers, or limiting close-up viewing/photography to the latter part of the lekking season after peak breeding activity.
9. Improve the dissemination of information to elementary and high school students, hunters, resource user-groups, and others to increase their understanding of sage-grouse and sagebrush steppe conservation issues.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions taken to minimize human disturbances to sage-grouse relative to the ten conservation measures and assess how effective those actions have been within the planning area.

3. Infrastructure

a. Conservation Measures

To address issues associated with infrastructure development resulting in disturbances to sage-grouse and sage-grouse habitat, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA.

1. The East Idaho Uplands LWG will provide written comments on all infrastructure development projects within the planning area.

Lek Disturbances. Human disturbance related to construction and maintenance activities associated with infrastructure development can adversely affect breeding sage-grouse. To reduce, minimize, or mitigate adverse impact to sage-grouse populations and habitat associated with infrastructure activities in the vicinity of leks:

2. Inspections, maintenance work, and related human activities at or near (1 km or 0.5 miles) occupied leks that results in, or will likely result in, disturbance to lekking birds should be avoided from approximately 6:00 PM to 9:00 AM. Utility companies should work closely with IDFG, land management agencies, and landowners in scheduling such activities to minimize disturbance. In general, this guideline should be applied from approximately March 15 to May 1, in lower elevations; and March 25 to May 15, in higher elevations.

Utility Lines, Communications Towers, and Related Facilities. Improper placement of utility lines, wireless towers or related structures can disrupt sage-grouse behavior, increase mortality due to collisions, lead to increased avian predation, or spread of invasive vegetation. To reduce, minimize, or mitigate adverse impact to sage-grouse populations and habitat associated with utility lines, communications towers, and related facilities:

3. Use of guy-wires on towers should be avoided. If it is not possible to avoid use of guy wires, wires should be marked with recommended bird-deterrent devices.
4. Where existing utility lines, including smaller power distribution lines, telephone lines, or wireless communication towers are known to be causing adverse impacts locally, or where such impacts are likely, East Idaho Uplands LWGs and/or land-management agencies should work closely with power companies and related entities to assess problem areas and develop creative solutions.
5. New above ground major power transmission lines should be sited in a manner that avoids sage-grouse habitat to the extent possible, or they should be buried.
6. New, smaller power distribution lines, or similar structures (e.g., telephone lines, communications towers) should be buried (as appropriate) or sited as far as possible, preferably at least 3.2 km (approximately 2 miles) from occupied leks and other important sage-grouse seasonal habitats (Connelly et al. 2000), as determined locally.
7. The placement of raptor perch deterrents on power poles and other structures, such as telephone poles, should be considered on a site-specific basis in areas where population impacts from raptors or ravens are likely or are a documented problem. Areas that may be of particular concern include fragmented habitats with high raptor and/or raven activity. See "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006" (Avian Power Line Interaction Committee 2006).
8. Utility companies should ensure access roads, rights-of-ways and disturbed areas associated with their facilities are managed in a manner that restores disturbed areas to perennial vegetative cover, and controls the spread of noxious weeds and invasive plant species. Coordinate with land-management agencies and others in selecting the most appropriate plant species. Consider the use of fire-resistant species in high fire-frequency/ cheatgrass areas. Encourage companies to participate in Coordinated Weed Management Areas. The East Idaho Uplands LWG may be of assistance in helping to identify particular problem areas.
9. The East Idaho Uplands LWG will compile and/or review a GIS layer that includes the location of all utility lines, communication towers, and related facilities.
10. Landowners, livestock operators, and agencies will report locations where existing power lines and/or towers are causing adverse impacts to sage-grouse, and/or structures where raptor perch deterrents may be used to reduce impacts to sage-grouse.

Roads. Roads can result in adverse direct and indirect effects on sage-grouse and habitat including: collisions with vehicles; human disturbance and vehicular noise; habitat loss and fragmentation; increased risk of fire, and invasives. To reduce, minimize, or mitigate adverse impact to sage-grouse populations and habitat associated with roads:

11. Ensure that new public trails, roads, and highways avoid or skirt areas of key or stronghold habitat (including restoration areas intended to become key/stronghold in the future) to the extent feasible.
12. The East Idaho Uplands LWG should identify specific roads or road sections where sage-grouse mortality has been documented. Work collaboratively with the appropriate agency(s)

to develop measures to reduce the risk of road-related mortalities of sage-grouse. Consider speed limits, brush control, signing, and public education.

13. Assess the impacts of travel-ways on sage-grouse. For documented vehicle or human-caused wildfires and spread of invasives, consider the potential benefits of planting perennial vegetation (e.g. green-strips) along travel ways. This measure is applicable to all existing as well as new paved, gravel, and dirt roads in sage-grouse habitat. The need for the green-strips should be evaluated on a case-by-case basis depending on fire risk, vehicle activity, vegetation type, importance of the area, or other factors. Avoid the use of species palatable to sage-grouse.
14. Manage existing roads and trails to minimize disturbance to occupied leks or other important seasonal habitats. Employ seasonal closures, permanent closures, rerouting of existing roads/trails or other measures, as deemed locally appropriate.
15. The East Idaho Uplands LWG will compile a GIS layer of key and stronghold habitat (including restoration areas intended to become key/stronghold habitat in the future). This GIS layer will be used to site new trails, roads, and highways to avoid key/stronghold habitat to the extent feasible.

Active Railroads. Disturbed areas along railroads can facilitate the establishment and spread of invasive plants. Certain invasives (e.g., cheatgrass) increase the likelihood of wildfire ignitions from trains. To reduce, minimize, and/or mitigate adverse impact to sage-grouse populations and habitat associated with active railroads:

16. Railroad companies should work closely with agencies and private landowners, as appropriate, to reduce or control invasive plants along railroad rights-of way.
17. The East Idaho Uplands LWG should identify locations along active railways where cheatgrass or other vegetation within rights-of-way presents a high-fire risk. When necessary and appropriate, the East Idaho Uplands LWG should work with landowners and land management agencies to explore the possibility of modifying the stipulations for easements to effectively manage fuels along railroad rights-of-way to reduce fire risk. Where appropriate, replace with suitable perennial species.

Oil and Gas Development. Oil/gas pipeline construction can fragment habitat and facilitate the spread of invasive plants. To reduce, minimize, and/or mitigate adverse impact to sage-grouse populations and habitat associated with oil and gas developments:

18. It is recommended that oil and gas developers work with IDFG to complete surveys and necessary studies prior to development because there is not yet good information about sage-grouse populations and habitat use in the East Idaho Uplands SGPA (beyond occupied leks),.
19. Locate new oil or gas pipelines and related facilities as far as possible, preferably at least 3.2 km (approximately 2 mi) from occupied leks or place along existing corridors to the extent possible. East Idaho Uplands LWGs and/or land-management agencies should work closely with gas/oil companies and related entities in identifying potential problem areas and creative solutions.
20. Oil/gas companies should work closely with agencies and private landowners, as appropriate, to reduce or control invasive plants along pipeline rights-of-way and access roads. This should include ensuring that disturbed areas are seeded to an appropriate perennial seed mix.

Wind Development. Wind energy development involves an array of potential direct and indirect adverse impacts to sage-grouse and sage-grouse habitat. To reduce, minimize, and/or mitigate adverse impact to sage-grouse populations and habitat associated with wind development:

21. It is recommended that wind energy developers work with IDFG to complete surveys and necessary studies prior to development because there is not yet good information about sage-grouse populations and habitat use in the East Idaho Uplands SGPA (beyond occupied leks),.
22. The East Idaho Uplands LWG should work with the land management agencies and counties to raise awareness of potential negative impact of wind energy developments on sage-grouse populations and habitat and develop guidance for monitoring protocol for inclusion in permitting processes.
23. The East Idaho Uplands LWG refers the reader to US Department of Interior (USDI) BLM (2005) and USDI FWS (2003) for a more comprehensive list of mitigation measures and site evaluation guidelines due to the complexity of wind energy development and related support facilities. Key conservation measures recommended in that publication for Idaho include:
 - A. Wind energy project and design approval should focus on avoiding, minimizing, or restoring habitat degradation (on-site mitigation). Consider one or more of the following specific recommendations:
 - Avoid placing turbines and related infrastructure in breeding or winter habitat. If turbines must be sited within breeding habitat, avoid placing turbines within five miles of occupied leks where feasible.
 - Avoid locating turbines and related infrastructure in known sage-grouse movement corridors, migration pathways or in areas where sage-grouse are highly concentrated (e.g., wintering areas).
 - Avoid fragmenting large, contiguous tracts of sage-grouse habitat. Where practical, focus wind energy development on lands already altered or cultivated and away from areas of intact and healthy native habitats. If this is not practical, select fragmented or degraded habitats for development rather than relatively intact areas.
 - Minimize roads, fences, or other infrastructure.
 - Use tubular supports with pointed tops, rather than lattice supports, to minimize bird (raptor, raven) perching and nesting opportunities.
 - Avoid placing external ladders and platforms on tubular towers to minimize perching and nesting by raptors and ravens.
 - To reduce the risk of collisions, avoid the use of guy wires for turbine or meteorological tower supports. All existing guy wires should be marked with recommended bird deterrent devices.
 - Where feasible, place electric power lines underground to avoid bird collisions. Where above-ground wires cannot be avoided, wires should be marked with recommended bird deterrent devices.
24. Measures to mitigate impacts at off-site locations should be employed to offset unavoidable alteration and losses of sage-grouse habitat. Off-site mitigation should focus on acquiring, restoring, or improving habitat within or adjacent to occupied habitats and ideally should be designed to complement local sage-grouse conservation priorities.
25. It is recommended that sage-grouse populations and habitat be monitored where wind energy development within sage-grouse habitat is unavoidable. Such monitoring should be conducted (a) for at least 3 years before project construction; (b) during construction, and (c) for at least 8 years after construction is completed and implementation has begun to complement the existing knowledge of impacts and help in the design of future conservation measures. Industry proponents should work closely with IDFG, land-management agencies,

private landowners and East Idaho Uplands LWGs, in designing the appropriate monitoring strategy. If monitoring indicates a population decline or impact, consider implementation of mitigation measures as identified in #22 above.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions taken to minimize impacts of infrastructure development on sage-grouse relative to the 22 conservation measures and assess how effective those actions have been within the planning area.

4. *Isolated Populations/Lack of Data*

a. Conservation Measures

There is a need for better information related to population status and trends. Status, survival and trend data relative to sage-grouse populations in the East Idaho Uplands SGPA is lacking. To address issues associated with isolated populations, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Identify Lek Locations. Although a few lek locations in the East Idaho Uplands sage-grouse Planning Area are known, much of the area has either not been surveyed for leks or has only been minimally surveyed from the air with no follow-up ground surveys. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

1. All respective agencies and the East Idaho Uplands LWG will work cooperatively to secure funding to locate all leks in the East Idaho Uplands area.
2. The East Idaho Uplands LWG will coordinate with IDFG to collect and analyze population data to determine if populations in the planning area are isolated.
3. Follow guidelines contained in Connelly *et al.* 2003. Monitoring of Greater Sage-grouse Habitats and Populations. Station Bulletin 80. College of Natural Resources Experiment Station, College of Natural Resources, University of Idaho, Moscow.
4. Use aircraft (helicopters preferred) to locate leks on all potential sage-grouse habitat in the East Idaho Uplands SGPA. Work with the Shoshone-Bannock Tribes to obtain permission to include the Fort Hall Reservation.
5. Use follow-up ground surveys to identify additional other leks in the vicinity. Work with the Shoshone-Bannock Tribal staff to survey the Fort Hall Reservation.
6. Use Global Positioning System (GPS) technology to map all leks found.
7. Count all male and female sage-grouse on identified leks during each lek visit.
8. Attempt to survey current and former land owners, resource users, agency personnel, and others familiar with the East Idaho Uplands about their observations of sage-grouse distribution and population changes over time.

Identify Lek Routes and Other Leks for Annual Counting. No sage-grouse leks or lek routes have been consistently counted in the East Idaho Uplands; therefore, there is no index to sage-grouse breeding population trend. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

9. The Local Working group and all respective agencies will work together to ensure the necessary commitment to count lek routes and/or leks annually following protocol outlined in sections 5.2.1.1 and 5.2.1.2 in the State Plan.

10. Identify a minimum of two lek routes that will be counted annually. If it is not possible to develop a minimum of two lek routes (e.g. leks are not distributed such that a route containing two or more leks can be counted following 5.2.1.1 protocol) then count a minimum of six individual leks annually distributed throughout the East Idaho Uplands SGPA.
11. Leks not on a lek route should be visited at least once every five years (preferably during peak male attendance as determined from lek routes/leks counted in the area) to determine if they are still active and determine trends in the number of males using the lek.

Identify Seasonal Habitats and Migratory Status. It is unknown if sage-grouse in the East Idaho Uplands are migratory and if there is one population or multiple populations occurring in different parts of the area. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

12. All agencies and the East Idaho Uplands LWG work cooperatively to secure funding to radio-mark sage-grouse from different leks distributed throughout the area.
13. Information from radio-marked birds will be used to map seasonal habitats.
14. Use data to map migratory pathways.
15. If radio marking demonstrates that there are actually multiple separate populations in the East Idaho Uplands SGPA, use data to delineate individual population habitat areas.
16. Use data to determine whether breeding populations are adequately surveyed through lek counts. Adjust lek route locations or individual leks counted if data suggests this is necessary.
17. Use all available data to evaluate harvest level and determine if harvest is being adequately monitored.

