

**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

Michael, J. Styler, Executive Director, Utah Department of Natural Resources

Jim Karpowitz, Director, Utah Division of Wildlife Resources

Submitted by

**Noelle Cockett, Vice President for University Extension and Agriculture,
Utah State University, Logan**

Staff Members

**Terry A. Messmer, Lorien Belton, Todd Black, S. Nicole Frey, Rae Ann Hart
Utah Community-Based Conservation Program, Jack H. Berryman Institute
Department of Wildland Resources, Utah State University, Logan.**

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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.

Strawberry Valley Adaptive Resource Management (SVARM) Sage-grouse Local Working Group

The Strawberry Valley Adaptive Resource Management (SVARM) sage-grouse local working group is facilitated by Ms. Lorien Belton. SVARM meets three times yearly: a spring meeting, a summer field tour, and a fall meeting. The group may meet more frequently as the need arises. In late spring 2008, a new facilitator from USU Extension took over the position left open in December 2007 by the departure of the previous facilitator. Only two meetings, therefore (summer and fall) were held in 2008. Two new co-chairs were named to the group in 2008, Michael Bornstein of the USFS and Alicia Moulton of USU Extension in Heber City.

Key progress this year includes increased interaction between SVARM and the Wasatch County planning department, which has resulted in increased communication about potential development threats to grouse, and an increased likelihood that timely, locally relevant comments will be received from sage-grouse interests on relevant projects. In addition, several habitat projects to improve brood-rearing areas are either in progress or planned for future years. Land purchases focused on protecting key winter habitat from development also bode well for sage-grouse in the SVARM project area. Key areas planned for future work include development of information materials to help reduce the threat of recreation – particularly winter recreation—to sage-grouse, and upcoming habitat treatment projects.



Figure 9. The Strawberry Valley Adaptive Resource Management (SVARM) Sage-grouse Local Working Group Conservation Area consists of 948,568 acres located in north-eastern Utah.

Conservation Strategy and Actions: 2008 Accomplishments

- 1. Strategy:** Provide a system and the reasonable extent of domestic livestock grazing that maintains and improves both the long-term stability of Greater Sage-Grouse populations, and habitats and the livestock industry in the Resource Area.
 - 1.1. Action:** Coordinate grazing management with livestock operators to reduce resource and timing conflicts on leks and prime nesting habitat when possible.
 - 1.2. Action:** Apply grazing management practices to achieve desired conditions including maintenance of residual herbaceous vegetation appropriate for the site.
 - 1.3. 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.

1.4. Action: Manage livestock to enhance riparian conditions.

Most of the conservation area is not grazed and grazing in the rest of the area is carefully controlled. Spring grazing on UDWR land is ongoing in an effort to increase sagebrush cover in areas with too much crested wheatgrass. Partners continue to work with grazers in discussions about where grazing would be beneficial or detrimental to wildlife.

2. Strategy: Maintain and, where possible, improve grass/forb component in the understory in nesting and brood-rearing areas.

2.1. Action: Reclaim and/or reseed areas disturbed by treatments when necessary, using seed mixtures with appropriate grasses and desirable forbs.

2.2. Action: Restore understory vegetation in areas lacking desirable quality and quantity of herbaceous vegetation, where economically feasible.

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

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

The Trout Creek and Badger Hollow mowing projects are being monitored as the seeded forbs and grasses continue to grow. Vegetation response has been very favorable. The areas are also being monitored for noxious weeds, particularly musk thistle. Additional treatments, with associated seeding, are planned for future years, such as those in Chicken Springs. If needed, projects will be seeded with UDWR-approved seed mixes. The many lop and scatter projects done over the last several years, particularly in the Fruitland area, also helped move toward this goal.

3. Strategy: Enhance existing riparian areas or create small wet areas to improve nesting and brood-rearing habitat.

3.1. Action: Identify opportunities or needs to create small wet areas, implement such projects where economically feasible.

3.2. Action: Design and implement livestock grazing management practices to benefit riparian areas.

3.3. Action: Modify or adapt pipelines or developed springs, to create small wet areas.

3.4. Action: Locate projects to minimize the potential loss of water table associated with wet meadows.

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

3.6. Action: Manage vegetation and artificial structures to increase water-holding capability

of areas.

