Pine Springs Hazardous Fuel Reduction Phase II

United States Department of the Interior, Bureau of Land Management

Follow this and additional works at: https://digitalcommons.usu.edu/utah_enviroassess

Part of the Oil, Gas, and Energy Commons

Recommended Citation
https://digitalcommons.usu.edu/utah_enviroassess/10

This Report is brought to you for free and open access by the Utah at DigitalCommons@USU. It has been accepted for inclusion in Environmental Assessments (UT) by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
United States Department of the Interior
Bureau of Land Management

Environmental Assessment DOI-BLM-UT-G010-2012-79-EA

August, 2012

Pine Springs Hazardous Fuel Reduction Phase II

Location:
Uintah County, Vernal, Utah
Township 14 South Range 22 East, Sections 25 and 36;
Township 14 South, Range 23 East, Sections 30, 31, 32;
Township 15 South, Range 23 East, Sections 5; SLB&M.

U.S. Department of the Interior
Bureau of Land Management
Vernal Field Office
170 South 500 East
Vernal, Utah 84078
1.0 INTRODUCTION AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The Environmental Assessment (EA) has been prepared to analyze the Pine Springs Hazardous Fuel Reduction Phase II project. The EA is an analysis of potential impacts that could result with the implementation of a proposed action or no action alternative. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). A Decision Record (DR), which includes a FONSI statement, is a document that briefly presents the reasons why implementation of the selected alternative will not result in “significant” environmental impacts (effects) beyond those already addressed in the Vernal Resource Management Plan (2008). This document provides the environmental assessment for the Pine Springs Hazardous Fuel Reduction Phase II project.

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the Pine Springs Hazardous Fuel Reduction Phase II project is to reduce the buildup of hazardous fuels that have accumulated over the last several decades in order to prevent the potential for large catastrophic fire events. In addition, the proposed action is needed to maintain important sage-steppe habitat for a variety of wildlife species in the project area.

1.3 CONFORMANCE WITH BLM LAND USE PLAN(S)

The alternatives considered in this EA are in conformance with the Vernal Resource Management Plan Record of Decision (2008). The specific citations are listed below. Page 78 in section Fire-4 reads:

_Hazardous fuel reduction activities will be implemented primarily through the use of prescribed fire and managed wildland fire. In some cases, chemical and/or mechanical treatments will be used in conjunction with fire. Where social and/or resource constraints preclude the use of fire, mechanical and/or chemical treatments will be used._

1.4 RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

Uintah County’s General Land Use Plan, as amended in 2011 relative to public land concerns:

All alternatives considered in detail in the EA would be consistent with the County’s general planning objectives which state:

* To insure that public lands are managed for multiple use and sustained yield and to prevent waste of natural resources.
- To support the wise use, conservation and protection of public lands and its resources including well-planned management prescriptions.

- Management of forage resources directly affect water quality and water supplies.

- The proper management and allocation of forage on public lands is critical to the viability of the Basin’s agricultural, recreation and tourism industry.

**Federal Statutes and Regulations.**


- Disaster Relief Act, Section 417 (Public Law 93-288).


- United States Department of the Interior Manual (910 DM 1.3).


- September 2000, “Managing the Impacts of Wildfires on Communities and the Environment.”
• October 2000, National Cohesive Strategy goal is to coordinate an aggressive, collaborative approach to reduce the threat of wildland fire to communities and to restore and maintain land health.

• August 2001, “Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment -10 Year Comprehensive Strategy” provides a foundation for wildland agencies to work closely with all levels of government, tribes, conservation, and commodity groups and community-based restoration groups to reduce wildland fire risk to communities and the environment.

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION:

2.1 Introduction

This EA focuses on the Proposed Action and No Action Alternatives. The No Action Alternative is considered and analyzed to provide a baseline for comparison of the impacts of the proposed action.

2.2 Proposed Action

The proposed action involves the reduction of approximately 1,387 acres of hazardous fuels through use of the bullhog mastication device. The bullhog methodology involves the chipping of the trees with a reciprocating drum mounted on a rubber tired front end loader machine. The mastication treatment results in bark, sawdust, and wooden chips being left on the ground after treatment is completed. In areas where the Ponderosa Pines are too dense for the mastication device to work, then the Pinyon-Juniper trees would be cut by hand with a chain saw. The resulting slash would then be piled and burned. Piles would be located so that there would be no scorching or burning of adjacent Ponderosa Pines.

In the project area, the Pinyon-Juniper trees (P-J) have increased in overall density and encroached into the sagebrush habitat type, increasing the overall fuel loads. The vegetation in the project area is comprised of both mountain big sagebrush and Wyoming sagebrush that has been encroached by P-J trees. The sagebrush vegetative type has been designated as a Fire Regime Group III (Fire return interval 35-100 years). The project area has also been designated as being in a Class II Condition Class. (Vernal Fire Management Plan, 2009) The increased amount of P-J trees has resulted in a change in the Fire Regime Condition Class from a Class I to a Class II Condition Class. The departure from a Class I Condition Class to a Class II Condition Class indicates that at least one cycle of the natural fire regime fire interval has been missed due to historic fire suppression efforts. The change from a Class I to Class II has resulted in an increase of the hazardous fuel loads in the project area.

No new access roads would be needed to access the project area and access would be via existing roads and trails. No treatment work would be allowed during times of saturated soil conditions, which exist when ruts greater than 4” in depth are created by the bullhog machine in a straight line movement.
The project has been designed to provide for the optimum amount of edge effect in order to increase the habitat values for wildlife, and to maintain the natural openings where the sagebrush habitat is located. P-J trees greater than 26” dbh would not be treated, and no Ponderosa Pine trees would be treated.

Due to the potential for weed invasion within the project area, the following weed prevention measures would be adhered to:

1. A pre-project weed inventory would be conducted to determine the presence of noxious weeds. If weeds are found, they would be: a) mapped and reported; 2) removed or treated prior to surface disturbance; 3) and removed or treated prior to seed set when possible.
2. All equipment would be power-washed prior to entering the project area.
3. All vehicles and equipment would be power-washed after driving through a noxious weed infestation.
4. Staging areas would be located in weed free sites.
5. The project area would be monitored annually for three years to for any noxious or invasive weed establishment.
6. Annual treatments of weeds would be conducted under the authority of existing Vernal Field Office Pesticide Use Proposals, and following existing policy (Vernal Field Office Surface Disturbing Weed Policy 2009).

Treatment activities would not be allowed from December 1 - April 30, during the elk wintering time period, and from May 15 - June 30 during the elk calving period.

If treatment activities occur between May 1 - August 15, then a raptor survey would be conducted by a qualified wildlife biologist.

No chemicals subject to SARA Title III in amounts greater than 10,000 pounds would be used. No extremely hazardous substances as defined in 40 CFR 355 in threshold planning quantities would be used.

