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

Accomplishment Report

2009-2010

Photo by Todd Black

November 2010

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Submitted to

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Preface

This report summarizes the 2009 and early 2010 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 discusses 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 2009-2010, 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. Please note that if a strategy or an action number is missing from this report or no comments are reported under a specific strategy; it means that no action(s) were reported during the period towards its completion. 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 actions 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 2009-2010, additional emphasis was placed on identifying population and habitat conditions and issues specific to each LWG conservation area.

Each LWG plan contains 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. All 10 Utah LWGs have completed sage-grouse conservation plans. These plans and summaries of LWG activities can be found on-line at www.utahcbcp.org.

In 2010, the USUEXT/UDWR LWG partnership (Utah Community-based Conservation Program) was recognized by the Utah Center for Rural Life at Southern Utah University with a 2010 Utah Rural Honors Award. The award was presented by Gov. Gary Herbert at the 2010 Utah Rural Summit, held in Cedar City, Utah on the SUU campus. The award recognizes the unique partnership for engaging Utah rural communities in proactive efforts to conserve sage-grouse and other sagebrush obligate species.

Staff

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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 $136,000 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 $300,000 were entered into in 2009-2010 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.

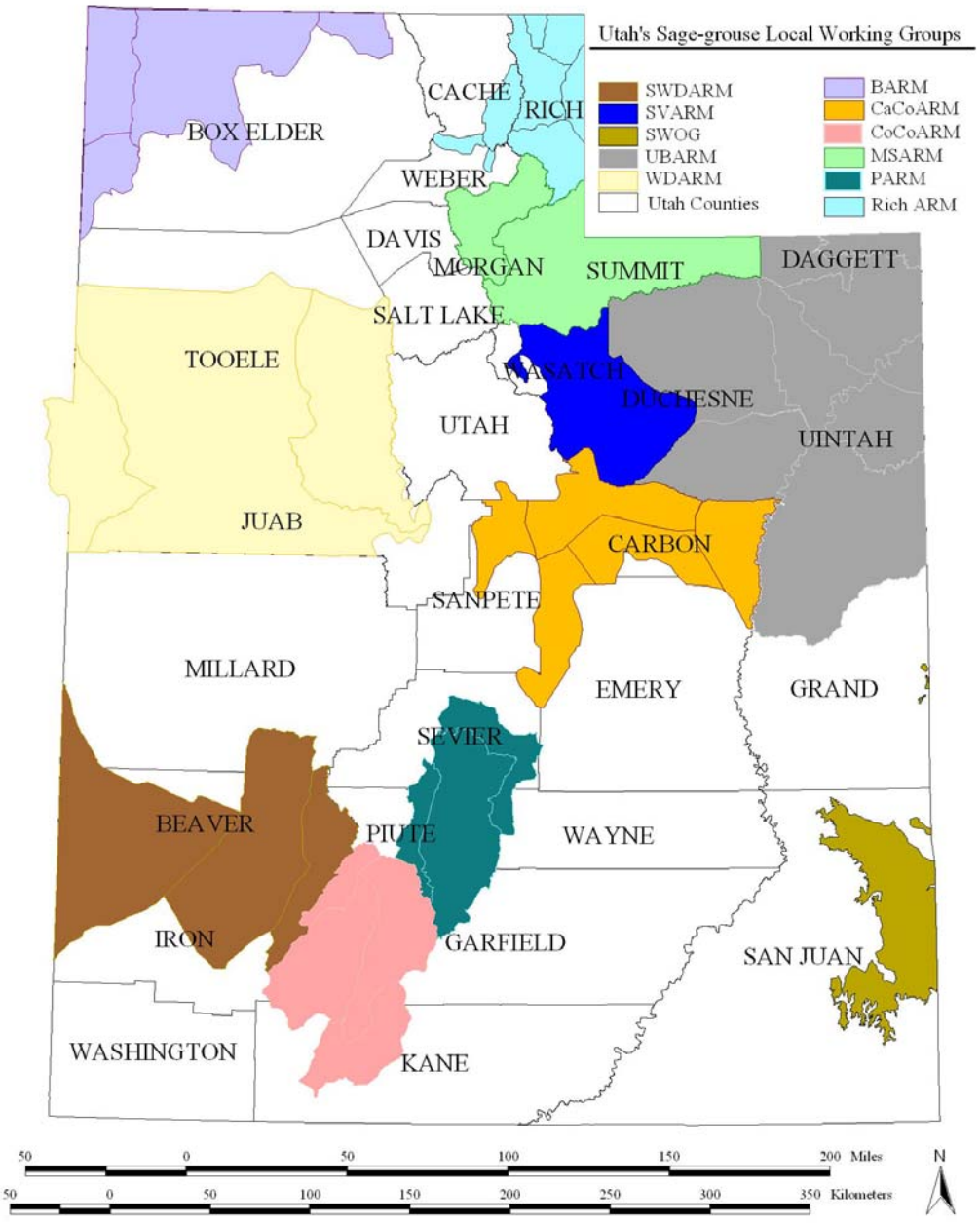

Figure 1. Utah Sage-grouse Conservation Areas, Utah Strategic Management Plan for Sage-grouse (UDWR 2009). (Note this report summarizes conservation actions completed to benefit greater sage-grouse. Thus it does not include Gunnison sage-grouse conservation actions. This species inhabits San Juan County).

