

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

**Environmental Assessment
Burnt Timber Mastication
DOI-BLM-UT-G010-2015-0086-EA**

PREPARING OFFICE

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Burnt Timber Mastication
DOI-BLM-UT-G010–2015–0086-EA

Prepared by
U.S. Department of the Interior
Bureau of Land Management
Vernal Field Office
Vernal, Utah

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Finding of No Significant Impact

Finding of No Significant Impact

Environmental Assessment DOI-BLM-UT-G010-2015-0086-EA

Based on the analysis of potential environmental impacts contained in the Burnt Timber DOI-BLM-UT-G010-2015-0086-EA, and considering the significance criteria in 40 CFR 1508.27, I have determined that the proposed action will not have any significant impacts on the environment and an environmental impact statement is not required.

Signatures:

Approved by:

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/s/ Troy Suwyn	11/12/2015
Troy Suwyn	[Date]
Fire Management Officer	

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Decision Record

Decision

Based on my understanding of the information contained in the *Burnt Timber EA* and my subsequent finding of no significant impact, it is my decision to authorize the actions needed to restore the sagebrush vegetation type, and reduce fuel loads as set out in DOI-BLM-G010-2015-0086 EA.

The following actions will be realized:

- Apply the mastication treatments to the project area.
- Apply seed to the treatment area.
- Apply ongoing weed control efforts 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 sagebrush vegetation and reducing the hazardous fuel loads.

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. Reductions of the existing hazardous fuel loads and decrease the risk of unplanned fire events.
2. Reduce fire behavior intensity characteristics in the area for more favorable suppression activities in the event of a wildland fire.
3. There would be increased forage for both livestock and big game species.
4. Habitat values for sagebrush related keystone species would be improved.

Protest and/or Appeal Provision:

As per 43 CFR 5003.1. (b), this decision is effective immediately.

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 , November 9, 2015. 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

Authorizing Official:

/s/ Troy Suwyn	11/12/2015
Troy Suwyn	[Date]
Fire Management Officer	

Chapter 1. Introduction

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1.1. Introduction

The Environmental Assessment (EA) has been prepared to analyze the Burnt Timber projects. 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 Burnt Timber projects.

1.2. Identifying Information:

1.2.1. Location of Proposed Action:

Location:

Duchesne County, Vernal, Utah

Township 13 South, Range 24 East, Sections 12–15, 21–24; Township 13 South, Range 25 East, Sections 7, 19; SLB&M..

1.2.2. Name and Location of Preparing Office:

Lead Office - Vernal Field Office and number NEPA # DOI-BLM-G010-2015-0086 EA

1.3. Purpose and Need for Action:

The purpose of the Burnt Timber projects are to provide for increased quality habitat for mule deer and elk, and 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, and to restore natural fire regimes. The proposed action is needed to restore the project area.

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Chapter 2. Proposed Action and Alternatives

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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.

2.1. Description of the Proposed Action:

The proposed action involves removing encroaching Pinyon-Juniper (P-J) from sagebrush ecosystems along with reducing hazardous fuels. The treatment method would be used to treat a total of 978 acres.

The Bullhog methodology, involves the chipping of the P-J 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 the project area, the P-J trees have increased in overall density and encroached into the sagebrush habitat type, with an average density of approximately 420 stems/acre. The treatment method will be utilized to remove encroaching Pinyon-Junipers from the sagebrush drainages.

The vegetation in the project area is comprised of 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 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. (Vernal Fire Management Plan, 2005) 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.

The project area still has an adequate understory vegetation to protect the soil from erosion, following removal of the P-J trees. The project has been designated 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. The proposed action is designed to remove encroaching P-J trees only. Sites that contain mature Pinyon-Juniper trees, (for this document, mature is defined as greater than 26" dbh) as determined by the soils and vegetation mapping completed by the NRCS in the Uintah Area Soil Survey (persistent P-J) are mapped out and would not be treated. In addition, no Ponderosa Pine trees would be treated.

In addition to the mastication treatment, seed would be applied aerially over the project area. The proposed seed mix is listed below.

Table 2.1.

Common Name	Scientific Name	PLS Pounds per acre
Indian ricegrass	Oryzopsis hymenoides	0.46
Bluebunch wheatgrass	Agropyron spicatum	0.54
Thickspike wheatgrass	Agropyron dasystachyum	0.60
Western wheatgrass	Agropyron smithii	0.61
Slender wheatgrass	Agropyron trachycaulum	0.64
Orchardgrass	Dactylis glomerata	0.25
Sandberg bluegrass	Poa secunda	0.18
Candy bluegrass	Poa canbyi	0.16
Green needlegrass	Stipa viridula	0.45
Prairie junegrass	Koeleria cristata	0.07

Idaho fescue	Festuca idahoensis	0.14
Alfalfa	Medicago sativa	1.84
Sainfoin	Onobrychis viciifolia	2.74
Small burnet	Sanguisorba minor	1.82
Blue flax	Linum perenne	0.22
Sagebrush, Wyoming	Artemisia tridentata wyomingensis	0.19
Bitterbrush	Purshia tridentata	0.83

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 not 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.