Collection of Hunter Harvested Sage-Grouse Wings. Currently no sage-grouse wings are collected within the planning area. The season was closed in 2008 and 2009 and will be evaluated on an annual basis. Information obtained from a sample of sage-grouse wings could be used to monitor sage-grouse production trends over time and compare production of sage-grouse in the East Idaho Uplands with other sage-grouse populations. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

18. Identify harvest areas using data collected from the radio-marking study and information obtained from current and former sage-grouse hunters, land owners, and agency personnel.
19. Use wing barrels to collect hunter-harvested sage-grouse wings from all major harvest areas identified in the area.
20. Use hunter field checks and check stations to obtain information on hunter activity and effort.
21. If possible, identify hunters who hunt the East Idaho Uplands and request hunters participate in the IDFG sage-grouse wing mail-in survey to increase wing sample size.
22. Read wings to provide trend data for East Idaho Uplands sage-grouse and compare with other sage-grouse population areas on young:adult female ratio, percent successful female brood information, percent successful yearling female information, and peak hatch time.

Collect Seasonal Habitat Data. Currently there is no information on the quality of seasonal habitats used by sage-grouse in the East Idaho Uplands. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

23. Using data collected from the radio-marking study, the East Idaho Uplands LWG, all agencies and Shoshone-Bannock tribes will evaluate seasonal habitats relative to Connelly *et al.* 2000.
24. Identify priority areas for habitat improvement.
25. Use data to influence habitat management for maintaining or increasing sage-grouse numbers and distribution.
26. Use data to work with counties, land owners, and land trusts to identify areas of high priority to manage for sage-grouse.

Identify Habitat/Population Connectivity Corridors. It is believed that the population of sage-grouse in the East Idaho Uplands SGPA is isolated from other sage-grouse populations and there may also be population isolations within the planning area. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

27. The East Idaho Uplands LWG, all agencies and Shoshone-Bannock tribes will identify connectivity corridors or potential connectivity corridors for sage-grouse using data collected for the radio-marking study.
28. Manage habitat to maintain and/or reestablish connectivity corridors.
29. Use data to evaluate new projects with counties, land owners, agencies, utilities, energy companies, and land trusts to maintain and/or reestablish connectivity corridors for sage-grouse.

Need for evaluation and monitoring of threats to isolated populations. The nature and extent of threats to isolated populations is unknown in some areas. If isolated populations are identified:

30. The East Idaho Uplands LWG will work with IDFG to identify and quantify threats within isolated population areas.

In addition, there is a need to protect, improve or restore habitat associated with isolated populations. Where isolated population areas are documented to use habitat areas that are in need of restoration:

31. The land management agencies and private landowners should ensure that vegetation prescriptions, hunting regulations, and permitted land-use activities are consistent with maintaining isolated populations and with maintaining or improving associated habitat.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report data collected to demonstrate implementation of the 31 conservation measures and assess how that cumulative effort has (or has not) benefitted sage-grouse within the planning area.

5. *Urban/Exurban Development*

a. Conservation Measures

Loss of sage-grouse habitat is the primary conservation issue associated with urban/exurban development and can result from (1) direct loss of sage-grouse habitat through development of previously occupied habitat for home sites and ranchettes, (2) direct loss of habitat through development of infrastructure to support the above home site developments, and (3) loss of habitat through physical degradation and human activities radiating out from the above developments.

To address issues associated with urban/exurban development, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

1. Work with county and city zoning and planning departments to avoid development affecting important sagebrush habitat.
2. Educate landowners and developers to values of sagebrush habitat and options associated with land trusts.
3. Acquire easements when owners are willing to negotiate conservation agreements.
4. Acquire habitat through sales and/or land exchanges where there are willing sellers and when it provides the best option to protect and/or restore important habitats:
 - a. Identify important parcels of habitat;
 - b. Work with landowners to identify willing sellers;
 - c. Use existing funding sources for acquisition.
5. Protect wildland areas from wildfire originating on private lands, infrastructure corridors, and recreation areas.
6. Off-site mitigation should be employed to offset unavoidable alteration and losses of sage-grouse habitat. Off-site mitigation should focus on acquiring, restoring, or improving habitat within or adjacent to occupied habitats and should be designed to complement local sage-grouse conservation priorities.
7. Rigorous population monitoring should begin immediately to document the status and trends of local populations.
8. Habitat areas should be evaluated and measures taken to protect critical habitat areas from development as a result of urban/exurban development. Parcels of private land suitable as sage-grouse habitat or related habitat values (e.g., potential for restoration) that are susceptible to loss to development or to uses related to new developments need to be identified for potential land exchange, conservation easements or related actions. Identify potential impacts to public lands from human occupancy and related factors (e.g., infrastructure) on adjacent private lands.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report what actions were taken to minimize impacts of urban/exurban development to sage-grouse relative to the eight conservation measures and assess how effective those actions have been within the planning area.

B. *Medium Risk to Sage-grouse and Habitat*

The threats that are ranked as posing medium risk to sage-grouse and habitat within the East Idaho Uplands SGPA by the LWG are addressed below, in alphabetical order.

I. Livestock Impacts

The East Idaho Uplands LWG recognizes that livestock grazing and range management practices can influence plant cover and composition. Sage-grouse depend upon the plant cover and composition for successful reproduction and recruitment. Therefore, livestock grazing and range management practices can also influence sage-grouse numbers (may be positive, negative, or have no effect) and distribution over time.

The members of the local working group believe that livestock grazing and range management practices with the seasonal habitat requirements of sage-grouse in mind will not have a negative impact on sage-grouse. In some cases livestock grazing and/or range management practices may be specifically tailored to improve sage-grouse habitat. However, livestock grazing and/or range management practices that are not done with the seasonal habitat needs of sage-grouse in mind can have a negative impact on sage-grouse. Therefore, the members of the local working group encourage livestock operators/managers and range managers in the East Idaho Uplands to become familiar with the seasonal habitat needs of sage-grouse and, as much as possible, implement them in their operations and management practices. Livestock operators/managers and range managers who are unfamiliar with the seasonal habitat needs of sage-grouse are referred to chapter 5 of the Conservation Plan for the Greater Sage-grouse in Idaho, July 2006 which summarizes the seasonal habitat needs of sage-grouse.

a. Conservation Measures

1. The East Idaho Uplands LWG recognizes the need for information on habitat use within the East Idaho Uplands SGPA. The East Idaho Uplands LWG will pursue funding to identify key and seasonal habitat use areas within the East Idaho Uplands SGPA.

Livestock management and rangeland health. Improper livestock management practices impair rangeland health. To reduce threats posed by improper livestock management practices, the East Idaho Uplands LWG members agreed that the following conservation measures are appropriate:

2. Use established scientifically based agency protocols and procedures for evaluating rangeland health and sage-grouse habitats.
3. Establish specific habitat objectives and implement effective grazing management practices and/or vegetative manipulation to achieve those objectives and maintain or improve vegetation conditions or trends.
4. Provide incentives to land managers and owners to achieve Idaho sage-grouse habitat objectives.

Livestock management in sage-grouse breeding and nesting habitat. In some cases, livestock may reduce the availability of suitable nesting (mid April through late June) or early brood-rearing habitat (early June to the end of July). To reduce threats posed by improper livestock management practices in breeding and nesting habitat, the East Idaho Uplands LWG members agreed that the following conservation measures are appropriate:

5. In areas that have been identified and mapped as nesting habitat by the East Idaho Uplands LWG, use established scientifically-based protocols to conduct fine-scale assessments and/or monitoring to determine if current livestock grazing practices are limiting sage-grouse nesting habitat quality and/or quantity.
6. Where it has been documented that grazing has reduced sage-grouse nesting habitat quality, land managers should work with livestock operators to design and implement grazing management systems that maintain or enhance herbaceous understory and minimize impacts of grazing on the cover and height of primary forage species in occupied habitat during the nesting season. Grazing systems must be consistent with ecological site characteristics. The primary objective is to provide desirable perennial grass and perennial forb cover during the spring nesting season.

The following is a list of management actions or strategies that should be considered and employed individually or in combination during development and implementation of grazing management programs:

- a. Employ grazing management systems to minimize grazing impacts to nesting habitat during nesting periods. Nesting occurs starting the beginning of April through late June.
- b. Adjust grazing use distribution to benefit occupied sage-grouse breeding habitat, include as appropriate, herding, salting, fencing, water source management, etc.
- c. Use incentive programs as related to private lands and sage-grouse/sagebrush habitats. Current programs that may provide some opportunities for economic offset of certain conservation measures include the NRCS Sage-grouse Conservation Initiative, Conservation Stewardship Program (CSP), Wildlife Habitat Incentives Program (WHIP), Grassland Reserve Program, Wetland Reserve Program, CRP, Farm and Ranch Protection Program, and Environmental Quality Incentive Program (EQIP) programs. Landowners are encouraged to discuss the various opportunities available with their local NRCS District Conservationist.
- d. Develop strategically located forage reserves (introduced grass and forb seedings) to shift early season livestock-use away from prime breeding areas.

(Note: the establishment of such forage reserves may be particularly relevant in areas that have minimal or no potential for sage-grouse habitat restoration.)
- e. Maintain residual herbaceous understory vegetation at the end of the grazing season to contribute to nesting and brood-rearing habitat during the coming nesting season.

Livestock management on or near leks. Proper livestock management on or near leks may reduce disturbances to breeding sage-grouse and interference with lek/population monitoring. To reduce threats posed by improper livestock management practices on and near leks, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

7. Use lek route or other relevant information to identify leks. This information should be used as a guide for the placement of sheep camps, and bed grounds. Dates of concern are from March 15 through May 15.
8. Ensure that livestock operators are aware of the location of occupied leks. Show operators these locations in the field, provide maps, or mark the perimeter of occupied leks, etc. as appropriate).

Livestock management in late brood-rearing habitat. Livestock grazing may affect late brood-rearing habitat. To reduce threats posed by improper livestock management practices in late brood-rearing habitat, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

9. Manage areas using grazing management techniques that promote and maintain a diversity of desirable annual and perennial forbs. Suggestions include:
 - a. Alternate or rotate areas for spring turnout.
 - b. Promote light, once-over use of vegetation as opposed to repeated use during the same season.
 - c. Ensure that livestock operators are informed of management goals, such as those related to burned area rehabilitation or other restoration sites.
 - d. Employ open (loose) herding of sheep as opposed to tightly bunched sheep.
10. Manage grazing of riparian areas, meadows, springs, and seeps in a manner that promotes vegetation structure and composition appropriate to the site. In some cases, fencing of riparian areas or herding of livestock may be viable options. However, quality of herbaceous species may be improved by periodic grazing and should be considered in the grazing management program. (Example: high intensity short duration)

Livestock management during periods of drought. Drought conditions can intensify the effects of livestock grazing on upland and riparian vegetation. To reduce threats posed by improper livestock management practices during periods of drought, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

11. In sage-grouse nesting and brood-rearing habitats, adjust livestock use (season, utilization, stocking, intensity, and/or duration) during drought to minimize the additional stress placed on herbaceous species. This is anticipated to reduce impacts on perennial herbaceous cover, plant species diversity, and plant vigor.
12. Foster the coordination of drought management activities and outreach involving all federal and state land managers and private landowners. Evaluate the possibility of identifying forage reserves.

Placement of salt and mineral supplements. The placement of salt and mineral supplements can affect sage-grouse habitat quality. To reduce threats posed by improper placement of salt and mineral supplements, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

13. When using salt or mineral supplements: a) place them in existing disturbed areas, areas with reduced sagebrush cover, seedings, or cheatgrass sites, b) use salts or mineral supplements to improve management of livestock for the benefit of sage-grouse habitat.
14. In areas of heavy brush (greater than 25% cover) new salting locations can be used to create a mosaic of age classes of sagebrush. To avoid long-term damage to plant cover, these sites should be moved frequently and/or distributed in small quantities that will be consumed quickly (within a week).

Placement of fences and other structures. The placement of fences or other structures near important seasonal habitats can increase the risk of collision mortalities or may facilitate predation by eagles, hawks and ravens. To reduce threats posed by improper placement of fences and other structures, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

15. Field personnel, in cooperation with East Idaho Uplands LWGs and willing landowners, are encouraged to use existing knowledge, allotment/pasture maps and lek distribution maps to determine which fences may pose the greatest risk for collision mortality.
16. If sage-grouse mortality due to collision with fences is documented, or if collisions are likely to occur due to new fence placement, implement appropriate actions to mitigate impact. Such actions might include marking key sections of fences with permanent flagging or other suitable means. Field personnel and landowners should use their best judgment in determining where fence marking is required to lessen the impacts to sage-grouse.
17. Placement of new fences and structures should include consideration of the likely impact on sage-grouse. In general, avoid constructing new fences within 1 km (0.5 mi) of occupied leks (adopted from Connelly et al. 2000). Where feasible, place new, taller structures such as corrals, loading facilities, water storage tanks, windmills etc., as far as possible from occupied leks to reduce opportunities for perching raptors. Careful consideration, based on local conditions, should also be given to the placement of new fences or structures near other important seasonal habitats (winter-use areas, movement corridors, etc.) in order to reduce potential impacts.

Design and placement of water developments. Water developments can result in mortality of sage-grouse due to drowning; affect the flow of springs/wet meadows; foster the spread of invasive plants; or encourage grazing or disturbance of previously unused or lightly used breeding or early brood-rearing habitat. Improving water distribution can reduce grazing

pressure on riparian areas. To reduce threats posed by improper design and placement of water developments, the East Idaho Uplands LWG members agree the following conservation measures are appropriate:

18. Spring developments in sage-grouse habitat should be designed to maintain the free-flowing characteristics of springs. Use float valves on troughs or other features where necessary.
19. Ensure new and existing livestock troughs and open water storage tanks are fitted with ramps to facilitate the use of and escape from troughs by sage-grouse and other wildlife. Do not use floating boards or similar objects, as these are too unstable and are ineffective. See Wildlife Watering and Escape Ramps on Livestock Water Developments (Sherrets 1989) for suggestions for ramp designs.
20. When placing new water developments in sage-grouse breeding habitat, choose sites and designs that will provide the greatest enhancement for livestock distribution and sage-grouse habitat.
21. Avoid placing water developments into higher quality native breeding/early brood rearing habitats that have not had significant prior grazing use.

Management of livestock during rehabilitation and restoration efforts. The practicality of extensive rangeland rehabilitation and restoration efforts is dependent upon adequate plant establishment before grazing resumes.