Cultural resource sites 42Un4516, 42Un516, and 42Un5139 would be avoided by 250 feet. The sites would be flagged immediately prior to treatment and then the flagging would be removed once the treatment was completed.

2.3 No Action

Under this alternative, no hazardous fuel reduction actions would be taken. Current resource conditions and trends would continue.

2.4 Alternatives Considered, but Eliminated from Further Analysis:

2.4.1 Prescribed Fire

The project contains a moderate amount of cheatgrass within the understory. The use of prescribed fire would result in an expansion of the cheatgrass species which typically responds
favorably to fire. The expansion of cheatgrass from fire would result in an increased amount of the highly flammable fuel bed, which would increase the overall hazardous fuel loading. Thus this alternative was not considered since it would not meet the purpose and need of reducing hazardous fuel loads.

In the project area, the Wyoming and Mountain sagebrush habitats provides crucial elk winter and summer range, and crucial mule deer summer range, in addition to providing habitat for a host of sagebrush obligate non-game species. The loss of this habitat type combined with the ongoing loss of habitat loss from the active energy development in the area would result in even more loss of this important habitat type. This alternative was not considered, because it would not maintain sagebrush habitat for wildlife species.

2.4.2 Hand Treatments

Cut and Lay where Felled

The use of hand treatments (chainsaws) to achieve the hazardous fuel reduction objective was considered but eliminated. This treatment would permit the use of chainsaws to cut down the trees and leave them where they lie. The density of P-J trees is approximately 260 stems/acre, and with the proposed treatment area covering 1,387 acres, then there would be approximately 360,620 trees laying on the ground. With that density of trees, manually cutting the trees down and leaving them on the ground would result in a large amount of woody slash lying on the ground. This would have the effect of substantially increasing the overall amount of hazardous fuel loads on the surface as the slash dries out. This alternative was not considered because it would not reduce the accumulation of hazardous fuels.

2.4.3 Cut into Smaller Slash with Some Felled Tree Removal

The use of hand treatments (chainsaws) with the slashing debris cut to a smaller particle size along with some removal of felled trees was considered. It would not be feasible or realistic to require a contractor to spend the time and resources needed to reduce the standing trees down to a smaller particle size than the typical hand treatment produces. The rationale is based on that the average density of trees within the project area is approximately 260 stems/per acre, resulting in the hand cutting of approximately 360,620 trees. Additional time and effort would then be required to reduce the cut trees debris down to a size comparable to the size resulting from a mastication treatment would be cost prohibitive and deemed unreasonable. Having a portion of the tree boles physically removed by hand from the project site would also be impractical and unfeasible due to the time, effort and expense to physically remove the trees over 1,387 acres. In addition, relocating felled trees effectively transfers the hazardous fuel from the project site to a nearby site, which would not reduce the fuel loading in the project area. Hazardous fuel contractors typically do not perform this kind of work, due to the high cost associated with this method. Thus this alternative was considered but eliminated based on the rationale discussed above.

3.0 AFFECTED ENVIRONMENT:
3.1 Introduction:

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values) of the project area as identified by the interdisciplinary team checklist. (Appendix A) This chapter provides the baseline for comparison of impacts of impacts/consequences described in Chapter 4.

3.2 General Setting:

The project is located in the Bookcliffs area, approximately 65 miles south of Vernal, Utah. The project area occurs across a topographical plateau. The vegetation in the area consists of Pinyon-Juniper, mountain sagebrush, Wyoming sagebrush, cheatgrass, larkspur, needle & thread grass, Indian rice grass, western wheatgrass, and a small amount of various forb species.

3.3 Resources Brought Forward for Analysis:

During the analysis conducted by the interdisciplinary team, it was found that the following aspects of the environment could potentially be affected by the proposed action.

3.3.1 Fish and Wildlife Excluding USFWS Designated Species

Big Game

Mule deer and Rocky Mountain elk are the primary big game species found within the project area. Use typically occurs from spring to winter, when elk and deer utilize the project area for foraging, thermal cover and escape cover. Both species have an extremely variable diet and therefore live in a variety of habitats. They consume a combination of grasses, forbs, and shrubs (UDWR 2010). Food consumption is also related to the season of use. During winter, elk move to lower elevations where they are found most often on south facing slopes, primarily in P-J woodlands. Deer typically move down to lower elevation foothill areas.

Crucial elk winter and summer habitat and substantial winter deer habitat has been designated within the project area. These designations were made in the Vernal Field Office RMP.

Other wildlife species that are likely to occur in the project area include black bear, mountain lion, coyote, and bobcat, as well as a large variety of small mammals. Many of these species are habitat generalists, meaning they are not tightly restricted to specific habitat types. These species have not shown negative impacts by bull hog operations; therefore, they will not be discussed further in this document.

Raptors

Some of the more visible birds in and near the project area could include golden eagles, red-tailed hawks, Cooper's hawks, Swainson's hawks, great horned owls, and ravens. The BLM raptor database was reviewed and no known nests were within the project area.
3.3.2 Fuels and Fire Management

The project area is located within the Upper Bookcliffs (C6) Fire Management Unit (FMU) identified in the Vernal Fire Management Plan. The Upper Bookcliffs FMU calls for:

- Approximately 113,000 acres per decade would be treated with prescribed fire.

  Objectives are: achieve the desired mix of seral stages for all major vegetative types, remove P-J and Douglas Fir encroachment from the Wyoming sagebrush, mountain big sagebrush, aspen, and mountain browse types; and reduce fuel loads.

- Non fire Fuels Treatments - Treat 7,000 acres per decade.

  Objectives are: achieve the desired mix of seral stages for the major vegetative types; remove the encroaching Pinyon-Juniper from the sagebrush and aspen types; provide fuel breaks in the sagebrush types to limit the size of unplanned fires; and reduce fuel loads. Chemical treatments would be utilized in conjunction with prescribed fire and mechanical treatments to achieve desired objectives, and to also control invasive species.

Fire Regime Condition Class (FRCC) as outlined in the Forest Service Rocky Mountain Research Station technical report entitled “Development of Coarse Scale Spatial Data for Wildland Fire and Fuel Management (RMRS-87, 2002). The Healthy Forest Restoration Act adopts this classification system, known as the Fire Regime Condition Class which describes the amount of departure of an area or landscape from historic to present conditions. This departure from the natural state may be a result of changes in one or more ecosystem components such as fuel composition, fire frequency, or other ecological disturbances. As mandated by national direction, the Vernal FMP utilizes the FRCC classification system to rank existing ecosystem conditions and prioritize areas for treatment. The project area is has been designated as FRCC 2 (lands that are moderately altered from their historical range). Due to this alteration in the fire regime and corresponding change in the Fire Condition Class there has been a corresponding increase in the overall fuel loadings.

