

## Color Country Adaptive Resources Management (CoCARM) Sage-grouse Local Working Group

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

One of the main purposes of this 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 CoCARM partners. 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 Plan introduction. Strategies developed by CoCARM are designed to be specific to the local area while taking into consideration the guidelines at a range wide level.

Implementation of strategies and actions remains voluntary on the part of CoCARM partners. Yet, CoCARM has focused on partnerships for the last 6 years. For example, a partnership of in-kind support from UDWR and UACD, and a grant of \$25,000+ helped to fund a long-term project on sage-grouse in this region. This activity led to a partnership with BYU and Alton Coal Inc. (who granted another \$18,000) for continued research on grouse movements in response to adaptive management strategies.

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

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

*The group has actively pursued assistance with predator control in several areas that are critical to sage-grouse. We have supported the efforts for raven control, worked with WS and UDWR, and worked with Alton Coal Company to secure financial assistance.*

**1.2 Action:** Avoid creating or improving raptor-nesting habitat in sage-grouse habitat.

**1.3 Action:** Determine brood-rearing success in each focus area annually.



Figure 4. The Color Country Adaptive Resource Management (CoCARM) Sage-grouse Local Working Group Conservation Area consists of 4,956,258 acres located in south-central Utah.

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

*This action is on-going.*

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

*Panguitch and Johns Valleys are identified in the UDWR Predator Management Plan for the Paunsaugunt and Mt Dutton WMU's for coyote and raven control to protect sage-grouse.*

**Partners:** USUEXT, UDWR, WS, land developers

**Threats Addressed:** Enhanced native and domestic predators

**Aspects of Sage-grouse Ecology Addressed:** Reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced connectivity of seasonal habitat types, reduced connectivity of populations and sub-populations, reduced population size

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

**2.1 Action:** Identify and prioritize target areas needing improvement.

*Each year, all projects are presented through the WRI process. Partners of CoCARM present their projects to the group for approval before presenting them to UPCD. Thus all projects meet with the approval of CoCARM and the southern region. UDWR is working with agencies to create a valley-wide corridor from Sink Valley to Bear Valley.*

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

*Working on WHIP project in conjunction with BLM, and a couple of SGI projects to seed a variety of forbs and grasses that will be available for sage-grouse have been funded. 2.1 and 2.2 have been met, but too early for 2.3. UDWR proposed nearly 6000 acres of PJ removal south of Hatch on SITLA property to WRI for funding.*

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

*We have conducted a 5 year radio-telemetry project to measure the response of grouse to habitat treatments. The manuscript and field reports will be completed in 2012.*

**Partners:** USUEXT, UDWR, USFS, BLM, SITLA, NRCS

**Threats Addressed:** Invasive/alien vegetation species, fire and vegetation management, dramatic weather events

**Aspects of Sage-grouse Ecology Addressed:** Reduced connectivity of seasonal habitat types, reduced connectivity of populations and sub-populations, reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality

**3. Strategy:** Improve water availability and riparian habitat in brood-rearing habitat by 2016.

**3.1 Action:** Survey and evaluate current water sources and needs.

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

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

*A project facilitated by NRCS treated 750 acres of PJ which should provide increased water availability with that much PJ removed. UDWR/NRCS is also working on a WHIP project that will provide two different water sources that will be available to sage-grouse.*

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

**Partners:** NRCS, BLM, UDWR, USFS, landowners, interest groups

**Threats Addressed:** Concentrated wildlife and/or livestock use, dramatic weather events, alternative land uses (mining, wind power, water development)

**Aspects of Sage-grouse Ecology Addressed:** Population distribution, reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced connectivity of seasonal habitat types, reduced connectivity of populations and sub-populations

**4. Strategy:** Increase participation of public and private landowners within the Resource Area.

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

*CoCARM continues to work actively with the local landowners and industry personnel in the CoCARM focus areas.*

**4.1.1. Action step:** Identify regional groups and their contact person.

**4.2 Action:** Develop fact sheet to distribute to special interest groups.

*We develop new items each year. This year, the Farm Bureau has had a display at two of our major meetings for our membership and has published articles in the UFBF News on sage-grouse and promoted landowner participation.*

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

*NRCS has worked with landowners educating them about sage-grouse in the Alton area. Discussed SGI at the annual range livestock workshop in St. George and Kanab.*

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

*Also, the NRCS hosted an open house in Panguitch on SGI. This year our field tour was sponsored by Alton Coal Inc. The group toured the mine and surrounding areas.*

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

*This action is conducted each year.*

**4.6 Action:** Proactively seek partnerships when developing new projects.

*This action is conducted each year.*

**Partners:** USUEXT, NRCS

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

**Aspects of Sage-grouse Ecology Addressed:** Reduced population size, population distribution, reduced lek habitat quality, reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced winter habitat quality, reduced connectivity of seasonal habitat types, reduced connectivity of populations and sub-populations.

