# United States Department of the Interior
# Bureau of Land Management

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**Determination of NEPA Adequacy**

**DOI-BLM-W010-2016-0011-DNA**

**August 2016**

# Crawford Mountains Greater Sage-Grouse Habitat Improvement Project

**Location**: Rich County, Utah; Township 10 and 11 South, Range 7 and 8 West, various sections, Salt Lake Meridian.

**Applicant/Address**: Not Applicable.

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BLM

Salt Lake Field Office

# Worksheet

# Crawford Mountains Greater Sage-Grouse Habitat Improvement Project

# Determination of NEPA Adequacy

U.S. Department of the Interior

Utah Bureau of Land Management

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The signed CONCLUSION at the end of this worksheet is part of an interim step in the Bureau of Land Management's internal analysis process and does not constitute an appealable decision; however, it constitutes an administrative record to be provided as evidence in protest, appeals and legal procedures.

OFFICE: Salt Lake Field Office

TRACKING NUMBER: NEPA #DOI-BLM-W010-2016-0011-DNA

CASEFILE/PROJECT NUMBER: #RA63

PROPOSED ACTION TITLE/TYPE: Crawford Mountains Greater Sage-Grouse Habitat Improvement Project

LOCATION/LEGAL DESCRIPTION: BLM-managed public lands in the Crawford Mountains area, Rich County, Utah (see Attachment A, Project Location Map). Townships 10 and 11, Range 7 and 8 East, various sections, Salt Lake Meridian.

APPLICANT (if any): Not Applicable

## A. Description of the Proposed Action and Any Applicable Mitigation Measures

The Bureau of Land Management (BLM), Salt Lake Field Office proposes vegetation treatments that would reduce key threats to greater sage-grouse (*Centrocercus urophasianus*) habitat for the Rich-Morgan-Summit population. Key threats to greater sage-grouse include conifer expansion, invasive species, and wildland fire. Since 2011, the BLM has implemented approximately 1,570 acres of vegetation treatments in the Crawford Mountain area to reduce wildland fire threat, remove encroaching conifers, and restore ecosystem resiliency (see Crawford Mountains WUI Hazardous Fuels Treatment Project (UT-W010-2010-0023-EA)). Previously implemented treatments include bullhog (1,016 acres), lop and scatter (254 acres), and fuel break mowing (298 acres). Although these treatments have been successful, the benefit to greater sage-grouse has been indirect.

Wildfire, invasive species, and loss of sagebrush habitat due to juniper encroachment are identified as primary threats to greater sage-grouse populations in the State of Utah Conservation Plan for Greater Sage Grouse (2013), the U.S. Fish and Wildlife Service's (USFWS), Conservation Objectives Team Report (2013), the Record of Decision and Approved Resource Management Plan Amendment for the Greater Basin Region (2015), and the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (2015). Thus, proactively managing juniper to reduce fire threat and prevent loss of sagebrush is recommended as a conservation measure to meet sage-grouse habitat objectives.

The project area occurs within the Rich-Morgan-Summit Sage-Grouse Management Area as identified by the Utah Division of Wildlife Resources and classified by the BLM as a Priority Habitat Management Area. The eastern portion of the project area is also within a Sagebrush Focal Area, which is a subset of Priority Habitat Management Areas, as identified by the BLM in the Utah Approved Resource Management Plan Amendment. Sagebrush Focal Areas have been identified by the USFWS as having the highest densities of greater sage-grouse and other criteria important for the persistence of the species. This project would contribute to the long-term sustainability of the Rich-Morgan-Summit greater sage-grouse population.

The new proposed action is designed to build upon these previous treatments and provide a direct benefit to the Rich-Morgan-Summit greater sage-grouse population in the Crawford Mountains area by creating and expanding useable habitat that could be immediately occupied following treatment. To accomplish this, juniper trees left from previous bullhog treatments would be removed and additional new treatments, including mechanical shredding, lop and scatter, pile burning, and creation of additional fuel breaks may occur. Treated lands may also be seeded and herbicide control of invasive species may occur. A detailed description of proposed activities is provided below.

The entire treatment area (footprint) is approximately 4,430 acres, with implementation scheduled to begin in the fall of 2016. Some maintenance activities would be necessary over time to ensure that project objectives are sustained for the long-term. The scheduled implementation would be subject to change due to weather, funding, and/or equipment related issues. The proposed action would be implemented with the protective measures/considerations identified below.

The goals of this project are to: reduce fuel loading; improve, protect and expand habitat for greater sage-grouse; limit the expansion or dominance of juniper; and maintain or improve soil site stability, hydrologic function, biological integrity and ecosystem resiliency.

The objectives of the project include: 1) removing up to 100 percent of juniper encroaching into selected sagebrush habitats, and 2) increasing perennial native plant cover and diversity.

### Proposed Treatment Methods

Re-Entry (Previously Treated Areas)

Approximately 425 acres of juniper encroached sagebrush were treated previously (mechanically shredded) and have been identified for potential re-entry (see Attachment A, Project Location Map). Original thinning specifications removed up to 90 percent of juniper trees based on size class, which left a substantial amount of juniper trees within sagebrush habitat. The new proposed action would remove up to 100 percent of juniper trees within previously treated areas. However, some small pockets of trees, ranging in size between 1 and 15 acres, and trees within 100 meters of wetlands or riparian zones would be left intact to meet cover requirements for wildlife species and to protect wetland and riparian habitat. Old-growth trees and pinyon pine would be avoided.

New Treatments

In areas not previously treated, up to 100 percent of juniper trees that have encroached into sagebrush habitat may be removed using a combination of mechanical shredding (approximately 780 acres) and lop and scatter by hand crews (approximately 1,200 acres). In treated areas, some

small pockets of trees, ranging in size between 1 and 15 acres, and trees within 100 meters of wetlands or riparian zones would be left intact to meet cover requirements for wildlife species and to protect wetland and riparian habitat. Old-growth trees and pinyon pine would be avoided.

In areas where use of heavy equipment is not practical (e.g., slopes greater than 25 percent), trees may be cut with chainsaws, piled, and potentially burned. In mechanically shredded areas where mulch is greater than 4 inches in depth, selective burning of mulch piles may occur. Shredded debris piles greater than 4 inches in depth would not be burned for a minimum of 3 years post treatment to allow for understory species to respond to the tree removal treatment. Burning of hand piles and/or mulch piles would only occur under conditions that would minimize potential damage to sagebrush.

Up to approximately 440 acres of fuels breaks may be created along designated routes and/or select drainages to reduce the risk of vehicle and human caused wildfires, reduce the spread of invasive species, and aid in the controlling of wildfires in Priority Habitat Management Areas for greater sage-grouse. Within these proposed fuels breaks, all juniper and sagebrush would be cleared up to 150 feet on either side of the road or drainage. Where sagebrush is the dominant species, fuels breaks would be created by mowing. Fuel break mowing would be avoided on any straight line east-west route and would be directed to following natural features such as dry washes or other topographic features to screen the visual impact to the greatest extent possible. While creating additional fuel breaks may remove some sagebrush, any reduction in sagebrush would be outweighed by the benefits of reduced wildfire risk and invasive species spread. Maintenance would also be performed on previously treated fuel breaks (approximately 295 acres), as necessary.

Seeding

Treated lands in need of seed would be planted with a diverse native seed mixture (see Attachment B) during the fall using rangeland drills or broadcast aerially. Where seed is applied aerially, mechanical seedbed preparation or cover treatment may be required. This may include the use of a chain-harrow or other similar implement.

Invasive Species and/or Noxious Weeds

If cheatgrass becomes established in areas where fuel reduction treatments would occur, herbicide may be used to control it. Plateau® herbicide (or the generic equivalent Panoramic; active ingredient imazapic) may be applied either aerially or by ground at a rate of 4 to 8 ounces per acre, plus up to 1 quart of surfactant per acre. Plateau® may also be used to treat patches of degraded rangeland invaded by cheatgrass within the analysis area. Additionally, any other invasive species and/or noxious weeds that become established in treatment areas would be treated with an appropriate herbicide, as necessary.

Herbicide application would be carefully recorded and documented. Herbicide use information would be reported to the BLM Utah State Office and the BLM Washington Office. A pesticide use proposal would be prepared and approved by the BLM Utah State Office prior to application of herbicide.

