

**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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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.

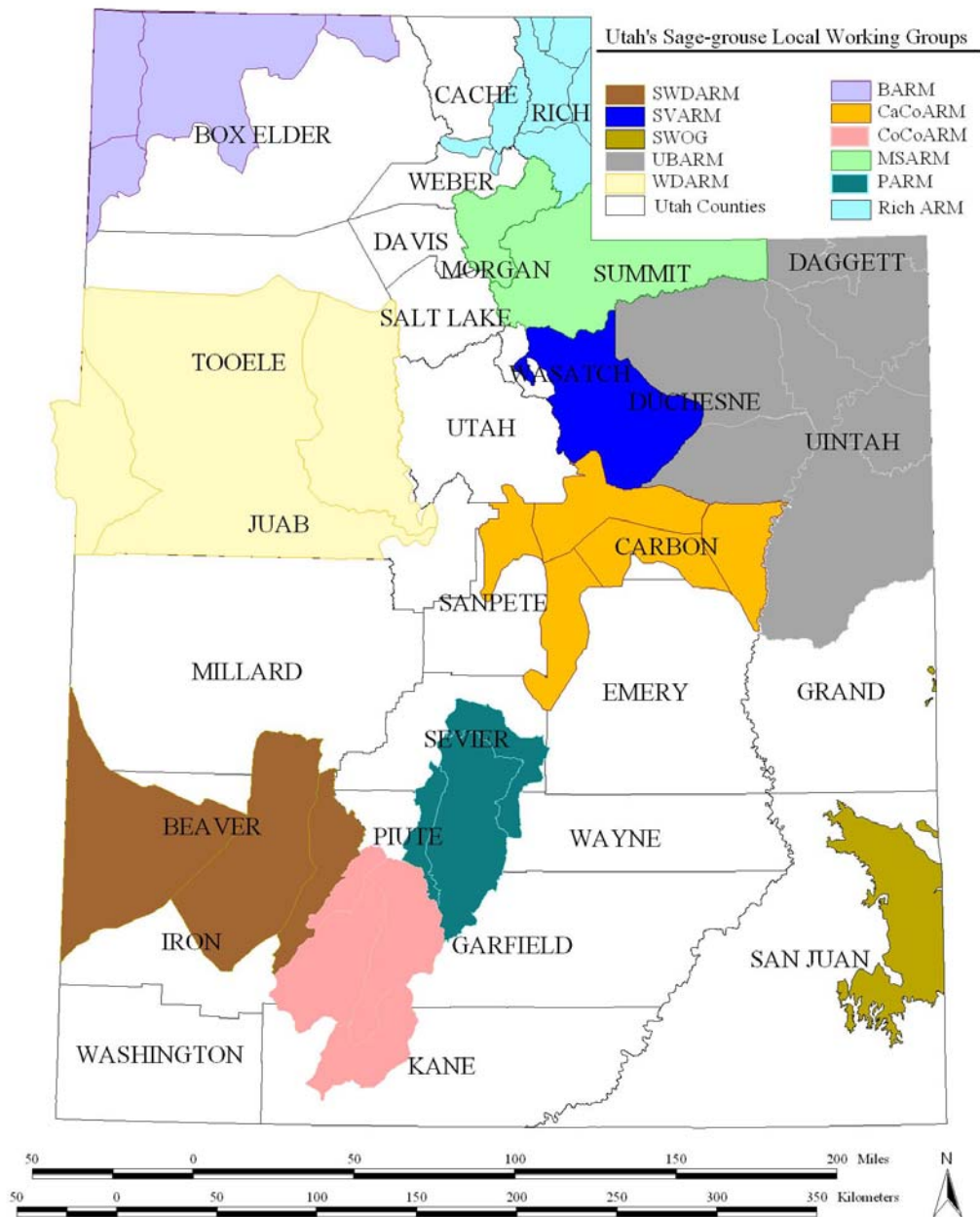


Figure 1. Utah Sage-grouse Conservation Areas, Utah Strategic Management Plan for Sage-grouse (UDWR 2009). (Note this report summarizes conservation actions completed to benefit greater sage-grouse. Thus no it does not include Gunnison sage-grouse conservation actions. This species inhabits San Juan County).

West Desert Adaptive Resource Management Local Working Group

The West Desert Basin Adaptive Resource Management (WDARM) sage-grouse local working group is facilitated by Ms. Lorien Belton. WDARM 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. No meetings were held until spring of 2009.

WDARM has an excellent relationship with the Central Region Utah Partners for Conservation and Development (UPCD). Summer field tours are planned in conjunction with UPCD and the local weed management district tours when appropriate; in 2009 the May field tour visited numerous sites in the West Desert in conjunction with the Squarrose Knapweed CMWA and the UPCD. Over 70 individuals attended the tour. WDARM has a strong presence on the Central Region UPCD team and is actively involved in project ranking.



