

## CHAPTER 2

### MANAGEMENT DECISIONS

#### INTRODUCTION

BLM managers selected the management guidance of the Proposed Action (Alternative B), as the Approved RMP. Under the RMP, the BLM's management focus will be to allocate resources to resolve resource use issues or conflicts and management concerns associated with the Monument, while complying with Presidential Proclamation 7394 and current BLM policies, initiatives, and guidance. The BLM will more intensively manage recreational use through additional development of facilities for visitor use and enjoyment of the area; resource protection; visitor health and safety needs; meeting land health standards; research and environmental education opportunities that are in compliance with the Proclamation; and protecting American Indian use areas and traditional cultural practices. The RMP allocates uses of resources and critical elements as discussed below and summarized in Chapter 4, "Management Plan Implementation." Implementation of the RMP should resolve the issues and provide management direction for the next fifteen to twenty years.

Up to this point in the planning process, proposed decisions have been presented by issue. Now that the RMP has been approved, the decisions to be implemented are presented in this chapter by resource program area (for example, "Lands and Realty" or "Special Status Species"). The narrative for each resource program is divided into three sections: Goals and Objectives, Management Actions, and Monitoring. These sections are described below:

#### Goals and Objectives

Land use plans ensure that the public lands are managed in accordance with the intent of Congress as set out in FLPMA (43 U.S.C. 1701 et seq.), under the principles of multiple use and

sustained yield. As required by FLPMA and BLM policy, the public lands must be managed in a manner to protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; that will provide for outdoor recreation and human occupancy and use; and that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands by encouraging collaboration and public participation throughout the planning process. Land use plans are one of the primary mechanisms for guiding BLM activities to achieve the mission and goals outlined in the Department of the Interior Strategic Plan (USDI 2003). The KKTR RMP has established goals and objectives for management of the Monument and Planning Area. These goals and objectives are described by program and/or resource below to identify desired management results for the Monument and Planning Area.

#### Management Actions

Land use plan decisions identify resources to be applied and the means for application of resources to achieve the stated goals and objectives. "Management Actions" in this document include three types of resource management guidance. They are **proclamation requirements** (specific resources to be applied or applications required by the Proclamation); **previously approved management actions** (established management guidance believed to be moving conditions toward desired goals and objectives and therefore carried forward into the current Plan); and **Approved Plan management actions** (actions believed to have potential to contribute to more efficient and effective achievement of the goals and objectives).

“Management Actions” in the resource program sections below include all three types of program/resource management guidance.

For each resource program, the “Management Actions” section is further divided into three subsections: “Allowable Uses and Actions,” “Implementation Decisions,” and “Support Services.”

### ***Allowable Uses and Actions***

This subsection summarizes allowable uses, restricted uses, and prohibited uses. It also includes management measures that will guide future day-to-day activity.

### ***Implementation Decisions***

By the approval of the Record of Decision, decisions have been made for the allocation and use of Federal lands, interests in lands, and resources in the Monument and Southwest Acquisition. Decisions have also been made for lands in the remainder of the Planning Area; however, these decisions can be implemented only if proposed acquisitions from willing sellers are completed or through Cooperative Management Agreements.

### ***Support Services***

This subsection identifies needs from three support programs: Lands and Realty (for lands and right-of-way/easement acquisition), Cadastral Survey, and Engineering. Needed support services will be identified in scheduling and budgeting for plan implementation. Many other programs such as Cultural Resources, Special Status Species, and Visual Resources will provide input into various aspects of plan implementation but are not considered “support services.”

### **Monitoring**

This section describes plans for monitoring to assess progress toward meeting program or resource goals and objectives. In some cases, it discusses plans of action if monitoring indicates actions are not meeting goals and objectives, or if actions are no longer needed. Monitoring will help the BLM to detect and document natural and human-induced changes in resource conditions and visitor experiences, and offer insights into the effectiveness of resource management policies and objectives. It will enable personnel to understand what might be driving any changes requiring intervention (corrective management actions or strategies).