**Protective Measures/Considerations**

Access

- Any new routes created during project work, by equipment and support vehicles, would be rehabilitated to prevent further use by off-highway vehicle users. Some areas may require the installation of signs stating 'closed to motorized vehicles' to prevent off-highway vehicle use until the evidence of the tracked or rubber tired pathways are obscured by vegetation cover.

Air Quality

- If project work is causing localized dust that is impeding vehicular traffic or visibility in the area, a water tender would be used to spray the road surface with water to improve visibility.

Cultural and Paleontological Resources

- Project layout and design would avoid cultural resources that are eligible for inclusion in the National Register of Historic Places, or limit treatment to non-mechanized removal of trees with hand tools, with the added provision that no felled trees are dragged within the site perimeter. Further treatments, if required, would be implemented on a case by case basis in consultation with a cultural resource staff member present. If undiscovered or previously unrecorded sites area found all activity would cease immediately and the authorized officer would be contacted.
- If paleontological resources are found, all project activity would cease and the authorized officer would be contacted immediately.

Fire and Fuels

- Projects would be designed in a manner that best meets the goals and objectives of the Fire Management Plan.
- Follow all applicable Fuels Management Required Design Features from the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment.
- BLM wildlife biologist will provide training to fuels treatment personnel, including contractors, on the general biology of greater sage-grouse, habitat requirements, and how to identify local areas utilized by greater sage-grouse.
- Power-wash all vehicles and equipment involved in fuels management activities, prior to entering the area, to minimize the introduction of undesirable and/or invasive plant species.

Greater Sage-Grouse

- The following seasonal restrictions and buffers apply for greater sage-grouse:
    - Avoid activities in winter habitat between November 15 and March 15.
    - Avoid activities in breeding (leks), nesting, and early brood-rearing habitat between February 15 and June 15.
    - Avoid activities in brood-rearing habitat between April 15 and August 15.
- Apply 0.5 mile buffer (no treatment) around sage grouse strutting grounds (leks) between March 15 and June 15.

Livestock Grazing

- Rangelands that have been burned, reseeded or otherwise treated to alter vegetation composition would be closed to livestock grazing as follows: 1) burned rangelands, whether by wildfire or prescribed burning, would be ungrazed for a minimum of one complete growing season following the burn; and 2) rangelands that have been reseeded or otherwise chemically or mechanically treated would be ungrazed for a minimum of two complete growing seasons. Rangelands that meet the criteria discussed above would be protected from grazing by avoidance, fencing, or a combination of the two. Any fencing installed will comply with the wildlife guidelines set forth in the Fencing BLM Manual Handbook H-1741-1 (December 1989) and be fitted with bird deflectors.
- A grazing program decision would be issued or a letter of agreement would be entered into with the permittee to implement grazing deferral.

Migratory Birds (Raptors and neo-tropical migrants)

- If project activities occur within the migratory bird breeding seasons (Raptors: January 1 to August 31; Neotropical migrant birds: March 1 to July 15), migratory bird surveys would be conducted within 0.5 mile radius of the project area no more than 7 to 10 days prior to project initiation.
  a) If no migratory birds are found nesting in the project area, then project activities may proceed as planned.
  b) If migratory birds are present and nesting in the project area, the following measures must be incorporated during the project construction phase:
     i. Neotropical bird nests would be flagged and avoided by 100 feet from March 1 to July 15 or until birds have fledged.
     ii. If occupied, raptor nests would be avoided by the spatial and temporal buffers, 0.5 miles, specified in the U.S. Fish and Wildlife Utah Field Office's Guidelines for Raptor Protection from Human and Land Use Disturbances (Romin and Muck 2002).
  c) If nests cannot be avoided or if take as defined by the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act is likely to occur, then the BLM must contact the U.S. Fish and Wildlife Service's Utah Field Office (801-975-3330) or the Migratory Bird Permit Office (303-236-8171) for guidance on appropriate avoidance, minimization, and mitigation measures. Any exceptions to this requirement must have prior written approval from the authorized officer.

Noxious/Invasive Weeds

- Treated areas would be monitored for 5 years to detect noxious or invasive weeds that may be promoted due to the proposed activity.
- All equipment used on the project would be cleaned and free of any dirt and debris that could harbor weed seeds and be introduced into the project area. Likewise, all equipment would be checked and cleaned once again prior to leaving the project area.
- Project staging areas would be weed free and travel through weed infested areas would be avoided or minimized.
- To prevent conditions favoring weed establishment, reestablish vegetation on bare ground caused by project disturbance as soon as possible using either natural recovery or reseeding.

- Apply the least amount of herbicide needed to achieve the desired result of controlling the spread of noxious weeds and/or invasive plants;
- Follow herbicide product label for use and storage;
- Licensed applicators would apply the herbicide;
- Apply herbicide in favorable weather conditions to minimize drift;
- Notify permittees of the herbicide treatment project to improve coordination and avoid potential conflicts and safety concerns during implementation of the treatment;
- Post signs noting exclusion areas and the duration of exclusion, if necessary;
- Use protective equipment as directed by the product label.
- Application of the herbicide would follow the requirements printed on the herbicide label to eliminate risk to human health and the ecological site. Material safety data sheet (MSDS) is located in the fuels project file or go to: MSDS Label Database.

Property Boundary Evaluation

- Project work must not disturb or destroy cadastral survey markers.
- Cadastral survey must be coordinated with during project design and layout.

Pygmy Rabbit and White-tailed Prairie Dog

- The following seasonal and spatial restrictions apply for pygmy rabbit:
    - No off road travel, surface use or otherwise disruptive activity would be allowed within 300 feet (100 meters) of occupied pygmy rabbit habitat.
    - Pygmy rabbit burrows have been found in the area. Exception has been granted for this project. Impacts to pygmy rabbits will be mitigated with the following measures:
        - No mowing of sagebrush for firebreak would occur during the pygmy rabbit breeding season in Rich County from February 1 to July 15.
        - Minimize project foot print in sagebrush.
        - No off road travel in sagebrush except on the project foot print would be allowed.
- White-tailed prairie dog colonies have been found in the area. Impacts to white-tailed prairie dogs will be mitigated with the following measures. The following seasonal and spatial restrictions apply for white-tailed prairie dog:
    - No mowing of sagebrush for firebreak would occur during the white-tailed prairie dog breeding season from April 1 to June 15.
    - Minimize project foot print in sagebrush.
    - No off road travel in sagebrush except on the project foot print would be allowed.

Wetlands/Riparian Zones

- Utah riparian policy states no new surface disturbing activities within 100 meters of riparian unless there are no alternatives, the disturbance can be mitigated, or will benefit and enhance riparian areas. If riparian vegetation is present within treatment areas, the Utah riparian policy will be followed to ensure the resource is not negatively impacted.

Other Wildlife

- Buffers would be placed around wildlife corridors and drainages.
- Include untreated areas for thermal cover usage by wildlife.

- Limit activities in mule deer winter crucial habitat between November 15 and April 30. No off road travel, surface use or otherwise disruptive activity would be allowed from November 15 through May 30 within identified crucial winter mule deer and habitat. This notice may be waived, accepted, or modified by the BLM authorized officer if either the resource values change or the grantee/operator demonstrates that adverse impacts can be mitigated. If project activities are authorized during the mule deer winter crucial period, implementation would cease when snow depth is > 6" and/or temperatures are < 10° F.

## B. Land Use Plan (LUP) Conformance

The project was determined to be in conformance with the Randolph Management Framework Plan (1980), as amended by the 1998 Salt Lake District Office Fire Management Plan Alternative 2-Proposed Action/Integrated Fire/Resource Management Plan (pages 7 and 8). The Salt Lake District Office Fire Management Plan (1998) specifically mentions the action, and is consistent with the objectives identified above to emphasize greater use of vegetation management to meet resource management objectives. The proposed action also meets Objective WL-1 in the Randolph Management Framework Plan: "Improve terrestrial and aquatic/riparian habitat for all game and nongame species of wildlife and fisheries throughout the WHA."

Additionally, the proposed action was determined to be in conformance with the Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah (September 2015) and the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (September 2015). Attachment D provides an analysis of the proposal and its conformance with applicable special status species objectives and management actions; vegetation management actions, and fuels management actions listed in sections 2.2.1, 2.2.2, and 2.2.3 of the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment. Overall, the proposed action would create and expand useable habitat for greater sage-grouse, resulting in a net conservation gain.

