

Box Elder County Adaptive Resources Management (BARM) Sage-Grouse Local Working Group

The Box Elder Adaptive Resource Management Plan (BARM) Sage-grouse Local Working Group was organized in 2001. The group is currently facilitated by Mr. Todd A. Black. The BARM is comprised of state and federal agency personnel, representatives from local government, non-profit organizations, academic institutions, private industry, and private individuals.

The conservation actions and strategies of the BARM LWG were reviewed and updated in 2010-2011. Actions continue to be implemented by partners. Specific highlights included a field tour conducted June 2010 in conjunction with the Utah Chapter of the Society for Range Management and the West Box Elder Soil Conservation District.

In March of 2011, the Soil Conservation District approached the BARM group and asked the group to merge with the newly formed Coordinated Resource Management (CRM) effort. The CRM will oversee resource management plans, implementation and coordination with state, private, and federal partners. The West Box Elder Soil Conservation District in conjunction with Box Elder County are working on a comprehensive conservation plan for West Box Elder County and will incorporate the BARM sage-grouse plan. Names have been submitted to the West Box Elder CRM for approval of a sage-grouse sub-committee. Once this sub-committee is approved, the first task will be to evaluate and update the sage-grouse plan.

The new CRM group will meet bi-monthly to include an annual summer field tour.

Conservation Actions and Strategies

1. Strategy: By 2016, identify PJ stands within the resource area that encroaching in key sage-grouse habitat.

1.1. Action: Revisit and make recommendations to retreat as needed PJ removal sites.

BARM members continue to work on identifying areas where PJ is encroaching and working with the Watershed Restoration Initiative (WRI) to secure funding and to reduce this threat.

2. Strategy: By 2011 make an assessment of cheat grass and other non-desirable species in sage-grouse habitats.



Figure 2. The Box Elder Adaptive Resource Management (BARM) Sage-grouse Local Working Group Conservation Area consists of 1,702,251 acres located in northwestern Utah.

2.1. Action: Review and monitor all vegetative sampling by all partners (range trend crew completed surveys in 2006 and again in 2011).

BARM data suggested that cheatgrass is increasing in abundance and at higher elevations. This could be in response to observed increases in average temperatures.

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

No fires were used for habitat restoration in areas where cheatgrass was present in 2009-2010.

2.3. Action: Evaluate all wildfires and prescribed burns and reseed with appropriate species to prevent establishment of cheatgrass and other invasive weed species.

Lynn seeding area was evaluated and BLM will take action in 2010 to complete the reseeding.

2.4. Action: Work with and identify other partners (County, UDOT, and private industry) to establish fire breaks in key areas to protect important sage-grouse habitat.

BARM partners met with BLM to discuss areas to establish fire breaks to protect key wintering and lekking areas for sage-grouse in and around Badger Flats, Dairy Valley, and Curlew Junction.

2.5. Action: Treat areas where undesirable vegetation has become, or is at risk of becoming, a factor in sage-grouse habitat loss or fragmentation.

BLM completed a fire break for the Badger Flat area to protect sage-grouse lekking habitat. Project is being monitored by USU.

2.6. Action: Work with existing weed management programs to control noxious weeds in the Resource Area.

BARM members continue to work with County weed boards in identifying any areas of concern.

2.7. Action: Identify large areas of introduced plant species that are not meeting sage-grouse habitat needs and reseed with native species where appropriate.

No action taken in 2010/2011.

2.8. Action: Identify areas where pinyon or juniper trees are encroaching on good quality sagebrush habitat and treat as needed.

See strategy 1 action 1

2.8. Action: Manage fire, transportation, and vegetation treatments to minimize undesirable vegetation where possible.

No action taken in 2009-2010.

3. Strategy: By 2011, complete an assessment on the condition of available water sources and identify potential new water improvement/development projects.

3.1. Action: Manage vegetation and artificial structures to increase water-holding capabilities of likely habitat.

No action taken in 2010/2011.

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

BARM members were assigned areas within each of their respective jurisdictions to identify potential areas and will report in late 2011.

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

No action taken in 2010/2011.

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

BARM members were assigned areas within each of their respective jurisdictions to identify potential areas and will report in late 2010. This report will be included in our 2011 summary.

3.3. Action: Identify key elements of various water projects by developing partners to work cooperatively to maintain existing water sources.

No action taken in 2010/2011.

4. Strategy: By 2011, identify key public, private, and Utah School and Trustlands Administration (SITLA) lands in the Conservation Area (specific locations to be selected) that are protected and/or managed so as to conserve/improve sage-grouse nesting habitat.

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

BARM partners discuss these areas as projects they are developed.

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

The BARM group identified the Rosebud/Muddy/Upper Dove Cr./Upper Grouse Cr./Cotton Thomas/Upper Meadow Cr. lek complexes as areas that need special protection and consideration. Almost 80% of all west Box Elder lekking birds and the corresponding nesting occur in an area from Immigration road north to middle/upper Dove Creek, upper Lynn Valley west to Kimbell Cr., north through Cotton Thomas Basin and southwest into the upper Meadow Cr./Joe Dahr Cr. Basin. This relatively small area is the core of the BARM's sage-grouse population with corresponding metapopulation extensions into Idaho and NE Nevada.

4.3. Action: Use available grouse and brood telemetry data to identify key nesting/brooding habitat areas within the Grouse Creek sub unit.

Ongoing research work; USU graduate students are continuing research to identify important areas. This work will be completed by 2012.

4.4. Action: Pursue habitat improvement projects (to meet Desired Conditions) on private and SITLA lands in areas used by sage-grouse for nesting habitat.

All habitat improvement projects are approved and presented to WRI and have BARM support.