Morgan-Summit Adaptive Resources Management (MSARM) Local Sage-grouse Working Group

The Morgan-Summit Adaptive Resource Management (MSARM) sage-grouse local working group is facilitated by Ms. Lorien Belton. MSARM sage-grouse local working group restarted in 2009 after a period of inactivity. Meetings in August and November provided opportunities for new agency staff, local landowners, and prior members of the group to convene and discuss topics of local relevance. The group continues to meet on a regular schedule.

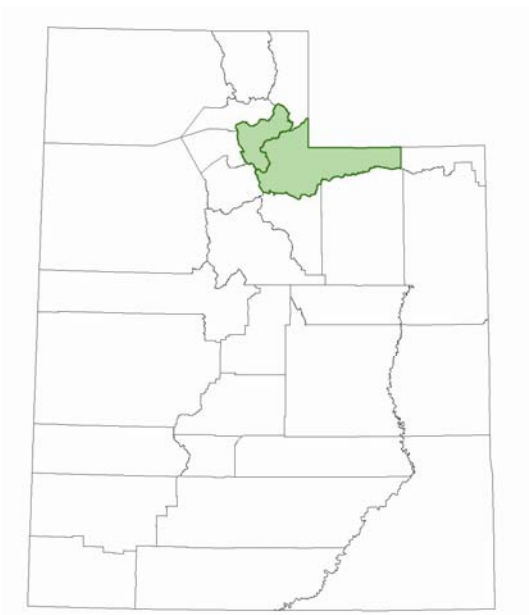

Figure 5. The Morgan-Summit Adaptive Resource Management (MSARM) Sage-grouse Local Working Group Conservation Area consists of 1,608,659 acres located in northern Utah.

Conservation Strategies and Actions: 2009-2010 Accomplishments

The following updates reflect the individual or joint efforts of MSARM partners in 2009.

1. **Strategy:** Through 2016, prevent establishment of cheat grass and other non-native vegetation species in sage-grouse habitats.
   - **1.1. Action:** Seed treated areas, where appropriate, with ecologically suitable seed mixes
   - **1.2. Action:** Avoid using fire in sage-grouse habitats prone to invasion by cheatgrass or other invasive weed species.
   - **1.3. Action**: Evaluate all wildfires and prescribed burns and reseed with ecologically suitable seed, where appropriate, to prevent establishment of cheat grass and other invasive weed species.

   NRCS has planned several projects. Local education efforts take place through the Cooperative Weed Management Area. Deseret Land and Livestock ranch does Dyer's woad management. DWR also does ongoing weed management on the Henefer/Echo and East Canyon Wildlife Management Areas.

2. **Strategy**: By 2016, **<u>increase grass/forb understory</u>** in sagebrush stands.
   - **2.1 Action**: Use sagebrush thinning techniques (Lawson aerator, spike, etc) in a mosaic pattern, where possible, to thin sagebrush stands.
   - **2.2 Action**: Seed, when possible, treated areas with ecologically suitable seeds.
   - **2.3 Action**: Reclaim and/or reseed areas disturbed by treatments when necessary, using seed mixtures with appropriate grasses and desirable forbs
   - **2.4 Action**: Restore understory vegetation in areas lacking desirable quality and quantity of

herbaceous vegetation where economically feasible.

2.5 Action: Conduct vegetation treatments to improve forb diversity (e.g., harrowing, aerating, chaining) and reclaim or reseed disturbed area, if needed

2.6 Action: Develop management techniques to increase forb diversity and density in sagebrush steppe, within limits of ecological sites and annual variations

2.7 Action: Work with public and private partners to implement rest-rotation grazing systems, where possible

NRCS has many acres in the CSP program, which provides rest-rotation grazing that can increase understory in sagebrush steppe areas. Private land projects have included sage-beating tall older sagebrush, and seeding behind the aerator. Above 7000 feet, reseeding may be less necessary. A planned project on Henefer Echo WMA had to be postponed to 2010, but will focus on increasing forb and shrub diversity and decreasing grass dominance. In addition, the QRM group has begun working with landowners to encourage work on adjacent lands.