The alteration in the FRCC from a Class 1 to a Class 2 can be associated with the reduced role of fire in the ecosystem. The shift from a relatively stable or limited rate of P-J expansion to a substantial increase in conifer establishment in both space and time is generally attributed to the reduced role of fire; introduction of livestock grazing, and shifts in climate. (Miller, et al: 2008)

Fuel loadings for the project area were assessed through utilizing BLM Technical Note 430-“Guide for Quantifying Fuels in the Sagebrush Steppe and Juniper Woodlands of the Great Basin” (Stebleton and Bunting, 2009). Based on this guide along with the research completed by Miller et al (2005, 2008) and on site tree density measurements to determine Pinyon-Juniper stems per acre, it was determined that the project area is in a Phase 2 condition as described in the literature described above.

For a Phase 2 condition, fuel loads are estimated to be:

- Forb and grass component-
- Live herbaceous loading- 0.06 tons/acre
- Dead herbaceous loading- 0.02 tons/acre
- Total herbaceous loading- 0.08 tons/acre

- Non tree woody component (Shrubs)
  - Total shrub fuel loading- 1.86 tons/acre

- Pinyon-Juniper Trees
  - Live fuel loading- 17.21 tons/acre
  - Dead fuel loading- 1.35 tons/acre
  - Total Fuel loading is estimated to be 18.56 tons/acre

Combined fuel loadings for the project area are approximately 20.5 tons/acre

### 3.3.3 Greenhouse Gas Emissions

Ongoing scientific research has identified the potential impacts of anthropogenic (man-made) greenhouse gas (GHG) emissions and changes in biological carbon sequestration due to land management activities on global climate. Through complex interactions on a regional and global scale, these GHG emissions and net losses of biological carbon sinks cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia, recent industrialization and burning of fossil carbon sources have caused CO₂ concentrations to increase dramatically, and are likely to contribute to overall global climatic changes. The Intergovernmental Panel on Climate Change recently concluded that warming of the climate system is unequivocal and most of the observed increase in globally average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations (IPCC 2001).

Global mean surface temperatures have increased nearly 1.8°F from 1890 to 2006 (IPCC, 2001). Models indicate that average temperature changes are likely to be greater in the Northern Hemisphere. Northern latitudes (above 24° N) have exhibited temperature increases of nearly 2.1°F since 1900, with nearly a 1.8°F increase since 1970 alone. Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of GHGs are likely to accelerate the rate of climate change.

In 2001, the IPCC indicated that by the year 2100, global average surface temperatures would increase 2.5 to 10.4°F above 1990 levels.). Computer model predictions indicate that increases in temperature will not be equally distributed, but are likely to be accentuated at higher latitudes. Warming during the winter months is expected to be greater than during the summer, and increases in daily minimum temperatures is more likely than increases in daily maximum temperatures. Increases in temperatures would increase water vapor in the atmosphere, and reduce soil moisture, increasing generalized drought conditions, while at the same time enhancing heavy storm events. Although large-scale spatial shifts in precipitation distribution may occur, these changes are more uncertain and difficult to predict.
Several activities contribute to the phenomena of climate change, including emissions of GHGs (especially carbon dioxide and methane) from fossil fuel development, large wildfires and activities using combustion engines; changes to the natural carbon cycle; and changes to radiative forces and reflectivity (albedo). It is important to note that GHGs will have a sustained climatic impact over different temporal scales. For example, recent emissions of carbon dioxide can influence climate for 100 years.

3.3.4 Invasive Plants/Noxious Weeds, Soils, and Vegetation

Soils

Soils within the project area have been studied, mapped and described as part of the official published Uintah soil survey, completed by the Natural Resource Conservation Service (NRCS, 1996). The Uintah soil survey meets the standards of the National Cooperative Soil Survey and describes the soil map units, their individual components, and provides interpretive information on soil use and management.

Soils within the project area are comprised of one soil map unit. Map unit 119 is comprised of the Jagon gravelly clay loam. The Jagon soil is derived from parent material composed of eolian deposits and slope alluvium formed over residium derived from shale and sandstone. This soil is moderately deep and well drained, and the risk of water erosion is moderate.

Vegetation

Studies across the Intermountain West have shown substantial increases in P-J trees since the late 1800's. (Burkhardt and Tisdale, 1976; Gedney et al. 1999; Knapp and Soule 1998; Miller and Rose 1995; Soule and Knapp 2000; Tausch et al. 1981). These increases were the result of both infill in mixed aged tree communities and expansion into shrub-steppe communities that appeared to have not supported trees over the last few centuries. (Miller, et al. 2008) This documented expansion of P-J into the shrub-steppe community has also occurred in the project area, and has resulted in a decline in the overall cover of the shrubs, forbs, and grasses, along with a decline in the vigor, and productivity of the understory species that occur due to the inherent ability of P-J to outcompete the understory species for light, water, and nutrients.

Miller et al. (2008, 2005) have identified and described phases of woodlands development in the Intermountain West. Phases are described as:

- **Phase I** - P-J trees are present but shrubs and herbs are the dominant vegetation that influences ecological processes on the site.
- **Phase II** - P-J trees are co-dominant with shrubs and herbs and all three vegetation layers influence ecological processes on the site.
- **Phase III** - P-J trees are the dominant vegetation and the primary plant layer influencing ecological processes on the site.
Using the above descriptions, and the use of the BLM Technical Note 430- “Guide for Quantifying Fuels in the Sagebrush Steppe and Juniper Woodlands of the Great Basin” (Stebleton and Bunting, 2009) along with USGS Circular 1335- Pinyon-Juniper Field Guide: Asking the Right Questions to Select Appropriate Management Actions (Tausch et al 2009) it was determined that the project area can best be depicted as being in a Phase II condition.

### 3.3.5 Migratory Birds

The Migratory Bird Treaty Act (MBTA) was implemented for the protection of migratory birds. Unless permitted by regulations, the MBTA makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. In addition to the MBTA, Executive Order 13186 sets forth the responsibilities of Federal agencies to further implement the provisions of the MBTA by integrating bird conservation principles and practices into agency activities and by ensuring that Federal actions evaluate the effects of actions and agency plans on migratory birds.

The Utah Partners In Flight (UPIF) has prioritized migratory birds that are considered “most in need of conservation action, or at least need to be carefully monitored throughout their range within Utah.” These are also the species “that will be most positively influenced by management as well as those species with the greatest immediate threats” according to UPIF (Parrish et al. 2002).