22. Identify, and when feasible, establish strategically located forage reserves focusing on areas unsuitable for sage-grouse habitat restoration or lower priority habitat restoration areas. These reserves (such as seedings) would serve to provide livestock operators with temporary alternative forage opportunities during the resting of recently seeded restoration or fire rehabilitation areas, and could serve as additional fuel breaks depending on location and configuration.
23. Identify and utilize economic incentive programs to assist private landowners in implementation of appropriate sage-grouse habitat conservation actions on private lands.
24. Since many factors (i.e., climate, seed viability) can determine the success of vegetative establishment on rehabilitation/restoration sites, land managers and livestock operators will evaluate each site and determine when grazing can resume. Light grazing may have little impact on restoration/rehabilitation efforts.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report what recommendations were made and what actions were taken to minimize impacts of livestock operations to sage-grouse relative to the 24 conservation measures and assess how effective those actions have been within the planning area.

2. *Mines, Landfills, and Gravel Pits*

a. Conservation Measures

Human activities associated with construction and operation of mines, landfills, and gravel pits can result in habitat loss and disturbance to sage-grouse in habitat use areas. To reduce, minimize, or mitigate habitat loss throughout the SGPA, the East Idaho Uplands LWG recommends implementation of the following conservation measures:

1. Discourage the establishment of new mines, landfills or gravel pits within sage-grouse breeding or winter habitat. Where possible, avoid occupied leks by at least 3.2 km (2 miles) (adopted from Connelly et al. 2000, and Stinson et al. 2004).

2. If the placement of new mines, gravel pits, and landfills in or near breeding habitat is unavoidable, ensure that reclamation plans incorporate the appropriate seed mix and seeding technology to restore suitable breeding habitat characteristics.
3. During activities associated with the exploration, operation, and maintenance of mines, gravel pits, or landfills, ensure that adequate measures are implemented to control invasive plant species.
4. Ensure adequate weed control measures are implemented during the life of the operation, including the reclamation plan.
5. Off-site mitigation should be employed to offset unavoidable alteration and losses of sage-grouse habitat. Off-site mitigation should focus on acquiring, restoring, and/or improving habitat within or adjacent to occupied habitats. Ideally, mitigation efforts should be designed to complement local sage-grouse conservation priorities. Priority should be given to restoration or improvement of previously degraded habitat and/or potential habitat.

To minimize disturbance in seasonal habitat areas:

6. Apply seasonal-use restrictions or time-of-day restrictions on activities associated with the exploration, operations, and maintenance of mines, gravel pits, or landfills, including those associated with supporting infrastructure. Restrictions would limit activity between 6:00 PM to 9:00 AM from approximately March 15 through May 1 in lower elevation habitats and March 25 through May 15 in higher elevation habitats.
7. If mine operation precludes or prevents seasonal use or time-of-day restrictions, consider mitigation measures (see #5 above).

(See the Human Disturbances section for further information.)

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report on actions and recommendations taken to minimize impacts of mines, landfills, and gravel pits to sage-grouse relative to the seven conservation measures and assess how effective those actions have been within the planning area.

3. Predation

a. Conservation Measures

The East Idaho Uplands LWG will consider the following questions to evaluate the nature and extent of potential predator problems in a specific geographic area. This systematic approach will guide local planning efforts and ensure that excessive predation and other threats are dealt with appropriately.

1. What is the status of the sage-grouse “population” in question (on a three-year running average)?
 - Is the population considered isolated or is it a stronghold?
 - Is the population migratory or non-migratory?
 - Is the status of each lek known? Are lek counts conducted annually? Is production assessed annually?
 - Are population trend indices (e.g., lek counts) declining, stable, or increasing?
 - If population trend is down, what are the reasons? Has there been a recent drought or large wildfire or other factor influencing trend?

- Is annual productivity, as determined by the fall ratio of juveniles/ hen below 2.25? (Note: 2.25 juveniles/hen is the suggested indicator for stable or increasing populations, Connelly and Braun 1997 and Edelman et al. 1998).
 - Is nest success (proportion of nests that hatch at least one egg per season) less than 25%? Connelly et al. (2004) reported a range of 14.5% to 86.1%.
 - Is average adult female survival rate less than approximately 45%? Connelly et al. (2004) report a range of 48-75%.
 - Is annual hunter harvest within recommended Western Association of Fish and Wildlife Agencies (WAFWA) Guidelines? See Sport Hunting section for additional details.
2. What is the status of sage-grouse habitat in the area?
- Are the important seasonal habitats known (breeding, late brood, winter)?
 - Are seasonal habitats generally contiguous or fragmented?
 - Do the respective seasonal habitats generally meet WAFWA Guidelines, or is there a considerable departure from the Guidelines for one or more of them?
 - If there is a departure from Guidelines, what can or should be done to restore desired habitat conditions (long-term habitat restoration combined with short-term predator control)?
 - What is the land status? Predominantly private, public, mixed?
3. What is the nature and extent of other threats in the area?
- Is infrastructure (e.g., power pole cross-arms, or other man-made structures) providing opportunities for ravens or raptors to perch or nest in proximity to important habitats?
 - Is conifer encroachment inhibiting lek quality or activity?
 - Is human disturbance of leks or breeding habitat a significant factor?
4. What is the status of predation and predators in the area?
- What potential predator species are present?
 - Do the predator species of concern have legal protection through state or federal law (e.g., game or protected non-game, Endangered Species Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, etc.) Who has management authority for the predator species?
 - Is the suite of predators or population levels present inconsistent with what is expected in healthy sagebrush steppe habitats? Are there non-indigenous predators present?
 - Has excessive predation of nests, juveniles or adults been documented?
 - What is the predicted population response of other predator species to removal of the target species?
5. If predator control is recommended:
- Is a viable control method and adequate funding available?
 - Have humane predator control techniques been considered as a first option wherever possible?
 - Have clear objectives been defined that describe when successful control has been achieved?

- Can the predator species of concern be identified and effectively targeted?
- If so, is lethal take recommended or are there non-lethal or passive control alternatives?
- Are surrounding landowners supportive?
- Has the appropriate environmental analysis been completed?
- Has the proposed action been adequately designed with suitable control and treatment areas, so effects can be assessed and documented?
- Have pre-treatment and post-treatment monitoring protocols been established?

Excessive levels of predation can be detrimental to sage-grouse populations. The scale, quality, or configuration of habitat; infrastructure; non-indigenous predator species or artificially high predator populations may contribute to excessive predation. To reduce the potential for threats posed by high predator populations, the East Idaho Uplands LWG recommends:

6. Evaluate local conditions using the systematic approach outlined above.
7. Depending on the outcome of the evaluation, consider implementing one, or a combination, of the conservation measures identified below:
 - A. If excessive predation is the result of poor habitat conditions:
 - Take actions to correct the habitat deficiencies for the long-term.
 - Consider predator control for at risk or isolated populations as a short-term measure.
 - B. If excessive predation is the result of artificial structures or developments (e.g., fences, roads, power lines, landfills, etc.) or if the presence of such structures in proximity to important habitats is suspected to be a problem:
 - East Idaho Uplands LWGs and agency personnel should work closely with utilities, agencies, landowners, and others to document problem areas and develop suitable solutions on a case-by-case basis.
 - New man-made structures or developments should be designed and sited to minimize effects on sage-grouse populations.
 - Consider predator control for at risk or isolated populations as a short-term measure.
 - C. If excessive predation is the result of non-indigenous predator species or artificially high predator populations:
 - Eliminate factors contributing to artificially high predator populations (e.g., unnatural food sources including landfills, dead animal pits, artificial nest substrates, etc.) where possible.
 - Cooperate with Wildlife Services and IDFG in designing and implementing appropriate control measures. Ideally, such efforts should include monitoring that provides comparisons of habitat conditions and predator-species compositions between treatment and control (non-treatment) area(s).

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of predation to sage-grouse relative to the seven conservation measures and assess how effective those actions have been within the planning area.

4. *Sagebrush Control (including Chemical and Mechanical Treatments and Prescribed Fire)*

a. **Conservation Measures**

To address issues associated with prescribed fire and other sagebrush treatment projects in and near sage-grouse habitat, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Reduction of already limited or fragmented habitat. Inadequate planning and implementation of prescribed burns, or other sagebrush treatment projects, may adversely impact sage-grouse seasonal habitats and/or sage-grouse populations. The following conservation measures are designed to reduce impacts of limited and fragmented habitat on sage-grouse:

1. Prior to planning prescribed burns or other vegetation management treatments in sagebrush communities, ensure that sage-grouse seasonal habitats have been assessed. Provide adequate lead time to conduct site-specific project assessments.
2. Once seasonal habitats have been mapped, ensure that proposed project areas have been evaluated on the ground in the context of the appropriate seasonal habitat characteristics. (See 5.3.2 of the July 2006 Idaho Sage-grouse Conservation Plan).
3. Avoid the use of prescribed fire, and other sagebrush reduction projects in habitats that currently meet or are trending toward meeting breeding or winter habitat characteristics or in areas where sagebrush distribution is spotty or fragmented on the landscape.
4. If the analysis shows that a vegetation treatment may still be advisable, design habitat manipulation projects to achieve the desired objectives while considering the following:
 - a. Where prescribed burning or other treatments in sage-grouse habitats may be warranted (e.g., sagebrush cover exceeds desired breeding or winter habitat characteristics, understory does not meet seasonal habitat characteristics and restoration is desired, there is a need to restore ecological processes, or a proposed treatment site is in an exotic seeding being managed for overall sage-grouse benefits on the surrounding landscape):
 - Project design should be done with interdisciplinary input and in cooperation with IDFG.
 - Ensure that any proposed sagebrush treatment acreage is conservative in the context of surrounding seasonal habitats and landscape.
 - Where appropriate, ensure treatments are configured in a manner that promotes use by sage-grouse (see Connelly 2000 for additional discussion).
 - Leave adequate untreated sagebrush areas for loafing/hiding cover near leks for sage-grouse.
5. Evaluate and monitor prescribed burns and other treatments as soon as possible after treatment and periodically thereafter to determine whether the project was successful and is meeting or trending toward desired objectives.

Expansion of exotic plant and/or undesirable native species. Inadequate planning, implementation and follow-up of prescribed burns or other sagebrush treatments may result in the expansion of cheatgrass or other invasive plant species. The following conservation measure is designed to reduce impacts of expansion of exotic and/or undesirable native species on sage-grouse:

6. Avoid the use of prescribed fire or other sagebrush treatments in habitats prone to the expansion of undesirable species unless adequate measures are taken to control the invasives and ensure subsequent dominance by desirable perennial species. In many, if not most cases, this will likely require chemical treatments and reseeding.

Risk of escaped prescribed fire. Escaped prescribed fires can threaten surrounding habitats. The following conservation measures are designed to reduce impacts of escaped prescribed fire on sage-grouse:

7. Prescribed fires must be planned, executed, and monitored in a manner that provides for adequate control and provision for contingency actions.
8. Ensure burn plans address the importance of preventing escaped fires when prescribed fires are planned in the vicinity of stronghold and key habitat.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report what actions and recommendations were taken to minimize impacts of sagebrush control efforts to sage-grouse relative to the eight conservation measures and assess how effective those actions have been within the planning area.

5. *West Nile Virus*

a. Conservation Measures

The effects of land management activities on West Nile Virus and its vectors are largely unknown. Early detection of West Nile Virus in sage-grouse can help managers better assess risk and determine further actions (e.g., alert the public, restrict seasons, and increase monitoring).

Need for continued surveillance for West Nile Virus. The East Idaho Uplands LWG recommends:

1. Continued cooperation with regional, state, and county-level West Nile Virus monitoring and/or surveillance efforts.

Need for better information concerning land management activities that reduce risk of transmission. The East Idaho Uplands LWG recommends:

2. Cooperation with research efforts to evaluate habitat conditions that contribute to West Nile Virus.
3. Identification of effective conservation measures to manage potential West Nile Virus vectors.
4. Monitoring by the East Idaho Uplands LWG, agencies, counties, landowners, and operators in areas with a potential to support mosquitoes and areas with a documented history of sage-grouse losses from West Nile Virus. Evaluate practices e.g. habitat conditions, chemical control, and biological control to address mosquito numbers in areas where sage-grouse losses have been documented. Consider installation of bat houses, bird houses, and other biological measures where feasible.
5. The East Idaho Uplands LWG work with ranchers, landowners, and sheepherders to help all understand the threat of West Nile Virus to sage-grouse and how to best handle dead birds when they are encountered (how to pick them up safely, who to contact, and how to take carcasses for testing).
6. Consideration of emergency hunting season closures in areas where a significant loss of sage-grouse has been documented.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of West Nile Virus to sage-grouse relative to the six conservation measures and assess how effective those actions have been within the planning area.

C. *Low Risk to Sage-grouse and Habitat*

The threats that are ranked as posing low risk to sage-grouse and habitat within the East Idaho Uplands SGPA by the LWG are addressed below, in alphabetical order.

I. *Agricultural Expansion*

a. Conservation Measures

Conversion of additional sagebrush lands to agriculture may adversely affect sage-grouse. To reduce the potential for threats posed by conversion of sagebrush lands to agriculture, the East Idaho Uplands LWG recommends the following conservation measures:

1. Utilize the Conservation Reserve Program, Wetland Reserve Program, Grasslands Reserve Program, Farmland Protection Program, Environmental Quality Incentives Program, WHIP, Conservation Stewardship Program and other USDA incentives programs to recover habitat for sage-grouse where feasible.
2. Where possible, avoid additional agricultural expansion into key habitat or potential restoration areas.
3. Where there are willing landowners, identify and prioritize parcels available for purchase, conservation easements, or exchange that could be restored to perennial grasses, forbs and shrubs.
4. Within East Idaho Uplands LWGs, and with willing landowners, identify options for lands on the Snake River Plain recently withdrawn from irrigation. Options may exist for collaboratively funded restoration projects or development of forage reserves.
5. Where opportunities allow (incentives, partnerships, willing landowner, etc.), off-site mitigation should be employed to offset unavoidable alteration and losses of sage-grouse habitat. Off-site mitigation should focus on acquiring, restoring, or improving habitat within or adjacent to occupied habitats and should be designed to complement local sage-grouse conservation priorities.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of agricultural expansion to sage-grouse relative to the five conservation measures and assess how effective those actions have been within the planning area.