3. **Strategy:** By 2016, **all new water projects** will take into account MSARM recommendations to **prevent conditions for extraordinary mosquito populations** and potential persistence and spread of West Nile Virus in the Resource Area.
   - **3.1. Action:** Identify key elements of various water projects that are needed to prevent existence of standing water and minimize mosquito populations.
   - **3.2. Action:** Develop partnerships with key water management agencies to work cooperatively to both maintain necessary flow regime and prevent conditions for extraordinary mosquito populations
   - **3.3. Action:** Cooperate with Summit County Mosquito Abatement District.
   - **3.4. Action:** Assess any new water projects for contributions toward conditions that may enhance mosquito populations

West Nile is still not a concern in the area. Efforts will be made to include the mosquito abatement district in future MSARM discussions or meetings to stay ahead of this issue.

4. **Strategy:** By 2016, search additional areas (TBD) for new active lek sites.
   - **4.1. Action:** Coordinate with UDWR to conduct aerial surveys in areas suspected to contain undiscovered active leks.
   - **4.2. Action:** Coordinate with public and private partners to conduct terrestrial lek searches in areas suspected to contain undiscovered active leks
   - **4.3. Action:** Coordinate with public and private partners to conduct count surveys of known active leks.
   - **4.4. Action**: UDWR to enlist and coordinate private volunteers and/or other agency biologists search for new leks and conduct lek counts on active leks.
   - **4.5. Action**: Through 2016, test dead sage-grouse for West Nile Virus and any other parasites/pathogens of importance

No specific lek-searching activities took place this year, although DWR biologists stay alert to possible new leks when conducting other work. Helicopter surveys may take place in 2010.

Powerline and pipeline companies also search for sage-grouse activity when surveying for wildlife, although those results are not publicly available. Some landowners are wary of reporting leks on private property.

5. **Strategy:** By 2016 **<u>decrease populations of sage-grouse predators</u>**, especially in areas used by sage-grouse for nesting and brood-rearing.
   - **5.1. Action:** Support efforts of USDA-WS to remove red foxes, coyotes, and ravens in areas used by sage-grouse for nesting and brood-rearing during spring and early summer
   - **5.2. Action:** Develop educational materials and distribute to recreationists that provide information on the impact to non-native predator species from littering

Morgan Woolgrowers do coyote control near some sage-grouse areas. No raven control occurs in the area. Much of the funding for predator control comes from local stock producers, who are taxed per head of livestock.

6. **Strategy**: **<u>Monitor impacts of lek viewing</u>** opportunities on lek behavior and lek attendance.
   - **6.1. Action**: Provide educational material (brochures, presentations, etc.) to interested birding groups about the ecology of sage-grouse and threats they face in the Resource Area.
   - **6.2. Action**: Increase law enforcement patrols in and around crucial lek sites
   - **6.3. Action**: Through 2016, include information about MSARM activities in County Extension newsletter

Wasatch Audubon contacted Utah Dept. of Transportation to explore the ideas of posting signs asking people to slow down during the lekking season, but was turned down because they were told that sage-grouse were not on a list of approved species that require signs. Also, the Utah Audubon Council has begun to explore getting fence reflectors up on some of the fences around the lek. Audubon is increasing their involvement in the LWG to increase coordination.

7. **Strategy**: By 2016**<u>, increase funding opportunities for private partners</u>** interested in improving sage-grouse habitat on private land.
   - **7.1. Action**: Participate in SCD and UPCD northern region team; share Plan Strategies with these groups and encourage funding of Plan Strategies
   - **7.2. Action**: Increase information dissemination about funding opportunities to private partners
   - **7.3. Action**: Develop educational material about habitat improvement techniques appropriate for sage-grouse habitat improvement and distribute to private partners
   - **7.4. Action**: Coordinate habitat projects on private land that meet the needs outlined in Plan and the needs of private partners

NRCS has increased its involvement in the LWG and works with landowners to develop projects. As of March 2010, EQIP and WHIP money is also available specifically for sage-

grouse projects. Promontory Ranch has funded species inventories on their property and is investing in educational efforts for homeowners in the development.

8. **Strategy**: By 2016 **increase amount breeding habitat** in "good" condition.
   - **8.1. Action**: Work with public and private partners to implement rest-rotation/time controlled grazing management strategies, where appropriate
   - **8.2. Action**: Work with NRCS and private partners to implement Farm Bill programs beneficial to sage-grouse
   - **8.3. Action**: Coordinate with county weed board to implement noxious weed program to reduce impacts on sage-grouse
   - **8.4. Action**: Work with NRCS and private partners to monitor effects of treatments on sage-grouse populations and habitat

NRCS's CSP program provides sage-grouse breeding season grazing deferment plans to ensure that adequate forbs are available for sage-grouse. No active projects were implemented in 2009-2010.