## C. Identify the applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

**List by name and date all applicable NEPA documents that cover the proposed action.**

- Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment [DOI-BLM-UT-W010-2010-0023-EA] (2011).
- Utah Greater Sage-Grouse Proposed Land Use Plan Amendment and Final Environmental Impact Statement [DOI-BLM-UT-9100-2013-0002-EIS] (2015).
- Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah (September 2015).
- Utah Greater Sage-Grouse Approved Resource Management Plan Amendment. Attachment 4 From the USDI 2015 Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah (September 2015).

**List by name and date other documentation relevant to the proposed action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring reports).**

- A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan (U.S. Department of the Interior and the U.S. Department of Agriculture Forest Service 2002).
- Rangeland Health Standards and Guidelines for Healthy Rangelands Utah State Office (1997).
- Conservation Plan for Greater Sage-Grouse in Utah (2013).
- Greater Sage-Grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO (February 2013).

## D. NEPA Adequacy Criteria

**1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?**

☒ Yes.

☐ No.

Documentation of answer and explanation:

The proposed methods and impacts have been analyzed under the Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment (DOI-BLM-UT-W010-2010-0023-EA) and the Utah Greater Sage-Grouse Proposed Land Use Plan Amendment and Final Environmental Impact Statement (DOI-BLM-UT-9100-2013-0002-EIS). The proposed treatment is within the same analysis area as the Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment, with similar goals and objectives. The primary goals within the 2011 Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment, as identified on page 3, were to:

1. Decrease the probability of an extreme wildland fire event;
2. Promote ecosystem resilience by removing juniper and promoting the growth of perennial grasses and forbs within sagebrush habitat;
3. Protect critical sagebrush steppe;
4. Reduce threats to rangeland health and wildlife habitat across the landscape while improving the ecological condition of the sagebrush ecosystem;
5. Use several different mechanical and non-mechanical tools to reach the desired objectives; and
6. Promote the systematic gathering of information to address the impacts to rangeland health.

The goals of this project are to: reduce fuels and improve, protect, and expand habitat for greater sage-grouse; limit the expansion or dominance of juniper; and maintain or improve soil site stability, hydrologic function, biological integrity, and ecosystem resiliency.

The juniper treatment methods proposed remain the same as analyzed in the original document (e.g., mastication, hand thinning with chainsaws). The main difference between then and now is that the newly proposed treatment would take out more trees to directly benefit greater sage-grouse and expand their potential habitat. Removing additional trees fully supports the Purpose and Need, as well as the goals identified in the 2011 Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment (refer page 3). Furthermore, the proposed action is consistent with the most current guidelines and policies for managing greater sage-grouse habitat. The anticipated impacts and outcomes are sufficiently similar to the original analysis that differences will not be substantial.

**2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action (or existing proposed action), given current environmental concerns, interests, and resource values?**

☒ Yes.

☐ No.

Documentation of answer and explanation:

The alternatives analyzed for the proposed action is based on the best available information. This action addressed environmental concerns, interests and resource values. The range of alternatives analyzed within the 2011 Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment (refer to pages 5 to 9) remains appropriate for this action.

**3. Is existing analysis adequate in light of any new information or circumstances (such as, rangeland health standards assessment; recent endangered species listings, updated list of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?**

☒ Yes.

☐ No.

Documentation of answer and explanation:

"In 2010, the U.S. Fish and Wildlife Service determined that the Greater sage-grouse was warranted for protection under the ESA due to the loss and fragmentation of habitat and a lack of adequate regulatory mechanisms to stem habitat loss. The Service did not propose a listing rule at the time due to the need to address higher priority listing actions. When the Service made the warranted but precluded finding in 2010, the sage-grouse became a candidate species. Through a court-ordered work plan, the Service committed to resolve the Greater sage-grouse's "candidate" designation by September 30, 2015 by either proposing to list the species as threatened or endangered or remove the species from the "Candidate List," an action already required by the ESA.

After evaluating the best available scientific and commercial information regarding the greater sage-grouse, in September 2015 the Service determined that protection for the greater sage-grouse under the Endangered Species Act is no longer warranted and is withdrawing the species from the candidate species list." (from http://www.fws.gov/greaterSageGrouse/findings.php).

The Bureau of Land Management Record of Decision and Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (DOI-BLM-UT-9100-2013-0002-EIS), signed in September 2015, identify specific habitat and management objectives for greater sage-grouse within Utah and other sub-regions. This project incorporates requirements outlined in the Record of Decision (Chapter 1, sections 1.6.2 and 1.6.3) and the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (Chapter 2, sections 2.2.1, 2.2.2, and 2.2.3). Refer to the staff determinations documented in the Interdisciplinary Team Checklist (see Attachment C) and the analysis in Attachment D.

**4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?**

☒ Yes.

☐ No.

Documentation of answer and explanation:

The methodology and analytical approach used in the 2011 Crawford Mountains WUI Hazardous Fuels Treatment Environmental Assessment (refer to pages 13 to 17) are consistent with the BLM NEPA Handbook, the 1998 Salt Lake District Office Fire Management Plan, BLM Instruction Memorandum No. 2012-043 Greater Sage-Grouse Interim Management Policies and Procedures, and the Record of Decision and Utah Greater Sage-Grouse Approved Resource Management Plan Amendment [DOI-BLM-UT-9100-2013-0002-EIS ](September 2015). The direct, indirect, and cumulative effects in the new proposed action are similar to those analyzed in the referenced NEPA documents in section C.

**5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?**

☒ Yes.

☐ No.

Documentation of answer and explanation:

The existing NEPA document (DOI-BLM-UT-W010-2010-0023-EA) was posted to the BLM Utah Environmental Notification Bulletin Board and Tribal notification letters were sent to the Eastern and Northwestern Shoshone. No comments were received from the public and Tribes. Additionally, the existing NEPA (DOI-BLM-UT-W010-2010-0023-EA) was presented to the Utah Watershed Restoration Initiative Northern Region team in 2011.

This project was developed and reviewed by the Rich County Coordinated Resource Management group which represents stakeholders of both private and public lands in Utah's Rich County. The project was also presented and reviewed by the Bear River Divide Steering Committee in southwestern Wyoming (including the Crawford Mountain Allotment) which is a partnership between the BLM, Wyoming Game and Fish Department, Bear River Commission, grazing permittees, and wildlife and energy interests.

This project was posted on the Bureau of Land Management's NEPA/Land Use Plan Register website on April 26, 2016. Utah's Public Lands Policy Coordination Office was notified on May 3, 2016 and certified consultation letters were sent to Eastern Shoshone, Western Shoshone, and Jemez Pueblo, on April 27, 2016. Additionally, a public open house was held at the Senior

Center in Randolph, Rich County, Utah on the evening of June 21, 2016 to provide information on habitat restoration and fuels reduction projects in the Crawford Mountains. Information was presented on "Conifers and Sage-Grouse" by Dr. David Dahlgren from Utah State University, "Utah's Watershed Restoration Initiative: Challenges facing mule deer and their habitats, and are they responding to restoration efforts?" by Scott Walker from the Utah Division of Wildlife Resources, and "Crawford Mountain Fuel Reduction Projects" by the Brad Jessop of the BLM. On July 21, 2016, the project area was visited by the Rich County Coordinated Resource Management (CRM) Group as a part of their 2016 summer field tour.

Comments were received from one public citizen regarding the project and concerns about potential impacts of the proposed treatments. The BLM reviewed the commenters concerns and meet with the commenter during the public meeting and Rich County CRM field tour to discuss concerns with the project. BLM staff reviewed planned treatment areas with regard for the commenters concerns and made adjustments to proposed treatment areas where valid.

## E. Persons/Agencies/BLM Staff Consulted

| Name | Title | Resource Represented |
|---|---|---|
| Brad Jessop | Natural Resource Specialist | Fuels |
| Randy Kyes | Fuels/NEPA Planner, Project Lead | NEPA Compliance |
| Masako Wright | Wildlife Biologist | Wildlife |

Note: Refer to the EA/EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents. Additional information is documented in the attached Interdisciplinary Team Checklist (Attachment C).

## F. CONCLUSION

### Plan Conformance

☒ This proposal conforms to the applicable land use plan.

☐ This proposal does not conform to the applicable land use plan

### Determination of NEPA Adequacy

☒ Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

☐ The existing NEPA documentation does not fully cover the proposed action. Additional NEPA documentation is needed if the project is to be further considered.