In order to prevent the establishment of weeds within the project area as a result of the proposed action, the following measures would be incorporated to reduce the risk of noxious and invasive weeds from becoming established:

1. A pre-project weed inventory would be conducted to determine the presence of noxious weeds. If weeds were found, they would be: a) mapped and reported; b) removed or treated prior to surface disturbance; c) and removed or treated prior to seed set when possible.
2. All vehicles and equipment would be power-washed after driving through a noxious weed infestation.
3. Staging areas would be located in weed free sites.
4. Annual monitoring of the project area for weed establishment would occur for three years following implementation of the proposed action.
5. 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).

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.

2.2. Description of Alternatives Analyzed in Detail:

2.2.1. No Action Alternative

Under this alternative, no restoration actions or fuel reductions would be taken. Current resource conditions and trends would continue

2.3. Alternatives Considered but not Analyzed in Detail

Prescribed Fire and Seeding: The use of prescribed fire to remove the P-J was considered but eliminated. The rationale for not using prescribed fire was that portions of the project area lay directly adjacent to private property. The proximity of the private land constrains the application

of prescribed fire due to the high risk of fire moving on to these adjacent lands. In addition the dense canopy provides for a heavy and continuous fuel load which would be extremely risky to ignite as the fire would be difficult to control without constructing fuel breaks with heavy equipment. Thus this alternative was not considered as it would not be feasible to conduct a prescribed burn under these existing conditions.

Hand Treatments: The use of hand treatments (chainsaws) to achieve the hazardous fuel reduction objective was considered but eliminated. This treatment would encompass the use of chainsaws to cut down the trees and leave them where they lie. The density of P-J trees is approximately 420 stems/acre. 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. Conformance

The alternatives considered in this EA are in conformance with the Vernal Resource Management Plan Record of Decision (2008). The specific citation is listed below:

P. 78 in the Fire 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.

P. 133 in the Vegetation section, under Veg-5: Allow mechanical, fire, biological, cultural, or chemical methods for vegetation manipulation using the type of manipulation appropriate to and consistent with other land use objectives, and incorporating standard operating procedures and BMP's, as applicable, to protect other resources.

P. 135 in the Vegetation section, under Veg-13: Restore or rehabilitate up to 200,000 acres of sagebrush steppe over the life of the plan. Such vegetation treatment plans will consider the Western Association of Fish and Wildlife Agencies Guidelines for Management of Sage Grouse Populations and Habitats and State and Local Conservation Plans.

2.4.1. 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.

- Protection Act of September 20, 1922 (42 Stat. 857; U.S.C. 594).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; U.S.C. 315).
- Reciprocal Fire Protection Act of May 27, 1955(69 Stat. 66; 42 U.S.C. 1856, 1856a).
- Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 686).
- The Federal Land Management and Policy Act of 1976 (FLPMA) (Public Law 94-579; 43 U.S.C. 1701).
- Disaster Relief Act, Section 417 (Public Law 93-288).
- 2001 Annual Appropriations Acts for the Department of the Interior.
- United States Department of the Interior Manual (910 DM 1.3).
- 2009 Federal Wildland Fire Management Policy.
- 2001 Updated Federal Wildland Fire Management Policy (1995 Federal Wildland Fire Management Policy Update).
- 1998 Departmental Manual 620 Chapter 1, Wildland Fire Management General Policy and Procedures.
- 1998 BLM Handbook 9214, “Prescribed Fire Management” describes authority and policy for prescribed fire use on public lands administered by the Bureau of Land Management.
- 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.

Chapter 3. Affected Environment:

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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 analysis and as presented in Chapter 1 of this assessment. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

3.2. General Setting

The project area is located near the Atchee Ridge Road in the Book Cliffs. The project area occurs on a fairly large topographical plateau. The vegetation in the area consists of Utah juniper, mountain big sagebrush, and Wyoming sagebrush.

3.2.1. 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 objectives include:

- Manage the vegetation to attain the ecological stage that would benefit wildlife in crucial habitat and livestock grazing.
- Manage forests and woodlands for long-term healthy habitat for animal and plant species, forest and woodland health, and riparian restoration and enhancement.
- Manage the vegetative types to achieve the desired mix of seral stages for all major vegetative types.
- Restore or rehabilitate up to 200,000 acres of sagebrush-steppe habitat over the life of the plan.

Fire Management Actions/Strategies within the FMP in the Non-fire Fuels Treatment contain the following objectives:

- Achieve the desired mix of seral stages for each major vegetative type.
- Create fuel breaks within the mountain big sage type to prevent large unplanned fires in this type.
- Remove encroaching woody species from the major vegetative types.
- 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, 2004). 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 I 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 pinyon-juniper 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” (Stebbleton 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, with a current height of 15 to 18 feet.

- 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.

The current height of pinyon-juniper trees in the area is 15 to 18 feet in height. In the event of a wildland fire, flame lengths can be expected to reach 40 to 50 feet in length.

3.2.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

Invasive Plants/Noxious Weeds

There are no known noxious weed populations occurring inside of or within a two mile radius of the project area. However, with ground disturbance there is always the potential for establishment.

