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

Taos Resource Management Plan Amendment and Environmental Assessment
for the
Rimrock Rose Ranch Acquisition and Livestock Grazing on Two Allotments in Sabinoso Wilderness

DOI-BLM-NM-F020-2016-0011-EA

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1.0 INTRODUCTION

1.1 Background

The Wilderness Land Trust, a private non-profit organization, has acquired eight parcels of land, the Rimrock Rose Ranch, totaling 4,080 acres adjacent to the Sabinoso Wilderness in San Miguel County, New Mexico. The Wilderness Land Trust is offering to donate 3,314 acres of the ranch property to the United States of America to be managed as part of the Sabinoso Wilderness, administered by the Bureau of Land Management (BLM), Taos Field Office, for the purpose of providing public access to public lands currently completely enclosed by private lands and to expand the wilderness by the addition of these wilderness-quality adjacent lands. The remaining 766 acres are offered for sale to the United States.

In general, the BLM proposes to accept the donation of 3,314 acres for addition to the wilderness under the authority of Section 6 of the Wilderness Act of 1964 (PL 88-577, 16 U.S.C. 1131-1136). The BLM also proposes to acquire the remaining acreage, through purchase when funds become available under the Land and Water Conservation Fund Act of 1965 or other sources, to be managed as part of the Sabinoso Area of Critical Environmental Concern (ACEC), an administrative designation adjacent to the wilderness.

The BLM is also proposing to make the two allotments for which the Rimrock Rose Ranch served as base property (per 43 CFR 4110.2-1) unavailable to livestock grazing. The grazing permits for these allotments, 00735 and 00736, were cancelled at the time the former owner sold the ranch property to The Wilderness Land Trust. These allotments, therefore, are not currently being grazed under an existing permit. Furthermore, the decision to make the allotments unavailable for grazing requires an amendment to the Taos Resource Management Plan (RMP), since making lands unavailable is considered a land use planning-level decision per BLM regulations.

Section 1.4 succinctly presents the decisions to be made based on the analysis presented in this environmental assessment (EA).

1.2 Purpose and Need for Action

The BLM's purpose for acquiring the Rimrock Rose Ranch is to secure public access to Sabinoso Wilderness. The purpose for making the allotments 00735 and 00736 unavailable for livestock grazing is to comply with a condition of the donation that the ranch property not be used to accommodate grazing, as well as to ensure that riparian resources on the ranch property are protected.

The BLM needs to take this action to provide the public an opportunity to access Sabinoso Wilderness—the first such public access since its designation. This action is necessary to allow the fullness of the intent of the wilderness designation to be realized. The Wilderness Act of 1964 specifies, at Section 2 (a) that wilderness areas "be administered for the use and enjoyment of the American people..." Furthermore, Section 4 (b), "that the wilderness shall be devoted to the public purpose of recreational, scenic, scientific, educational, conservation, and historical use," activities for which there is currently no access.

The BLM also needs to provide for the protection and restoration of riparian resources in a manner consistent with the Taos RMP, as described in Section 1.4, as well as to honor conditions of the 3,314-acre donation. In addition, action is necessary to acquire the remainder of the real property under the provisions of Section 205 of the Federal Land Policy and Management Act (FLPMA) to fulfill the land

tenure goals, objectives, and management actions for the Sabinoso area, described below, as prescribed by the applicable land use plan.

1.3 Land Use Plan Conformance

The Taos RMP, approved in May 2012, is the applicable land use plan. The RMP establishes the goal of securing public access to public lands, specifically Sabinoso Wilderness, when these opportunities become available. (See pages 34 and 123 of the Taos RMP.)

The Taos RMP identified the area as a Special Recreation Management Area because of the unique opportunity for primitive and unconfined recreation. It also acknowledges the management challenge of providing public access. The RMP states that the BLM, "will seek to establish public access at appropriate locations based on the availability of easements and compatibility of access with preserving wilderness character and ACEC values," (page 76).

Nearly all of the Rimrock Rose Ranch to be acquired is located within the Sabinoso ACEC, designated under the Taos RMP. The RMP states that, "Areas within or adjacent to the Sabinoso Wilderness/ACEC is designated as an acquisition zone," a specific area that includes the ranch property. The deed to the property also includes an access easement across adjacent private land.

In addition, the Sabinoso ACEC was designated in part to protect and restore riparian resources, which are recognized as a relevant and important value for which special management prescriptions are required. One of the Taos RMP objectives (page 20) is to, "Manage riparian areas with an emphasis on protection and restoration..." To meet this objective, the Taos RMP specifically makes riparian areas within the ACEC unavailable to livestock grazing (page 123). For reasons further explained below, the proposal to make two allotments unavailable to livestock grazing is intended to ensure that management of the acquired property would conform to the Taos RMP.

1.4 Decisions to be Made

One land use planning-level decision will be made based on this EA:

1) The BLM will decide whether to make allotments 00735 and 00736 (4,781 and 1,479 acres, respectively) unavailable for livestock grazing.

Two implementation-level decisions will be made based on this EA:

1) The BLM will decide whether to accept The Wilderness Land Trust's donation of 3,314 acres, thereby enlarging the Sabinoso Wilderness, per Section 6 of the Wilderness Act of 1964.
2) The BLM will decide whether to purchase 776 acres from The Wilderness Land Trust, the majority of which would be included within the Sabinoso ACEC.

1.5 Applicable Authorities

Federal Land Policy and Management Act of 1976 (FLPMA): FLPMA provides the BLM its underlying authority to exercise discretion on the following:

1) Section 202 authorizes the BLM to make land use planning decisions allocating the uses of public lands, including the availability of areas for livestock grazing. Section 402 (c) further specified

this authority. In this case, FLPMA provides for a decision to make the two allotments unavailable for grazing by the land use plan amendment process.

2) Section 202 gives the BLM authority to prioritize the protection of ACECs and their relevant and important values.
3) Section 205 provides the BLM broad authority to acquire lands and interests, including through donation and purchase.

Wilderness Act of 1964: The Wilderness Act establishes the BLM authority to accept donations of land for their inclusion as part of a designated wilderness. Section 6(a) states, "The [Secretary] may... accept gifts or bequests of land adjacent to wilderness areas designated by the Act for preservation as wilderness if he has given sixty days advance notice thereof to the President of the Senate and the Speaker of the House of Representatives." If the BLM decides to accept the donation of land following this environmental analysis, the BLM, through the Secretary of the Interior, will provide the advance notice to Congressional leaders as required under this section.

Section 6(a) allows donors to place certain conditions on the lands being donated. It states, "Regulations with regard to any such land may be in accordance with such agreements, consistent with the policy of this Act, as are made at the time of such gift, or such conditions, consistent with such policy, as may be included in, and accepted with, such bequest." Under this authority, The Wilderness Land Trust is making the donation of the ranch property contingent upon the permanent exclusion of livestock grazing on the ranch property being donated.

Public Law 111-11 (2009): Section 1602 of Public Law 111-11 established Sabinoso Wilderness as a component of the National Wilderness Preservation System. This section further allows for any lands acquired within the wilderness boundary to be incorporated as part of the wilderness designation, a provision that applies to one of the parcels (Parcel S1—see Appendix A, Map 1) offered to the Federal government for sale.

1.6 Identification of Issues

A Federal Register notice was published on June 6, 2016 announcing the proposed action and to solicit public input on issues and alternatives that warrant consideration in this environmental review process. Public notification was also provided by various means, including a news release, web posting, and letters send to interested parties by mail and email.

Based on these efforts along with an interdisciplinary process conducted by BLM resources specialists, the following issues have been identified as relevant for detailed analysis of potential impacts from this action:

Sabinoso Wilderness

- How might the wilderness characteristics of the area benefit from this action?
- How might the wilderness characteristics be adversely impacted?

Sabinoso ACEC

- How might the area's relevant and important values—scenic and riparian—benefit from this action?
- How might these values be adversely impacted?

Recreation

- How would the opportunities for solitude or a primitive and unconfined recreational experience be impacted?
- Would this action be consistent with the recreational management applied to this area by the Taos RMP?

Cultural Resources

- How might the cultural and historic resources benefit from this action?
- How might these resources be adversely impacted?

Paleontological Resources

- How might the paleontological resources benefit from this action?
- How might these resources be adversely impacted?

Riparian Resources

- How might riparian habitat benefit from this action?
- How might riparian habitat be adversely impacted?

Livestock Grazing

- How would livestock grazing operations be impacted?
- How would opportunities for livestock grazing be impacted?

Wildlife and Special Status Species

- How might wildlife and special status species' habitat benefit from this action?
- How wildlife and special status species' habitat might be adversely impacted?

