

**U.S. Department of the Interior  
Bureau of Land Management**

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**Determination of NEPA Adequacy (DNA)  
Likely Gulch Habitat Enhancement and Fuels Reduction  
Project**

**PREPARING OFFICE**

U.S. Department of the Interior  
Bureau of Land Management





**Determination of NEPA Adequacy  
(DNA)  
Likely Gulch Habitat Enhancement and Fuels  
Reduction Project**

**DOI-BLM-CO-F020-2015-0010 DNA**

**Prepared by  
U.S. Department of the Interior  
Bureau of Land Management  
Canon City, CO**

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OFFICE:: Royal Gorge Field Office, LLF02000

CASEFILE/PROJECT NUMBER:

PROPOSED ACTION TITLE/TYPE: Likely Gulch Habitat Enhancement and Fuels Reduction Project

LOCATION/LEGAL DESCRIPTION: Sixth Principle Meridian, T19S R 73W sec 31 & 32, T 47N R 12E sec 1&12, and T 20S R 73W sec 5&6

APPLICANT (if any):

## **A. Description of Proposed Action and any applicable mitigation measures**

Fire ~~is~~ plays an important ecological role in maintaining the function and pattern of the vegetation on the landscape. Wildland fires reduced natural fuel accumulations, maintained forest health, recycle nutrients, maintained openings and parks, and maintained wildlife habitats. During the settlement of the area, most of the larger trees were removed for infrastructure and energy. Over time fire suppression, timber harvests, and cattle grazing have interrupted the natural frequency and intensity of fires. This has caused the forests to become overstocked, mainly with smaller trees that are generally less fire resistant and provide a ladder for fire to move into the canopy. Most of these dense forests are very susceptible to catastrophic canopy fires. A canopy or crown fire is the most destructive and difficult to control.

The Likely Gulch fuels reduction project is part of an on-going project that has been occurring in the Road Gulch/Turkey Gulch area with several phases that started in 2005. Approximately 530 acres have been treated with mastication or other mechanical equipment, 470 acres have been hand thinned and piled, and approximately 400 acres by prescribed fire (pile burning). In addition, BLM Range staff has completed additional mastication treatments near the proposed treatment area in the Racepath Gulch area west of Texas Creek. The completion of the proposed project will be a collaborative effort involving several BLM programs including fuels, fire, range, forestry, and wildlife. Other cooperators will contribute to the completion of the project. These include Colorado Parks and Wildlife, Habitat Partnership Program, and other groups and organizations that have contributed funding in the form of grants to the project. This project will improve habitat and forage conditions for livestock and wildlife, forest health, and it would reduce hazardous fuels to reduce the risk of catastrophic wildfire in the area. The ultimate goal of this mechanical treatment is to create a fuel arrangement and amount to be able to return fire back into the ecosystem with the use of prescribed fire or a managed wildfire in the future. This treatment area falls within the Texas Creek Grazing Allotment (#15043). A land health assessment of the Lower Grape Creek Watershed, Royal Gorge Watershed, and the Texas Creek Watershed, encompassing this allotment and surrounding areas in September of 2004. It was determined that Piñon/Juniper woodland is the most extensive vegetation type on the Texas Creek allotment. None of the P/J woodland areas were being adversely affected by livestock grazing. Generally, these P/J woodlands have a more healthy understory vegetation and better soil surface conditions than would be expected with under the existing canopy coverage when compared to other woodland sites in this area. Based on GIS interpretation and field observations,

it was determined that a portion of the piñon-juniper range site was not meeting standards for upland vegetation and soils within the allotments. Piñon and juniper woodlands are steadily encroaching into ~~naturally~~the open grassland range sites and piñon / juniper ~~range site~~ canopies have steadily grown increasingly dense. As this continues over time, many areas are characterized by decreasing amounts of herbaceous plant cover and higher amounts of bare ground. As a result, plant productivity, vigor and diversity of at this site has decreased. It was estimated that only about 59 acres of the 19916 acres of P/J vegetation within the Texas Creek Allotment are not meeting the soil and vegetation health standards. It is expected that over time, the canopy will continue to increase to a point where understory diversity, production and basal cover will decrease. Based on these observations, recommended management actions were developed. One of these management actions was to focus fuels treatment and HPP projects in the piñon/juniper vegetation type to reverse the long term trend toward reduced understory vegetation.