Soils

*Chapter 3 Affected Environment:
Invasive Plants/Noxious Weeds, Soils, and Vegetation*

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). 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 151 is comprised of a complex of soils. The soils within map unit 151 are the Whetrock soil and the Moonset soil. The Whetrock soil is a channery loam that is derived from eolian deposits over slope alluvium derived from sandstone, limestone, silt, and shale. The Whetrock loam is located on slopes between 1 and 50 percent, is well drained, and has a runoff hazard of medium. The NRCS has developed Ecological Site Descriptions for most of the State of Utah. Ecological sites are defined by the NRCS as “A distinctive kind of land, with specific physical characteristics which differs from other types of land in its ability to produce a distinctive kind and amount of vegetation, and in its response to management”. The Ecological Sites located within the project area are: MLRA 34A — 034XY334–UT Upland Stony Loam, R034XY344UT-Pinyon-utah juniper. The Ecological Site designated for the Moonset soil type is an Upland Shallow Loam (P-J). For this project however, the project area was mapped through the use of a GPS device to avoid the Moonset soil type since it supports mature or persistent P-J, and the proposed action involves the Whetrock soil type only.

Since the potential native vegetation in the project area is described by the NRCS as a sagebrush vegetative community, the presence of P -J at the level of approximately 420 stems/acre indicates that the pinyon-juniper trees present on these sites should be considered to be part of the historic Pinyon-juniper expansion described by Miller et al. (2008) and are not part of the potential native vegetative community for the project area.

Vegetation

The project area vegetation is dominated by Wyoming sagebrush. The sagebrush community has reached a stage where sagebrush is of a single age class, mature, and quite decadent. The understory contains a viable population of perennial grasses and forbs but these species are suppressed by the encroaching pinyon-juniper and their vigor and productivity are very limited. Understory species are comprised of cheatgrass, larkspur, needle & thread grass, Indian rice grass, and western wheatgrass.

Studies across the Intermountain West have shown substantial increases in Pinyon-Juniper 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 2005) 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 out compete 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.

As noted in the soils section, the project area is comprised of the Whetrock soil type. This soil type supports the sagebrush vegetative type. The understory vegetative community is comprised of similar species composed mostly of western wheatgrass, needle and thread grass, bluegrass, cheatgrass and various forb species. Pinyon-Juniper has encroached into both of the vegetative communities, with an estimated average density of XXX stems/acre.

3.2.3. Livestock Grazing

The project area is within the Atchee Ridge Allotment which is an active cattle allotment. The Atchee Ridge Allotment is primarily grazed from April 1 to October 1; permitted for 2287 AUMs. The allotment has been treated in numerous areas for conifer removal, which has resulted in an increase in forage species palatable for livestock and wildlife. In accordance with the 2008 ROD for the Vernal RMP Forage Decision 20 (pg 84); increases in forage will be distributed as: 60% to suspended cattle AUMs and 40% to wildlife. After restoring all suspended AUMs, additional forage will be allocated proportionately between livestock and wildlife.

3.2.4. Lands with Wilderness Characteristics (LWC)

The BLM evaluated 34 units for Wilderness Characteristics in 2007. Of these units a total of 17 had either recent or historic vegetation treatments which were identified by an interdisciplinary team. Of the 17 units with vegetation treatments, 12 of the treatments evaluated were found to retain their wilderness character with vegetation treatments not being identified as noticeable to the casual observer. Five of the units identified vegetation treatments as having noticeable intrusions to wilderness character (See 2007 inventory for Cliff Dweller, Lower Flaming Gorge, Mountain Home, Seep Canyon, and Wolf Point units.) Of the five the dominant noticeable vegetation treatment was the chaining method which involved heavy equipment dragging a chain between equipment (generally two bull dozers) and uprooting trees along the way. In heavy or dense pinyon-juniper trees, the chainings were identified as noticeable intrusions based on large piles of dead uprooted trees being left behind. Lop and scatter was noticeable as an intrusion in dense areas, however it was determined that the casual observer would not notice the lop and scatter as an intrusion within 1-3 years of the project completion.

Approximately 978 acres of the project area are located within an area (Bitter Creek, 33,487 acres) that was found to have wilderness characteristics in 2007 by a BLM interdisciplinary team. Although the area was found to have wilderness characteristics, it was not designated

as a natural area in the Vernal RMP ROD (2008). The ROD stated that the area would not be designated as a natural area because:

“The area is considered high potential for oil and gas (O&G) development. 23,569 acres (70%) of the total area is currently leased for O&G development. Wilderness characteristics could not be protected, preserved or maintained” (p.33 of the ROD).

As of this writing, approximately four treatment projects totaling 1,342 acres of Bullhog mastication treatment have been completed in the Bitter Creek unit. None of the Bullhog mastication treatment projects cumulatively or individual detracted from the 2007 inventory evaluation for wilderness character for the Bitter Creek unit.

3.2.5. Wildlife

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). In addition, The Utah Steering Committee has identified approximately 542,967 acres of Bird Habitat Conservation Area’s (BHCA) within the VPA (USC 2005). BHCA’s are intended to display areas where bird habitat conservation projects may take place, predicated on concurrence, collaboration, and cooperation with all landowners involved; however, the BHCA’s have no official status. No BHCAs have been designated within the project area.

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 nutcracker, 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.

