

Monticello/Dove Creek Gunnison Sage-grouse Local Working Group

2009-2010 Plan of Work

I. Situation/Problem Statement

Gunnison sage-grouse (*Centrocercus minimus*, GUSG) inhabit a limited area in Colorado and Utah. In Utah, GUSG are only found in San Juan County. In January 2000 the U.S. Fish and Wildlife Service (USFWS) designated the species as a candidate for listing. In 2007 the USFWS removed the species from the candidate list.

The San Juan County GUSG Local Working Group (SWOG) was formed in 1996 to develop a conservation plan to benefit sage-grouse populations in Utah. The conservation plan was finalized in November 2000 and updated in 2003. Implementation of the conservation plan will ensure local ownership in future management and land-use decisions; respect private property rights; and enhance community socio-economics (SWOG 2003).

In 2003, a Range-wide Steering Committee (RSC) comprised of state and federal agency personnel prepared a GUSG Range-wide Conservation Plan (RCP). The RCP was developed to assist federal and state agencies, non-governmental organizations (NGO), industry, and local working groups (LWG) in the range-wide conservation and management of GUSG. The RCP includes a comprehensive conservation assessment, threats analysis and strategies to guide range-wide and local conservation efforts. Since the completion of the document, the RSC has focused on plan.

In 2006, SWOG merged with the Dove Creek LWG from Colorado. Partners in the group include Utah State University Extension (USUEXT), Colorado State University Extension, Utah Division of Wildlife (UDWR), Colorado Division of Wildlife (CDOW), Bureau of Land Management (BLM), U.S. Forest Service (USFS), Utah Farm Bureau Federation (UFBF), Farm Services Agency (FSA), Natural Resources Conservation Service (NRCS), San Juan County Extension, San Juan County Commission, and The Nature Conservancy (TNC). The group has been working to implement strategies identified in the Range-wide Plan

A. Implementation:

The Monticello/Dove Creek LWG met in November 2006 to identify and rank threats and prioritize conservation strategies. The LWG used a multi-voting process the equally weighted participant opinions in the ranking process. To ensure consistency across all GUSG LWGs, the RSC developed definitions that could be used to rank threats as low, medium, high or very high (Table 1). After the threats were ranked, the rankings were used to prioritize strategies. Definitions to prioritize strategies were also developed (Table 2). The goal of this process was to identify the best strategies based on "importance, given limited resources (i.e. time, money, manpower, etc.)" that the LWG would work to implement within the next 7 years.

Table 1. A threat represents the proximate cause of stress on a population (e.g., disease, habitat loss, fire suppression). Many sources of threats are driven by social, economic, or political causes that often are the focus of conservation strategies. Below are the definitions used by LWG to rank threats.

Threats were ranked by both severity and scope.

Severity of Threat -- the level of damage to GUSG population that can reasonably be expected within 7 years under current or predicted conditions (i.e., given the continuation of the existing situation).

Scope of Threat -- the geographic scope of impact on GUSG population throughout its specified range that can reasonably be expected within 7 years under current or predicted conditions (i.e., given the continuation of the existing situation).

Very High: The threat is likely to eradicate or drive a population to extremely low levels that will have difficulty recovering without augmentation. The threat is very widespread and will affect GUSG populations at a majority of sites within its specified range.

High: The threat is likely to seriously degrade the GUSG population but it will be able to recover with alleviation of threat. The threat is widespread in scope, and will affect the GUSG population within at least half of the sites within its range.

Medium: The threat is likely to moderately degrade the GUSG population. The threat is likely to be localized in its scope, and affect the GUSG population at a limited number of sites within its range.

Low: The threat is likely to only slightly impair the GUSG population. The threat is localized in scope and affects the population at a limited number of sites within its range.

Table 2. Strategies represent the tools used by managers to decrease or eliminate the threats negatively impacting a population. Below are definitions that were used by LWG to prioritize strategies.

Strategies were prioritized by considering practicality (e.g. wetland converted to agriculture is not practical to restore), cost of implementing strategy, and what portion of the population would benefit from implementation of the strategy.

Very High: The strategy to alleviate the threat is practical, can be done at a doable cost, and will be a large contributor in alleviating the threat throughout the population or to a crucial section of the population.

