

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

Gorham Scout Camp Forest Restoration Project

DOI-BLM-NM-F020-2009-0046-EA

U.S. Department of the Interior
Bureau of Land Management
Taos Field Office
226 Cruz Alta Road
Taos, New Mexico 87571
575-758-8851



Gorham Scout Camp Forest Restoration Project *DOI-BLM-NM-F020-2009-0046-EA*

Chapter 1: Purpose and Need

1.1 Introduction

Since the spring of 1998, forest restoration treatments have been ongoing at the Gorham Scout Ranch, Camp Frank Rand. The objective of treatments as identified in the *Chimayo Scout Camp Wildland Urban Interface Hazardous Fuels Reduction EA # NM-020-03-016*, has always been to reduce the camp's level of hazardous fuels, providing for public safety by lessening the threat of catastrophic wildfire. Treatments have included mechanical thinning, pile burning, and prescribed broadcast burning.

With collaborative efforts between the Boy Scouts of America (BSA) and the Bureau of Land Management (BLM) there have been more than 800 acres treated since 1998. In addition to meeting the objectives identified, the strategies implemented have also contributed to restoration of ponderosa pine stands in the area, reduced long-term erosion rates of the soils, protected the many archaeological sites found on the camp from the effects of catastrophic wildfire, and have improved forage opportunities for big game wildlife including deer and elk.

Forest restoration activities on the Gorham Scout Ranch, Camp Frank Rand are expected to continue with future sources of funding from BLM hazardous fuels reduction and fire programs, State of New Mexico Sikes Act Wildlife Habitat Improvement Funds, State of New Mexico Environment Department grants, and assistance from partnerships with the U.S. Forest Service.

1.2 Purpose and Need for Action

The purpose of the proposed project on sections 6, 7, 8 and 9, T19N, R10E is to reduce hazardous fuels in the wildland urban interface and consists of thinning pinyon-juniper woodlands and ponderosa pine forest in the wildland urban interface south of Camp Frank Rand. The Gorham Scout Ranch, Camp Frank Rand lies on 2,443 acres purchased by the Boys Scouts of America from the Bureau of Land Management under a Recreation and Public Purpose Patent, where the BLM retains the responsibility of management of the vegetation, wildlife, mineral, and cultural resources. (Information on this Recreation and Public Purpose Patent can be found in BLM Lease File NM-1057.)

The proposed project is needed because current forest conditions are at a higher level of susceptibility to stand replacement fires and add a greater threat to catastrophic wildfire at Camp Frank Rand and nearby residential areas. Ponderosa pine forest stands in this area have an understory of high density pinyon-juniper, little grass and forb production, low regeneration of ponderosa pine, and continuous distribution of ladder fuels, which could lead to a stand-replacing burn in the event of wildfire. The pinyon-juniper savannah is now a continuous and dense woodland forest, with little grass production and greater susceptibility to stand-replacement fires.

1.3 Land Use Plan Conformance

The proposed project is in conformance with the *1988 Taos Resource Management Plan (RMP)*, as required by the Federal Land Policy and Management Act of 1976 (FLPMA) and the *Taos Field Office Fire Management Plan (FMP)*, which was developed and approved in 2005.

The Taos Resource Management Plan identifies the need to initiate treatments or projects to “restore or maintain forest and woodland community quality through thinning, “weeding” undesirable species, treating diseased and infested stands and reducing the potential for catastrophic wildland fire.” The proposed project was designed in conformance with all bureau standards and incorporates appropriate guidelines for specific required and desired conditions relevant to project activities.

1.4 Identification of Issues

On September 1, 2009, the proposed project was discussed by Taos Field Office resource specialists at a monthly NEPA coordination meeting. Issues discussed included Wildlife, consultation requirements on threatened and endangered species, and needs related to archaeological clearance. Follow up staff meetings and consultations were held with field office resource specialists to further discuss the scope of this analysis.