Environmental Coordinator — Date: 08/10/2016

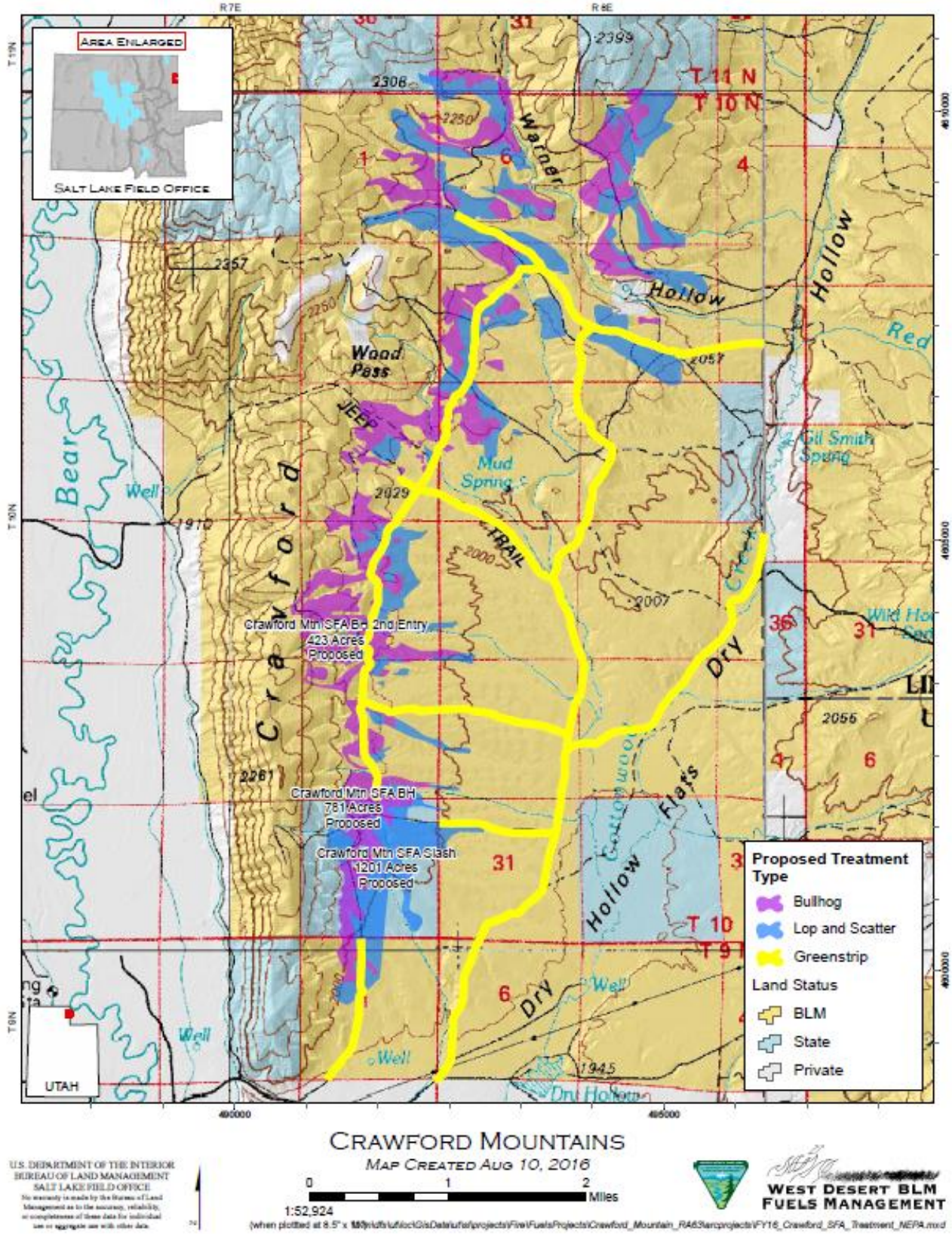
Salt Lake Field Office Manager — Date: 8/10/16

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

## ATTACHMENTS

A. Project Location Map
B. Seed Mix Tables
C. Interdisciplinary Team Checklist
D. Utah Greater Sage-Grouse Amendment Analysis

## ATTACHMENT A, PROJECT LOCATION MAP



## ATTACHMENT B, SEED MIX TABLES

BLM Managed Public Lands Mastication Seed Mix

| Growth Form | Origin | Seed: Common Name | Seed: Scientific Name |
|---|---|---|---|
| Forb | Native | Blue Flax | *Linum perenne* |
| Forb | Native | Munroe's globemallow | *Sphaeralcea munroana* |
| Forb | Native | Western Yarrow | *Achillea millefolium* |
| Grass | Native | Canby Bluegrass | *Poa canbyi* |
| Grass | Native | Western wheatgrass | *Agropyron smithii* |
| Grass | Native | Bluebunch wheatgrass | *Agropyron spicatum* |
| Grass | Native | Snake River Wheatgrass | *Elymus wawawaiensis* |
| Grass | Native | Indian Ricegrass | *Oryzopsis hymenoides* |
| Grass | Native | Thickspike Wheatgrass | *Agropyron dasystachyum* |
| Grass | Native | Squirreltail | *Elymus elymoides* |
| Grass | Native | Great Basin Wildrye | *Leymus cinereus* |

Seed mixes may be adjusted based on funding and availability.

## ATTACHMENT C, INTERDISCIPLINARY TEAM CHECKLIST

**Project Title**: Crawford Mountains Greater Sage-Grouse Habitat Improvement Project

**NEPA Log Number**: DOI-BLM-W010-2016-0011-DNA

**File/Serial Number**: #RA63

**Project Leader**: Randy Kyes

**DETERMINATION OF STAFF:**

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

| Determi-nation | Resource | Rationale for Determination | Assigned | Date |
|---|---|---|---|---|
| RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1) | | | | |
| NC | Air Quality | The project would not conflict with Utah's Dept. of Air Quality's (DAQ) State Implementation Plan (SIP). National Ambient Air Quality Standards (NAAQS) would not be exceeded. The project area is located within an attainment airshed. There is some expectation that surface disturbing activity could occur due to earth-moving equipment and vehicle traffic. Fugitive dust could affect air quality in the local area. If dust is affecting visibility, control measures would be applied such as using a water tender to spray road surfaces. Protective measures would be applied as described in the DNA Section A. | /s/ Randy Kyes | 4/25/16 |
| NP | Areas of Critical Environmental Concern | There are no ACECs identified within the project area. | /s/ Randy Kyes | 4/25/16 |
| NI | Cultural Resources | Eligible sites would be avoided through final project design and layout, or limit treatment to non-mechanized removal of trees with hand tools, with the added provision that no felled trees are dragged within the site perimeter. Further treatments, if required, would be implemented on a case by case basis in consultation with a cultural resource staff member present. | /s/ Glenn Stelter | 05/18/16 |
| NI | Environmental Justice | As defined in EO 12898, minority, low income populations and disadvantaged groups may be present within the county. The project would not cause any disproportionately high and adverse effects on minority or low income populations. All members of the public can access and use the project area. | /s/ Randy Kyes | 4/25/16 |
| NI | Farmlands (Prime or Unique) | Soil units designated as Farmland may be present but are not irrigated or cultivated. | /s/ Randy Kyes | 4/25/16 |
| NP | Fish Habitat | There is no fish habitat in the analysis area | /s/ Cassie Mellon | 5/12/16 |
| NC | Floodplains | Floodplains, as defined by EO 11988, FEMA, HUD, Corps of Engineers and the LUP, may be present; however, the proposed action would not affect the ability to obtain and/or maintain Federal flood insurance. | /s/ Randy Kyes | 4/25/16 |