Numerous species may migrate through, or nest within the project area. This section identifies migratory birds that may inhabit the project area such as BHCA’s or those that are classified, as High-Priority birds by Partners in Flight*, according to the habitat types found within the project area:

- **Sagebrush-Steppe**: horned lark, sage sparrow, sage thrasher*, Brewer’s sparrow*, western kingbird, Say’s phoebe, prairie falcon, green-tailed towhee*, and Swainson’s hawk.
- **Pinyon-Juniper Woodlands**: black-chinned hummingbird*, gray flycatcher*, gray vireo*, Lewis’ woodpecker, Clark’s nuthacker, pinyon jay, western scrub jay, black-throated gray warbler, bushtit, juniper titmouse*, northern shrike, Virginia’s warbler*, broad-tailed hummingbird*, mountain bluebird*, and Say’s phoebe.

### 3.36 Greater Sage-grouse (BLM Sensitive, Federal Candidate)

The greater sage-grouse is a BLM sensitive species, and a federal candidate for listing under the Endangered Species Act. These birds inhabit sagebrush plains, foothills, and mountain valleys. Sagebrush is the predominant plant of quality habitat. Factors involved in the decline in both the distribution and abundance of greater sage-grouse include permanent loss, degradation, and fragmentation of sagebrush-steppe habitat throughout the western states including Utah (Heath et al.1996, Braun 1998). Documented severe populations declines (approximately 80%) occurred from the mid-1960s to mid-1980s. Research and conservation efforts in the last 20 years have help stabilize and recover many populations. Populations appear to have taken a slight positive turn in recent years. Utah Division of Wildlife Resources (UDWR 2012) identifies
approximately 100 acres of occupied habitat within the project area. There are no known leks within the project area.

4.0 ENVIRONMENTAL IMPACTS

4.1 Introduction:

This Chapter analyzes the direct and indirect impacts that the proposed action and the no action alternative have on the resources identified in Chapter 1 and explained in Chapter 3. It also analyzes the cumulative impacts expected from other land use activities and recognizes actions that could take place in the reasonably foreseeable future.

4.2 Alternative A – Proposed Action

4.2.1 Fish and Wildlife Excluding USFWS Designated Species

Raptors

Impacts would be the same as the migratory bird section. No treatments are proposed from December 1 – June 30 due to big game timing stipulations. If treatment activities do occur from May 1 - August 15, then a raptor survey would be conducted by a qualified wildlife biologist, prior to treatment activities, and any active nests found within the project area would be avoided by .5 mile buffer.

Big Game

One of the major problems facing big game populations in Utah is that many of the crucial ranges are in late successional plant community stages that are dominated by increasing densities of P-J or other conifer trees (UDWR 2008). The tree-dominated habitats occupied by persistent P-J offer a place to retreat from severe weather, but offer little in the way of forage. That is why it is important to maintain mosaic patterns of habitat that can provide forage, cover, and water. Treatment of the encroachment P-J sites can successfully return this area into a grassland/shrubland community, thus enhancing and promoting the return of sagebrush and other perennial understory species which will benefit big game habitat for the long term.

Both deer and elk can be found within the project area. An increase in human presence during the summer, and winter months could cause short term impacts (increased stress, increased energy expenditure, displacement during calving) to big game species. As per the proposed action no treatment activities would be allowed from December 1 - April 30, during the elk wintering time period, and from May 15 - June 30 during the elk calving period.

4.2.2 Fuels and Fire Management:

With the removal of the encroaching P-J, the overall fuel loadings for the project area would decline from an existing 20.56 tons/acre to 2.05 tons/acre, a reduction of an estimated 18.51 tons/acre. The FRCC for the project area would change from the current Class II Condition Class to a Class I condition Class. The reduction in fuel loading would be expected to result in a
decline in the degree of fire severity that occurs from any unplanned fire events, as the residual shrubs, forbs, and grasses typically produce shorter flame lengths and reduced rates of spread of the flaming fire front. With an expected decline in fire severity, then the understory species are more likely to survive an unplanned fire event, which would also hasten vegetative recovery following a fire event. A hastened recovery of vegetation would also likely reduce the potential for any post fire erosion events.

4.2.3 Greenhouse Gas Emissions

Climate change analyses are comprised of several factors, including greenhouse gases (GHGs), land use management practices, the albedo effect, etc. The tools necessary to quantify climatic impacts are presently unavailable. As a consequence, impact assessment of specific effects of anthropogenic activities cannot be determined. Additionally, specific levels of significance have not yet been established. Existing climate prediction models are global in nature; so are not at the appropriate scale to estimate potential impacts of climate change on the project area. Therefore, climate change analysis for the purpose of this document is limited to accounting and disclosing of factors that contribute to climate change. Qualitative and/or quantitative evaluation of potential contributing factors within the project area are included where appropriate and practicable. The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts. However, potential impacts to air quality due to climate change are likely to be varied. For example, if global climate change results in a warmer and drier climate, increased particulate matter impacts could occur due to increased wind-blown dust from drier and less stable soils. Cool season plant species’ spatial ranges are predicted to move north and to higher elevations, and extinction of endemic threatened/endangered plants may be accelerated. Due to loss of habitat, or due to competition from other species whose ranges may shift northward, the population of some animal species may be reduced. (UNFCC Final GHG Inventory, October 2007)

4.2.4 Invasive Plants/Noxious Weeds, Soils, and Vegetation

Soils

Soil erosion is not expected to increase as a result of the proposed action, as the project area is relatively flat, and no mastication treatment would be conducted during periods of saturated soil conditions. The proposed action would result in an increase in overall ground cover as removal of the encroaching P-J trees is expected to benefit the understory grasses, forbs, and shrubs in their overall productivity and vigor since the competition with the P-J for water, nutrients and light would be dramatically reduced. An increase in overall ground cover is expected to improve overall watershed conditions through increased infiltration and decreased amounts of bare ground, which decreases the potential for soil erosion.

Vegetation

Under this alternative, there would be 1,387 acres of fuel reduction activities. Encroaching P-J trees would be removed across the 1,387 acre project and there would be a minor amount of shrub loss from being crushed by the bull hog machine. The shrubs, grasses, and forbs are
expected to increase in overall vigor and productivity as the competition with the P-J trees for light, nutrients and water is drastically reduced. 1,387 acres of shrub-steppe habitat would be maintained as shrub-steppe habitat.

The proposed action would result in a change from the current Phase II condition to a Phase I Condition as described in BLM Technical Note 430- (Stebleton and Bunting, 2009), and (Miller et al. 2008, 2005).

4.2.5 Migratory Birds

Migratory bird species may be present during the breeding/nesting season from May 1- August 1. If bull hog operations were to take place during the breeding/nesting season, individual bird species could be impacted. Impacts may include; destruction of nests, eggs, and nesting habitat, fragmentation of habitat, reduction of habitat patch size, human presence during the breeding/nesting season can cause nest abandonment. The mastication would result in a long term loss of 1,387 acres of P-J trees. There would also be a minor amount of shrub loss from being crushed by the bull hog machine. Nesting species associated with those habitat types would most likely move to adjacent areas to nest. Also, the proposed action targets younger P-J trees that are not older, mature stands of p-j which are favored by most pinyon-juniper bird species. Although there may be some short-term direct impacts to pinyon-juniper bird species, the long term benefit of the HFR project would benefit sagebrush/grassland bird species, several of which are currently identified as BLM State Sensitive Species.

