

Castle Country Adaptive Resources Management (CaCoARM) Sage-grouse Local Working Group

The Castle Country Adaptive Resource Management Plan (CaCoARM) Sage-grouse Local Working Group was organized in 2004. This LWG is facilitated by Mr. Todd A. Black. CaCoARM consists of state and federal agency personnel, representatives from local government, non-profit organizations, academic institutions, private industry, and private individuals.

The information below summarizes efforts completed in 2010-2011 individual and partners to address threats identified in the Castle Country Greater Sage-grouse Local Conservation Plan, October 2006 and by the USFWS (2010). This adaptive plan is in effect until the year 2016. CaCoARM partners reported on specific actions completed or addressed in 2010-2011 and identified steps to be taken to implement additional actions into subsequent years of the plan. For action items completed in 2010/11 see the italicized text below. For the complete list of threats identified by the CaCoARM group, see page 64 of the conservation plan located on line at

http://utahcbcp.org/files/uploads/carbon/CaCoARM_final-01-07.pdf



Figure. 3. The Castle Country Adaptive Resource Management (CaCoARM) Sage-grouse Local Working Group Conservation Area consists of 1,906,443 acres located in eastern Utah.

Conservation Strategies and Actions

1. Strategy By 2011, make an assessment of pinyon-juniper (PJ) stands in key sage-grouse habitat throughout the resource area.

1.1. Action Revisit and make recommendations to treat or retreat as needed PJ removal sites (West Tavaputs, Horn Mountain, Price Airport (West) Benches, Gordon Creek, and Sanpete County).

BLM EIS approved for West Tavaputs Plateau (Bill Barrett Cooperation [BBC] Oil/Gas lease) and is working with UDWR and partners to identify sites and recommend sites on BLM and SITLA grounds. A West Tavaputs mitigation team was formed by the BLM and CaCoARM has a representative on this team. Potential projects for PJ removal were discussed for the Ford Ridge Emma Park area, these to be discussed further in 2012.

Partners: BLM, UDWR, NRCS, USFS, Private Landowners

Threats Addressed: Vegetation management, incompatible livestock grazing management, drought and weather, PJ encroachment

Aspects of Sage-grouse Ecology Addressed: winter habitat quality, summer/late brood rearing habitat quality, connectivity of seasonal habitat types

2. Strategy: By 2011, make an assessment of non-desirable vegetative species in sage-grouse habitats.

2.1. Action Review and monitor all vegetative sampling data collected by all partners and monitor as needed.

Private landowners are working with NRCS to spray and remove rabbit brush in sage-grouse habitat in the Emma Park area. Weed management groups in various districts continue to address noxious weeds through chemical spraying in sage-grouse habitat.

2.2. Action Avoid using fire in sage-grouse habitats prone to invasion by cheat grass or other invasive weed species.

No fires were used as treatments in areas prone to invasive species in 2010/11.

2.3. Action Evaluate all wildfires and prescribed burns and reseed with species that are adapted to the site and/or competitive with non-desirable plants.

There were several controlled fires in the LWG area but none of them were conducted in areas where there were any concern with non desirable species or in sage-grouse habitat.

Partners: UDWR, NRCS, USFS, BLM

Threats Addressed: Vegetation management, incompatible livestock grazing, drought, invasive/noxious weeds, lack of proper range management, incompatible fire management practices.

Aspects of Sage-grouse Ecology Addressed: Nesting/early brood rearing habitat quality, summer/late brood rearing habitat quality, connectivity of seasonal habitat types

3. Strategy: By 2011, assess mesic vegetation sites and identify potential new water projects.

3.1. Action Identify key elements of various water/erosion projects by developing partnerships to work cooperatively to maintain existing water sources (natural and/or man made) and control erosion.

Ongoing – The UDWR completed a project in Gordon Creek to reduce erosion. The group discussed potential future work in the Emma Park area to reduce the erosion. These discussions will be worked into WRI proposals for future funding.

3.2. Action Identify key elements of various water projects by developing partnerships to work cooperatively to develop new water sources.

Ongoing with Canyon Fuel Company, LLC dba as SUFCO Corp on Wildcat Cat Knoll.

3.3. Action: Work with the NRCS and private partners to develop NRCS, WHIP, and EQIP projects that would increase mesic sites and brood-rearing habitat quality in the Resource Area.