3.7. Action: Install catchment structures to slow run-off, hold water, and eventually raise water tables.

NRCS worked on a project on Joyce Bailey's private land. Considerable past projects addressed many of these actions, so implementation levels of these actions was reduced in 2008. No new ponds, pipelines, or guzzler projects occurred this year for specific grouse benefit. However, several additional pond clean-ups are being discussed (silt removal to create deeper ponds reduces evaporation and provides water later in the season). UDWR meets annually with grazers to help develop wildlife-friendly projects and grazing plans that address riparian areas, water for wildlife, and other areas.

4. Strategy: Manage pinyon/juniper stands to reduce encroachment into sagebrush/grass communities.

4.1. Action: Remove encroaching trees and tall shrubs mechanically (chainsaws, chaining, etc.) or by other methods, to maintain visibility at lek sites and security from predation in other seasonal habitats.

4.2. Action: Brush-cut or treat with other mechanical methods specified areas and re-claim or re-seed as necessary.

4.3. Action: Coordinate with State Forester to expand defensible space programs to improve sage-grouse habitat where possible.

Substantial work done in previous years with Watershed Restoration Initiative funding treated most of the key areas, so further work toward this objective was not a focus in 2008. Defensible space projects occur primarily near residences where grouse are unlikely to be. Plans to mow tall shrubs in 2009 are part of the proposed Chicken Springs project.

5. Strategy: Improve lek vegetation conditions to allow for predator recognition and visibility.

5.1. Action: Open lek areas that have been invaded by sagebrush and other shrubs.

5.2. Action: Map and inventory leks with potential for restoration.

5.3. Action: Maintain and enhance desired conditions for leks.

5.4. Action: Coordinate vegetation management to maintain desired conditions.

5.5. Action: Evaluate/monitor treatment effects.

No lek-specific vegetation work was done in 2008. Active leks are on private property with unresolved access concerns so focus has been on monitoring birds. The Chicken Springs project has the potential to open up satellite leks for possible bird use and improvement of

brood-rearing habitat conditions. BYU coordinates lek searching in the area. Additional lek searching was done in the spring of 2009 by helicopter by UWDR. No new leks were found.

6. Strategy: Maintain and improve habitat conditions in winter range.

6.1. Action: Treat decadent stands of sagebrush (harrowing, aerator, brush beating, chain, spike), where appropriate, to create uneven aged stands of sagebrush across the Resource Area.

6.2. Action: Establish easements or other land protection in crucial sage-grouse use areas.

6.3. Action: Work with county planners and county council to establish zoning ordinances for crucial winter habitat that protect those areas from inappropriate development.

UDWR is purchasing areas of critical winter habitat in the area, which will eliminate the threat of development in those areas. DWR now owns or will own much of the crucial winter habitat and will work to acquire more as possible. Maintenance of current conditions is the primary current need as birds currently use the area in the winter.

7. Strategy: Protect crucial habitat from inappropriate development.

7.1. Action: Work with county planners and county council to establish zoning ordinances for crucial habitat that protect those areas from inappropriate development.

7.2. Action: Establish easements or other land protection in crucial habitat.

7.3. Action: Work with USFS and other federal agencies to protect crucial sage-grouse habitat from renewable and non-renewable energy development.

7.4. Action: Maintain or reestablish sagebrush patches of sufficient size and appropriate shape, to support sage-grouse between agricultural fields.

7.5. Action: Work with NRCS and others to maintain and enroll important sage-grouse habitats involved in Farm Bill programs currently in agricultural production.

7.6. Action: Encourage use of sage-grouse friendly seed mixes, including bunchgrasses, forbs, and big sagebrush, in plantings.

7.7. Action: Encourage interest and enrollment of key sage-grouse habitats in the Farm Bill programs.

Efforts are ongoing to get useful sage-grouse data to county planners. UDWR and NRCS meets with landowners to keep landowners involved and encourage sage-grouse friendly efforts on private land. As noted in Section 6, UDWR has also purchased some key habitat in the area. Sagebrush treatment projects are approved by biologists and UDWR seed-mixes are used. Non-renewable energy development threat on USFS land has abated slightly for the time being due to economic considerations. Any immediate new drilling threats would still

need to do through USFS comment on seismic and drilling proposals, making any new proposed impacts several years away. The USFS may have little say on leases that have been sold, but can work to mitigate impacts.

8. Strategy: Minimize impacts of noxious and invasive weeds.

8.1. Action: Identify areas where noxious/invasive weeds are encroaching on sage- grouse habitat.

8.2. Action: Treat areas where noxious/invasive weeds and non-desirable introduced species (e.g. smooth brome) have become, or are at risk of becoming, a factor in sage-grouse habitat loss or fragmentation.