Figure 11. The West Desert Adaptive Resource Management (WDARM) Sage-grouse Local Working Group Conservation Area consists of 5,137,991 acres located in western Utah.

Conservation Strategies and Actions: 2008 Accomplishments

- 1. Strategy:** Maintain and increase coordination and communication with agency and private partners.
 - 1.1. Action:** Participate with and coordinate with the Central Region UPCD, Tooele County Natural Resource Group, Deep Creek Watershed partnership, Goshute Tribe, Tooele and Juab County Commissioners, SCDs, UFBF, and any other groups, as necessary.
 - 1.2. Action:** Hold annual field tours to review projects, evaluate on-the-ground progress on the Plan, and share ideas.
 - 1.3. Action:** Develop educational material appropriate for a broad recreationist audience to develop sensitivity to issues identified in the Plan.

WDARM members regularly attend (Utah Partners for Conservation and Development) UPCD meetings to coordinate and discuss projects. A field tour was held in May 2009. The UPCD partnered on these tours and invited constituents from ID and NM to participate.

2. Strategy: By 2010, reduce pinyon/juniper stands from sage-grouse use areas.

2.1. Action: Remove pinyon/juniper trees from priority areas where action is warranted.

2.2. Action: Revisit and retreat pinyon/juniper removal sites, as needed.

WDARM partners treated encroaching P/J on Forest Service grazing allotments in Vernon, private lands and BLM lands in Rush Valley. Also see Strategies 4 and 5.

3. Strategy: By 2016, increase brood-rearing habitat quality in the Conservation Area.

3.1. Action: Work with the NRCS and private partners to develop projects that would increase brood-rearing habitat quality in the Resource Area.

3.2. Action: Work with agency partners to develop projects that would increase brood-rearing habitat quality in the Resource Area.

3.3. Action: Work with private and public partners to monitor effects of habitat improvement projects on vegetation and sage-grouse habitat use.

3.4. Action: Where appropriate, reduce sagebrush canopy cover with mechanical or chemical treatments and reseed with ecologically appropriate seed mixes.

Sagebrush treatments were done to improve the vegetation structure of the McIntyre Lek (brush mowing) and spike treatments to thin sagebrush and release more forbs and grasses near the lek. Seeding and sagebrush/PJ treatments were done in Davenport Canyon and Tooele Valley. WDARM partners treated sagebrush around Frank Vincent Ranch, Forest Service grazing allotments, and Diagonal Electric pastures. Benmore Pastures treatments are planned for fall 2009. UDWR and BLM collect range trend data on some sites.

4. Strategy: Thru 2016, maintain and protect winter habitat distribution and quality in the Conservation Area.

4.1. Action: Promote protection of winter habitat from fire.

4.2. Action: Promote protection of winter habitat from OHV trail development and activities.

4.3. Action: Update maps of crucial winter habitat areas and monitor winter habitat use areas for presence of sage-grouse.

4.4. Action: In the event of fire, aggressively rehabilitate sites to prevent domination of invasive/noxious weed communities.

See Strategy 14: UDWR has recommended to the BLM to key OHV users travel be

restricted in brooding and nesting areas north of the Little Sahara recreation area. See Strategy 5: Numerous bushhog projects for PJ removal have dual wildlife habitat and fuels reduction benefits.

- 5. Strategy:** Reduce the threat of conversion of sagebrush stands to invasive/noxious weed communities.

5.1. Action: Seed green-strips and/or fire breaks in crucial areas (to be identified).

WDARM partners treated sagebrush Ibapah west and east slopes, Rush Valley.

5.2. Action: Identify areas where fire suppression should be promoted to protect crucial habitat.

5.3. Action: Maintain and/or increase fuels reduction projects in crucial areas (to be identified).

5.4. Action: Work with agency and private partners to conduct vegetation treatments that restore functional plant groups to sagebrush communities.

5.5. Action: Coordinate with noxious/invasive weed Coordinated Weed Management Area (CWMA) personnel.

WDARM partners participate in the Squarrose Knapweed CWMA, which is active in the area. UPCD and BLM fire management bushhog and Dixie harrow projects occurred in West Government Creek and other areas in or near sage-grouse habitat. South Sheeprocks sage-grouse areas are targeted for future PJ treatments to reduce fire and open up sage-grouse habitat. BLM fuels reductions efforts are closely coordinated with UDWR needs to ensure that habitat projects serve both fuel reduction and wildlife needs.

- 6. Strategy:** Minimize the impact of excessive predation.

6.1. 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.

6.2. Action: Remove trees, remove/modify raptor perches, and maintain quality sagebrush habitat, where predation concerns on sage-grouse have been identified.