| Determi-nation | Resource | Rationale for Determination | Assigned | Date |
|---|---|---|---|---|
| NC | Fuels/Fire Management | The proposed action would alter fuel loading, composition and structure thus reducing hazardous fuels and the probability of high severity wildfire. Protective measures would be applied as described in the DNA Section A. | /s/ Brad Jessop | 4/27/16 |
| NC | Geology / Mineral Resources/Energy Production | There would be no change to the possible mineral resources within the proposed areas that would occur during the proposed treatments. | /s/Larry Garahana | 4/26/16 |
| NC | Greenhouse Gas Emissions | It is anticipated that greenhouse gas emissions associated with this action and its alternative(s) would be negligible. | /s/ Randy Kyes | 4/25/16 |
| NC | Invasive Species/Noxious Weeds (EO 13112) | Treatments could promote invasive species. Several class 2 and Class 3 noxious weed infestation are known to be present in current and proposed treatment areas. Infestation and treatment areas should be documented using NISIMS. All SOPS in the EA should be followed to prevent impacts. | /s/ Mark Williams | 5/20/16 |
| NC | Lands/Access | Existing access must be maintained and corner monuments must be identified and protected. | /s/ Dave Watson | 5/18/16 |
| NC | Livestock Grazing | Livestock grazing would likely not be impacted. If seeding is conducted voluntary rotations or non-use agreements should be discussed with the permittees. | /s/ M. Wood | 5/17/16 |
| NC | Migratory Birds | The area supports important habitat for raptors and neotropical migrant birds. The project would cause a decrease in nesting and foraging habitat and nesting success for juniper woodland and sage-brush obligate species. Protective measures would be applied as described in the DNA Section A. | /s/ Masako Wright | 5/13/16 |
| NP | National Historic Trails | Resource is not present. | /s/ Ray Kelsey | 5/19/16 |
| NC | Native American Religious Concerns | The following Tribes were consulted via certified letter on April 27, 2016: Jemez Pueblo, Eastern Shoshone, Northwest Shoshone. No concerns were expressed by the tribes. | /s/ Randy Kyes | 5/18/16 |
| NP | Paleontology | There are no known paleontological resources within the proposed area. If any are located, work would need to be stopped and the AO would need to be contacted immediately. | /s/Larry Garahana | 4/26/16 |
| NC | Property Boundary Evaluation | Existing access must be maintained and corner monuments must be identified and protected. | /s/ Dave Watson | 5/18/16 |
| NC | Rangeland Health Standards | Treatments would help increase herbaceous understory and likely increase infiltration and decrease runoff, positively impacting rangeland health. | /s/ M. Wood` | 5/17/16 |
| NC | Recreation | Impacts to recreational access and opportunities are not anticipated. Big game hunting opportunities will still be available although wildlife may change their patterns of behavior due to reduced tree cover. | /s/ Ray Kelsey | 5/19/16 |
| NC | Sage Grouse Habitat | The purposes of this project are to improve sagebrush habitat for GRSG and to reduce threats to GRSG by managing pinyon-juniper encroachment, minimizing invasive species and reducing fire risks. The project will comply with the GRSG ARMPA. Protective measures would be applied as described in the DNA Section A. | /s/ Masako Wright | 5/13/16 |
| NC | Socio-Economics | No quantifiable additional or decreased economic impact to the local area would be caused by the proposed action. | /s/ Randy Kyes | 4/25/16 |

| Determi-nation | Resource | Rationale for Determination | Assigned | Date |
|---|---|---|---|---|
| NC | Soils | Decreasing juniper would open up resources for perennial species to grow in the understory, improving soil infiltration and increasing soil macropores. Gullies and rill erosion would be reduced. | /s/ M. Wood | 5/17/16 |
| NC | Threatened, Endangered, Candidate or Special Status Plant Species | No rare or special status plants have been identified in the project area. The DNA specifies that pinyon pine would be avoided. | /s/ Mark Williams | 5/20/16 |
| NP (aquatic)<br>NC (Terrestrial) | Threatened, Endangered, Candidate or Special Status Animal Species | For aquatic species none present.<br><br>The area supports habitat for sensitive species such as pygmy rabbits, white-tailed prairie dogs, ferruginous hawks and other sage-brush or juniper obligate species. The project would cause a decrease in breeding, nesting and foraging habitat and nesting success for juniper woodland and sage-brush obligate species. Protective measures would be applied as described in the DNA Section A. | /s/ Cassie Mellon<br><br>/s/ Masako Wright | 5/12/16<br><br>5/13/16 |
| NI | Travel/Transportation | No changes or impacts to motorized routes or non-motorized access are anticipated. | /s/ Ray Kelsey | 5/19/16 |
| NC | Vegetation Excluding Special Status Species | Decreasing juniper species would promote sage brush and other sagebrush steppe habitat. Perennial understory response would increase due to treatments. | /s/ M. Wood | 5/17/16 |
| NI | Visual Resources | Removal of overgrown juniper stands will return vegetative cover to a more natural condition and will conform in the long term to the native characteristics of the landscape in form, lines, color, and texture. In the short term, changes to color and texture due to ground mulch left behind by treatments may be noticeable but not dominant. | /s/ Ray Kelsey | 5/19/19 |
| NC | Wastes (hazardous or solid) | The only concern for wastes is fuel or oil leaking from equipment. If this occurs, spill must be cleaned up and, if applicable, reported to regulatory agencies. | /s/ Alan V Jones | 5/23/16 |
| NC | Water Resources/Quality (drinking/surface/ground) | No additional impacts are expected | /s/ C. Mellon | 5/12/16 |
| NC | Wetlands/Riparian Zones | No additional impacts are expected with protection measures in place | /s/ C. Mellon | 5/12/16 |
| NP | Wild and Scenic Rivers | Resource is not present. | /s/ Ray Kelsey | 5/19/16 |
| NP | Wilderness/WSA | Resource is not present. | /s/ Ray Kelsey | 5/19/16 |
| NI | Lands with Wilderness Characteristics | Impacts to potential areas with wilderness character are not anticipated. Removal of overgrown juniper stands will improve natural conditions or will not substantially affect opportunities for solitude and primitive recreation due to the area's low visitation. | /s/ Ray Kelsey | 5/19/16 |
| NP | Wild Horses and Burros | Project is outside a Herd Management Area. | /s/ T. Howell | 5/9/16 |
| NP (aquatic)<br>NC (Terrestrial) | Wildlife Excluding Special Status Species | No aquatic species present.<br><br>Wildlife excluding special status species should benefit from the proposed action. The purpose of the project is to improve sagebrush habitat and to reduce fire risks by removing juniper and increasing forage. Protective | /s/ Cassie Mellon<br>/s/ Masako Wright | 5/12/16<br>5/13/16 |

| Determi-nation | Resource | Rationale for Determination | Assigned | Date |
|---|---|---|---|---|
| | | measures would be applied as described in the DNA Section A. | | |
| NC | Woodland / Forestry | The DNA specifies that pinyon pine and old growth juniper would be avoided. | s/ Mark Williams | 5/24/16 |

FINAL REVIEW

| Title | Signature | Date |
|---|---|---|
| Environmental Coordinator | /s/ Randy Kyes | 8/10/2016 |
| Authorized Officer | | 8/10/16 |

## ATTACHMENT D, UTAH GREATER SAGE-GROUSE AMENDMENT ANALYSIS

This attachment documents the conformance of the proposed action with the Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah (September 2015) and the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (September 2015).

## Project Overview

The Bureau of Land Management (BLM) Salt Lake Field Office proposes vegetation treatments that would reduce key threats to greater sage-grouse (*Centrocercus urophasianus*) habitat for the Rich-Morgan-Summit population. Key threats to greater sage-grouse include conifer expansion, invasive species, and wildland fire. Since 2011, the BLM has implemented approximately 1,570 acres of vegetation treatments in the Crawford Mountain area to reduce wildland fire threat, remove encroaching conifers, and restore ecosystem resiliency (see Crawford Mountains WUI Hazardous Fuels Treatment Project (UT-W010-2010-0023-EA)). Previously implemented treatments include bullhog (1,016 acres), lop and scatter (254 acres), and fuel break mowing (298 acres). Although these treatments have been successful, the benefit to greater sage-grouse has been indirect.

Wildfire, invasive species, and loss of sagebrush habitat due to juniper encroachment are identified as primary threats to greater sage-grouse populations in the Utah State Sage Grouse Conservation Plan, the Record of Decision and Approved Resource Management Plan Amendment for the Greater Basin Region, and the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment. Thus, proactively managing juniper to reduce fire threat and prevent loss of sagebrush is recommended as a conservation measure to meet sage-grouse habitat objectives.

The project area occurs within the Rich-Morgan-Summit Sage-Grouse Management Area as identified by the Utah Division of Wildlife Resources and classified by the BLM as a Priority Habitat Management Area. The eastern portion of the project area is also within a Sagebrush Focal Area, which is a subset of Priority Habitat Management Areas, as identified by the BLM in the Utah Approved Resource Management Plan Amendment. Sagebrush Focal Areas have been identified by the U.S. Fish and Wildlife Service as having the highest densities of greater sage-grouse and other criteria important for the persistence of the species. This project would contribute to the long-term sustainability of the Rich-Morgan-Summit greater sage-grouse population.