The Road Gulch Fuels Reduction Project EA was completed in 2003. The Likely Gulch treatment area is within the planning area for this EA. (See Map 1: Likely Gulch Thinning Overview Map and Map 2: Likely Gulch Project Map). This project is approximately 1100 acres and will consist of areas that will be thinned over the next several years. This project is designed to thin understory and mid-story trees from dense stands of piñon pine, juniper and ponderosa pine. In an effort to return the area to a more Ponderosa pine-dominated stand, a majority of the piñon pine and juniper trees would be removed from the understory in areas where Ponderosa Pine is the dominant species. Approximate spacing in ponderosa pine stands treatment units would be thinned in a manner that would maintain a diverse age and size class stand. Total live stems per acre will be reduced by at least 40-50%. The areas that are dominated by piñon pine and juniper will be thinned in a manner to create a mosaic of openings and clumps of live trees. Existing openings or meadows will be maintained or enhanced during these treatments. Older, larger trees would be retained while smaller trees and trees infected with mistletoe or showing signs of other insect and disease infestation would be the main target of removal. The fuels treatments proposed in this project are designed specifically to attempt to reduce fuel quantity, depth and continuity (vertical and horizontal). Treated areas will result in larger trees and stands that are more fire resistant. These treatments will also increase survival and vigor of the older, larger trees, raise crown base heights, and improve forage for cattle and wildlife. The end result of the treatment will meet both hazardous fuels reduction objectives, as well as management objectives that were developed with the public land health assessment that was completed in 2014

The proposed treatment methods include hand crews with chainsaws and chippers; masticating machines, prescribed fire operations (pile burning and broadcast burning) or a combination of these methods. Whenever possible, biomass (in the form of firewood, fencing materials, wood chips etc.) will be made available to the public or private contractors. This may require skidding/dragging and decking material in a central location to minimize off road travel by the public. Slash resulting from hydro-mulching activities will be well distributed in the units. Slash piles may be created in areas where hand-thinning occurs. These piles will be burned at a later date. Piles will be constructed according to the following specifications in order to make pile burning operations more effective and efficient in terms of consumption and smoke production:

## Piling Specifications

### Recommended Specifications for Hand-Piles

*Chapter 1 Determination of NEPA Adequacy (DNA)  
A. Description of Proposed Action and any applicable mitigation measures*

Stumps will be cut 6 inches or less from the ground on the uphill side. All cut trees shall be completely severed from the stump. No live limbs will be left on the stump of any species.