6.3. Action: Maintain or increase site-specific predation management to consider all predator species (especially common ravens and red fox) where necessary and appropriate.

6.4. Action: Initiate research on direct and indirect impacts of predation during each sage-grouse life history phase.

6.5. Action: Coordinate management and research with USDA-WS.

In 2008, raven control on Forest Service land involved placement of 100 poisoned eggs weekly in key areas. In 2009, more strategic placement of DRC-1339 eggs on private land lambing and calving grounds, earlier in the season, allowed for a reduction in eggs placed on USFS ground but a similar impact to the raven population. Other predators (coyotes, fox, etc.) are removed (and funded) through other programs such as deer or livestock benefit programs, but likely have a secondary benefit to grouse due to the proximity of those control efforts to sage-grouse habitat. Several WDARM partners also voiced opposition to construction of high voltage power lines structures planned near sage-grouse habitat, which would provide additional perches for avian predators.

7. Strategy: Work with public and private partners to implement **livestock management plans** that address seasonal needs of sage-grouse and livestock operations.

7.1. Action: Incorporate appropriate livestock management in vegetation/habitat treatment projects.

7.2. Action: Initiate research on the direct and indirect effects of livestock grazing on various aspects of sage-grouse life history.

7.3. Action: Work with public and private partners to evaluate livestock management in crucial sage-grouse use areas.

No active grouse-related grazing changes are underway; however, treatment areas with soil disturbance and that are normally grazed are planned to ensure that reseedings are allowed to recover before being grazed again.

8. Strategy: By 2016, increase **population and habitat monitoring efforts** in the Resource Area.

8.1. Action: Encourage public and private partners to use techniques from Connelly et al. (2003) “Monitoring of Greater Sage-grouse Habitats and Populations”

8.2. Action: In 2007, UDWR biologists will coordinate with Goshute Tribe biologists to identify sage-grouse lek sites and count birds on Tribal lands.

8.3. Action: UDWR to enlist and coordinate private volunteers and/or other agency biologists search for new leks and conduct lek counts on active leks.

8.4. Action: Through 2016, test dead sage-grouse for West Nile Virus and any other parasites/pathogens of importance.

8.5. Action: Secure funding to support additional research and monitoring on issue as identified in the Plan.

8.6. Action: Increase outreach with private landowners to facilitate greater communication

about sage-grouse distribution, ecology, and management.

UDWR does the majority of the monitoring. Monitoring of projects can be done by partners but is generally done by UDWR. New lek searches were done by helicopter in 2009. In 2008, lek searching (coordinated by USU/EXT and UDWR) was done by various partners on the ground. UDWR talks to the Tribe and have coordinated lek counting, but communication is currently limited and no sage-grouse related projects are currently underway. No dead grouse found 2008 but would be tested if likely specimens were found. WNV is present in Tooele County. Private landowner outreach is done through the conservation district, USU Extension, WDARM meetings, and field tours. Several private landowners in the area are actively involved in sage-grouse habitat projects.

9. Strategy: Encourage use of this Plan in local, county, state, and federal natural resources planning efforts.

9.1. Action: Provide the Plan to all appropriate local, county, state, and federal natural resource agencies, departments, and personal.

9.2. Action: Review local, county, state, and federal plans and projects with the potential to impact sage-grouse and/or sagebrush habitats in the Resource Area.

9.3. Action: Participate in local, county, state, and federal natural resource planning efforts, committees, and working groups.

WDARM partners represent the Plan at other meetings, particularly UPCD meetings during discussion of habitat projects.

10. Strategy: Minimize impacts of oil and gas development on sage-grouse and their habitat.

10.1. Action: Coordinate and communicate with BLM and USFS to ensure that adequate information/data is available for decision making process.

10.2. Action: Support recommendations that provide for temporal avoidance, minimization of tall structures, and avoid crucial habitat or use areas, where possible.

10.3. Action: Reduce fragmentation of sage-grouse habitat by oil and gas development activities.

10.4. Action: Minimize disturbance to sage-grouse associated with oil and gas development.

10.5. Action: Reduce cumulative impacts of oil and gas development.

10.6. Action: Share sage-grouse data with industry and encourage planning to reduce and/or mitigate for impacts.

Current natural resource development concerns are primarily in regard to pipeline and

transmission power line placement through the area. Group members review proposed projects when possible and provide comments to reduce or avoid impact on sage-grouse. Partners in 2009 submitted public comments regarding the high voltage power line construction near sage-grouse use areas from Tintic Junction to Tooele Valley.

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

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

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

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

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

11.5. Action: Work with public and private partners to maintain rural economies and viable ranching and agricultural enterprises.

No specific actions were taken by the group in 2008.

12. Strategy: By 2016, maintain or increase **distribution and quality of mesic sites** available to sage-grouse during summer months.