The group discussed potential for work in the Emma Park area to reduce the erosion and working with NRCS and landowners to identify needs and potential projects. Additional sites have been identified on the east end of West Tavaputs on private land.

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

SUFCO Corp and USFS are proposing developing water sources on Wildcat Knoll. Dixie harrow work was completed on private property north of Scofield in upland habitat to increase wet meadow area. The UDWR completed a project in Gordon Creek to reduce erosion and improve mesic sites, more information on this project is available on the Utah Watershed Initiatives web page see <http://wildlife.utah.gov/watersheds/>

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

No action to monitor effects of water improvement projects were taken in 2010/11.

3.6. Action: During times of drought, coordinate with public and private partners to maintain water available for sage-grouse during late summer and early fall in areas used by sage-grouse during this time.

No action taken. 2010-2011 were non-drought years.

Partners: UDWR, NRCS, USFS, UFB, SCD, USUEXT, Private landowners

Threats addressed: Vegetation management, drought and weather, water distribution

Aspects of Sage-grouse Ecology Addressed: Nesting/early brood rearing habitat quality, summer/late brood rearing habitat quality, connectivity of seasonal habitat types

4. Strategy Through 2016, identify key public/SITLA and private lands in the Resource Area (specific locations to be selected) that are recognized by the group as critical to be protected and/or managed to effectively conserve/improve sage-grouse nesting/brood rearing habitat.

4.1. Action: Encourage the use of group defined, desired conditions for state and federal lands and influence management actions in order to move toward those conditions.

This has been and will continue to be an ongoing process with partners and WRI Southeastern Region team.

4.2. Action: Support partner efforts for special designations that protect sage-grouse nesting/brood rearing habitat on public/SITLA and private lands.

This has been and will continue to be an ongoing process with partners and WRI Southeastern Region team.

4.3. Action: Use available grouse and brood telemetry data to identify key nesting/brood rearing habitat areas within the Emma Park and Tavaputs subunit.

This is underway state wide with USU research project. BBC completed GIS project mapping sage-grouse habitat on Tavaputs. Radio telemetry work to describe sage-grouse ecology and habitat use was started by UDWR in 2010 on the Tavaputs and will continue through 2012.

4.4. Action: Support partner efforts to rehabilitate historical nesting/brood rearing habitat within Sanpete subunit.

The group is fully supportive of any efforts to restore sage-grouse habitat in the area, however currently no sage-grouse are found in the area. Monitoring efforts will continue by UDWR and other partners.

4.5. Action: Pursue habitat improvement projects (to meet desired conditions) on public/SITLA and private lands in areas used by sage-grouse for nesting/brood rearing habitat.

This is accomplished through the WRI process. The LWG identifies needs and areas and discusses these possibilities. Once identified, they are presented to the WRI southeastern region team for approval and funding. Additional efforts and projects are discussed within the LWG with mitigation funds from oil/gas development.

4.6. Action: Identify research needs to address sagebrush treatments at 'lower' elevations where the majority of the nesting/brood rearing activity occurs.

This has been and will continue to be an ongoing process with partners and Open Range Consulting.

4.7. Action: Work with the NRCS and private partners to develop NRCS, WHIP, and EQIP projects that would increase nesting/brood rearing habitat quality in the Resource Area. *The group discussed potential for work in the Emma Park area to reduce the erosion and working with NRCS and landowners to identify needs and potential projects. Additional sites have been identified on the east end of Tavaputs on private property.*

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

This is accomplished through the WRI process. The LWG identifies needs and areas and discusses these possibilities. Once identified, they are presented to the WRI southeastern region for approval and funding.

4.9. Action Work with private and public partners to monitor effects of habitat improvement projects on vegetation and sage-grouse nesting/brood rearing habitat use.

This was accomplished with the UDWR range trend studies and through monitoring UPCD projects. The Southeastern range trend sites were monitored summer of 2010. For more information see http://wildlife.utah.gov/range/pdf/2010_WRI_Report.pdf

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Vegetation management, livestock grazing, drought and weather, invasive/noxious weeds, PJ encroachment

Aspects of Sage-grouse Ecology Addressed: Nesting/early brood rearing habitat quality, summer/late brood rearing habitat quality, connectivity of seasonal habitat types

5. Strategy: Through 2016, identify key public/SITLA and private lands in the Resource Area (specific locations to be selected) that are recognized by the group to be protected and managed to conserve and improve sage-grouse lek areas and habitat.