High: The strategy to alleviate the threat is practical, can be done with a reasonable commitment of resources, and will contribute to alleviating the threat to a large portion of a population.

Medium: The strategy to alleviate the threat will be difficult and costly but will contribute to alleviating the threat in a portion of a population.

Low: The strategy to alleviate the threat is not practical and would be highly costly and the benefits would be negligible for protecting the population as a whole.

B. Monticello/Dove Creek LWG Threat Rankings

The following are the results of the ranking process for the Monticello/Dove Creek LWG. The high to very high ranked threats are listed along with a brief discussion why it was ranked as high or very high. Following the threat are the top strategies identified by the LWG to implement to alleviate the threat.

1. Lack of habitat enhancement/restoration: Risks come from pinion-juniper (PJ) encroachment, lack of healthy sagebrush or sagebrush in general, lack of wet meadows, overabundance of crested wheatgrass, uncertainty of Conservation Reserve Program (CRP) renewal, and inappropriate CRP maintenance cause this threat to be a very high risk to maintenance of this population.

Strategies to implement to alleviate threat

- Select appropriate treatment options suitable for the site characteristics and treatment objective when planning for vegetation restoration/improvement projects that provide the structural habitat required for breeding, summer-fall, and winter GUSG habitats.
- Conduct pre-restoration and post-restoration monitoring using a recognized technique appropriate to measure treatment objective to evaluate the impact of treatments on GUSG when planning for vegetation restoration/improvement projects that provide the structural habitat required for breeding, summer-fall, and winter GUSG habitats.

2. Lack of development of habitat linkages among populations: Risk due to potential impacts of stochastic events like drought or disease that, without linkages, could potentially cause loss of all or part of population in this area.

Strategies to implement to alleviate threat

- Continue to refine identification of potential habitat linkages and prioritize possible habitat linkages between populations based on additional knowledge gained through research and updated GIS analyses in order to facilitate gene flow and dispersal of individuals

- Protect from permanent loss linkages that are demonstrated to allow for gene flow among populations and identify areas where habitat improvement efforts could restore functional linkages among populations
- Conduct habitat treatments to restore functional linkages among populations where feasible

3. Lack of habitat protection from permanent loss: Risks come from encroaching development and uncertainty about what will happen if CRP is not renewed which could cause the loss of many acres of protected habitat. A new concern for this population is the use of lands to produce sunflower and safflower oil for biodiesel.

Strategies to implement to alleviate threat

- Obtain conservation easements and implement management plans through the CSCP program in order to maintain 90% of seasonally important habitats within each population.
- Continue to complete conservation easements and management agreements for qualifying landowners as allowed by available funding.
- Obtain fee title to important habitats through purchase, land exchanges, or mineral rights acquisition.
- Enroll important habitats in conservation programs with incentive payments to landowners under the Farm Bill (e.g., CRP, EQIP, WRP, WHIP, Grassland Reserve).

4. Risk from impacts of weather/drought: The LWG felt that, overall, drought compounded the potential negative effects of many, if not all, other threats and issues to result in greater cumulative effects than any one threat/issue on its own. In particular, drought impacts nest success and habitat structure. In addition, there is much uncertainty about the potential impacts of drought due to the inability to predict future drought events. Overall, the LWG felt that the area seems to be prone to extreme weather events. Colorado birds are not likely to survive another drought event, especially if it is prolonged or severe. Severe winters potentially problem in Utah because of the lack of sufficient winter range (tall sagebrush).

Strategies to implement to alleviate threat

- Develop grass banks for livestock producers to graze during extreme conditions and develop additional water sources for wildlife and livestock to minimize impact to existing riparian, wetland, and wet meadow areas. Manage invasive vegetation in riparian, wetland, and wet meadow areas to improve water table

5. Research Priorities:

- Evaluate the effect of the amount, configuration and composition of contrasting habitat types (including GUSG seasonal habitats) on GUSG behavior (e.g., movement and dispersal), species distribution, productivity, and population

dynamics. Map and analyze landscape metrics (e.g., edge density, fragmentation, heterogeneity, fractal dimension), using the most reliable and current GIS data. and examine the spatial and temporal correlation with GUSG population dynamics. Evaluate the potential for dispersal of individuals into currently unoccupied suitable habitat.