The proposed project was posted in the on-line NEPA log on August 24, 2009, inviting the public to submit comment and concerns related to the scope of this project.

Based on public scoping, as well as the internal scoping efforts, the following issues are considered relevant to the analysis of this management action:

- Cultural Resources
- Migratory Birds
- Soils
- Visual Resources
- Wildlife

Chapter 2: Description of Alternatives

2.1 Alternative A: Proposed Action

The Proposed Action is located on sections 6, 7, 8 and 9 T19N, R10E of the Gorham Scout Ranch, Camp Frank Rand area, approximately 10 miles southeast of Chimayo, NM in Santa Fe County (see figure 1). Management actions would include mechanical thinning and prescribed fire.

Mechanical thinning would be conducted to some extent on all sections of the project area, totaling approximately 1,730 acres. Thinning would be done by chainsaw, and would be executed by BLM fuels crews or contract crews who are trained in proper thinning protocol and under direct supervision of a fuels foreman. At selected pre-thinned sites, the Taos BLM fuels crew or contract crews would gather downed fuelwood to be sold to the public. Mechanical thinning and fuelwood gathering would begin in the first year of the project and continue throughout the duration of the project.

Prescribed fire would be implemented on all sections listed in the project area. Following thinning activities slash and pile burning would be used to eliminate high concentrations of surface fuels, then broadcast burning of the understory would be implemented to reduce duff and litter accumulations on the forest floor. Prescribed fire would begin after slash piles from forest thinning have cured and are ready to burn. Both broadcast burns and pile burning would continue throughout the duration of the project.

