

Strawberry Valley Adaptive Resource Management (SVARM) Sage-grouse Local Working Group

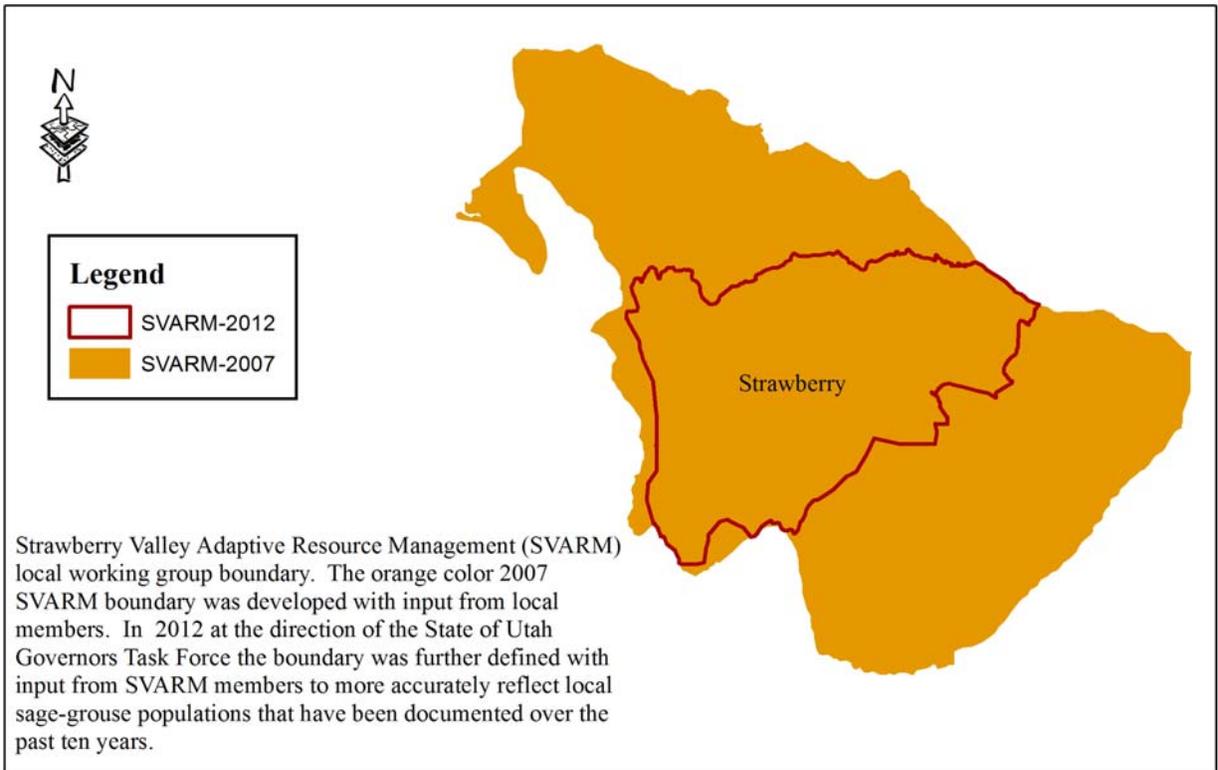


Figure 10. The Strawberry Valley Adaptive Resource Management (SVARM) Sage-grouse Local Working Group and new Sage-grouse Management Area.



The Strawberry Valley Adaptive Resource Management (SVARM) sage-grouse local working group is facilitated by Ms. Lorien Belton. SVARM meets three times yearly: a spring meeting, a summer field tour, and a fall meeting. The group may meet more frequently as the need arises.

Description of Area and General Population Information

The LWG conservation area covers Wasatch and Duchesne Counties. There are leks and associated nesting/brood-rearing areas both at high elevations around the Strawberry Reservoir, as well as in the lower-elevation Fruitland area in Duchesne County. The birds winter primarily in Fruitland. In recent years, the population has grown increasingly stable, estimated to number between 400-500 birds. Predator control efforts, particularly with regard to red fox control, have played a large role in helping the sage-grouse population rebound from previous lows.

