

## Southwest Desert Local Working Group Annual Report

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The Southwest Desert Adaptive Resource Management sage-grouse local working group (SWARM) consists of community members from Beaver and Iron Counties. Recent updates to sage-grouse management areas have identified 2 major management areas that fall under the operation of SWARM: Hamlin Valley and Bald Hills.

The Bald Hills Management Area is located in southwestern Utah, in Beaver and Iron Counties, and is considered a population stronghold for this region of Utah. This population uses a series of leks throughout the habitat area, with males visiting more than one lek per season. Currently, the population is constrained to the Management Area by vegetation fragmentation and human development; however future improvements could connect this population to the Hamlin Valley Management Area to the west, and further north into Beaver County. The primary land uses in this Management Area are grazing, agriculture, and swine production; predominant land ownership is Bureau of Land Management and private. The BLM manages the Bald Hills for multiple uses including conservation, recreation, energy development, and big game hunting. Residential development is present in Minersville, in the north of the Management Area, where most of the agriculture production also occurs. There is potential for wind energy production as well as current and future power transmission lines.

The Hamlin Valley Management Area is located in southwestern Utah, in Beaver and Iron Counties, on the border of Utah and Nevada and is considered a population stronghold for this region of Utah. Although currently isolated from other habitat areas, habitat restoration could link this population to the Bald Hills Management Area. The primary land use in this Management Area is grazing; predominant land ownership is the Bureau of Land Management. The BLM manages Hamlin Valley for multiple uses including wild horse conservation, recreation, and big game hunting. Development is limited to scattered houses, generally in the southern portion of the Habitat Area.

One of the main purposes of our Plan is to provide a framework of strategies and associated actions that can be implemented to abate threats, address information gaps, and guide monitoring efforts. Several other documents and publications provide recommendations and guidelines for management of sage-grouse populations and their habitats, many of which were reviewed in the Introduction of our Plan. Strategies developed by SWARM are designed to be specific to the local area while taking into consideration the guidelines at a rangewide level.

SWARM meets every other month, more frequently if necessary. In the fall of 2011, members of SWARM developed a short list of action items to focus their efforts on in 2012. Below I report on the strategies and actions that were addressed in the past year. Additionally, SWARM participated in 2 consultation activities in 2011. Members of SWARM assisted in developing the Bald Hills and Hamlin Valley Management Area maps and management plan for the Governor's sage-grouse planning process, through monthly meetings and email correspondence. Additionally, USU Extension, UDWR, and BLM have been cooperating to assist in the development of the Sigure-Red Butte transmission line mitigation plan. In past years, BLM has funded research in the Bald Hills study area. As a result, Dr. Frey and her graduate student were able to provide USFWS, BLM and Rocky Mountain Power with key information regarding sage-grouse habitat use and movement patterns in relation to potential power line development. Furthermore, the BLM has continued to fund this research in Hamlin Valley and the Bald Hills to continue to gather information on winter space use and movement patterns in the SWARM management areas.

**Strategy:** Improve age distribution of sagebrush-steppe communities by 2016.

**Action:** Coordinate associations among agencies and landowners to fund implementation of projects and monitoring.

Nile Sorenson and Clint Wirick have been actively engaging landowners in the SWARM area, especially in areas targeted by the SWARM group. They have several projects in Hamlin Valley at this time.

**Action:** Monitor the response of sage-grouse to changing habitat conditions.

Both the Bald Hills and Hamlin Valley telemetry projects have been instrumental in documenting sage-grouse of habitat reclamation via removal of pinyons and junipers as well as reclamation post-fire. Continued research in this area will increase our knowledge of sage-grouse response to what we hope is habitat improvements.

**Strategy:** Increase participation of local public and private landowners with SWARM over the next ten years.

**Action:** Host open houses, field tours, and presentations.

This summer, SWARM conducted a field tour of the Minersville area, highlighting fire reclamation sites and research results. The BLM and UACD coordinated to conduct an informative and interesting trip. This fall, SWARM hosted a very successful open house. Members sponsored a dinner prior to several light-hearted presentations, including updates on fire reclamation and graduate student research. More than 40 people attended the event.

**Action:** Involve the Conservation District representatives more regularly.

Our attempts to involve the Conservation Districts more regularly were very successful. By improving the list serve and making a few phone calls, the UACD greatly increased their involvement, as evidenced by their attendance and support of the both the field tour and the open house.

**Strategy:** Manage unwanted plant species in sage-brush steppe habitat by 2016.

**Action:** Evaluate and utilize chemical applications where appropriate to restore habitat dominated by cheatgrass, unwanted species, and/or noxious weeds.

Chad Reid, the USU Cooperative Extension Iron County agent has been conducting research on different chemical applications for several years. He continues to update SWARM on his research findings, and involves members of SWARM on the research site selection and application support.

**Strategy:** Minimize impacts of new land developments and/or recreational uses on sage-grouse populations during the next ten years.

**Action:** Provide input into management plans for federal, state, and local agencies.

Our facilitator provided Iron and Beaver county commissions with updates on annual SWARM activities this year. In addition, we supported UDWR with their presentations and updates of the Governor's planning process. During the planning process, we consulted with the Iron and Beaver county commissions to provide them with the information necessary for them to submit county and regional management suggestions to the sage-grouse management task force.

**Strategy:** Reduce threat of predators on sage-grouse over ten-year period.

**Action:** Determine predator community composition and depredation rate.

Utah State University Extension is currently concluding a study on avian predator communities and the factors that influence fence use in Hamlin Valley.

As part of providing comments to the Governor’s office planning team, SWARM updated their threats matrix that was created in 2005. Our edits are report below.

Relative importance/contribution of individual threats to reducing or degrading aspects of sage-grouse populations in the SWARM Resource Area. Threats are described in the “Threat Analysis” section of this Plan. Ranks are defined according to TNC (2005).

	Aspects of Sage-grouse population in the SWARM Resource Area							
<b>Threat</b>	Lack of key habitat type connectivity	Poor Condition of Surrounding Communities	Degradation of Winter Habitat Quality	Loss of Breeding Quality (Leks and nesting) Habitat	Loss of Brood-rearing habitat quality	Loss of Riparian Area Quality	Reduction of Population Size	Reduction of Population Distribution
Enhanced native and domestic predators	Medium	Low	Low	High	High	Medium	High	High
Recreational use	Medium	Medium	Medium	High	High	High	Medium	Medium
Invasive/alien vegetation species	High	High	High	Very High	High	Medium	High	High
Concentrated wildlife and/or livestock use	High	Medium	Medium	High	High	Medium	Medium	Medium
Fire and Vegetation Management	High	Medium	Medium	High	High	High	High	High
Development of roads or utilities	High	Medium	Low	Very High	High	Medium	Medium	High
Lack of communication among public parties	Medium	Medium	Low	High	Medium	Medium	Medium	Medium
Diseases and parasites	Medium	Medium	Low	High	Medium	Medium	High	High
Alternative Land Uses (mining, wind power, water development)	High	High	Medium	High	High	High	High	High
Dramatic Weather Events	High	Medium	Medium	Very High	High	High	High	High