1.7 Issues Considered but Dismissed from Detailed Analysis

The potential for negative impacts on the local economy as a result of decreasing the public land available for livestock grazing was considered, but dismissed from detailed analysis. It is not anticipated that the loss of opportunity to utilize the two grazing allotments on public land would equate to a significant impact on the local economy, especially considering the potential offset generated by revenue associated with the new recreational opportunities provided by securing public access to the wilderness area.

The potential for this action to contribute to greenhouse gases and/or be affected by climate change was also identified but dismissed from detailed analysis. The proposed action is administrative in nature and would not produce any effect on greenhouse gas emissions. Similarly, a change in ownership or administrative designation would not be affected by changing climatic conditions.

2.0 DESCRIPTION OF ALTERNATIVES

2.1 Alternative A: Proposed Action

The BLM proposes to acquire the 4,080-acre Rimrock Rose Ranch adjacent to Sabinoso Wilderness in San Miguel County, New Mexico, from The Wilderness Land Trust. Of this acreage, the BLM proposes to accept 3,314 acres as a donation for its inclusion within the designated wilderness under the provisions of Section 6 (a) of the Wilderness Act of 1964. The remaining 766 acres would be acquired through a purchase in accordance with Section 205 of FLPMA. Also a part of the proposed action, the BLM proposes to make two allotments unavailable to livestock grazing, a decision that requires the BLM to amend its Taos RMP. See Appendix A, Map 1.

2.1.1 Acquisition through Donation Acceptance

The BLM proposes to accept a donation of 3,314 acres, consisting of four parcels located in T 16 N, R 22 E; T 16 N, R. 23 E; and T 17 N, R 23 E, to be added to the wilderness (with one minor exception involving roughly 3 acres)—see Table 1. Management of these parcels as part of the wilderness would be in accordance with the Wilderness Act of 1964 and guidance contained in BLM Manual 6340—Management of Designated Wilderness Areas.

Access would be available to the public at the westernmost end of Parcel D1 off of county road C51A. The road entering Cañon Largo would remain closed to the public. A gate would be placed on rim of the cañon in the northwestern quarter of section 28, T. 16 N., R. 22 E., where trailhead parking would be accommodated.

Table 1. Parcels Donated for Inclusion within Sabinoso Wilderness

Parcel	Acres	Description
D1	2,340	Cañon Largo parcel*
D2	247	West parcel
D3	407	South parcel
D4	320	East parcel

*About 3 acres to be donated would not be included within the wilderness boundary because of the constructed nature of the access road. See Map 1.

In addition, of the inclusion of Parcel D1 in the Sabinoso Wilderness would create a new private inholding within the wilderness boundary. This inholding would consist of portions of sections 13, 24, 25, and 26 within T. 16 N., R. 22 E., amounting to approximately 640 acres in size. Under Section 5 (a) of the Wilderness Act, such an inholding may be given rights to adequate and reasonable access, limited to the route and modes of travel used by the owner at the time the inholding was created. In this case, access may be granted across section 23 and/or section 26 within T. 16 N., R. 22 E., which keeps any travel on top of the mesa and out of Cañon Largo.

2.1.2 Grazing Allotment Availability

The BLM is also proposing to make the two allotments, 00735 and 00736, for which the ranch served as base property (per 43 CFR 4110.2-1) unavailable to livestock grazing. The ranch property contains important riparian resources, and when it served as base property for the two allotments, the grazing operation on the two allotments depended on the riparian areas as a water source and/or for trailing livestock. To alleviate potential impacts to riparian resources in a manner consistent with management prescriptions in the Taos RMP, allotments 00735 and 00736, totaling 6,260 acres and 1,044 animal unit months (AUMs), would be made unavailable for grazing.

Under the provisions of Section 6 (a) of the Wilderness Act of 1964, a donor may apply conditions on a property donated for inclusion within a designated wilderness. In this case, the Wilderness Land Trust has specified that the grazing of livestock be permanently excluded on the ranch property as a condition of their donation.

2.1.3 Acquisition through Purchase

In addition, the BLM proposes to acquire 766 acres within six other parcels through a purchase, under the provisions of Section 205 of FLPMA. (See Table 2.) Parcel S1 would be included within Sabinoso Wilderness, while parcels S3, S4, and most of S5 would be included within the Sabinoso ACEC. Parcels S2 and S6 and a portion of S5 would not be included within the ACEC, but would be managed in accordance with the general prescriptions under the Taos RMP.

Table 2. Parcels Offered for Sale

Parcel	Acres	Management
S1	322	Inholding—to be included within wilderness
S2	48	Not contiguous to ACEC or wilderness—to receive general management per Taos RMP
S3	35	To be included within ACEC
S4	166	To be included within ACEC
S5	154	Approximately 110 acres would be included within ACEC, while the remaining would be outside the ACEC and to receive general management per Taos RMP
S6	41	Not contiguous to ACEC or wilderness—to receive general management per Taos RMP

2.1.4 Rights Associated with the Acquisition

Rights associated with the ranch property proposed for acquisition though donation and purchase are 1) a deeded access road from county road C51A to the property, 2) mineral rights underlying the ranch property, and 3) the rights to caliche material underlying approximately 2,379 acres.

All nine parcels proposed for acquisition are presented on Map 1 in Appendix A along with the access route, the caliche rights area, and allotments 735 and 736, as discussed above.

2.2 Alternative B: No Action

The BLM would not accept the donation of 3,314 acres or pursue the acquisition of 766 acres from The Wilderness Land Trust. The Rimrock Rose Ranch would remain in private ownership.

While allotments 00735 and 00736 would remain vacant of livestock grazing, the allotments would be available for application by a qualified party. A new grazing permittee, however, would not be authorized by the current owner to use the Rimrock Rose Ranch property as part of a livestock grazing operation.

2.3 Alternatives Considered but not Analyzed in Detailed

Alternatives considered but eliminated from detailed analysis include the following for reasons explained:

1) **Acquire, by donation, the 3,314 acres of land known as the Rimrock Rose Ranch (plus an additional 766 acres of the ranch through purchase) but not include within the Sabinoso Wilderness.** However, under this alternative, the acreage would not be included within the

Sabinoso Wilderness. Instead, while much of the land would be included within the ACEC, the acreage would be managed for multiple use purposes according to the guidance contained in the Taos RMP.

The Wilderness Land Trust, however, is only offering the donation with the intention of its inclusion within the Sabinoso Wilderness, as provided for under Section 6 of the Wilderness Act of 1964. Their offer is contingent upon the majority of the land being preserved as wilderness. Therefore, this alternative is not considered any further as an option since it is not an option made available by The Wilderness Land Trust.

2) **Acquire the Rimrock Rose Ranch lands through an exchange.** If acquired through an exchange, the lands would be inventoried for their wilderness characteristics, and be subject to protection or not under a revised RMP at the discretion of the BLM. However, none of the land would become part of the Sabinoso Wilderness without further Congressional action. The Wilderness Land Trust has not expressed a willingness to enter into a land exchange with the BLM. Because an exchange is not being offered to the United States, it will not be further analyzed.

3) **Acquire the Rimrock Rose Ranch lands through a purchase.** If acquired through purchase, the lands would be inventoried for their wilderness characteristics, and be subject to protection or not under a revised RMP at the discretion of the BLM. However, none of the land would become part of the Sabinoso Wilderness without further Congressional action (except parcel S1). The BLM would not have funding to pursue a purchase unless appropriated through Congress. The Wilderness Land Trust has not expressed a desire to work through the process of selling the subject land to the BLM. Because this alternative is not being offered to the United States, it will not be further analyzed.

4) **Offset the loss of the available livestock grazing allotment and/or forage by providing the opportunity elsewhere in the Sabinoso area.** This alternative was considered and dismissed from this analysis because of the lack of availability within the area for additional allotments or animal unit months. This opportunity, however, would be more appropriately explored as part of a process to complete the Sabinoso Wilderness Management Plan, subsequent to acquiring public access to the wilderness. (The wilderness management planning effort was put on hold in 2013 until the access issue could be resolved.)

3.0 AFFECTED ENVIRONMENT

The Rimrock Rose Ranch property is adjacent to or is near the Sabinoso Wilderness approximately 50 miles east of Las Vegas, New Mexico near the community of Trujillo. The parcel is generally undeveloped land and consists of rimrock bordered cañons with riparian species and large conifers (in Cañon Largo), and piñon-dominated uplands.