Raptors

Some of the more visible birds in and near the project area include goshawk, golden eagles, red-tailed hawks, prairie falcons, and ravens. The BLM raptor database was reviewed and there are no known raptor nests that were identified within the project area. Habitats in and around the project area provide diverse breeding and foraging habitat for raptors. These habitats include rocky outcrops, pinyon-juniper woodlands and sagebrush shrub lands.

Non-USFWS Designated (Big Game Species)

Mule deer and Rocky Mountain elk are the primary big game species found within the project area (UDWR 2008, 2010). 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. 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 and deer winter habitat has been designated within the project area. These designations were made in the Vernal Field Office RMP (BLM, 2008).

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 bullhog operations; therefore, they will not be discussed further in this document.

Chapter 4. Environmental Effects:

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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. Fuels and Fire Management

Fuels

The mulching and slashing treatment of PJ will change the arrangement of over 18 tons of hazardous fuels from standing 15–18 feet in height to less than 2 feet in height. The fuel height has a direct correlation to flame length in the event of a wildland fire. Over time the fine fuels attached to pinyon and juniper trees (needles and twigs) would decompose and decrease fuel loading and flammability. 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.

Fire Management

The shortened flame lengths in these fuels would increase the ability of fire suppression resources in extinguishing or controlling wildland fires in the area. An additional benefit would consist of suppression resources using the treatment area as a fire break or an anchor point for strategic wildland fire tactics.

4.2.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation

Invasive Plants/Noxious Weeds

The preventive measures that will be taken to avoid spread of noxious weed species within the project are outlined in the proposed action. These measures greatly minimize the threat of invasion following disturbance associated with the proposed action.

Soils

Under this alternative, encroaching P-J trees would be removed across the 978 acre project area. Soil erosion and sediment yields are not expected to increase, the tree removal will leave vegetative debris and litter on the surface following treatment, which will provide for protective ground cover. The understory has adequate vegetation for ground cover. Slopes in the project area are between 1 and 8 percent, which should preclude the ability of any storm generated runoff to cause any potential soil erosion issues.

Vegetation

Under this alternative, there would be 978 acres of fuel reduction activities. Encroaching pinyon-juniper trees would be removed across the 978 project area 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 pinyon-juniper trees for light, nutrients and water is drastically reduced. Nine hundred seventy eight 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).

4.2.3. Livestock Grazing

Under this alternative, the grazing permittee would be required to defer growing season use of the project area for two growing seasons following the proposed treatment. The portion of the allotment that is planned for the vegetation treatment is an area that is not used by the permittee and his livestock during the spring/growing season due to the density of trees; however it is not feasible due to the structure of the pastures to rest just the pasture area without temporary fencing. The permittee will be coordinated with to discuss the options of rest, which may include complete non use of the pastures.. Therefore, there may be a temporary loss of AUM's by deferment as part of the proposed action. In the long term, the proposed action would provide for increased livestock forage in terms of both quantity and quality, as the seeding becomes established. The establishment of a reliable amount of herbaceous forage available each year would also help in developing and maintaining a sound grazing management strategy.

The allotment consists of five pastures. The project will impact two of the five pastures and will require mandatory rest in the seeded areas. The time period for such rest is two growing seasons or until monitoring indicates livestock use can resume. A grazing Decision Document will be issued as a result of the project initiation to the permittee for the required rest periods. The document may be protested and or appealed after planning discussions with the permittee.

In accordance with the 2008 ROD RMP, the permittee may be entitled to apply for an increase in use levels resulting from the increase in forage created by the project. A forage inventory will be required in the future for the mastication area.

4.2.4. Lands with Wilderness Characteristics (LWC)

Under this alternative there would be approximately 978 acres of mastication treatment within the Bitter Creek unit. The mastication treatment is expected to result in leaving piles of woody matter composed of 1-2 inch chips. The piles would be less than one foot high, and resemble compost type piles. The piles would be scattered, diffuse, and isolated enough that the average observer would not perceive the woody matter as a substantial impact to naturalness. The mastication treatment would not leave behind any man-made structures, and since there would be no mastication work during times of saturated soil conditions, there would be a minimal amount of tire tracks across the project area. Those tracks that are made would likely blend into the landscape of the project area within one to two years following treatment as they have been found to be in other similarly treated areas. The project boundaries follow the natural sage brush

openings and there would be no residual long term sharp contrasts or straight edge effects left upon the landscape in the project area.

As noted in Chapter 3, several previous mastication projects totaling approximately 1,342 acres have been conducted in this area of wilderness characteristics. These projects have not been found to have degraded the quality of the relevant values that comprise the wilderness characteristics, and based on this evidence the proposed action is not expected to degrade these characteristics either.

In compliance with Secretarial Order 3310 and under BLM's Instruction Memorandum 2011-034, the 6300-2 manual "Consideration of Lands with Wilderness Characteristics in the Land Use Planning Process" BLM may approve projects in lands with wilderness characteristics under some circumstances (6300-2 manual .24) In light of the above analysis, the proposed action is anticipated to create no impacts to wilderness characteristics due to limited ground disturbance and modest changes in the vegetation community.