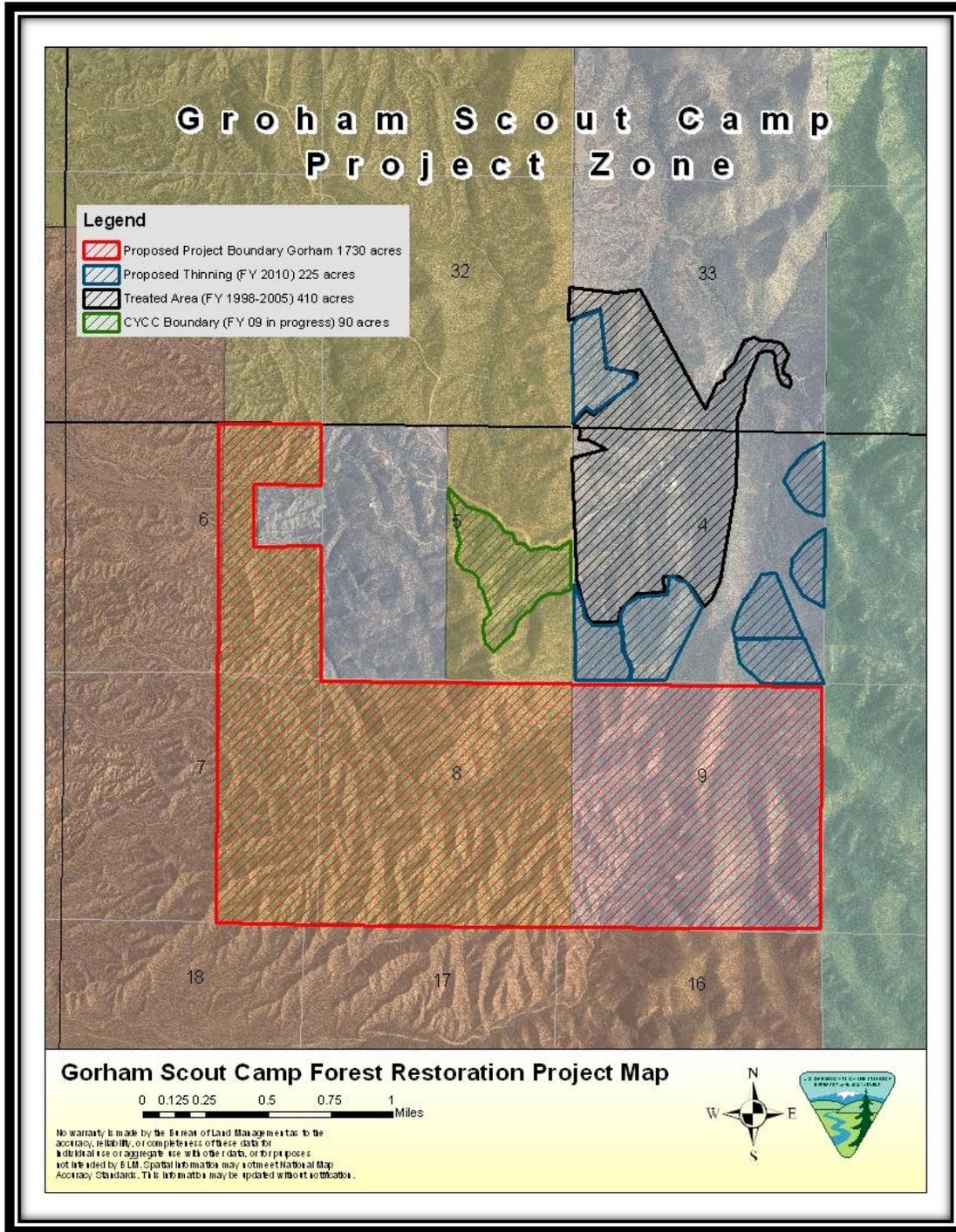


Figure 1. Gorham Scout Camp Project Map.

Archeological inventories would be performed before prescribed fire and non-fire fuels treatment projects. The intensity of archeological inventory would be determined for each proposed project based on the potential for earth disturbing activities, fuel types, projected site types, etc.

A nest search would be conducted by a qualified biologist prior to removing any trees during the breeding bird season (April 15 through September 15). If nests are found, those trees and a buffer zone of 50m around them would be avoided to mitigate destruction of active migratory bird nests, eggs or young.

Funding would be the primary constraint in determining the rate and progress at which the projects are developed and management objectives are met. Other factors such as timing, inclement weather, and personnel constraints could also impact progress.

2.2 Alternative B: No Action

Under the No Action Alternative, the BLM would implement none of the above management actions, but would continue current management on the site, which includes monitoring forest health and fire suppression tactics. There would be no forest restoration treatments conducted in the Gorham Scout Ranch, Camp Frank Rand area which would likely result in the rapid natural succession of the pinyon-juniper woodlands and ponderosa pine forest towards plant communities where herbaceous species are generally absent or severely under-represented. Such conditions would further sustain a class 3 fire regime, where fire frequency is 35 or more years with mixed severity.

2.3 Alternatives Considered but not Analyzed in Detailed:

No other alternatives were identified as part of the internal and external scoping and therefore were not considered and analyzed in detail.

Chapter 3: Affected Environment

The project area is located inside the perimeter of the Sombrillo SMA - Santa Cruz and Scout Camp Fire Management Units. This area lies in Santa Fe County, NM. The Gorham Scout Camp borders private land to the North, Forest Service land to the East, BLM land to the West, and Nambe Indian Reservation land to the South. The camp is located approximately 10 miles southeast of the village of Chimayo. Elevation ranges from 6,800 to 8,000 feet.

The project area has a limited range of vegetation zones and habitat types. The canopy is a mix of Ponderosa Pine (*Pinus ponderosa*), juniper (*Juniperus spp.*), and pinyon pine (*Pinus edulis*). The understory is composed of various grasses, forbs, and shrubs, including blue grama (*Bouteloua gracilis*), side-oats grama (*Bouteloua curtipindula*), longleaf squirreltail (*Elymus longifolius*), lupine (*Lupinus spp.*), broom snakeweed (*Gutierrezia sarothrae*), gambel oak (*Quercus gambelii*), and mountain mahogany (*Cercocarpus montanus*).

