

Southwest Desert Adaptive Resource Management (SWARM) Sage-grouse Local Working Group

The SWARM Local Working Group is facilitated by Dr. Nicole Frey. SWARM consists of state and federal agency personnel, representatives from local government, academic institutions, private industry, and private individuals.

One of the main purposes of the SWARM Plan is to provide a framework of strategies and associated actions that can be implemented to abate threats identified by the USFWS (2010), address information gaps, and guide monitoring efforts. Strategies and actions listed below were developed by SWARM partners. For example, we have initiated two new research projects in the SWARM area as a direct result of partnerships among the agencies to target threats and data gaps for this region. The information gathered from these research projects will be used to drive future management actions in this region. These projects are partnerships with many organizations including SFH, UDWR, NRCS, and BLM that provide both monetary support (>\$208,000 combined) and in-kind services. Additionally, local landowners are involved in assisting with research in Hamlin Valley.



Figure 8. The Southwest Desert Adaptive Resource Management (SWARM) Sage-grouse Local Working Group Conservation Area consists of 5,672,052 acres located in south-western Utah.

Implementation of strategies and actions remains voluntary on the part of SWARM partners. However, for illustration, we have designated for each strategy the public and private partners who might be involved in implementation. Designation does not imply responsibility or commitment of resources of any sort to implementing, initiating, or completing any actions; however, it does provide a framework of resources and expertise.

Conservation Strategies and Actions

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

1.1. Action: Identify and prioritize target areas needing improvement.

The NRCS launched SGI and the local office actively promoted this program and had several landowners sign up for conservation practices under the initiative. BLM CCFO: Hamlin Valley- BLM has completed EA and is in the process of addressing comments. BLM CCFO: Greenville Bench- reseeded approximately 500-700 acres in the upper portion as part of a fire rehabilitation project.

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

LWG members worked closely with the WRI to ensure that projects initiated in this region benefit sage-grouse as much as possible. All projects in the SWARM region that could affect grouse are presented to the LWGs prior to submitting them through the WRI process.

1.3. Action: Monitor the response of sage-grouse to changing habitat conditions. NONE

1.4. Action: Implement treatments to change age class distribution of sagebrush.

The LWG works directly with WRI partners to plan projects in the area.

1.5. Action: Assist agencies in assessing wildfires in focus areas and restoration needs for sagebrush seed in mixes.

No action completed in 2010-2011.

Partners: UDWR, BLM, USUEXT, USFS, NRCS, local county residents

Threats Addressed: Fire and vegetation management, communication among parties, invasive/alien vegetation species

Aspects of Sage-grouse Ecology Addressed: Lack of key habitat-type connectivity, poor condition of surrounding communities, degradation of winter habitat quality, loss of breeding habitat quality, loss of brood-rearing habitat quality, loss of riparian area quality, reduction of population size, reduction of population distribution

2. Strategy: Improve water availability in brood-rearing habitat by 2016.

2.1. Action: Survey and evaluate current water sources and needs.

The BLM CCFO evaluated the following water sources in sage-grouse habitat in 2009-2011

Lotic sites:

Bluebell Spring (0.2 mile, FAR)

Big Maple Spring (0.2 mile, FAR-down)

Salt Cabin Wash (0.4 mile, FAR)

Lentic sites:

Bluebell Spring (0.4 acre, PFC)

Little Maple Spring (0.1 acre, FAR)

Marsh Spring (2.6 acres, PFC)

Salt Cabin Wash (0.1 acre, inventory)

Wiregrass Spring (0.2 acre, FAR)

2.2. Action: Partner with watershed specialists to identify new water sources.

2.3. Action: Consider new water developments that are multi-use and multi-purpose.

2.3.1. Action step: Construct guzzlers in areas identified as needing water.

BLM re-constructed Dry Willow Spring, removing PJ around the spring, re-developing the spring and head box, re-constructing exclosures to make ground level water and riparian vegetation available to wildlife.

2.4. Action: Coordinate with private landowners to protect current water availability that benefits brood-rearing habitat.

BLM has proposed several projects in and around Hamlin Valley to improve and project water sources and water access.

2.5. Action: Conduct vegetation treatments to improve water yield.

2.6. Action: Restore and improve wildlife access to water.

BLM has proposed several projects in and around Hamlin Valley to improve and project water sources and water access.

2.7. Action: Improve riparian conditions.

UPCD partners have proposed and are implementing projects to improve riparian conditions. However, no proposed projects are directly in known sage-grouse habitat.