8.3. Action: Work with existing weed management programs to incorporate sage-grouse habitat needs.

8.4. Action: Identify large areas of noxious/invasive weeds and non-desirable introduced species (e.g. smooth brome), that are not meeting sage-grouse habitat needs and reseed where appropriate.

8.5. Action: Manage burned areas, transportation, utility, and pipeline corridors, and vegetation treatments to minimize undesirable vegetation where possible.

8.6. Action: Work with County weed board to increase awareness of weed problems in sage-grouse and other important wildlife habitat.

There is a strong interest from all parties in the ongoing positive coordination between UDWR and CMWAs. CMWA representatives attended the SVARM summer 2008 field tour to view projects and discuss needs and options. UDWR is also aware of the ongoing need to ensure coordination with the Desert Hollow and Wasatch County CWMA to manage weeds in all project sites. For example, musk thistle issues in the Trout Creek area are being addressed as follow-up for that habitat enhancement project. Spot treatments for weeds are continually ongoing as needed on DWR properties. The CMWA actively works to address toadflax and salt cedar issues around the reservoir. In addition, the Wallsberg knapweed project is being identified and will involve mapping areas, dealing with infestations, and also attempting to determine if sage-grouse are using the area, information which is currently unknown.

9. Strategy: Minimize impacts of utility lines, fences, and roads in sage-grouse habitat.

9.1. Action: Avoid new construction during important periods and re-route lines where technically and economically feasible to avoid impacts.

9.2. Action: Schedule maintenance to avoid important periods, however, maintenance in emergency situations will be unrestricted.

9.3. Action: Install raptor deterrents when applicable

SVARM and other entities comment on proposed new projects that might be detrimental to grouse and make suggestions for mitigation options. This is part of efforts to coordinate with county officials. Perch deterrents are not planned for use due to results of a study in San Juan County indicating that they may not be sufficiently effective.

10. Strategy: Minimize sage-grouse habitat loss to oil and gas activities.

10.1. Action: Increase/encourage participation by private oil/gas industry in SVARM.

10.2. Action: Encourage use of central tanks and locate those in areas with least impact to sage-grouse.

10.3. Action: Use directional drilling where feasible to minimize surface disturbance, particularly where well density exceeds 1:160 acres.

10.4. Action: Minimize pad size and other facilities to the extent possible, consistent with safety.

10.5. Action: Plan and construct roads to minimize duplication.

10.6. Action: Cluster development of roads, pipelines, electric lines and other facilities.

10.7. Action: Minimize noise disturbance (directing mufflers, glass packs, etc.) in and near lek and nesting habitat.

10.8. Action: Use existing, combined corridors where possible.

10.9. Action: Use early and effective reclamation techniques, including interim reclamation, to speed return of disturbed areas to use by sage-grouse.

10.10 Action: Reduce long-term footprint of facilities to the smallest possible.

10.11 Action: Avoid aggressive, nonnative grasses (e.g. intermediate wheatgrass, pubescent wheatgrass, crested wheatgrass, smooth brome, etc) in reclamation seed mixes.

10.12. Action: Eliminate noxious weed infestations associated with oil and gas development disturbances.

10.13. Action: Minimize width of field surface roads.

10.14. Action: Avoid ridge top placement of pads and other facilities.

10.15. Action: Use low-profile, above-ground equipment, especially where well density

exceeds 1:160 acres.

10.16. Action: Avoid breeding/nesting season (March 1 – June 30) construction and drilling when possible in sage grouse habitat.

10.17. Action: Limit breeding season (March 1 – May 1) activities near sage grouse leks to portions of the day after 9:00 a.m. and before 4:00 p.m.

10.18. Action: Reduce daily visits to well pads and road travel to the extent possible in sage-grouse habitat.

10.19. Action: Utilize well telemetry to reduce daily visits to wells, particularly where well density exceeds 1:160 acres.

10.20. Action: Locate compressor stations off ridge tops and at least 2,500 feet from active sage-grouse leks, unless topography allows for closer placement.

10.21. Action: Avoid locating facilities within a quarter mile of active sage-grouse leks, unless topography allows for closer placement.

10.22. Action: Plan for and evaluate impacts to sage-grouse of entire field development rather than individual wells.

10.23. Action: Study, and attempt to quantify, impacts to sage-grouse from oil and gas development.

10.24. Action: Evaluate need for near-site and/or off-site mitigation to maintain sage-grouse populations during oil and gas development and production, especially where well density exceeds 1:160 acres.