*Veterans Memorial Scenic Overlook*

## ACCESS AND TRANSPORTATION

### Goals and Objectives

The BLM's goals in managing access and transportation are (1) to promote the safety of all users of the public lands [AT-1a] and (2) to minimize conflicts between the various users of those lands [AT-1b].

To meet these goals, the BLM designates all roads on public land in the Planning Area in one of the following three categories: open, closed, or limited (open for authorized administrative or emergency use only). The following criteria are used to place roads into one of the three categories:

- In designating roads, the BLM considers the protection of resources such as valuable wildlife habitat, cultural resource values, traditional cultural properties, watershed, and recreational values.
- When duplicate or multiple roads lead to the same location on public lands, the BLM considers closing and rehabilitating at least one of these roads to deter use and protect the watershed and other resources.
- The BLM considers limited use on roads where (1) trespassing on non-public land would be encouraged by an open designation; or (2) the road crosses non-public land and is needed for administrative purposes, emergency rescue or fire, and no other open roads exist nearby.
- The road serves as important access to facilities, recreational opportunities, or areas needed for program administration.
- The road is reasonably located.
- The road generally complies with resource management objectives.
- Roads used for access under authorized livestock grazing leases or other authorization will not be restricted.

### Management Actions

The Proclamation prohibits use of all motorized and mechanized vehicles off road, except for

emergency or authorized administrative purposes. The Proclamation also requires that the management plan include appropriate transportation planning that addresses the actions, including road closures or travel restrictions, needed to protect the geologic, cultural, and biological objects of interest identified in the Proclamation (see Appendix A) and to further the purposes of the American Indian Religious Freedom Act of August 11, 1978 (42 U.S.C. 1996).

Numerous roads exist in the Monument and Planning Area, developed either by continuous casual use or for such purposes as removal of material excavated from the area's old mines. Those roads not needed for visitation, safety, or administrative purposes will be closed. BLM staff will determine appropriate restoration measures such as stabilization and reseeding to prevent soil erosion. Such Best Management Practices for minimizing sediment pollution will be developed and implemented on a site-specific basis. (See "Soil and Water Resources" below for additional information.)

### *Allowable Uses and Actions*

Of the 25.25 miles of vehicle transportation routes currently on Federal lands in the Planning Area (19.55 miles in the Monument and 5.7 miles in the Southwest Acquisition), about 5.95 miles will continue to be open to public use [AT-2], 7.8 miles will be limited to authorized administrative and emergency use only [AT-3], and 11.5 miles will be closed [AT-4], leaving 13.75 miles of vehicle routes. (See Map 4 in the map pocket for road segment locations and Tables 2-1 and 2-2 for segment mileage and status.)

Of the 8.43 miles of trails now on Federal land, about 1.9 miles will be closed [AT-5], 6.33 miles will be open to hiking and/or equestrian use [AT-6], and 0.2 mile will be limited to authorized administrative or emergency use [AT-7]. In addition, 0.9 mile of new trail will be constructed [AT-8] and Road Segment 103 (0.7 mile) will be closed to motorized and mechanized vehicles and converted to a hiking trail [AT-9], resulting