There is one constructed road that leads to the upper part of Cañon Largo, originating from county road C51A. There is a primitive two-track route on the property in Cañon Largo, which the previous owner used to traverse the Rimrock Rose Ranch property. This route crosses public lands in the cañon, and as part of a wilderness inventory was determined to be a primitive route worn by the passages of vehicles, not a constructed road.

3.1 Sabinoso Wilderness

The Rimrock Rose Ranch property is adjacent to the 16,030-acre Sabinoso Wilderness and meets the size criteria for wilderness in conjunction with the existing designated wilderness. The property appears to be affected primarily by the forces of nature. The property proposed for addition to the wilderness is considered "roadless," having only primitive routes in a portion of the property.

There are approximately 2.5 miles of primitive routes on the property, the most notable of which is a two-track route in Cañon Largo worn in by the passage of vehicles. This route does not conflict with wilderness values in that it could reclaim naturally or be converted to a hiking and equestrian trail. The property also includes about 3.5 miles of allotment and pasture fences and three solar powered wells. The wells would be removed prior to donation. None of the developments on the property are substantially noticeable and so are not inconsistent with a wilderness designation. Livestock grazing has been discontinued on the ranch property by Wilderness Land Trust.

In combination with the adjacent Sabinoso Wilderness, the property offers outstanding opportunities for solitude and primitive and unconfined recreation. Furthermore, by itself the property offers these values and would become a major focal point of the wilderness for primitive recreation due to the outstanding opportunities for cañon hiking, horseback riding, camping, hunting, photography, and other forms of primitive recreation. A large part of the property includes a winding cañon, and this topography provides for separation from other visitors. In addition, the vegetation on the property includes woodland and forest which further enhances separation and screening between visitors. These qualities result in outstanding opportunities for solitude and primitive and unconfined recreation.

The parcel has high scenic values because of the sandstone cliff walls of Cañon Largo and the ponderosa and cottonwood trees that grow within it. Based on the presence of cultural resources on adjacent BLM lands, the property is expected to contain prehistoric and historic cultural resources of value. Cañon Largo forms a logical travel corridor between the upper and lower plains here, and this is expected to contribute to past uses by people. A large prehistoric pueblo ruin is also believed to be located on the property based on remote sensing information. Cultural resources would be a supplemental value of the wilderness character of the donated lands. Based on what is known on adjacent public land, the property is expected to contain wildlife habitat including important riparian habitat for amphibians.

3.2 Sabinoso ACEC

3.2.1 Riparian Value

The Sabinoso ACEC was established to protect relevant and important riparian resource values, where they occur on public lands in the area. However, there are several miles of riparian resources located on the ranch property proposed for acquisition and inclusion within the wilderness. These resources are described under section 3.6.

3.2.2 Scenic Value

The ACEC was found to contain high quality scenic value, based on a visual quality inventory, and is currently managed as Visual Resource Management (VRM) Class I. The VRM objective for this classification is to preserve the existing character of the landscape. The level of change to landscapes where this classification is applied—should any be authorized—should be very low and must not attract attention.

3.3 Recreation

A large part of the property includes Cañon Largo, a scenic area exceptionally attractive for hiking, horseback riding, backcountry camping, photography, and hunting, or as an access corridor to those activities on the adjacent public lands. However, currently there is no public access on the road to the Wilderness and surrounding public lands as a whole. Public ownership of the Rimrock Rose Ranch property would provide access to and parking for the Sabinoso Wilderness and surrounding BLM lands by way of a constructed road to the upper part of the cañon. Where this road is located on adjacent private land, an easement exists and is included in the Rimrock Rose property. From this new access opportunity primitive recreational activity including hiking, horseback riding, hunting, camping, nature study, and photography are readily available.

Public lands in the area are managed as the Sabinoso Special Recreation Management Area (SRMA) where special management may be applied that seeks public access while preserving the unique opportunity for primitive and unconfined recreation. The Taos RMP acknowledges the management challenge of providing public access, stating that the BLM "will seek to establish public access at appropriate locations based on the availability of easements and compatibility of access with preserving wilderness character and ACEC values" (page 76).

3.4 Cultural Resources

The Sabinoso area and the proposed acquisition are situated within the Southern High Plains where evidence of human occupation dates back at least 12,500 years. Prehistoric and historic period cultural developments in the Sabinoso area are part of the much broader High Plains cultural environment that is distinct from the rest of cultural developments in the Southwestern regions of the United States (Gunnison 1987). Within the Southern High Plains, the deeply incised topography of the Canadian River and the attendant cañon lands of the Sabinoso area represent an abrupt and comparatively well-watered departure from the surrounding semi-arid and highly exposed tablelands of the "plains" environment. While humans have traversed and occupied the Great Plains for thousands of years it has long been recognized by archaeologists and historians that intensive human occupation of this physiographic region in the past was typically concentrated in cañon environments where the unique topography and diversity of natural resources provided a highly attractive contrast to the surrounding tablelands (Akins 1993; Lowie and DeMaillie 1984, DeMaillie 1979, Gunnison 1987, Winter 1988, Gunnison and Gunnison 1988, Cordell and McBrinn 2012).

The Sabinoso area has not been intensively studied or inventoried, but a general knowledge of its cultural resources can be assembled from existing sources. Scatters of stone artifacts are distributed in the cañons and along the precipitous margins of the surrounding mesa tops. These artifacts are testimony to the long prehistoric use of this region by nomadic people who intermittently traveled through, and sometimes resided within, this protected environment. Rock overhangs were sometimes used as shelters and also contain artifacts associated with the prehistoric and historic period presence in this area. Petroglyphs have been observed on some shelter walls, on cliff faces, and on isolated boulders. The remnants of ancient trails traverse the cañons and mesa tops and are associated with scattered alignments of prehistoric and early historic period artifacts (Dicks 2007, 2008; Lambauch 2010; Dicks et al. 2012). Large game "kill sites," where herd animals such as bison were corralled or even driven over steep cliffs and into deep gullies where they were then killed and butchered, have been identified in the region. Some of these are extremely old and provide the earliest evidence of human nomadic activities in this portion of the Southern Plains (Frison 1978; Fraught et. al. 1994; Cordell and McBrinn 2012).

Circles of stone, representing the weighted margins of brush structures and skin-covered tipis have been found all along the Canadian watershed (Winter 1988; Gunnerson 1987; Gunnerson and Gunnerson 1988;

York 1988; Dicks 2007). Some of these date to the arrival of the horse in the Plains region and are indicative of the expansion of the Great Plains Horse Culture into this part of the Canadian River Valley, beginning in the mid-17th century (Hämäläinen 2008; Eislet 2012). Historic period groups like the Kiowa, Apaches, Utes and, and particularly, the Comanche, quickly adopted the horse and expanded their realm of activities and occupation to include this portion of the Canadian River Valley. Some of the early metal and glass artifacts that have been found in the region were probably acquired by these Plains nomads through trade networks that stretched across the High Plains, linking the Spanish southwest with the Great Lakes and eastern reaches of the continent were French, British, Spanish and later, American interests vied for economic and political control of the continent (Hämäläinen 2008).

The settlement of the Sabinoso area by Hispanic and Anglo homesteaders and farmers began only in the mid-19th century. This late date is indicative of the persistent presence of nomadic groups like the Comanche who controlled much of the southern Plains from the 17th century through the early 19th century. In the lower reaches of Largo Cañon are the remains of several small, defensive plazas that were constructed of tabular fieldstone and adobe. The earliest of these date to the very beginnings of the U.S. Territorial period when disenfranchised Hispanic families moved from the settlements around Las Vegas, down the Mora River Valley to its confluence with the Canadian to start a new existence (Laumbach 2010).

At first, because the threat of attack from nomadic raiders was still very much present in the Sabinoso area, these new arrivals clustered together in plaza settlements and farmed nearby tracks of land in the rich alluvium that lay along the river and at the mouth of the cañons (Lambauch 2010). In 1863 it was necessary to station two troops of New Mexico Volunteers near the end of Cañon Largo to protect these settlements. A military road was constructed down the cañon in the 1850's and 60's that connected nearby Fort Union with Fort Bascom, located further down the Canadian River. The new road linked the Largo and Canadian River settlements with the outside world, but raiding by nomadic Plains people continued. In 1854 a "running battle" was fought on the rugged slopes and rim above Cañon Largo between a company of U.S. Dragoons and "Apache" raiders. The raiders may actually have been "*genezarios*" rustlers made up to look like Apaches. The battle ended with the death of a young Lieutenant, killed instantly by two arrows "*that found their mark*" as he led his unit in a charge over the sandstone rim of a nearby mesa (Utley 1962).