The new proposed action is designed to build upon these previous treatments and provide a direct benefit to the Rich-Morgan-Summit greater sage-grouse population in the Crawford Mountains area by creating and expanding useable habitat that could be immediately occupied following treatment. To accomplish this, juniper trees left from previous bullhog treatments would be removed and additional new treatments, including mechanical shredding, lop and scatter, pile burning, and creation of additional fuel breaks may occur. Treated lands may also be seeded and herbicide control of invasive species may occur.

The entire treatment area (footprint) is approximately 4,430 acres, with implementation scheduled to begin in the summer of 2016. Some maintenance activities would be necessary over time to ensure that project objectives are sustained for the long-term. The scheduled implementation would be subject to change due to weather, funding, and/or equipment related issues.

## Utah Greater Sage-Grouse Approved Resource Management Plan Amendment Compliance

Because the project is within a greater sage-grouse identified priority habitat management area (PHMA), with portions also identified as Sagebrush Focal Areas (SFAs), impacts to greater sage-grouse and the applicable management actions identified in the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA) are considered in this report. Only those objectives and management actions that are applicable to this project are discussed below.

### A. Special Status Species Objectives and Management Actions

Subsection 2.2.1 in the Utah Greater Sage-Grouse ARMPA lists objectives to meet the goal for special status species and habitat objectives for greater sage-grouse (GRSG). Table 1 below demonstrates how the proposed action meets these objectives.

**Table 1: Special Status Species Compliance**

| Objective | Existing | Proposed Treatment |
|---|---|---|
| **Objective SSS-1:** Enhance or improve GRSG habitat (e.g., through restoration or rehabilitation activities) within PHMA that has been impaired or altered. | The existing BLM managed land consists of approximately 4,430 acres of juniper encroached sagebrush habitat. | The treatment is designed to build upon previous treatments, in addition to implementing new treatments within the area previously approved, and provide direct benefit to greater sage-grouse by creating and expanding useable habitat that could be immediately occupied following treatment. |
| **Objective SSS-3:** In all GRSG habitat, where sagebrush is the current or potential dominant vegetation type or is a primary species within the various states of the ecological site description, maintain or restore vegetation to provide habitat for lekking, nesting, brood rearing, and winter habitats. | The existing BLM managed land consists of approximately 4,430 acres of juniper encroached sagebrush habitat. | The treatment is designed to build upon previous treatments, in addition to implementing new treatments within the area previously approved, and provide direct benefit to greater sage-grouse by creating and expanding useable habitat that could be immediately occupied following treatment. |
| **Objective SSS-4:** Within PHMA, increase the amount and functionality of seasonal habitats by:<br>• Reducing conifer (e.g., pinyon/juniper) from areas that are most likely to support Greater Sage-grouse at a rate that is at least equal to the rate of encroachment.<br>• Maintaining or improving understory (grass, forb) and/or riparian condition within breeding and late brood- | The existing BLM managed land consists of approximately 4,430 acres of juniper encroached habitat. | To accomplish this, juniper trees left from previous bullhog treatments would be removed, additional acres of initial treatment would occur, and up to approximately 440 acres of fuel breaks may be created. Juniper trees would either be masticated or lopped and scattered depending on density and size. Treated lands in need of seed would be planted with a diverse native seed mixture. |

| Objective | Existing | Proposed Treatment |
|---|---|---|
| rearing habitats.<br>• Conducting vegetation treatments based on the following 10-year (decadal) acreage objectives: For the Rich-Morgan-Summit; Unitah Population Area for mechanical treatments, the objective is 40,700 acres. | | |

The Utah Greater Sage-Grouse ARMPA lists specific management actions (MA-SSS-3) required for all actions in greater sage-grouse PHMAs. Project compliance with these management actions is described in Table 2.

**Table 2: Special Status Species Management Actions (MA-SSS-3 (A-G))**

| Management Action | Compliance |
|---|---|
| **Net Conservation Gain** | As described in the Habitat Objectives table above, the proposed action would result in net conservation gain for greater sage-grouse. |
| **Disturbance Cap** | The project area is not identified as one of the 18 threats listed in Table E.1 of the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment. Therefore, the disturbance cap [MA-SSS-3 (B)] does not apply to this project proposal. |
| **Density of Energy / Mining Facilities** | The project is not energy or mining related and as such is not one of the six types of project for which this management action applies; therefore density of energy and mining facilities [MA-SSS-3 (C)] does not apply to this site specific project proposal. |
| **Predation** | The project does not propose any new structures of facilities such as dumps or waste transfer stations that would propagate predation on grouse; therefore, predation [MA-SSS-3 (D)] does not apply to this site specific project proposal. |
| **Noise Restrictions** | Noise restrictions only apply to 0.25 miles of lek buffers from 2 hrs before and 2 hrs after official sunrise and sunset during breeding season. The proposed project area is outside of the 0.25 mile lek buffers, noise restrictions do not apply to the proposed action. However, mechanical treatments would be applied in the fall, and would therefore not affect during the winter, nesting or brood-rearing seasons. |
| **Tall Structure Restrictions** | The project does not propose any new tall structures; therefore, tall structure restriction [MA-SSS-3 (F)] does not apply to this site specific project proposal. |
| **Seasonal Restrictions and Buffers** | The project area contains winter, brood and nesting habitat, which are protected during the following periods:<br>• November 15 to March 15 for winter habitat<br>• February 15 to June 15 for breeding (leks), nesting and early brood-rearing habitat<br>• April 15 to August 15 for brood-rearing habitat<br>Vegetation enhancement treatments would be conducted in the fall which would avoid impacts to sage-grouse on the lek, nesting or brood rearing, or wintering. |

## B. Vegetation Management Actions

Subsection 2.2.2 in the Utah Greater Sage-Grouse ARMPA contains management actions applicable to vegetation manipulations in PHMA. Table 3 below illustrates compliance with these management actions.

**Table 3: Vegetation Management Actions applicable to vegetation manipulations in PHMA**

| Management Action | Compliance, if applicable |
|---|---|
| **MA-VEG-1** | |
| In PHMA, where necessary to meet GRSG habitat objectives, treat areas to maintain and expand healthy GRSG habitat (e.g., conifer encroachment areas and annual grasslands). | The removal of encroaching juniper in areas identified for second entry and in initial treatment areas would maintain and expand healthy greater sage-grouse habitat. |
| In PHMA, prioritize restoration in seasonal habitats that are identified as the limiting factor for GRSG distribution and/or abundance. | The treatments would occur within areas identified as brood rearing habitat. |
| Apply seasonal restrictions to avoid treating areas during seasons of use, as needed, when implementing vegetation treatments (see MA-SSS-3G). | Treatments would be conducted in PHMA in compliance with the seasonal restrictions listed in MA-SSS-3G. Before November 15 and after March 15 for winter habitat; before February 15 and after June 15 for breeding (leks), nesting, and early brood-rearing habitat; and before April 15 and after August 15 for brood-rearing habitat. |
| In PHMA, avoid sagebrush reduction treatments within GRSG nesting and winter habitat unless the project plan and associated NEPA document demonstrate a biological need for the treatment to maintain or improve habitat for the GRSG population, or unless the treatment is for Utah prairie dog recovery where the needs of both species will be addressed on the landscape. Coordinate with the appropriate State of Utah agency and the USFWS prior to conducting sagebrush treatment projects within nesting and winter habitat. | Within winter and nesting habitat, approximately 440 acres of new fuels breaks may be created along designated routes and/or select drainages to reduce the risk of vehicle and human caused wildfires, reduce the spread of invasive species, and aid in the controlling of wildfires in PHMA for greater sage-grouse. Within these proposed fuels breaks, all juniper and sagebrush would be cleared up to 150 feet on either side of the road or drainage. Where sagebrush is the dominant species, fuels breaks would be created by mowing. While creating additional fuel breaks may remove some sagebrush, any reduction in sagebrush would be outweighed by the benefits of reduced wildfire risk and invasive species spread. |
| Use collaborative planning efforts to develop and implement habitat restoration projects. Expertise and ideas from entities such as local landowners, local GRSG working groups, and other federal, state, county, and private organizations shall be solicited and considered in development of restoration projects. | The proposed action is the result of a collaborative effort between the BLM, Natural Resources Conservation Service, Utah Division of Wildlife Resources, and private landowners. |
| In PHMA, implement project design features that will contribute to the most favorable conditions for success when planning and implementing restoration/vegetation treatment projects. Examples include, but are not limited to the following:<br>• Review of available plant species and their adaptation to | Where juniper expansion and infilling have resulted in a decrease in perennial understory vegetation, seeding would occur. Seed would be applied in the fall prior to mastication. Site adapted species would be used in the seed mix. |