5.1. Action: Encourage the use of group defined desired conditions for state and federal lands and influence management actions in order to move toward those conditions.

This has been and will continue to be an ongoing process with partners and WRI Southeastern Region team.

5.2. Action: Support partner efforts for special designations that protect sage-grouse lek habitat on public/SITLA and private lands.

In 2010, BLM released the range wide lek/breeding density maps. See

http://www.blm.gov/pgdata/etc/medialib/blm/wo/Communications_Directorate/public_affairs.Par.46599.File.tmp/GRSG%20Rangewide%20Breeding%20Density.pdf for more details.

5.3. Action: Use available grouse and brood telemetry data to identify key lek habitat areas within the Emma Park subunit.

This is underway state wide with UDWR seasonal technicians.

5.4. Action: Support partner efforts to rehabilitate historical lek habitat within Sanpete subunit.

No action taken—the group discussed the possibility to remove this action from the plan. Currently no sage-grouse leks are known to exist in the Sanpete subunit and habitat has been altered such that year round habitat including lekking habitat is no longer available.

5.5. Action: Pursue habitat improvement projects (to meet desired conditions) on public/SITLA and private lands in areas used by sage-grouse for lek habitat.

The group discussed the need to identify leks that could use habitat improvement projects. UDWR will work through 2012 to identify needed improvements.

5.6. Action: Identify research needs to address sagebrush treatments at ‘lower’ elevations where the majority of the lek activity occurs.

This has been and will continue to be an ongoing process with partners.

5.7. Action: Work with the NRCS and private partners to develop NRCS, WHIP, and EQIP projects that would increase lek habitat quality in the Resource Area.

This has been and will continue to be an ongoing process with partners and NRCS. In 2010 Sage-grouse Initiative (SGI) monies were identified and ear marked and NRCS is holding meetings with and working with landowners to identify projects.

5.8. Action: Work with agency partners to develop projects that would increase lek habitat quality in the Resource Area.

The group discussed the need to identify leks that could use habitat improvement projects.

UDWR will work through 2012 to identify needed improvements.

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

NRCS is working with private contractors and landowners to identify projects and needed monitoring to evaluate the identified projects from the SGIP funded projects.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Vegetation management, livestock grazing, drought and weather, invasive/noxious weeds, PJ encroachment

Aspects of Sage-grouse Ecology Addressed: Nesting/early brood rearing habitat quality, summer/late brood rearing habitat quality, connectivity of seasonal habitat types

6. Strategy: Change lek vegetation conditions to allow for predator recognition and visibility.

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

Work continued on private lands in Emma Park. A landowner cleared brush in and around a historical lekking area on approximately 40 acres.

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

This is underway statewide with UDWR seasonal technicians.

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

This is underway statewide with UDWR seasonal technicians.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Predation, invasive/noxious weeds, PJ encroachment, power lines, fences, and other tall structures

Aspects of Sage-grouse Ecology Addressed: Population size, lek habitat quality, population distribution

7. Strategy: Increase cooperation and coordination between CaCoARM and public and private partners.

7.1. Action: Work with the NRCS to review and potentially endorse NRCS WHIP and EQIP projects that would benefit sage-grouse in the Resource Area.

Conducted a field tour and attended meetings with West Tavaputs mitigation meeting with all major partners to discuss West Tavaputs in summer of 2010. The field tour was held in summer of 2011 to look at the Emma Park and Scofield area projects.

7.2. Action: Continue to work with and identify key landowners within the Resource Area that have sage-grouse or sage-grouse habitat.

This has been and will continue to be an ongoing process with NRCS and other partners.

Partners: USUEXT, UDWR, NRCS

Threats addressed: Vegetation management

Aspects of Sage-grouse ecology addressed: population size, population distribution, seasonal habitat quality.

8. Strategy: Increase informational and educational opportunities with local community and CaCoARM partners.

8.1. Action: By 2008, develop informational handouts about sage-grouse ecology and CaCoARM activities.

USU CBCP newsletter. Local paper (Sun Advocate) attended and reported on annual field tour. NRCS held an open house to with landowners to discuss SGI funding and other wildlife programs.