1. All material between 1/4 and 3 inches in diameter will be hand piled.
2. All material over 3 inches in diameter will be left at its original length (whole bole), and all limbs will be completely severed from the remaining bole.
3. All logs and large branches shall be limbed up completely.
4. No material over 3 inches in diameter shall be piled for burning; however, all material 3 inches in diameter and greater shall be limbed (all branches severed completely and directly from the bole) placed separately for fuel wood).
5. All piles shall be constructed by laying limbs, stems, and other slash in the pile so as to be parallel with each other.
6. Slash that would cause large air spaces in piles shall be sectioned (e.g. cut into smaller pieces).
7. Each slash pile shall have a minimum volume (10-15% by volume of small sized slash (small branches less than 1/2 inch in diameter and or small branches with needles attached) placed in the lower, center of the pile, to provide kindling for prompt ignition to aid in the combustion of the larger slash.
8. Place larger diameter of the limbs (butt end) toward the center of the pile (up and into the pile) so that heavier material is in the center of the pile for more complete combustion.
9. Piles shall be no smaller than 6 feet in diameter by 5 feet tall. Ideal pile size would be 10 feet by 10 feet or larger, but should not exceed 4,700 cubic feet.
10. All limbed material shall be hand piled.
11. Slash pieces projecting 2 feet or more beyond the general perimeter of the pile shall be cut off and piled.
12. Piling methodology, pile location and orientation shall not result in unstable piles. All piles shall be as compact as possible and constructed so they will not topple
13. Piles will **not** be located on stumps or downed logs.
14. Piles should be at least 10 feet away from standing trees and located so that the burning will not cause damage to standing trees.
15. All piles shall be a minimum distance of 15 feet away from one another.
16. Piles should not be constructed under or in any location near power lines where the power line can be damaged through direct flame impingement or from radiant heat from during ignition operations. It is important to take slope and potential wind direction into consideration when determining if the power line could be impacted during burning operations.
17. \*No soil, other than that adhering to the bark or contained in the root ends, will be acceptable in piles. Soil in the piles reduces the completeness of the combustion of that material. Minimizing the amount of soil in the piles will reduce the amount of post-ignition smoldering and smoke production in the days following the ignition of the piles.

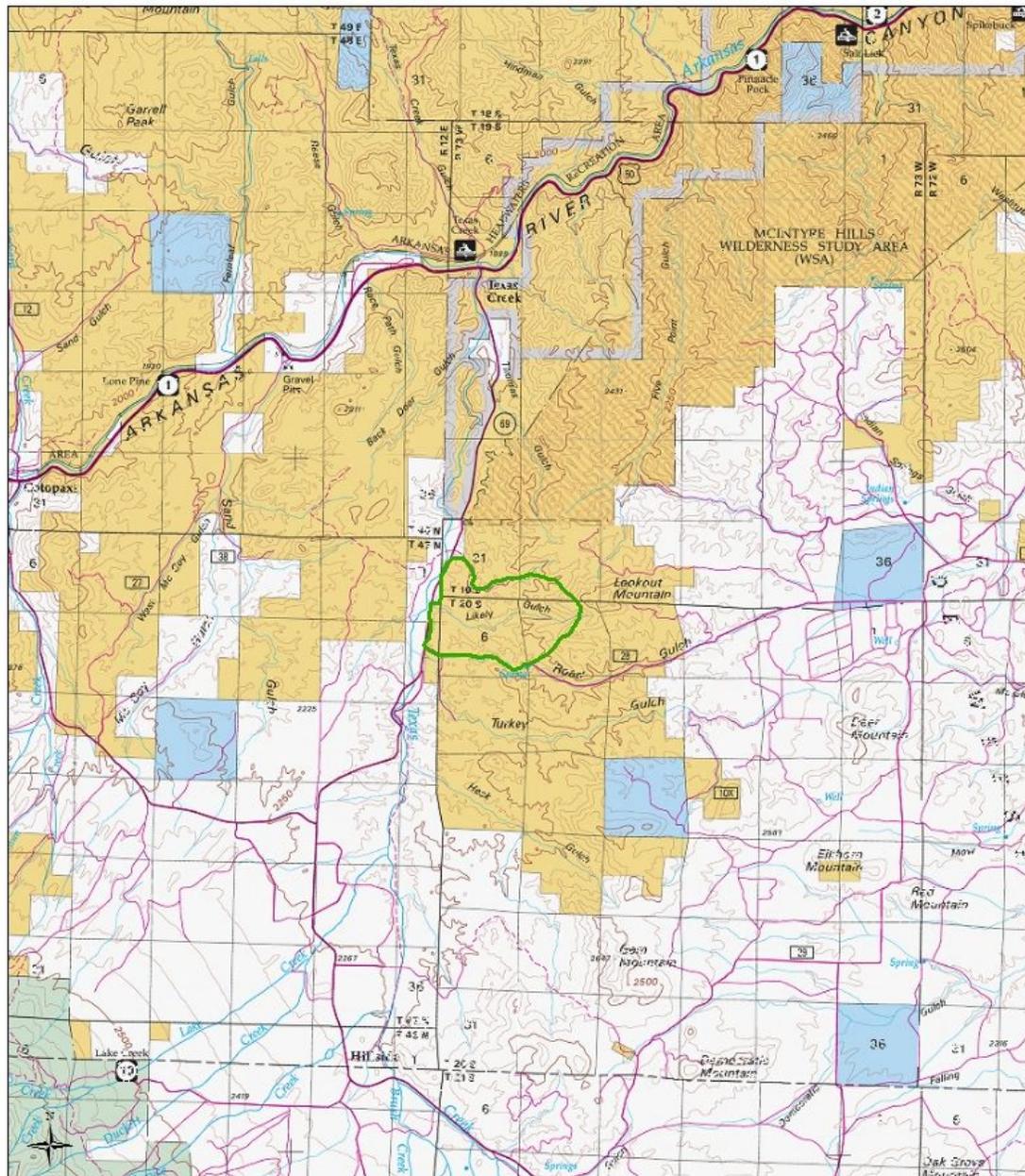
### Recommended Specifications for Machine Piles

