

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

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**Environmental Assessment**

**Big Wash Five Mile Mastication Slashing  
DOI-BLM-UT-G010-2014-0098-EA**

**PREPARING OFFICE**

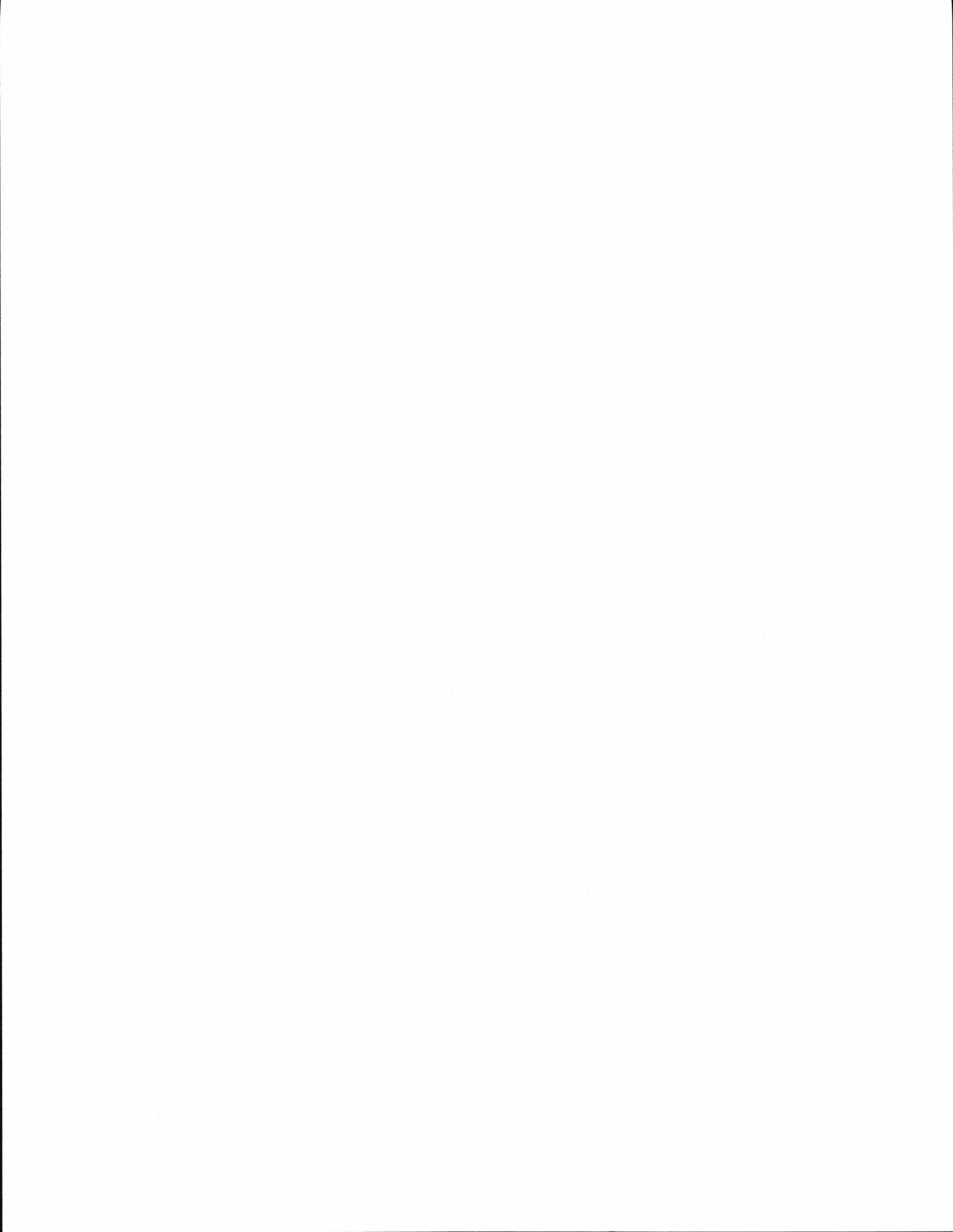
U.S. Department of the Interior  
Bureau of Land Management  
Vernal Field Office  
170 South 500 East  
Vernal, Utah 84078 USA  
435-781-4400





**Environmental Assessment**  
**Big Wash Five Mile Mastication Slashing**  
**DOI-BLM-UT-G010-2014-0098-EA**

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

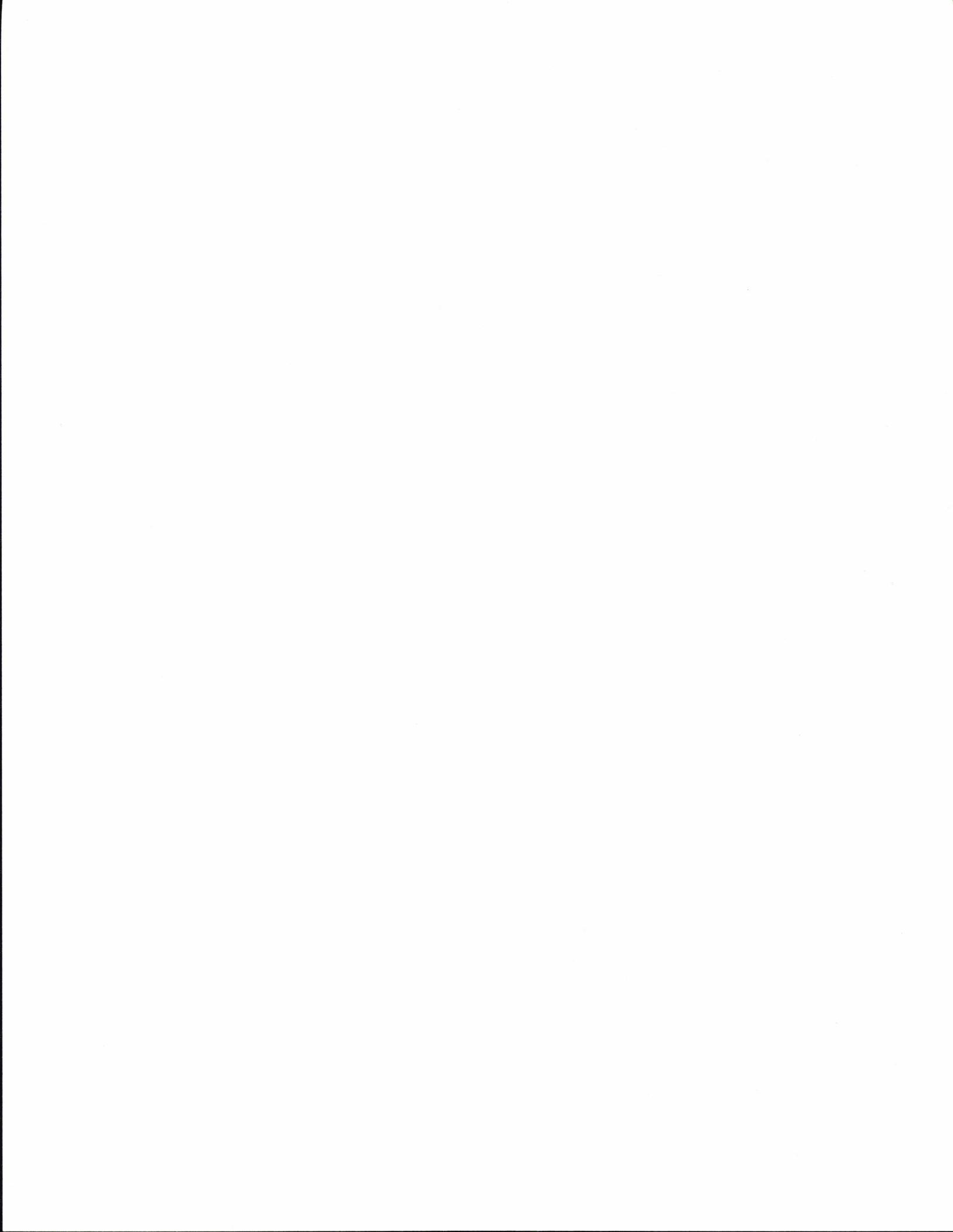


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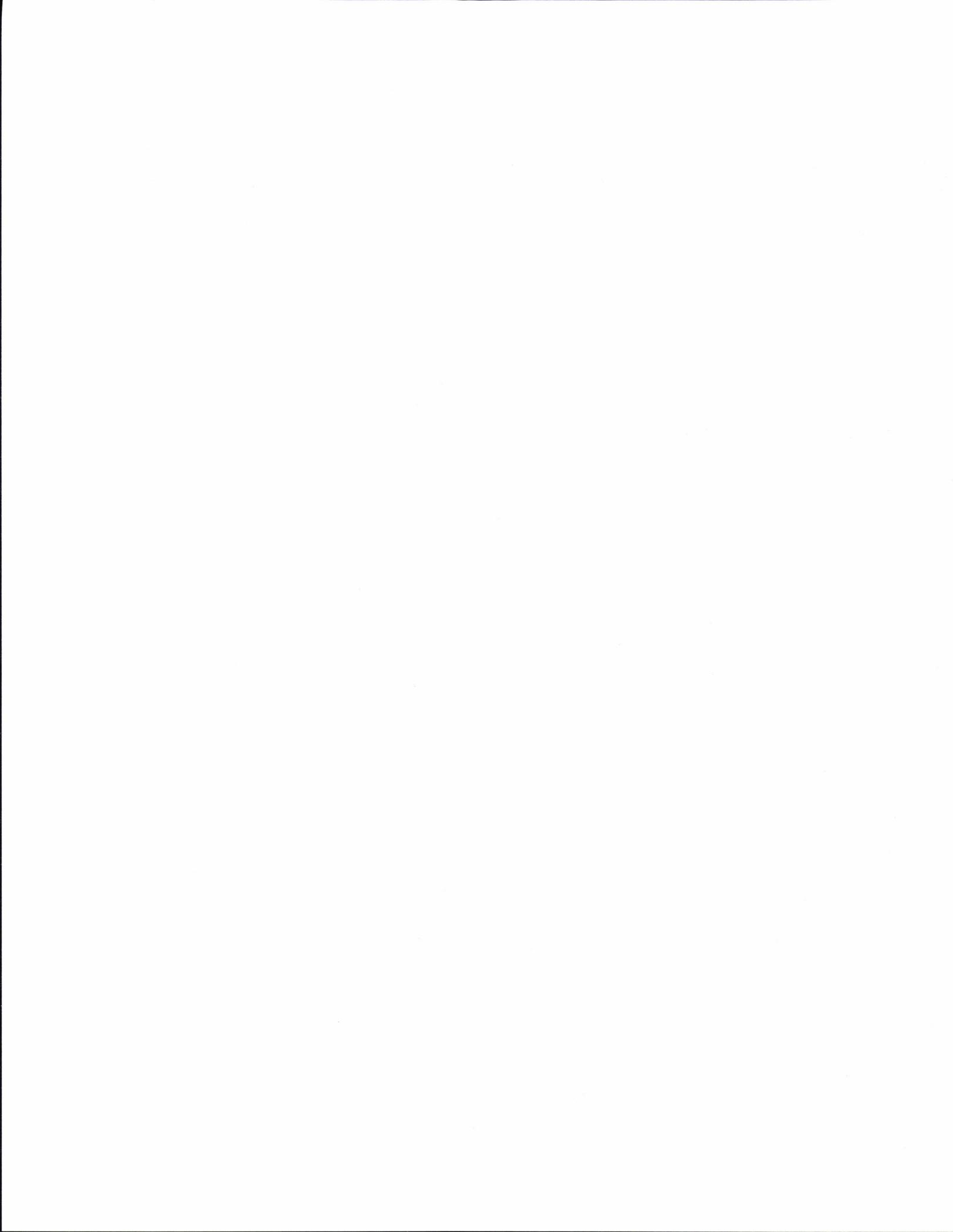


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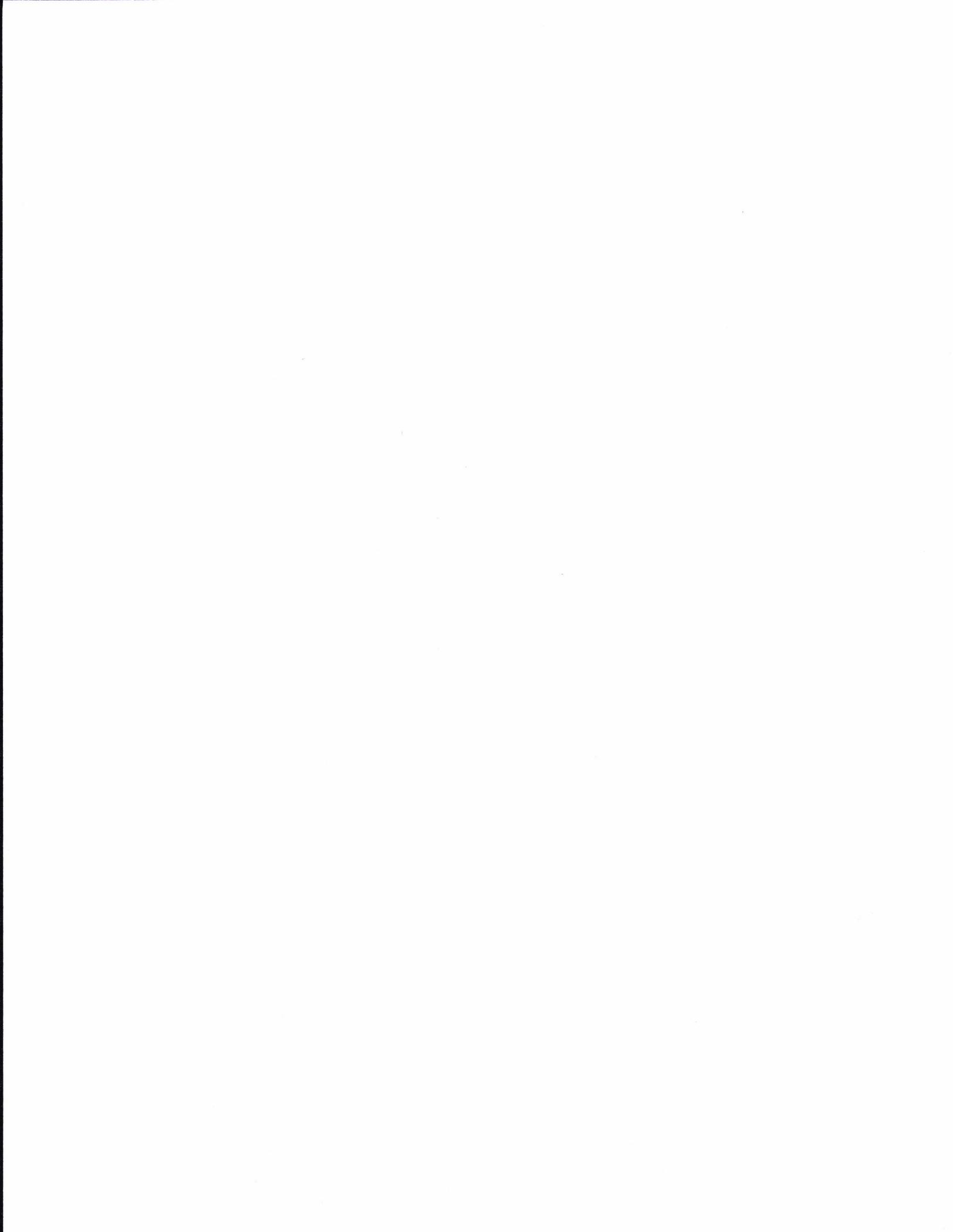
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# Finding of No Significant Impact

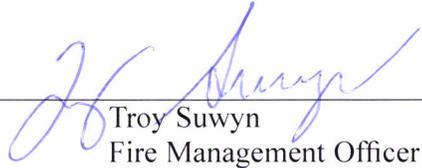
## Finding of No Significant Impact

### Environmental Assessment DOI-BLM-UT-G010-2014-0098-EA

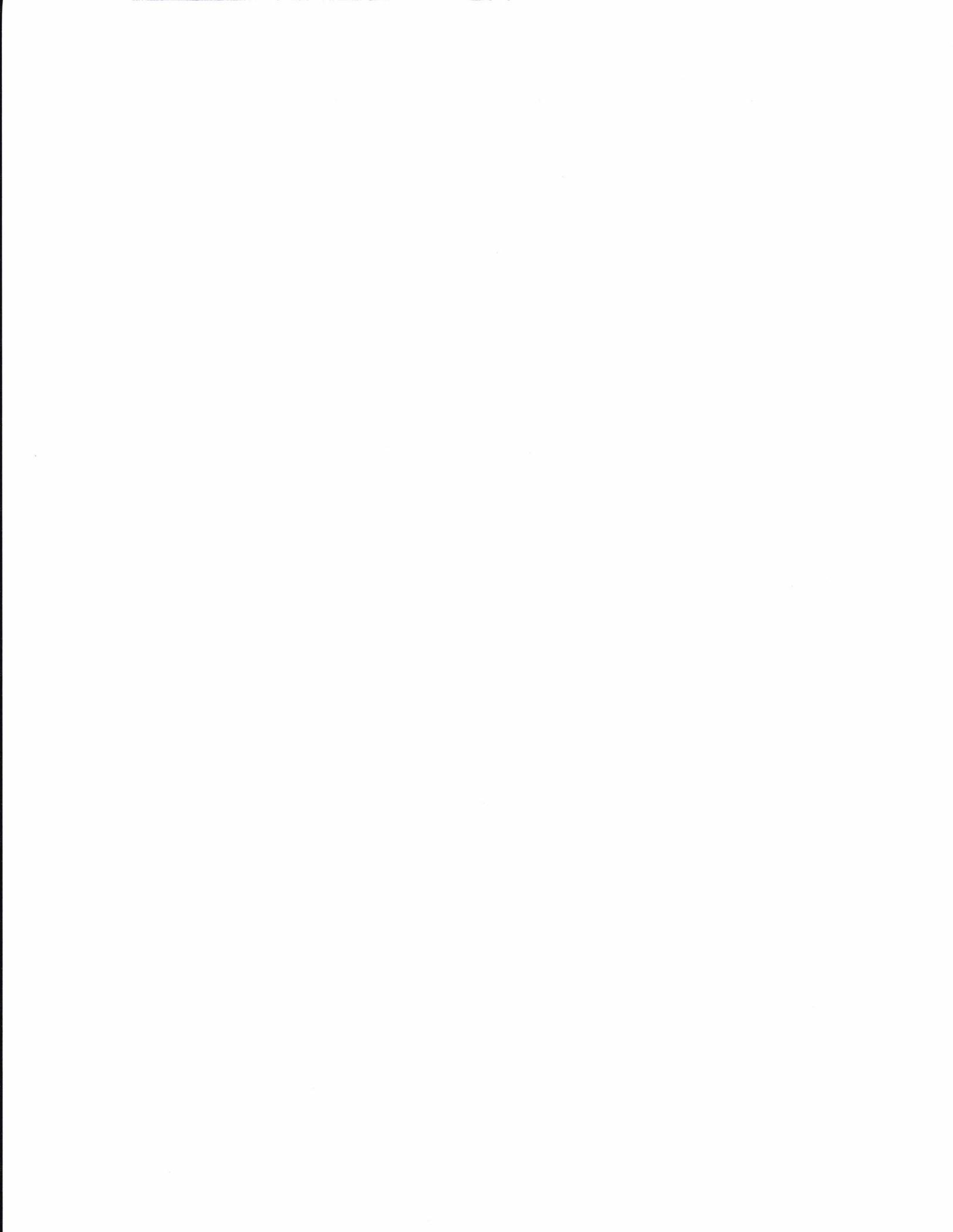
Based on the analysis of potential environmental impacts contained in the Big Wash/Five Mile Mastication, Slashing DOI-BLM-UT-G010-2014-0098-EA, and considering the significance criteria in 40 CFR 1508.27, I have determined that the proposed action will not have any significant impacts on the environment and an environmental impact statement is not required.

### Signatures:

Approved by:

  
Troy Suwyn  
Fire Management Officer

  
[Date]



# Decision Record

## Decision

Based on my understanding of the information contained in the *Big Wash/Five Mile Mastication/Slashing 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-G010-2014-0098 EA.

The following actions will be realized:

- Apply the mastication/slashing treatments to the project 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.