**TABLE 2-1**

**STATUS OF ROAD SEGMENTS IN THE MONUMENT**

<b>Segment Number<sup>a</sup></b>	<b>Length (miles)</b>	<b>Type<sup>b</sup></b>	<b>Status</b>
100	0.70	Primitive road	Closed
100A	1.00	Primitive road	Closed
100B	0.40	Primitive road	Closed
100C	0.30	Primitive road	Closed
100D	0.10	Primitive road	Closed
100E	0.10	Primitive road	Closed
100F	0.30	Primitive road	Closed
101	0.80	Primitive road	Closed
101A	1.50	Primitive road	Closed
101B	0.20	Primitive road	Closed
101C	0.10	Primitive road	Closed
102	0.90	Primitive road	Limited <sup>c</sup>
102A	0.80	Primitive road	Closed
102B	0.90	Primitive road	Closed
102C	0.20	Primitive road	Limited <sup>c</sup>
102D	0.10	Primitive road	Limited <sup>c</sup>
103	0.70	Primitive road	Closed <sup>d</sup>
103A	0.20	Primitive road	Closed
103B	0.20	Primitive road	Closed
103C	0.20	Primitive road	Closed
103D	0.30	Primitive road	Closed
103E	0.10	Primitive road	Closed
104	0.40	Primitive road	Closed
104A	0.50	Primitive road	Limited <sup>c</sup>
105	0.05	Primitive road	Open
106	0.10	Resource road	Closed
1011 (also known as Forest Service Road 266 and Tribal Road 92)	5.90	Collector road	Open <sup>e</sup>
1011A	1.00	Resource road	Limited <sup>c</sup>
1011B	1.50	Resource road	Limited <sup>c</sup>
<b>Road Access Designation</b>			<b>Mileage</b>
Open			5.95
Limited			4.20
Closed			9.40

Notes: <sup>a</sup> See Map 4 (in the map pocket) for segment location.

<sup>b</sup> See the Glossary for definitions of these road types.

<sup>c</sup> Road segment limited to authorized administrative or emergency use only.

<sup>d</sup> Close road and convert to hiking trail, for use with proposed small developed parking area and trailhead.

<sup>e</sup> Road will have different hours of operation summer and winter. It may be closed at the fee station if it becomes impassible and be closed seasonally in T. 17 N., R. 4 E., Sec. 30 for fire protection.

TABLE 2-2

STATUS OF ROAD SEGMENTS IN THE SOUTHWEST ACQUISITION

Segment Number <sup>a</sup>	Length (miles)	Type <sup>b</sup>	Status <sup>c</sup>
107	0.4	Resource	Limited <sup>c</sup>
107A	0.6	Primitive	Limited <sup>c</sup>
108	1.7	Primitive	Closed
108A	0.2	Primitive	Closed
108B	0.2	Primitive	Closed
109	0.9	Resource	Limited <sup>c</sup>
1011C	1.7	Resource	Limited <sup>c</sup>
Road Access Designation			Mileage
Open			0.0
Limited			3.6
Closed			2.1

Notes: <sup>a</sup> See Map 4 (in the map pocket) for segment location.  
<sup>b</sup> See the Glossary for a definition of these road types.  
<sup>c</sup> Road segment limited to authorized administrative or emergency use only.

in a total of 8.13 miles of trails. (See Map 4 in the map pocket for road and trail segment locations and Table 2-3 for segment mileage, status, and approved use.)

BLM routes designated on Federal lands within the Planning Area include 5.9 miles of collector road (BLM Road 1011), 5.5 miles of resource roads, and 2.35 miles of primitive roads (see Tables 2-1 and 2-2). All of the resource roads and primitive roads are limited to authorized administrative and emergency use only; see the Glossary for road definitions. Mileage of roads in areas proposed for acquisition from willing sellers or potentially under Cooperative Management Agreements is unknown.

**Implementation Decisions**

Motorized and mechanized access for recreational visits to the Monument and Planning Area will be provided on 5.95 miles of road designated as open for public access [AT-2]. An additional 7.8 miles of road will have limited access for authorized administrative and emergency uses only [AT-3]. Resource protection will be provided by closing 11.5 miles of existing roads [AT-4] (see Tables 2-1 and 2-2, and

Map 4 in the map pocket). As acquisitions are completed, roads in the acquired areas will be evaluated and designated as open for public use, limited to authorized administrative or emergency use as a part of the transportation system, or closed [AT-10] and identified for rehabilitation [AT-11].

The off-highway vehicle (OHV) designation for the entire Planning Area is “limited to designated roads and trails” for motorized and mechanized modes of travel [AT-12]. This means that visitors using motorized and mechanized travel must remain on designated roads and trails, except for authorized administrative use, emergency services, or valid existing rights.