Stumps will be cut 6 inches or less from the ground on the uphill side. All cut trees shall be completely severed from the stump. No live limbs will be left on the stump of any species.

1. It is highly recommended that a brush rake be utilized to avoid incorporating excess soil into the pile.
2. \*No soil, other than that adhering to the bark or contained in the root ends, will be acceptable in piles. Soil in the piles reduces the completeness of the combustion of that material. Minimizing the amount of soil in the piles will reduce the amount of post-ignition smoldering and smoke production in the days following the ignition of the piles.
3. All material between 1/4 and 8 inches in diameter will be piled.
4. All logs and large branches shall be limbed up completely.
5. No material over \_\_\_ inches in diameter shall be piled for burning.
6. Slash that would cause large air spaces in piles shall be sectioned (e.g. cut into smaller pieces).
7. Each slash pile shall have a minimum volume (10-15% by volume of small sized slash (small branches less than 1/2 inch in diameter and or small branches with needles attached) placed in the lower, center of the pile, to provide kindling for prompt ignition to aid in the combustion of the larger slash.
8. Place larger diameter of the limbs (butt end) toward the center of the pile (up and into the pile) so that heavier material is in the center of the pile for more complete combustion.
9. \*Piles shall be no smaller than 6 feet in diameter by 5 feet tall. Ideal pile size would be 10 feet in diameter by 10 feet tall or larger, but should not exceed 4700 cubic feet.
10. Slash pieces projecting 2 feet or more beyond the general perimeter of the pile shall be cut off and piled.
11. Piling methodology, pile location and orientation shall not result in unstable piles. All piles shall be as compact as possible and constructed so they will not topple
12. Piles will **not** be located on stumps
13. Piles should be at least 10 feet away from standing trees and located so that the burning will not cause damage to standing/reserve trees.
14. All piles shall be a minimum distance of 15 feet away from one another.
15. Piles should not be constructed under or in any location near power lines where the power line can be damaged through direct flame impingement or from radiant heat from during ignition operations. It is important to take slope and potential wind direction into consideration when determining if the power line could be impacted during burning operations.

\*These specifications are recommended to ensure that pile construction will allow fire personnel to be in compliance with the smoke permit acquired from the Colorado Department of Public Health and Environment’s Division of Air Quality.