- Examine the effects of different habitat treatments on the behavior (e.g., movement patterns), productivity, and population dynamics of GUSG.
- Evaluate the potential impact of, and techniques for, converting CRP to sagebrush habitat on GUSG distribution and population viability
- Evaluate the effect of population augmentation on GUSG demographics and genetic diversity.
- Evaluate the impact of agricultural and residential development (c) on the distribution and population dynamics of GUSG.
- Evaluate the impact of oil and gas development on the distribution and population dynamics of GUSG.

C. Strategies Identified by Monticello/Dove Creek LWG to Mitigate Threats

1. HABITAT PROTECTION

<p>Strategy 1: Maintain 90% of those vegetation communities likely used by GUSG within occupied habitat (combined public and private), by protecting the necessary proportion of those private lands that are at risk of development from conversion to unsuitable housing densities In addition, retain protection through CRP re-enrollment of 25,000 acres in Monticello, Utah, and 15,000 acres in Dove Creek, Colorado.</p>		
Task(s)	Responsible Group(s)	When
1. Permanently protect important seasonal GUSG habitats from permanent loss in Monticello, Utah area.	BLM, County Governments, NGO's, UDWR	Ongoing and by 2020
2. Develop prioritization criteria for and strongly recommend the re-enrollment of 25,000 acres of CRP in occupied and potential GUSG habitat in Monticello, Utah, and 15,000 acres of CRP in Dove Creek, Colorado.	CDOW, UDWR, NRCS	By 2010

3. Permanently protect important seasonal GUSG habitats at significant risk of permanent loss in Dove Creek. Develop, cooperatively with the BLM and Secret Canyon Homeowners Association, a strategy for development that protects important GUSG areas.	BLM, CDOW, County Governments, NGO's, Secret Canyon Homeowners Association	By 2020
---	--	---------

2. HABITAT IMPROVEMENT

Strategy 1: Develop 4,200 acres of additional GUSG habitat in Dove Creek and 5,800 acres in Monticello, and create a habitat linkage between the 2 subpopulations.		
Task(s)	Responsible Group(s)	When
1. Eliminate piñon/juniper from and develop GUSG habitat on 800 acres between Hickman Flat and the Utah-Colorado state line, or at the periphery of occupied habitat	BLM, Local Work Group, NRCS, UDWR	2010
2. Eliminate piñon/juniper from 1,200 acres between currently occupied habitat north of Dove Creek and vacant/unknown habitat encompassing the Spud Patch area .	BLM, Local Work Group, NRCS, UDWR	2010
3. Use habitat improvement techniques to establish sagebrush in 5,000 acres of CRP, other idled cropland, or other areas within 3 miles of lek sites within Utah.	BLM, Local Work Group, NRCS, UDWR	2010
4. Use habitat improvement techniques identified in to establish sagebrush in 3,000 acres of CRP, other idled cropland, or other areas within 4 miles of lek sites within Colorado.	CDOW, Local Work Group, NRCS	2010

Strategy 2: Improve existing breeding habitat to meet habitat quality guidelines on 500 acres in Dove Creek and 500 acres in Monticello.		
Task(s)	Responsible Group(s)	When
1. Brush beat or otherwise control sagebrush and other shrubs on lek sites	BLM, CDOW, Local Work Groups, NRCS, UDWR	As needed

2. Improve understory grass and forb component within nesting and early brood-rearing areas where necessary to meet habitat guidelines on west side of Dove Creek subpopulation and in Utah subpopulation area	BLM, CDOW, NRCS, UDWR	2010
3. Protect brood-rearing habitat in CRP by restricting haying and grazing, or providing incentives not to hay and graze.	CDOW, NRCS, Private Landowners, UDWR	2005