4.2.6 Greater Sage-grouse

The UDWR has designated approximately 100 acres of the project area as occupied habitat. The 100 acres consists of encroaching Pinyon-Juniper trees. Discussions with UDWR (Maxfield 2012) indicate that there has been no documented use of the 100 acres of occupied habitat for the past 10 years. Direct and indirect impacts (mortality of individual grouse from bullhog vehicles) to sage grouse are not anticipated because grouse are not expected to occupy the habitat due to its poor quality.

Treatment of the encroachment Pinyon-Juniper can successfully maintain the project area as a sage/grass community. Sustaining this habitat would enhance and promote long term maintenance of sage-grouse dependent vegetation, resulting in positive impacts to sage-grouse habitat for the future.

4.3 Alternative B – No Action

Under the No Action Alternative, current resource trends would continue.

4.3.1 Fish and Wildlife Excluding USFWS Designated Species

Under this alternative, there would be no removal of P-J trees across the project area.

Raptors
Impacts under this alternative would be the same as the no action for Migratory Birds.

**Big Game**

The continued encroachment by P-J into sagebrush habitats would be detrimental to sagebrush-dependent species because it results in the loss or fragmentation of sagebrush habitat. Over time the P-J trees will out compete the shrubs, grasses, and forbs, resulting in the loss of the sagebrush habitat type. The decline of the sagebrush type habitat including the understory would result in a loss of forage over 1,387 acres for a variety wildlife species, especially for sagebrush dependent species.

4.3.2 **Fuels and Fire Management**

Under this alternative, there would be no removal of the encroaching P-J trees across the project area. Hazardous fuel loads would be expected to increase as the P-J densities increase and replace the shrub/herbaceous understory. The FRCC for the project area would be expected to change from a Class II Condition to a Class III condition as the fuel loading increases. As the fuel loading increases, increased fire severity is also expected to increase from unplanned fire events.

4.3.3 **Greenhouse Gas Emissions**

Impacts for this alternative would be the same as described in Section 4.2.3

4.3.4 **Invasive Plants/Noxious Weeds, Soils, and Vegetation**

**Soils**

Under this alternative, there would be no removal of the encroaching P-J trees across the project area. Over time the P-J trees would eventually out compete the shrubs, grasses, and forbs for water, nutrients, and light, resulting in the loss of the sagebrush habitat type in the project area. As P-J becomes the dominant species affecting ecological processes on the site, overall ground cover is expected to decline. With declining ground cover, overland erosion is expected to increase, leading to increased erosion and sedimentation rates.

**Vegetation**

Under this alternative, there would be no removal of the encroaching P-J trees across the project area. Under current climatic conditions, conifers are likely to continue expanding into shrub–steppe plant communities. (Miller, et al. 2008) With the expected continuation of the P-J expansion, the project area is expected to move from the existing Phase II condition to a Phase III condition. In a Phase III condition, the P-J trees would have replaced the sagebrush and herbaceous understory, and the P-J would be the dominant species affecting the ecological processes on the site. As the perennial species decline over time, the existing cheatgrass plants are expected to also increase over the same time period, resulting in a site with a P-J tree
overstory and a cheatgrass dominated understory. There would be a long term loss of 1,387 acres of shrub-steppe habitat over time.

4.3.5 Migratory Birds

The continued encroachment by P-J into sagebrush habitats would be detrimental to sagebrush-dependent species because it results in the loss of sagebrush foraging/nesting habitat. Over time, there is expected to be a loss of 1,387 acres of foraging and nesting habitat under this alternative.

4.3.6 Greater Sage-Grouse

Encroachment by Pinyon-Juniper will continue into the sagebrush habitat type. The P-J trees will eventually replace the sagebrush and herbaceous understory. There would be a long term loss of 1,387 acres of shrub-steppe habitat over time.

4.4 Cumulative Impacts Analysis:

“Cumulative impacts” are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions

4.4.1 Fish and Wildlife Excluding USFWS Designated Species

Migratory Birds, Raptor Species, Greater Sage-Grouse

The Vernal Field Office has been involved in restoring declining habitat conditions in the sage steppe habitat type. It is expected that habitat treatments within sage steppe habitat types will continue to occur in the future.

Big Game

Due to a precipitous decline in deer numbers in the early 1990s deer hunting has been limited and/or closed. Conversely, elk numbers have risen substantially in the same time span. Presently, the Bookcliffs is open to limited entry permits for both deer and elk. Since present deer and elk numbers are below the established herd management objective numbers, deer and elk numbers will continue to increase in the future, until herd objective numbers are realized. As herd numbers increase, then the continued need for vigorous and productive vegetative types will increase.

4.4.2 Fire and Fuels

The Cumulative Impact area for Fire and Fuels is the Vernal Field Office. The Bureau of Land Management has been directed by Congress (2001 Updated Federal Wildland Fire Management Policy) to implement actions designed to reduce decades of accumulation of hazardous fuels on public lands. In the future in the Vernal Field Office, hazardous fuel reductions activities will
most likely increase through the use of mechanical, prescribed fire, and wildland fire use to manage the vegetative resource. With the increased hazardous fuel reductions, the Field Office landscape will eventually be composed of different age classes of vegetation.

4.4.3 Greenhouse Gas Emissions

Rangelands, and to a broader extent sagebrush steppe ecosystems, are important for carbon sequestration, primarily because of the significant carbon stored as soil organic matter and the magnitude of the rangelands that occur within the United States (roughly one-third of total lands, excluding Alaska). Conversion of sagebrush steppe to annual vegetation dominance (such as cheatgrass) is associated with 1) volatilization of carbon in woody shrubs during wildfires (carbon source); 2) loss of surface soil organic matter layer due to erosion after a wildfire, 3) reduction in net carbon stored in deeper soils; and 4) reduction in net carbon exchange in annual grasslands compared to sagebrush steppe lands. Conversion of sagebrush steppe to annual vegetation dominance would be cumulative with such events occurring throughout much of the western United States.

4.4.4 Invasive Plants/Noxious Weeds, Soils, and Vegetation

The Cumulative Impact area for invasive plants, vegetation, and soils is the Vernal Field Office. Since 2004, The Vernal Field Office of the Bureau of Land Management has been involved with the Utah Partners for Conservation and Development to take actions to restore declining habitat conditions in the sage steppe habitat type. Approximately 50,000 acres have been treated to date, and continued actions by this group are expected to continue to occur in the future through the use of mechanical, prescribed fire, chemical applications, and wildland fire use to manage the vegetative resource. The Field Office Weed Monitoring and Control program would continue to treat weed infestation areas.