8.2. Action: Through 2016, include information about CaCoARM activities in County Extension newsletter.

USU County Extension Agent reports on various programs and activities for landowners to participate in.

8.3. Action: Work with NRCS, UDWR and SCD to schedule spring field tour of habitat management projects on private lands.

UDWR spring annual lek watch tour. The 2010 field tour included Hunt Oil and Butch Jensen's property to discuss sage-grouse projects and habitat.

8.4. Action: Coordinate workshops for private partners to share information about habitat enhancement, funding opportunities, and other relevant topics to be identified as needed.

NRCS mailed out flyers (40+) and held an open house to with landowners to discuss SGI funding and other wildlife programs. NRCS has held other meetings with private landowners.

Partners: USUEXT, UDWR, USFS, BLM, SITLA, NRCS, Utah Farm Bureau Federation (UFBF), private partners, SCD.

Threats Addressed: Inability to maintain local control and have local input on sage-grouse conservation issues, OHV Recreation

Aspects of Sage-grouse Ecology Addressed: Population size, population distribution, connectivity of populations and subpopulations

9. Strategy: Through 2011, work with industries involved in natural resource development within important sage-grouse use areas to minimize impacts.

This has been and will continue to be an ongoing process with partners.

9.1. Action: Participate in county planning efforts for natural resource exploration and development to ensure that impacts to biodiversity are minimized.

In 2010 Blue Tip Energy converted a gas fired pump to an electric pump to reduce and mitigate noise around on Jensen's lek. CaCoARM and other partners continue participation in the West Tavaputs Mitigation committee/team.

9.2. Action: Evaluate the interest and possibly develop a demonstration garden for the common vegetative species used in restoration.

No action taken to date on this item.

9.3. Action: Cooperate with partners' planning efforts to minimize impacts on sage-grouse and sage-grouse habitat.

CaCoARM and other partners continue participation in the West Tavaputs Mitigation committee/team. BBC West Tavaputs meetings through EIS reducing the number of oil pads and impacts. Two (Gateway South and Transwest) distribution power lines were originally proposed to bi-sect the West Tavaputs area but due to potential impacts, the routes were altered.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Power lines, fences, and other tall structures, predation, renewable and non-renewable energy development, roads

Aspects of Sage-grouse Ecology Addressed: Population size, population distribution, connectivity of populations and subpopulations

10. Strategy: Through 2016, increase population and habitat monitoring efforts for sage-grouse in the Resource Area.

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

This has been and will continue to be an ongoing process with partners.

10.2. Action: Through 2009, search additional areas (TBD by the group) for new active lek sites.

New strutting areas were found in 2011, UDWR will monitor these areas for the next 3 years. Three new leks found prior to 2009, were included in the UDWR database and added as new leks.

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

UDWR uses dedicated hunters to assist with lek counts.

10.4. Action: Coordinate with UDWR, public, and private partners to conduct terrestrial lek searches in areas suspected to contain undiscovered active leks. These sites include the area around Scofield Reservoir, portions of the Tavaputs Plateau, and portions of the South Manti populations.

See 10.2 above.

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

No recorded dead birds to test.

10.6. Action Coordinate with UDWR to conduct aerial surveys in areas (Tavaputs and Scofield areas) suspected to contain undiscovered active leks.

See 10.2 above.

Partners: NRCS, UDWR, USFS, BLM, Ute Tribe, SITLA, USUEXT , private partners

Threats Addressed: Parasites/disease, vegetation management

Aspects of Sage-Grouse Ecology Addressed: Population size, population distribution, connectivity of populations and subpopulations

11. Strategy: By 2016, minimize effects of roads and utilities in areas used by sage-grouse. *This has been and will continue to be an ongoing process with partners. Team members will continue to work with industry and new roads on private lands to avoid impacts.*

11.1. Action: Re-vegetate utility corridors with sage-grouse seed mixes.

None to date in 2011.

11.2. Action: Avoid placement of new roads and utilities near lek sites (specific distances should be site specific).

Moved access roads out of sage-grouse habitat into PJ sites in the Tavaputs/sagebrush flats area.