**5. Strategy:** Locate and monitor new active lek sites within the Resource Area.

**5.1 Action:** Survey landowners and land users to determine extent of sage-grouse distribution.

*CoCARM continues to search for new leks, or investigate historic leks.*

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

*Local BLM employees reported sage-grouse using newly treated areas. Biologists have investigated the site, but it does not appear to be a lek. However it does appear to constitute summer habitat.*

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

*This is conducted each year. This year UDWR conducted surveys by helicopter; focus areas were selected by the group. No new leks were found at this time.*

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

*This action is pending.*

**Partners:** USUEXT, UDWR, NRCS, local landowners

**Threats Addressed:** Recreational use, invasive/alien vegetation species, concentrated wildlife and/or livestock use, alternative land uses (mining, wind power, water development), dramatic weather events.

**Aspects of Sage-grouse Ecology Addressed:** Reduced lek habitat quality, reduced population size, population distribution, reduced connectivity of populations and sub-populations

**6. Strategy:** Increase sage-grouse populations using direct management in Resource Area by 2016.

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

**6.2 Action:** Support and encourage prevention of illegal harvest of sage-grouse.

**Partners:** UDWR, USUEXT

**Threats Addressed:** Dramatic weather events, enhanced native and domestic predators

**Aspects of Sage-grouse Ecology Addressed:** Reduced population size, population distribution, reduced connectivity of populations and sub-populations

**7. Strategy:** Minimize affects of new land developments and/or recreational uses on sage-grouse populations.

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

**7.2 Action:** Regularly discuss new developments and alternative land uses in management agencies at local working group meetings.

**7.2 Action:** Identify and maintain a list of contact people involved in land and recreational developments.

**7.3 Action:** Involve local county and city planning commissions in meetings.

*This year, presentations were given to Beaver, Garfield and Iron County Commissions.*

**Partners:** USUEXT, BLM, UDWR, USFS, SITLA, county commissioners, local landowners

**Threats Addressed:** Recreational use, development of roads or utilities, alternative land uses (mining, wind power, water development), lack of communication among public parties.

**Aspects of Sage-grouse Ecology Addressed:** Reduced population size, reduced lek habitat quality, reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced winter habitat quality, reduced connectivity of populations and sub-populations, reduced connectivity of seasonal habitat types

**8. Strategy:** Reduce impacts of concentrated wildlife or livestock use of sage-grouse winter and brood-rearing habitat by 2016.

**8.1 Action:** Identify and prioritize target areas needing improvement.

**8.2 Action:** Implement habitat improvements and direct management actions to improve distribution of problem animal communities.

*The prescribed grazing conservation practice under NRCS planning process will help with this effort. Incentives are provided for leaving a specific amount of cover for nesting birds.*

**Partners:** BLM, NRCS, USUEXT, UDWR, local landowners

**Threats Addressed:** Concentrated wildlife and/or livestock use

**Aspects of Sage-grouse Ecology Addressed:** Reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced winter habitat quality

**9. Strategy:** Reduce threat of invasive/unwanted plant species in sage-grouse habitat by 2016.

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

*UDWR/BLM/USFS/UACD have focused their efforts on projects to address this action through the WRI process.*

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

**9.2.1 Action step:** Re-seed area after land disturbance such as mechanical treatments, fire, and human development.

*This is a standard practice for BLM/USFS/UDWR.*

**9.2.2 Action step:** Use dedicated hunters to help with re-seeding and rehabilitation efforts.

*CoCARM region often uses dedicated hunters to help with their restoration efforts.*

*Several projects are planned this year to utilize dedicated hunters.*

**9.3 Action:** Evaluate and use chemical applications where appropriate to restore habitat dominated by cheatgrass and/or noxious weeds.

**9.4 Action:** Evaluate the feasibility of using fire as a tool in areas where cheatgrass has been established or is prone to establish.

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

**Threats Addressed:** Fire and vegetation management, invasive/alien vegetation species

**Aspects of Sage-grouse Ecology Addressed:** Reduced nesting/early brood-rearing habitat quality, reduced summer/late brood-rearing habitat quality, reduced connectivity of populations and sub-populations.

## **Major Needs and Concerns**

The decline of the Alton population is a concern for the LWG, especially when considering the new coal mine in the area. The number of males attending the Sink Valley lek has declined from 12 to 2 in 5 years. Mitigation via habitat improvement projects and establishing corridors to other areas has been initiated but needs to be consistently applied. The group is supporting region-wide habitat improvement projects that require state funds and interagency collaboration. Furthermore, the LWG has proposed conducting a genetic analysis of the region's grouse population to determine the extent of movement to identify and prioritize the areas in greatest need of habitat improvements and corridors to maintain a healthy grouse population.