12.1. Action: Work with public and private partners to develop mesic sites for sage-grouse associated with existing or new water developments.

12.2. Action: Develop project planning tools (both printed material and on-the-ground examples) to illustrate successful, wildlife-friendly, water developments.

No actions taken in 2008, though some planning on private land is ongoing. See Strategy 13.

13. Strategy: Maintain or improve breeding habitat quality in the Resource Area.

13.1. Action: Where appropriate, conduct vegetation manipulation to maintain open areas on lek sites.

13.2. Action: Work with public and private partners to maintain nesting cover in crucial breeding areas.

13.3. Action: Work with public and private partners to minimize disturbance to crucial areas during lek and nesting seasons.

See Strategies 2, 3, 10, and 14. Kendall Bagley with UDWR/NRCS work on McIntyre's private land was done to open up lek area with mowing. A long-term plan for the next ten years is in development for water, fencing, upcoming treatments, etc.

14. Strategy: Minimize the negative impacts of recreation on sage-grouse populations and their habitats.

14.1. Action: Work with local, county, state, and federal planners and managers to minimize impacts of OHV trails and undeveloped roads on crucial sage-grouse habitat.

14.2. Action: Work with law enforcement agencies to enforce existing and new laws, ordinances, and regulations specific to hunting/poaching, OHV recreation, and trespassing.

14.3. Action: Work with OHV recreation groups to develop greater sensitivity and awareness to issues identified in this Plan.

14.4. Action: If appropriate, work with public and private partners to restrict lek viewing opportunities during crucial time-periods and in crucial areas.

14.5. Action: In a GIS system, evaluate where existing and proposed trails intersect crucial sage-grouse habitat.

Lek locations are not advertised to protect them from illegal hunting or other over-use impacts USFS through the NEPA process works to eliminate non-system roads and trails. Due to facilitator personnel changes, limited coordination with the county trails committee occurred in 2008. WDARM partners do work with the trails committee. UDWR works to coordinate with the Fillmore BLM to restrict recreation in sensitive sage-grouse areas where substantial long-term motor-cross use occurs in areas where new leks have been found. A field trip with these groups in early 2009 occurred to identify sensitive areas that are likely winter habitat.

Major Needs and Challenges

As in other sage-grouse groups' project areas, numerous projects with potential to improve sage-grouse habitat have been completed over the last several years. Improved monitoring, either using the newly formed Watershed Restoration Initiative wildlife monitoring teams or another mechanism, is critically needed to determine the actual impact these projects have for sage-grouse and other wildlife species.

We currently have two major construction projects that will impact Sage grouse use areas with the Mona to Herrimann power line project and the water development of snake valley for the city of Las Vegas. The powerline will construct 200 ft tall steel power line structures and the water development may dry up some perennial water sources used by sage-grouse, eliminating

continuity between lek nesting and brood rearing habitat and the higher elevation habitat needed as summer heats the valley habitats.

Summary of Sage-grouse Conservation Threats

In 2007, WDARM identified and ranked major threats to sage-grouse conservation in the conservation area. (Table 10). This threat ranking is used by WDARM to prioritize conservation actions. WDARM will review the threat ranking in 2009 to ensure immediacy.

Table 10. Relative importance/contribution of threats to sage-grouse populations in West Desert Adaptive Resources Management (WDARM) Sage-grouse Local Working Group Conservation Area.(L = low; M = medium; H = high; and VH = very high).

WDARM							
Threat	Reduced Population Size	Reduced Population Distribution	Reduced Breeding Habitat Quality	Reduced Late Summer/Fall Habitat Quality	Reduced Winter Habitat Quality	Reduced Connectivity of Seasonal Habitat Types	Reduced Connectivity of Populations & Sub-populations
Altered Water Distribution	-	VH	VH	H	L	L	H
Drought and Weather	M	H	M	M	L	L	-
Existing and New Fences	-	M	M	M	-	M	-
Home and Cabin Development	-	M	M	M	M	M	M
Power lines and Other Tall Structures	-	M	M	M	-	M	-
Renewable and Non-renewable Energy Development	-	M	M	M	-	L	L
Roads	-	M	M	M	M	M	M
Incompatible Vegetation Management	H	M	H	L	M	M	M
Poaching	H	L	-	-	-	-	-
Fire	-	-	VH	VH	VH	H	M
Incompatible Livestock Grazing	-	-	H	H	L	L	L
Recreation	VH	VH	H	M	VH	M	M
Invasive/Noxious Weeds	-	-	VH	VH	H	H	M
Parasites and Disease	M	M	-	-	-	-	-
Predation	VH	M	-	-	-	-	-
Pinyon-Juniper Encroachment	-	-	H	H	H	H	-
Conversion to Agriculture	-	-	L	L	-	-	-