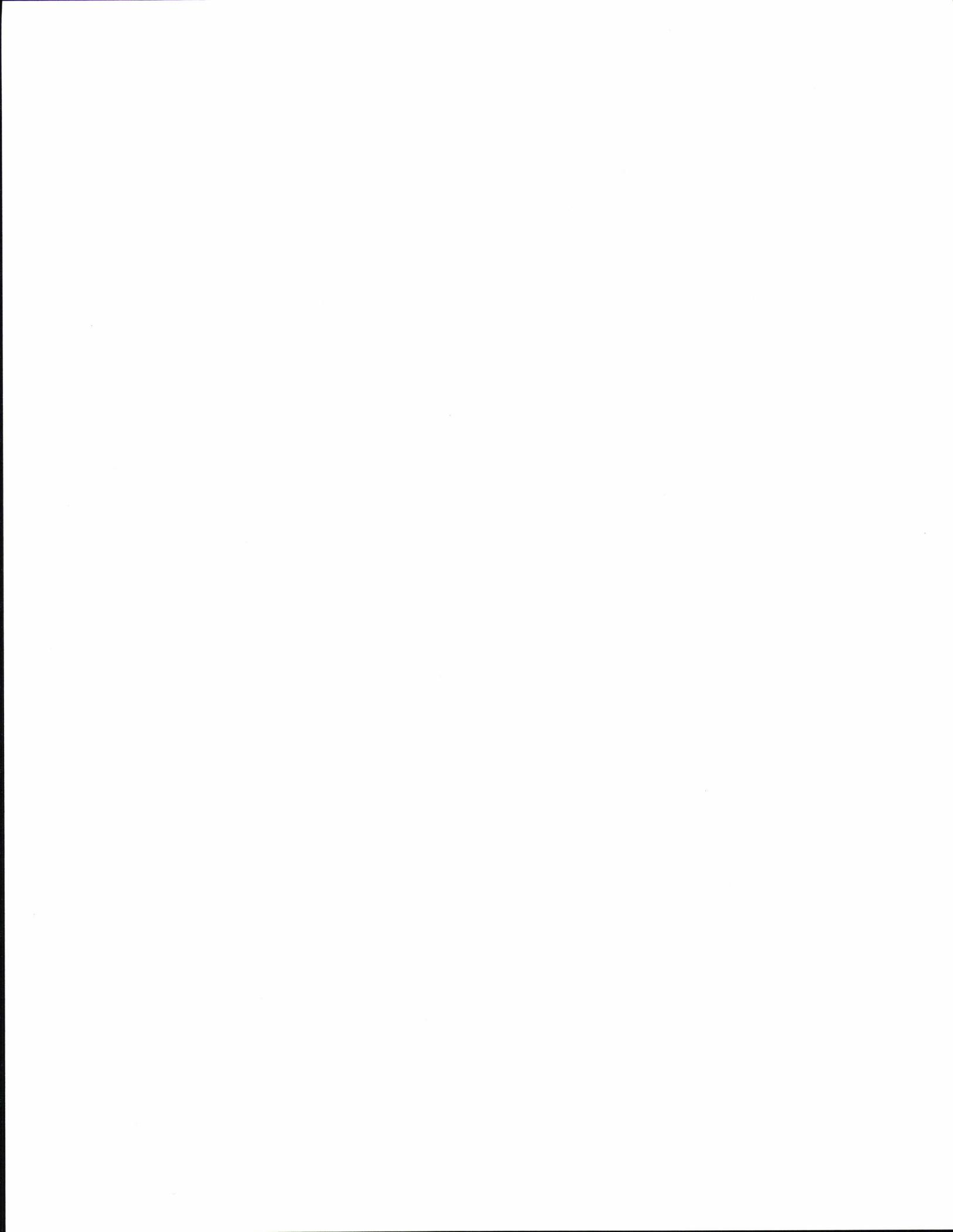
Implementation of the proposed action will result in the improvement towards a vigorous and healthy sagebrush vegetative type. The treatment will result in the following positive result:

1. Reductions of the existing hazardous fuel loads and decrease the risk of unplanned fire events.
2. There would be increased forage for both livestock, big game species and occupied sage-grouse habitat.
3. Habitat values for sagebrush related keystone species would be improved.

## 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 , July 16, 2013. 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

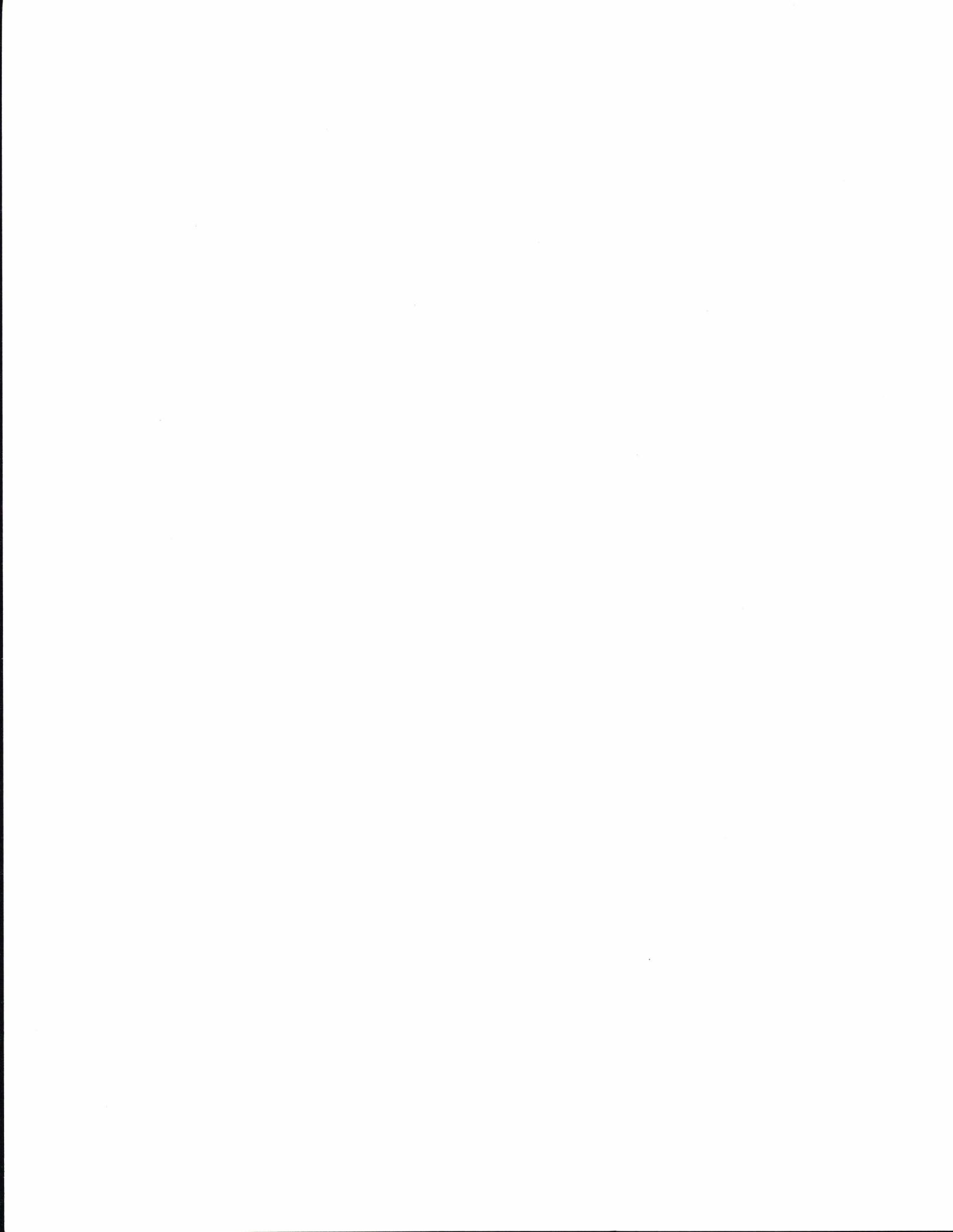
**Authorizing Official:**

\_\_\_\_\_  
Troy Suwyn  
Fire Management Officer

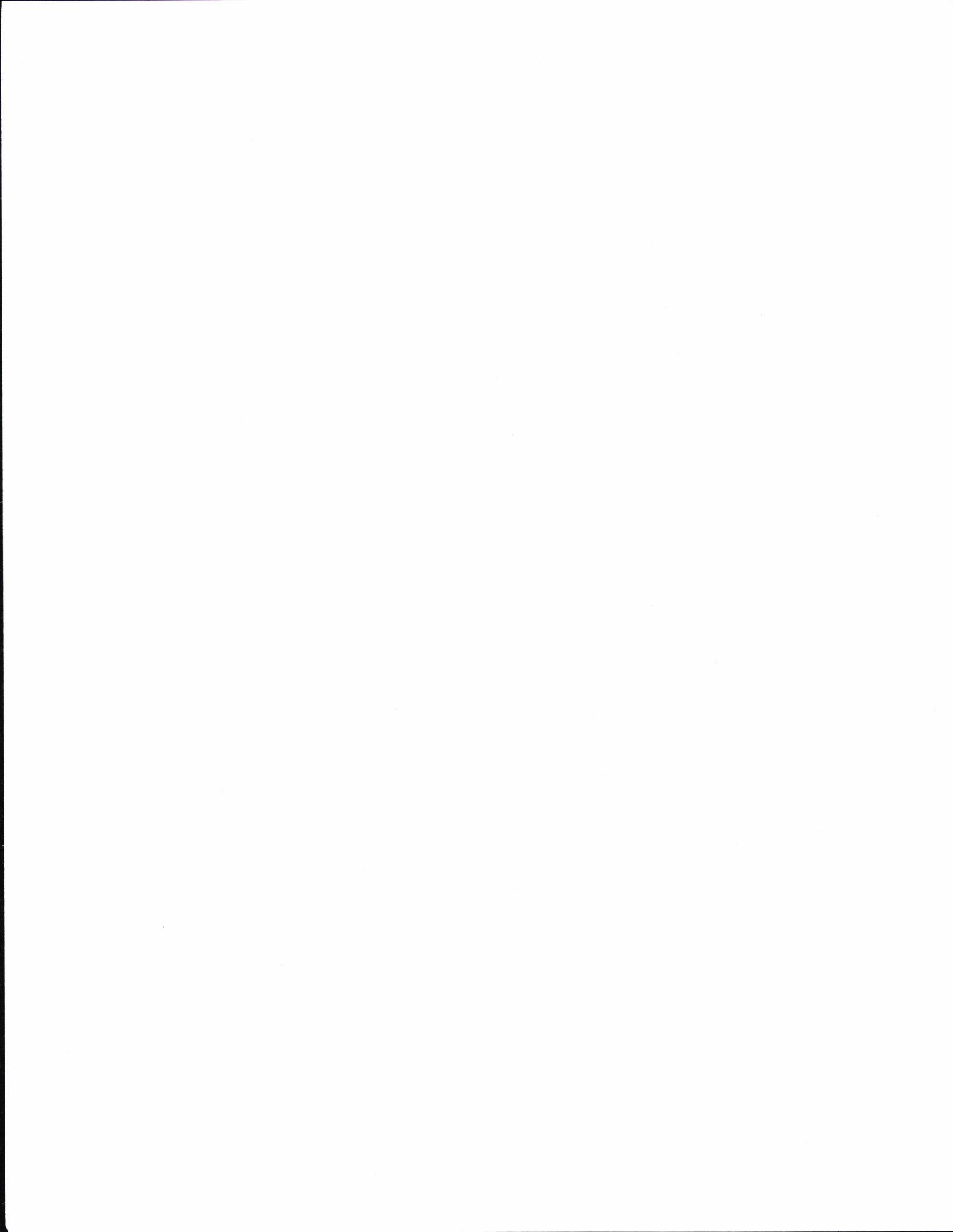
*Troy Suwyn*

\_\_\_\_\_  
Date

7/14/2014



# **Chapter 1. Introduction**



## **1.1. Introduction**

The Environmental Assessment (EA) has been prepared to analyze the Big Wash/Five Mile Mastication/Slashing 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 Big Wash/Five Mile Mastication/Slashing projects.

## **1.2. Identifying Information:**

### **1.2.1. Location of Proposed Action:**

*Location:*

Duchesne County, Vernal, Utah

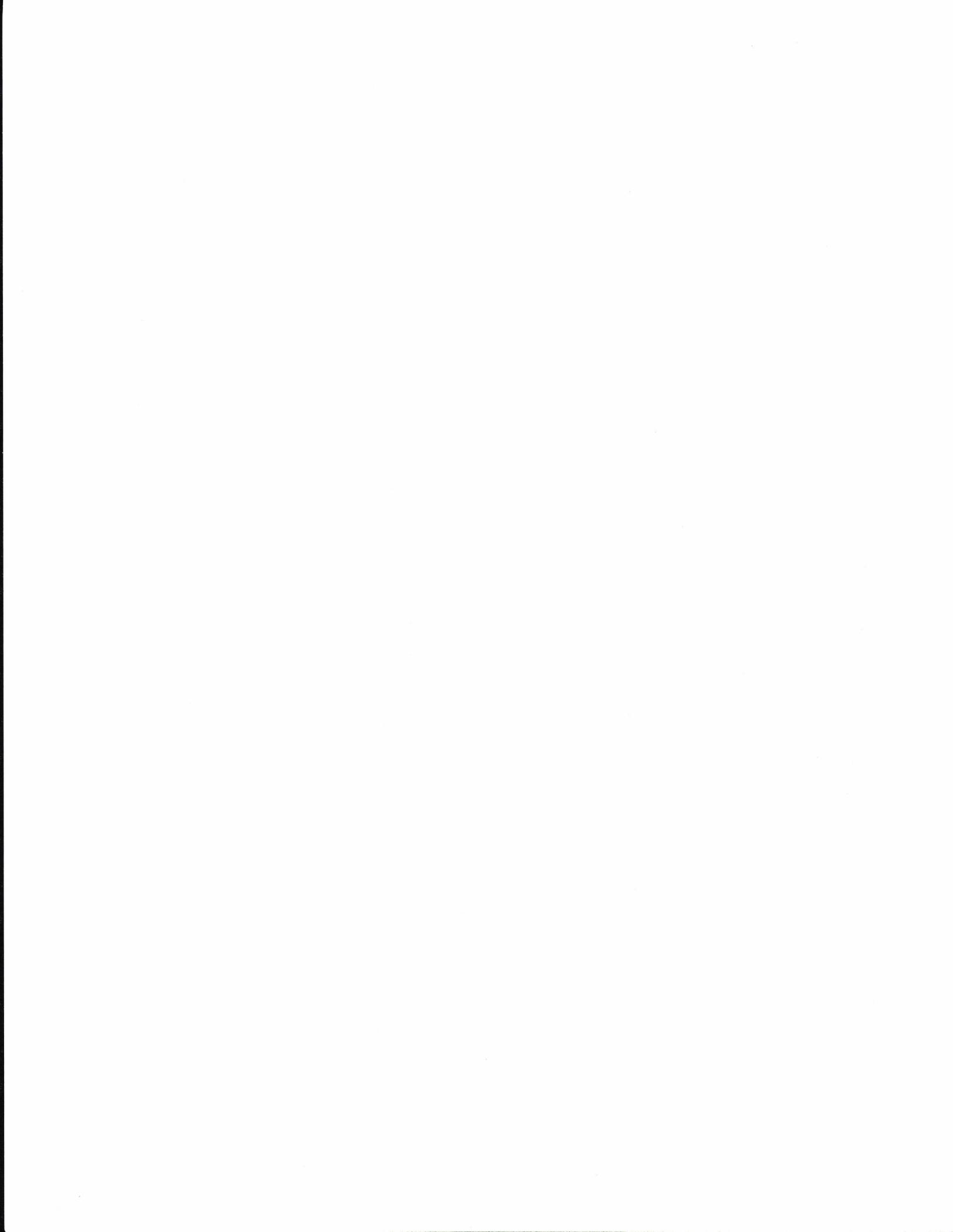
*Township 10 South, Range 15 East, Sections 14, 15, 19-23, 26-35, ; Township 10 South, Range 14 East, Sections 24, 25, 35, 36 ; Township 11 South Range 14 East, Sections 1,2 ; Township 11 South, Range 15 East, Sections 1-6, 10-12; SLB&M..*

### **1.2.2. Name and Location of Preparing Office:**

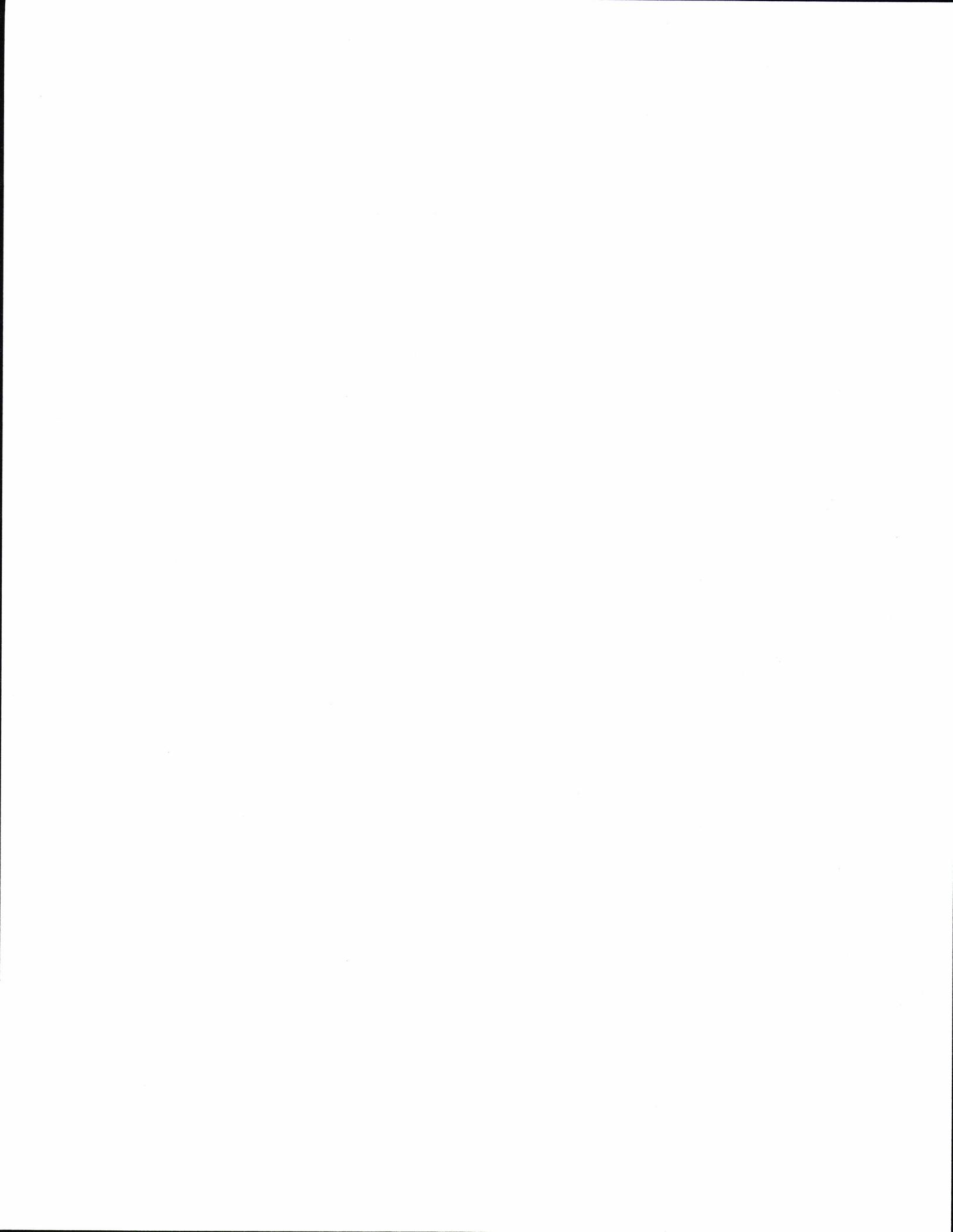
Lead Office - Vernal Field Office and number NEPA # DOI-BLM-G010-2014-0098 EA

## **1.3. Purpose and Need for Action:**

The purpose of the Big Wash/Five Mile Mastication/Slashing projects are to provide for increased quality habitat for sage grouse, mule deer 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 areas.