Figure 1.1. Likely Gulch Overview Map



**Likely Gulch Habitat Enhancement and Fuels Reduction Project**

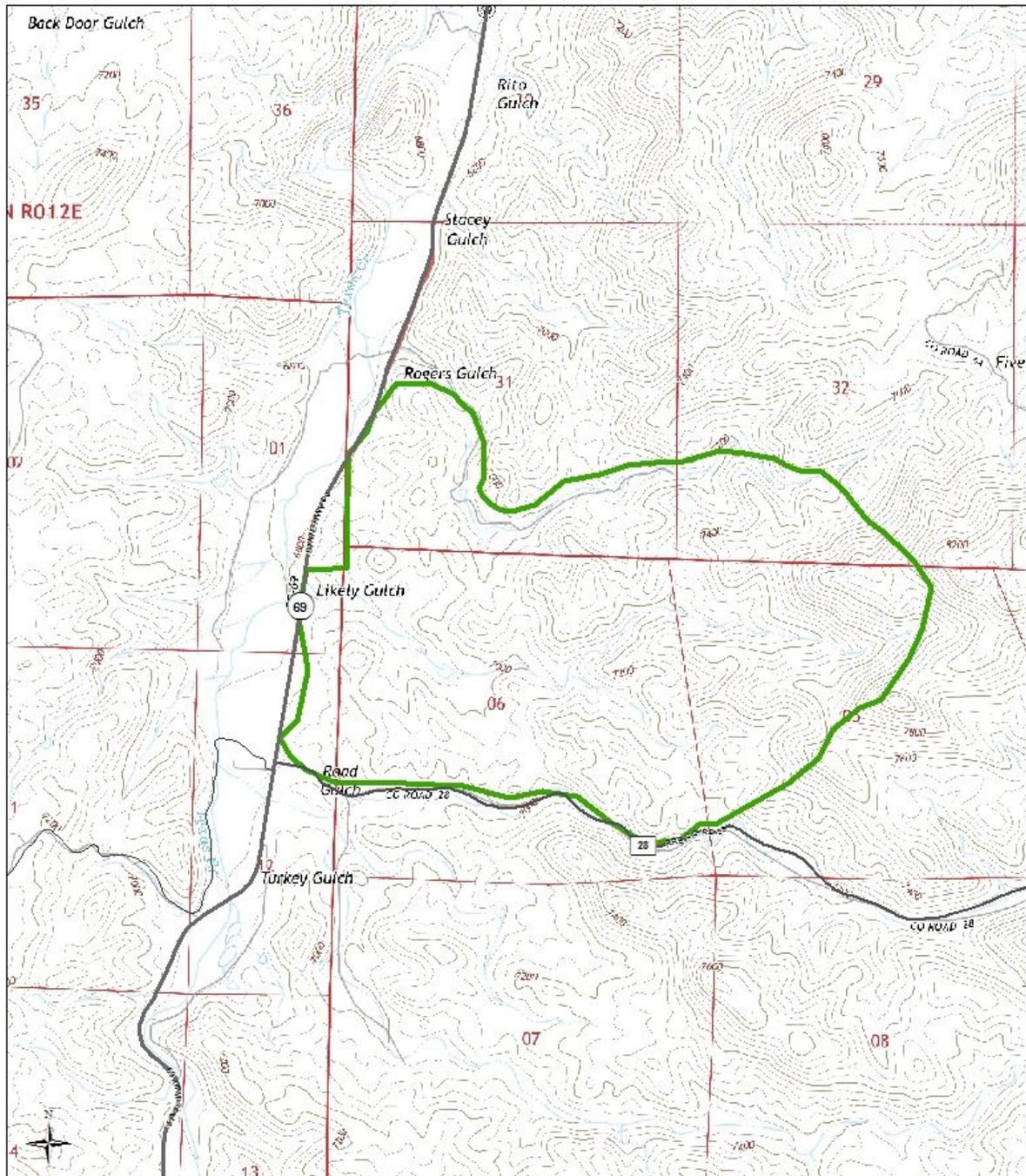
Project Area

T 19 S R 73 W sec 31, 32  
 T 47 N R 12 E sec 18, 12  
 T 20 S R 73 W sec 5, 6

NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL USE OR AN AGGREGATE USE WITH OTHER DATA.