After the end of the American Civil War in 1864 the region became more conducive to permanent settlement. The remains of homesteads appeared along the length of Cañon Largo in the second half of the 19th century as families dispersed to occupy lands that were formerly beyond the protective confines of the old defensive plazas of Largo, Ancon, and Armenta. These small homesteads were mostly positioned along the old Fort Bascom-Fort Union military road (Dicks et al. 2012). A 2010 oral history survey of the Sabinoso area documented the remains of numerous homesteads and other cultural features in nearby Olguin, Ciruela, and Spring cañons. The remains of a small, rural cemetery and one isolated grave site were found in Ciruela Cañon (Laumbach 2010). Like the earlier plaza settlements down along the Canadian, the homesteads were built of stone, mud, and large, wooden "vegas" and "latias." They are preserved today as archaeological sites that include light scatters of mostly homemade artifacts, but there are also discarded fragments of "store-bought" artifacts of glass, metal, and "fancy" porcelain (Laumback 2010; Dicks et. al. 2012).

While small scale farming and gardening were a part of these homestead economies, the main focus was on grazing livestock (Laumbauch 2010). The surrounding cañons and mesa tops are dotted with the remains of sheep herder shelters and camps. Corrals and smaller "lambing pens" of brush, stone, and wooden rails are also present, along with petroglyphs that record initials, names, dates, and sometimes religious sentiments in the form of Christian crosses (Dicks 2007; 2008). The smaller corrals often contain the remains of central hearths and scatters of "knife-opened" cans of condensed milk. The

herders would sit inside these small enclosures, hold the new born lambs near the hearth, and "nursed" them with canned milk to give them a "surer start" at life.

Mesa top playa lakes border some of the cañon lands and some of these features are known to be present within the existing Wilderness area and ACEC. Playas in the area are often surrounded by the remains of livestock herder camps. Some were modified by the construction of rock walls and dams so that they would hold more water for livestock. Lines of stepping stones are also common that extend out towards the center of these recessed, natural ponds, across the muddy flats, to access open water. Some of these playa features may have been constructed by earlier people as there are often light scatters of stone artifacts that indicate that these upland sources of water were also attractive to prehistoric human groups. Playa lakes within this physiographic setting have been found to harbor lacustrine (lake) sediments in excess of 300 feet deep (Tony Benson, personal communication 2015). These kinds of depositional environments possess the potential to harbor well-preserved and deeply stratified archaeological, paleontological, and paleo-environmental remains and data that are generally not present or preserved in other settings. All of these places on the landscape were linked by networks of constructed trails that are still visible today, though they are now mostly traversed by wildlife (Dicks 2008).

The Sabinoso area continued to be something of a frontier landscape well into the 20th century. During World War I, a local volunteer from Sabinoso went AWOL from the army and hid out in the upper reaches of Cañon Largo for several years. Local people brought him provisions and kept him hidden from the authorities until after the end of the war (Lambauch 2010). Rustling livestock seems to have been a tradition in this area that extended back to the early days of nearby Fort Union. Official records are filled with references to livestock and horse theft from the government herds and of punitive expeditions to the Canadian settlements in what seem to have generally been futile searches for the perpetrators. The remote, largely inaccessible cañon lands provided the perfect setting for this sort of activity.

Major flood events in 1909 and 1920 effectively destroyed the old plazas of Ancon and Armenta, located just upstream from Sabinoso, at the mouth of the Mora River (Dalrymple, Tate and "Others" 1939; Laumbach 2010). The remote and rugged environment of the Sabinoso area was a key factor in its economic decline during the first half of the 20th century when even rural community articulation with outside market economies became increasingly important across the United States. Sabinoso was bypassed by the network of early railroads that inched their way across the New Mexico landscape in the late 19th and early 20th centuries. The closest rail line was the Dawson Branch of the Southern Pacific which ran through the rural hub of Roy 21 miles to the north. Farming along the Canadian, while productive at the subsistence level, was constrained by the limited amount of arable land within the narrow cañon environments of the Sabinoso area. Always removed from mainland routes, the community was further marginalized when the county road connecting Mosquero with Las Vegas bypassed Sabinoso altogether. The largely self-sufficient and highly rural community of Sabinoso was probably less directly affected by the Great Depression than many areas of the country. But it was also completely left behind by the post-World War II economic "boom" that left it more isolated than ever and further diminished the connections that the community had with the outside world. The nation-wide shift in rural populations to urbanized settings particularly affected communities like Sabinoso which has experienced a substantial decline in population over the past century.

3.5 Paleontological Resources

The proposed acquisition lands, along with the Sabinoso Wilderness and the Sabinoso ACEC, are all located within the Canadian Escarpment physiographic region. This is a region that is characterized by high plateaus that are dissected by deep, narrow cañons that feed into the Canadian River drainage. Cañon Largo and Cañon Olguin both contain extensive vertical exposures of Triassic, Jurassic, and

Cretaceous-age rock formations. These formations have yielded an abundance of highly significant fossil specimens in adjacent portions of east-central New Mexico. Important specimens that have been recovered range from complete and well preserved skeletons and tracks of Triassic-age, terrestrial mega-fauna, such as *Allosaurus*—a large, heavily armored, and carnivorous dinosaur—to whole assemblages of Cretaceous age marine fauna and flora that collectively represent extinct ecosystems dating back 150 million years (Leibold et al. 1987; Sealey 2010).

The Potential Fossil Yield Classification system (PFYC) ranks different areas within the United States according to their potential for the associated rock formations and exposures to preserve and yield highly significant fossil assemblages. The formations that are associated with the Sabinoso region are usually ranked "High" (PFYC 4) to "Very High" (PFYC 5) in the surrounding portions of east-central New Mexico. Current PFYC ranking classifies most of the Sabinoso Wilderness and the proposed acquisition parcels as PFYC 3 (moderate or unknown) and PFYC 4 (high). The PFYC 3 ranking is believed by paleontologists familiar with the region to more accurately reflect the remoteness of the Sabinoso area and an absence of detailed paleontological explorations, rather than the actual fossil yield potential of the associated formations (Sealey 2010). A scientific-based summary of the fossil potential for the Sabinoso area concludes that this region should more appropriately be classified as PFYC 4b because;

> The Sabinoso Wilderness Area contains important rock units that have yielded high numbers of scientifically important fossils elsewhere in New Mexico, but because of the general nature of outcrop due to vegetation cover, colluvium and steepness of [cañon] walls, the overall categorization of the geologic outcrops is a PFYC Class 4b…Class 4b is defined as the bedrock unit having high potential, but a protective layer of soil, thin alluvial material, or other conditions may lessen or prevent potential impacts to the bedrock resulting from an activity. It is not considered a Class 5b because even though it does contain highly fossiliferous geologic units that consistently and predictably produce significant fossil remains elsewhere in New Mexico, the steep nature, colluvium, and vegetation cover of the rock units precludes it from having a very high potential to yield large numbers of scientifically important fossil remains…(Sealey 2010).

Mesa top playa lakes border some of the cañon lands and some of these features are known to be present within the existing Wilderness area and ACEC. Playa lakes within this general physiographic setting have been found to harbor lacustrine (lake) sediments in excess of 300 feet deep (Tony Benson, personal communication 2015). These kinds of depositional environments possess the potential to harbor well-preserved and deeply stratified paleontological and paleo-environmental remains and data that are generally not present or preserved in other settings.

3.6 Riparian Resources

The riparian habitat of the Sabinoso Wilderness and Rimrock Rose Ranch follow the intermittent stream within Cañon Largo and to a lesser extent within its side cañons. Many of the side cañons and drainages retain pools of standing water (tinajas) long after the streamflow has stopped. Water flows above and below ground along Cañon Largo depending on location and season. In the Southwest, these riparian habitats are rare and extremely vulnerable. The riparian habitat within the Rimrock Rose Ranch is important for water quality control, flood mitigation, regulating the movement of water, and critical wildlife habitat and food sources.

Taxa identified in the riparian habitat of Cañon Largo and surrounding side cañons are sedges (*Carex*), horsetails (*Equisetum*), spike rush (*Eleocharis*), smartweeds (*Persicaria*), bulrushes (*Schoenoplectus*), cattails (*Typha*), rushes (*Juncus*), grasses (Poaceae), willows (Salix), and cottonwoods (*Populus*). Mature cottonwoods are common in Cañon Largo, however, saplings and mid-aged cottonwoods are less abundant. Willows are present but not common and the specimens detected were heavily browsed.

Abundant cattle tracks and scat were detected near the browsed willows and grazed non-woody vegetation throughout the cañon.