## **Chapter 2. Proposed Action and Alternatives**

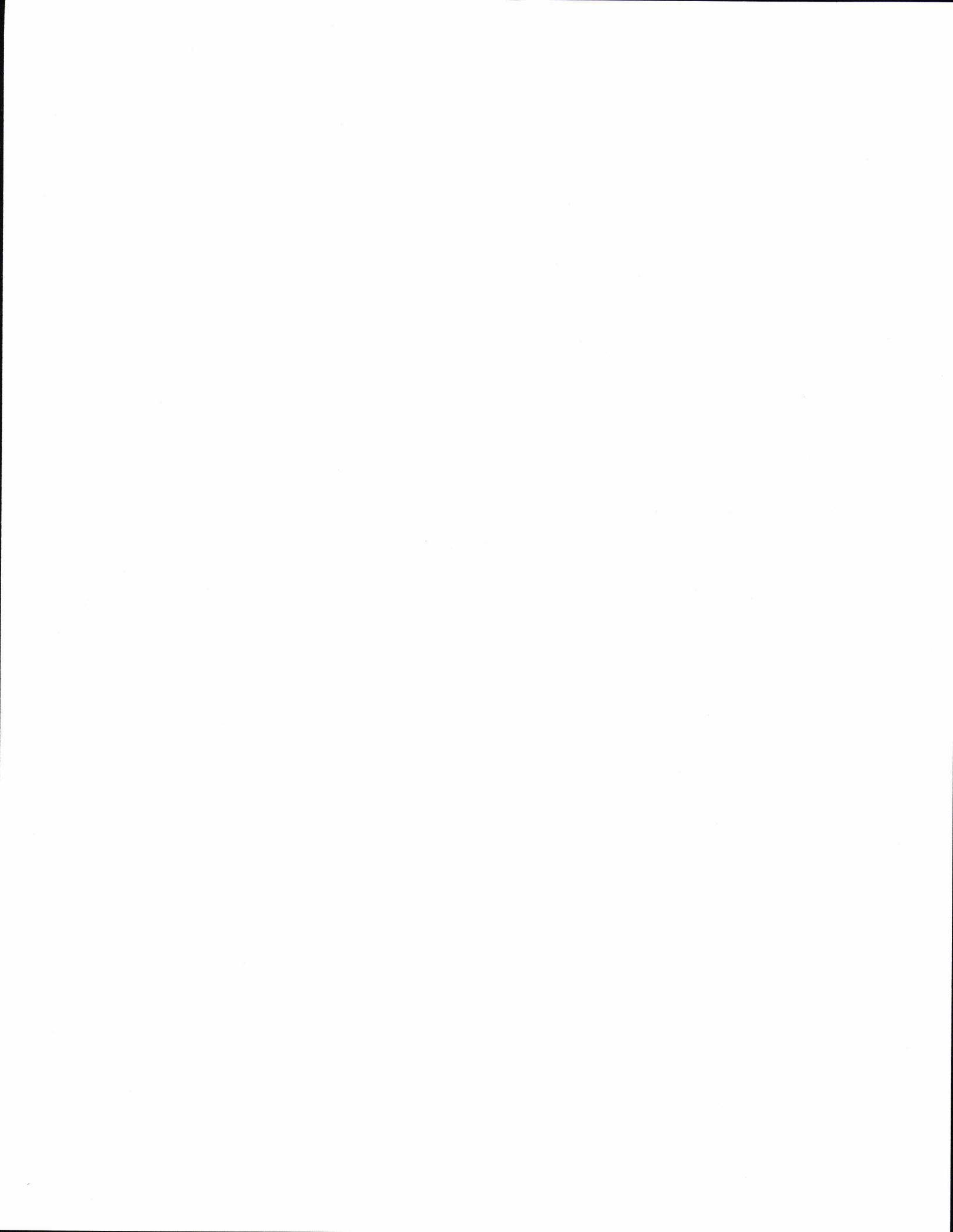


This EA focuses on the Proposed Action and No Action Alternatives. The No Action Alternative is considered and analyzed to provide a baseline for comparison of the impacts of the proposed action.

## **2.1. Description of the Proposed Action:**

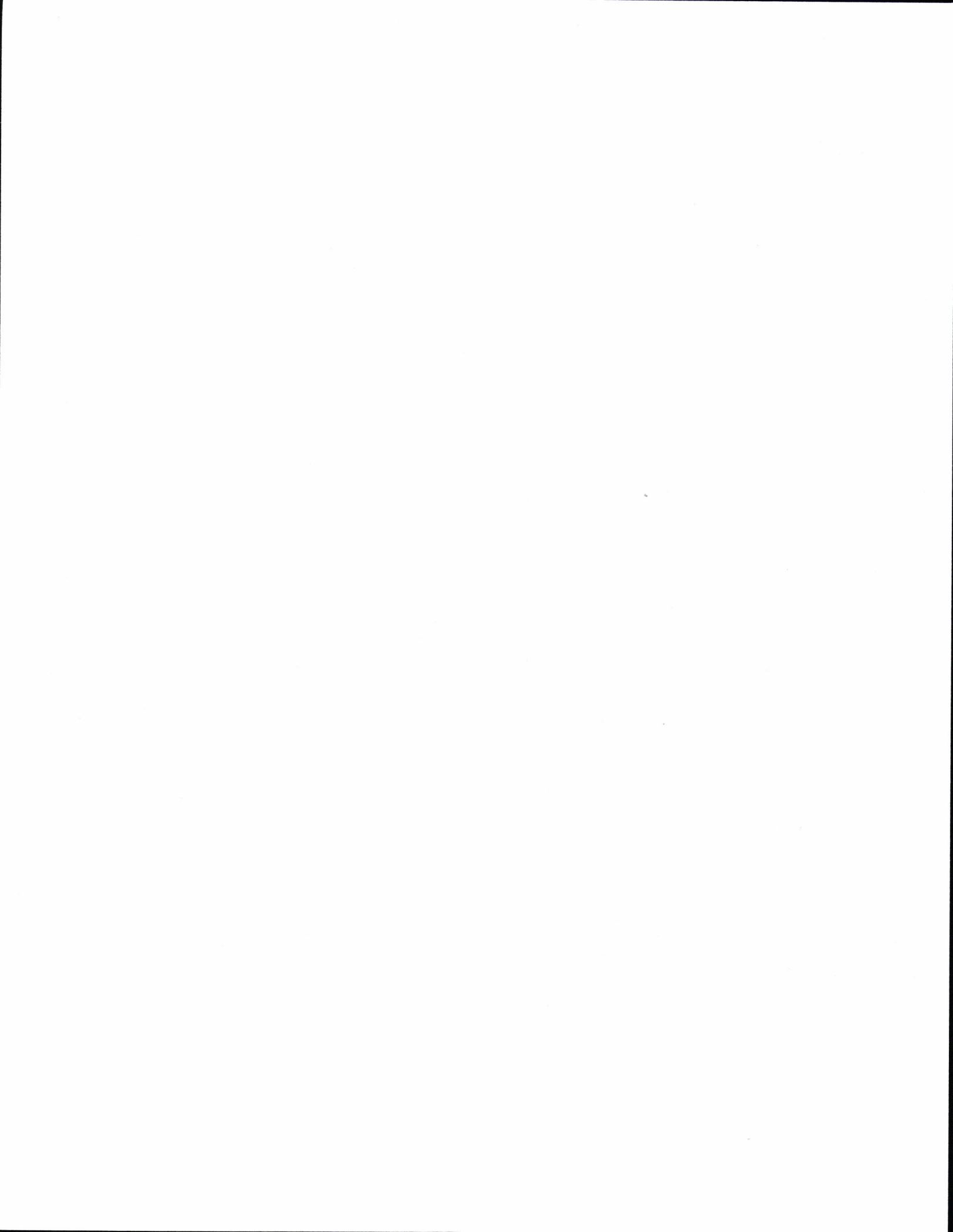
The proposed action involves removing encroaching Pinyon-Juniper (P-J) from sagebrush ecosystems along with reducing hazardous fuels. The two treatment methods would be used to treat a total of 14,479 acres.

The first method, 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 562 stems/acre. Bullhog areas have been identified within the Big Wash, and Five Mile project areas. The second treatment methodology involves the reduction of hazardous fuels by the removal of Pinyon-Juniper trees through a lop and scatter type of removal. This involves the cutting of the P-J trees by hand with a chainsaw. The resulting volume of slash would be reduced to a level of three (3) feet. Remaining stumps would be no greater than 6" above level ground. 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 102 stems/acre. Lop & Scatter areas have been identified within the Five Mile project area. Both treatment methods will be used to remove encroaching Pinyon-Junipers from the sagebrush drainages. Pinyon-Juniper trees will not be removed from the entire project areas.





*Chapter 2 Proposed Action and Alternatives  
Description of the Proposed Action:*



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.

No new access roads would be needed to access the project area and access would be via existing roads and trails.

The project area still has an adequate understory vegetation to protect the soil from erosion, following removal of the P-J trees. Therefore reseeding this area after treatment would not be required. 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.

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:

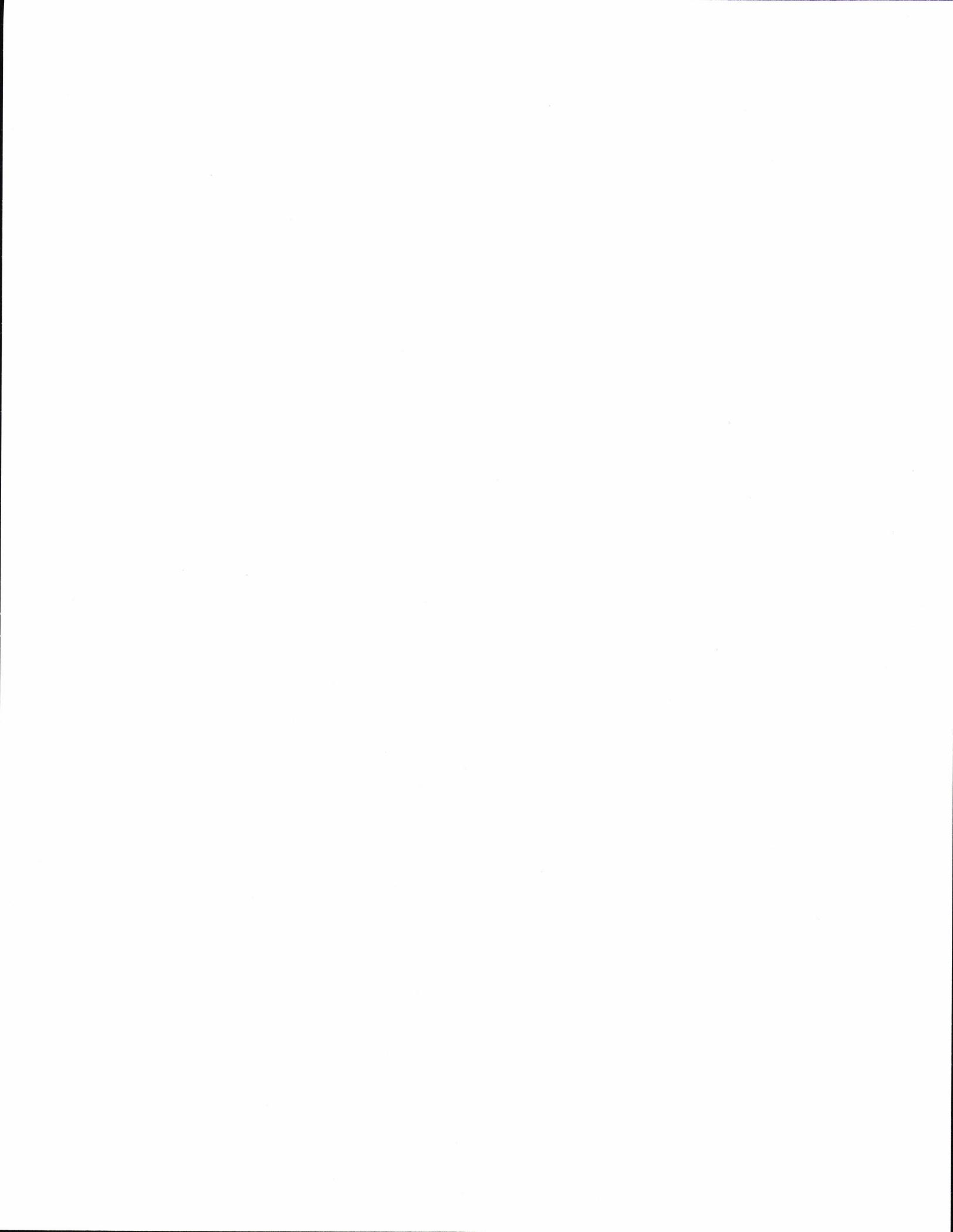
1. A pre-project weed inventory would be conducted to determine the presence of noxious weeds. If weeds were found, they would be: a) mapped and reported; b) removed or treated prior to surface disturbance; c) and removed or treated prior to seed set when possible.
2. All vehicles and equipment would 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.

## 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.

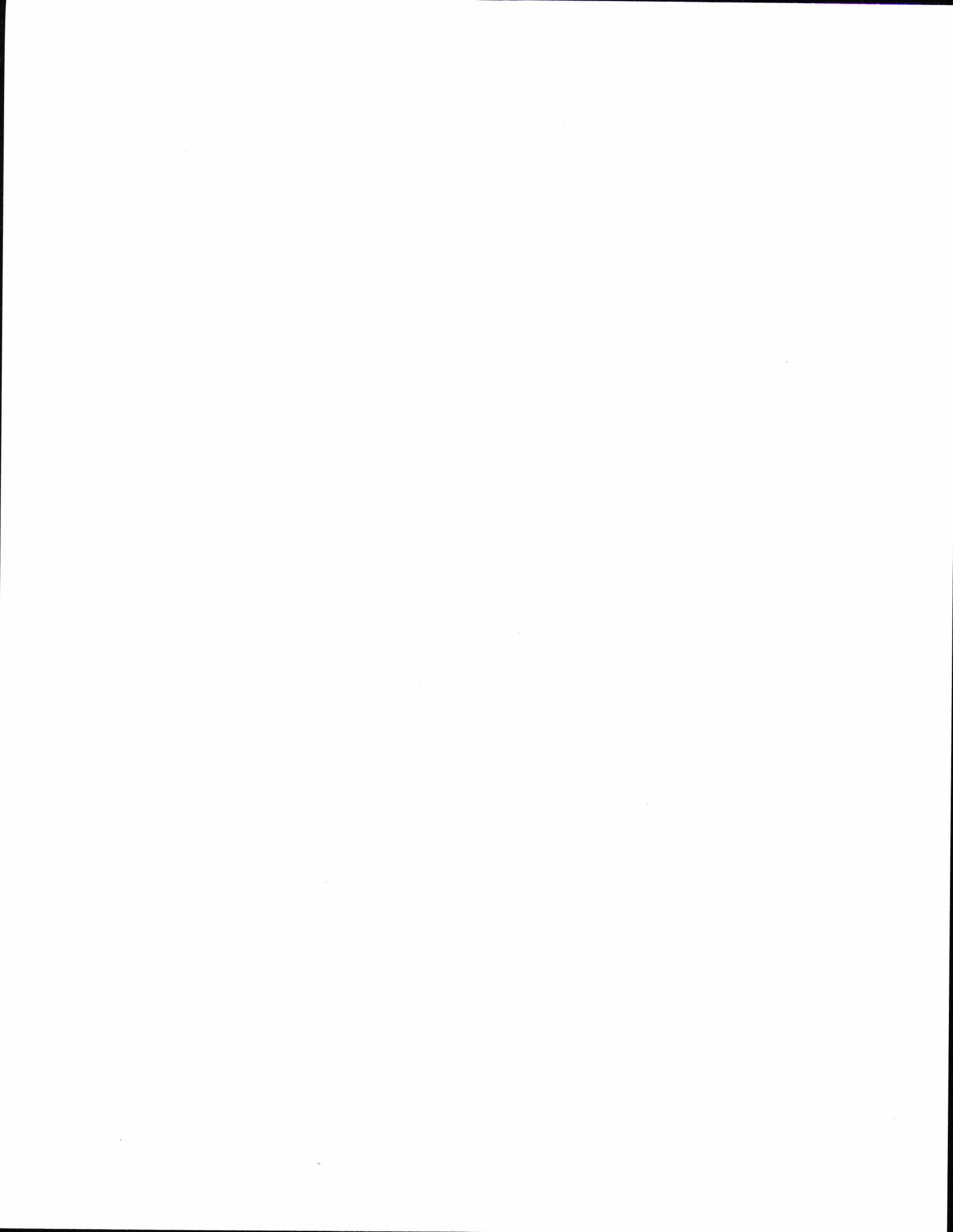
### 2.4.1. Relationships To Statutes, Regulations and Other Plans

Duchesne County's General Land Plan, County Policies, Objectives and Action Steps as amended in 2013 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:

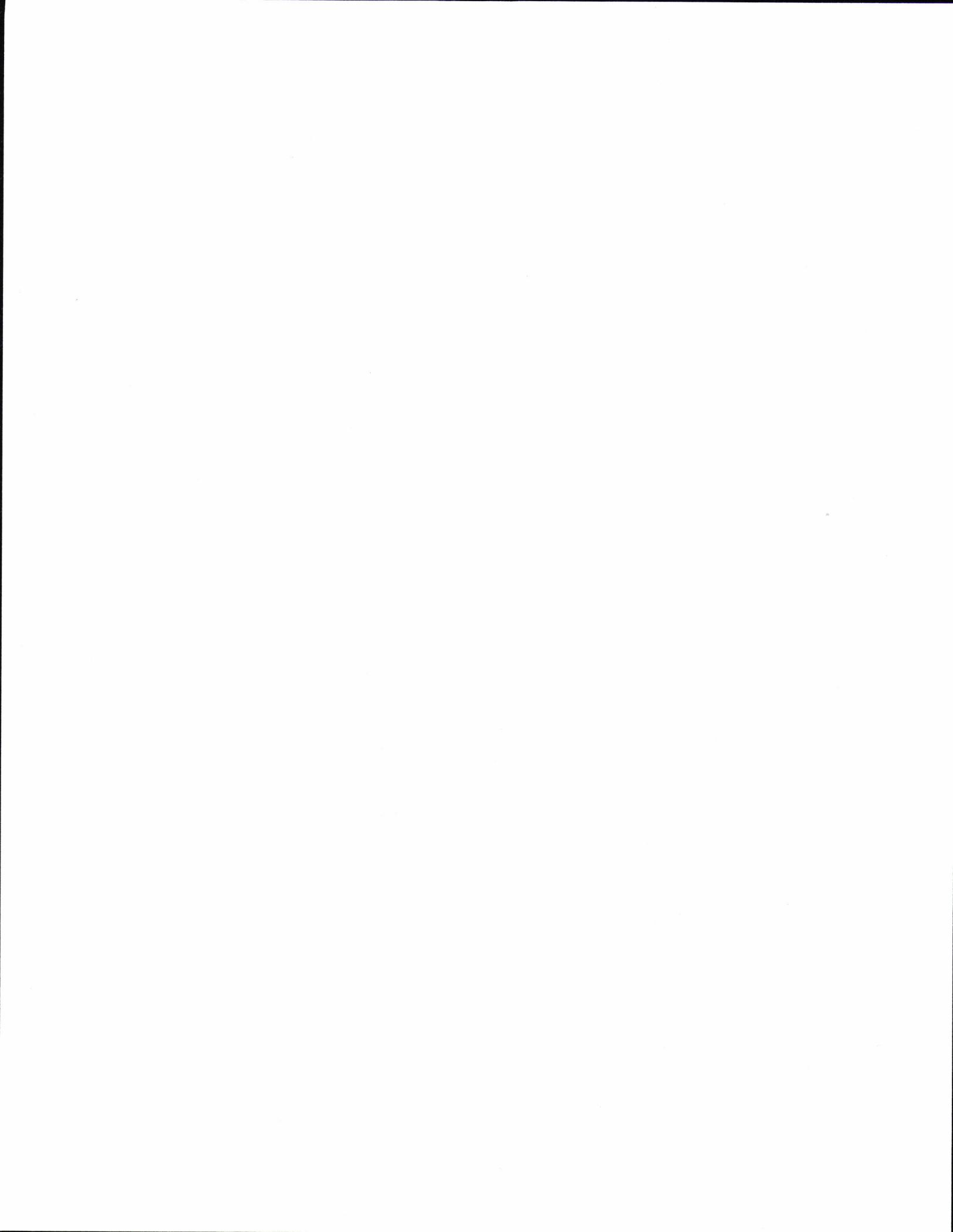
- Maintaining multiple-use of public lands.
- To protect, maintain, and expand natural resource use.
- The proper management and allocation of forage on public lands is critical to the viability of the Basin's agricultural, recreation and tourism industry.