G. Torres  
 5/28/2015



**Llikely Gulch Habitat Enhancement and Fuels Reduction Project**

T 19S R 73W sec 31, 32  
T 47N R 12E sec 1&12  
T 20S R 73W sec 5, 6

**Project Area**

NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL USE OR AGGREGATE USE WITH OTHER DATA.

0 0.5 1 Miles

G. Torres  
5/28/2015

**Figure 1.2. Llikely Gulch Project Map**  
*Chapter 1 Determination of NEPA Adequacy (DNA)*  
*A. Description of Proposed Action and any applicable mitigation measures*

## B. Land Use Plan Conformance

LUP Name	Date Approved
Royal Gorge Resource Management Plan	05/13/1996
Other Document	Date Approved
Other Document	Date Approved

The proposed action is in conformance with the applicable LUP because it is specifically for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions).

**The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):**

## C. Identify 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.**

CO-200-2003-0081 EA-Road Gulch Fuels Reduction Project

CO-200-2006-0003 DNA-Road Gulch Fuels Reduction

CO-200-2006-0090 DNA-Road Gulch Thinning Phase I.2, and Arkansas Mountain Thinning

CO-200-2005-0039 DNA-Turkey Gulch Fuels Reduction

CO-200-2007-0084 DNA- 2007 Road Gulch Fuels Reduction

DOI-BLM-CO-200-2010-0076 DN- Turkey Gulch Fuels Reduction and Habitat Improvement FY2010

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

Public Land Health Assessment September 2004- Texas Creek Grazing Allotment (#15043). A land health assessment of the Lower Grape Creek Watershed, Royal Gorge Watershed, and the Texas Creek Watershed, encompassing this allotment and surrounding areas.

## 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. The EA covered the impacts of fuel reduction using the above methods and locations. A site specific onsite review was completed for the proposal and the proposal is within the parameters of those analyzed in the approved EA.

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

Yes. The range of alternatives analyzed in the Road Gulch Fuels Reduction Project EA are appropriate with respect to the new proposed action. This EA included the proposed action, the no action alternative, and there were some additional alternatives that were considered but not carried forward.

The proposed action contained treatment objectives to reduce fuels to protect communities from wildfire. Another objective is to create/maintain a mosaic of successional stages of vegetation to improve wildlife habitat and forage conditions throughout the landscape. These treatments would be accomplished with mechanical methods and hand tools including, but not limited to, chain saws, skidders, brush hogs, hydro-axes, feller-bunchers, tree spades, and dozers. Prescribed fire, including pile and broadcast burning, would also be used to reduce natural fuel loadings and activity slashes.

The utilization of the trees and vegetation to be removed would be encouraged. The utilization of vegetative products for firewood, fence posts, or other uses, has the potential to create jobs and support the local economy. Removing the vegetative materials to be used as biomass would be beneficial for the treatment areas and could provide the community with a renewable energy source.

Under the no action alternative no fuels reduction projects would be conducted. Vegetation and fuels growth would remain as they are today and continue to accumulate.

Another alternative was considered; however it was not carried forward. This alternative was to not include prescribed burning as a treatment option. Prescribed burning was included, and will be an important method to remove activity slash and excess fuels especially in pile burning efforts.

**3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessments, recent endangered species listings, updated lists 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. The information remains valid and germane to the Proposed Action. There is no new information related to this fuels reduction project.

**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. The proposal is within the parameters of the impacts identified in the EA, and the cumulative impacts analysis remains unchanged

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

Yes. The public involvement and review remains adequate for this action and will continue. Prescribed fire managers have been and will continue working with local land owners, Fremont County fire officials, and local fire departments prior to and during the implementation of prescribed fire or pile burning activities. This project will be completed as a cooperative effort with Colorado Parks and Wildlife.