4.2.5. Wildlife

Migratory Birds

Migratory bird species may be present during the breeding/nesting season from March 1- August 31. If project 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. Project activities are planned to occur after August 31st. The proposed project targets younger pinyon-juniper trees that are not older, mature stands of pinyon-junipers 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 project would benefit sagebrush/grassland bird species, several of which are currently identified as BLM State Sensitive Species.

Raptors

Impacts would be the same as the migratory bird section. Treatments would be planned to occur after August 31. If project activities were to occur during the nesting season (March 1 – August 31), raptor surveys would be required, and no tree removal would be allowed within .5 mile of an occupied nest site.

Non-USFWS Designated (Big Game Species)

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 pinyon-juniper or other conifer trees (UDWR 2008). The tree-dominated habitats occupied by persistent pinyon-juniper adjacent to the project area 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 pinyon-juniper 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. Approximately 978 acres of crucial winter elk habitat and 275 acres of crucial winter deer habitat was identified within the proposed project area. No treatment

activities will be allowed from December 1 to April 30, during the winter range timing. An exception may be granted if deer and elk are not present.

4.4. Alternative B — No Action

Under the No Action Alternative, current resource trends would continue, no tree removal would occur.

4.4.1. Fuels and Fire Management

Fuels

Under the no action alternative, there would be no removal of the PJ trees across the project area. Over time the PJ trees would eventually out-compete the shrubs, grasses, and forbs for water, nutrients, and light, resulting in the loss of the herbaceous and sagebrush habitat type in the project area. The fuel loading would continue to increase, eventually shifting the project area from the existing Condition Class II to a Condition Class III situation. In the absence of disturbance or management, the majority of these landscapes will become closed woodlands resulting in the loss of understory plant species and greater costs for restoration (Miller et al 2008). Under the no action alternative there would be a continued progression of mature sagebrush species with declining vigor and growth. The current sagebrush would become decadent and there would be an increase in the dead component in the crowns and individual species.

Fire Management

Eventually, an unplanned wildland fire is expected to occur, and since the fuel loadings would have increased, the severity of the fire event is also expected to be greater. The increased amount of PJ tree densities will correspondingly decreased the amount of understory plants, the loss of trees from an unplanned fire event would most likely result in increased soil erosion due to the lack of ground cover remaining following the fire event. The current vegetation mix of pinyon pine and Utah juniper with heights of 15-18 feet in a sagebrush community would result in 40 - 50 foot flame lengths if ignited. Under the no action alternative, fuels would continue to increase in height, tons/acre, and vegetative dead component. Standard procedures for wildland firefighters include not engaging direct tactics by hand on flames over four feet tall, wildland fire engines and bulldozers limits are eight feet flame lengths. The conditions associated with the no action alternative will increase fire behavior characteristics and minimize the ability of firefighters suppressing wildfires.

4.4.2. Invasive Plants/Noxious Weeds, Soils and Vegetation

Invasive Plants/Noxious Weeds

Invasive plant and noxious weed populations would still establish within the project area, but they would not establish as a result of the proposed action. Existing invasive plant and noxious weed species that may already occur within the project area would not be located or treated as a result of the proposed action and, therefore, may continue to spread for a longer period of time than if the proposed action is approved.

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. Other ongoing land use issues such as livestock grazing could impact the soils resource resulting in increased soil erosion and sediment yields.

Vegetation

Under this alternative, there would be no removal of the encroaching pinyon-juniper 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 pinyon-juniper 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 pinyon-juniper trees would have replaced the sagebrush and herbaceous understory, and the pinyon-juniper 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 pinyon-juniper tree overstory and a cheatgrass dominated understory. There would be a long term loss of approximately 978 acres of shrub-steppe habitat over time.

4.4.3. Livestock Grazing

Under this alternative the dense stands of conifers would maintain the present vegetative condition. This process would result in a slow and steady decline in forage for livestock grazing, as the forage values decrease due to lack of understory species. However, the current allocation of AUMs is not based on the conifer stands and the permit would be managed under the current terms and conditions until the allotment is evaluated for permit renewal under a NEPA document. No deferred rest would be required for the project area.

4.4.4. Lands with Wilderness Characteristics (LWC)

Under this alternative, existing resource conditions would continue. The wilderness characteristics within the project area would remain unchanged as the Pinyon-Juniper trees increase, and the sagebrush habitat declines in scope and quality. Any unplanned fire that would occur would also not diminish the wilderness characteristics.

4.4.5. Wildlife

Migratory Birds

The expected encroachment of P-J into sagebrush ecosystems would continue. The understory decline is expected to only minimally affect Migratory Birds in the short term, but the long term will result in a loss of understory and habitat for birds species associated with that particular vegetation type. Migratory Bird species will utilize more area than just the project area.

Raptors

Under this alternative, impacts to raptors would be slight, as the prey base is not expected to change drastically over the short term, but long term impacts resulting from encroaching P-J would result in a loss of understory species and prey species associated with that particular vegetation type. Raptors will utilize more area than just the project area.

Non-USFWS Designated (Big Game Species)

There would be a slow and steady decline in terms of forage quality, as the understory grasses and forbs decline and the P-J trees dominates the project area further.