Strategy 3: Minimize GUSG habitat fragmentation and degradation.		
Task(s)	Responsible Group(s)	When
1. Implement recommendations from rangewide strategy on “Oil & Gas Development and Mining”	BLM, Local Work Groups, NRCS, STL, Utility Companies	As needed
2. Implement recommendations from rangewide strategy on “Human Infrastructure: Powerlines, Other Utility Corridors, Wind Turbines, Communication Towers, Fences, and Roads”	BLM, CDOW, Local Work Group, STL, UDWR, Utility Companies	As needed
3. Incorporate grazing management practices (such as those presented on page 212) for both cattle and sheep that are compatible with, or enhance, GUSG habitat on federal and state lands during the permit renewal process, or when monitoring indicates need.	BLM, CDOW, NRCS, Private Landowners, UDWR	As needed
4. Implement recommendations from rangewide strategy on “Noxious and Invasive Weeds”	BLM, CDOW, County Governments, Local Work Groups, UDWR	As needed

Strategy 4: Monitor existing and new GUSG habitat for quality.		
Task(s)	Responsible Group(s)	When
1. Implement recommendations from rangewide strategy on “Habitat Monitoring”	CDOW, Local Work Groups, UDWR	Ongoing
2. Evaluate suitability of vacant/unknown habitat classification and determine if habitat improvement techniques may enhance suitability.	BLM, CDOW, Local Work Group, UDWR	2009

3. Investigate opportunities to expand currently occupied habitat into Vacant/Unknown or Potentially Suitable habitats that would also begin to establish linkages between sub-populations.	BLM, CDOW, Local Work Group	2010
4. Monitor recovery of sagebrush stands that recently died or experienced defoliation due to drought and associated stresses, and implement restoration treatments if necessary.	BLM, CDOW, Local Work Group, UDWR	As needed

3. POPULATION MANAGEMENT

Strategy 1: Monitor population and area to detect changes in GUSG numbers and distribution, and to evaluate potential areas for expansion.		
Task(s)	Responsible Group(s)	When
1. Implement recommendations in the “Population Monitoring and Targets” rangewide strategy.	CDOW, Local Work Groups, UDWR	Annually
2. Evaluate vacant habitat at La Sal, Lisbon Valley, and Hatch Point (Utah), and Spud Patch (Colorado) to determine habitat suitability and potential for re-introduction.	BLM, CDOW, Local Work Group, UDWR	2005-06
3. Evaluate the Near Draw/Far Draw area of “the Glade” to determine habitat suitability and potential for reintroduction.	BLM, CDOW	2005-06

Strategy 2: Minimize disturbances to GUSG population (see Appendix I).		
Task(s)	Responsible Group(s)	When
1. Implement recommendations from rangewide strategy on “Lek Viewing”	BLM, CDOW, Local Work Group, UDWR	As needed
2. Implement timing restrictions provided in rangewide “Human Infrastructure: Powerlines, Other Utility Corridors, Wind Turbines, Communication Towers, Fences, and Roads” strategy, and “Oil & Gas and Mining” strategy.	BLM, NRCS, Local Work Groups, STL, Utility Companies, Oil and Gas Companies	As needed

Strategy 3: Augment population and genetic diversity.		
Task(s)	Responsible Group(s)	When

1. Implement recommendations from rangewide strategy on “Population Augmentation”. Conduct transplant of 40 or more birds over several years to recover population and increase genetic diversity in Dove Creek.	CDOW, Local Work Group, UDWR	TBD
2. If vacant habitat at La Sal, Lisbon Valley, and Hatch Point (Utah), and Spud Patch (Colorado) is determined to be suitable, reintroduce birds following recommendations from rangewide strategy on “Population Augmentation” (pg. 241).	CDOW, UDWR	TBD
3. If the Near Draw/Far Draw area of “the Glade” is determined to be suitable, reintroduce birds following recommendations from rangewide strategy on “Population Augmentation” (pg. 241).	CDOW	2007 or later

Strategy 4: Manage predators to reduce excessive predation.		
Task(s)	Responsible Group(s)	When
1. Implement recommendations from rangewide strategy on “Predation”	CDOW, Local Work Groups, Private Landowners, UDWR, USDA (APHIS)	As needed
2. Given nest success is below the 25% trigger indicated in the predator management strategy, determine specific predators reducing nest success and evaluate effectiveness of control methods on these predators.	CDOW, Local Work Group, UDWR	On-going