Under the Recreation Opportunity Spectrum classification, public motorized access is provided to approximately 1,987 Federal acres of the Planning Area. Limited motorized access for authorized administrative or emergency uses only is provided to another 2,048 acres. Non-motorized access is available to approximately 1,054 Federal acres [RU-5] (see Map 7).

Designated hiking and equestrian trails will provide an additional 8.13 miles of access to

**TABLE 2-3**

**STATUS OF TRAIL SEGMENTS IN THE MONUMENT AND SOUTHWEST ACQUISITION**

<b>Segment Number <sup>a</sup></b>	<b>Length (miles)</b>	<b>Current or Past Use</b>	<b>Authorized Use</b>	<b>Status</b>
T1	1.60	National Recreation Trail	Hiking	Open
T2	0.70	National Recreation Trail	Hiking	Open
T3	0.40	Recreation trail	None	Closed
T4	0.03	Parking lot trail	Hiking	Open
T5	0.20	Possibly used for Civilian Conservation Corps camp (1933-42)	Hiking	Limited <sup>b</sup>
T6	0.30	Primitive trail—possibly used by livestock	None	Closed
T7	1.10	Pack trail	None	Closed
T8	1.30	Cañada Camada trail	Hiking	Open <sup>c</sup>
T9	0.30	Canyon bottom access—Peralta Canyon	Hiking	Open
T10	0.10	Pack trail	None	Closed
L1	0.60	Livestock trail	Hiking and equestrian use <sup>d</sup>	Open <sup>e</sup>
L2	0.40	Livestock trail	Hiking	Open <sup>f</sup>
L3	1.40	Livestock trail through wash	Hiking and equestrian use <sup>d</sup>	Open <sup>e</sup>
E1	0.90	Proposed new trail	Hiking and equestrian use <sup>d</sup>	Develop and open
Road Segment 103	0.70	Convert primitive road to hiking trail	Hiking	Close road, open as trail
<b>Trail Access Designation</b>				<b>Mileage</b>
Open <sup>g</sup>				7.93
Limited				0.20
Closed				1.90

Notes: <sup>a</sup> See Map 4 (in the map pocket) for segment locations.

<sup>b</sup> Limited to authorized or emergency use only.

<sup>c</sup> Previously authorized—identify treadway and construct to Americans with Disabilities Act standards.

<sup>d</sup> Equestrian use by permit only on a case-by-case basis.

<sup>e</sup> Improve for use as hiking and equestrian trail.

<sup>f</sup> Improve for use as hiking trail.

<sup>g</sup> Includes 0.4 mile of livestock trail to be converted to hiking trail (L2), 2.0 miles of livestock trails to be converted to hiking and equestrian trails (L1 and L3), 0.7 mile of road to be converted to hiking trail (RS103), plus 0.9 mile of a new trail segment to be developed for hiking and equestrian use (E1), and 1.3 miles of previously authorized hiking trail currently under development (T8).

Federal lands when construction is complete on all authorized trails [AT-6, AT-7, AT-8, AT-9] (see Table 2-3 and Map 4 in the map pocket for trail segment designations). As acquisitions are completed, trails in the acquired areas will be evaluated and designated as open for public use, limited to authorized administrative or emergency use as a part of the transportation system, or closed [AT-13] and identified for rehabilitation [AT-14]. Additional trails will be developed if land acquisitions are completed [AT-15]. Trails may also be developed on private land through Cooperative Management Agreements [AT-16].

Access for research permits will be considered as authorized administrative use and will be reviewed on a case-by-case basis [AT-17]. Research may include field work, specimen collection, or other types of scientific study. Permits will be issued after a thorough review of research goals, strategies, operational detail, and potential for resource disturbance. The duration of each permit will vary based on applicant performance (past and present), the resources being studied, the type and extent of resources, and other related factors.