Riparian vegetation within the side cañons of Cañon Largo are supported by subsurface soil moisture allowing for intermittent riparian vegetation. The side cañons have similar riparian vegetation to Cañon Largo, however cottonwoods are rare.

Figure 1. Riparian habitat with cottonwoods in the background

Figure 2. Riparian area with sedges, rushes, cattails, bulrushes, and grasses.

Figure 3. Cattle tracks in the riparian habitat

Although, the Rimrock Rose Ranch has not been actively grazed since October 2015, there are numerous cattle presently in Cañon Largo, apparently abandoned. Over 50 individuals were detected in July 2016 within Cañon Largo, as well as two horses near the eastern boundary (Besser pers. obs.). Cattle tracks and scat were seen throughout the cañon. Riparian vegetation is grazed by the remaining cattle throughout Cañon Largo resulting in lower stubble height of the herbaceous vegetation, browsing of sapling cottonwoods and willows, degrees of soil erosion from trampled banks and shorelines, and contribution to the increase and spread of invasive species. The riparian areas and flood plains visited displayed signs of degradation that included many herbaceous species associated with disturbed areas. Most forbs and many grasses identified were invasive species, while the sedges, rushes, bulrushes, cattails, cottonwoods, and willows were native species. Tamarisk was detected in the cañon in low numbers.

3.7 Livestock Grazing

Within Sabinoso Wilderness and the surrounding area, there are 18 BLM livestock grazing allotments. All but three are currently permitted for use. In total, over 21,000 acres are allotted for grazing, including 3,640 acres of state and private lands within the federal allotments. Approximately 2,200 animal unit months, the measure of available forage, are allocated on total allotted acreage.

Allotments 00735 and 00736, the Rim Rock and Cañon allotments, respectively, are among those without an active permittee. (See Table 3.) The Rimrock Rose Ranch served as base property for these allotments in accordance with regulations at 43 CFR 4110.2-1. The former owner of the ranch was the permittee on the two allotments from June 2006 until October 2015 when the permittee sold the ranch

property to The Wilderness Land Trust. The Wilderness Land Trust does not qualify for a grazing permit, so would not be able to use the ranch as base property.

Table 3. Livestock Grazing Allotments Served by Ranch Property

Number	Name	Livestock	Acres	AUMs	Period
00735	Rim Rock	73 cattle	4,781	876	3/1 to 2/28
00736	Cañon	14 cattle	1,479	168	3/1 to 2/28

The permittee, who previously owned the ranch, was authorized to run 87 head of cattle on the two allotments on a year-round lease. BLM records indicate that the permittee paid annual fees for all 87 head. However, anecdotally, based on field observations, it is believed that the permittee only averaged 30-40 head of cattle and, consequently, only utilized allotment 00735. The stream in Cañon Largo, most of which is on the private ranch property, is more easily accessible from allotment 00735 and provides a more reliable year-round water source, though the permittee did drill two wells and install metal troughs on the ranch property to provide water when the stream went dry.

Table 1. BLM New Mexico Sensitive Species of the Sabinoso Wilderness in San Miguel County, New Mexico. The "I" is considered Important habitat for the species year round and the "C" is Casual habitat use. Where there is a gap in the data the "ND" is used to indicate "no data." BISON: Biota Information System of New Mexico provided the data for the table.

Common Name	Scientific Name	Riparian	Arroyo Riparian	Ponderosa Pine	Pinon/ Juniper	Juniper Savannah	Scrub	Short-grass Steppe	Rock Outcrop
Pale Townsend's big-eared Bat	*Corynorhinus townsendii*	C	C	C	C	C	C	C	C
Arizona myotis	*Myotis occultus*	I	C	I	I	C	I	C	I
Fringed myotis	*Myotis thysanodes*	I	C	I	I	I	I	I	I
Long-eared myotis	*Myotis evotis*	I	C	I	C	C	C	C	I
Long-legged myotis	*Myotis volans*	I	C	I	I	C	C	C	I
Western Small-footed myotis	*Myotis ciliolabrum*	I	I	I	I	I	I	I	I
Yuma myotis	*Myotis yumanensis*	I	C	C	I	I	I	I	I
Gunnison's prairie dog (prairie)	*Cynomys gunnisoni zuniensis*	C	C	C	I	I	I	I	ND
Ferruginous hawk	*Buteo regalis*	ND	I	C	C	I	ND	I	I
Burrowing owl	*Athene cunicularia*	ND	ND	ND	C	I	ND	I	ND
Loggerhead shrike	*Lanius ludovicianus*	ND	C	ND	ND	I	C	I	ND
Piñon jay	*Gymnorhinus cyanocephalus*	ND	ND	C	I	I	ND	C	ND
Chestnut-collared longspur	*Calcarius ornatus*	ND	ND	ND	ND	I	ND	I	ND
Texas horned lizard	*Phrynosoma cornutum*	I	I	ND	ND	ND	ND	I	ND
Northern leopard frog	*Lithobates pipiens*	I	I	ND	ND	ND	ND	ND	ND

Table 2. Other wildlife species present in/common to the Sabinoso Wilderness and Rim Rock Ranch Donation and Acquisition. The "I" is considered important habitat for the species year round and the "C" is casual habitat use by the species. Where there is a gap in the data the "ND" is used to indicate "no data." BISON: Biota Information System of New Mexico provided the data for the table.

Common Name	Scientific Name	Riparian	Arroyo Riparian	Ponderosa Pine	Pinon/ Juniper	Juniper Savannah	Scrub	Short-grass Steppe	Rock Outcrop
Coyote	*Canis latrans*	C	C	C	I	I	I	I	C
Common gray fox	*Urocyon cinereoargenteus*	I	I	I	I	I	I	C	I
Red fox	*Vulpes vulpes*	I	ND	C	I	I	I	C	ND
Black bear	*Ursus americanus*	I	C	I	I	C	I	C	C
Common raccoon	*Procyon lotor*	I	C	C	C	C	C	C	I
Long-tailed weasel	*Mustela frenata*	C	C	I	I	I	I	I	I
Ringtail	*Bassariscus astutus*	I	I	I	I	I	I	I	I
American badger	*Taxidea taxus*	C	C	C	C	I	I	I	C
Mountain lion	*Puma concolor*	I	C	I	I	I	I	I	I
Bobcat	*Lynx rufus*	I	I	I	I	I	I	C	I
Elk	*Cervus elaphus nelsoni*	I	C	I	I	I	I	C	ND
Mule deer	*Odocoileus hemionus*	I	I	I	I	I	I	I	ND
Pronghorn	*Antilocapra americana americana*	ND	ND	C	C	I	I	I	ND
Turkey vulture	*Cathartes aura*	I	I	I	I	I	I	I	I
Golden eagle	*Aquila chrysaetos*	I/C	I	I	I	I	I	I	I
Red-tailed hawk	*Buteo jamaicensis*	I	I	I	I	I	I	I	I
Swainson's hawk	*Buteo swainsoni*	I	C	C	C	I	I	I	ND
American kestrel	*Falco sparverius*	I	I	I	I	I	I	I	ND
Merlin	*Falco columbarius*	I	I	I	I	I	I	I	ND
Prairie falcon	*Falco mexicanus*	C	C	C	I	I	I	I	I
Peregrine falcon	*Falco peregrinus*	C	C	I	I	C	C	C	I
Wild turkey	*Meleagris gallopavo merriami*	I	C	I	I	I	I	C	ND
Long-eared owl	*Asio otus*	I	I	I	I	I	C	C	ND
Western screech owl	*Megascops kennicottii*	I	ND	C	I	I	C	C	ND
Great horned owl	*Bubo virginianus*	I	I	I	I	I	I	I	I
Gophersnake	*Pituophis catenifer*	I	I	I	I	I	I	I	ND
Western diamondback rattlesnake	*Crotalus atrox*	I	I	I	I	I	I	I	I
Prairie rattlesnake	*Crotalus viridis*	I	I	I	I	I	I	I	I
Tiger salamander	*Ambystoma tigrinum*	I	I	I	I	I	I	I	ND
Red-spotted toad	*Anaxyrus punctatus*	ND	I	ND	I	ND	I	I	ND

Common Name	Scientific Name	Riparian	Arroyo Riparian	Ponderosa Pine	Pinon/ Juniper	Juniper Savannah	Scrub	Short-grass Steppe	Rock Outcrop
Woodhouse's toad	*Anaxyrus woodhousii*	I	I	I	I	I	I	I	ND
Plain's leopard frog	*Lithobates blairi*	I	I	ND	ND	ND	ND	ND	ND

3.8 Wildlife and Special Status Species

The Sabinoso Wilderness lies within the Southwestern Tablelands Level III Ecoregion, an area dominated by sub humid and semiarid grasslands. The Sabinoso Wilderness and surrounding ACEC's deep cañons and mesa tops break up the relatively flat grassland of the southwestern tablelands. Piñon pine (*Pinus edulis*) and juniper (*Juniperous spp.*) woodlands, savannahs, grasslands, rock outcrops, and riparian habitat along the cañon bottoms are common and support many wildlife species. Table 1 outlines the BLM Sensitive Species that may inhabit the Sabinoso Wilderness and Rimrock Rose Ranch. Table 2 lists many other species that live in the habitats provided by the wilderness. Table 2 is not exhaustive, and many species of song birds, lizards, snakes, small mammals, and insects depend upon the ecosystem within the Sabinoso Wilderness and the ranch property. A bird survey was conducted by Bill West in June 2016, which documented over 50 bird species within Cañon Largo.