4.5. Cumulative Impact 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.

4.5.1. Fuels and Fire Management

The Cumulative Impact area for Fire and Fuels is the Upper Bookcliffs (C6) Fire Management Unit. 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. Future treatments in this Fire Management Unit C4 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, this Fire Management Unit landscape will eventually be composed of different age classes of vegetation. The No Action Alternative would not result in an accumulation of impacts

4.5.2. Invasive Plants/Noxious Weeds, Soils and Vegetation

Invasive Plants/Noxious Weeds

The Cumulative Impact area for vegetation is the Atchee Ridge AMP Allotment, which consists of approximately 101,934 acres. Invasive plant and noxious weed populations are not known to occur within the project area and are not expected to established or spread as a result of the proposed action. The Field Office Weed Monitoring and Control program would continue to treat weed infestation areas as they are found. Cumulative impacts would include the continue spreading of weeds throughout the field office. The No Action Alternative would not result in an accumulation of impacts.

Soils and Vegetation

The Cumulative Impact area for vegetation is the Atchee Ridge AMP Allotment, which consists of approximately 101,934 acres. 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 75,000 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 No Action Alternative would not result in an accumulation of impacts.

4.5.3. Livestock Grazing

The Cumulative Impact Area for Livestock grazing is the Atchee Ridge AMP Allotment. The Burnt Timber Hazardous Fuel Treatment project is scheduled to be completed in the fall of 2015 and will occur in the Atchee Ridge AMP Allotment. This treatment will be a combination of mastication and seeding. This will require the complete rest of the 978 acre area for two growing seasons following the treatment. This allotment has not been evaluated for Rangeland Health Standards. This allotment will continue to be monitored and evaluated in relation to these standards in the future. A steady and reliable forage base is needed to properly manage livestock grazing in a sustainable manner for the long term. The No Action Alternative would not result in an accumulation of impacts.

4.5.4. Lands with Wilderness Characteristics (LWC)

The Cumulative Impact Area is the area comprised by the Bitter Creek wilderness characteristics unit. Past actions include the four Bullhog mastication projects totaling 1,342 acres. These previous vegetative manipulation projects have not diminished the relevant values of the Bitter Creek wilderness characteristic unit, therefore, the proposed action is not expected to directly or indirectly impact the relevant values of this unit. Because no direct or indirect impacts to wilderness characteristics would occur under either the Proposed Action or the No Action alternatives, no cumulative impacts would occur under the either alternative.

4.5.5. Wildlife

Migratory Birds and Raptors

The Cumulative Impact area for wildlife is the Vernal Field Office The Vernal Field Office has been involved in restoring declining habitat conditions in the sage steppe habitat type. These habitat improvement projects would typically be comprised of removing P-J encroachment from sage brush, restoration of cheatgrass infested sage brush types, and sage brush manipulation projects that have a seeding component that improves understory conditions. It is expected that habitat treatments within sage-steppe habitat types would continue to occur in the future.

Non-USFWS Designated (Big Game Species)

The Cumulative Impact area for Big Game is the area within the Bookcliffs hunting unit. Approximately 978 acres of crucial winter elk habitat and 275 acres of crucial winter deer habitat has been identified within the project area. Current population estimates for the deer for the Bookcliffs Unit is 7,850, below the population objective of 15,000. Current population estimates for the elk for the Bookcliffs Unit is 4,800, below the population objective of 7,500. Presently, the Bookcliffs hunting unit is open to limited entry permits for both deer and elk. Since present deer numbers 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. The Vernal Field Office has been involved in restoring declining habitat conditions in the sage steppe habitat type. These habitat improvement projects would typically be comprised of removing P-J encroachment from sage brush, restoration of cheatgrass infested sage brush types, and sage brush manipulation projects that have a seeding component that improves understory

conditions. It is expected that habitat treatments within sage steppe habitat types would continue to occur in the future. The No Action Alternative would not result in an accumulation of impacts.

**Chapter 5. Tribes, Individuals,
Organizations, Preparers, or Agencies
Consulted:**

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During preparation of the EA, public involvement consisted of posting the proposal on the back office for ePlanning. Issues or impacts identified through the interdisciplinary team analysis process are described in Appendix B.

Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
State Historic Preservation Officer (SHPO)	National Historic Preservation Act Section 106	SHPO Concurrence received November 6, 2015
Utah Division of Wildlife Resources (UDWR)	Coordination with UDWR Habitat Biologist, Tory Mathis	Contacted in person (2015) and they support the project.

For a list of preparers see Appendix A

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Chapter 6. References

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Appendix A. Interdisciplinary Team Checklist

Project Title: Burnt Timber EA

NEPA Log Number: DOI-BLM-UT-G010-2015-0086-EA.

File/Serial Number:

Project Leader: Dixie Sadlier

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.