9. **Strategy**: Coordinate **fire management practices** with public and private partners to prevent loss of crucial sage-grouse habitat and enhance/improve sage-grouse habitat, where appropriate.
   - **9.1. Action**: Comment on BLM/USFS fire plans
   - **9.2. Action**: Re-seed sites, post-burn, with ecologically suitable seed mixture to prevent the establishment of cheat-grass
   - **9.3. Action**: Use fire management to reduce sagebrush canopy cover and create diverse sagebrush stands in brood-rearing and summer use areas

No known fire projects were conducted in 2009-2010.

10. **Strategy**: Improve **lek vegetation conditions** to allow for predator recognition and visibility.
    - **10.1. Action**: Open lek areas that have been invaded by sagebrush and other shrubs
    - **10.2. Action**: Map and inventory leks with potential for restoration
    - **10.3. Action**: Maintain and enhance desired habitat conditions for leks

No projects to improve lek vegetation were done in 2009, although mowing projects have been discussed.

11. **Strategy**: Improve **mesic and riparian areas** for sage-grouse and watershed health.
    - **11.1. Action:** Identify opportunities or needs to create small wet areas, implement such projects where economically feasible
    - **11.2. Action:** Design and implement livestock grazing management practices to benefit riparian areas
    - **11.3. Action:** Modify or adapt pipelines or developed springs to create small wet areas

11.4. Action: Locate projects to minimize potential loss of water table associated with wet meadow

11.5. Action: Protect existing wet meadows and riparian areas where necessary

11.6. Action: Manage vegetation and artificial structures to increase water-holding capability of areas.

No sage-grouse specific work was done in the area during 2009-2010. Some private lands water projects may benefit sage-grouse but not be reported to the group.

12. Strategy: Minimize the amount of quality sage-grouse habitat eliminated by residential and commercial **land development** consistent with private property rights.

12.1. Action: Participate with County land use decision makers in identifying key sage-grouse habitats

12.2. Action: Maintain sagebrush environments of sufficient size and shape around developments in sage-grouse habitat.

12.3. Action: Encourage the voluntary use of conservation easements and other land protection vehicles with willing sellers in sage-grouse habitats

12.4. Action: Educate rural residents about the importance of good grazing management in keeping small tracts weed free and capable of providing wildlife habitat

County planners have been provided with maps of sage-grouse habitat known locally. The Summit Land Conservancy holds agricultural easements in the area, including one riparian easement north of Henefer.

13. Strategy: **Encourage monitoring programs** that are consistent with NRCS practices and Connelly et al. (2003).

13.1. Action: Coordinate with MSARM partners to facilitate data collection

13.2. Action: Schedule and/or advertise educational opportunities, disseminate printed materials

13.3. Action: Coordinate with academic institutions to utilize students in monitoring efforts

13.4. Action: Hold annual field tours of habitat improvement projects

DWR is working to obtain funding for new collaring studies for sage-grouse in the area, in addition to regular spring lek counts. No field tour was conducted in 2009. A tour for the group was completed in summer of 2010.

14. Strategy: Improve efforts to **increase size of sage-grouse population** in the Resource Area.

14.1. Action: Explore possibility of initiating translocations of hen sage-grouse from other areas within Utah with stable or increasing populations

14.2. Action: Continue existing predator management activities as called for by UDWR, USDA-WS, and other participating agencies and organizations

No translocations have occurred in the area.

15. Strategy: Provide for a level and system of domestic livestock grazing that maintains and improves both the long-term stability of sage-grouse populations and habitats and the livestock industry in the Resource Area.

- **15.1. Action**: Coordinate grazing management with livestock operators to reduce resource and timing conflicts on leks and prime nesting habitat when possible
- **15.2. Action**: Apply grazing management practices to achieve desired conditions including maintenance of residual herbaceous vegetation appropriate for the site
- **15.3. Action**: Encourage implementation of grazing systems that provide for areas and times of deferment while taking into consideration the resource capabilities and needs of the livestock operator

As noted previously, the CSP program has done grazing system design that allows for sage-grouse breeding areas to be rested (not grazed) during critical times for sage-grouse. On the Henefer/Echo WMA, improved water distribution (2010) and fencing (2011) will be done to graze cattle to improve wildlife habitat. These are UPCD projects.

Major Needs and Concerns

The Morgan-Summit group has two primary challenges: a lack of specific knowledge of area populations sufficient to recommend habitat improvement projects, and a large amount of private land. In addition, the overlapping boundaries of two UDWR regions in the area make coordination slightly more complex. The group is working toward greater inclusion of NRCS employees in the LWG efforts, in order to address the private lands access issue. In addition, DWR habitat and wildlife biologists are working together to propose radio telemetry work for sage-grouse in the area.