## E. Persons/Agencies/BLM Staff Consulted

**Table 1.1. Interdisciplinary Team**

INTERDISCIPLINARY TEAM REVIEW			
NAME	TITLE	AREA OF RESPONSIBILITY	Initials/date
Matt Rustand	Wildlife Biologist	Terrestrial Wildlife, T&E, Migratory Birds	MR, 1/7/2015
John Lamman	Range Management Spec.	Range, Vegetation, Farmland, Weeds	JL, 12/17/2014
Dave Gilbert	Fisheries Biologist	Aquatic Wildlife, Riparian/Wetlands	DG, 12/22/2014
Stephanie Carter	Geologist	Minerals, Paleontology, Waste Hazardous or Solid	SSC, 01/12/2015
John Smeins	Hydrologist	Hydrology, Water Quality/Rights, Soils	JS, 12/16/14
Ty Webb	Fire Management Officer	Air Quality	TW, 12/29/14
Dave Parker	Cadastral Surveyor	Cadastral Survey	DP, 7/8/2015
Linda Skinner	Outdoor Recreation Planner	Recreation, Wilderness, LWCs, Visual, ACEC, W&S Rivers	LS, 12/23/2014
Ken Reed	Forester	Forestry	KR, 1/20/15
Michael Troyer	Archaeologist	Cultural, Native American	MT, 7/6/2015
Rich Rotte	Realty Specialist	Realty	RR, 12/16/14
Steve Cunningham	Law Enforcement Ranger	Law Enforcement	N/A

### 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.

### Cooperating Agencies: Colorado Parks and Wildlife

### REMARKS:

Cultural Resources: No historic properties were found in the area of potential effect [see reports CR-RG-82-114 N, CR-RG-83-001 N, CR-RG-87-023 P, CR-RG-93-001 P, CR-RG-12-067 P, and CR-RG-15-033 P]. Therefore, the proposed undertaking will have no effect on any historic properties (those eligible for the NRHP).

Native American Religious Concerns: No possible traditional cultural properties were located during the cultural resources inventory (see above). There is no other known evidence that suggests the project area holds special significance for Native Americans.

Threatened and Endangered Species: There are no records of any federally listed or BLM sensitive species within or near the project area. The Proposed Action will not result in impacts to TES species.

Migratory Birds: To be in compliance with the Migratory Bird Treaty Act (MBTA) and the Memorandum of Understanding between BLM and USFWS required by Executive Order 13186, BLM must avoid actions, where possible, that result in a “take” of migratory birds. Pursuant to BLM Instruction Memorandum 2008-050, to reduce impacts to Birds of Conservation Concern (BCC), no habitat disturbance (removal of vegetation such as timber, brush, or grass) is allowed during the periods of May 15 - July 15, the breeding and brood rearing season for most Colorado migratory birds. The provision will not apply to completion activities in disturbed areas that were initiated prior to May 15 and continue into the 60-day period.

An exception to this timing limitation will be granted if nesting surveys conducted no more than one week prior to vegetation-disturbing activities indicate no nesting within 30 meters (100 feet) of the area to be disturbed. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 a.m. under favorable conditions.

#### MITIGATION:

Wastes, Solid or Hazardous: If the project involves oil or fuel usage, transfer or storage, an adequate spill kit and shovels are required to be onsite during project implementation. The project proponent will be responsible for adhering to all applicable local, State and Federal regulations in the event of a spill, which includes following the proper notification procedures in BLM’s Spill Contingency Plan.

Geology/Minerals: A Free Use Permit is in the process of being issued to Fremont County to initiate a quarry that is located in T19S, R73W, sections 19 and 30. In addition, Fremont County holds a permit for “emergency road repairs” along this county road. Coordination would be required as this project moves forward, to ensure safety and awareness.

## Conclusion

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 requirement of NEPA.

Glenda Torres  
\_\_\_\_\_  
Signature of Project Lead

/s/ Ty Webb  
\_\_\_\_\_  
Signature of Supervisor

/s/ Martin Weimer

\_\_\_\_\_  
Signature of NEPA Coordinator

/s/ Keith E. Berger

\_\_\_\_\_  
Signature of the Responsible Official

7/9/15

\_\_\_\_\_  
Date

**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 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.