Determina-tion	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
NI	Air Quality & Greenhouse Gas Emissions	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.	Dixie Sadlier	5/14/2015
NP	BLM Natural Areas	No Natural Areas Present within the Project Area according to the VFO GIS layers and RMP review.	William Civish	7/21/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Cultural: Archaeological Resources	The current project was determined to be an <i>undertaking</i> per 36 CFR 800.16(y). The area of potential effect (APE) 36 CFR 800.16(d) is considered to be the area within the polygons in the attached maps. A 100% cultural inventory was conducted on the proposed project area (U-15-LI-0435b). No cultural material was identified within the current project area. Pursuant to 36 CFR 800.5(1)(b) a “no adverse effect” to historic properties letter was sent to the State Historic Preservation Officer (SHPO) on 11-5-2015. SHPO had several concerns about the project and our archaeology staff went out and field tested the findings returning with a “no effect” finding. We resubmitted our findings to the SHPO on 11-6-2015. We received the SHPO concurrence to our determination on 11-6-2015. No further actions need to be taken.	Kathie Davies	11/06/2015
NP	Cultural: Native American Religious Concerns	Tribal consultation was conducted on 6/10/2015. We received one “no effect” response from the Hopi Tribe on 5-28-2015. No other comments were received. Also, the proposed project will not hinder access to or use of Native American religious sites.	Kathie Davies	11/06/2015
NP	Designated Areas: Areas of Critical Environmental Concern	No ACEC’s are present within the Project Area according to the VFO GIS layers and the RMP review..	William Civish	7/21/2015
NP	Designated Areas: Wild and Scenic Rivers	No Wild and Scenic Rivers are within the Project Area according to the VFO GIS layers and RMP review.	William Civish	7/21/2015
NP	Designated Areas: Wilderness Study Areas	There are no Wilderness Study Areas within the Project Area according to the VFO GIS layers and RMP review.	William Civish	7/21/2015
NI	Environmental Justice	No minority or economically disadvantaged communities or populations are present which could be affected by the proposed action or alternatives.	Dixie Sadlier	5/14/2015
NP	Farmlands (prime/unique)	There are no Prime Farmlands located in the project area because there are no irrigated lands in the project area, which is a pre requisite for the resource designation.	Dixie Sadlier	5/14/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
PI	Fuels/Fire Management	The project is designed to reduce and rearrange hazardous fuels on 978 acres. The overall affects include benefits by reducing fire behavior; thus, allowing fire suppression resources valuable tactics to reduce the threat of wildfire on values at risk.	Blaine Tarbell	6/27/2015
NI	Geology/Minerals/ Energy Production	<p>The project area is leased for fluid minerals. However, there are no existing and or developed energy production sites located within the project area.</p> <p>The proposal is within as area identified in the VFO RMP open for mineral material disposal. This action is consistent with BLM policy. Other geologic and mineral resources will not be negatively affected by this proposal. Locatable minerals are not present.</p> <p>No known gilsonite veins trend through the area. If gilsonite is encountered, the GPS information should be provided to BLM.</p>	Rick Goshen	5/18/2015
PI	Invasive Plants/ Noxious Weeds, Soils & Vegetation	<p>IP/NW:</p> <p>The UT Class C noxious weed Canada thistle (<i>Cirsium arvense</i>) has been previously documented near the Project Area, per BLM GIS review. However, due to the minimal surface disturbance associated with the Proposed Action, applicant committed measures and the BLM's practice of early detection and rapid eradication, noxious weed infestations are not expected to increase as a result of the project.</p> <p>Soils:</p> <p>No surface disturbing actions are associated with the Proposed Action. Therefore, the project is nor anticipated to contribute to an increase in soil erosion in the Project Area.</p> <p>Vegetation:</p> <p>The mapped vegetation communities present in the Project Area include Wyoming big sagebrush, Pinyon-Utah juniper, Douglas fir, and alkali flat. This project is intended to improve sagebrush communities by removing the encroaching piñon and juniper; therefore an impact to vegetation in the Project Area is anticipated as a result of the Proposed Action.</p>	Christine Cimiluca	5/29/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Lands/Access	<p>The proposed area is located within the Vernal Field Resource Management Plan area, which allows for oil and gas development with associated road and pipeline right-of-ways.</p> <p>Current land uses, within the area identified in the proposed action and adjacent lands, consist of existing oil and gas development, wildlife habitat, recreational use, and cattle ranching. No existing land uses would be changed or modified by the implementation of the proposed action.</p> <p>The existing right-of-way holder in the project area would be notified of the project. The holder of the road right-of-way is Uintah County, Right-of-Way UTU-69125-05, and the road identified as Big Park Road. There are also several class D roads identified in the proposed project area that would also need to be listed in the notification letter. They are: #020709, 020708, 020706, 020707, 022304, 022005, 022006, Anderson Ridge, Flat Rock Spring, Brewer Canyon and Boulevard Ridge.</p> <p>Master Title Plats has been checked for public water reserves. There are no Public Water Reserves in the proposed project area.</p> <p>In T13S., R24E, Section 21, SWNW, N1/2SW, SESW, SWSE, is identified as a State Wildlife Reserve/Management Area. This surface management agency would need to be notified of your proposal.</p> <p>Dixie notified me 6/15/2015 she has sent the notifications to the non-BLM land owners of the proposed project.</p>	Margo Roberts	06/12/2015 06/15/2015