11.3. Action: Where possible, install perch deterrents on tall structures located in areas used by sage-grouse.

None in 2011.

11.4 Action: Where practical, install low-profile tanks in areas used by sage-grouse.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners, County Governments

Threats Addressed: Power lines, fences, and other tall structures, predation, renewable and non-renewable energy development, roads

Aspects of Sage-grouse Ecology Addressed: Seasonal habitat quality, connectivity of seasonal habitat types

12. Strategy: Through 2016, avoid locating homes or cabins within important sage-grouse use areas, within limits of private property rights. When necessary development does occur, work to minimize impacts to biodiversity.

12.1. Action: Participate in county planning efforts for home and cabin development to ensure that biodiversity impacts are minimized.

This is ongoing; a member of the CaCoARM is on the county planning and zoning board as a county representative.

12.2. Action: Educate County planning departments about where important sage-grouse use areas are located.

In March of 2011 USUEXT presented a sage-grouse status and LWG update to county commissioners and other county employees. A copy of this presentation can be found on the website www.utahcbcp.org.

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

None in 2011

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

This is ongoing; a member of the CaCoARM is on the county planning and zoning board as a county representative.

Partners: NRCS, UDWR, SITLA, USUEXT, County Planning departments, private partners.

Threats Addressed: Home and cabin development, roads, power lines, fences, and other tall structures.

Aspects of Sage-Grouse Ecology Addressed: Seasonal habitat quality, connectivity of seasonal habitats, connectivity of populations and subpopulations

13. Strategy: Through 2016, avoid locating oil and gas roads or pads near lek sites. Where impacts do occur, implement interim reclamation to well sites as soon as practical.

13.1. Action: Participate in county planning efforts for oil and gas exploration and development to ensure that sage-grouse impacts are minimized.

This is ongoing; a member of the CaCoARM is on the county planning and zoning board as a county representative. Additionally, UDWR comments to BLM before leases are sold to mitigate any impacts to lek locations and nesting/brooding habitat. Additionally onsite visits are made to further reduce impacts.

13.2. Action: Influence BLM/USFS/SITLA/private enterprise planning efforts to minimize impacts to sage-grouse.

UDWR comments to BLM before leases are sold to mitigate any impacts to lek locations and nesting/brooding habitat. Additionally onsite visits are made to further reduce impacts.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Renewable and non-renewable energy development, roads, power lines, fences, and other tall structures

Aspects of Sage-grouse Ecology Addressed: Seasonal habitat quality, connectivity of seasonal habitat types, connectivity of populations and subpopulations

14. Strategy: Provide for a use level and management 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.

14.1. Action: Coordinate grazing management with livestock operators to reduce negative resource and timing conflicts on leks and prime nesting habitat when possible.

This has been and will continue to be an ongoing process with partners through outreach and education and presentations and LWG meetings and field tours.

14.2. Action: Apply grazing management practices to achieve desired conditions including maintenance of residual herbaceous vegetation appropriate for the site.

Partners are working with landowners who have sage-grouse projects to develop grazing management plans and in areas where re-seeding is involved the areas will receive two years (growing seasons) of rest.

14.3. 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.

This has been and will continue to be an ongoing process with partners.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, UFBF, private partners

Threats Addressed: Livestock grazing

Aspects of Sage-grouse Ecology Addressed: Seasonal habitat quality

15. Strategy: Maintain and, where possible, improve the perennial forb component in the understory.

15.1. Action: Reclaim and/or reseed areas disturbed by treatments using seed mixtures high in native bunch grasses and desirable forbs.

Ongoing, UDWR completed a project in Gordon Creek to reduce erosion; the area was harrowed and seeded.

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

Ongoing, UDWR completed a project in Gordon Creek to reduce erosion; the area was harrowed and seeded. Ongoing process with partners through UPCD/WRI see <http://wildlife.utah.gov/watersheds/> for more details.

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

Ongoing, UDWR completed a project in Gordon Creek to reduce erosion; the area was harrowed and seeded. Ongoing process with partners through UPCD/WRI.

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

Ongoing, UDWR completed a project in Gordon Creek to reduce erosion; the area was harrowed and seeded. Ongoing process with partners through UPCD/WRI.