*This trail leads from the cool, shaded Slot Canyon to the sunny Vista Point overlook.*

If the North Edgeholding is acquired, it will initially be closed to public entry except access (1) on existing public roads or (2) with prior authorization from the Rio Puerco Field Manager. The BLM may allow a two-year period of resource survey and evaluation before making land and resource allocations. The BLM may provide guided tours in the interim. After consulting with potentially affected American In-

dian tribes, carrying out resource data inventory, including assessment of cultural resources, and implementing measures to mitigate potential adverse effects to cultural resources and other resources, the area will be opened with appropriate restrictions [AT-18].

BLM Road 1011 will have different hours of operation summer and winter. In addition, it may be closed at the fee station if it becomes impassible and be closed seasonally in T. 17 N., R. 4 E., Section 30 for fire protection [AT-19].

Roads and trails will be minimized in traditional use areas by road and trail closures and relocations [AIU-5].

### **Support Services**

#### **- Lands and Realty**

Acquisition of lands for resource protection is a needed support service.

Acquisition of access easements is a support service needed for road access through the Monument.

#### **- Cadastral Survey**

Cadastral survey is a support service needed for establishment of ownership boundaries and locating access easements to eliminate trespass on private property.

#### **- Engineering**

Engineering support services are needed for design, construction, and maintenance of access and transportation facilities.

### **Monitoring**

Road and trail use will be observed and recorded. This information will be used to support proposals for facility maintenance and development. It will also be used in considering the quality of the user experience and to determine need for additional roads and trails, especially on newly acquired lands.

## AIR QUALITY

### Goals and Objectives

The BLM's objective for air quality is to prevent significant deterioration of the Class II airshed designated by the Clean Air Act [AQ-1]. Meeting this objective requires that the BLM's own management actions and any authorizations granted for the use of public lands comply with and support local, state, and Federal laws. All BLM actions and use authorizations will be designed and stipulated to protect air quality in and adjacent to the Monument and Planning Area, and the nearby National Park Service Class I area, Bandelier National Monument [AQ-2].



*Evening Primrose.*

### Management Actions

As stated above, meeting this air quality objective requires that the BLM's own management actions and any authorizations granted for the use of public lands comply with and support local, state, and Federal laws.

#### *Allowable Uses and Actions*

All BLM actions and use authorizations will be designed and stipulated to protect air quality in and adjacent to the Monument and Planning Area, and the nearby National Park Service Bandelier National Monument Class I area [AQ-2]. The Fire Management Program is most likely to propose actions and authorizations affecting air quality.

#### *Implementation Decisions*

None.

#### *Support Services*

No support needs have been identified and none are anticipated.

### Monitoring

Visual monitoring is required for prescribed fire projects and wildfires. Observations of smoke plume characteristics such as direction, rise, color and density of the plume, and the time of day of observations will be recorded on the Visual Monitoring Form.

## **AMERICAN INDIAN USES AND TRADITIONAL CULTURAL PRACTICES**

### **Goals and Objectives**

The BLM 8120 Manual specifies a number of laws, executive orders, presidential memoranda, and secretarial orders that require government-to-government consultation regarding cultural, historical, and religious concerns of American Indians [AIU-1]. Under these authorities the BLM seeks to ensure that tribal issues and concerns are given legally adequate consideration during decision making [AIU-2]. In addition, the BLM is committed to protecting sensitive information relating to tribal concerns, and to fostering good working relationships with the tribes.

### **Management Actions**

Presidential Proclamation 7394 emphasizes the historical connection of the Pueblo de Cochiti to Kasha-Katuwe Tent Rocks National Monument and places special emphasis on furthering the purposes of the American Indian Religious Freedom Act.

The BLM will continue close coordination and cooperation with the Pueblo de Cochiti in the day-to-day operations of the Monument and Planning Area. For actions requiring an environmental assessment (EA) and/or environmental impact statement (EIS) under NEPA, the BLM will consult with Cochiti, Santo Domingo, Jemez and Zia Pueblos, as well as any tribes that may come forward later to express concern about traditional cultural properties, places, and uses in the Monument and Planning Area. These tribes, the Hopi Tribe, and the Jicarilla Apache Nation, will be included in any consultation required by the Native American Graves Protection and Repatriation Act.