NI	Lands with Wilderness Characteristics (LWC)	<p>Approximately 978 acres of the project area are located within an area (Bitter Creek, 33,487 acres) that was found to have wilderness characteristics in 2007 by a BLM interdisciplinary team. Although the area was found to have wilderness characteristics, it was not designated as a natural area in the Vernal RMP ROD (2008).</p>	William Civish	7/21/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
PI	Livestock Grazing & Rangeland Health Standards	The project will require a grazing decision document to be issued to the permittee for the restricted use/rest of the project area. Overall, the long term success of the project may increase livestock forage as well as wildlife forage and habitat resources.	Dusty Carpenter Dixie Sadlier	11/6//2015
NI	Paleontology	There are no known scientifically important paleontological resources present. The proposed action should not affect any paleontological resources.	Rich Goshen	5/27/2015
NI	Plants: BLM Sensitive	The following UT BLM Sensitive plants have been documented in the Project Area or an adjacent subwatershed: oilshale cryptantha (<i>Cryptantha barnebyi</i>). Suitable habitat for this species is typically the domed or gently sloping white shale knolls of the Green River Formation, mostly in shadscale and pinyon-juniper communities. The Proposed Action will not occur in these areas, since the objective is to remove encroaching pinyon-juniper trees from sagebrush communities. Therefore, the species is unlikely to be impacted as a result of the Proposed Action.	Christine Cimiluca	5/29/2015
NI	Plants: Threatened, Endangered, Proposed, or Candidate	No threatened, endangered, proposed or candidate plant species or designated critical habitat are present in the Project Area, per BLM GIS data review and the FWS critical habitat portal. Suitable habitat for Ute-ladies' tresses (<i>Spiranthes diluvialis</i>) may be present in the Project Area in wetlands or riparian areas. However, the Proposed Action would avoid these areas, and therefore suitable habitat for this species is unlikely to be impacted.	Christine Cimiluca	5/29/2015
NI	Plants: Wetland/Riparian	One mapped riparian area (Burnt Timber Canyon) intersects the Project Area, per BLM GIS review, and other unmapped wetlands or riparian areas may be present. However, the Proposed Action would avoid these areas, and therefore wetland/riparian areas and associated plant species are unlikely to be impacted as a result of the Proposed Action.	Christine Cimiluca	5/29/2015
NI	Recreation	Timing will not impact hunting season use. OHV use is limited to designated routes only.	William Civish	7/21/2015
NI	Socio-Economics	Due to the small scale project size, socioeconomics are not expected to be measurably impacted by this proposed project.	Dixie Sadlier	5/14/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Visual Resources	Class III has been identified. The proposed project is within class III objectives. Class III objectives state: The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. Based on the remote nature of the project and no history of formal or informal complaints from the public based on this activity, the project meets VRM Class III objectives. The Form, Line Color and texture would change with the vegetation removal, however, an overall review of vegetation treatments with the exception of heavy chaining are not noticeable to the casual observer. (Based on wilderness characteristics determination findings in the 2007 Wilderness characteristics review).	William Civish	7/21/2015
NI	Wastes (hazardous/solid)	<i>Hazardous Waste:</i> 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. <i>Solid Wastes:</i> 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.	Dixie Sadlier	5/14/2015
NI	Water: Floodplains	A review of the Field Office GIS layer files indicates that there are no 100 year flood plains located in the project area.	Dixie Sadlier	5/14/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Water: Groundwater Quality	<ul style="list-style-type: none"> The proposed action does not involve surface disturbance that would alter groundwater hydrology (see surface water quality). There is not potential to discharge significant volumes of fluids. Though useable groundwater may exist at depth, there are no designated EPA Sole Source Aquifers or State of Utah Drinking Water Source Protection Zones in the project area and the State of Utah has recorded no underground water rights in the area. 	Justin Snyder	5/21/2015
NI	Water: Hydrologic Conditions (stormwater)	Overall ground cover is expected to increase as a result of the proposed action, which would improve hydrologic conditions.	Dixie Sadlier	5/14/2015
NI	Water: Surface Water Quality	Surface Water Quality is not expected to be impacted by the proposed action removal of pinyon-juniper will improve overall ground cover and hydrology.	Dixie Sadlier	5/14/2015
NI	Water: Waters of the U.S.	The proposed action removing the encroaching PJ is expected to improve overall ground cover and hydrology and would not degrade any ephemeral drainages in the project area.	Dixie Sadlier	5/14/2015
NP	Wild Horses	none are present in the project area	Dusty Carpenter	
PI	Wildlife: Migratory Birds (including raptors)	Potential impacts to habitat and nesting.	Dixie Sadlier	3/7/2014
PI	Wildlife: Non-USFWS Designated	BLM has designated crucial winter habitat for elk and deer within the project area. Project should enhance habitat.	Dixie Sadlier	5/14/2015
PI	Wildlife: Threatened, Endangered, Proposed or Candidate	No critical habitat has been identified within the project area. Is the proposed project in sage grouse PPH or PGH? No x No, If the answer is yes, the project must conform with WO IM 2012-043.	Dixie Sadlier	5/14/2015
NI	Woodlands/Forestry	VFO GIS layers indicate that there are no commercial woodlands present within the project area.	Dixie Sadlier	11/6/2015

FINAL REVIEW:			
Reviewer Title	Signature	Date	Comments
Environmental Coordinator	Kelly Buckner	10/13/2015	
Authorized Officer	Troy Suwyn	11/12/2015	