#### Federal Statues and Regulations.

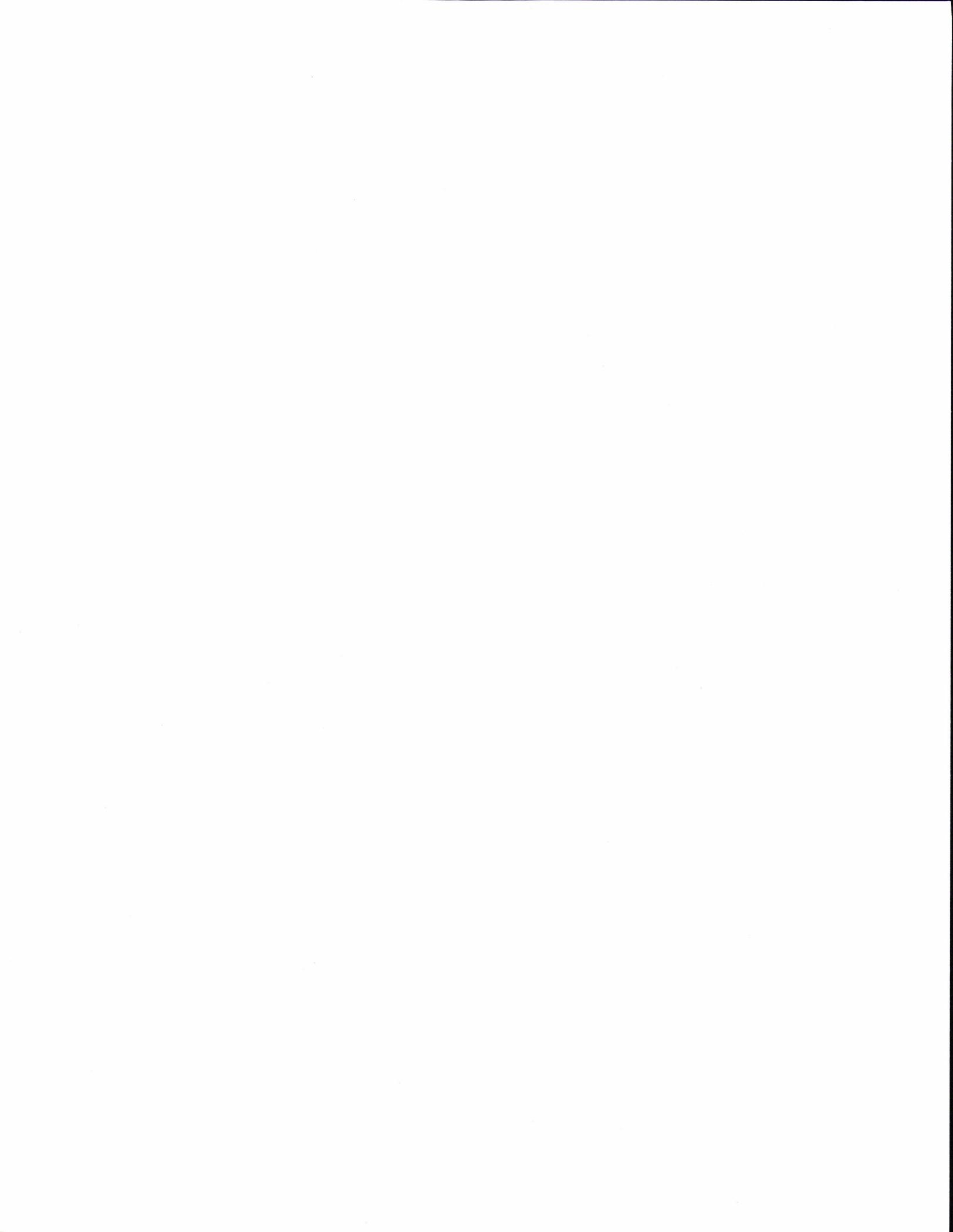
- Protection Act of September 20, 1922 (42 Stat. 857; U.S.C. 594).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; U.S.C. 315).



- 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).
- 1995 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:**



### **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 Wells Draw Road, approximately 35 miles southwest of Myton, Utah. The project area occurs on a fairly large topographical plateau. The vegetation in the area consists of pinyon-juniper larkspur, Wyoming sagebrush, cheatgrass, larkspur, needle & thread grass, Indian rice grass, crested wheatgrass and western wheatgrass.

#### **3.2.1. Fuels and Fire Management**

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

- **Non-Fire Fuels Treatments**

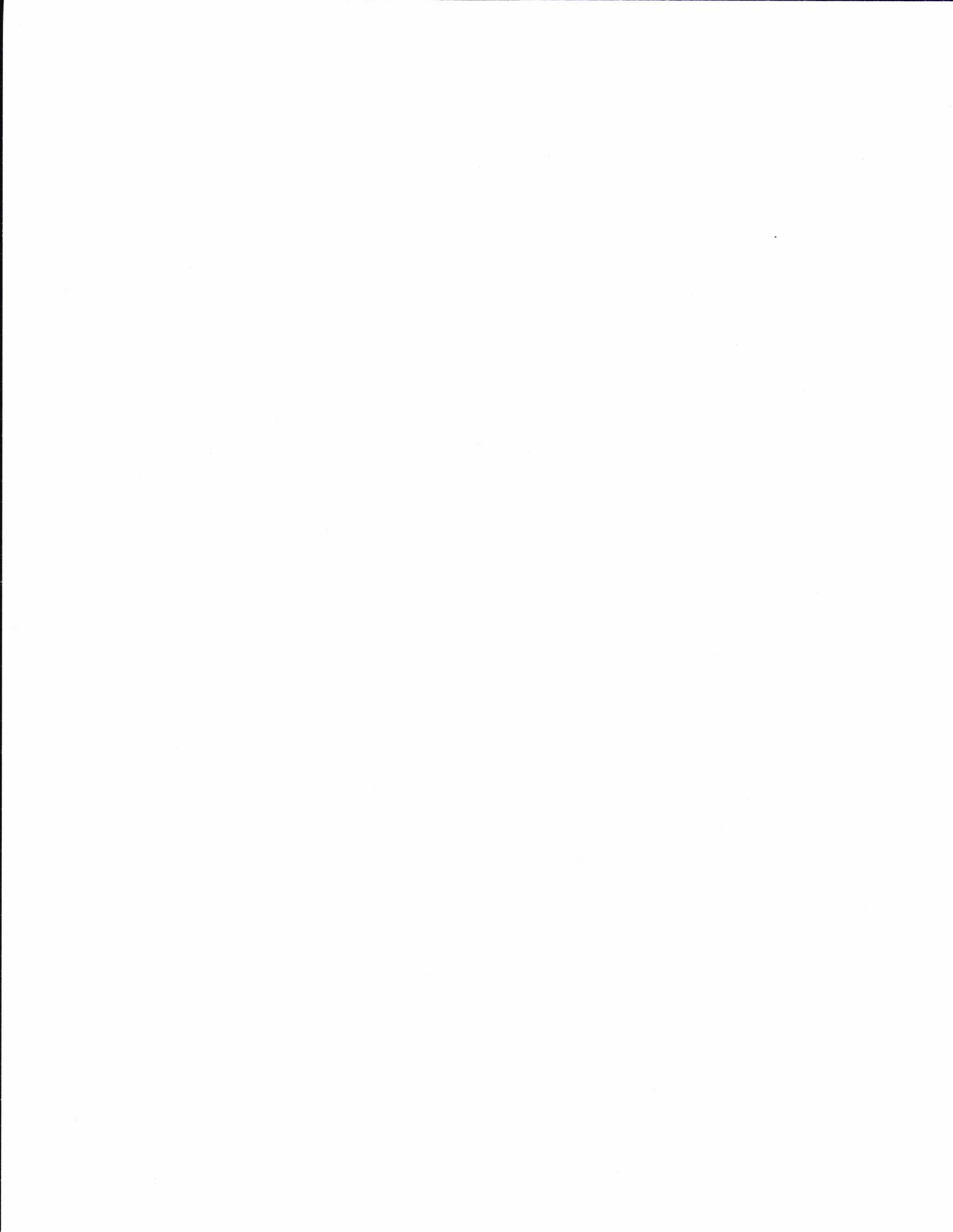
Treat 2,000 acres per decade with non-fire fuels treatment. Objectives are: achieve the desired mix of seral stages for each major vegetative type, create fuel breaks within the mountain big sage type to prevent large unplanned fires in this type; remove encroaching woody species from the major vegetative types, 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.

- **Prescribed Fire**

Treat approximately 2,000 acres per decade. Objectives are: achieve the desired mix of seral stages for the Pinyon-Juniper and Wyoming sagebrush vegetative types; remove Pinyon-Juniper and Douglas Fir encroachment from the Wyoming sagebrush type; and to reduce fuel loads.

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 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.

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

#### **Invasive Plants/Noxious Weeds**

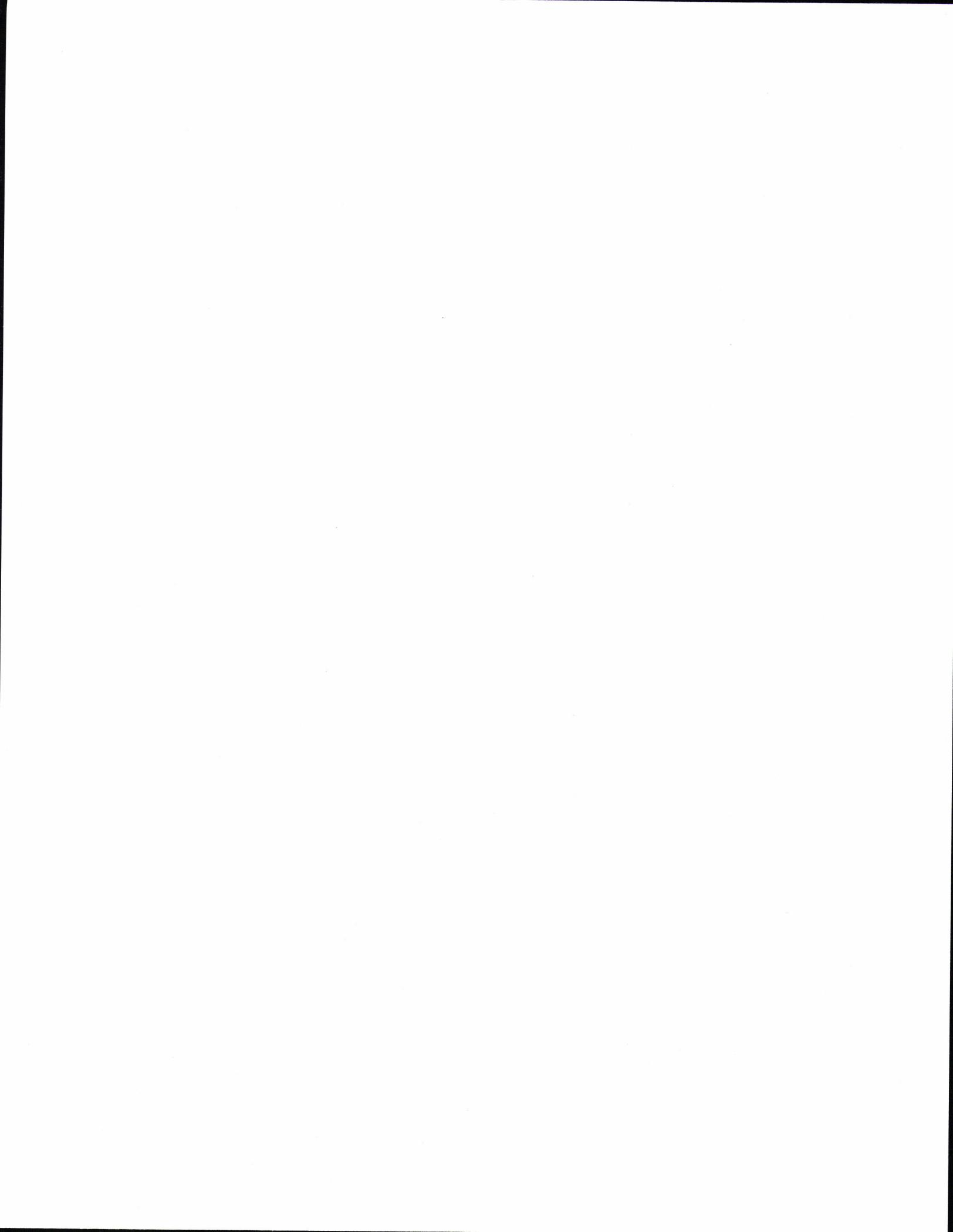
There are no known noxious weed populations occurring inside of or within a two mile radius of the project area. However, with ground disturbance there is always the potential for establishment.

#### **Soils**

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 — 034BY312UT Upland Stony Loam

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 102 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, crested wheatgrass 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 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:

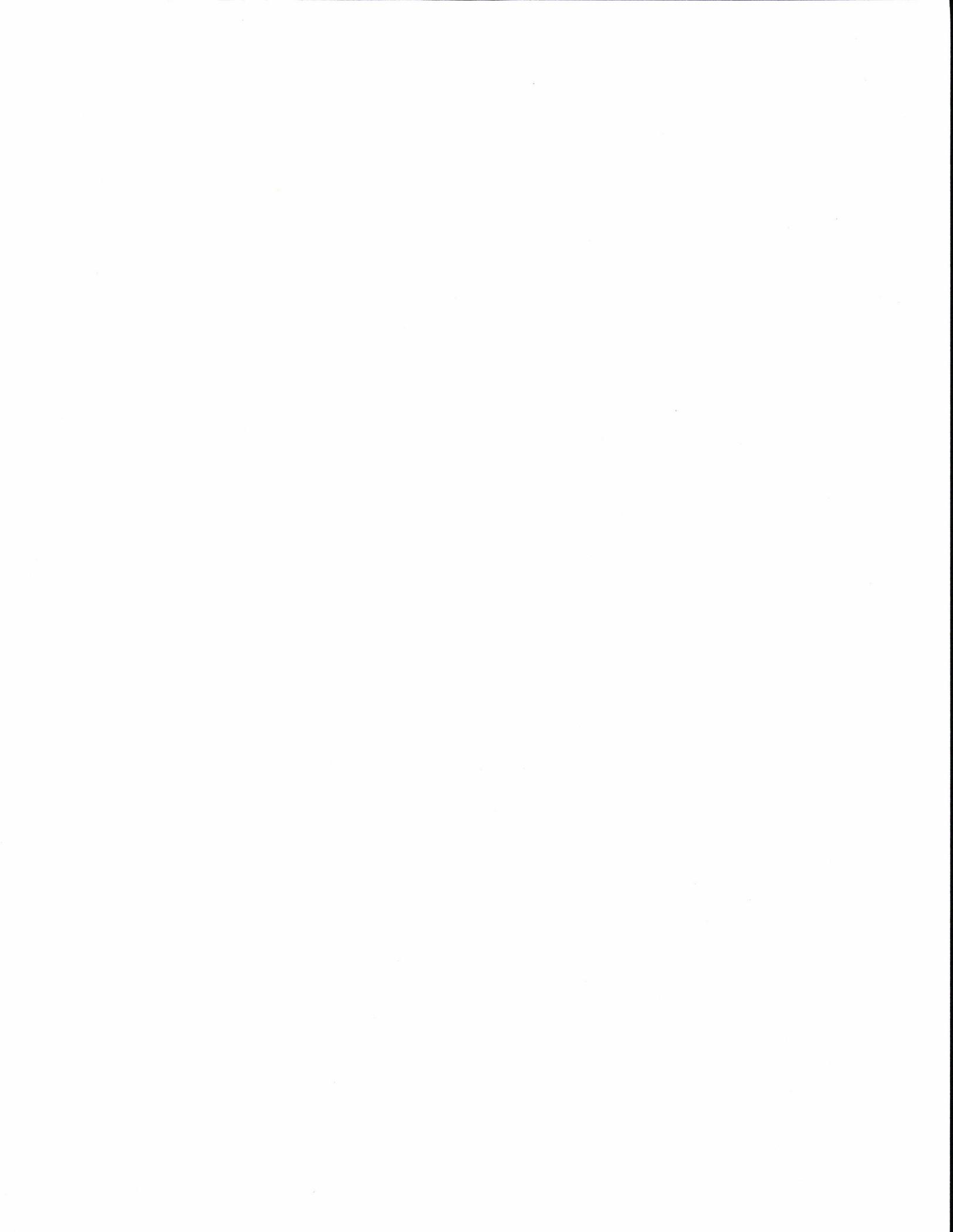
- Phase I- P-J trees are present but shrubs and herbs are the dominant vegetation that influences ecological processes on the site.
- Phase II- P-J trees are co-dominant with shrubs and herbs and all three vegetation layers influence ecological processes on the site.
- Phase III- P-J trees are the dominant 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.

### **3.2.3. 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 golden eagles, red-tailed hawks, prairie falcons, and ravens. The BLM raptor database was reviewed and three known raptor cliff nests 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.

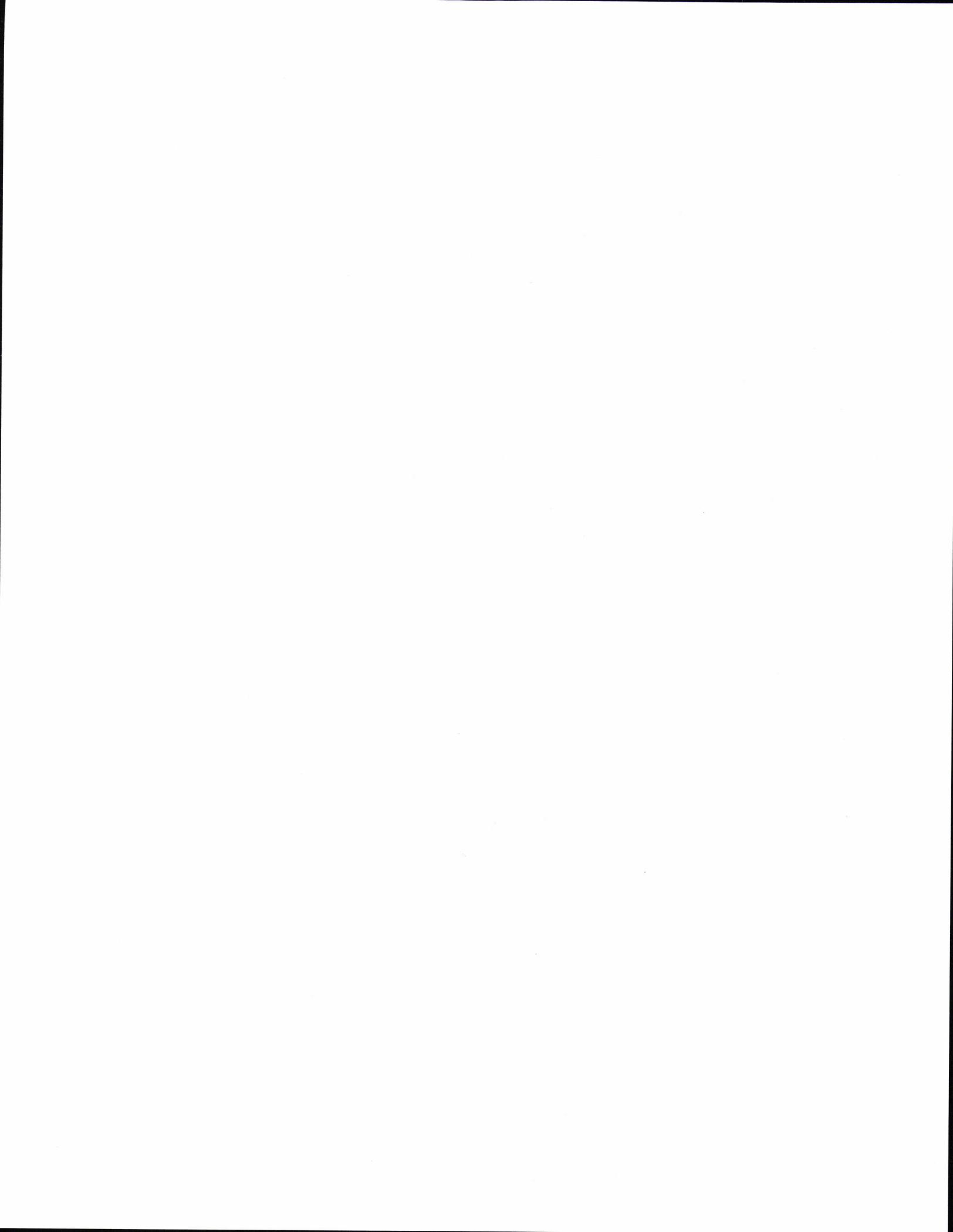
### **Non-USFWS Designated (Big Game Species)**

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 summer habitat has been designated within the project area. These designations were made in the Vernal Field Office RMP (BLM, 2008).