2. *Annual Grasslands*

a. Conservation Measures

Annual grasslands do not provide suitable habitat to meet the seasonal habitat needs of sage-grouse. However, the East Idaho Uplands LWG does not believe seasonal grasslands present a major concern within the East Idaho Uplands SGPA at this time. To address the potential for threats posed by annual grasslands, the East Idaho Uplands LWG recommends the following conservation measures:

1. Continue to monitor for changes in annual grassland establishment. Following any major disturbance, the East Idaho Uplands LWG will monitor changes more closely for two years to help identify potential problems and take immediate corrective action if needed.
2. Consider implementing conservation measures outlined in the Idaho Conservation Plan for Sage-Grouse if annual grasslands threaten to establish a monoculture.
3. The eradication or control of noxious weeds posing a risk to sage-grouse habitats should be aggressively pursued using a variety of chemical, mechanical, biological, or other means as appropriate. All seeding project designs should include measures for noxious weed control and monitoring for at least three years following implementation.
4. To discourage the spread of invasive annuals and noxious weeds, require the use of certified weed-free forage by Permitted users (outfitters, guides, livestock operators) and by casual users (e.g., recreation trail riders, hunters) utilizing horses, goats, or llamas on public or state lands.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report the results of implementation of the four conservation measures.

3. *Climate Change*

a. *Conservation Measures*

Increase awareness of expected impacts of climate change. Without awareness and understanding of the significance of climate change on the sagebrush ecosystem successful adaptive management is less likely to occur. To reduce the threat resulting from a lack of awareness and understanding, the following conservation measure is appropriate:

1. Factor climate change needs into current management of arid and semi-arid rangelands.

Maintenance of ecosystem resiliency. Conservative use and management will be necessary to allow plant communities to combat on-going environmental stress from climate change. To reduce the threat posed by decreases in ecosystem resiliency, the following conservation measures are appropriate:

2. Avoid degradation of current vegetation communities.
3. Adjust management of the resource as needed in periods of unusual climatic events such as drought.
4. Focus management of rangelands on restoration and/or resiliency of the vegetative resource.

Control undesirable invasive species. Maintain viability of native plant communities by decreasing stress caused by undesirable invasive species. To reduce the threat of undesirable invasive species, the following conservation measures are appropriate;

5. Increase knowledge and awareness of invasive species problems on native ecosystems.
6. Reduce impacts of land uses that increase the rate of spread of invasive species.
7. Manage native plant communities to maintain biotic soil crusts (where appropriate) and improve or maintain high vigor of native vegetation.
8. Increase the effort of active control/elimination of invasive species in situations where other management is not capable of reducing the competition. Work closely with Cooperative Weed Management Areas/ programs to control noxious and invasive weeds.

Restoration with suitable plant materials. Successful restoration relies on the availability of appropriate seed stock and methods for restoration. To reduce the threats associated with unsuitable plant restoration, the following conservation measures are appropriate:

9. Consider using alternative approaches to improve the likelihood of establishment, such as hand-planting seedlings, imprinters or other tools.
10. Use local, native seed stock (where feasible and desirable) to reseed disturbed areas. If local native seed stock is not practical or available, use native seed stock. If native seed stock is not available, use desirable non-native seed stock.

Improved monitoring approaches.

11. The East Idaho Uplands LWG will support coordination and communications links between researchers and land managers.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of climate change to sage-grouse relative to the 11 conservation measures and assess how effective those actions have been within the planning area.

4. *Conifer Encroachment*

a. Conservation Measures

Conifer encroachment into sagebrush communities reduces sage-grouse habitat quality and availability. To reduce the threat posed by encroachment of conifer into sagebrush communities, the following conservation measures are appropriate:

1. East Idaho Uplands LWGs, land management agencies, IDFG, and other partners should work closely together to identify and prioritize conifer encroachment areas for further management action.
2. IDFG, land management agencies, East Idaho Uplands LWGs and other partners should work closely together to identify leks where conifer encroachment may be affecting lek attendance or nearby habitat quality.
3. Remove Douglas-fir or other conifers where they are encroaching on wet meadows, riparian areas or sagebrush stands that provide potential sage-grouse habitat.
4. On private lands, apply for OSC sage-grouse grant funds, or enroll in NRCS incentive programs related to sage-grouse/sagebrush habitats. Current NRCS programs that may provide some opportunities for economic offset of certain conservation measures include the CSP, WHIP, and EQIP programs. Landowners are encouraged to discuss the various opportunities available with their local NRCS district conservationist. Support for Idaho projects may also be available through the North American Grouse Partnership's (NAGP) Grouse Habitat Restoration Fund.
5. Plan wildfire suppression and prescribed fire strategies to support this goal.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of conifer encroachment to sage-grouse relative to the five conservation measures and assess how effective those actions have been within the planning area.

5. *Insecticides*

a. **Conservation Measures**

To address issues associated with insecticide use in and near sage-grouse habitat, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Impacts of agricultural pesticides on sage-grouse. Some agricultural chemicals can cause direct or indirect mortality of sage-grouse foraging in farm fields. The following conservation measures are designed to reduce impacts of agricultural pesticides on sage-grouse:

1. Avoid the use of organophosphates and minimize the use of other insecticides on fields utilized by sage-grouse, or allow for suitable treatment buffers around field edges. Incentive or enhancement payments to offset economic impacts to farmers may be available through NRCS/FSA or other programs. Farmers/landowners are encouraged to discuss options with their local NRCS District Conservationist.
2. Work with plant and insect specialists to develop strategies that could be used to protect crops near sage-grouse habitat from insects, thus minimizing the use of insecticides. Planting the outside field borders with certain plants that attract, repel or control insects may be feasible.
3. As alternative brood habitat, manage nearby native habitats, especially moist meadows and riparian areas to be more attractive (e.g. cover, forb availability and diversity) to sage-grouse and broods.
4. The East Idaho Uplands LWG, Cooperative Extension agents, NRCS, IDFG, commercial pesticide applicators, Idaho Department of Agriculture, NAGP, and other partners should collaborate to inform farmers of concerns with insecticide use, and develop collaborative solutions to reduce adverse impacts to sage-grouse.

Impacts of Mormon cricket and rangeland grasshopper control on sage-grouse. Mormon cricket and rangeland grasshopper control may reduce food availability for sage-grouse in certain areas. The following conservation measure is designed to reduce impacts of Mormon cricket and rangeland grasshopper control on sage-grouse:

5. East Idaho Uplands LWGs, land management agencies, landowners, IDFG, IDA, and Animal and Plant Health Inspection Service's, Plant Protection and Quarantine Program should continue to collaborate to ensure annual control efforts focus on key problem areas, better delineate treatment avoidance areas, determine the treatment of least risk to sage-grouse, and monitor results.

b. **Monitoring**

On an annual basis, the East Idaho Uplands LWG will report what actions and recommendations were taken to minimize impacts of insecticide use to sage-grouse relative to the five conservation measures and assess how effective those actions have been within the planning area.

6. *Seeded Perennial Grasslands*

a. **Conservation Measures**

Lack of sagebrush on the landscape and lack of plant species diversity hinders the recovery of sage-grouse. The following conservation measures are designed to reduce impacts of limited

sagebrush and/or the lack of plant species diversity. The East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

1. East Idaho Uplands LWGs, land management agencies, IDFG, and other partners should work closely together to identify and prioritize perennial grasslands (exotic versus native) where plant species diversity or sagebrush is limiting on the landscape; and work cooperatively to identify options, schedules and funding opportunities for re-establishing sagebrush in higher priority areas.
2. When seeding sagebrush, use source-identified, tested seed adapted to local conditions. In an attempt to match existing species composition, use local seed whenever possible.
3. Consider using one or more of the following approaches for restoring sagebrush to improve likelihood of success (see Dalzell 2004 and Monsen et al. 2004):
 - Use of the “Oyer” compact row seeder, which compacts soil and presses seed onto the surface.
 - Use of the Brillion cultipacker seeder, where seed is broadcast over the surface followed by cultipacking.
 - Transplant bare-root or containerized stock in small, critical areas to establish a seed source.
 - Use the “mother plant” technique, and transplant bare-root or containerized stock in select locations throughout the area to establish a seed source.
 - For large areas (e.g., large wildland fires), aerial seed onto a rough seedbed (Monson et al. 2004) coupled with one or more of the above options.
4. In established stands of introduced perennial grasses, transplant sagebrush into strategic patches or strips in critical sites or throughout the area. Scalp spots or strips to reduce grass competition prior to planting or as an alternative to scalps, consider the use of herbicides (see Monson et al. 2004, Volume 3).
5. Where the diversification of crested wheatgrass or similar seedings with native species of grasses, forbs and/or shrubs is desired Pellant and Lysne (2005) recommend a 3-step process:
 - Reduce competition of crested wheatgrass to facilitate the establishment and persistence of the desired species. Possibilities include use of livestock, capitalizing on drought episodes that reduce grass vigor, herbicides such as glyphosate, and mechanical treatments.
 - Introduce desired, site-adapted species through drill seeding, aerial seeding followed by harrow, cultipacker or chaining, livestock trampling, transplanting container stock, bare-root stock or individual plants from native sources (“wildings”). Lambert (2005) provides descriptions, recommended seeding rates, and other useful information for nearly 250 species of native and non-native grasses, forbs and shrubs.
 - Post-treatment management. Ensure that livestock grazing and rest intervals are matched with the phenology and life history characteristics of the desired/ seeded/ transplanted species. Implement monitoring to clearly document how, what, when and where treatments were implemented. Follow up with suitable effectiveness monitoring, to document success of the treatments relative to project objectives.
6. Private landowners may wish to enroll in NRCS incentive programs as related to sage-grouse/sagebrush habitats. Current NRCS programs that may provide some opportunities for economic offset of certain conservation measures include the CSP, WHIP, and EQIP

programs. Landowners are encouraged to discuss the various opportunities available with their local NRCS district conservationist and the local Soil and Water Conservation District. Another potential source of project funding for private lands are Idaho Governor's OSC project grants. Landowners interested in OSC grants are encouraged to work through their respective East Idaho Uplands LWG or in the absence of an East Idaho Uplands LWG, the appropriate IDFG Regional Office. Support for Idaho projects may also be available through the NAGP's Grouse Habitat Restoration Fund and the USFWS Partners for Fish and Wildlife Program.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report actions and recommendations taken to minimize impacts of seeded perennial grasslands to sage-grouse relative to the six conservation measures and assess how effective those actions have been within the planning area.

7. *Sport Hunting (including Falconry)*

Insufficient information about the viability of the sage-grouse population within the East Idaho Uplands SGPA led to a 2008 recommendation by the East Idaho Uplands LWG that hunting be prohibited in the East Idaho Uplands SGPA. The Idaho Fish and Game Commission accepted that recommendation. Because there is no hunting at this time in the planning area, data normally derived from wings (from harvested birds) deposited in wing barrels is not available.

The East Idaho Uplands LWG will continue to encourage and support efforts to learn more about populations and habitat use in the planning area. For example, a lek search and documentation project was conducted in 2009. A project proposal for radiotelemetry monitoring of habitat use was partially funded by the Idaho Governor's OSC in 2009.

a. Conservation Measures

To address issues associated with sport hunting and falconry, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Better hunter effort and success information. To ensure seasons and bag-limits are set using the best-available information and are consistent with ensuring sustainability of sage-grouse populations in Idaho. The following conservation measures are designed to address the need for better information:

1. Continue to require a special permit to hunt sage-grouse in Idaho to allow for efficient identification and sampling of sage-grouse hunters.
2. Conduct an annual telephone survey in order to contact adequate numbers of sage-grouse hunters to allow for reliable statewide and local harvest estimates.
3. Evaluate accuracy of current harvest estimate data and implement needed changes.
4. Consider the feasibility and potential value of implementing a permit system with mandatory reporting by all hunters.

Production and harvest location data. Production and harvest location data are crucial to sage-grouse management and wing collection from hunters is currently the only feasible way to collect these data. The following conservation measures are designed to address the need for more data:

5. Conduct opening weekend hunter check stations at strategic locations to collect harvest information and wings from harvested birds.

6. Place wing barrels at strategic locations to increase the sample of wings from harvested birds.
7. Send voluntary wing envelopes to all Idaho sage-grouse hunters planning to hunt in the East Idaho Uplands SGPA before the hunting season to test whether voluntary return of wings can increase the proportion of wings collected from harvested birds. Envelopes should require date of harvest and kill locations with as much specificity as possible.
8. Annually analyze all sage-grouse wings collected to determine age, sex, and molt pattern of harvested birds.
9. Analyze existing wing data to determine the differences in sex and age of the harvest during the opening weekend, compared to later in the season, and summarize other long-term trends.

Season and harvest criteria. Uniform criteria will ensure seasons and bag-limits are established using a consistent process. The following conservation measure is designed to address the need for season and harvest criteria:

10. Identify sage-grouse populations where overharvest is a risk because of (1) isolated or fragmented habitat, or (2) small numbers of birds. Develop appropriate hunting season recommendations to reduce risk.
11. The following guidelines should be considered by the IDFG when making sage-grouse season recommendations to the Idaho Fish and Game Commission:
 - Do not hunt populations where less than 300 birds comprise the breeding population (100 or less males counted on leks). All populations geographically isolated by more than 15 miles will be considered separate populations unless specific data demonstrate otherwise.
 - Restrict the hunting season if data indicates harvest of over 10% of the fall population for more than one year.
 - Use the criteria identified in Table 4-14 of the July 2006 Idaho Sage-grouse Conservation Plan when setting hunting seasons for each population. East Idaho Uplands LWGs should evaluate how well these guidelines apply to their areas and provide recommendations to the IDFG by May 1, of each year.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report data collected and report actions and recommendations taken to demonstrate implementation of the 11 conservation measures. The LWG will also assess how the cumulative effort has (or has not) benefitted sage-grouse within the planning area.

