

**Utah's Adaptive Resources Management
Greater Sage-grouse Local Working Groups**

Accomplishment Report

2008



Photo by Todd Black

June 2009

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Submitted to

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June 2009

Preface

This report summarizes the status and 2008 accomplishments of Utah's Adaptive Resource Management Greater Sage-grouse (*Centrocercus urophasianus*, hereafter referred to as sage-grouse) Local Working Groups (LWGs). These groups were facilitated by staff affiliated with the Utah Community-Based Conservation Program (CBCP). This report incorporates the information requested under 50 CFR Chapter IV, US Fish and Wildlife Service (USFWS) Policy for Evaluation of Conservation Efforts (PECE) When Making Listing Decisions (USFWS 2003). Specific topics addressed by the LWGs plans include:

1. Staffing, funding, funding sources, and other resources necessary to implement LWG's plans.
2. Legal authority of the partners to implement the plan.
3. The legal procedural requirements (environmental reviews) needed to implement the plans and how this will be accomplished.
4. Authorizations or permits that may or will be needed and how these will be obtained.
5. The type and level of voluntary participation (number of landowners involved, types of incentives used to increase participation).
6. Regulatory mechanisms (laws, ordinances, etc.) that may be necessary to implement the plans.
7. A statement regarding the level of certainty that the funding to implement the plans will be obtained.
8. An implementation schedule to include incremental completion dates.
9. A copy of LWG's approved management plans (These reports are available on our web site www.utahcbcp.org).

The conservation plans discuss the level of certainty that the management efforts identified and implemented will be effective. Specific topics addressed in the conservation plans include:

1. The nature and extent of threats to be addressed by the LWG's plans and how management efforts will reduce the threats described.
2. Explicit objectives for each management action contained in the plans and dates for achieving.
3. The steps needed or undertaken to implement management actions.
4. The quantifiable, scientifically valid parameters by which progress will be measured (e.g., change in lek counts, improved habitat conditions).
5. How the effects of the management actions will be monitored and reported.
6. How the principles of adaptive management resource management are being implemented.

The LWG sage-grouse conservation plans, previous annual reports, and meeting minutes can be accessed at www.utahcbcp.org.

Executive Summary

The Community-based Conservation Program (CBCP) encompasses the historical range of sage-grouse in Utah as identified in the 2002 (2009 revised) Strategic Management Plan for Sage-grouse (Figure 1). The plan, approved by the Utah Wildlife Board on 1 June 2002 *revised 2009), mandated the organization of local sage-grouse working groups (LWGs) to develop and implement sage-grouse conservation plans. The Utah Division of Wildlife Resources (UDWR) in cooperation with Utah State University Extension (USUEXT), private landowners, public and private natural resource, wildlife management, and conservation agencies and organizations have implemented the CBCP.

In 2008, Utah's Adaptive Resources Management Greater Sage-grouse (hereafter referred to as sage-grouse) LWGs continued implementation of their Sage-grouse Conservation Plans (Plan). The LWGs include representatives from state and federal agencies of land and resource management, non-governmental organizations, private industry, local communities, and private landowners.

In this report we summarize efforts of the LWGs to implement the conservation strategies and actions outlined in their Plans. These strategies meet the guidelines set forth by the US Fish and Wildlife Service (USFWS) in their Policy for Evaluation of Conservation Efforts (PECE) standards. The conservation strategies and action address the five USFWS listing factors as they apply to sage-grouse in each LWG area. Plan recommendations and guidance are voluntarily being implemented by all LWGs. The LWGs meet regularly to review actions and encourage adoption of Plan conservation strategies and actions. In 2008, greater emphasis was placed on identifying population and habitat conditions and issues specific to each LWG conservation area.

In this report, each LWG presents a table of ranked threats that currently or potentially affecting sage-grouse and sagebrush habitats in their area. This threat analysis, combined with recommended strategies and actions, provided a framework for LWGs to implement their Plans over the next ten years. Plans are being implemented using an adaptive resource management approach. As new information emerges from local and range wide conservation efforts, the LWGs are using it to update management strategies, and priorities in their area. As of January 2008, 10 Utah LWGs have completed sage-grouse conservation plans. These plans and a summaries of LWG activities can be found on-line at www.utahcbcp.org.