5.0 CONSULTATION AND COORDINATION

5.1 Introduction

During preparation of the EA, public involvement consisted of posting the proposal on the Utah BLM Environmental Notification Bulletin Board (ENBB) on January 18, 2012. Issues or impacts identified through the interdisciplinary team analysis process are described in Appendix B.

5.2 Persons, Groups, and Agencies Consulted

Utah Division of Wildlife Resources
Alameda Ranches
State Historical and Preservation Office
State Institutional and Trust Land

5.3 List of Preparers
Preparers are listed in Appendix A in the ID Team Checklist

6.0 REFERENCES


U.S. Natural Resources Conservation Service, 1996, Uintah Soil Survey

**INTERDISCIPLINARY TEAM CHECKLIST**

Project Title: Pine Springs Hazardous Fuel Reduction Phase II

NEPA Log Number: G010-2012-079

Project Leader: Steven Strong

**DETERMINATION OF STAFF:** (Choose one of the following abbreviated options for the left column)

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.

<table>
<thead>
<tr>
<th>Determination</th>
<th>Resource</th>
<th>Rationale for Determination*</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX I H-1790-1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>Air Quality</td>
<td>Air quality impacts from the projected levels of emission are expected to be negligible. Minimum quantities of dust emissions are anticipated because the volume of traffic from this proposal would be less than one or two vehicles per day during the project, and the project is estimated to take 10 days to complete.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Areas of Critical Environmental Concern</td>
<td>A review of the GIS layer files indicates that there are no ACECs in the project area.</td>
<td>Jason West</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>BLM Natural Areas</td>
<td>A review of the GIS layer files indicates that there are no BLM Natural Areas in the project area.</td>
<td>Jason West</td>
<td>3/5/2012</td>
</tr>
<tr>
<td>NP</td>
<td>BLM Sensitive Plant Species</td>
<td>The VFO GIS files show that there are no known habitats for sensitive plant species exists in the project area</td>
<td>Steven Strong</td>
<td>3/1/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Cultural Resources</td>
<td>Waiver #4 is being used on this undertaking. The entire Pine Springs Bullfrog project area has been inventoried on at least one occasion (U-04-ST-0432) appears to be the most recent. Eight sites are associated with the current project area. Sites 42Un686, 42Un1785, 42Un3297, 42Un3715, and 42Un3717 are all &quot;not eligible&quot; sites and do not require avoidance measures. Site 42Un1786 is an &quot;eligible&quot; lithic scatter located on SITLA managed land and will be avoided by 250 feet as per the proposed action. Site 42Un4516 is an &quot;eligible&quot; historic grave on BLM managed land and needs to be avoided by at least 250 feet. Site 42Un5139 is an &quot;eligible&quot; wickiup located on SITLA managed land and needs to be avoided by at least 250 feet. All three sites must be flagged for avoidance prior to treatment. I have been in communication with the SITLA and DWR archaeologists on this project and we all concurred on this treatment method.</td>
<td>Kathie Davies</td>
<td>4/12/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Environmental Justice</td>
<td>No minority or economically disadvantaged communities or populations are present which could be affected by the proposed action or alternatives.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Farmlands (Prime or Unique)</td>
<td>A review of the Field Office GIS layer files indicates that there are no Prime or Unique Farmlands located in the Field Office.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>Determination</td>
<td>Resource</td>
<td>Rationale for Determination*</td>
<td>Signature</td>
<td>Date</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------</td>
</tr>
<tr>
<td>PI</td>
<td>Fish and Wildlife Excluding USFWS Designated Species</td>
<td>Crucial summer and winter habitat has been designated for elk. Treating the encroachment will benefit sage-steppe habitat types.</td>
<td>Dixie Sadlier</td>
<td>3/05/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Floodplains</td>
<td>A review of the Field Office GIS layer files indicates that there are no 100 year flood plains located in the project area.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>PI</td>
<td>Fuels/Fire Management</td>
<td>Project is designed to reduce hazardous fuels.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Geology / Mineral Resources/Energy Production</td>
<td>The project area is leased for fluid minerals. However, there are no existing and or developed energy production sites located within the project area.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>PI</td>
<td>Greenhouse Gas Emissions</td>
<td>Greenhouse gas emissions would be realized from the proposed action, however, there are currently no &quot;credible scientific&quot; methods to predict the potential climate change impacts from project specific GHG emissions (40 CFR 1502.22 Incomplete or Unavailable Information).</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Hydrologic Conditions (stormwater)</td>
<td>Project is designed to improve ground cover which would improve overall hydrologic conditions.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>Soils-PI</td>
<td>Invasive Plants/Noxious Weeds, Soils, and Vegetation</td>
<td>There is a slight risk of increased soil erosion. There are minor amounts of henbane, houndstongue, and musk thistle present in the project area. Since there would be a minor amount of surface disturbance combined with applicant committed measures, noxious and invasive weeds are not expected to increase. There would be a loss of about 550 acres of P-J.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Lands/Access</td>
<td>A review of the GIS layer files shows that the proposed action would not conflict with any approved access roads or existing ROWs.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Lands with Wilderness Characteristics (LWC)</td>
<td>A review of the GIS layer files shows that there are no LWC lands located within the project area. Inventory was conducted for the Jacks Wagon Road inventory unit and the Pine Spring unit and no wilderness character was found.</td>
<td>Jason West</td>
<td>3/5/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Livestock Grazing</td>
<td>There would be a long term increase in forage for livestock as the understory species respond with increased vigor and productivity. Since no seed is being applied with the proposed action, no post treatment grazing deferment is required.</td>
<td>Dusty Carpenter</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>PI</td>
<td>Migratory Birds</td>
<td>There could be short term impacts to migratory species. Over time sage-steppe species will benefit due to the treatment of encroaching pinyon-juniper.</td>
<td>Dixie Sadlier</td>
<td>3/05/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Native American Religious Concerns</td>
<td>A Tribal consultation letter was sent on 4/12/2012. The BLM received one response from the Confederated Tribes of the Goshute. They deferred comment to the Northern Ute Tribe. Another letter was received on 4/27/2012 from the Hopi Tribe asking to be advised of any &quot;adverse effects&quot; the project may have on cultural material. The BLM did not receive any additional comments from the Tribes.</td>
<td>Kathie A. Davies</td>
<td>5/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Paleontology</td>
<td>No subsurface disturbance is planned to occur with the proposed action, thus there would be no impacts to Paleontology resources.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Rangeland Health Standards</td>
<td>Rangeland Health Standards have not been completed for this allotment at this time. The proposed action is designed to improve ground cover which would benefit</td>
<td>Dusty Carpenter</td>
<td>4/2/2012</td>
</tr>
<tr>
<td>Determination</td>
<td>Resource</td>
<td>Rationale for Determination*</td>
<td>Signature</td>
<td>Date</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>-----------------------------</td>
<td>--------------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rangeland health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>Recreation</td>
<td>Hunting takes place within the project area, ATV use is limited to designated trails and travel within the project area.</td>
<td>Jason West</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Socio-Economics</td>
<td>Due to the small scale project size, socioeconomics are not expected to be measurably impacted by this proposed project.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>PI</td>
<td>Threatened, Endangered or Candidate Animal Species</td>
<td>Office files were reviewed, along with a site visit, no T&amp;E species or habitat was identified. The northern boundary line of the project area was identified as occupied habitat for greater sage-grouse by the UDWR (approximately 100 acres). There are no known leks within the project area or directly adjacent to the area, therefore, no brood-rearing habitat has been identified. The probability of sage-grouse using the area is very low. The proposed action is consistent with the guidelines established in Utah IM-2012-043. Personal communication with UDWR Sensitive Species Biologist, Brian Maxfield, 2012.</td>
<td>Dixie Sadlier</td>
<td>3/05/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Threatened, Endangered, Proposed, or Candidate Plant Species</td>
<td>Review of office files show no threatened, endangered or candidate plant species within the project file.</td>
<td>Steven Strong</td>
<td>3/1/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Visual Resources</td>
<td>The proposed project falls within a VRM Class III area. For VRM Class III, the proposed P-J mastication action is not expected to detract from the existing form, color and texture of the surrounding landscape, and is not expected to draw attention from the casual observer, which is within the guidelines and prescriptions for the VRM Class III.</td>
<td>Jason West</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Wastes (hazardous or solid)</td>
<td>Hazardous Waste: No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the project. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the project. Solid Wastes: Trash would be confined in a covered container and hauled to an approved landfill. Burning of waste or oil would not be done. Human waste would be contained and be disposed of at an approved sewage treatment facility.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NI</td>
<td>Waters of the U.S.</td>
<td>The proposed action of chain harrowing the sagebrush is expected to improve overall ground cover and hydrology and would not degrade any ephemeral drainages in the project area.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>Surface-NI Ground-NI</td>
<td>Water Resources/Quality (surface/ground)</td>
<td>Ground water is not expected to be impacted by the proposed action as there would be no sub surface disturbance associated with the proposed action. There are no live waters in the project area that could be degraded by the proposed action.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>Determination</td>
<td>Resource</td>
<td>Rationale for Determination*</td>
<td>Signature</td>
<td>Date</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>NI</td>
<td>Wetlands/Riparian Zones</td>
<td>VFO GIS layers indicate that there are no wetlands or riparian areas within the project area.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Wild and Scenic Rivers</td>
<td>VFO GIS layers indicate that there are no Wild and Scenic Rivers present within the Vernal Field Office Boundary.</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Wild Horses and Burros</td>
<td>VFO GIS layers indicate that there are no Wild horse and Burro areas present within the project area.</td>
<td>Dusty Carpenter</td>
<td>2/14/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Wilderness/WSA</td>
<td>A Vernal RMP and GIS layers review indicate that there are no Wilderness areas present within the Vernal Field Office Boundary.</td>
<td>Jason West</td>
<td>3/5/2012</td>
</tr>
<tr>
<td>NP</td>
<td>Woodland / Forestry</td>
<td>VFO GIS layers indicate that there are no commercial woodlands present within the project area</td>
<td>Steven Strong</td>
<td>2/14/2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reviewer Title</th>
<th>Signature</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Coordinator</td>
<td>Matthew Winner</td>
<td>8/24/12 2012-0079</td>
<td></td>
</tr>
<tr>
<td>Authorized Officer</td>
<td>Steven Strong</td>
<td>8/28/12</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: RESPONSE TO ENVIRONMENTAL ASSESSMENT COMMENT
Pine Springs Hazardous Fuel Reduction Phase II
Environmental Assessment, DOI-BLM-UTG010-2012-79