Riparian dependent wildlife species present during a July 2016 survey of the Rimrock Rose Ranch property included plain's leopard frog (*Lithobates blairi*), Woodhouses toad (*Anaxyrus woodhousii*), red-spotted toad (Anaxyrus punctatus), American bullfrog (*Lithobates catesbiana*), smooth soft shell turtle (*Trionyx muticus*), garder snakes (*Thamnophis*), black bullhead catfish (*Ameiurus melas*), green sunfish (*Lepomis cyanellus*), and red shiner (*Cyprinella lutrensis*).

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Direct and Indirect Effects

4.1.1 Alternative A: Proposed Action

4.1.1.1 Sabinoso Wilderness

The acquisition of the parcel through donation under Section 6 of the Wilderness Act plus the purchase of the inholding would result in an enlargement of the Sabinoso Wilderness by 3,633 acres. The property has limited developments on it that would not conflict with a wilderness designation and would not require any rehabilitation necessitating a prohibited tool listed in Section 4(c) of the Wilderness Act.

Though the primitive route would not be open to motor vehicle use under the donation, it could be utilized as a non-motorized/non-mechanized trail. The wilderness would be enhanced by including an area of exceptional scenic and primitive recreational qualities. Furthermore, the part of the donation apart from the Section 6 donation would result in public access to and trailhead parking for the Sabinoso Wilderness. As the Sabinoso Wilderness does not currently have public access, the public purpose of recreation under Section 4(b) of the Wilderness Act would be realized through this proposal.

Visitation and access are indicators that the public is realizing the recreational purposes of the wilderness. Visitation to the wilderness is expected to remain low since it is still not accessible from major travel routes or population centers. Visitation could result in some impacts to vegetation along foot traffic or horseback riding routes and where camping may occur near access points and in proximity to water sources. Where routes or sites receive repeated use, soils tend to harden and become denuded of vegetation. Litter can also be an associated impact from recreation and visitor use. However, management of recreation in wilderness typically starts with education and minor controls on use until monitoring indicates a need for more control on visitor behavior such as allocating use, requirements of registrations, or location of campsites.

An inholding to the wilderness would be acquired from willing sellers which would eliminate the need for motorized vehicle inholding access. However, the acquisition of the parcel would also create one new non-wilderness inholding, and two wilderness exclusion areas. The two wilderness exclusion areas would be BLM lands of 100 and 20 acres which are currently recognized as having wilderness characteristics and withdrawn from mineral entry under Public Law 111-11. The wilderness exclusion areas are unusual, but present no issues to wilderness management. The exclusion area could be added to the wilderness under the discretion of Congress, through a subsequent Act. The inholding would be a private parcel of 640 acres which, because it is not currently an inholding, is not currently eligible for motorized access across the adjoining wilderness. Once it becomes an inholding, it would qualify for motorized access under Section 5(a) of the Wilderness Act, thus a new issuance of permission to use motorized vehicles in the wilderness would result.

The enlargement of the wilderness by the donation would also make other existing BLM land become contiguous with the wilderness. This land would be expected to possess wilderness characteristics, and they would be inventoried to confirm the presence or absence of wilderness characteristics after the donation is accepted.

In summary, the proposal would result in 1) the expansion of the Sabinoso Wilderness to 19,663 acres, 2) no impact to the untrammeled or natural qualities of wilderness character, 3) a no-net change to the undeveloped quality of wilderness character (because one inholding access allowance would be removed and another created), and 4) an enhancement to the outstanding opportunity for primitive recreation and solitude.

4.1.1.2 Sabinoso ACEC

For analysis of how riparian resource might be impacted, see section 4.1.1.5. No change is expected to occur to the scenic quality of the area as a result of the acquisition and removal of grazing from two allotments. The ACEC is currently managed to protect the visual quality in accordance to the objectives of VRM Class I. The classification would continue to be applied to the public lands within the ACEC. However, upon acquiring the ranch property, the area afforded this protective management would be substantially increased as all of the new acreage would also be managed as Class I. Furthermore, since The Wilderness Land Trust is expected to remove the more visible ranch features on the property that are currently in contrast to the wild character of the landscape prior to the BLM's acquisition of the property, there is expected to be an improvement in the scenic quality within the resulting ACEC acreage.

4.1.1.3 Recreation

Cañon Largo, a scenic area which provides opportunities for hiking, horseback riding, camping, hunting, photography and other forms of primitive recreation would become available for public use. The public would gain access to the Sabinoso Wilderness, Cañon Largo, and other surrounding BLM lands for the first time. The primitive route in Cañon Largo would be available for use as a hiking or horseback riding trail. Because the acquisition would be donation with the purpose of adding the property to the Sabinoso Wilderness, the primitive route in Cañon Largo would not be available for motorized or mechanized use.

4.1.1.4 Cultural Resources

Under Alternative A, cultural resources contained within the proposed acquisition would move from private to federal ownership and management. Cultural resources on private lands in New Mexico are not protected by federal law and are only rarely protected or regulated by state, county, or local ordinances. General prescriptions for the management of cultural resources by the Taos Field Office are outlined in the 2012 Taos RMP. These prescriptions are based upon applicable federal laws and policies that protect

cultural resources which include, among others, the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1990. These laws and policies provide levels of protection and management of cultural resources that are not typically available under private ownership. Under Alternative A, these resources will enter into, and remain, under federal ownership and management in perpetuity. The change from private to federal ownership under the proposed action is therefore preferred as being beneficial to the preservation and protection cultural resources.

Under the proposed action the cultural resources contained within the acquisition would be managed as either a "supplemental value" within the wilderness area or, as part of the Sabinoso ACEC. No specific prescriptions are provided for the management of cultural resources included in the Sabinoso ACEC. Their management would default to the general management guidance provided for cultural resources in the 2012 Taos RMP. Cultural resources included in the wilderness area would be managed in accordance with the Wilderness Act of 1964, BLM Manual 6340 and, where allowable, the 2012 Taos RMP. Regardless of whether acquired cultural resources fall under the management of the wilderness or the ACEC, federal ownership is determined to be preferable to continued private ownership.

The exclusion of livestock grazing and the Cañon Largo Road closure under Alternative A would benefit cultural resources because these changes would eliminate potential competing uses that pose potential adverse effects to cultural resources in the area. Illegal looting of archaeological sites on BLM lands along the Canadian River drainage have been documented nearby (Dicks 2007). Limiting access to non-motorized traffic would diminish the likelihood that such activities would occur within the ACEC and the Wilderness. The decision not to continue grazing would also eliminate the need for present and future grazing infrastructure to continue in the identified allotments. The removal of existing grazing infrastructure and the closure of the Cañon Largo Road would help restore and maintain the wilderness character of the land and eliminate the potential for future modern intrusions into the natural and cultural landscapes that are associated with the ACEC and the wilderness area. Historic resources that are related to the history of grazing in the region would not be removed, but would be managed as a supplemental value to wilderness character, or as significant resources attendant to the management of the Sabinoso ACEC.

A potential source of concern is posed by the inclusion of cultural resources within the Sabinoso Wilderness Area where they will be managed as a supplemental (and therefore, subservient) value to wilderness. Wilderness management prohibits, or severely constrains, certain activities and actions in wilderness contexts. These possess the potential to limit or exclude the "*uses*" for which cultural resources are typically managed and cared for in non-wilderness BLM contexts (see BLM Manual 1601: Appendix C).