Road access to the management area is limited to one road that connects to NM 4 on the north side. Private landowners use this road to reach their homes as well. Access to the camp is through an all-weather dirt road. Roads throughout the camp are all-weather dirt and two-track roads.

3.1 Cultural Resources

3.1.1 The Gorham Scout Ranch, Camp Frank Rand, formerly the Chimayo Boy Scout Camp, has a rich presence of cultural resources. The University of California Los Angeles did an inventory of cultural sites at the camp in 1992 and 1993. Sites are primarily late pre-history, with several structural sites and many lithic sites. 1,111 acres were intensively inventoried, documenting 65 sites dating from the thirteenth and fourteenth centuries. Their management recommendations noted that “ the presence of

three major adobe pueblos, a range of small structures, shrines, and gardens and the high level of preservation of all these features present circumstances rarely seen elsewhere in the region.”

3.2 Migratory Birds

3.2.1 Migratory bird species of conservation concern that have the potential to occur within the project area include: black-throated gray warbler, Brewer’s sparrow, Cordilleran flycatcher, golden eagle, olive-sided flycatcher, pinyon jay, plumbeous vireo, vireo vicinior, Virginia’s warbler, and warbling vireo.

3.3 Soils

3.4.1 Soils include Panky fine sandy loam (PB), Alluvial land cobbly (AL), Rough broken land (RU), and Chimayo stony loam (CM). (USDA, USDI 1982) RU, AL, and CM occur on steep slopes. Runoff is rapid for CM and RU. Runoff is medium for AL and PB. PB, CM and AL exhibit moderate rates of erosion and RU exhibits severe rates of erosion. Soil permeability ranges from slow (PB), moderate (CM) and moderately rapid (AL). Most of the area consists of CM soils and the other soils filling smaller, scattered sections.

Detailed soil information can be found at <http://soils.usda.gov/survey> and follow prompts to the above online soil survey of Santa Fe County.

3.4 Visual Resources

3.6.1 The proposed project is within the Gorham Scout Ranch, Camp Frank Rand. The area receives high usage from approximately 400-800 staff members and scouts every year. The camp has been categorized as a VRM Class IV area.

3.5 Wildlife

3.7.1 Existing habitat with the project area includes pinyon-juniper woodlands, arroyo/wash areas and mixed conifer. These habitat types support seasonal home ranges for big game species such as elk, mule deer, mountain lion, and black bear, as well as small mammals like coyote, gray fox, striped skunk, porcupine, raccoon, rock squirrel, chipmunk, mice, woodrat, black-tailed jackrabbit, desert cottontail. Avian species likely to be found in the area include ash-throated flycatcher, broad-tailed hummingbird, chipping sparrow, mountain chickadee, mourning dove, pine siskin, rock wren, and yellow-rumped warbler. Amphibians, such as the collared lizard, and reptiles like the western diamondback rattlesnake might also be found in the region. Tree-roosting bats, such as the hoary or silver-haired bat, and a variety of insects could also frequent the area. While the area does not contain any riparian zones, it is an important refuge for many species of wildlife.

Forestry practices can have positive effects on wildlife and be a beneficial management tool, including increases in vegetation composition diversity and improvement of forage availability and quality for early to mid-successional wildlife species; creation of patchy habitat with high structural diversity for feeding, nesting and hiding; opening up areas of dense vegetation to improve foraging areas for a variety of wildlife; removing rank, coarse stands of trees that would encourage regrowth and improve abundance of high quality forage for wild ungulates; and improving nutritional quality of browse by stimulating plant regrowth (NMDGF 2005). “Regardless of habitat type, quality of typical winter range diets is inadequate to prevent catabolism and weight loss in mule deer. However, the rate of weight loss can be reduced by improving winter range forage conditions” (Watkins et al. 2007).

Chapter 4: Environmental Effects

4.1 Direct and Indirect Effects

This chapter describes the anticipated effects on the resource issues if the alternatives are implemented. The general effects of each alternative on resource categories are addressed. Direct effects are caused by an action and occur at the same time and place. Indirect effects are caused by an action and occur later in time or farther removed in distance.