2012 Conservation Strategies and Actions

In 2012 the LWG engaged in considerable planning efforts, in addition to research and project implementation. Planning work included:

- Revision of threats chart and the strategies and actions in the SVARM local sage-grouse conservation plan, in preparation for future full-plan revisions
- Providing local perspective and comments on drafts of the Governor's Task Force sage-grouse plan, both the maps and planning/stipulations documents
- Participation at BLM/USFS scoping meetings in early 2012, as part of the process that will eventually lead to Forest Plan and Resource Management Plan amendments that include sage-grouse stipulations
- Although no comments periods were available during this reporting period, SVARM members are also staying apprised of the planning processes for the high voltage transmission lines proposed to come through the area in future years.

In addition to extensive involvement with multiple planning processes, SVARM participants, through their respective organizations and agencies, continue to implement strategies and actions outlined in the local conservation plan. During 2011-2012, these efforts included:

- Continued raven control efforts in the area
- Efforts to engage landowners in habitat improvement projects. Several landowners have signed up to NRCS's SGI funding for projects.
- Finalizing the current phase of sage-grouse research by BYU in the Strawberry area
- Current efforts, nearly complete, to report the results and lessons learned from the years of sage-grouse research in the area, in a "white-paper" format.
- Implementation of several Watershed Restoration Initiative (WRI) funded habitat improvement projects to benefit sage-grouse in the area, including three sagebrush treatment projects and one weed-management project.
- Mitigation Commission has expressed interest in continued work on habitat improvements in the future.
- Wasatch County continues to be a strong partner in weed management efforts in sage-grouse areas around Strawberry Reservoir.

Project and Research Highlights

The following habitat improvement projects were completed during 2011-2012. Project numbers correspond to the numbers in the WRI database.

- South Strawberry Treatment (1754). This is a sage-brush treatment for nesting/brood-rearing habitat improvement, finished in the 2011-2012 fiscal year.
- Badger Hollow/Chicken Springs (1816). This project is also a sage-brush mowing and harrowing project to reduce sagebrush density and improve the forb component in high-elevation spring and summer use areas by sage-grouse. This project was finished in the 2011-2012 fiscal year.
- Wildcat (2309). This is also a sagebrush density reduction project, on the Wildcat Wildlife Management Area near the Wasatch/Duchesne County line. A chain harrow was used to decrease sagebrush density and encourage forb and other understory growth.

This project was finished in September 2012. This project was designed specifically to benefit sage-grouse based on information about where local birds nest.

- A small mowing on private land adjacent to the Wildcat WMA project was also done in November 2012 to benefit understory vegetation for sage-grouse.
- Wallsburg Knapweed control (2259). This project only has a secondary (not immediately local) benefit to sage-grouse, but has a huge long-term benefit for the entire area by keeping problematic weed infestations wherever they occur under control.

Research on sage-grouse in the Strawberry Valley has a long history and has been gathering critical information on the Strawberry populations for many years. As a result of the research, grouse use of habitat improvement project areas has been tracked, and has increased our understanding of how grouse use areas. In addition, the information has been used to design habitat treatments in sagebrush to be most compatible and optimal for how grouse currently use the areas. Now that we are starting to understand behavioral responses to the habitat treatments, the next step, over future years, will be to determine whether the projects improve vital rates (like nesting or brood-rearing success), or population numbers overall. In the fall of 2012, there will be a final push to collar some young grouse before the battery life ends for the hens' collars. Monitoring will continue for as long as possible. The researchers are currently working on a research summary paper, which is scheduled for release in late 2012 or early 2013.