### ***Allowable Uses and Actions***

For American Indian Uses and Traditional Cultural Practices, the BLM will follow the

consultation practices described above under “Goals and Objectives.” BLM developments and recreation management policies will be oriented, in part, toward discouraging visitor use in sensitive areas identified by American Indians [AIU-3]. In addition, with appropriate advance notice, the BLM will consider brief, temporary closures of all or portions of the Monument and Southwest Acquisition to ensure privacy for traditional uses [AIU-4].

If the BLM acquires the North Edgeholding, it will initially be closed to public entry except access (1) on existing public roads or (2) with prior authorization from the Rio Puerco Field Manager. After consulting with potentially affected American Indian tribes and carrying out resource data inventory (not to exceed two years’ duration), the area will be opened with appropriate restrictions [AT-18].

### ***Implementation Decisions***

Specific areas where American Indian uses and traditional cultural practices take place are not identified in this document because of the sacred nature of some of these uses. Also, visitors’ natural inquisitiveness could lead to higher levels of intrusion. Traditional use areas will be identified through the use of existing data on file and through consultation with tribes as part of the NEPA process and in compliance with NHPA.

Roads and trails will be minimized in traditional use areas by road and trail closures and relocations [AIU-5].

The Pueblo de Cochiti will continue to be involved in management of the Monument and Planning Area through Cooperative Management Agreements. The Pueblo will continue to have close day-to-day participation in managing the Monument [AIU-6].

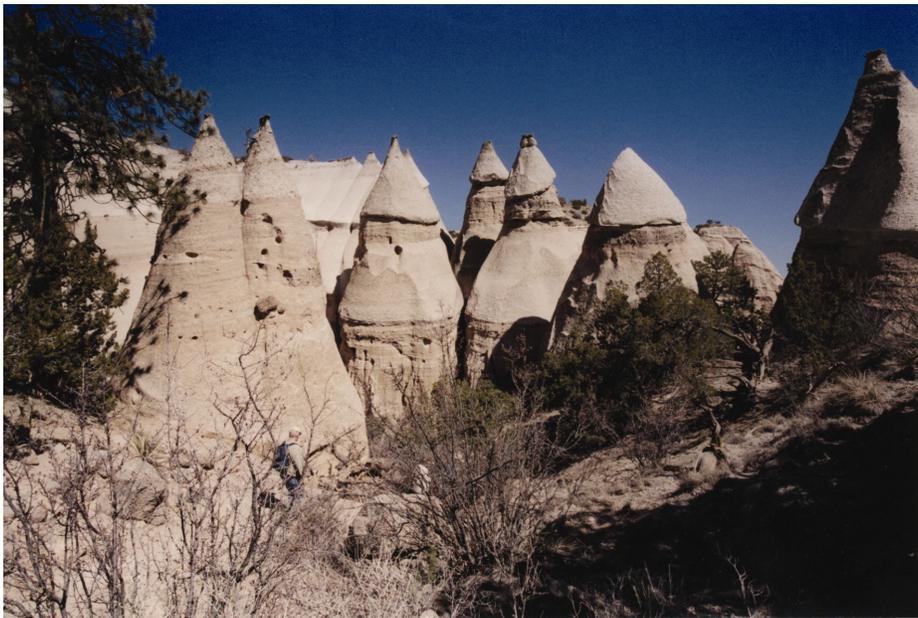
On an infrequent basis, the Pueblo can temporarily close roads for control of access to avoid disruption of tribal ceremonies [AIU-4].

### *Support Services*

No support needs have been identified and none are anticipated.

### **Monitoring**

Notes will be kept on file as to comments received through the tribal consultation process. Tribal concerns and issues will be documented in the files and reviewed periodically to ensure that they are being taken into consideration, particularly regarding management of traditional use areas.