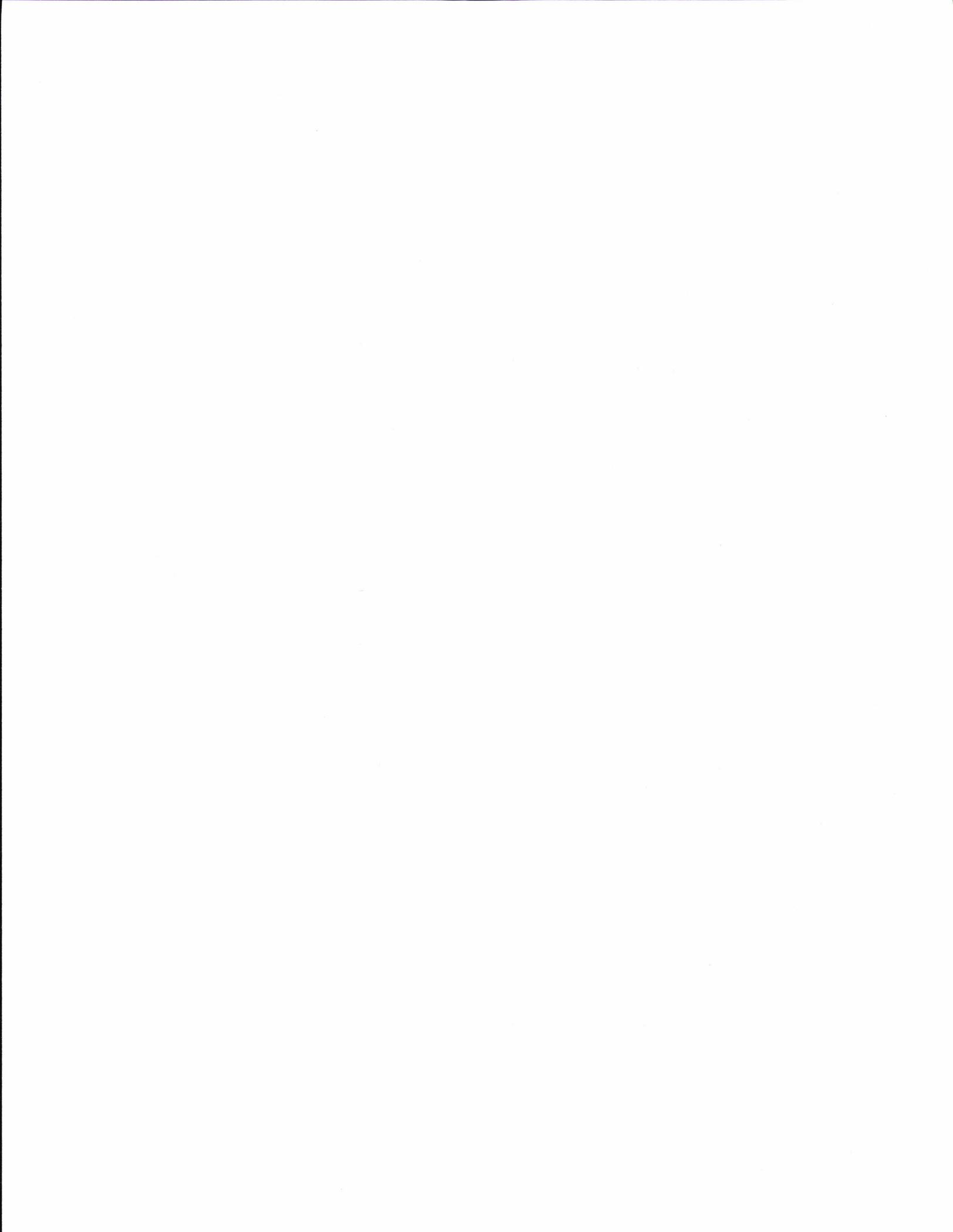
Other wildlife species that are likely to occur in the project area include black bear, mountain lion, coyote, and bobcat, as well as a large variety of small mammals. Many of these species are habitat generalists, meaning they are not tightly restricted to specific habitat types. These species have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

### **Threatened, Endangered, Proposed or Candidate**

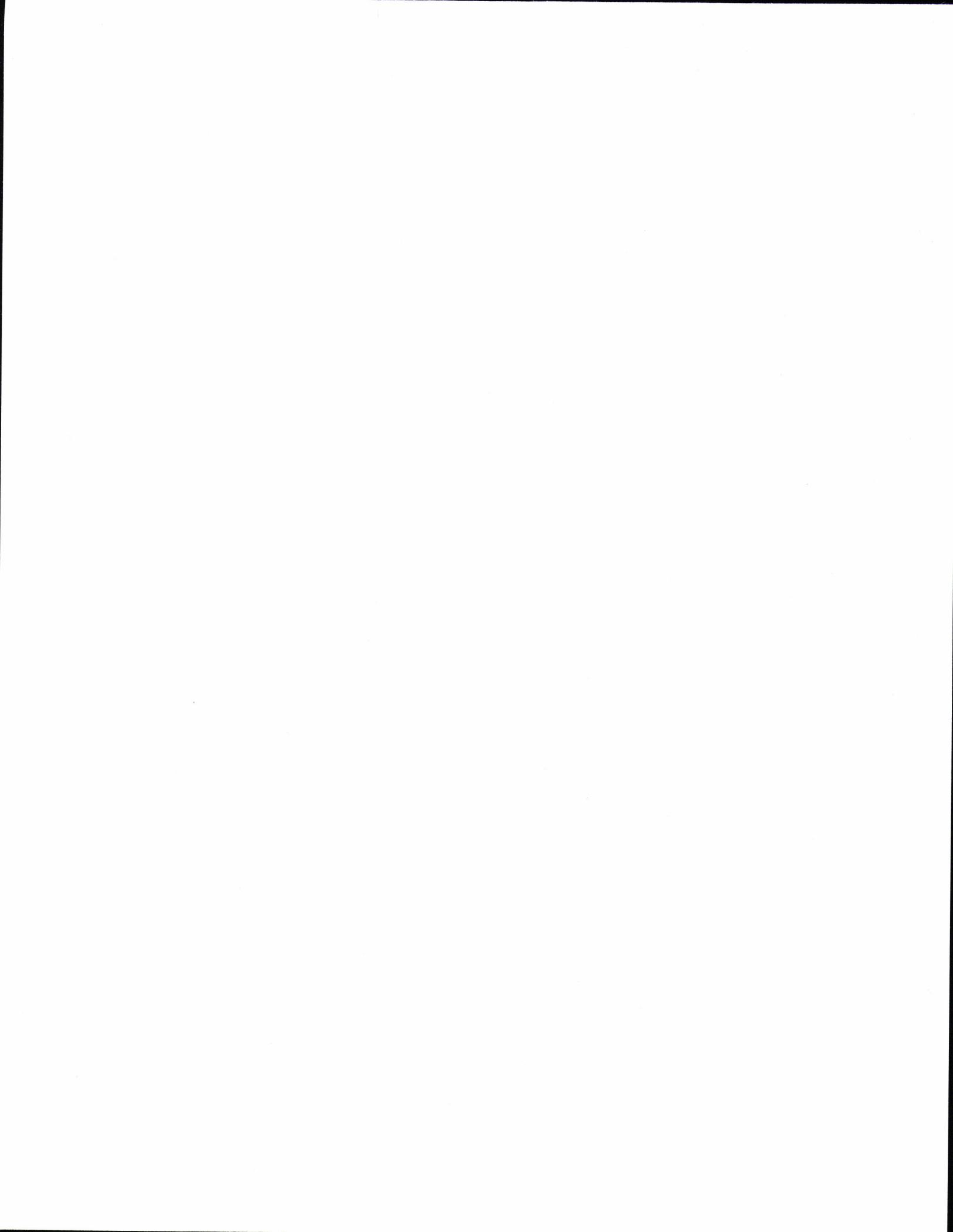


### Greater Sage-grouse (Federal Candidate, BLM Sensitive, Utah State Sensitive)

The greater sage-grouse is an important game bird found in Utah. 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) identifies occupied and winter habitat within the project area. The project area is not considered a Sage Grouse Management Area (SGMA) within the state's Conservation Plan for Greater Sage-Grouse in Utah. Currently, the BLM identifies occupied habitat as Preferred Priority Habitat (BLM IM 2012-043).



## **Chapter 4. Environmental Effects:**



## **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

With the removal of the encroaching pinyon-juniper, 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. With the mulching and slashing of PJ, the arrangement of over 18 tons of hazardous fuels would be decreased 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.

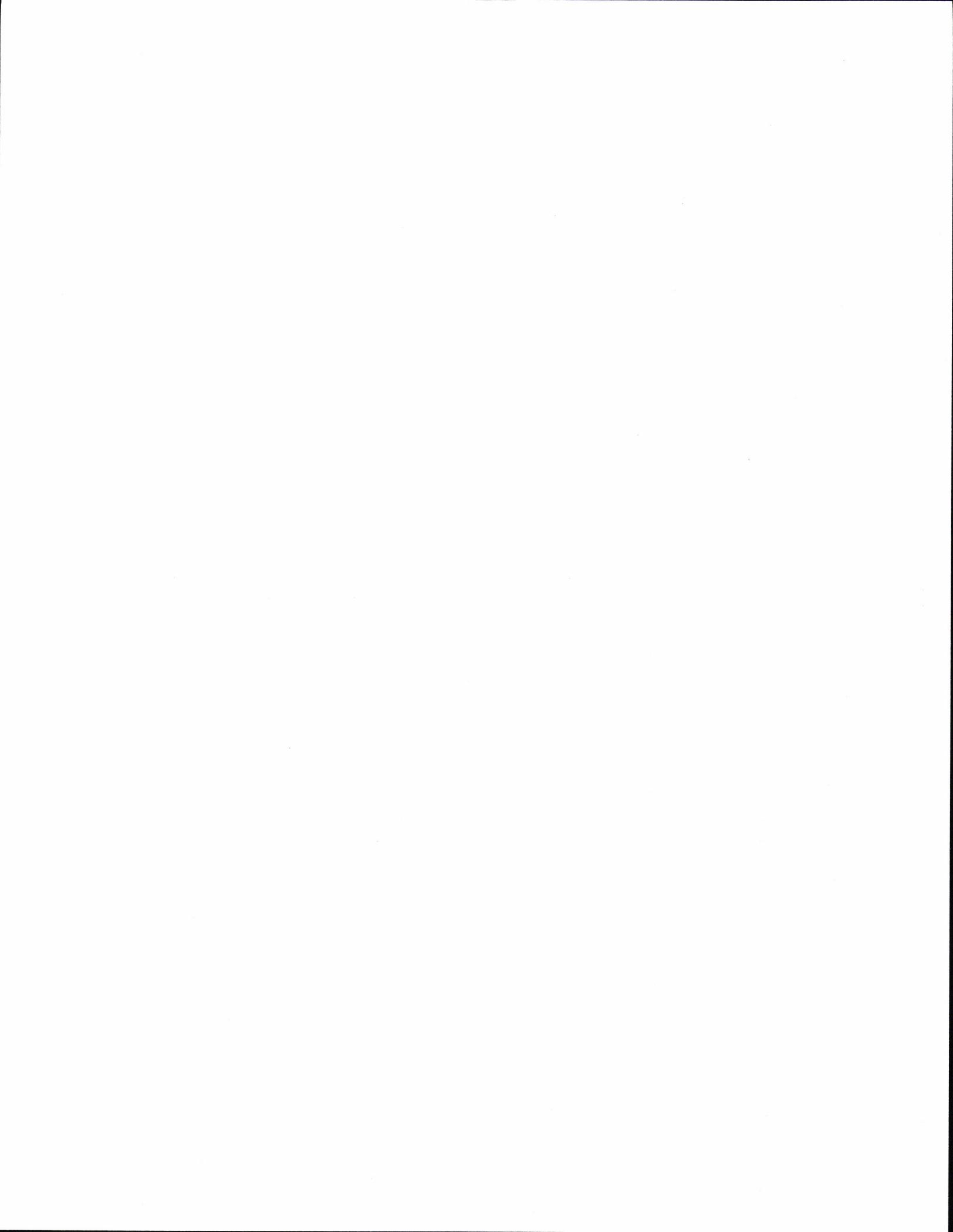
### **4.2.2. Invasive Plants/Noxious Weeds, Soils, and Vegetation**

#### **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 14,479 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 14,479 acres of fuel reduction activities. Encroaching pinyon-juniper trees would be removed across the 14,479 project areas 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. Fourteen thousand, four hundred, and seventy-nine 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. 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 10,271 acres of crucial summer calving habitat was identified within the proposed project areas. Elk can be found in the project year around. An



increase in human presence during the summer months could cause short term impacts (increased stress, increased energy expenditure, displacement during calving) to elk. No treatment activities will be allowed from May 15 – June 30 during elk calving period.

### **Threatened, Endangered, Proposed or Candidate**

Greater Sage-grouse (Federal Candidate, BLM Sensitive, Utah State Sensitive)

The BLM has designated PPH and UDWR has identified approximately 1,227 acres of occupied and winter habitat in the project area. There are known leks within 4 miles of the project area. Sage-grouse habitat use and requirements change through the annual flow of the seasons and life functions. Early brood-rearing (May-July) generally occurs relatively close to nest sites. As herbaceous plants mature and dry, hens move their broods to late brood-rearing (July-September) habitats which consist of more succulent vegetation. Winter habitat almost exclusively consists of sagebrush, which is the main diet of sage-grouse in the winter.

Direct impacts (mortality of individual grouse from bullhog vehicles) to sage grouse are not anticipated as these activities would not be conducted within sage grouse nesting, or early brood-rearing seasons from March 1- June 15. Indirect impacts could include temporary displacement (flushing) from foraging/cover areas. Overall, treatment activities would result in a positive impact for sage-grouse. Encroaching pinyon-juniper would be removed leaving the younger, smaller plants. The understory would be replenished with a mixture of forbs, grasses, and shrubs. In recent years the BLM has conducted similar treatments to wyoming sagebrush and treatments have been considered a positive improvement to sage-grouse habitat, as they have promoted younger sagebrush and replenished understories. The proposed action is consistent with the guidelines established in Utah IM-2012-04, as personal communication with UDWR (Brian Maxfield, 2014) verified that the project will benefit sage-grouse in the are

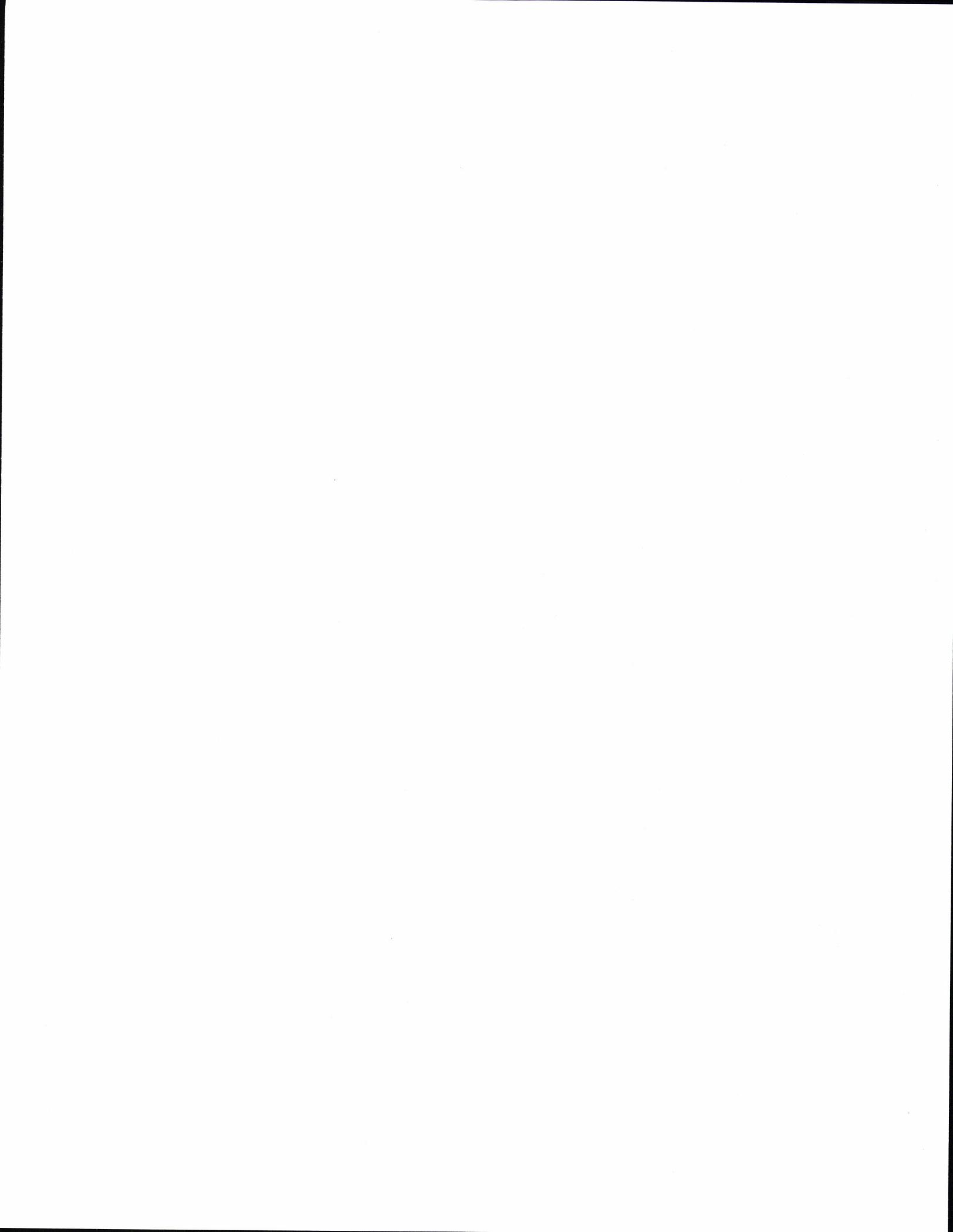
## **4.3. Alternative B — No Action**

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

### **4.3.1. Fuels and Fire Management**

#### **Fuels**

Under the no action alternative, there would be no removal of the PJ trees across the project area. Sagebrush obligate species: including sage-grouse are sensitive to western juniper encroachment into sagebrush communities (Miller et al 2005). 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 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 decrease 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 30 - 40 foot flame lengths if ignited. Under the no action alternative, fuels would continue to increase in height, tons/acre, and dead component. These variables would decrease the ability to suppress wildland fires. 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. These conditions increase fire behavior characteristics and minimize the ability of firefighters suppressing wildfires.

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

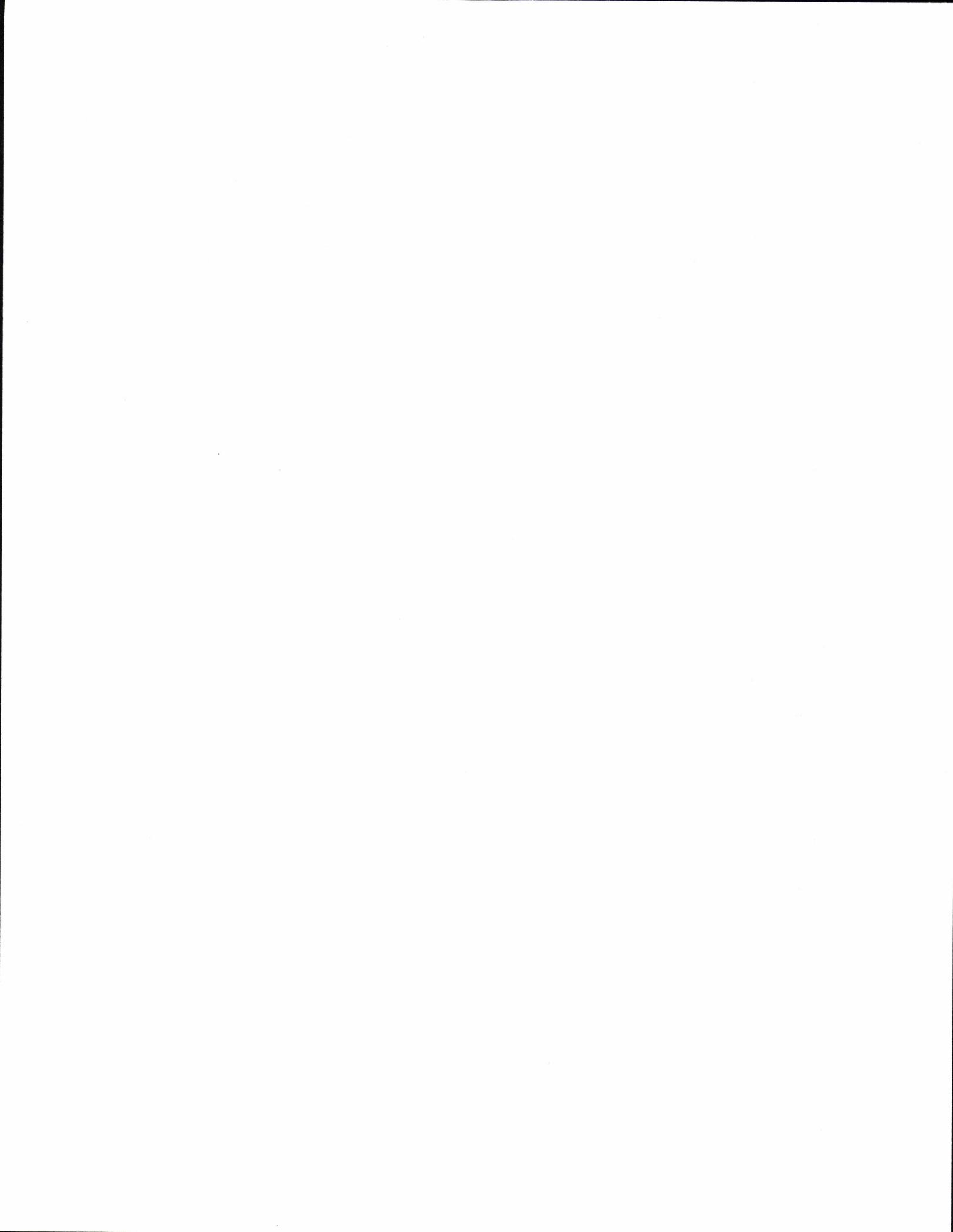
#### Vegetation

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 14,479 acres of shrub-steppe habitat over time.

### 4.3.3. Wildlife

#### Migratory Birds

The expected continued 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.

### **Threatened, Endangered, Proposed or Candidate**

Greater Sage-grouse (Federal Candidate, BLM Sensitive, Utah State Sensitive)

There will be a slow and steady decline in understory plants. Over time, the P-J trees will dominate as the sagebrush, understory grasses and forbs decline. There would be a decline in winter habitat quality for sage-grouse over time.