10.25. Action: Implement near-site and/or off-site mitigation as necessary to maintain sage-grouse habitat quality.

10.26. Action: Share sage-grouse data with industry to allow planning to reduce impacts.

No oil and gas exploration concerns currently exist in the SVARM area. One company that had expressed interest pulled out due to economic concerns. For future projects, SVARM will comment on EIS's for proposed development.

11 Strategy: Minimize the impact of extraordinary predation.

11.01. Action: Modify power lines and wood fence posts (to remove raptor perches) in important sage-grouse areas, where feasible, and where predator concerns have been identified.

11.02. Action: Remove trees, remove/modify raptor perches, and maintain quality sagebrush

habitat, where predation concerns on sage-grouse have been identified.

11.03. Action: Begin site-specific predation management considering all predator species (especially common ravens and red fox) where necessary and appropriate.

11.04. Action: Work with County planners and private developers to incorporate trash minimization and domestic animal control measures in CCNRs.

No specific perch removal projects have taken place; however, UDWR makes recommendations regarding fence removal and other perches as per Strategy 9. Raven and red fox control by APHIS continue. Improvements to the timing of raven control are being implemented in order to increase the effectiveness of current measures. Red fox control has encountered some budget issues but is continuing. APHIS hopes to expand efforts to the Fruitland area in the near future. Starting this year, the county has required trash pickup from summer homes, which will hopefully reduce the amount of trash available to scavengers.

12. Strategy: Improve knowledge of diseases and parasites in sage-grouse populations.

12.1. Action: Collect sage-grouse parasite and disease organism samples while handling birds for other research, when possible.

12.2. Action: Monitor radio-collared and other sage-grouse for West Nile Virus and other disease outbreaks.

Researchers from BYU take blood samples of every radio collared bird. During high West Nile times, they also take fresh-killed birds in for necropsy. Only one bird (in the UBARM area, not in SVARM) has tested positive for West Nile.

13. Strategy: Improve knowledge of genetics in sage-grouse in minimum viable populations.

13.1. Action: Collect samples for genetic research from all known breeding complexes (including hunted and un-hunted areas) when possible.

See Strategy 12. BYU does this when doing other blood tests. Feathers are taken from chicks when possible to augment this effort.

14 Strategy: Increase size of sage-grouse population in the Resource Area.

14.01 Action: Continue translocation efforts as called for by UDWR, BYU, and other participating agencies and organizations.

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

2009 is the first year of not translocating birds to the area, which will provide initial data on survival. Predator control is ongoing as per Strategy 11.

15 Strategy: Maintain and increase long-term habitat and population monitoring and research.

15.01. Action: Maintain long-term habitat monitoring sites on the Resource Area (as monitored by the Utah Big Game Range Trend Studies program).

15.02. Action: Maintain and increase radio-monitoring of translocated sage-grouse.

15.03. Action: Work with agency partners to maintain and increase funding for research and monitoring.

15.04. Action: Continue to monitor sage-grouse populations through use of lek counts.

15.05. Action: Increase lek search activities to find new lek sites in the Resource Area.

15.06. Action: Work with USDA-WS to monitor populations of sage-grouse predators.

Monitoring efforts continue as a joint effort between BYU and UDWR. Big Game Range Trend Studies are ongoing in the area. Starting soon, UPCD/Watershed Restoration Initiative Projects may be monitored for sage-grouse by a UDWR wildlife monitoring team, which will focus on the Fruitland area as well as other areas of the state. Lek searching did not locate new leks in spring 2009. Predator reduction monitoring is anecdotal but communication continues between UDWR, SVARM, and APHIS.

16. Strategy: Increase public education about sage-grouse ecology, conservation, and management.

16.01. Action: Work with Audubon Society to increase educational opportunities regarding sage-grouse in the Resource Area.

16.02. Action: Develop educational materials (brochures, presentations, etc.) and deliver to Friends of Strawberry Valley, Strawberry Anglers Association, Daniels Summit Lodge, Strawberry Water Users and other potential stakeholders to increase awareness.

16.03. Action: Encourage use of signage in appropriate areas to increase awareness of crucial sage-grouse habitats.

16.04. Action: Develop sage-grouse identification materials for distribution to recreationists, bird watchers, and other stakeholders

SVARM is in the process of designing one or more kiosks and a brochure to target winter and summer recreationists in the Strawberry Valley. Rick Baxter (BYU) gives presentations to professional societies. Two field tours in the summer of 2008 highlighted SVARM's activities and visited habitat improvement projects. One field tour was for USFS staff from several regions. Additional avenues for communication to the public are under discussion.