Staffing

Project Director: Terry A. Messmer, Professor and Associate Director, Jack H. Berryman Institute and Quinney Professorship for Wildlife Conflict Management, UMC 5230, Utah State University, Logan, Utah 84322-5230. Phone 435-797-3975, Fax 435-797-3796, E-mail terry.messmer@usu.edu

Project Staff: S. Nicole Frey, Research Assistant Professor, Jack H. Berryman Institute, Department of Wildland Resources, Utah State University (station in the Department of Biology – Southern Utah University, Cedar City), Mr. Todd Black and Ms. Lorien Belton, Community-based Conservation Extension Specialists, Dr. David Dahlgren, Post-Doctoral Fellow, and Rae

Ann Hart, Assistant to an Executive, Department of Wildland Resources, Utah State University, Logan.

Funding: In July 2006, Utah State University entered into a 5 year agreement with the Utah Division of Wildlife Resources (UDWR) to develop and facilitate the Utah Community-Based Conservation Program. This agreement provides up to \$140,000 annually in funding and in-kind matches through June 30, 2011, to conduct the program. Additional funding of up to \$160,000 a year is provided through by the Jack H. Berryman Institute through Utah State University Extension. Additional support in terms site and agency specific grants and contracts in the amount of \$200,000 were entered into in 2008 to support local working group activities, project monitoring and evaluation.

Legal Authority

The LWG Plans implement Utah's Sage-grouse Strategic Management Plan (Strategic Plan) that was approved by the Utah Wildlife Board in 2002 (UDWR 2002, revised 2009).

Project Goals

1. Protect, enhance, and conserve Utah sage-grouse populations and sagebrush-steppe ecosystems.
2. Establish sage-grouse in areas where they were historically found and the current sagebrush-steppe habitat is capable of maintaining viable populations (Utah Sage-Grouse Management Strategic Plan 2002).
3. Protect, enhance, and conserve other sensitive wildlife species that inhabit Utah sagebrush-steppe ecosystems.
4. Sustain and enhance socio-economic conditions in affected local communities.
5. Complete actions that make listing sage-grouse as threatened or endangered unwarranted and/or assist in recovery if the species are listed.
6. Increase local stakeholders and community involvement and ownership in the species conservation planning processes.
7. Increase LWGs awareness, appreciation, and the application of the use of science in making land use and population management decisions.

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

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

In 2008, the group met formally 6 times to discuss strategies and actions and receive research updates. One field tour was held to view and discuss management efforts designed to improve sagebrush-steppe habitat. Additionally, an open house was held in December 2008 to showcase efforts made during the year and to discuss the Alton Coal Industry LLC plans for the coming year.

This information below summarizes efforts made by individual and partners to address threats and strategic actions for the CCARM local working group during 2008. Please note that if a strategy or an action number is missing from this report; or no comments have been provide it means that no action(s) were taken in 2008 towards its completion.

Conservation Strategies and Actions: 2008 Accomplishments

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

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

Utah State University Extension concluded an undergraduate study (SUU) on predator communities. UDWR is in discussion with WS to obtain more information about the John's Valley bird depredation. USFS asked county to repair fence around landfill to reduce the trash in the area, to reduce raven densities.

1.2. Action: Avoid creating or improving raptor-nesting habitat in sage-grouse habitat.
Remove raptor perches when possible.

USFS has been working on Garkane EIS to mediate power lines going through grouse lek.

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

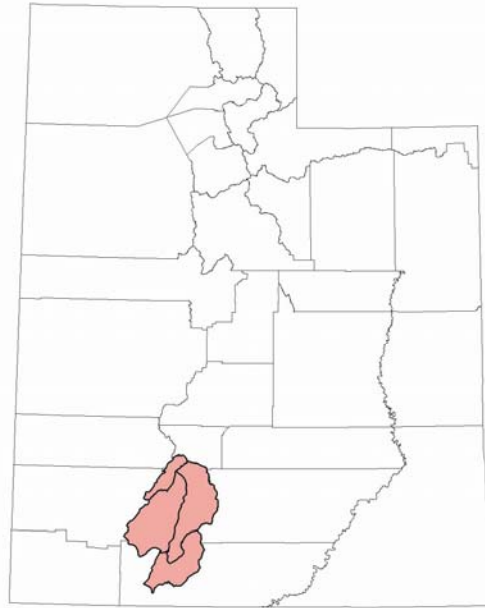


Figure 4. The Color Country Adaptive Resource Management (CoCARM) Sage-grouse Local Working Group Conservation Area consists of 4,956,258 acres located in south-central Utah.