Comments in common to several groups or individuals were combined into one comment, where applicable; and subsequently addressed in one response. Comments that were not considered substantive (e.g. opinions or preferences) did not receive a formal response, but were considered in the BLM decision making process. Two comment letters were received from two organizations following the issuance of the Pine Springs Hazardous Fuel Reduction Phase II Environmental Assessment, DOI-BLM-UTG010-2012-0079 comment period. Comments were reviewed and considered in the decision making process. BLMs responses to substantive comments are identified below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Commenter</th>
<th>Comment</th>
<th>BLM Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Uintah County Commission</td>
<td>Please coordinate the proposed project with the ongoing construction of the Seep Ridge Road with the contractor</td>
<td>BLM will coordinate implementation of the proposed project with the Contractor for the Seep Ridge Road construction project.</td>
</tr>
<tr>
<td>2</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The BLM has failed to Take a Hard Look at Whether the Historic Range of Density of the Pinyon-Juniper Forest in the Project Area Has Changed</td>
<td>Section 3.3.4 describes the existing vegetative status of the project area. The expansion and encroachment of Pinyon-Juniper across the Intermountain West is well documented by research cited in this document. Stebleton and Bunting (2009) describe and classify the expansion and/or encroachment of Pinyon-Juniper. This source is used in the EA to describe the degree of expansion/encroachment in the project area.</td>
</tr>
<tr>
<td>3</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Lacks Evidence That the “Hazardous Fuels” Have Built Up and Fails to Explain What Sort of Build Up Has Taken Place and What Constitutes Hazardous Fuels.</td>
<td>Section 3.3.2 describes the existing fuel loading both in terms of amounts (tons/ acres) and by functional group (shrubs, trees, and herbaceous). Section 4.3.2 describes the changes that will result from the proposed action.</td>
</tr>
<tr>
<td>4</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Lacks Evidence That Vegetation Treatment in This Area is Necessary to Maintain the Correct Fire Cycle in the Project Area.</td>
<td>Section 3.3.2 describes the existing Fire Regime and the existing Condition Class in terms of how the vegetative changes have occurred over time combined with historic fire suppression and how that relates to a change in Fire Regime Condition Class.</td>
</tr>
<tr>
<td>No.</td>
<td>Commenter</td>
<td>Comment</td>
<td>BLM Response</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Lacks Evidence that This Vegetation Treatment Will Restore or Increase Ecological Function</td>
<td>Sections 3.3., 4.3.1, 3.3.4, and 4.3.4 describe various ways ecologic functions would be affected by the project.</td>
</tr>
<tr>
<td>6</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Ignores Climate Change Impacts and Fails to Consider Cumulative Impacts to and From Climate Change to All Vegetation Projects in the Vernal Field Office.</td>
<td>Although presently there are no &quot;credible scientific&quot; methods to predict the potential climate change impacts from project specific greenhouse gas (GHG) emissions, chapter 3 and chapter 4 discuss climate change. GHG baseline information is currently unavailable to conduct a meaningful cumulative impact analysis. Based on 40 CFR 1502.22 (Incomplete or Unavailable Information) the BLM cannot reasonably analyze GHG emissions from the proposed action and no action alternatives.</td>
</tr>
<tr>
<td>7</td>
<td>Southern Utah Wilderness Alliance</td>
<td>BLM Did Not Fully Assess or Disclose Adverse Effects to Historic Properties from the Proposed Action.</td>
<td>The Area of Potential Effect was defined as the area within the project polygons. The “scope of identification” under 36 CFR 800.4 was determined through an inventory of previous projects, and identified known sites within the project area. The BLM’s analysis found that the entire project area had been surveyed on several occasions. Conducting additional inventories was not warranted. Consequently, waiver #4 (inventoried at a Class III Level of Intensity) was applied to the project area. Refer to the Cultural Resources Section of the ID Team Checklist for further information. Further, consultation letters to various tribes were sent on 4/12/2012. Responses from the consultation letter consisted of one letter from the Goshute Tribe deferring comment to the Ute Tribe, and one letter from the Hopi Tribe asking to be advised of any adverse impacts the project may have on cultural material. The ID Team Checklist for Native American Religious Concerns has been updated to reflect these responses.</td>
</tr>
<tr>
<td>No.</td>
<td>Commenter</td>
<td>Comment</td>
<td>BLM Response</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Fails to Consider the Impact on Greater Sage Grouse</td>
<td>The BLM used the UDWR Occupied Sage Grouse Habitat Layer Map to determine if the project area fell within sage grouse habitat. (March 2012). Due to a mapping error, it was determined that approximately 100 acres of occupied sage grouse habitat occurs within the project area. Sections 3.3.6 and 4.2.6 were amended to include impact analysis on sage grouse. The project area contains no known leks or brooding habitat. The ID Team Checklist was amended to include a reference to IM-2012-043. In addition, a reference pertaining to consultation with the Sage Grouse Biologist with the Northeast Region Utah Division of Wildlife Resources concerning the impacts of the proposed project on sage grouse was addressed in Section 4.2.6 and referenced in Chapter 6.</td>
</tr>
<tr>
<td>10</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA Fails to Fully Consider an Alternative to Remove Pinyon and Juniper Trees by Hand</td>
<td>Section 2.4.3 describes the rational for not fully analyzing the Cut into Smaller Slash with Some Felled Tree Removal Alternative.</td>
</tr>
<tr>
<td>11</td>
<td>Southern Utah Wilderness Alliance</td>
<td>The Pine Springs EA fails to Fully Consider an Alternative to Remove Pinyon and Juniper Trees by Prescribed Fire.</td>
<td>Section 2.4.1 describes the rationale for not going forward with Analyzing the Use of Prescribed Fire as an Alternative to the Proposed Action. Under the Vernal fire Management Plan, Fire Management Unit C6 does allow for prescribed fire to occur, but where resource/social values preclude the use of fire, then non fire fuels reduction treatments may be utilized. For the project area, the presence of cheatgrass is considered a resource value that precludes the use of prescribed fire.</td>
</tr>
</tbody>
</table>
United States Department of the Interior
Bureau of Land Management