| Management Action | Compliance, if applicable |
|---|---|
| the site when developing seed mixes.<br>• The need to reduce non-native annual grass densities and competition through herbicide, targeted grazing, tillage, etc.<br>• Assessment of on-site vegetation to ascertain if enough desirable perennial vegetation exists to consider the use of passive restoration techniques.<br>• Use of site preparation techniques that retain existing desirable vegetation.<br>• Use of "mother plant" techniques or planting of satellite populations of desirable plants to serve as seed sources.<br>• The need for post-treatment control of non-native annual grass and other invasive species. | If cheatgrass or other noxious weeds/invasive species becomes dominant within treated areas, herbicide may be used to achieve control. |
| Upon completion of vegetation treatments, monitor and manage the project area to ensure long-term success, including persistence of seeded species and/or other treatment components, such as implementing maintenance treatments. | Vegetation monitoring would occur prior to treatment as well as 1, 3, and 5 years post-treatment to document treatment success and determine if objectives were met. |
| **MA-VEG-2** | |
| Remove conifers encroaching into sagebrush habitats, in a manner that considers tribal cultural values. When conducting conifer treatments:<br>• Prioritize treatments closest to occupied GRSG habitats and near occupied leks, and where juniper encroachment is phase I or phase II.<br>• Treat areas in late Phase II or Phase III condition to create movement corridors, connect habitats, or to break up continuous, hazardous fuels and reduce the potential for catastrophic fire.<br>• Prioritize methods to reduce conifer canopy cover to those that maintain the understory vegetation as the preferred treatment methods (e.g., mechanical, lop and scatter).<br>• Require that vegetation treatments conducted within 0.6 miles of a lek include an objective of reducing conifer, where technically feasible, to less than 5 percent canopy cover, with preference for complete removal.<br>• Include stipulations to avoid removing old-growth pinyon/juniper stands (e.g., Tausch et al. 2009; Miller et al. 1999).<br>• Use of site-specific analysis and tools like the Vegetation Dynamics Development Tool and the fire and invasives assessment tool report (Chambers et al. 2014) will help refine the location for specific areas to be treated. | The objective of the proposal is to remove up to 100 percent of juniper encroaching into selected sagebrush habitats and increase perennial native plant cover and diversity. Pockets of trees ranging from 1 to 15 acres in size would be left scattered throughout the landscape. These pockets will be left to meet the multiple use mandate of the BLM. Pockets of trees provide cover and shade for livestock, wildlife, and recreation users. Pockets of old-growth and pinyon pine would be avoided. Trees would be completely removed within 0.6 miles of leks. Mechanical methods would be used in order to preserve sagebrush and other understory species. |
| **MA-VEG-3** | |
| In PHMA manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Also conserve or enhance these wet meadow complexes to maintain or | No wet meadows have been identified for treatment. |

| Management Action | Compliance, if applicable |
|---|---|
| increase amount of edge and cover within that edge. | |
| **MA-VEG-4** | |
| In PHMA, include GRSG habitat objectives in restoration/treatment projects. Include short-term and long-term habitat conditions in treatment objectives, including specific objectives for the establishment of sagebrush cover and height, as well as cover and heights for understory perennial grasses and forbs necessary for GRSG seasonal habitats (see Objective SSS-3). | The short-term habitat objective for this project is to remove encroaching juniper in order to provide a direct benefit to greater sage-grouse by creating and expanding useable habitat that could be immediately occupied following treatment.<br>The long-term objective is to achieve the specific Greater Sage-grouse seasonal habitat conditions identified in Objective SSS-3. |
| Make meeting the GRSG objectives for the restoration/treatment project one of the primary priorities for the project and subsequent land uses, recognizing that managing for other special status species may result in treatment objectives that may not meet GRSG seasonal habitat objectives (e.g., winter habitat cover requirements versus creation of Utah prairie dog habitat). Where GRSG habitat overlaps with that of federally listed threatened or endangered species (e.g., Utah prairie dogs), coordinate with species-specific experts to develop conservation and recovery objectives and allow habitat treatments that will benefit both species. | The project area would be managed as greater sage-grouse habitat in accordance with the goals and objectives identified in the Utah Greater Sage-Grouse Approved Resource Management Plan Amendment. |
| **MA-VEG-5** | |
| In PHMA, prioritize the use of native seeds for restoration based on availability, adaptation (ecological site potential), and probability of success. Where probability of success or adapted seed availability is low, desirable non-native seeds may be used as long as they support GRSG habitat objectives. Re-establishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, should be the principle objective for rehabilitation efforts. | Native grasses and a combination of native and introduced forbs would be seeded in areas where understory species are lacking. Sagebrush is abundant throughout the project area; thus, there is not a need to include it in seed mixes. |
| **MA-VEG-6** | |
| In PHMA, design post restoration management to ensure long term persistence. This could include changes in livestock grazing management, wild horse and burro management and travel management, etc., to achieve and maintain the desired condition of the restoration effort that benefits GRSG, as well as monitoring and maintaining the treated area. | Wild horse and burro management is not applicable to this project area. Livestock grazing would not occur in treated areas that are reseeded for a minimum of two complete growing seasons. Changes to livestock grazing terms and conditions and/or travel management would be analyzed in future NEPA decision. |
| **MA-VEG-10** | |
| Follow the applicable and technically feasible RDFs in Appendix C for vegetation projects/activities (fuels management) at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated with the project/activity:<br>• A specific RDF is documented to not be applicable to the | All applicable Required Design Features (RDFs) listed in Appendix C of the Utah Greater Sage-Grouse ARMPA have been included in the proposed action. |

| Management Action | Compliance, if applicable |
|---|---|
| site-specific conditions of the project/activity;<br>• An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;<br>• A specific RDF will provide no additional protection to GRSG or its habitat. | |
| **MA-VEG-14** | |
| Treat areas that contain cheatgrass and other invasive or noxious species to minimize competition and favor establishment of desired species. | Noxious weeds and invasive species would be monitored and treated as needed to minimize spread. |

## C. Fire and Fuels Management Actions

Subsection 2.2.3 in the Utah Greater Sage-Grouse ARMPA contains management actions applicable to fire and fuels proposals in PHMA. Table 4 below illustrates compliance with these management actions.

**Table 4: Management actions applicable to fire and fuels proposals in PHMA**

| Management Action | Compliance, if applicable |
|---|---|
| **MA-FIRE-1** | |
| In collaboration with the USFWS and relevant state agencies, complete and maintain GRSG Landscape Wildland Fire and Invasive Species Habitat Assessments to prioritize at risk habitats, and identify fuels management, preparedness, suppression and restoration priorities necessary to maintain sagebrush habitat to support interconnecting GRSG populations. These assessments and subsequent assessment updates will also be a collaborative effort to take into account other GRSG priorities identified in this plan. Appendix H describes a minimal framework example and suggested approach for this assessment.<br>Implementation actions will be tiered to the local GRSG Landscape Wildland Fire and Invasive Species Assessment, using best available science related to the conservation of GRSG.<br>In collaboration with USFWS and relevant state agencies, BLM planning units will identify annual treatment needs for wildfire and invasive species management as identified in local unit level Landscape Wildfire and Invasive Species Assessments. Annual treatment needs will be coordinated across state/regional scales and across jurisdictional boundaries for long-term conservation of GRSG.<br>Annually complete a review of landscape assessment implementation efforts with appropriate USFWS and state agency personnel. | This area is currently being analyzed as part of the efforts to identify and manage threats to GRSG within their eastern range. See Chambers, J.C., Beck, J.L., Campbell, S., Carlson, J., Christiansen, T.J., Clause, K., Dinkins, J.B., Doherty, K.E., Griffin, K.A., Havlina, D.W., Henke, K., Hennig, J.D., Garner, L., Kurth, L., Maestas, J.D., Manning, M., Mayer, K.E., Mealor, B.A., McCarthy, C.W., Perea, M., Pyke, D.A. 2016. Using resilience and resistance concepts to develop a strategic approach for managing threats to sagebrush ecosystems, Gunnison sage-grouse, and greater sage-grouse in their eastern range. Gen. Tech. Rep. RMRS-GTR-000. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.<br>This publication is in process and not yet complete. |
| **MA-FIRE-2** | |
| Follow the applicable and technically feasible RDFs in Appendix C for fuels management at the site-level unless at least one of the following can be demonstrated in the NEPA analyses associated | All applicable Required Design Features (RDFs) listed in Appendix C of the Utah Greater Sage-Grouse ARMPA have been included in the |