Strategy 5: Collect field information to refine and map habitat and GUSG use areas.		
Task(s)	Responsible Group (s)	When
1. Conduct inventory of vacant/unknown habitat areas using inventory technique developed at a rangewide level	BLM, CDOW, UDWR, USFS	Complete in 2010
2. Search for new or unknown existing leks utilizing survey methodology developed at rangewide level.	BLM, CDOW, UDWR	Begin in 2006; Repeat every 3-5 years

3. Map GUSG seasonal habitats in a GIS as defined per “Habitat Monitoring” rangewide strategy, Objective 1, Strategy #7 (see pg. 220).	BLM, CDOW, UDWR	July, 2006
--	-----------------	------------

II. Inputs – Resources Needed

In 2009-2010, the Monticello/Dove Creek LWG will seek to implement the following selected strategies. For each strategy we have identified the specific actions, resources required, and the agency and organization contact that will responsible. Note these are selected priorities for 2009-2010.

A. Habitat Protection

Task 1. Secure a conservation easement on 400 acres of important GUSG winter and breeding habitat in San Juan County, Utah.

Resources Needed: The UDWR (Guy Wallace) and TNC (Sue Bellagamba) will develop a funding proposal to submit to the National Fish and Wildlife Foundation to secure funds for this easement. This proposal will be submitted by 1 November 2009. The UDWR will develop a prioritized list of other properties that are located within the Utah GUSG conservation area that are important to species conservation and present this list to the LWG for consideration as possible sites for conservation easements.

Task 2. Implement steps resulting in the CRP re-enrollment of 25,000 acres in Monticello, Utah, and 15,000 acres in Dove Creek, Colorado.

Resources Needed: A staff specialist with the Utah Community-based Conservation Program (Terry Messmer) will work with the LWG, NRCS, and FSA in Colorado and Utah encourage that the conservation area be designated as a Critical Wildlife Area. The new federal guidelines for implementing the CRP have not been released. Based on FSA interviews with landowners that have land currently enrolled in CRP, most if not all will be interested in re-enrolling in the program. Additional lands currently not enrolled in CRP in the conservation area may also qualify for the program.

B. Habitat Improvement

Task 1. Develop and implement projects to remove piñon/juniper from and develop GUSG habitat on 800 acres between Hickman Flat and the Utah-Colorado state line, or at the periphery of occupied habitat. Eliminate piñon/juniper from 1,200 acres between currently occupied habitat north of Dove Creek and vacant/unknown habitat encompassing the Spud Patch area. To achieve these acreage totals small projects will be implemented annually.

Resources Needed: Biologists from the BLM, UDWR, and CDOW will secure funding through respective agencies to conduct lop and scatter projects that will culminate in creating a sagebrush corridor between Utah and Colorado populations. The amount of acres treated will be subject to funding availability.

Task 2. Use habitat improvement techniques to establish sagebrush in 5,000 acres of CRP, other idled cropland, or other areas within 3 miles of lek sites within Utah and 3,000 acres of CRP, other idled cropland, or other areas within 4 miles of lek sites within Colorado. Biologist will annually monitor recovery of sagebrush stands that recently died or experienced defoliation due to drought and associated stresses, and implement restoration treatments if necessary.

Resources Needed: Biologists from the BLM, UDWR, USUEXT, and CDOW will secure funding through respective agencies plant sagebrush in the conservation areas in Utah and Colorado. Although, the amount of acres treated will be subject to funding availability, sagebrush plantings will be conducted annually.

Task 3. Evaluate suitability of vacant/unknown habitat classification and determine if habitat improvement techniques may enhance suitability Investigate opportunities to expand currently occupied habitat into Vacant/Unknown or Potentially Suitable habitats that would also begin to establish linkages between sub-populations.

Resources Needed: USUEXT will evaluate the condition of potential and historic GUSG habitats located within 6 miles of existing leks in Utah. The CDOW will complete similar work in Colorado. These data will be compared to RCP vegetation guidelines by USUEXT and CDOW to establish priorities for protection and restoration.