4.1.1 Alternative A: Proposed Action

As described in section 2.1, the Proposed Action is located on sections 6, 7, 8 and 9 T19N, R10E of the Gorham Scout Ranch, Camp Frank Rand area. Management actions include mechanical thinning and prescribed fire.

4.1.1.1 Cultural Resources

Under the Proposed Action many of the proposed activities could have adverse effects on Cultural Resources. Most obviously, fire can destroy features constructed of wood. Intense, high temperature fires can alter archaeological features such as fire hearths and artifacts. However, these possible impacts to inventoried sites can be reduced or eliminated through protective measures taken during the burning operation, such as foaming or black-lining around existing sites.

As discussed in section 2.1, archeological inventories will be performed before prescribed fire and non-fire fuels treatment projects. The intensity of archaeological inventory will be determined for each proposed project based on the potential for earth disturbing activities, fuel types, projected site types, etc. Inventory methods would help mitigate potential impacts to cultural resources.

Short-term effects may include an increase in erosion due to the initial loss of vegetation cover. Erosion is a major cause for the loss of archaeological resources. Long-term effects of the proposed project will likely have a positive effect on cultural resources due primarily to forest, grassland and watershed restoration which should reduce long term erosion.

4.1.1.2 Migratory Birds

The Proposed Action has the potential to have a negative effect upon individual birds, eggs, young and/or the nesting habitat of ground nesting birds, due to trampling, however, there would be no noticeable impact to the population or to the species as a whole. As discussed in section 2.1, a nest search would be conducted by a qualified biologist prior to removing any trees during the breeding bird season (April 15 through September 15). If nests are found, those trees and a buffer zone of 50m around them would be avoided to mitigate destruction of active migratory bird nests, eggs or young.

4.1.1.3 Soils

Soils in this area exhibit the potential for medium to high rates of erosion. Impacts could include short-term increases in road erosion from administrative vehicle use during treatments and soil erosion from the initial loss of vegetative cover from fire. However, long term reductions in soil erosion rates would result from the Proposed Action. Prescribed fire would stimulate groundcover vegetation, which would act as a soil stabilizer; reducing erosion rates.

4.1.1.4 Visual Resources

Retaining old growth pinyon and other scenic groupings of Ponderosa Pine stands would maintain the scenic quality within the Gorham Scout Ranch, Camp Frank Rand. Slash piles and cleared areas would result in short term adverse but weak impacts to the line, color, and texture of vegetation. Edges of the treatment area may be visible as well as, greener, brighter, and finer vegetation of grasses.

Greater changes or contrasts to the characteristic landscape would be avoided by following natural contours, scalloping, and feathering of the treatment edges, planting with native grass seed, and burning and scattering slash piles. Smoke from prescribed fire may be seen from adjacent communities. Thinning activities would decrease the density of forest canopy and increase line-of-sight distance in forest stands.

4.1.1.5 Wildlife

The restoration of wildlife habitats would provide long-term benefits to the native wildlife populations that depend upon them.

Prescribed fire and thinning activities would accomplish the following habitat management goals: an increased understory production of native grasses and forbs, establishment of a higher amount of “edge”, or transition zone between different habitat types, and creation of snags. An increased understory production of native grasses and forbs would provide increased forage opportunities for deer, elk, and small mammals, as well as provide nesting habitat for ground nesting birds, and would support insect populations which many bird species require for food. Creation of snags in the burn areas would provide habitat for cavity-nesting birds and support insect populations, which many bird species would use for food.

Best management practices included within this fuel reduction project would ensure that the area can support wildlife while reducing the threat of wildfires. Therefore, it is not likely that the proposed action would have negative impacts on wildlife and would result in benefits to many wildlife species.

Short-term effects of the proposed management actions on wildlife populations include disturbance from chainsaws, administrative motor vehicle use and smoke from prescribed fire.