Revision of Threat Matrix and Strategies Sections of Local Plan

The threat matrix was revised by the group over a series of meetings extending through the past year and a half (Table 8). Each individual threat level (the intersection of a specific threat and a specific element of the sage-grouse life cycle) in the plan was considered separately. The group debated whether additional information was known, or if conditions had changed from when the plan was written, when considering adjustments to any threat level. Numerous threat levels were adjusted accordingly. Changes included:

- Increased concern about weeds, particularly in brood-rearing and nesting habitat
- Decreased concerns about drought/weather impacts to grouse given the relatively mesic quality of habitat in the SVARM area
- Increased concern about pinyon-juniper encroachment, particularly with regard to winter habitat and connectivity of habitats
- Reduced concern about OHV recreation during spring and summer, while maintaining high levels of concern about its winter impact
- Increased concern about the impact of past vegetation treatments on habitat connectivity
- Decreased concern on tall structures, particularly given the focus on channeling future power lines through the existing transmission corridor in the Fruitland area

Map Revisions

The Governor's Task Force planning process resulted in draft maps for sage-grouse management areas, including one for the Strawberry Valley and Fruitland areas. The SVARM group reviewed the draft maps in June 2012, considering the overlay of all known sage-grouse locations from the last 15 years of BYU research. The group forwarded recommendations to the state working group. Final maps are not yet available.

Summary of Major Issues and/or Concerns

The SVARM group will continue to develop projects and conduct outreach and research according to the revised strategies and actions in the local conservation plan. In the upcoming year, particular focus will be placed on:

- Increased outreach to landowners who might be interested in NRCS SGI funding for habitat improvement projects
- Identifying ongoing and future research needs and planning accordingly
- Understanding results of past research and applying that information to strategic habitat project design in the future
- Revise the local conservation plan to incorporate new information
- Continue efforts to engage and assist counties in sage-grouse planning processes, particularly with respect to county-level participation in the Governor's sage-grouse planning efforts
- Increase efforts to engage Duchesne County, particularly weed managers, in local working group efforts.

The Strawberry Valley sage-grouse populations continue to maintain themselves at healthy levels. The LWG priorities included continued habitat work, weed management, and predator management. Understanding, through research, how our work impact grouse populations long term is also of high importance to this group. Although it is not clear how future energy development plans could affect grouse in the Fruitland area, SVARM will keep abreast of the growing energy development interest in the winter range and other habitat areas, including on Mitigation Commission and UDWR properties.

Table 8. Relative importance/contribution of individual threats to reducing or degrading aspects of sage-grouse populations in the SVARM Resource Area. Threats are described in the “Threat Analysis” section of this Plan. Rankings are as follows: Ranks are defined according to TNC (2005).

Threat	Aspects of Sage-grouse population in the SVARM Resource Area							
	Reduced population size	Population distribution	Reduced nesting habitat quality	Reduced brood-rearing habitat quality	Reduced summer/fall habitat quality	Reduced winter habitat quality	Reduced connectivity of seasonal habitat types	Reduced connectivity of populations & sub-populations
Drought and weather	Medium	Medium	Medium	Medium	Medium	Low	Medium	Low
Existing and new fences	Low	Low	Low	Low	Low	Low	Low	Low
Home and cabin development	High	High	Medium	Medium	Medium	Medium	High	Very High
Power lines & other tall structures	Medium	High	Medium	Medium	Medium	Medium	High	High
Renewable & non-renewable energy development	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Roads	Medium	High	High	High	High	Medium	High	High
Historical vegetation treatments	Medium	High	Medium	Medium	Medium	High	High	High
Hunting	Low	Low	-	-	-	-	-	-
Fire	Low	Low	Low	Low	Low	Low	Low	Low
Livestock overgrazing	Low	Low	Low	Low	Low	Low	Low	Low
OHV recreation	Medium	Medium	Medium	Medium	Medium	Very High	Medium	Medium
Invasive/noxious weeds	-	-	Medium	Medium	Low	Low	Low	-
Parasites and disease	Low	Low	-	-	-	-	-	-
Predation	Very High	Very High	High	High	Medium	Medium	Medium	Medium
Conifer (pinyon-juniper) encroachment	Medium	Medium	Medium	Medium	Medium	High	High	High