17. Strategy: Minimize negative impacts of incompatible OHV (ATVs, snowmobiles, 4WD trucks, etc.) recreation and other recreation on sage-grouse populations and habitats.

17.01. Actions: Work with County planners and other agencies to restrict seasonal OHV access to crucial sage-grouse use areas.

17.02. Actions: Coordinate with enforcement agencies (Sheriff, parks, USFS, COs) to increase awareness of negative impacts to sage-grouse.

17.03. Action: Create opportunities and use existing avenues to increase awareness in participating public about negative impacts of OHV use in crucial sage-grouse areas.

17.04. Action: Coordinate with enforcement agencies to increase awareness of poaching and to minimize sage-grouse poaching opportunities.

17.05. Action: Encourage use of signage to identify areas closed to hunting; language in proclamation that specifies closed area

Outreach efforts to recreationists will be focused on kiosk and brochure development as discussed in Strategy 16. The brochure will be distributed at snowmobile rental areas and other key locations. There is also increased spring-time enforcement on UDWR properties to decrease the impact to sage-grouse on those properties. Discussions are underway regarding possible modifications to the USFS travel management plan.

18. Strategy: Maintain and increase coordination and communication between state and federal agencies and private partners.

18.01. Action: When possible, present all brush management projects at regional UPCD meetings in advance, to facilitate information sharing and coordination.

18.02. Action: Annually provide maps of crucial sage-grouse habitat to SVARM partners.

18.03. Action: Meet annually to visit habitat projects in the field.

18.04. Action: Hold annual coordination meeting prior to the start of spring field season.

18.05. Action: SVARM representative to report on UDWR-USFS coordination meetings.

18.06. Action: Coordinate with the County through public lands coordinator and committee.

18.07. Action: When possible, comment, as a group, on proposed actions that may impact sage-grouse or their habitats.

Habitat improvement projects are currently taken through the Central Region UPCD's process. Current maps are not currently distributed among partners yearly; however, GIS shape files are available for download from the UWDR website and are updated with new data as soon as possible. The SVARM facilitator will send annual reminders to the group regarding the location of these files. Field tours occur at least annually, in addition to two SVARM other meetings scheduled in spring and fall. County communications are channeled through the group chairs and facilitator.

Major Needs and Concerns

A topic of increased focus this year was renewable energy impacts, specifically spurred by a local landowner's interest in developing a small private wind turbine near high-quality sage-grouse winter habitat. Although the project was cancelled for unrelated reasons, the issue is likely to become a greater one for SVARM in the future. The group did not formally alter the threat assessment matrix in the plan, but future iterations of the adaptive plan will include such changes.

Summary of Sage-grouse Conservation Threats

In 2007, SVARM identified and ranked major threats to sage-grouse conservation in Strawberry Valley (Table 8). This threat ranking is used by SVARM and its partners to prioritize conservation actions. SVARM will review the threat ranking in 2009 to ensure immediacy.

Table 8. Relative importance/contribution of threats to sage-grouse populations in Strawberry Valley Adaptive Resources Management (SVARM) Sage-grouse Local Working Group Conservation Area. (L=low; M=medium; H=high; and VH=very high).

Threat	Aspects of Sage-grouse population in the SVARM Resource Area							
	Reduced Population Size	Population Distribution	Reduced Nesting Habitat Quality	Reduced Brood-rearing Habitat Quality	Reduced Summer/Fall Habitat Quality	Reduced Winter Habitat Quality	Reduced Connectivity of Seasonal Habitat Types	Reduced Connectivity of Populations & Sub-populations
Drought and Weather	M	M	H	H	H	L	M	L
Existing and New Fences	L	L	L	L	L	L	L	L
Home and Cabin Development	H	H	M	M	M	M	H	VH
Power lines & Other Tall Structures	M	H	H	H	H	M	H	H
Renewable & Non-renewable Energy Development	M	M	M	M	M	M	M	M
Roads	M	H	H	H	H	M	H	H
Historic Vegetation Treatments	M	H	M	M	M	H	M	L
Hunting	L	L	-	-	-	-	-	-
Fire	L	L	L	L	L	L	L	L
Livestock Grazing	L	L	L	L	L	L	L	L
OHV Recreation	M	M	H	H	H	VH	M	M
Invasive/Noxious Weeds	-	-	L	M	M	H	L	-
Parasites and Disease	M	M	-	-	-	-	-	-
Predation	VH	VH	H	H	M	M	M	M
Pinyon-Juniper Encroachment	M	M	M	L	L	M	M	M