4.1.2 Alternative B: No Action

Under the No Action alternative, there would be no forest restoration treatments conducted in the Gorham Scout Ranch, Camp Frank Rand area which would likely result in the rapid natural succession of the pinyon-juniper woodlands and ponderosa pine forest towards plant communities where herbaceous species are generally absent or severely under-represented and where the fire regime condition class 3 would be further sustained.

4.1.2.1 Cultural Resources

The No Action alternative would have no short-term effects on cultural resources. Long-term effects on cultural resources could include less opportunity for accurate surveys due to vegetation and duff and damage or destruction of sites from the intense heat and duration of wildfires, unregulated suppression activities, and possible erosion.

4.1.2.2 Migratory Birds

The No Action alternative could benefit some species, specifically sagebrush or woodland obligates that prefer climax vegetation conditions, while negatively impacting grassland species that are precluded from these habitat conditions. Generally, migratory birds would find fewer habitat niches within existing conditions and, therefore, the No Action alternative would have a negative impact on these species.

4.1.2.3 Soils

The No Action alternative may result in increased soil degradation. Through the No Action alternative, the area would support less ground-cover vegetation, and retain forest stand characteristics which would support a large stand replacement fire. Both of these conditions would facilitate higher rates of soil erosion.

4.1.2.4 Visual Resources

Under the No Action alternative, the Visual Resources of the area would not be affected.

4.1.2.5 Wildlife

The No Action alternative would leave the wildlife habitats in the management area in their current conditions, allowing them to degrade over time. Relative to the conditions that the proposed action is likely to create, current habitat conditions would exhibit a decreased production of understory grasses and forbs and larger unbroken blocks of dense forest. Under this alternative, the forests in the management area would also be more susceptible to large stand replacement fires, which could remove the cover and forage that many wildlife species require.

4.2 Cumulative Effects Analysis

A cumulative impact, as defined in 40 CFR 1508.7, is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other action.

4.2.1 Cumulative Actions

4.2.1.1 Past and Present Actions

Past Actions include prescribed fires and mechanical treatments. From 1998 through 2008, approximately 800 acres of the Gorham Scout Camp have been treated (Table 1). Mechanical treatments included about 425 acres within the Gorham Scout Ranch, Camp Frank Rand Project Area. Overall, the cumulative impacts of this project would be positive; this project would reduce overall density levels, reduce fuel loadings and lead to more diverse woodland ecosystems that are healthy and sustainable.

4.2.1.2 Reasonably Foreseeable Actions

In addition to the 1,730 acre proposed forest restoration treatment action, reasonably foreseeable actions may include approximately 625 acres of mechanized treatments to restore woodland communities in denser pinyon-juniper dominant areas located northwest of the Gorham Scout Camp, and a 900 acre prescribed burn within the FMUs (Table 1).

Table 1. Historic and foreseeable treatments at Gorham Scout Ranch, Camp Frank Rand.

Treatment	Historic (1998 through 2008) Bureau of Land Management	Future (2009 through 2019) Bureau of Land Management	Total Acres
Prescribed Fire	415	900	1,315
Mechanical	465	625	1,090
Total Acres	880	1,525	2,405

4.2.2 Cumulative Effects

4.2.2.1 Cultural Resources

BLM staff archaeologists have been integrated into the assessment process to promote proactive, long-term management of cultural resources. Proposed activity areas, which have not been intensively inventoried, and at-risk resources would be delineated for minimizing activity impacts with their perimeters. No cumulative impacts to cultural resources within the Project area would occur under either alternative.

4.2.2.2 Migratory Birds

While there would be short-term impacts to individual birds due to disturbance during the implementation phase of the project, there would be long-term benefits from an increase in diversity of vegetation. There could also be a slight reduction in the quantities of seeds and berries produced in the project area due to reduction of pinyon pine and juniper, decreasing the amount of forage available for birds dependent on those resources.