## **4.4. 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.

### **4.4.1. Fuels and Fire Management**

The Cumulative Impact area for Fire and Fuels is the Upper Myton Bench (C4) 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

### **4.4.2. Invasive Plants/Noxious Weeds, Soils and Vegetation**

#### **Invasive Plants/Noxious Weeds**

The Cumulative Impact area for vegetation is the Big Wash and Five Mile allotments, which consists of approximately 18,138 acres. Invasive plant and noxious weed populations are not known to occur within the project area and are not expected to be 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 Big Wash and Five Mile allotments, which consists of approximately 18,138 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.

## **4.4.3. 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.

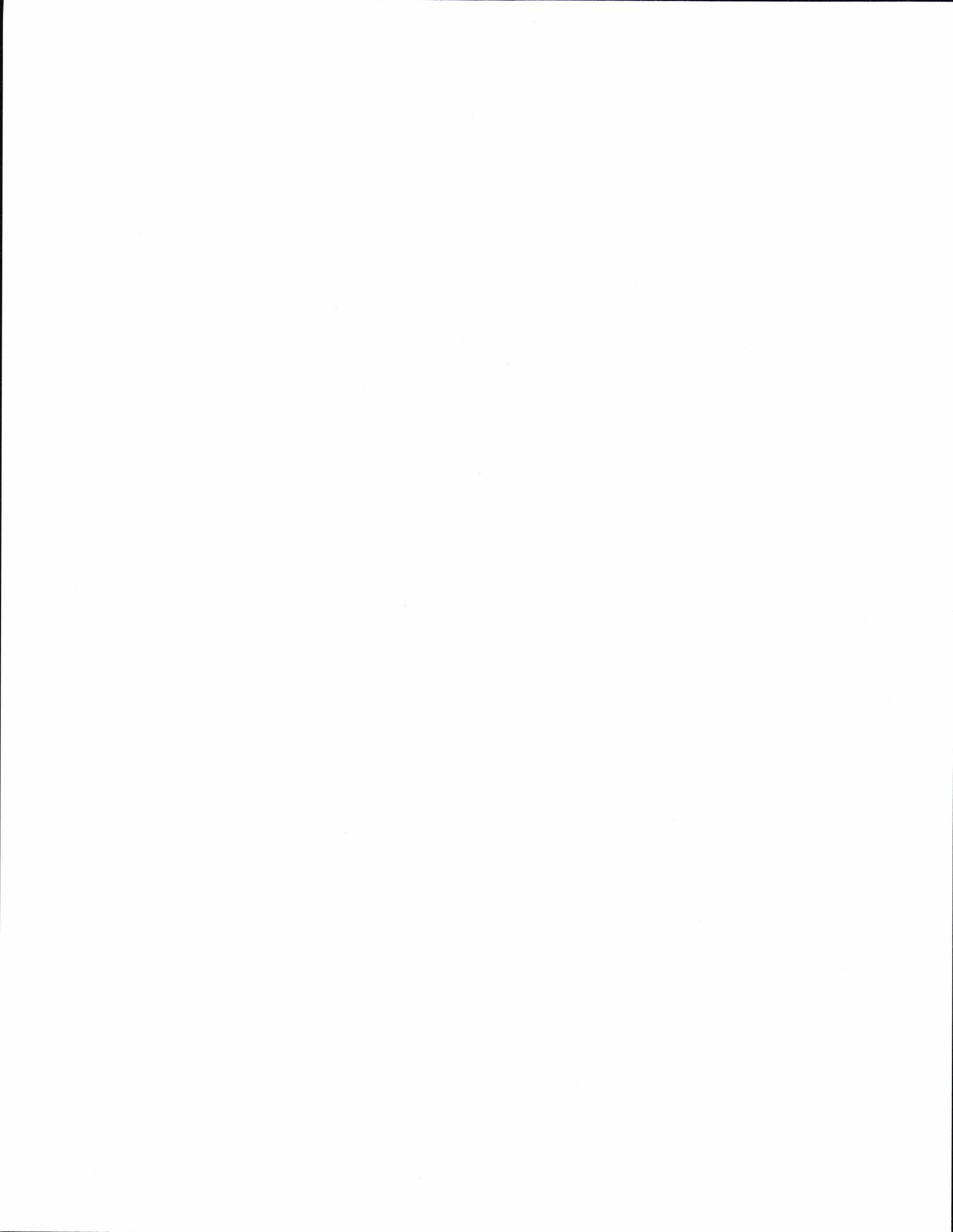
### **Non-USFWS Designated (Big Game Species)**

The Cumulative Impact area for Big Game is the area within the Nine Mile-West, Anthro Big Game Units. Approximately 10,271 acres of crucial summer elk habitat has been identified within the project area. Current population estimates for the deer for the Nine Mile Unit is 5,400, below the population objective of 8,500. Conversely, elk numbers have risen substantially in the same time span. Current population estimates for the elk Nine Mile West Anthro Unit is 900, well above the population objective of 700. Presently, the Nine Mile-West-Anthro hunting unit is open to limited entry permits for both deer and elk. Since present deer numbers below and elk numbers are above the established herd management objective numbers, deer numbers will continue to increase in the future, until herd objective numbers are realized, and cow elk tags will continue to be issued to decrease numbers. 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.

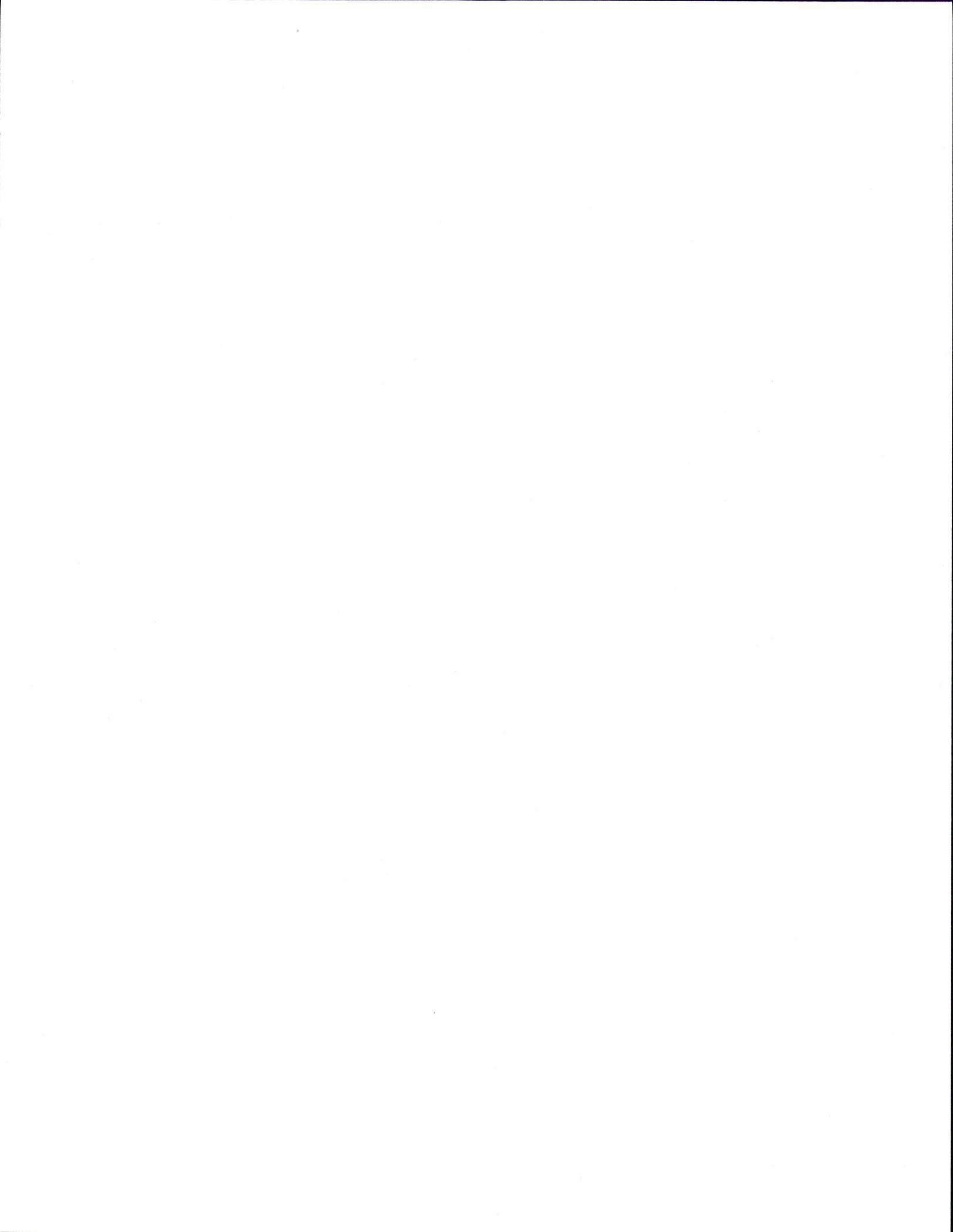
### **Threatened, Endangered, Proposed or Candidate**

Greater Sage-grouse (Federal Candidate, BLM Sensitive, Utah State Sensitive)

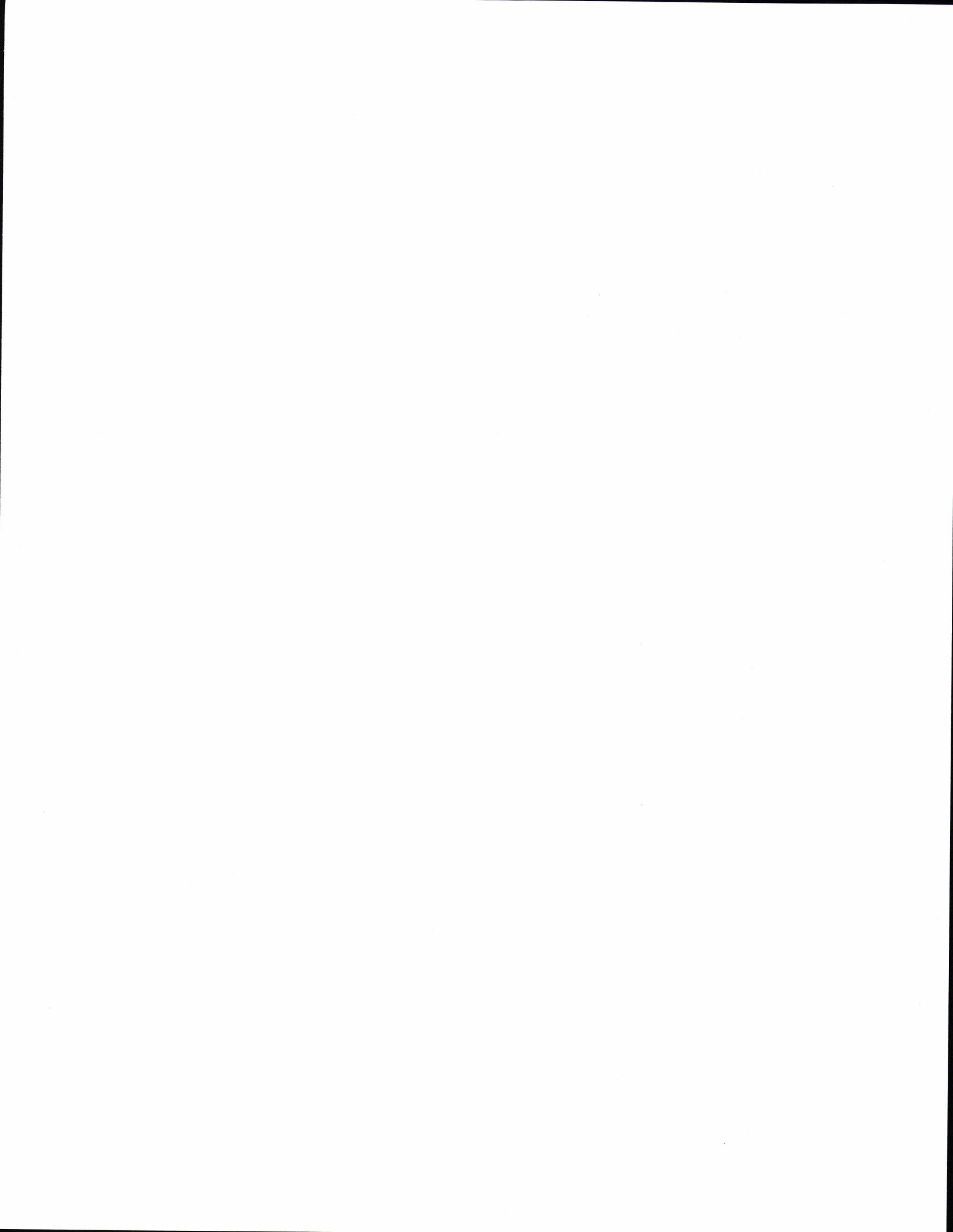
The Cumulative Impact area for sage-grouse is the Big Wash and Five Mile allotments, which consists of approximately 18,138 acres. Approximately 1,227 acres of PPH (occupied) habitat



has been identified within the project areas. The Vernal Field Office has been involved in restoring declining habitat conditions in the sage steppe habitat type across the Field Office. It is expected that habitat treatments within sage steppe habitat types will continue to occur in order to prevent the further decline of sage grouse population numbers and the potential for ESA federal listing from the U.S. Fish and Wildlife Service. These habitat improvement projects would typically be comprised of removing pinyon-juniper 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. The No Action Alternative would not result in an accumulation of impacts.



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

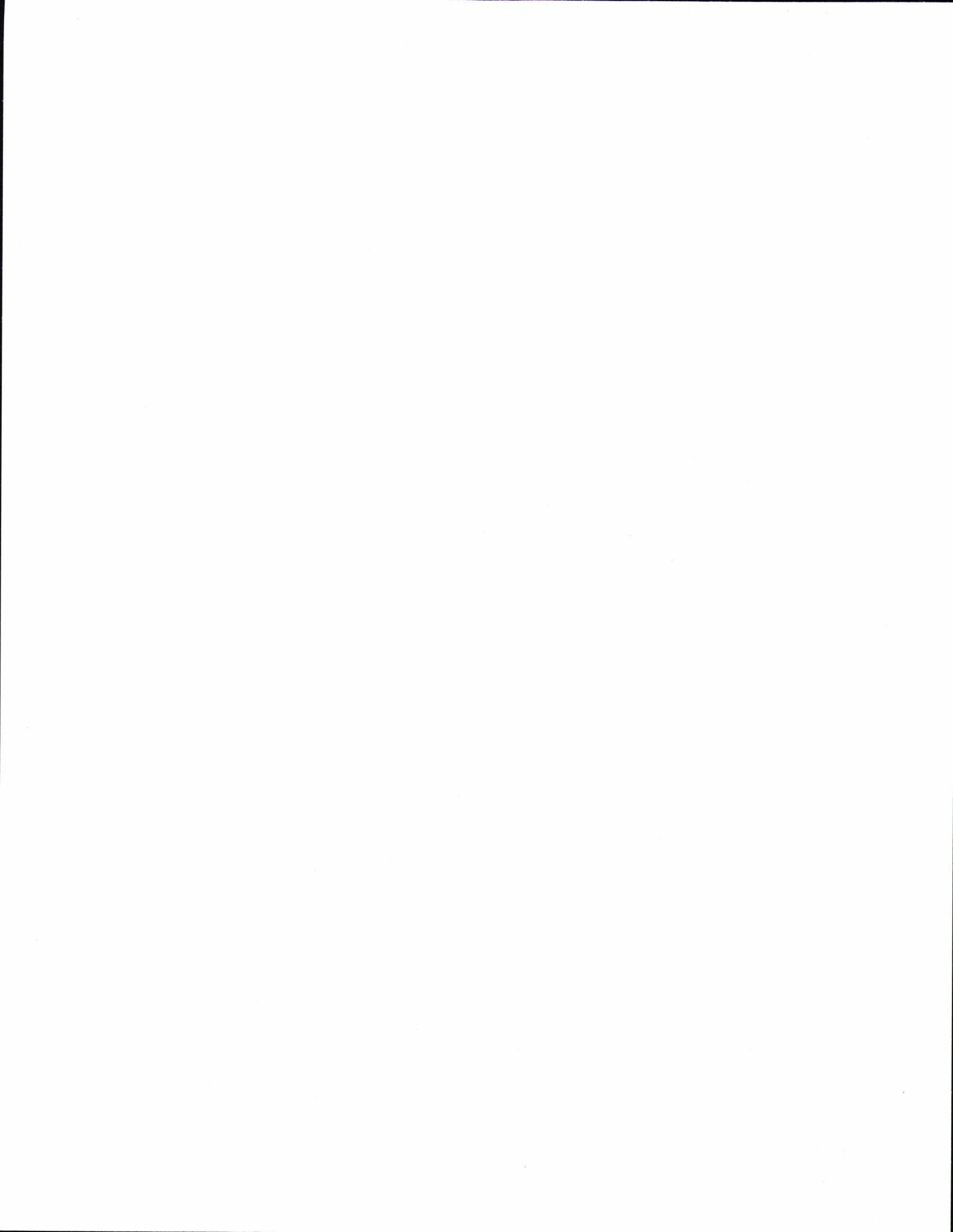


During preparation of the EA, public involvement consisted of posting the proposal on the back office for ePlanning. Issues or impacts identified through the interdisciplinary team analysis process are described in Appendix B.

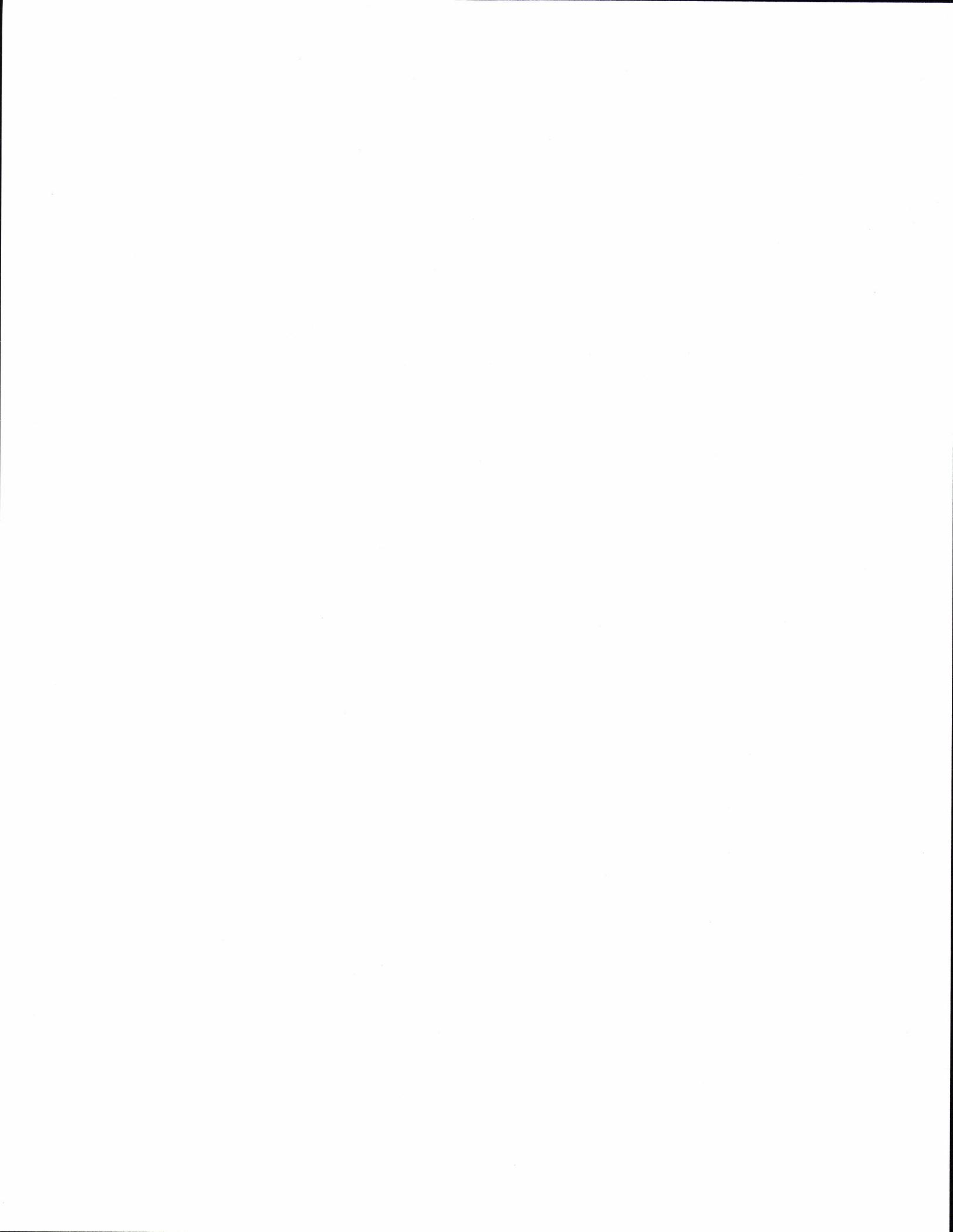
**Table 5.1. List of Persons, Agencies and Organizations Consulted**