Task 4. Improve understory grass and forb component within nesting and early brood-rearing areas in CRP and other areas where necessary to meet habitat guidelines on west side of Dove Creek subpopulation and in Utah subpopulation area

Resources Needed: USUEXT will work with the Monticello/Dove Creek LWG top prepare a funding proposal to submit to the NFWF by November of 2009 that will seek funds to implement management actions on CRP to increase vegetation diversity. This proposal will include the use of disking, reseeding, and grazing.

C. Population Monitoring

Task 1. Monitor population and area to detect changes in GUSG numbers and distribution, and to evaluate potential areas for expansion. . Search for new or unknown existing leks utilizing survey methodology developed at range-wide level. Evaluate vacant habitat at La Sal, Lisbon Valley, and Hatch Point (Utah), and Spud Patch (Colorado) to determine habitat suitability and potential for re-introduction.

Resources Needed: UDWR and CDOW biologists will conduct annual leks counts and seek for new leks.

D. Local Working Group Administration and Communication

Task 1. Increase community support for GUSG conservation and landowner awareness of and participation in conservation funding opportunities.

Resources Needed: The Monticello/Dove Creek LWG will meet face-to-face on a quarterly basis to review progress toward accomplishing the tasks identified in this plan of work. One of these meetings will consist of a community forum involving local landowners. These meetings will be rotated between Dove Creek, Colorado and Monticello, Utah. USUEXT will continue to facilitate the LWG and work with members to arrange meeting dates and publicity. Meeting dates, minutes, and accomplishment reports will be posted on the Utah Community-based Conservation Program web site.

III. Anticipated Outcomes/Impacts

A. Habitat Protection

Task 1. Funding will be identified to secure a conservation easement on 400 acres of important GUSG winter and breeding habitat in San Juan County, Utah.

Task 2. The GUSG Conservation areas in Utah and Colorado will be designed critical wildlife areas thus facilitating the re-enrollment of 25,000 acres in Monticello, Utah, and 15,000 acres in Dove Creek, Colorado.

B. Habitat Improvement

Task 1. Up to 200 acres of piñon/juniper will be removed between Hickman Flat and the Utah-Colorado state line, or at the periphery of occupied habitat and between currently occupied habitat north of Dove Creek and vacant/unknown habitat encompassing the Spud Patch area.

Task 2. Sagebrush will be planted on up to 100 acres of CRP, other idled cropland, or other areas within 4 miles of lek sites within Utah and Colorado.

Task 3. The suitability of vacant and unknown habitat within 6 miles of known leks will be evaluated and compared to range-wide vegetation guidelines to develop recommendations for habitat improvements. These results will be prepared by USUEXT for presentation to the LWG.

Task 4. USUEXT will secure funding to implement and evaluate management experiments designed to improve understory grass and forb component within nesting and early brood-rearing areas in CRP and other areas where necessary to meet habitat guidelines in Utah subpopulation area

C. Population Monitoring

Task 1. UDWR and CDOW will monitor population and area to detect changes in GUSG numbers and distribution, and to evaluate potential areas for expansion. Biologist will search for new or unknown existing leks utilizing survey methodology developed at range-wide level.

D. Local Working Group Administration and Communication

Task 1. The number of landowner's participation in GUSG conservation actions will increase.

IV. Collaborators

Partners in the group include Utah State University Extension (USUEXT), Colorado State University Extension, Utah Division of Wildlife (UDWR), Colorado Division of Wildlife (CDOW), Bureau of Land Management (BLM), U.S. Forest Service (USFS), Utah Farm Bureau Federation (UFBF), Farm Services Agency (FSA), Natural Resources Conservation Service (NRCS), San Juan County Extension, San Juan County Commission, The Nature Conservancy (TNC), and private landowners.

Target Audiences: See above

V. Program Methods

Program Area: This effort will be conducted in San Juan County, Utah and Dove Creek Colorado.

Methods of Delivery: education classes, workshops, group discussion, demonstrations, field tours, personal contacts, conferences, web sites, newsletters, newspapers, peer presentations, and direct mailings.

Evaluation Techniques: LWG participation in GUSG conservation activities to include number of participants by stakeholder category (agency, landowner, NGO) and commitments in terms of time, resources, and funding. Other metrics will include acres of habitat evaluated, acres of habitat improved and/or protected through conservation easements, CRP, or voluntary actions.