8. *Wildfire*

a. Conservation Measures

To address issues associated with wildfire in and near sage-grouse habitat, the East Idaho Uplands LWG recommends implementation of the following conservation measures throughout the SGPA:

Altered fuels and fire regimes. Areas dominated by cheatgrass or medusahead have higher frequency of wildfire and minimal habitat value. The following conservation measures are designed to reduce impacts of altered fuels and fire regimes on sage-grouse:

1. See conservation measures for Annual Grasslands section.

2. Identify and prioritize annual grasslands most conducive for restoration to perennial species. Coordinate closely with US Geological Survey (USGS) Snake River Field Station, Great Basin Restoration Initiative, universities, local partners, and IDFG, as appropriate.
3. Since it is impossible to restore large annual grasslands all at once due to cost and logistics, consider an incremental or “buffer” approach to protect existing intact habitat. That is, where large annual grasslands border key or other important areas such as recent restoration projects, create “buffers” by progressively converting broad bands of the adjacent annual grasslands to perennial species. As perennial grasses, forbs, and sagebrush become established, expand the buffers outward. This practice, over time, can reduce fire risk by conversion of high fire hazard annuals to lower hazard perennial fuels. Where funding and logistical factors permit, larger-scale conversions, rather than the buffer approach, may be appropriate.

Reduction or modification of habitat. Wildfires can reduce or fragment already limited habitat, including recent restoration project areas, and can facilitate the proliferation of invasive plants. The following conservation measures are designed to reduce impacts of reduced or modified habitat on sage-grouse:

Wildfire suppression tactics:

4. In the event that multiple ignitions occur in a local suppression unit area, suppression priorities are to protect human life and property. In situations where human safety, livestock, or property will not be compromised or threatened, employ fire suppression tactics that protect sagebrush ecosystems by minimizing the average size of unplanned fires, maintaining productive sage-grouse habitat, and maintaining sagebrush cover. In the event of multiple fire starts in sagebrush ecosystems, suppression priority will be as outlined by specific Fire Management Unit (FMU) based on the following general guidelines:

Priority 1 - Stronghold habitats (subset of key habitat on the Idaho Sage-grouse Habitat Planning Map).

- a. Wyoming big sagebrush sites (in general, lower elevations).
- b. Mountain big sagebrush sites (in general, higher elevations).
- c. Other habitats (e.g. early sagebrush, low sagebrush sites).

Priority 2 - Key habitat.

- a. Wyoming big sagebrush sites (in general, lower elevations).
- b. Mountain big sagebrush sites (in general, higher elevations).
- c. Other habitats.

Priority 3 - Restoration habitat.

- a. Areas with established or recovering sagebrush.
- b. Areas with minimal or no sagebrush cover.

Priority 4 - Juniper or annual grasslands where delaying initial attack does not threaten priorities 1-3 above.

5. BLM and USFS line officers will ensure that a knowledgeable field level Resource Advisor is available for any “extended attack” fire (over 12 hours and >300 acres in size) within or threatening sage-grouse habitats, including stronghold, key, and potential/existing restoration areas. Availability by phone or “on-call” is appropriate in some circumstances, such as during times of low fire danger. During times of high or extreme fire danger, red flag,

or other similar conditions, resource advisors should be field-ready on short notice, whenever possible.

6. In all sage-grouse habitats (key, stronghold, potential restoration areas), suppress fires and hotspots in unburned areas including interior islands, patches, or strips of sagebrush if doing so will not compromise fire crew safety, poses little risk of escape, and to the extent that resources allow (limited water supplies, etc.). Do not square-up or burn-out islands or interior patches of sagebrush. Such areas may provide important remnant habitats post-fire, useful in assessing pre-burn vegetation conditions, and serve as a source of on-site sagebrush seed facilitating the post-fire reestablishment of sagebrush.
7. When fires threaten or occur within sage-grouse stronghold habitats, deploy the appropriate pre-identified appropriate management response as soon as possible to minimize loss of habitat to fire and to reduce the scale of subsequent ESR efforts. Depending on the nature of the fire, appropriate tools may include heavy or medium engines, dozers, hand crews, single engine aerial tankers, large tankers, or others. In general, the intent of this conservation measure is to encourage fire management officers, dispatch shift supervisors, and incident commanders to be proactive in deploying suppression resources to minimize habitat loss. Fire crew safety will be the first priority.
8. Burn-out/backfiring operations should be conducted in a manner that minimizes the loss of sagebrush while still providing for public and fire crew safety.
9. Use post-fire After Action Reviews and/or evaluations on fires that are large enough and/or intense enough to have adversely affected sage-grouse habitat. The intent of the review is to facilitate making improvements or adjustments in priorities, tactics or resource availability in preparation for potential fires. During multiple or sequential large-scale fire events this measure may need to be deferred. The urgency of the review depends on when the fire occurred in the fire season, how typical or significant it was, and if there are opportunities to learn important lessons.

Strategic wildfire suppression planning:

10. Ensure Fire Management Plans (FMPs), updated annually, re-assess priorities and incorporate the conservation measures outlined in this plan, particularly identifying the appropriate management response in FMUs where stronghold and key habitat exist.
11. In FMPs, annually update the Idaho Sage-grouse Habitat Planning Map. Update FMPs and FMU databases as needed to incorporate new sage-grouse habitat related information and wildfire suppression priorities in sage-grouse or restoration habitats.
12. In areas of limited water availability and/or remote locations, coordinate with East Idaho Uplands LWGs and appropriate agency personnel to explore creative options for the establishment of fill hydrants along existing pipelines, new emergency water storage tanks or other similar facilities, or upgrading/modification of existing wells or pipelines. Locate such water access facilities near suitable access roads. Mark locations of such sites on maps for fire crews, resource advisors, and dispatchers. Wildlife water guzzlers can also be designed in concert with such projects in sage-grouse habitats where water is limited.
13. Where feasible, consider staging initial attack resources in high fire incident areas to ensure quicker initial attack response times in remote areas.
14. At the wildland-urban interface bordering rangelands, employ pre-suppression tactics, public education and vegetation treatments to minimize or reduce the risk of the escape of human-caused fire into sage-grouse key or restoration habitat.

15. Strategically place pre-treated strips/areas (e.g., mowing, herbicide application, strictly managed grazed strips, green stripping, etc.) to aid in controlling wildfire should wildfire occur near critical habitats.

Firefighter training:

16. Provide annual training for rangeland fire personnel (including appropriate Rural Fire Department personnel), public affairs staff, resource advisors, and others, as appropriate, to include awareness of issues and potential impacts of suppression activities in sage-grouse habitats and other resource issues of management concern.

Human-caused ignitions. Over half of wildfires in Idaho are human-caused. The following conservation measures are designed to reduce impacts of human-caused ignitions on sage-grouse:

Public outreach and education:

17. Increase public awareness of fire danger by installing and maintaining additional fire danger signs along main access roads.
18. Increase public outreach, information, and education related to sagebrush ecosystems, fire risk mitigation, fire ecology and related issues. Examples include media interviews and articles, presentations to schools and civic organizations, and brochures.
19. Via media opportunities, increase public awareness and understanding of fire-related risk during times of high to extreme fire danger and red flag conditions.
20. Work closely with Idaho Department of Transportation and railroad companies to minimize wildfire ignitions, improve suppression response, and manage fuels/invasives within highway and railroad rights-of-way.

Enforcement of restrictions or closures and related measures:

21. Increase local enforcement of existing fire restrictions or closures in accordance with the High Fire Danger Closure and Restriction Plan.
22. Promote practices that discourage or limit firelines (e.g., dozer lines or other trails created by equipment) from being converted to 2-track roads or OHV/all terrain vehicle trails.

Restoration and burned area rehabilitation. Analyze burned area to assess possibilities of natural regeneration. Deliberate seeding of some areas is essential to ensure that needed habitat components are restored. The following conservation measures are designed to support restoration and burned area rehabilitation:

23. Assess pre-burn vegetation via mapping, fuels/vegetation surveys, or allotment monitoring records to determine plant species composition and diversity. Consider/evaluate fire severity. Acquire satellite or aerial imagery of the burn, where available and feasible, to help estimate the extent of burned and unburned areas, including islands.
24. In the absence of information for areas directly affected by the burn, evaluate unburned islands and the areas adjacent to the burn to predict plant species composition and diversity within the burned area.
25. Estimate from the findings of 23 and 24 and a site potential analysis if rehabilitation is necessary to achieve the habitat goals for the area.
26. Ensure that sage-grouse habitat considerations are incorporated into restoration and burned area rehabilitation plans, particularly in or near stronghold, key and isolated habitats.
27. Encourage the use of native plant materials to the greatest extent possible, as appropriate for site conditions. Seeds should be certified weed free.

28. Use proper site-preparation techniques (e.g., seedbed preparation, control of invasives, weed-control), seeding techniques, and seed mixes in designing restoration and burned area rehabilitation plans. For example, the restoration of annual grasslands may require preparatory chemical treatments and/or an exotic/native seed mix. Perennial grasslands (existing seedings or native) may require seeding or planting of sagebrush.
29. When planting or reseeding sagebrush, favor the sagebrush species and subspecies that are appropriate for the ecological site. Source identified seed is preferable. To maximize the likelihood of establishment, consider multiple approaches such as aerial seeding, ground broadcast seeding with harrow or roller, and planting of seedlings in strategic patches or strips. Avoid seeding sagebrush or other shrubs near road margins if the road and road margin might otherwise serve as a fuel break in the event of future fires.
30. When using exotic perennial grasses and forbs in restoration, use species whose growth form, species, and phenology most closely mimic native species.
31. Provide for noxious and invasive weed control in burned area rehabilitation projects.
32. Opportunities may exist for cost sharing for restoration. Contact local NRCS representatives for more information.

b. Monitoring

On an annual basis, the East Idaho Uplands LWG will report what actions and recommendations were taken to minimize impacts of wildfire to sage-grouse relative to the 32 conservation measures and assess how effective those actions have been within the planning area.

V. IMPLEMENTATION STRATEGY

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
Conservation Measures to Address Threats Associated with Conversion of Conservation Reserve Program Lands		
1. Add new stipulations to benefit sage-grouse habitat.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	During periodic agreement renewal.
2. Introduce forbs and shrubs.	FSA, NRCS, SCD committees, Landowners	Mid-contract modifications (interseed, etc.).
3. Consider sage-grouse habitat needs.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	During ranking for continued participation.
4. Allow grazing on CRP lands.	FSA, NRCS, SCD committees, Landowners	When grazing of CRP would allow rest in other areas, and/or in order to reestablish forbs and shrubs.
5. Educate CRP participants concerning sage-grouse needs.	East Idaho Uplands LWG, IDFG, NRCS, FSA	Refer to conservation measures in the Perennial Grasslands section of the EIU Sage-grouse Conservation Plan.
6. Promote flexibility in CRP management.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	Where sage-grouse habitat improvement could occur.
7. Consider sage-grouse needs in management options.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	When land comes out of CRP designation.
8. Pursue funding options through various programs to improve sage-grouse habitat.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	When land comes out of CRP designation.
9. Encourage further use of CCRP to meet the needs of sage-grouse.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	Ongoing. Possible state-wide CCRP category/designation.
10. Educate landowners about technical assistance and funding.	East Idaho Uplands LWG, NRCS, FSA and SCD committees.	Ongoing.
Conservation Measures to Address Threats Associated with Human Disturbance		
1. Limit OHV use to designated roads and trails.	Land Management Agencies, Landowners.	Where disturbance due to cross-country travel could be a concern.
2. Discourage the creation of new roads and trails. Reroute trails to minimize disturbance.	Land Management Agencies, Landowners.	In sage-grouse breeding or winter habitat.
3. Apply vehicle and land use restrictions to non-essential activities.	Land Management Agencies, Landowners.	Where appropriate (e.g. where existing roads or OHV trails are near occupied leks, restrict use between 6 pm to 9 am).