4.5. Action: Identify research needs to address sagebrush treatments at 'lower' elevations where the majority of these nesting activities occur.

BARM has identified additional research needs for wintering areas and creating fire breaks and improving wintering habitat in the Badger Flat and Dairy Valley area of the Grouse Creek sub unit and in the Park Valley area.

4.6. Action: Use mechanical or chemical treatments to reclaim and/or reseed areas (when necessary) using suitable seed mixtures.

No action taken in 2009. In the fall of 2010, BLM completed green stripping to mitigate wildfire potential on Badger flats. USU will be evaluating the vegetation and sage-grouse responses in 2011-2013.

4.7. Action: Where economically feasible, restore understory vegetation in areas lacking desirable quality and quantity of herbaceous vegetation.

On going with WRI projects, all WRI funded projects are reviewed by BARM members and reseeding efforts are a wildlife/sage-grouse approved mix.

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

On going with WRI projects, all WRI funded projects are reviewed by BARM members and reseeding efforts are a wildlife/sage-grouse approved mix.

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

On going with WRI projects, all WRI funded projects are reviewed by BARM members and reseeding efforts are a wildlife/sage-grouse approved mix.

5. Strategy: By 2011, identify key public, private, and SITLA lands in the Conservation Area (specific locations to be selected) are protected and/or managed so as to conserve/improve sage-grouse lekking areas/habitat.

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

No action taken in 2010/2011.

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

On-going

5.3. Action: Support partner efforts for special designations that protect sage-grouse lekking habitat on public, private, and SITLA lands.

No action taken in 2010/2011.

5.4. Action: Pursue habitat improvement projects (to meet Desired Conditions) on public, private, and SITLA lands in areas used by sage-grouse for lekking.

No action taken in 2010/2011.

6. Strategy: Minimize the impact of excessive predation.

6.1. Action: Begin site-specific predation management considering all predator species (especially common raven) where necessary and appropriate.

No action reported by partners at the time of this report for 2010/2011.

6.2. Action: Support efforts of USDA-WS to remove red foxes and ravens in areas used by sage-grouse for nesting and brood-rearing during spring and early summer.

See 6.1

7. Strategy: Through 2016, avoid natural resource development within important sage-grouse use areas. If development does occur, work with industry to minimize impacts.

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

BARM members commented on various aspects of the project, see Ruby pipeline EA

7.2. Action: Cooperate with partners (BLM/USFS/SITLA/NRCS) planning efforts to minimize impacts on sage-grouse and sage-grouse habitat.

BARM members commented on various aspects of the project, see Ruby pipeline EA

8. Strategy: By 2016, identify measures to protect key wintering areas available to sage-grouse.

8.1. Action: Use available grouse telemetry data in the Grouse Creek sub unit and local knowledge in other sub units to map these areas.

USU researchers started working on this in 2010 to map these areas and expect to be completed by late 2012.

8.2. Action: Work with public and private partners to identify areas through winter locations (Dry Basin, Montgomery Ranch, South Kilgore, Dakes Pass).

Ongoing USU research has identified additional wintering areas. These areas have been mapped. BARM partners met with BLM to discuss areas to establish fire breaks to protect key wintering and lekking areas for sage-grouse in and around Badger Flats, Dairy Valley, and Curlew Junction.

8.3. Action: Use UDWR fixed wing winter surveys for big game to identify areas.
No action taken in 2010 with the UDWR.

9. Strategy: By 2009, maintain or increase populations of sage-grouse in the Conservation Area.

9.1. Action: Support continued sport hunting within current UDWR models.

BARM group supports current UDWR harvest recommendations and models.

9.2. Action: BARM group will consider support of any translocation of sage-grouse hens from the Conservation Area.

No birds were translocated in 2010/2011.

9.3. Action: Work with UDWR to explore other methods (Selected lek or lek complexes counts and statistical inferences).

Post doc work by USU to explore and evaluate these methods. Results expected by 2012.

10. Strategy: Increase cooperation and coordination between BARM and other public and private partners.

10.1. Action: Continue with quarterly BARM meetings. Review and assess our local plan and MOU.

BARM partners meet 3-4 times a year as a group with three meetings and a field tour in 2010/2011. See BARM meeting schedule on the web at

<http://utahcbcp.org/html/groups/boxelder>

11. Strategy: Through the duration of the plan, continue looking at and evaluating current predator management strategies especially in areas used by sage-grouse for nesting and brood-rearing.

11.1. 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.

USU published results of these monitoring efforts in;

http://utahcbcp.org/files/uploads/boxelder/Thacker_Dissertation%20.pdf and

http://utahcbcp.org/files/uploads/boxelder/2008BARM_Final.pdf

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

BLM ongoing lop and scatter and brush hog work east of Badger flat and up Pole Creek and Dry Canyon area.

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

See strategy and action 6 above.

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

No action taken to date by any working groups.

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

See strategy and action 6 above.

11.6. Action: Support efforts of USDA-WS to remove mammalian predators and corvids in areas used by sage-grouse for nesting and brood-rearing during spring and early summer.

See strategy and action 6 above.

11.7. Action: Identify additional sources of funding to continue current predator removal efforts.

Ongoing

Major Needs and Concerns

In early 2011, the sage-grouse local working group known as BARM was dissolved into a Coordinated Resource Management group (CRM) at the decision of BARM members and the West Box Elder Watershed team. This larger group will form a sage-grouse subcommittee and this subcommittee will function as a smaller group of the CRM. Nominations for the sage-grouse plan sub-committee membership were submitted and will be ratified by CRM board before the end of the year. The sub-committee will re-evaluate the BARM sage-grouse plan and update Actions and Strategies prior to 2012.