BLM Manual 6340 stipulates that cultural resources in wilderness will be managed for "*public purposes*" as a "*supplemental value,*" while "*keeping in mind that the overarching mandate from Congress is to preserve wilderness character*" (BLM Manual 6340: Sec. 1.6.A.1.5 and Sec. 1.6.C.1). As defined, public purposes include consideration of the "*recreational, scenic, scientific, educational, conservation, and historical use*" of supplemental values (BLM Manual 6340: Sec. 1.6.A.4). Wilderness management prohibitions on these uses can be mitigated through Minimum Requirements Analysis (MRA) and by application of the Minimum Requirements Decision Guide (MRDG), provided that the proposed use meets specific requirements that are designed to protect wilderness character (see BLM Manual 6340: Section 1.6.C.5.g and Appendix B). Preservation measures that might otherwise be prohibited in wilderness contexts, such as the protection of cultural resources from the effects of wildland fire or natural erosion, are allowable through this process. Scientific research, including data recovery, may also be allowed (BLM Manual 6340: Section 1.6.C.5.f) to the extent that anticipated restrictions on realizing

the use potential of cultural resources are permissible in wilderness context. Therefore, no adverse effects to cultural resources are anticipated from the inclusion of these resources within the wilderness area.

4.1.1.5 Paleontology Resources

Under Alternative A, paleontological resources contained within the proposed acquisition would move from private to federal ownership and management. Paleontological resources on private lands in New Mexico are not protected by federal law and are only rarely protected or regulated by state, county, or local ordinances. General prescriptions for the management of paleontological resources by the Taos Field Office are outlined in the 2012 Taos RMP. These prescriptions are based upon applicable federal laws and policies that protect fossil resources on public land; foremost among these being the Paleontological Resources Preservation Subtitle of the 2009 Omnibus Public Land Management Act (16 USC 470aaa). These laws and policies provide levels of protection and management of paleontological resources that are not typically available under private ownership. Under Alternative A, these resources will enter into and remain under federal ownership and management in perpetuity. The change from private to federal ownership under the proposed action is therefore preferred as being beneficial to the preservation and protection paleontological resources.

Under the proposed action the paleontological resources contained within the acquisition would be managed as either a "supplemental value" within the wilderness area, or as part of the Sabinoso ACEC. No specific prescriptions are provided for the management of paleontological resources included in the Sabinoso ACEC. Their management would default to the general management guidance provided for this resource in the 2012 Taos RMP. Fossil resources included in the wilderness area would be managed in accordance with the Wilderness Act of 1964, BLM Manual 6340 and, where allowable, the 2012 Taos RMP. Regardless of whether acquired paleontological resources fall under the management of the wilderness or the ACEC, federal ownership is determined to be preferable to private ownership.

The exclusion of livestock grazing and the Cañon Largo Road closure under Alternative A will benefit fossil resources because these changes will eliminate potential competing uses that pose potential adverse effects to paleontological resources in the area. Limiting access to non-motorized traffic will diminish the likelihood that unauthorized removal or excavation of paleontological resources will occur within the ACEC and the wilderness. The elimination of ground disturbing activities associated with grazing, the construction and maintenance of range improvements, and vehicle traffic along the Cañon Largo Road will help preserve and protect paleontological resources in the area.

A potential source of concern is posed by the inclusion of fossil resources within the Sabinoso Wilderness Area where they will be managed as a supplemental (and therefore, subservient) value to wilderness. Wilderness management prohibits, or severely constrains, certain activities and actions in wilderness contexts that may limit or exclude the "*uses*" for which paleontological resources are typically managed and cared for in non-wilderness BLM contexts (see BLM Manual 1601: Appendix C).

BLM Manual 6340 stipulates that fossil resources in wilderness will be managed for "*public purposes*" as a "*supplemental value,*" while "*keeping in mind that the overarching mandate from Congress is to preserve wilderness character*" (BLM Manual 6340: Sec. 1.6.A.1.5 and Sec. 1.6.C.1). As defined, public purposes include consideration of the "*recreational, scenic, scientific, educational, conservation, and historical use*" of supplemental values (BLM Manual 6340: Sec. 1.6.A.4). Wilderness management prohibitions on these uses can be mitigated through Minimum Requirements Analysis (MRA) and by application of the Minimum Requirements Decision Guide (MRDG), provided that the proposed use meets specific requirements that are designed to protect wilderness character (see BLM Manual 6340: Section 1.6.C.5.g and Appendix B). Preservation measures that might otherwise be prohibited in wilderness contexts, such as the excavation and collection of fossil specimens, are allowable through this

process. Therefore, no adverse effects to paleontological resources are anticipated from the inclusion of these resources in the wilderness area.

4.1.1.6 Riparian Resources

With the addition of Cañon Largo and its intermittent stream to the Sabinoso Wilderness, the amount of riparian vegetation in the wilderness increases significantly. Stand of cottonwoods (*Populus*), sedges (*Carex*), horsetails (*Equisetum*), spike rush (*Eleocharis*), smartweeds (*Persicaria*), bulrushes (*Schoenoplectus*), cattails (*Typha*), rushes (*Juncus*), grasses (Poaceae), and willows (*Salix*), along Cañon Largo will increase in distribution, diversity, and biomass within the riparian zone as a result of the removal of cattle grazing (Kauffman and Krueger 1984).

Effects of cattle grazing in riparian areas can include (1) soil compaction leading to runoff and less water for plant uptake, (2) vegetation removal, causing soil temperature to rise, increasing evaporation to the surface of the soil, and (3) damage from trampling, browsing, and rubbing. The removal of cattle should minimize these effects (Kauffman and Krueger 1984).

Riparian dependent species would benefit by the increased microclimate that riparian trees and shrubs create. Effects of herbivory on riparian trees and shrubs can significantly alter the serial stage by preventing establishment of seedlings (Carothers 1977, Glinski 1977). The removal of cattle would allow the riparian shrub and tree species to grow past the seedling stage creating riparian microhabitat. The increase in herbaceous vegetation would increase the insect prey base benefiting insectivore species (Zwartjes et al. 2005).

Riparian values would be protected and water quality disturbances would be reduced by the restriction of motor vehicle use in Cañon Largo. Soil compaction and stream bank sloughing would be reduced, as well as, non-point source pollution due to motor vehicle restrictions.

Overuse of riparian areas by wilderness visitors has a potential to adversely impact the riparian resources. In search of firewood, visitors may trample the samplings and riparian ground cover and compact the soil. Impacts from visitor use would be at the areas of most use such as trail heads and sites used for camping. The most affected area would be the section of riparian directly accessible from the trailhead into the wilderness area.

The introduction of non-native vegetation from increased visitor use is a potential adverse impact, and the chances of wildfire from campfires may become greater with increased use to the area. Fire is a natural part of the Sabinoso ecosystem and the low level of use predicted for the area potential impacts to the system are few. Monitoring of the riparian resources would inform management decisions on impacts to the areas from increased visitor use.

4.1.1.7 Livestock Grazing

No livestock grazing permittee would be directly affected by the removing of grazing from allotments 00735 and 00736 since there is no active grazing permit for those allotments. Nor would making them unavailable for grazing directly impact any other permittee in the Sabinoso area.

The plan amendment decision to make the two allotments unavailable to livestock grazing, however, would result in the loss of the opportunity for their use, which would affect any eligible permittee that might be interested in applying for their use. This opportunity, though, would expect to be less desirable to a prospective permittee following the proposed acquisition of the ranch property since use of the primary access to the two allotments via Cañon Largo would be precluded and the water in Cañon Largo

would also be unavailable. While the BLM could have assumed there would have been interested at some point by a prospective permittee, an application would have been somewhat speculative because of the difficulty in accessing and feasibility of managing these allotments.

In all, approximately 30 percent of the total allotment acreage in the Sabinoso area would become unavailable to livestock grazing. This equates to about 47 percent of the AUMs. (The allotments have a higher percentage of AUMs due to the mesa top conditions where more moisture is received and retained and thereby yielding more forage.)

4.1.1.8 Wildlife and Special Status Species

The land donation adds nearly 2,650 acres of cañon habitat in Cañon Largo and Cañon Olguin to the Sabinoso wilderness along with 750 acres of piñon pine and juniper woodlands. One of four other parcels available to the BLM through direct sale would add 320 acres of south facing mesa and hillside to the wilderness. The last three parcels available through direct sale would not be included to the Sabinoso Wilderness but would be a part of the Sabinoso ACEC. The Rimrock Rose Ranch land donation would benefit many special status species that rely on many of the habitat types common in the Sabinoso ecosystem. Lands within the ranch property would be provided protection benefitting native wildlife species by the elimination of grazing, motorized travel, and potential mineral extraction.

The removal of grazing may increase the diversity of species nesting on the ground and shrub layer of the riparian zones, piñon pine/juniper areas, and prairie ecosystems, as well as, provide for improved water quality for aquatic species. Riparian vegetation often recovers quickly following the removal of ungulates from a system (Ohmart 1996).