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
4. Increase awareness of adverse impacts of OHVs.	OHV user groups, East Idaho Uplands LWG, Land Management Agencies.	Ongoing.
5. Limit snowmobile use.	Land Management Agencies, Landowners.	Allow in designated areas only and/or implement seasonal closure.
6. Avoid unnecessary disturbances related to livestock management.	Livestock operators.	Near occupied leks.
7. Avoid placement of sheep camps, bed grounds, etc. on leks.	East Idaho Uplands LWG, Land Management Agencies, IDFG, Livestock operators.	When leks are active. Generally, this is from March 15-May 1 in lower elevations and March 25-May 15 in upper elevations.
8. Minimize bird disturbance during lekking/breeding season.	Land Management Agencies, Individuals and groups.	During viewing and photography at leks.
9. Increase understanding of sage-grouse and sagebrush steppe conservation issues.	Academia, IDFG, East Idaho Uplands LWG, Land Management Agencies.	Ongoing. Educate students, hunters, user groups, etc.
Conservation Measures to Address Threats Associated with Infrastructure		
1. Avoid activity which would disturb lekking birds.	IDFG, Utility Companies, Land Management Agencies, Landowners.	From 6 PM to 9 AM at or near occupied leks.
2. Avoid guy-wires on towers.	Utility Companies, Land Management Agencies, Landowners.	Where feasible. OR wrap wires to increase visibility to birds.
3. Assess problem areas and develop creative solutions.	East Idaho Uplands LWG, Land Management Agencies, Utility Companies, IDFG.	Where existing lines and/or towers are causing or could cause adverse impacts.
4. Site or bury powerlines to avoid sage-grouse habitat	Landowners, Land Management Agencies, Utility Companies.	New construction.
5. Bury or site distribution lines and communication towers as far as possible from leks or other important habitat.	Landowners, Land Mgmt Agencies, Utility Companies.	New construction.
6. Consider installation of raptor perch deterrents	Landowners, Land Management Agencies, Utility Companies.	On power poles and other structures, on a site-specific basis.
7. Restore areas to perennial vegetative cover and control noxious weeds and	East Idaho Uplands LWG, CWMA, Land Mgmt Agencies, Landowners, Utility Companies	On disturbed sites, roads, right-of-ways, etc.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
8. Avoid areas of key or stronghold sage-grouse habitat.	Land Mgmt Agencies, Landowners, Utility Companies.	New highways, roads, trails.
9. Reduce the risk of road-related sage-grouse mortality.	East Idaho Uplands LWG, IDFG, Land Management Agencies.	Identify problem areas. Consider speed limits, brush control, signing, education.
10. Assess the impact of travel ways on sage-grouse.	East Idaho Uplands LWG, IDFG, Land Management Agencies.	Evaluate the need for green-strips depending on fire risk, vehicle activity, vegetative type, etc.
11. Minimize disturbance to leks or other important habitat.	East Idaho Uplands LWG, IDFG, Land Management Agencies.	Manage road and trail use. Employ closures, rerouting, etc.
12. Reduce invasive plants along railroad right-of-ways.	Land Management Agencies, CWMA, Railroad Companies, Landowners.	Ongoing.
13. Manage fuels along railroad right-of-ways.	Land Management Agencies, CWMA, Railroad Companies, Landowners.	Where wildfire risk could be a problem.
14. Minimize impacts of oil and gas infrastructure.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Oil and Gas Companies, Landowners.	Locate oil and gas pipelines and facilities away from leks and important habitat, and/or use existing corridors.
15. Reduce or control invasive plants.	Land Management Agencies, CWMA, Oil and Gas Companies, Landowners.	Ongoing, along roads and pipeline rights-of way. Seed disturbed areas.
16. Raise awareness of impacts of wind energy development.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Ongoing. Develop protocol for permits.
17. Implement wind energy mitigation measures shown in the conservation plan.	Energy Companies, Land Management Agencies, Landowners.	Ongoing
18. Employ offsite mitigation measures to address unavoidable impacts.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Focus on acquiring, restoring, or improving habitat within or adjacent to occupied habitat.
19. Monitor populations and habitat before, during, and after wind energy project development.	Industry proponents, IDFG, Land Management Agencies, Landowners, East Idaho Uplands LWG	Ongoing. Implement mitigation measures.
Conservation Measures to Address Threats Associated with Isolated Populations/Lack of Data		
1. Secure funding to locate all leks.	East Idaho Uplands LWG, IDFG, Land Management Agencies	Ongoing for an undetermined time.
2. Determine if populations are isolated.	East Idaho Uplands LWG, IDFG	Collect and analyze all population data for as long as needed.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan

# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
3. Follow monitoring guidelines in <i>Connelly et al. 2003</i>	IDFG	Ongoing.
4. Use aircraft to locate leks	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Ongoing for an undetermined time.
5. Use follow-up ground surveys	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Ongoing.
6. Use GPS technology to map all leks	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Ongoing.
7. Count all male sage-grouse during lek visits.	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Ongoing.
8. Survey people about sage-grouse observations and population trends.	Landowners, Resource Users, Land Management Agencies, IDFG.	Ongoing.
9. Ensure certain lek routes are counted each year.	East Idaho Uplands LWG, IDFG, Land Management Agencies	Ongoing.
10. Ensure that at least 2 lek routes are counted annually,	East Idaho Uplands LWG, IDFG, Land Management Agencies	Ongoing. A minimum of 6 individual leks will be counted annually.
11. Visit leks not on a route at least once every 5 years.	East Idaho Uplands LWG, IDFG, Land Management Agencies	Ongoing.
12. Secure funding to radio-mark sage-grouse.	East Idaho Uplands LWG, IDFG, Land Management Agencies	Ongoing for an undetermined time.
13. Map seasonal habitats.	East Idaho Uplands LWG, IDFG, Land Management Agencies	As data become available.
14. Map migratory pathways.	East Idaho Uplands LWG, IDFG, Land Management Agencies	As data become available.
15. Delineate individual population areas.	East Idaho Uplands LWG, IDFG, Land Management Agencies	If radio telemetry shows that there are separate populations.
16. Determine if breeding populations have been adequately surveyed.	East Idaho Uplands LWG, IDFG, Land Management Agencies	Base conclusions on lek counts. Adjust leks or routes to be counted, if necessary.
17. Evaluate harvest levels and determine if harvest is adequately monitored.	IDFG, East Idaho Uplands LWG	Ongoing.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan

# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
18. Identify harvest areas.	IDFG, East Idaho Uplands LWG, Landowners	Through radio telemetry and info from hunters, landowners, etc.
19. Collect hunter harvest information.	IDFG	Use wing barrels in major areas.
20. Obtain information on hunter activity.	IDFG	Conduct hunter field checks.
21. Increase wing sample size.	IDFG	Request hunters to participate in a wing mail-in survey.
22. Compare trend data between East Idaho Uplands and other sage-grouse areas.	IDFG	Look at young:adult ratio, brood success, hatch time, etc.
23. Evaluate seasonal habitats.	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Based on <i>Connelly et al. 2000 Guidelines</i>
24. Identify priority areas for habitat improvement	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies	Ongoing.
25. Manage habitat to increase sage-grouse and distribution.	Sho-Ban Tribes, IDFG, Land Management Agencies	Base opportunities on available data.
26. Identify areas of high priority for sage-grouse management.	Counties, Landowners, Land Trusts, Land Management Agencies, Sho-Ban Tribes, IDFG, East Idaho Uplands LWG	Base opportunities on available data.
27. Identify existing or potential connectivity corridors.	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies.	Use radio telemetry data and other information.
28. Maintain or reestablish connectivity corridors.	Sho-Ban Tribes, IDFG, East Idaho Uplands LWG, Land Management Agencies.	Through management or restoration of habitat
29. Evaluate proposed projects for impact to connectivity corridors.	Counties, Landowners, Land Trusts, Land Management Agencies, Sho-Ban Tribes, IDFG, East Idaho Uplands LWG	Ongoing.
30. Identify and quantify threats within isolated population areas.	East Idaho Uplands LWG, IDFG.	As data become available.
31. Maintain isolated populations and maintain or improve associated habitat.	Land Management Agencies, Landowners, IDFG	Consider land use activities, vegetation management, hunting regulations, etc.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
Conservation Measures to Address Threats Associated with Urban/Exurban Development		
1. Avoid development of important sage-grouse habitat.	Land Management Agencies, Landowners, IDFG, East Idaho Uplands LWG, Counties, Cities.	Work with agency and city and county planners.
2. Educate landowners and developers concerning the value of sagebrush areas.	Land Management Agencies, IDFG, East Idaho Uplands LWG.	Consider options associated with land trusts.
3. Acquire conservation easements.	Land Management Agencies, Land Trusts.	Ongoing, when landowners are willing.
4. Acquire habitat.	IDFG, Land Management Agencies, Land Trusts.	Ongoing. Through land sales and/or exchanges. Use various funding sources.
5. Protect wildland areas from wildfire originating in areas of urban/exurban development.	Fire Suppression Agencies.	Ongoing.
6. Offset unavoidable alteration and loss of sage-grouse habitat.	Land Management Agencies, Landowners, IDFG, East Idaho Uplands LWG, Counties.	Pursue options for off-site mitigation; focusing on maintaining or restoring habitat elsewhere.
7. Conduct population monitoring.	Land Management Agencies, IDFG, East Idaho Uplands LWG.	Immediately and ongoing.
8. Evaluate and protect critical habitat areas.	Land Management Agencies, Landowners, IDFG, East Idaho Uplands LWG.	Consider land exchanges, conservation easements or related actions.
Conservation Measures to Address Threats Associated with Livestock Impacts		
1. Identify key habitat use areas.	East Idaho Uplands LWG, IDFG, Land Management Agencies.	Pursue funding opportunities to gather information.
2. Evaluate rangeland health and sage-grouse habitat condition.	Land Management Agencies.	Use established scientifically-based protocols.
3. Maintain or improve desired vegetative conditions or trends.	Land Management Agencies, Landowners, Livestock Operators,	Implement effective grazing management practices and/or vegetative manipulation.
4. Provide Incentives to achieve sage-grouse objectives	IDFG, Land Management Agencies.	Develop and implement options.
5. Conduct fine scale assessments and/or monitoring to determine nesting habitat conditions.	IDFG, Land Management Agencies.	Where nesting habitat has been identified. Use scientifically accepted protocols.
6. Implement grazing systems that maintain or enhance herbaceous understory.	Land Management Agencies, Landowners, Livestock Operators.	Where grazing has reduced sage-grouse nesting habitat quality. In occupied habitat during the nesting season.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
7. Consider leks when establishing sites for sheep camps and bedgrounds.	IDFG, Land Management Agencies, Landowners, Livestock Operators.	Use lek route or other relevant information. Dates of concern are March 15 - May 15.
8. Ensure livestock operators are aware of occupied leks.	IDFG, Land Management Agencies, Landowners, Livestock Operators.	Show locations during field visits, provide maps, or mark leks as appropriate.
9. Use grazing management techniques that promote and maintain a diversity of desired forbs.	Land Management Agencies, Landowners, Livestock Operators.	Consider options listed in the Conservation Plan.
10. Promote appropriate riparian vegetation structure and composition.	Land Management Agencies, Landowners, Livestock Operators.	Use appropriate grazing management methods.
11. Adjust livestock use during drought.	Land Management Agencies, Landowners, Livestock Operators.	In sage-grouse nesting and brood-rearing habitat.
12. Coordinate drought management.	Land Management Agencies, Landowners, Livestock Operators.	As necessary; also evaluate the possibility of identifying forage reserves.
13. Appropriately place salt or mineral supplements.	Landowners, Livestock Operators.	Place in disturbed areas, in seedings or cheatgrass sites. Use salt and supplements as a management tool to improve sage-grouse habitat.
14. Establish salting locations so as to create a mosaic of sagebrush age-classes.	Land Management Agencies, Landowners, Livestock Operators.	Where sagebrush cover is >25%. Change sites frequently to avoid long-term damage to herbaceous plant cover.
15. Consider which fences may provide risk of sage-grouse collision mortality.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, Livestock Operators.	Use existing information (fence location maps, lek maps, existing knowledge, etc.)
16. Take action to mitigate fence collision occurrence.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Fence marking could be one appropriate action.
17. Consider sage-grouse when constructing new fences and/or structures.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Place as far as possible from leks and/or important seasonal habitat.
18. Maintain free-flowing characteristics of springs.	Land Management Agencies, Landowners, Livestock Operators.	Use float valves, etc.
19. Fit troughs and open storage tanks with wildlife escape ramps.	Land Management Agencies, Landowners, Livestock Operators.	See Wildlife Watering and Escape Ramps on Livestock Watering Developments (Sherrets, 1989) for suggested ramp designs.
20. Enhance livestock distribution and sage-grouse habitat through water development.	Land Management Agencies, Landowners, Livestock Operators.	New water developments in sage-grouse breeding habitat.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan

# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
21. Avoid placing new waters in higher quality breeding/early brood-rearing habitat.	Land Management Agencies, Landowners, Livestock Operators.	Where grazing use has not been significant in the past.
22. Establish forage reserves.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	In areas unsuitable for sage-grouse habitat restoration, or in lower priority habitat restoration areas.
23. Utilize economic incentive programs	NRCS, FSA, FWS, Landowners.	On private lands, to implement sage-grouse habitat conservation actions.
24. Evaluate individual sites to determine when grazing can resume following rehabilitation/restoration actions.	Land Management Agencies, Landowners, Livestock Operators.	Base determinations on meeting outlined objectives.
Conservation Measures to Address Threats Associated with Mines, Landfills, and Gravel Pits		
1. Discourage activities within sage-grouse breeding or winter habitat.	Land Management Agencies, Landowners, Individuals, Cities, Counties, Road Departments, Mining Companies.	Avoid occupied leks by at least 3.2 km.
2. Ensure reclamation plans incorporate appropriate seed and seeding technologies.		Where these activities are unavoidable.
3. Control invasive plant species.		During exploration, operation, maintenance, and restoration of these sites.
4. Take adequate weed control measures.		During exploration, operation, maintenance, and restoration of these sites.
5. Offset alteration and loss of sage-grouse habitat.		If activities are unavoidable, employ off-site mitigation (acquire, improve or restore habitat within or adjacent to occupied habitat).
6. Apply seasonal-use or time-of-day restrictions.		During exploration, operation, maintenance, and restoration of these sites. Include restrictions related to supporting infrastructure.
7. Consider other mitigation measures for mines.	East Idaho Uplands LWG, Land Management Agencies, Landowners, Mining Companies.	If time restrictions are not possible.
Conservation Measures to Address Threats Associated with Predation		
1. Consider the status of sage-grouse populations in individual areas before implementing predator control.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS.	look at the 3-year running average, and use guidelines from various publications.
2. Consider the status of sage-grouse habitat in individual areas.		Use guidelines from various publications.
3. Consider the nature and extent of other threats in the area.		Determine if other factors (apart from predation) are a greater factor.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
4. Consider the status of predators in the area.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS.	Determine what species are present; if populations are inconsistent with what is expected for healthy sagebrush steppe; whether excessive predation has been documented.
5. Consider predator control actions.		Ensure all appropriate steps are taken, including environmental analysis of impacts.
6. Use predator control when appropriate.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS.	Summarize the results of measures 1 - 5, and work on addressing other threats (fences, landfills, perch sites, etc.) in overall predator management.
Conservation Measures to Address Threats Associated with Sagebrush Control		
1. Ensure that sage-grouse seasonal conflicts have been assessed.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	Prior to planning prescribed burns or other vegetation management treatments.
2. Evaluate treatment proposals.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	When seasonal habitats have been mapped, and considering habitat characteristics.
3. Avoid sagebrush reduction projects.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	Where habitats are trending toward meeting certain sage-grouse needs, or in areas of minimal brush.
4. Design projects to meet objectives, taking existing conditions into consideration.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	If analysis shows treatment is advisable.
5. Evaluate and monitor treatments.	Land Management Agencies, Landowners.	As soon as possible after treatment, and periodically thereafter.
6. Avoid treating habitats prone to expansion of undesirable species.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	Unless adequate measures are taken to control invasives and ensure dominance of desirable species.
7. Provide control and contingency actions.	Land Management Agencies, Landowners.	When planning and executing prescribed fire.
8. Ensure burn plans address the importance of preventing fire escape.	Land Management Agencies, Landowners.	Especially when burns are near stronghold and key habitat.
Conservation Measures to Address Threats Associated with West Nile Virus		
1. Cooperate with West Nile Virus monitoring efforts.	IDFG, Land Management Agencies, Landowners, APHIS.	Ongoing.
2. Keep up on research results in relation to habitat conditions.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS.	Ongoing.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
3. Identify effective conservation measures.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS.	Ongoing.
4. Evaluate practices to address mosquito numbers.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS, Counties.	Where sage-grouse losses have been documented. Consider workable measures to control mosquito numbers.
5. Understand and educate others on how to deal with dead birds.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners, APHIS, Livestock Operators, Members of the Public.	Ongoing.
6. Consider hunting season closures.	East Idaho Uplands LWG, IDFG, Land Management Agencies.	Where significant sage-grouse loss has been documented.
Conservation Measures to Address Threats Associated with Agricultural Expansion		
1. Utilize various NRCS/FSA programs to recover sage-grouse habitat.	NRCS, FSA, Landowners.	Ongoing, where feasible, and as landowners choose to participate.
2. Avoid agricultural expansion into key habitat or potential restoration areas.	Landowners, Land Management Agencies,	Where possible.
3. Identify and acquire land parcels (through exchange, purchase, conservation easements) which could be restored.	Land Trusts, Landowners, Land Management Agencies, IDFG.	With willing landowners, and as funding becomes available.
4. Identify other land use options.	East Idaho Uplands LWG, Landowners, IDFG.	With willing landowners, and as funding becomes available. Where lands are withdrawn from irrigation, consider for restoration or forage reserve.
5. Employ off-site mitigation	Landowners, Permittees, Cooperating Agencies.	In relation to where alteration or loss of habitat is unavoidable.
Conservation Measures to Address Threats Associated with Annual Grasslands		
1. Identify annual grasslands.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	Ongoing, and following disturbance. Monitor for 2 years and take action if needed.
2. Consider Implementing appropriate measures.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	When there is a threat of a monoculture of annual grassland.
3. Eradicate or control noxious weeds.	CWMA, Land Management Agencies, Landowners.	Use a variety of methods (integrated weed management). Then monitor for at least 3 years.
4. Require certified weed-free forage.	Permitted Land Users, Casual Users, Land Management Agencies.	When forage will be brought onto public or state lands.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
Conservation Measures to Address Threats Associated with Climate Change		
1. Factor climate change into current management.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	Ongoing.
2. Avoid degradation of current vegetation communities.	Land Management Agencies, Permittees, Landowners.	Ongoing.
3. Adjust management as needed.	Land Management Agencies, Landowners.	During periods of unusual climatic events.
4. Focus management on restoration and/or resiliency of the vegetative resource.	Land Management Agencies, Landowners.	Ongoing.
5. Increase knowledge and awareness.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	Specifically understand invasive species impact.
6. Reduce impacts of land uses that increase invasive species.	Land Management Agencies, Permittees, Landowners.	As deemed necessary.
7. Manage to maintain biotic soil crusts; improve or maintain vegetative vigor.	Land Management Agencies, Permittees, Landowners.	Where appropriate (for soil crust potential).
8. Control/eliminate invasive species.	CWMA, Land Management Agencies, Landowners.	Where other management is not successful.
9. Use alternative approaches in restoration.	Land Management Agencies, Landowners.	Improve likelihood of establishment through the use of hand planting, imprinters, etc.
10. Use local, native seed stock.	Land Management Agencies, Landowners.	Where feasible and desirable in reseeding disturbed areas.
11. Support coordination and communication links.	East Idaho Uplands LWG, Land Management Agencies, Landowners, Researchers.	Ongoing.
Conservation Measures to Address Threats Associated with Conifer Encroachment		
1. Identify and prioritize conifer encroachment areas.	East Idaho Uplands LWG, Land Management Agencies, IDFG and Landowners.	Ongoing and in cooperation with the East Idaho Aspen Working Group.
2. Identify leks where encroachment may be affecting leks or habitat quality.	East Idaho Uplands LWG, Land Management Agencies, IDFG and Landowners.	Ongoing with particular attention to annual lek surveys, lek searches.
3. Remove conifers encroaching on riparian or sage brush providing potential habitat	Land Management Agencies and Landowners.	Ongoing and in cooperation with the East Idaho Aspen Working Group.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
4. On private lands apply for grants or enroll in Farm Bill programs benefitting sage grouse.	East Idaho Uplands LWG, NRCS, IDFG and Landowners.	Ongoing with particular attention to current grant or Farm Bill enrollment opportunities.
5. Plan wildfire suppression and prescribed fire to address encroachment and sage grouse habitat.	Land Management Agencies and Landowners.	Ongoing with particular attention to aspen restoration projects.
Conservation Measures to Address Threats Associated with Insecticides		
1. Avoid organophosphates and minimize use of other insecticides; or allow suitable treatment buffers around field edges.	Landowners, NRCS.	On fields utilized by sage-grouse. Incentive programs may be available.
2. Develop non-insecticide strategies to protect crops from insects.	Extension Personnel, Other Specialists, Landowners.	Possibly use certain plants around field edges to repel insects.
3. Manage native brood-rearing habitat for sage-grouse use.	Land Management Agencies, Landowners.	Where appropriate.
4. Inform agricultural operators of concerns with insecticide use.	<i>See long list in Conservation Plan</i>	Ongoing. Develop collaborative solutions.
5. Ensure control efforts focus on certain situations.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG, ISDA, APHIS-PPQ	In key problem areas, identify avoidance areas, identify treatment method, monitor results.
Conservation Measures to Address Threats Associated with Seeded Perennial Grasslands		
1. Prioritize areas, and identify options and opportunities for re-establishing sagebrush.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	Where sagebrush is limiting on the landscape.
2. Use source-identified, tested seed adapted to local conditions.	Land Management Agencies, Landowners.	When seeding sagebrush.
3. Consider and use various approaches to improve likelihood of success.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	When restoring sagebrush sites.
4. Plant sagebrush in patches or strips	Land Management Agencies, Landowners.	In established stands of introduced perennial grasses. Scalp spots or strips to reduce grass competition. Use herbicides.
5. Consider and implement the 3-step restoration process outlined by Pellant and Lysne (2005).	IDFG, Land management agencies, Landowners	Where the diversification of crested wheatgrass or similar seedings with native species of grasses, forbs and/or shrubs is desired.
6. Use NRCS/FSA, Grouse Partnership, OSC, etc. funds and programs	Landowners, NRCS, FSA, USFWS, OSC, Grouse Partnership, East Idaho Uplands LWG, IDFG.	Ongoing, as funding is available.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
Conservation Measures to Address Threats Associated with Sport Hunting (including Falconry)		
1. Continue to require a special permit to hunt sage-grouse.	IDFG.	An official Idaho regulation would be needed. This would allow for efficient identification and sampling of sage-grouse hunters.
2. Continue to conduct an annual telephone survey.	IDFG, East Idaho Uplands LWG.	In order to contact adequate numbers of sage-grouse hunters to provide harvest estimates.
3. Evaluate accuracy of harvest estimates, and implement needed changes to data gathering.	IDFG.	Yearly.
4. Consider implementing a mandatory report system.	IDFG, East Idaho Uplands LWG.	Statewide, as deemed necessary.
5. Conduct opening weekend hunter check stations.	IDFG, Volunteers.	Ongoing; yearly; at strategic locations.
6. Use an increased number of wing barrels.	IDFG.	Ongoing; yearly; at strategic locations.
7. Send wing envelopes to all sage-grouse hunters before the hunting season.	IDFG.	Return of wings in envelopes would be voluntary and would increase database of overall harvest.
8. Analyze wings collected.	IDFG, Volunteers.	Annually (to determine age, sex, and production) and to determine change in sex and age of birds harvested on opening weekend versus later in the season.
9. Identify populations where overharvest is a risk.	East Idaho Uplands LWG, IDFG.	Because of isolated or fragmented habitat or small number of birds. Develop appropriate hunting season recommendations.
10. Consider existing guidelines and possible changes/additions when making season recommendations to the IDFG Commission.	East Idaho Uplands LWG, IDFG.	Ongoing. Incorporate changes/additions as needed.
Conservation Measures to Address Threats Associated with Wildfire		
1. See the Annual Grasslands section for many conservation measures which tie closely to the threats associated with wildfire.		
2. Coordinate with partners to prioritize areas for restoration.	East Idaho Uplands LWG, USGS, GBRI, Academia, IDFG, Land Management Agencies.	Ongoing, where appropriate.
3. Consider an incremental or buffer approach to protect intact habitat.	East Idaho Uplands LWG, Land Management Agencies, Landowners, IDFG.	Progressively convert broad bands of annual grasslands to perennial species. Do larger scale conversions if funding and logistics permit.
4. Employ appropriate fire suppression tactics to minimize fire size.	Fire Suppression Agencies and Entities.	Where human safety will not be compromised, suppression priority will be based on fire management units (FMU) and on outlined guidelines for specific sagebrush conditions and species.
5. Knowledgeable Resource Advisors will be available for any "extended attack" wildfires.	Fire Suppression Agencies.	During certain times and conditions, resource advisors should be field-ready on short notice.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan

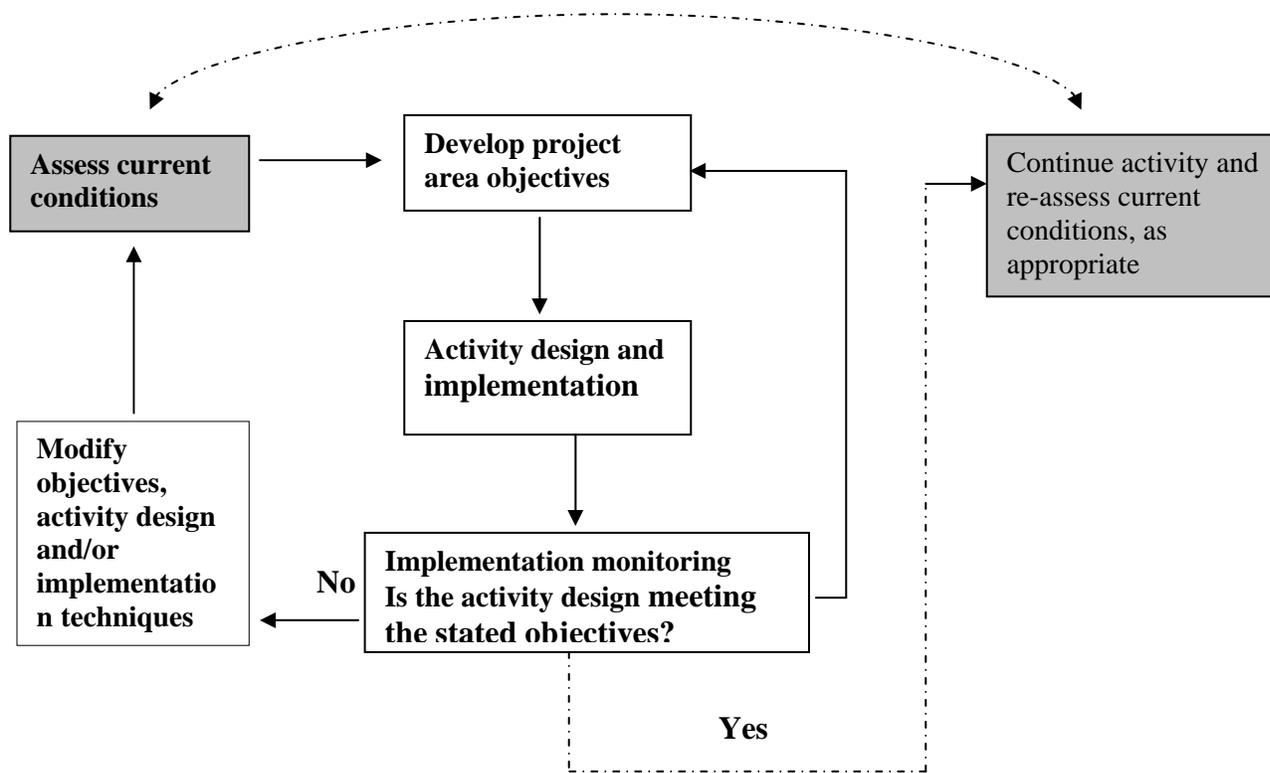
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
6. Suppress fires in unburned islands or patches.	Fire Suppression Agencies and Entities.	Where doing so will not compromise fire crew safety and will pose little risk of fire escape.
7. Deploy pre-identified "appropriate management response" resources.	Fire Suppression Agencies and Entities.	When fires threaten or occur within sage-grouse stronghold habitats.
8. Conduct burnout/backfire operations in a manner to minimize loss of sagebrush.	Fire Suppression Agencies and Entities.	While still providing for public and fire crew safety.
9. Use post-fire After Action Reviews (AAR).	Fire Suppression Agencies and Entities.	For fires which have affected sage-grouse habitat, and where valuable lessons could be learned.
10. Incorporate conservation measures into FMP.	Fire Suppression Agencies.	Updated annually. Reconsider appropriate management response.
11. Update FMPs and FMU database.	Fire Suppression Agencies.	As needed, to incorporate new sage-grouse habitat information and associated wildfire suppression priorities.
12. Explore options for water sources to be used for suppression activities.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	In areas of limited water availability and/or remote locations. Mark existing locations on maps for use by fire crews, resource advisors, and dispatchers.
13. Stage initial attack resources in high fire incident areas.	Fire Suppression Agencies and Entities.	Where feasible.
14. Minimize or reduce the risk of the escape of human-caused fire.	East Idaho Uplands LWG, Land Management Agencies, Landowners.	At the wildland-urban interface (WUI) bordering rangelands. Education, pre-suppression tactics, and vegetation treatments may be options.
15. Strategically create or place pre-treated strips/areas to aid in wildfire control/containment.	Land Management Agencies, Landowners.	Options could include mowing, herbicide application, grazing, seeding, etc.
16. Provide annual training	Fire Suppression Agencies and Entities.	To provide awareness of issues and potential impacts of suppression activities on sage-grouse habitats and other issues of management concern.
17. Install and maintain fire danger signs.	Land Management Agencies, Landowners, Counties.	Along main access roads.
18. Increase public outreach, information, and education related to fire and sagebrush ecosystems.	East Idaho Uplands LWG, Land Management Agencies, IDFG.	Examples include media interviews and articles, group presentations, brochures, etc.
19. Increase public awareness and understanding of fire risk during times of high fire danger.	East Idaho Uplands LWG, Fire Suppression Agencies.	Via media.
20. Minimize wildfire ignitions and manage fuels within highway and railroad rights-of-way.	ITD, Railroad Companies, Land Management Agencies, Landowners, CWMA.	Ongoing.