Partners: UDWR, BLM, NRCS, interest groups

Threats Addressed: Invasive/alien vegetation species, concentrated wildlife and/or livestock use

Aspects of Sage-grouse Ecology Addressed: Loss of brood-rearing habitat quality, loss of riparian area quality, reduction of population size, reduction of population distribution

3. Strategy: Improve wildlife and livestock distribution in winter and brood-rearing habitat throughout the next ten years.

3.1. Action: Identify and prioritize target areas needing improvement.

BLM monitored sage-grouse use on 32,000 acres of sage-grouse habitat monitoring in Minersville. This will be used to identify priority areas for habitat improvements.

Several projects have been identified for the future to aid in habitat improvement through this process.

3.2. Action: Implement habitat improvements and direct management actions to improve distribution.

Livestock grazing permit renewals completed in 2010-2011 BLM to address concerns with livestock grazing within sage-grouse habitats allowing for identification of seasons of use and grazing management systems to improve distribution. Range improvements identified during this process for livestock management and habitat improvements were reviewed and will be prioritized for construction.

Partners: UDWR, BLM, FS, USUEXT, SITLA, NRCS

Threats Addressed: Concentrated wildlife and/or livestock use

Aspects of Sage-grouse Ecology Addressed: Degradation of winter habitat quality, loss of brood-rearing habitat quality, reduction of population size, reduction of population distribution

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

4.1. Action: Develop partnerships with landowners and interest groups to increase visibility of sage-grouse management.

4.1.1. Action step: Identify regional groups and their contact person to promote cooperation from these groups.

The LWG continually strives to include all potential interested parties through newsletters, meetings, and one-to-one contacts.

4.2. Action: Support partnership efforts for special designations that promote sage-grouse habitat.

4.2.1. Action step: Write letters of support for new partnerships.

While not in direct relationship to partnerships, we comment on projects listed in the Federal Register. Additionally, we write letters of commendation for partners that have worked above and beyond what is expected.

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

This year we conducted two field tours; one in Buckskin and Dog Valleys and one in Pine Valley. Both were organized and led by the BLM to highlight future project potential.

4.4. Action: Distribute annual reports to local management agencies, county commissioners, and other interested parties.

Project and annual reports are always sent throughout our listserv, as well as to management agency leaders. In 2011, presentations were given to Beaver, Garfield, and Iron County Commissions.

4.5. Action: Develop incentives for landowners and interest groups.

4.5.1. Action step: Host educational field trips and provide interpretive areas.

Partners: USUEXT, NRCS, RC&D

Threats Addressed: Lack of communication among public parties, alternative land uses (mining, wind power, water development), development of roads or utilities, recreational use

Aspects of Sage-grouse Ecology Addressed: Lack of key habitat type connectivity, poor condition of surrounding communities, degradation of winter habitat quality, loss of breeding habitat quality, loss of brood-rearing habitat quality, loss of riparian area quality, reduction of population size, reduction of population distribution

5. Strategy: Locate and monitor new active lek sites over the next ten years.

5.1. Action: Survey landowners and land users to determine sage-grouse distributions.

UDWR CCFO does this annually.

5.2. Action: Investigate possible new lek sites based on local reports.

UDWR CCFO conducts annual surveys. No new leks were found this year. We usually do not find new leks based on local reports, but do find satellite lek locations and brood-rearing activity.

5.3. Action: Survey for new lek sites during lek counts and survey historic sites for new activity.

UDWR CCFO maintains the database on the status of new and historic lek sites. In the past, we have found a minimum of 6 leks that were not previously counted; these are reported in annual UDWR reports and our meeting minutes each spring.

5.4. Action: Rejuvenate historic lek site habitat for potential re-use.

BLM has proposed a project at Wild Pea Hollow that will improve grouse habitat.

Additionally, management of Bald Hills post-fire has led to increased use of the Bald Hills lek.

5.5. Action: Maintain and improve current lek site habitat.

Partners: UDWR, USFS, BLM, USUEXT, interest groups

Threats Addressed: Enhanced native and domestic predators, recreational use, concentrated wildlife and/or livestock use, fire and vegetation management, development of roads or utilities, alternative land uses (mining, wind power, water development), dramatic weather events

Aspects of Sage-grouse Ecology Addressed: Loss of breeding quality (leks and nesting) habitat

6. Strategy: Maintain or increase sage-grouse populations through direct management.

6.1. Action: Evaluate potential of translocation to supplement local populations.

6.2. Action: Work with enforcement agencies to prevent illegal harvest of sage-grouse.

6.3. Action: Monitor the presence of West Nile Virus or other diseases in sage-grouse populations.

6.4. Action: Identify and implement steps to reduce presence of West Nile Virus.

No Action Taken on this Strategy in 2011.