1.4. Action: Enlist Wildlife Services to reduce population numbers of problematic predator species.

UDWR is working to re-implement the strategic predator control plan. This should enable WS to begin raven and coyote control in target areas.

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

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

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

BLM has prioritized areas within the focus areas to improve habitat and connectivity. UDWR has several Dixie-harrow projects initiated this year to improve sagebrush-steppe habitat.

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

Private land owners have thinning trees and shrubs on 200-300 acres, creating movement corridors for sage-grouse. Several UPCD projects were proposed this year that will collaborate among agencies to improve rangeland conditions. Proposed habitat treatment with Alton Coal Company LLC as mitigation for impacting the lek.

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

Continued research project on Alton sage-grouse. Initiated the 4th year of radio-telemetry to determine movements of grouse outside of Alton/Sink Valley. Monitored the vegetation projects north of Panguitch for the second year.

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.

USFS/BLM/UDWR conducted surveys and submitted proposals to improve water sources in areas with known grouse populations.

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

UACD Upper Sevier working with local agencies to determine new water sources.

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

BLM/USFS discussing the possibility to improve water distribution in 3mile-Panguitch area. Alton Coal Company LLC may be proposing water development for grouse as mitigation.

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

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.

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

Continued to work to update fact sheets and improve distribution of information

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

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

CoCARM hosted open house in December, advertising in local newspaper and with fliers in town. USU Extension conducted a field trip for Southern Utah Audubon Society to see sage-grouse leks. USU Extension and Upper Sevier Watershed conducted a field trip to see sage-grouse leks and sage-grouse habitat improvements.

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

CoCARM distributed annual reports internally to their respective agencies. CoCARM distributed annual reports and project reports to their county commissioners.

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

Members of the CoCARM actively participate in UPCD/Watershed Initiative. Heaton family always involved with projects on their private lands to assist with CoCARM. UDWR and UACD met with and talked to Scott Walter to discuss project's on his land. USU Extension met with the Littles to allow us to trap sage-grouse on their property. USU Extension continuing talks with the golf course about creating an easement, with mitigation money from a possible coal mine.

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.

Retired UDWR employees, and CoCARM members, annually search for new leks, or investigate historic leks.

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

Followed up on local reports of grouse on Center Creek. We did find sage-grouse there.

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

UDWR annually searches new lek sites and reviews historic sites where people have recently reported seeing grouse. For example, UDWR has recorded activity on John's Valley site where they haven't seen them before.

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

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.

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.

BLM/USFS addressed these issues in their motorized travel planning. UFBF discusses these issues with their county commissioners (Garfield, Piute, Wayne, Kane) during "issue surfacing."

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

CoCARM engages in these discussions at LWG meetings.

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

USU Extension created a listserv that can be updated regularly.

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

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.

BLM/USFS/NRCS/UDWR maintain awareness, but they don't feel that this is really a critical problem this year. CoCARM participating agencies are actively trying to improve water sources. By improving water sources, they intend to improve distribution. UDWR is proposing/planning to remove a portion of the pronghorn population, which may alleviate some pressure on the resources.

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 UPCD process.

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

9.3. 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.

9.4. 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.

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

Used spike on areas around Alton. Monitoring it to evaluate its response. Chemical treatment of noxious weeds on border of Garfield/Iron county.

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

Major Needs and Concerns

Our major concern is a scheduled coal mine to be located on the Alton lek. We've maintained communication with the mining company, and mitigation is in the planning process. Another challenge is continuing to maintain open communication among the group and landowners and community representatives.

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Summary of Sage-grouse Conservation Threats

In 2007, CoCARM identified and ranked major threats to sage-grouse conservation in the conservation area (Table 3). This threat ranking is used by CoCARM to prioritize conservation actions. The threat rankings will be reviewed in 2009 to ensure immediacy.

Table 3. Relative importance/contribution of threats to sage-grouse populations in Color Country Adaptive Resources Management (CoCARM) Sage-grouse Local Working Group Conservation Area.

Threat	Aspects of Sage-grouse population in the CoCARM Resource Area							
	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 & Sub-populations
Enhanced native and domestic predators	High	Low	Low	High	High	Medium	High	High
Recreational use	Medium	Medium	Medium	High	High	High	Medium	Medium
Invasive/alien vegetation species	High	High	Medium	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	High	High	High
Lack of communication among public parties	Medium	Medium	Low	High	Medium	Medium	Medium	Medium
Diseases and parasites	Medium	Medium	Low	Medium	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	High	High	High	High	High