Decision Record
Environmental Assessment
For
DOI-BLM-UT-G010-2012-079-EA

August, 2012

Pine Springs Hazardous Fuel Reduction Phase II

Location:
Uintah County, Vernal, Utah
Township 14 South Range 22 East, Sections 25 and 36;
Township 14 South, Range 23 East, Sections 30, 31, 32;
Township 15 South, Range 23 East, Sections 5; SLB&M.

U.S. Department of the Interior
Bureau of Land Management
Vernal Field Office
170 South 500 East
Vernal, Utah 84078
Phone: 435-781-4400 FAX: 435-781-4410
Decision: Based on my understanding of the information contained in the Pine Springs Hazardous Fuel Reduction EA and my subsequent finding of no significant impact, it is my decision to authorize the actions needed to restore the sagebrush vegetation type as set out in DOI-BLM-GO10-2012-079-EA.

The following actions will be realized:

- Apply the Mastication treatment.
- Monitor for noxious and invasive weeds following treatment.

Rationale for Decision: My decision to authorize implementation of the proposed action alternative will not result in any undue or unnecessary environmental degradation to wilderness characteristics, threatened or endangered species, cultural resources, or matters pertaining to Native American religious freedoms or their customs. Realization of the proposed action is in conformance with the existing Vernal RMP (2008) and is consistent with the Uintah County Land Use Plan. The No Action Alternative was not selected because that alternative would not meet the stated purpose and need of restoring the Wyoming sagebrush habitat.

Implementation of the proposed action will result in the improvement towards a vigorous and healthy sagebrush vegetative type. The treatment will result in the following positive result:
1) There would be increased forage for both livestock and big game species, and sage grouse.
2) Habitat values for sagebrush related keystone species would be improved.
3) Hazardous Fuel loadings would be reduced.

Protest and/or Appeal Provision:

The decision or approval may be appealed to the Interior Board Of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR 4.21. Within 30 days of receipt of the decision, an appeal must be filed to: Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, Virginia, 22203. A copy of the notice of appeal must also be filed in the Vernal Field Office at 170 South 500 East; Vernal, Utah, 84078, as well as with: Office of the Solicitor, 125 South State Street, Suite 6201, Salt Lake City, Utah, 84138. Public notification of this decision will be considered to have occurred on August 20, 2012. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition for stay pursuant to 43 CFR 3150.2(b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:
(1) The relative harm to the parties if the stay is granted or denied,
(2) The likelihood of the appellants success on merits,
(3) The likelihood of irreparable harm to the appellant or resources if the stay is not granted, and
(4) Whether the public interest favors the granting of the stay.

Troy Suwyn
AFM for Division of Fire

8/28/12
Date
Finding of No Significant Impact
Environmental Assessment
For
DOI-BLM-UT-G010-2012-079-EA
August, 2012

Pine Springs Hazardous Fuel Reduction Phase II

Location:
Uintah County, Vernal, Utah
Township 14 South Range 22 East, Sections 25 and 36;
Township 14 South, Range 23 East, Sections 30, 31, 32;
Township 15 South, Range 23 East, Sections 5; SLB&M.
FINDING OF NO SIGNIFICANT IMPACT
Environmental Assessment
DOI-BLM-UT-G010-2012-079-EA

Pine Springs Hazardous Fuel Reduction Phase II

Based on the analysis of potential environmental impacts contained in the Pine Springs Hazardous Fuel Reduction Environmental Assessment (EA), and considering the significance criteria in 40 CFR 1508.27, I have determined that the proposed action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

Authorized Officer

Date