Partners: UDWR, USUEXT, BLM, SITLA

Threats Addressed: Diseases and parasites

Aspects of Sage-grouse Ecology Addressed: Loss of breeding quality (leks and nesting) habitat, reduction of population size, reduction of population distribution

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

7.1. Action: Remove juniper and pinyon pines from brood-rearing habitat.

Many projects initiated each year through UPCD.

7.2. Action: Reduce abundance of unwanted and/or invasive plant species.

7.2.1. Action step: Re-seed area after land disturbances such as mechanical treatments, fire, and human development.

Through UDWR CCFO, seed mixes to benefit grouse are used in all projects in potential sage-grouse habitat.

7.2.2. Action step: Utilize dedicated hunters to help with re-seeding and rehabilitation efforts.

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

No new projects this year; continue to monitor past projects.

7.4. Action: Evaluate the use of fire as a tool in areas where cheatgrass has been established or is prone to establish.

No Action Taken in 2011.

Partners: UDWR, BLM, USFS, USUEXT, interest groups

Threats Addressed: Invasive/alien vegetation species, fire and vegetation management

Aspects of Sage-grouse Ecology Addressed: Loss of brood-rearing habitat quality, reduction of population size, reduction of population distribution, lack of key habitat type connectivity, poor condition of surrounding communities, degradation of winter habitat quality, loss of breeding quality (leks and nesting) habitat

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

8.1. Action: Provide consultations and recommendations for new land developments and/or recreational uses.

8.2. Action: Regularly discuss new developments and alternative land uses to management agencies at local working group meetings.

8.3. Action: Identify and maintain list of contact people involved in land and recreational developments.

8.4. Action: Involve local county and city planning commissions in SWARM meetings.

USUEXT does this each year; updates were given to Iron and Beaver county commissions this year.

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

SWARM provides input to all projects presented to the SWARM group. Additionally, several SWARM members are on the review panel for UPCD.

Partners: USUEXT, UDWR, SITLA, NRCS, USFS, BLM, interest groups

Threats Addressed: Alternative land uses (mining, wind power, water development), development of roads or utilities, lack of communication among public parties, recreational uses

Aspects of Sage-grouse Ecology Addressed: Reduction of population size, lack of key habitat type connectivity, poor condition of surrounding communities, reduction of population distribution, loss of breeding quality (leks and nesting) habitat, loss of brood-rearing habitat quality, loss of riparian area quality

9. Strategy: Take steps to reduce the negative impact of dramatic weather events during the next ten years.

9.1. Action: Survey habitat after short-term dramatic weather events for damage to habitat.

9.2. Action: Manage for diverse and healthy habitat that will withstand effects of drought or other long-term weather events.

No Action Taken on this Strategy in 2011.

Partners: UDWR, BLM, USFS, SITLA

Threats Addressed: Dramatic weather events

Aspects of Sage-grouse Ecology Addressed: degradation of winter habitat quality, loss of breeding habitat quality, loss of brood-rearing habitat quality, loss of riparian area quality, reduction of population size, reduction of population distribution

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

10.1. Action: Remove current and avoid creating new raptor nesting in sage-grouse habitat.

10.2. Action: Enlist WS to reduce population numbers of problematic predator species.

10.3. Action: Support current predator management efforts by other groups or agencies in the focus areas.

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

10.5. Action: Identify threatening predator species.

No Action Taken on this Strategy in 2011.

Partners: UDWR, USUEXT, WS

Threats Addressed: Enhanced native and domestic predators

Aspects of Sage-grouse Ecology Addressed: Loss of breeding quality (leks and nesting) habitat, loss of brood-rearing habitat quality, reduction of population size, reduction of population distribution

Major Needs and Concerns

The greatest need in the Southwest Desert is for better data on the movements and habitat use of grouse. Two graduate research projects have been initiated, which in turn has illuminated how much we DON'T know about this region's sage-grouse populations. This region has been

identified as having a high potential for wind and solar energy development in the future, which could impact grouse habitat and populations. We will continue the research of grouse in this region; this will help determine the best management actions and avoid negative impacts of resource development in the future.