4.2.2.3 Soils

Cumulative impacts from the actual implementation operations would be minimal. Some physical soil disturbance would occur from vehicle use, but would only affect small localized areas (totaling less than 3 percent of the area) and natural recovery would occur within two to five years of the disturbance. Direct impacts from burning, intense surface heating causing soil sterilization, would be minimal in the project area.

4.2.2.4 Visual Resources

No change in VRM classes would be anticipated by the cumulative effects.

4.2.2.5 Wildlife

Cumulative impacts of the proposed management actions on wildlife populations include disturbance from machinery, administrative motor vehicle use, and prescribed fire. There would also be short-term impacts to individual species due to disturbance during the implementation phase of the project; however, there would be long-term benefits from an increase in diversity of vegetation. In general, the cumulative impacts of this forest restoration project on wildlife would be positive; this project would reduce overall density levels, reduce fuel loadings and lead to more diverse woodland ecosystems that are healthy and sustainable.

Chapter 5: Consultation and Coordination

5.1 Summary of Consultation and Coordination

The following people or agencies have been consulted for their comments in regards to the proposed action. The comments and suggestions expressed during the consultation have been incorporated into this Environmental Assessment.

Federal and State Agencies

USDA Forest Service
New Mexico State Land Office

Organizations

Forest Guild
Chimayo Youth Conservation Corps
Boy Scouts of America, Great Southwest Council

Individuals

Private land owners.

5.3 List of Preparers

<u>NAME</u>	<u>TITLE</u>	<u>REVIEWED/TASK</u>
Sam DesGeorges	Taos Field Office Manager	Assisted with Editing EA
Rudolph Pacheco	FMO, Farmington District	Assisted with Editing EA
Raul E. Hurtado	Biological Technician	Lead preparer, miscellaneous
Greg Gustina	Fisheries Hydrologist	Riparian/Watershed
Valerie Williams	Wildlife Biologist	Wildlife/Migratory/TE/Editing
Merrill Dicks	Fire Archaeologist	Archaeology
Jacob Young	Rangeland Management	Reviewed Document
Tami Torres	Outdoor Recreation Planner	Visual Resource Management
Patricio Martinez	Geographic Information Specialist	Maps, Arc GIS, Data
Kyle Sahn	Fire Management Specialist	Reviewed Document
Jessica Mrstick	Archaeological Technician	Archaeological clearance
Brad Higdon	NEPA Coordinator	Reviewed Document/Content

Chapter 6: References

Boyer, Jeffrey L. *Mountain West- Colorado Aggregate Company's No Agua Project: Archaeological Survey in Taos County, New Mexico*. Contract Archaeology Report No. 00-04. Jeffrey L. Boyer, Cultural Resources Consultant. Nyland, Russell. 2000.

Bureau of Land Management, USDI, Taos Field Office. *1988 Taos Resource Management Plan*

Bureau of Land Management, USDI, Taos Field Office. *Non-game Bird Surveys in Ponderosa and Pinyon-Juniper Forests*, 2000, 2001

Bureau of Land Management, USDI, Taos Field Office. *Taos Field Office Weed Prevention Plan* 1996, 1997, 1999

Miller, R.F. and Wigand, P.E. *Holocene changes in semi-arid pinyon-juniper woodlands*. *Bioscience*, 447(7), 465-474. 1994.

New Mexico Department of Agriculture. *New Mexico Noxious Weeds List*, Office of the Director/Secretary. 1999

New Mexico Partners in Flight. *Habitat Association List for New Mexico and Colorado*. 2001

USDA, USDI. *Soil Survey of Taos County and Parts of Rio Arriba and Mora Counties, New Mexico* 1982.

USFWS, *Federal Endangered, Threatened, Proposed, and Candidate Species and Species of Concern in New Mexico*.

Wilcox, B.P., Pitlick, J., Allen, C.D. and D.W. Davenport. *Runoff and erosion from a rapidly eroding pinyon-juniper hillslope*. *Advances in Hillslope Processes*, 1. 1996.