Implementation Strategy for Addressing Threats Identified in the East Idaho Uplands Sage-grouse Conservation Plan		
# and Focus of Conservation Measure (from Conservation Plan narrative)	Responsible Party and/or Land Ownership Area	Timetable, Location, and/or Related Actions
21. Increase enforcement of existing fire restrictions and closures.	Law Enforcement Agencies, Land Management Agencies.	As needed and In accordance with the High Fire Danger Closure and Restriction Plan.
22. Limit firelines and/or trails from being converted to 2-track roads or OHV/ATC trails.	Land Management Agencies, Landowners.	Where access was created during fire suppression activities.
23. Evaluate fire severity.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Gather pre-burn vegetation info. Acquire post-burn satellite data. Gather on-the-ground data.
24. Evaluate unburned islands/areas adjacent to burns.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Where pre-burn vegetation information is lacking for the burn area itself.
25. Determine if rehabilitation is necessary to achieve habitat goals.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Consider site potential and the results of conservation measures 23 and 24 above.
26. Ensure that sage-grouse habitat considerations are incorporated into restoration and rehabilitation plans.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	Particularly in or near stronghold, key and/or isolated habitats.
27. Encourage the use of native plant materials.	East Idaho Uplands LWG, IDFG, Land Management Agencies, Landowners.	In stabilization and rehabilitation treatments, and as appropriate for the site.
28. Use proper site preparation techniques, seeding techniques, and seed mixes.	Land Management Agencies, Landowners.	Based on the site, and when designing restoration and burned area rehabilitation plans.
29. Seed the appropriate species/subspecies of sagebrush.	Land Management Agencies, Landowners.	Source identified seed is preferable. Consider multiple treatment methods.
30. Use exotic grasses and forbs in seed mixtures when appropriate.	Land Management Agencies, Landowners.	To assure seeding success.
31. Provide noxious weed control in burned area rehabilitation.	Land Management Agencies, Landowners, CWMA.	Where needed.
32. Consider cost sharing in restoration efforts.	Land Management Agencies, Landowners, NRCS.	As appropriate and as funding is available.

VI. ADAPTIVE MANAGEMENT

Adaptive management is a type of natural resource management that implies making decisions as part of an ongoing process. Monitoring the results of actions will provide a flow of information that may indicate the need to change a course of action. Figure 3 below summarizes the adaptive management process.

Figure 3. Adaptive Management Process



Adaptive management includes five integral steps: assessment; development of objectives; activity design and implementation; monitoring; and modification.

- Assessment involves evaluating the current conditions, and in the case of “less than desired” conditions, determining the cause.
- Objectives are developed for an area based on the current conditions, site potential, and in this case, sage-grouse needs.
- Activity design and implementation involves the development and completion of conservation measures to move current conditions towards the desired conditions.
- Monitoring is conducted to determine if the activity is being implemented as designed and to determine if the observed results will be effective in reaching the stated objectives.
- Modification of objectives, activity design and/or implementation techniques may be necessary if the “effectiveness” monitoring shows the activities are resulting in ineffective

or insufficient progress towards meeting the objective(s). Monitoring of the modified activity then continues to assure results are as desired.

A. Adaptive Management and the East Idaho Uplands LWG Conservation Plan

As stated in the introduction (section 1.A.1), this conservation plan will be a “working document.” As local and regional conditions change and new information, technology and techniques become available; this plan may be refined to reflect these changes and information. It is also expected that the East Idaho Uplands Sage Grouse Conservation Plan and the objectives therein, may need to be adapted to changes in the legal status of sage grouse, results of sage grouse monitoring activities, etc. Therefore, after completion of the Plan, the LWG will meet no less than once annually to: 1) **assess** changes to current conditions, 2) review and, if necessary, develop updated population and habitat conservation **objectives**, 3) track existing or develop new **activities** to accomplish the stated objectives and 4) **monitor** implementation of the Conservation Plan, conservation projects conducted within the East Idaho Uplands SGPA and review monitoring results of sage-grouse populations and habitat. Most if not all of this information is expected to be contained in the LWG’s annual report which will include changes in sage-grouse numbers and distribution, changes in sage-grouse habitat, and management actions taken by the East Idaho Uplands LWG, agencies, landowners and livestock operators. Annual monitoring of conservation measures to address local threats has been made an integral component of the Plan. The results of the annual report and the monitoring of conservation measures will serve as the basis for **modifications** to the plan, if necessary.

B. Modification of the Plan

Any proposed changes to the Plan must be considered and approved at an announced meeting of the LWG. Announcements for Eastern Idaho Uplands LWG meetings must be distributed to the current mailing list no less than two weeks in advance of the meeting. Proposed changes to the Plan must be distributed to all individuals on the mailing list along with the meeting announcement. Meetings will be announced by e-mail and hard copy mailing to the entire mailing list no later than two weeks in advance of the meeting. Meeting locations will typically be at the Idaho Fish and Game Regional Office in Pocatello, Idaho.

All decisions to make changes to the Plan must be approved by consensus of the members who are in attendance. Consensus is defined as all LWG members understand, agree with, and will support the change. In the event that the members of the LWG are not able to reach consensus on a proposed change to the Plan, a subsequent meeting may be scheduled if a simple majority (>50%) of the members approve. The second meeting will be announced to the entire mailing list no later than two weeks prior to the scheduled meeting date. If consensus cannot be achieved by the end of the second scheduled meeting of the full LWG to adopt the proposed change, then the Plan will not be changed.

C. Special Objectives

The LWG can be convened for special objectives (such as submitting comments on proposed projects) on an as needed basis.

Meetings can be scheduled in response to the request of any individual or agency that has attended a prior meeting. All future meetings will be facilitated by a trained, neutral group process facilitator. Meetings will be announced by e-mail or hard copy mailing to the entire mailing list no later than two weeks in advance of the meeting. Meeting locations will typically be at the IDFG Regional Office in Pocatello, Idaho.

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**Appendix A.
East Idaho Uplands Sage-grouse Local Working Group Mailing List**

Individuals whose names are followed by an asterisk have attended one or more meeting of the LWG. Others have received mailings since the LWG began its work in 2007.

Bud Alford*
Targhee National Forest, Palisades Ranger
District
Idaho Falls, ID

Paul Alleman*
Montpelier, ID

Eric Anderson*
Idaho Department of Fish and Game
Idaho Falls, ID

Karl E. Anderson
Bannock County Commissioners
Pocatello, ID

Ken Andrus
Idaho House of Representatives
Lava Hot Springs, ID

Mark Arana*
Bureau of Reclamation, Snake River Area
Burley, ID

Sandi Arena*
U.S. Fish and Wildlife Service
Chubbock, ID

R. Steven Bair
Idaho Senate
Blackfoot, ID

Janet Bala
Idaho Native Plant Society, Sah-Wah-Be
Chapter
Pocatello, ID

Chris Banks*
Idaho Association of Soil Conservation
Districts
Bancroft, ID

Hans Bastian
US Forest Service, Caribou-Targhee
National Forest - Westside Ranger District
Pocatello, ID

Jason Beck*
Idaho Department of Fish and Game
Pocatello, ID

David Beckstead
Sugar Creek Allotment
Preston, ID

Von Beckstead
Caribou Field Archers
Soda Springs, ID

Scott Bergen
Wildlife Conservation Society
Idaho Falls, ID

John Berndt*
Jackson, WY

Diane Bilyeu
Idaho Senate
Pocatello, ID

Duane Bitton
Grace, ID

Todd Black
College of Natural Resources, Utah State
University
Logan, UT

Garth Boehme, Chair
Bear Lake Soil and Water Conservation
District
Geneva, ID

Joe Bohne*
Wyoming Game and Fish
Alpine, WY

Dirk Bowles, Commissioner
Franklin County Commissioners
Preston, ID

Terry Bowyer
Idaho State University, Biology Department
Pocatello, ID

Shirl Boyce
Idaho Economic Development
Association/College of Western Idaho
Nampa, ID

Dan Boyd
Idaho State Journal
Pocatello, ID

Stan Boyd, Executive Director
Idaho Wool Growers Association
Boise, ID

Robert Boyer*
Bureau of Reclamation, Snake River Area
Burley, ID

Boyd Bradford
Natural Resources Conservation Service
Preston, ID

Larry Bradford
Franklin, ID

Robert Bradley*
Landowner
Blackfoot, ID

Bryan Brown*
Environmental Consultant
Salt Lake City, UT

Pat Brown
Idaho Department of Lands
Idaho Falls, ID

Randall Budge, Commissioner
Idaho Department of Fish & Game
Commission, c/o Racine Olson Nye Budge
& Bailey
Pocatello, ID

Dr. Marie Bulgin
Idaho Wool Growers Association
Boise, ID

Bertha and Woodrow Butler*
Eastern Idaho Grazing Association
Blackfoot, ID

Paul Butler
Society for Range Management
Chubbock, ID

Rance Butler*
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Appendix B.

East Idaho Uplands Sage-grouse Local Working Group Working Charter

Purpose

The purpose of the East Idaho Uplands Sage-grouse Local Working Group will be to work cooperatively together and be an advisory body to:

- Increase our understanding of sage-grouse numbers, distribution, and habitat use within the East Idaho Uplands Sage-Grouse Planning Area (SGPA).
- Maintain and/or increase sage-grouse numbers and distribution within the East Idaho Uplands SGPA.
- Improve sage-grouse habitat conditions when/where possible within the SGPA.
- Share information on sage-grouse numbers, distribution, and habitat use with land management agencies, regulatory authorities having jurisdiction over the SGPA, and land owners owning land within the SGPA.
- Serve as the local educational and advisory body to land management agencies, jurisdictional authorities and land owners about sage-grouse distribution and habitat needs within the SGPA.

Sage-grouse Planning Area

The East Idaho Uplands SGPA is shown in Figure 1 in the Final East Idaho Uplands Sage-grouse Conservation Plan. Land ownership/management within the SGPA includes private lands and lands managed by the BLM, Bureau of Reclamation, IDFG, IDL, Idaho Department of Parks and Recreation, the Shoshone-Bannock Tribes, and USFS.

Membership

The East Idaho Uplands LWG will:

- Strive to maintain a diverse membership that includes broad and balanced representation of interests.
- Encourage continued participation by all land management agencies managing lands within the SGPA.
- Encourage continued participation by other agencies and organizations, including but not limited to, the Shoshone-Bannock Tribes, Natural Resources Conservation Service, Idaho Department of Fish and Game, county commissions and county planning and zoning commissions, land owners and grazing associations within the SGPA, non-governmental organizations, sportsmen, and interested citizens.
- Welcome participation by anyone willing to work cooperatively to increase the knowledge of sage-grouse numbers and distribution and to manage sage-grouse habitat within the SGPA in a way that maintains and/or increases sage-grouse numbers and distribution.

In order to support the ongoing coordination, communication, and meeting facilitation needs for the East Idaho Uplands LWG, the group will retain the services of a trained neutral facilitator, if possible.

LWG members will annually select a Presiding Secretary from its active membership who will serve for one year in this capacity. The Presiding Secretary will be the contact person for the LWG and work with the trained neutral facilitator to schedule meetings as necessary, appoint working committees as necessary with the approval of the LWG, and ensure that the annual report is completed.

Ground Rules

The following ground rules will be followed at each meeting of the East Idaho Uplands LWG:

- Start on time, end on time
- One person speak at a time
- No one dominate
- Encourage diverse interests to participate
- Be respectful of each other (no personal attacks)
- Agree to disagree
- Remember the big picture
- No sabotaging the process
- Everyone participates
- Take responsibility for being there
- No sidebar discussions
- Group memory from last meeting and agenda for next meeting ahead of time for each meeting.

Decisions

The EIUSGLWG will use consensus-building processes during discussion, meaning that all will be allowed to share concerns and participate in discussions leading up to decision-making. Decision making will be conducted by consensus. Consensus will be defined as “Everyone understands and will support the decision.” Decisions may be reopened (questioned and discussed again) at the beginning of the very next meeting. If not challenged at the next meeting, decisions will not be revisited.

Meetings

Meetings will be called at least quarterly or as necessary to implement the East Idaho Uplands LWG Conservation Plan and will be held in Pocatello, Soda Springs, or Montpelier.

Conservation Plan Revisions

It may be necessary to revise the East Idaho Uplands LWG Conservation Plan when new information or threats become identified. Conservation Plan revisions will be made using the same procedures that were used to develop the initial Conservation Plan.