| Management Action | Compliance, if applicable |
|---|---|
| with the project/activity:<br>• A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity;<br>• An alternative RDF, state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GRSG or its habitat;<br>• A specific RDF will provide no additional protection to GRSG or its habitat. | proposed action. |
| **MA-FIRE-3** | |
| In PHMA, fuel treatments will be designed through an interdisciplinary process to expand, enhance, maintain, or protect GRSG habitat.<br>• In collaboration with USFWS and relevant state agencies, BLM planning units with large blocks of GRSG habitat will develop, using the assessment process described in Appendix H, a fuels management strategy which considers an up-to-date fuels profile, land use plan direction, current and potential habitat fragmentation, sagebrush and GRSG ecological factors, and active vegetation management steps to provide critical breaks in fuel continuity, where appropriate. When developing this strategy, planning units will consider the risk of increased habitat fragmentation from a proposed action versus the risk of large scale fragmentation posed by wildfires if the action is not taken.<br>• Use green strips and/or fuel breaks to protect GRSG habitat from fire events.<br>• When possible, locate fuel breaks along existing roads, ROWs, and other suitable topographic or natural features (e.g., areas devoid of vegetation, rock outcrops).<br>• Avoid constructing fuel breaks through large areas of intact GRSG habitat, unless the associated NEPA document demonstrates a biological need for the fuel break to maintain or protect habitat for the GRSG population. Coordinate with the appropriate State of Utah agency and the USFWS prior to constructing fuel breaks within nesting and winter habitat.<br>• Using an interdisciplinary approach, a full range of fuel reduction techniques will be available. Fuel reduction techniques such as conifer reduction, grazing, prescribed fire, chemical, biological, and mechanical treatments may be acceptable, given site-specific variables.<br>• Remove encroaching conifer stands as a fuels management tool, where environmental review documents it protects or improves GRSG habitat.<br>• Prioritize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. Where probability of success | The proposed treatment would reduce hazardous fuels and reduce the likelihood of high severity wildfire, while expanding suitable greater sage-grouse habitat.<br>Fuel breaks have been proposed as a part of this project. Approximately 298 acres of fuel break treatments were implemented under the initial decision for the Crawford Mountains WUI Hazardous Fuel Treatment EA and up to an additional 440 acres of fuel breaks are proposed.<br>An interdisciplinary team has analyzed a full range of fuel reduction techniques including conifer reduction, prescribed fire, chemical, and mechanical treatments, depending upon site-specific variables.<br>The proposed project is designed to remove encroaching conifer stands across the analysis area to improve habitat for greater sage-grouse.<br>Native seeds would be utilized during implementation based on availability, site potential, and the probability of success (see Attachment B for potential native seed mix).<br>All seasonal restrictions identified in the Utah Greater Sage-Grouse ARMPA would be required during project implementation. |

| Management Action | Compliance, if applicable |
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| for native seed availability is low, desirable non-native seeds may be used to meet GRSG habitat objectives to trend toward restoring the fire regime. When reseeding, use fire resistant native and desirable non-native species, as appropriate, to provide for fire breaks.<br>• Upon project completion, monitor and manage fuels projects to ensure long-term success, including persistence of seeded species and/or other treatment components, such as implementing maintenance actions. Control invasive vegetation post-treatment.<br>• Apply seasonal restrictions, as needed, for implementing fuels management treatments according to the type of seasonal habitats present (see MA-SSS-3G). | |
| In PHMA, avoid sagebrush reduction fuels treatments within GRSG nesting and winter habitat unless the project plan and associated NEPA document demonstrate a biological need for the treatment to maintain or improve habitat for the GRSG population, or unless the treatment is for Utah prairie dog recovery where the needs of both species will be addressed on the landscape. Treatments in winter habitat should be designed to maintain sagebrush, especially tall sagebrush (sagebrush capable of standing above heavier than normal snowfall), which will be available to GRSG above snow during a severe winter, considering the needs of Utah prairie dog recovery. Prior to conducting fuels treatments in winter habitat, coordinate with the appropriate State of Utah agency and the USFWS to design the treatment to strategically reduce wildfire risk around or in the winter habitat. | Within winter habitat, up to approximately 440 acres of new fuels breaks may be created along designated routes and/or select drainages to reduce the risk of vehicle and human caused wildfires, reduce the spread of invasive species, and aid in the controlling of wildfires in PHMA for greater sage-grouse. Within these proposed fuels breaks, all juniper and sagebrush would be cleared up to 150 feet on either side of the road or drainage. Where sagebrush is the dominant species, fuels breaks would be created by mowing. While creating additional fuel breaks may remove some sagebrush, any reduction in sagebrush would be outweighed by the benefits of reduced wildfire risk and invasive species spread. |
| **MA-FIRE-4** | |
| If prescribed fire is used in GRSG habitat, the NEPA analysis for the Burn Plan will address:<br>• why alternative techniques were not selected as a viable options;<br>• how GRSG goals and objectives will be met by its use;<br>• how the COT Report objectives will be addressed and met;<br>• a risk assessment to address how potential threats to GRSG habitat will be minimized. | Prescribed fire may be used as a follow up treatment following slashing and piling of juniper on steep slopes to reduce fuel loading. See the following below for an assessment of how the proposal addresses these four items. |
| Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire may be used to meet specific fuels objectives that will protect GRSG habitat in PHMA (e.g., creation of fuel breaks that will disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual | • Prescribed fire may be used as a follow up treatment following slashing and piling of juniper on steep slopes to reduce fuel loading. This alternative was selected since the alternative to not burn slash piles would not meet the purpose and need. Leaving slash piles on the landscape would leave fuels available to fire on the landscape and would not meet the |

| Management Action | Compliance, if applicable |
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| grasses and restore native plant communities), as well as managing the landscape for GRSG in concert with Utah prairie dog. | requirements for protection of greater sage-grouse habitat in PHMA and SFA.<br>• The proposed action will me Objective SSS-3 by providing direct benefit to greater sage-grouse by creating and expanding useable habitat that could be immediately occupied following treatment. The proposal would move habitat conditions toward the desired conditions listed in Table 2-2 of the ARMPA. The action would also comply with Objective SSS-4 by reducing conifer encroachment and improving understory.<br>• The proposed action addresses and meets objective provided in the COT Report by minimizing threats to the population and maintaining and improving habitat. This includes a reduction in conifer encroachment, installation of fuel breaks to prevent loss of sagebrush habitat due to fire, treatment of invasive species, and seeding of native forbs and grasses.<br>• Risk Assessment: Potential threats to greater sage-grouse habitat from the proposal are limited as the proposal is specifically designed for the benefit of greater sage-grouse and sagebrush habitat. Burning of piles would be conducted outside of restrictive seasons and when weather and fuel conditions are favorable to limiting potential escape. All prescribed fire would comply with the burn plan and be adequately staffed to ensure the protection of habitat. Burning would be limited to slash piles; no burning of sagebrush would be conducted. |
| Prescribed fire in known winter range shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat will need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality. | These factors would be considered in the burn plan for this proposal. |

| Management Action | Compliance, if applicable |
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| **MA-FIRE-5** | |
| In PHMA, during fuels management project design, consider the use of targeted livestock grazing to strategically reduce fine fuels and, if used, implement grazing management that will accomplish this objective. If implementing targeted grazing, implement measures to minimize impacts on native perennial grasses. | Targeted grazing has not been identified by the interdisciplinary team as a tool to reduce fine fuels in the NEPA or proposed action for this project area. |

## D. Required Design Features – Fire and Fuels Management

Applicable design features required in Appendix C of the Utah Greater Sage-Grouse ARMPA are incorporated into this DNA.