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
State Historic Preservation Officer (SHPO)	National Historic Preservation Act Section 106	SHPO Concurrence
Utah Division of Wildlife Resources (UDWR)	Coordination with grazing permittee	Contacted by email (2014) and they support the project.
Grazing Permittee	Coordination with grazing permittee	Contacted by phone and they support the project

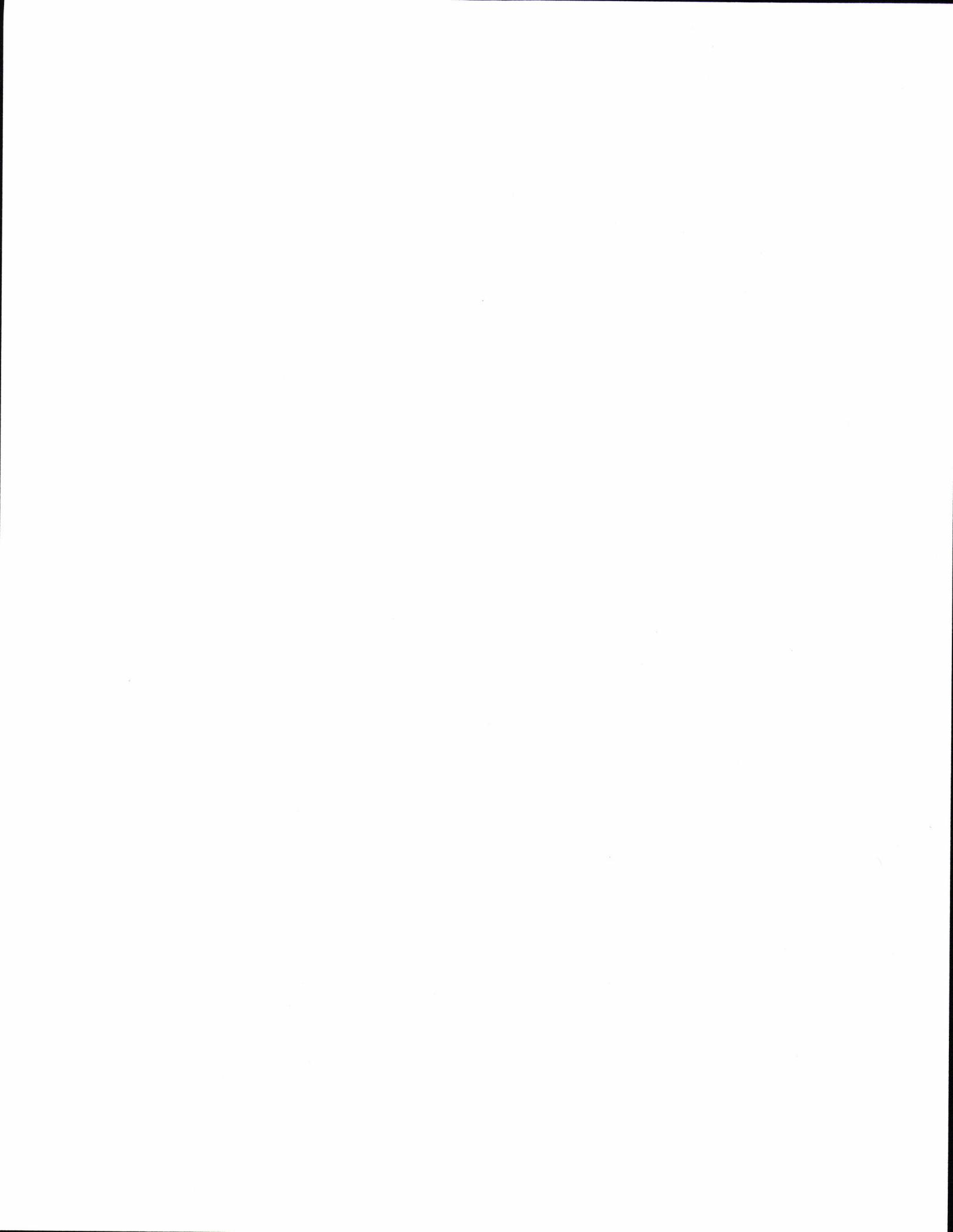
For a list of preparers see Appendix A



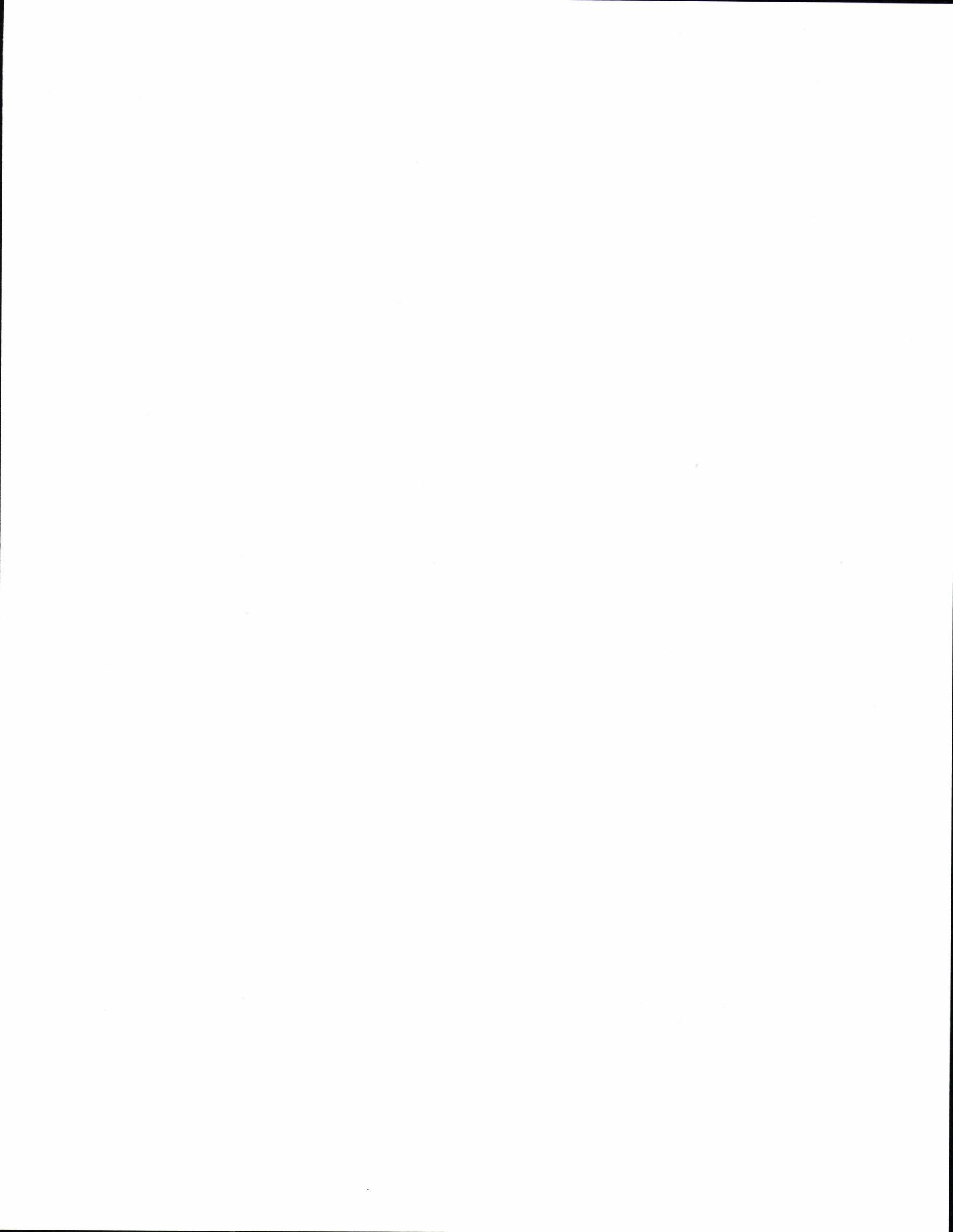
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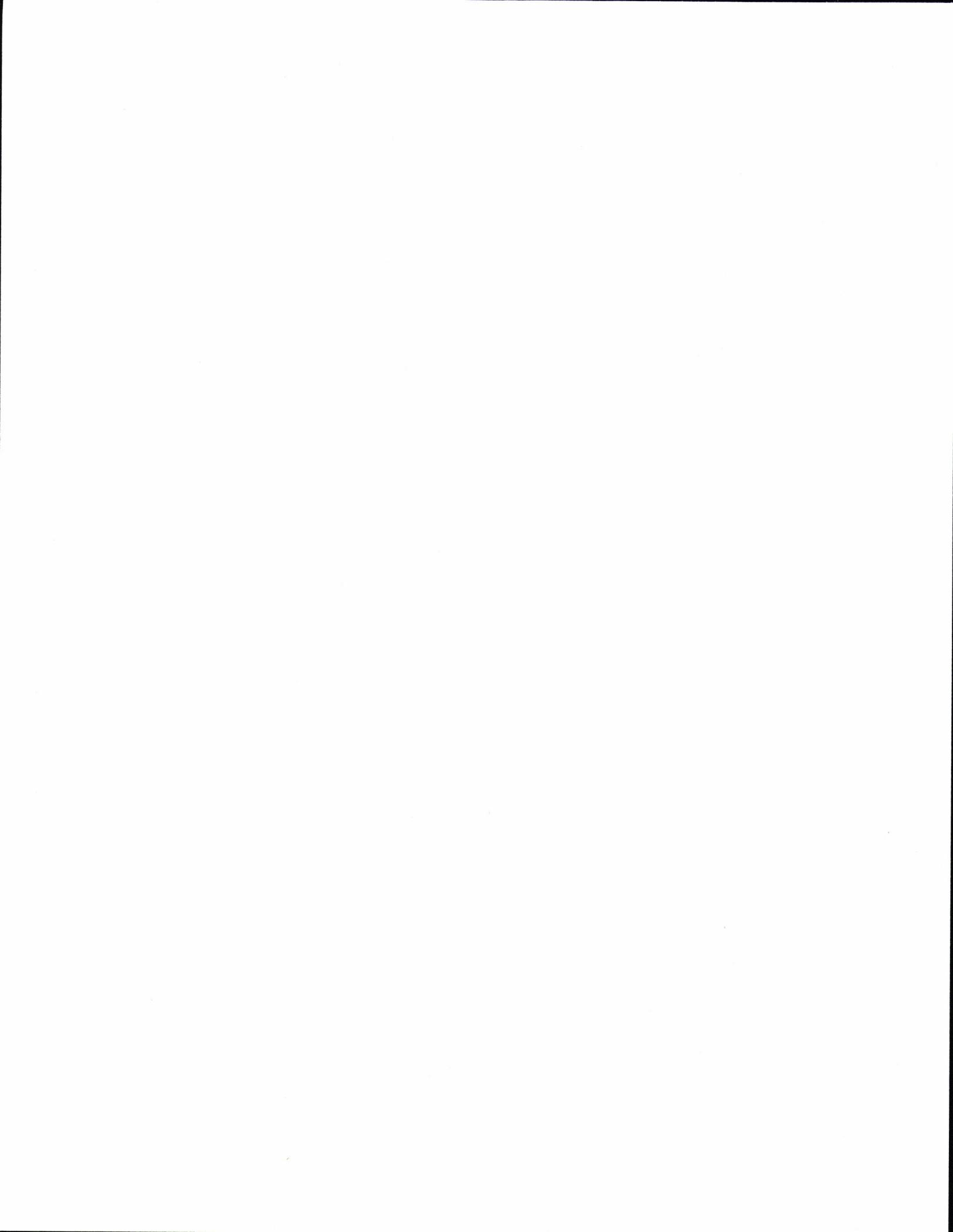
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# Appendix A. Interdisciplinary Team Checklist

**Project Title:** Big Wash Five Mile Mastication Slashing EA

**NEPA Log Number:** DOI-BLM-UT-G010-2014-0098-EA.

**File/Serial Number:**

**Project Leader:** Dixie Sadlier

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

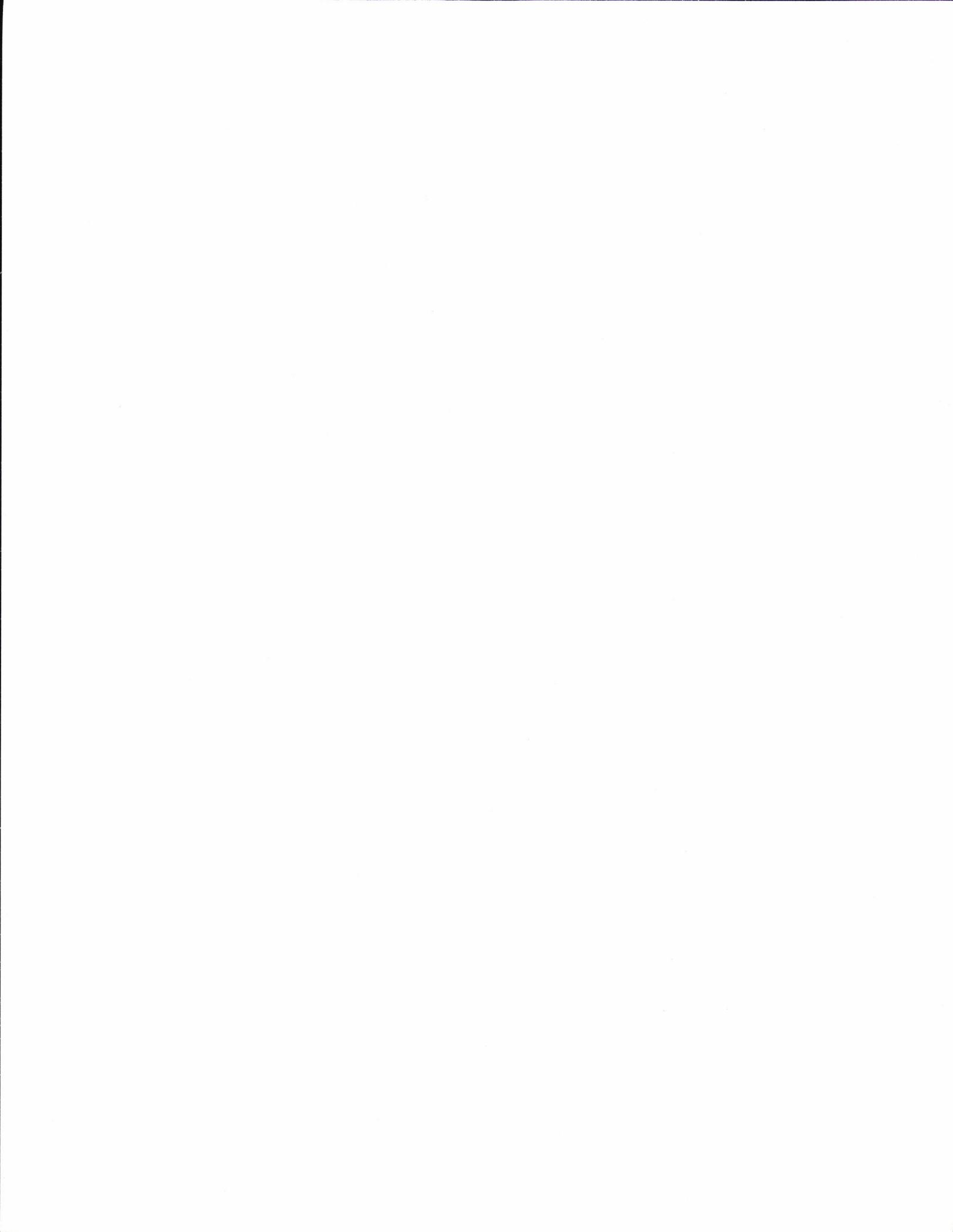
NP = not present in the area impacted by the proposed or alternative actions

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

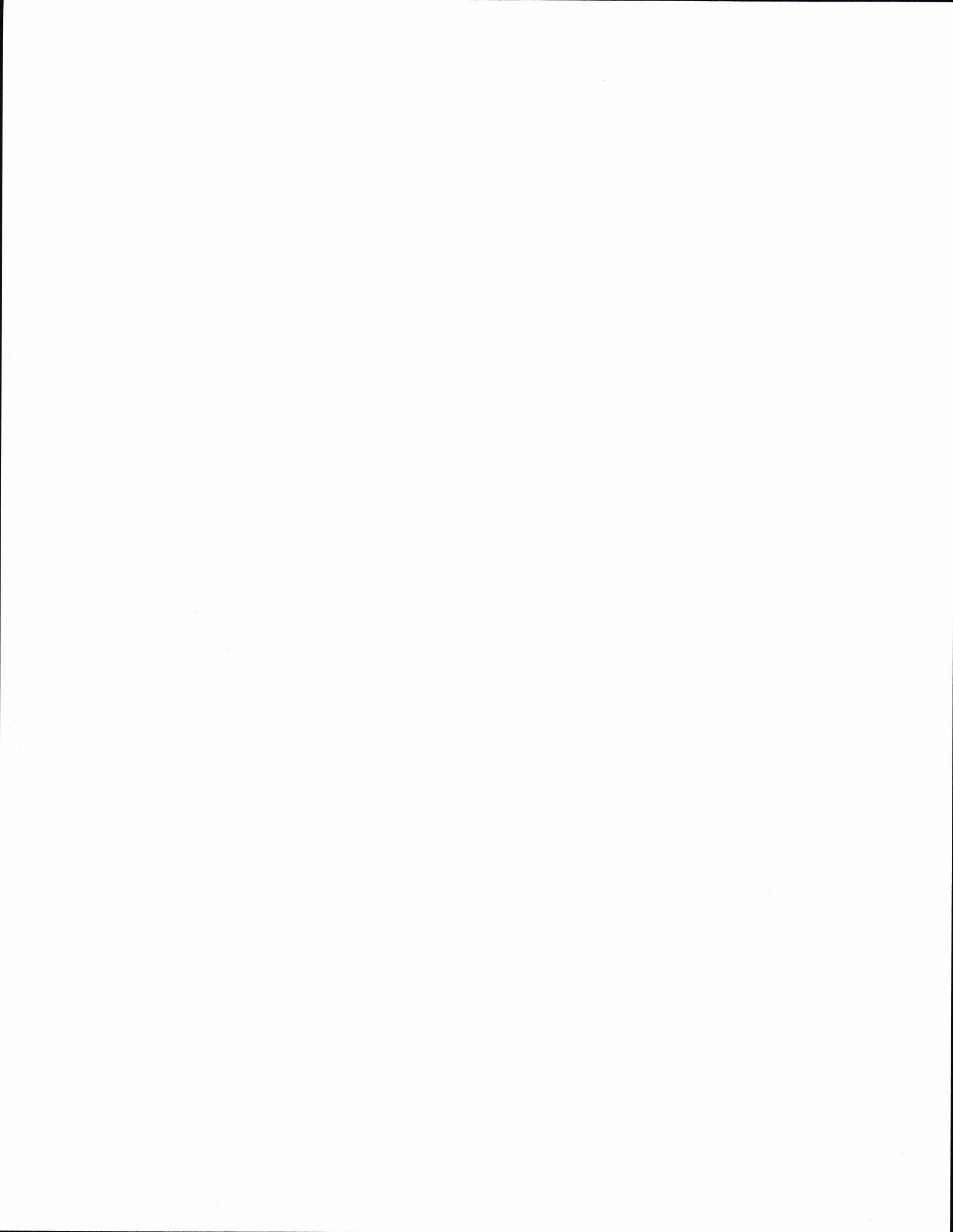
PI = present with potential for relevant impact that need to be analyzed in detail in the EA

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.