Partners: NRCS, UDWR, USFS, BLM, SITLA, USUEXT, private partners

Threats Addressed: Vegetation management, fire, renewable and non-renewable energy development, roads, PJ encroachment, invasive/noxious weeds

Aspects of Sage-grouse Ecology Addressed: Seasonal habitat quality

16. Strategy: Minimize impacts of agricultural conversion on sage-grouse.

Currently there are no areas that are currently occupied by sage-grouse that have a threat of conversion of agriculture. However, this is likely the major cause for decline and the loss of sage-grouse numbers in the Sanpete subunit. There are no recent reports of sage-grouse in this area.

16.1. Action: Maintain the Grassland Reserve Program (GRP) and improve its benefit to wildlife by altering seed mixes.

None in 2011.

16.2. Action: Expand GRP opportunities in sage-grouse habitats.

None in 2011.

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

None in 2011.

16.4. Action: Work with NRCS and others to maintain the GRP program and enroll important sage-grouse habitats that are currently in grain production.

None in 2011.

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

None in 2011.

16.6. Action: Rehabilitate old, low diversity, sod-bound GRP fields with sage-grouse friendly seed mixes including bunchgrasses, forbs, and big sagebrush.

None in 2011.

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

NRCS mailed out flyers (40+) and held an open house to with landowners to discuss SGI funding and other wildlife programs. NRCS has held other meetings with private landowners.

Partners: NRCS, UDWR, SITLA, SCD, USUEXT, private partners

Threats Addressed: Vegetation management

Aspects of Sage-grouse Ecology Addressed: Lek habitat quality, nesting/early broodrearing habitat quality, summer/late brood-rearing habitat quality, connectivity of seasonal habitat types

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

Currently the area north and northwest of Scofield Reservoir is being and has potential be developed/more developed. Partners are encouraging landowners to use conservation measures and improve existing habitat that is not scheduled or zoned to be developed.

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

This is ongoing; a member of the CaCoARM is on the county planning and zoning board as a county representative.

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

None in 2011.

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

None in 2011.

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

None in 2011.

Partners: NRCS, UDWR, SITLA, USUEXT, County Planning departments, private partners

Threats Addressed: Home/cabin development, roads, invasive/noxious weeds, livestock grazing, power lines, fences and other tall structures

Aspects of Sage-grouse Ecology Addressed: Seasonal habitat quality, connectivity of seasonal habitat types

18. Strategy: Minimize the impact of excessive predation, especially in areas used by sage-grouse for nesting and brood-rearing.

18.1. Action: Plan and conduct research to determine the population-level effects of predation on sage-grouse.

No specific research projects have been or are planned in the sage-grouse LWG area.

18.2. Action: Where sage-grouse population-level effects from predation are clearly identified, plan and implement site-specific predation management as necessary.

Incorporate a monitoring plan to determine success.

18.3. Action: Support efforts of USDA-WS to remove coyotes, red foxes, and ravens in areas used by sage-grouse for nesting and brood-rearing during spring and early summer. *UDWR coordinates with WS to address specific areas in and around brooding and nesting areas.*

18.4. 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.

No action taken in 2011.

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

None—no specific areas identified.

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

UDWR coordinates with WS to address specific areas in and around brooding and nesting areas.

18.7. Action: Work with partners to identify additional sources of funding to continue current predator removal efforts.

Ongoing with partners and WS.

Partners: UDWR, USFS, BLM, SITLA, USDA-WS, private partners

Threats Addressed: Predation, PJ encroachment, power lines, fences and other tall structures.

Aspects of Sage-grouse Ecology Addressed: Population size, seasonal habitat quality

Major Needs and Concerns

The LWG has expressed concerns over oil and gas development in the resource area, particularly near the Emma Park area and what effects it may have on sage-grouse that occupy private lands. Additionally, CaCoARM is concerned about the isolated populations of grouse on the Horn Mountain and Wild Cat Knoll. USU has collected DNA samples to determine if these two populations are linked to other populations in the conservation area. Nest predation continues to be a concern especially in dry years. The LWG has encouraged WS to be more involved in the CaCoARM group and identify areas of concern.

Based on feedback received at the field tour this year, there is a need to provide more outreach and education efforts with the private cabin owners in and around the Scofield Reservoir area. USUEXT will work with UDWR to initiate this outreach process in 2012.