Wildlife and Special Status Species could be adversely impacted by potential increased visitor use during the breeding stages of certain species and potential for wildfire starts from campfires. The possible indirect impacts are minor because of the low likelihood for recreation due to the remoteness to population centers, rough topography, limited trails, limited water, and limited access. The Sabinoso ecosystem is fire dependent, and it is a natural part of the Sabinoso ecology.

4.1.2 Alternative B: No Action

4.1.2.1 Sabinoso Wilderness

Enhancement to the outstanding opportunities of the wilderness would not be realized as the lands in Cañon Largo, with their high quality recreational opportunities, would not be added to the wilderness. One inholding access would continue to be eligible for motor vehicle use. However, the creation of a new inholding eligible for motor vehicle use would not occur. There would be no potential for approximately 3,314 additional BLM acres to possess wilderness characteristics as they would remain separated from the Sabinoso Wilderness by the Rimrock Rose Ranch property. In summary, there would be no impact to the untrammeled or natural qualities of wilderness character, and there would be no change to the undeveloped quality or outstanding opportunities for primitive recreation or solitude, but the ability of the public to realize the recreational values of the wilderness would not be available.

4.1.2.2 Sabinoso ACEC

No change is expected to occur to the scenic quality of the ACEC as its size and protective management would remain the same. Riparian resources within the current ACEC would also remain the same.

4.1.2.3 Recreation

Recreational opportunities in Cañon Largo and the Sabinoso Wilderness would not be available, as there would remain no public access.

4.1.3.4 Cultural Resources

Cultural resources located within the subject land parcels would remain under private ownership and would not benefit from the preservation and protection measures afforded by federal management and ownership. Continued livestock grazing on BLM lands in Allotments 735 and 736 would necessitate monitoring and analysis of both current uses and future range improvements to evaluate potential impacts to cultural resources in these areas. Allowing motorized vehicle access along the Cañon Largo Road would increase the potential for adverse effects to occur to cultural resources, including unauthorized collection and excavation of cultural resources. Motorized vehicle traffic and both existing and future range improvements would represent modern intrusions and potential compromises into the more pristine settings of prehistoric and historic cultural sites and cultural landscapes in Cañon Largo.

4.1.3.5 Paleontological Resources

Paleontological resources located within the subject land parcels would remain under private ownership and would not benefit from the preservation and protection measures afforded by federal management and ownership. Continued livestock grazing on BLM lands in Allotments 735 and 736 would necessitate monitoring and analysis of both current uses and future range improvements to evaluate potential impacts to paleontological resources in these areas. Allowing motorized vehicle access along the Cañon Largo Road would increase the potential for adverse effects to occur to paleontological resources, including unauthorized collection and excavation of fossil resources.

4.1.4.6 Riparian Resources

Riparian resources within the Rimrock Rose Ranch property would remain private with the potential for continued grazing and motorized vehicle use. Apparently abandoned, cattle could continue to inhabit Cañon Largo, or the current riparian areas could continue to be grazed at the property owner's discretion, limiting the expansion of riparian species. Motor vehicle traffic could continue to cross the riparian zone throughout Cañon Largo, increasing non-point source pollution, erosion, bank sloughing, and soil compaction.

4.1.4.7 Livestock Grazing

Allotments 00735 and 00736 would remain available for livestock grazing by a qualified applicant. However, as long as the ranch property remained under ownership of The Wilderness Land Trust, the ranch would not be used as base property or otherwise support any operation on the two allotments. While available, they would be less desirable to graze because of their difficulty to access, lack of reliable water, and feasibility to operate at a profit.

4.1.4.8 Wildlife and Special Status Species

Wildlife and Special Status Species located within the Rimrock Rose Ranch property would be subject to private ownership management. The increased diversity of species nesting on the ground and shrub layer of the riparian zones, piñon pine/juniper areas, and prairie ecosystems, as well as, improved water quality for aquatic species would be limited due to cattle grazing and motorized vehicle use.

5.0 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.

5.1 Past and Present Actions

Relevant past and present actions include land use planning decisions and other measures that afford protection to the wilderness, riparian, scenic, and other values within the Sabinoso area. The Taos RMP decision to designate the Sabinoso ACEC established protective management for the relevant and important resources within the area, complimentary to the protection of the wilderness designation. The Taos RMP also provided for the acquisition of private lands to provide for access to the wilderness and consolidated management of lands within the ACEC.

In addition, the Wilderness Land Trust is currently taking action to remove various infrastructures from the property as well as abandoned livestock to ensure the property would be compatible with Sabinoso Wilderness at the time it is included within the designated wilderness under the provisions of Section 6 (a) of the Wilderness Act.

5.2 Reasonably Foreseeable Actions

Subsequent to securing public access to Sabinoso Wilderness, the BLM anticipates completed a wilderness management plan to (1) ensure the protection of the area's wilderness character, (2) to delineate an access point and identify any necessary, basic services that may be necessary at those access points (i.e., parking, sanitation, etc.), and 3) to provide other prescriptions for the management of supplemental and other values consistent with the provisions of the Wilderness Act.

5.3 Cumulative Effects

No adverse cumulative effects are anticipated. The potential impacts are expected to be beneficial in nature since the purpose of the Sabinoso Wilderness Management Plan would be to protect the wilderness values and manage access for the public's enjoyment.

6.0 CONSULTATION AND COORDINATION

6.1 Summary of Consultation and Coordination

Notification letters were sent to various interested Tribes and Pueblos in April 2016 inviting their input. Only the Pueblo of San Felipe responded. The Taos Field Office is currently preparing to meet with the Pueblo of San Felipe to fulfill their request for further consultation.

6.2 Summary of Public Participation

As indicated under section 1.6, a Federal Register notice was published on June 6, 2016 announcing the proposal to acquire the Rimrock Rose Ranch property and to amend the Taos RMP. The notice sought public input on issues and alternatives relevant for analysis in this EA. Public notification was also provided by various means, including a news release, web posting, and letters send to interested parties by mail and email at the same time.

This EA is being made available for a 30-day public review and comment period. Once complete, the BLM will respond to all substantive comments by either revising the EA as appropriate or by explaining in writing why a change to the EA is not warranted.

6.3 List of Preparers

Name	Discipline	BLM Office
Maile Adler	National Conservation Lands	New Mexico State Office
Delane Atcitty	Range Management	Taos Field Office
Ryan Besser	Riparian Resources, Wildlife	Taos Field Office
Molly Cobbs	NEPA, Planning	New Mexico State Office
Merrill Dicks	Archaeology, Paleontology	Taos Field Office
James Harmon	Range Management	Taos Field Office
Brad Higdon	NEPA, Planning	Taos Field Office
James Sippel	Wilderness	Washington Office
Tami Torres	Recreation	Taos Field Office

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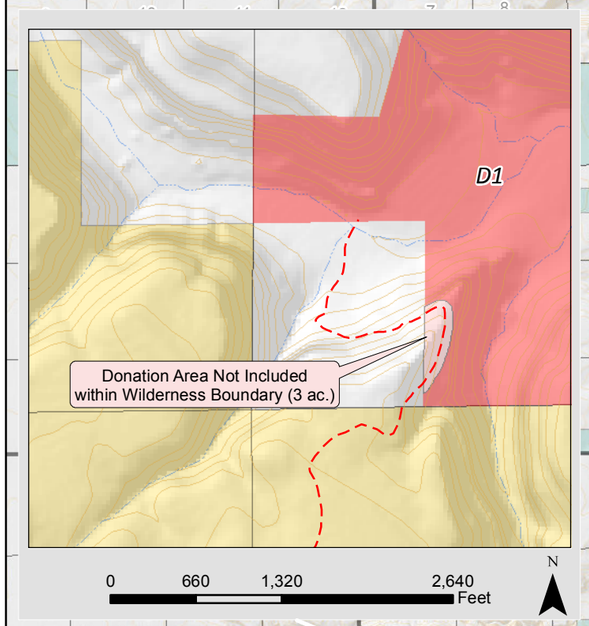
Appendix A: Map 1

Proposed Acquisition
Rimrock Rose Ranch

Map 1



Legend

- Access Road
- Sabinoso ACEC
- Sabinoso Wilderness
- Grazing Allotment Boundary
- Proposed Donation Acquisition
- Proposed Purchase Acquisition
- Caliche Rights
- Bureau of Land Management
- Private
- State

0 1.25 2.5 5 Miles

N

Location of Main Map

Produced by the BLM Taos Field Office - GIS on: March 29, 2016 PM