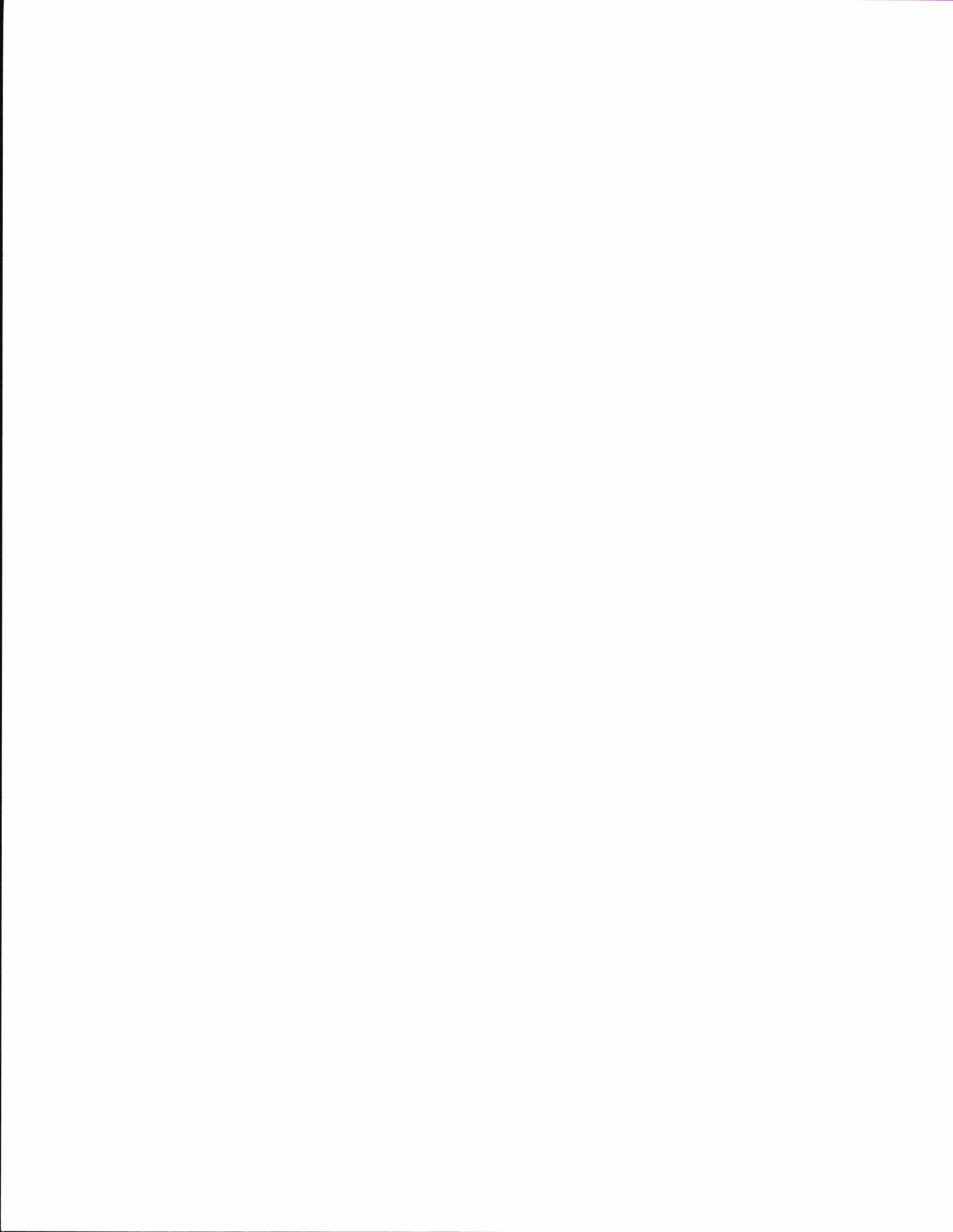
Determina- tion	Resource/Issue	Rationale for Determination	Signature	Date
<b>RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)</b>				
NI	Air Quality & Greenhouse Gas Emissions	Air quality impacts from the projected levels of emission are expected to be negligible. 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	4/20/2014
NP	BLM Natural Areas	None Present as Per Vernal RMP and GIS Layer review	Jason West	4/2/2014
NP	Cultural: Archaeological Resources	The current project was determined to be an undertraining per 36 CFR 800.16(y). The area of potential effect (APE) is considered to be the area within the polygons in attached maps. A "no adverse effect" letter was sent to the State Historic Preservation Officer on 3/19/2014. We received their concurrence to our determination on March 28, 2014. (Five Mile Lop & Scatter)	Kathie Davies	4/22/2014



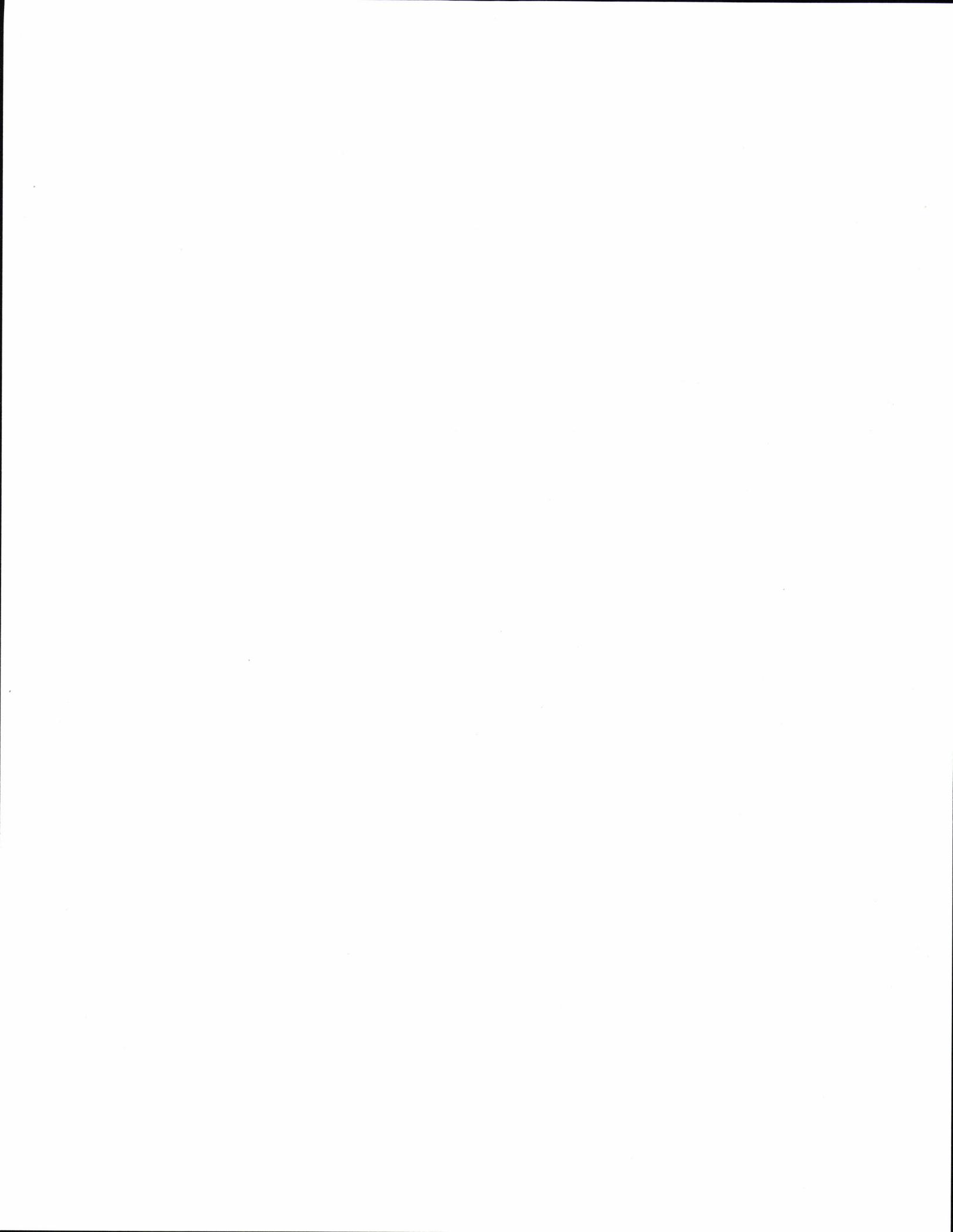
<b>Determination</b>	<b>Resource/Issue</b>	<b>Rationale for Determination</b>	<b>Signature</b>	<b>Date</b>
NP	Cultural: Native American Religious Concerns	Tribal consultation was conducted on 3/19/2014. We received one “no effect” responses from the Hopi Tribe with a request for more information. I called Terry Mogart, Hopi Cultural Preservation Officer on 4/9/2014 and discussed notification in the event of any “adverse effects” that may be planned. He had no further objects or comments. Also, the proposed project will not hinder access to or use of Native American religious sites (Five Mile Lop & Scatter).	Kathie Davies	4/22/2014
NP	Designated Areas: Areas of Critical Environmental Concern	None Present as Per Vernal RMP and GIS Layer review	Jason West	4/2/2014
NP	Designated Areas: Wild and Scenic Rivers	None Present as Per Vernal RMP and GIS Layer review	Jason West	4/2/2014
NP	Designated Areas: Wilderness Study Areas	None Present as Per Vernal RMP and GIS Layer review	Jason West	4/2/2014
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	3/7/2014
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	3/7/2014
PI	Fuels/Fire Management	The proposed action will reduce fuel loadings. The project will rearrange hazardous fuels in a manner that will decrease fire behavior.	Dixie Sadlier Blaine Tarbell	3/7/2014
NI	Geology/Minerals/ Energy Production	The project area is leased for fluid minerals. However, there are no existing and or developed energy production sites located within the project area. This project would have no adverse impact to geology and minerals.	Betty Gamber	4/22/2014



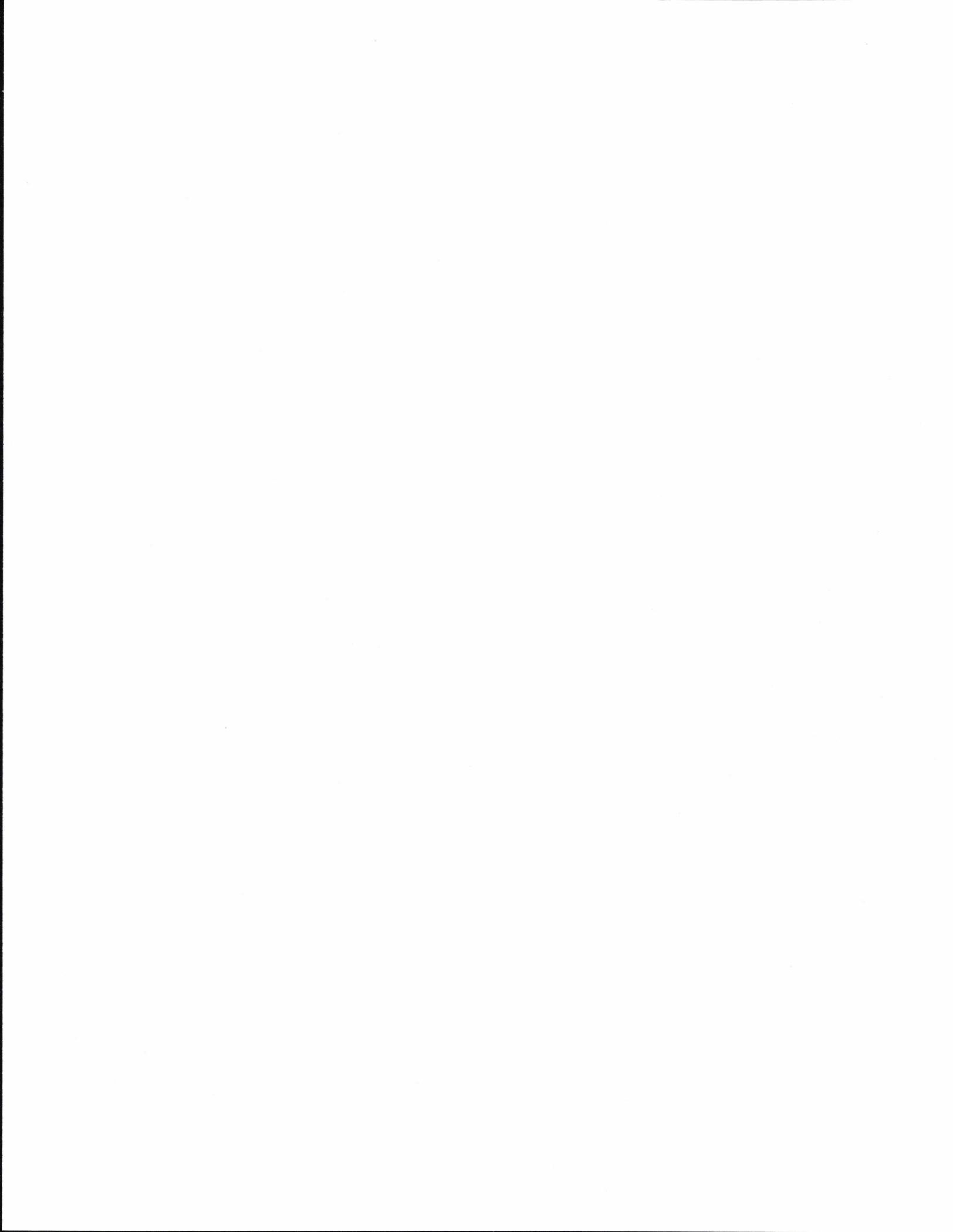
Determination	Resource/Issue	Rationale for Determination	Signature	Date
PI/NP/NI	Invasive Plants/ Noxious Weeds, Soils & Vegetation	Soil erosion is not expected to increase due to no surface disturbing actions. The mapped potential natural vegetation includes piñon, juniper, Wyoming sagebrush, cheatgrass, needle and thread, indian rice grass, crested wheatgrass, and western wheatgrass. This project is intended to improve sagebrush communities by removing the encroaching piñon and juniper. Canada thistle ( <i>Cirsium arvense</i> ) occurs along Wells Draw road, which accesses the project area. Due to minimal surface disturbance, applicant committed measures and BLM's practice of early detection and rapid eradication, noxious weed infestations are not expected to increase as a result of the project.	Jessie Brunson  Dixie Sadlier	6/5/2014
NI	Lands/Access	A review of the GIS layer files shows that the proposed action would not conflict with existing ROWs. Coordination/approval with SITLA will need to occur prior to the project being implemented regarding state sections 16, 32 and 36 located within the project area, as the BLM has no jurisdiction over these lands. There are no conflicts with the Oil Shale withdrawal that encompasses the project area. Coordination has been completed with Scott Chamberlain for SITLA sections.	Cindy Bowen	4/24/2014
NP	Lands with Wilderness Characteristics (LWC)	A review of the RMP and GIS layers shows that no Lands with Wilderness Character are present	Jason West	4/2/2014



Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Livestock Grazing & Rangeland Health Standards	<p>The proposed project area is in the Big Wash Allotment. There will be no loss of AUM's or grazing rotation adjustment, because there will be no seed planted.</p> <p>This allotment was evaluated for Rangeland Health Standards in 2008. It was determined that this allotment is meeting the Utah Standards for Rangeland Health, but no ROD was ever signed. The proposed action is designed to improve the vegetative condition through removing competing encroaching trees which will enhance the understory vegetation. There is expected to be a long term increase in vegetative ground cover and a reduction in soil erosion. The proposed action will likely contribute to this allotment continuing to meet Rangeland Health Standards and Guidelines.</p>	Alec Bryan	2/26/2014
NI	Paleontology	<p>No subsurface disturbance (below topsoil) is planned to occur with the proposed action, thus there would be no impacts to Paleontology resources.</p> <p>No paleo localities are present in this area according to the GIS paleo layer.</p>	Betty Gamber	
NI	Plants: BLM Sensitive	A review of field office GIS layers shows that this projects encompasses potential habitat for <i>Thelesperma ceasptosum</i> (low greenthread) and <i>Cryptantha grahamii</i> (Graham's cryptanth), BLM Sensitive species. No known locations have been documented within the proposed treatment areas. The treatments are focused on removing piñon and juniper from areas where there is a sagebrush understory and where sensitive species, such as low greenthread and Graham's cryptanth, do not occur.	Jessie Brunson	6/5/2014
NI	Plants: Threatened, Endangered, Proposed, or Candidate	A review of field office GIS layers revealed no known occurrences of Threatened, Endangered, Candidate or Proposed Species populations or potential/suitable habitat in or near the project area.	Jessie Brunson	6/5/2014
NI	Plants: Wetland/Riparian	VFO GIS layers indicate that there are no wetlands or riparian areas within the project area.	Jessie Brunson	6/5/2014
NI	Recreation	The project will avoid designated permitted sites for wilderness youth therapy. (Second Nature)	Jason West	4/2/2014

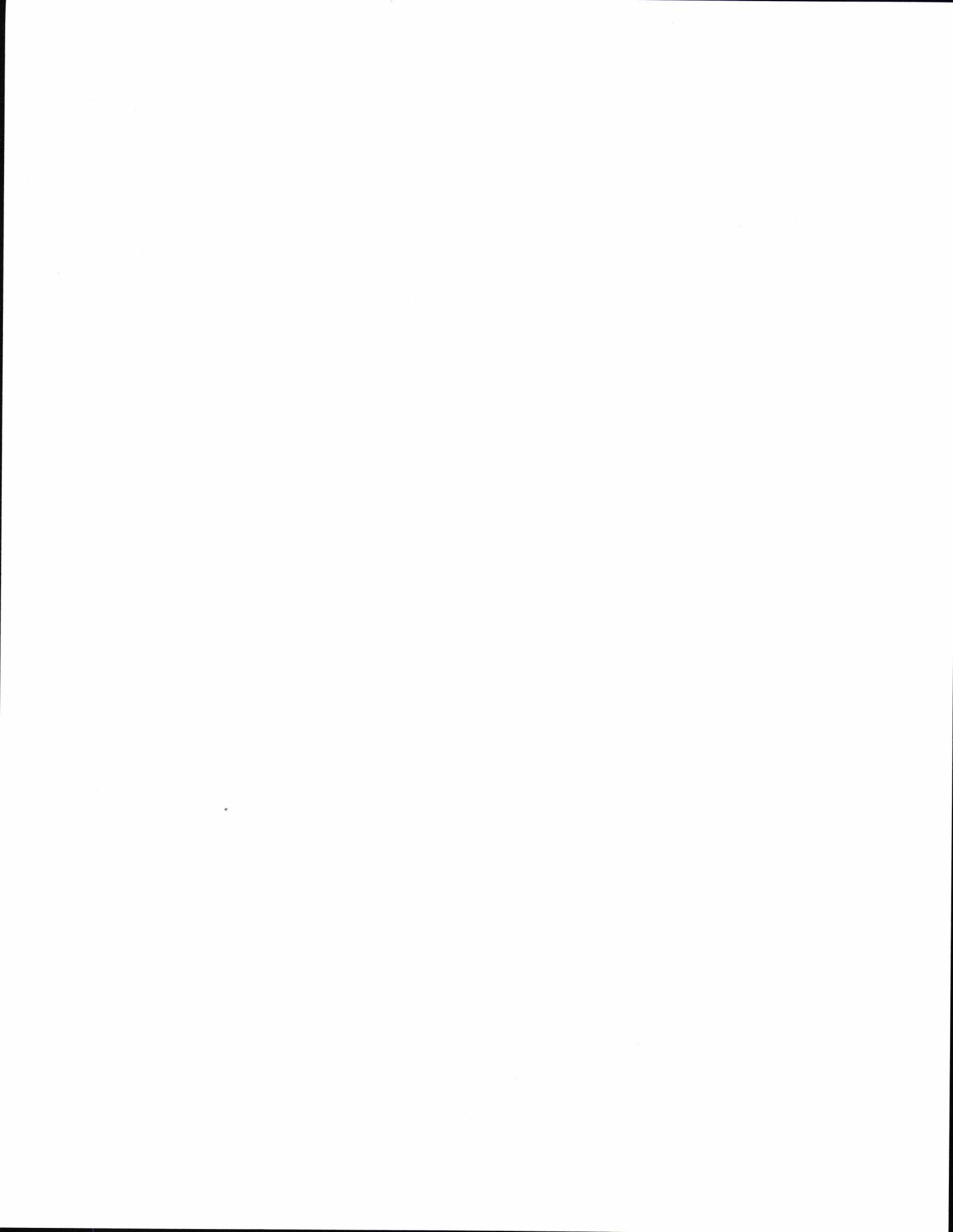


Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Socio-Economics	Due to the small scale project size, socioeconomic are not expected to be measurably impacted by this proposed project.	Dixie Sadlier	3/7/2014
NI	Visual Resources	VRM Class III and IV. Vegetative contrast will occur with the loss of the trees through mastication. Lop and scatter will have a color change over time as lopped trees will change colors, as trees are scattered the vegetative contouring will change as well. Inventory Unit rated a class B (Second Highest) for quality. No contrast rating sheet will be completed as the proposed project is identified as appropriate in the Vernal RMP.	Jason West	4/2/2014
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	3/7/2014
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	6/17/2014
NI	Water: Groundwater Quality	A review of the Field Office GIS layer files indicates that there are no 100 year flood plains located in the project area.	Betty Gamber	4/22/2014
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	4/20/2014
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 Sadleir	6/17/2014
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	6/17/2014



Determina-tion	Resource/Issue	Rationale for Determination	Signature	Date
NP	Wild Horses	VFO GIS layers indicate that there are no Wild Horse areas present in the project area.	Dixie Sadlier	3/7/2014
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 summer habitat for elk within the project area. Project should enhance habitat.	Dixie Sadlier	3/31/2014
PI	Wildlife: Threatened, Endangered, Proposed or Candidate	The proposed action has been designed to enhance sage-grouse habitat. The proposed action is consistent with the guidelines established in Utah IM-2012-043. Personal communication with UDWR Sensitive Species Biologist 2014. Is the proposed project in sage grouse PPH or PGH? <b>Yes x</b> No If the answer is yes, the project must conform with WO IM 2012-043.	Dixie Sadlier	3/31/2014
NI	Woodlands/Forestry	VFO GIS layers indicate that there are no commercial woodlands present within the project area	David Palmer	2/27/2014

FINAL REVIEW:			
Reviewer Title	Signature	Date	Comments
Environmental Coordinator	<i>Kelly Buckner</i>	07-08-2014	
Authorized Officer	<i>[Signature]</i>	07-14-2014	



# Big Wash/Five Mile Mastication/Slashing