*Tent Rock formations viewed from trail.*

## CULTURAL RESOURCES

### Goals and Objectives

The goals of the BLM's Cultural Resources Program are defined in BLM Manual 8100. Managing cultural resources is viewed as an integrated system of identifying and evaluating cultural resources, deciding on their appropriate uses, and administering them accordingly [CR-1a]. The objectives are as follows:

- Respond in a legally sufficient and professional manner to the legal authorities concerning historic preservation and cultural resource protection, and to the principles of multiple use [CR-1b].
- Recognize potential public and scientific uses of cultural resources on public lands, managing the lands and cultural resources so that these uses and values are appropriately protected [CR-1c].
- Contribute to land use planning and multiple use management in ways that (1) make optimum use of the thousands of years of land use history inherent in cultural resource information, and (2) safeguard opportunities for achieving appropriate uses of cultural resources [CR-1d].
- Protect and preserve in place representative examples of the full array of cultural resources on public lands for the benefit of scientific and public use by present and future generations [CR-1e].
- Ensure that proposed land uses avoid inadvertent damage to Federal and non-Federal cultural resources [CR-1f].
- Further the goals of the Department of the Interior and BLM Strategic Plans (USDI 2003; USDI, BLM 1997), and the Government Performance and Results Act [CR-1g].

### Management Actions

In describing the elements to be protected within the Monument, the Presidential Proclamation places special emphasis on the remnants of human history scattered throughout the Monument. To protect these resources, the Proclamation

states: "No person may use, injure, destroy, or remove any feature of this Monument without authorization, nor locate nor settle upon any of the lands" [CR-2].

The BLM complies with the National Historic Preservation Act through procedures described in the "Protocol Agreement Between New Mexico Bureau of Land Management and New Mexico State Historic Preservation Officer" (signed in June 2004), or any later agreements [CR-3]. The original agreement normally requires intensive archeological survey (BLM Class III inventory) of areas that will be directly affected by a project or action. If archeological resources are found, the preferred course of action is to redesign the project to avoid them. If this is not possible, the BLM undertakes data recovery or other measures developed in consultation with the New Mexico State Historic Preservation Officer and the appropriate tribes to reduce adverse impacts.

#### *Allowable Uses and Actions*

The BLM will follow the procedures described above for Cultural Resources. However, more stringent inventory requirements will be in effect, with larger buffers and Class III (intensive) inventory, in all questionable cases [CR-4]. For example, the following management measures will apply:

*Access and Transportation* - The 1.05 miles identified for easement acquisition along BLM Road 1011 have already been inventoried for cultural resources. The agency has inventoried 5.3 miles of roads open to public access. Before any further maintenance is done, the BLM will inventory the remaining 0.65 miles of "open" roads, as well as the 7.8 miles of roads limited to authorized administrative and emergency use only [CR-5]. The 11.5 miles of "closed" roads will also be inventoried if rehabilitation is needed following closure [CR-6].

Cultural resource inventory needs for 7.93 miles of "open" and 0.2 miles of "limited" trails are discussed below under "Recreation." Of the 1.9 miles of trails to be closed, 0.18 mile has been

inventoried, leaving 1.72 miles to be inventoried before any rehabilitation work is done [CR-7].

*Lands and Realty* - If the BLM acquires the North Edgeholding, it will initially be closed to public entry except access (1) on existing public roads or (2) with prior authorization from the Rio Puerco Field Manager. The restriction on access will be lifted after an assessment of cultural resources (not to exceed two years' duration) has been accomplished, and measures implemented to mitigate potential adverse effects, including avoidance of cultural resources [AT-18].

*Recreation* - The BLM will address the secondary effects of recreational use on cultural resources by requiring inventory of expanded buffer areas around recreational developments [CR-8]. This will accommodate pedestrian activities such as hiking, picnicking, and sightseeing. Cultural resource inventories for parking areas, scenic viewing areas, picnic areas, and similar developments will include a minimum 100-meter-wide buffer. For hiking trails, a minimum 30-meter-wide buffer will be inventoried on each side of the trail, resulting in examination of a 60-meter-wide corridor [CR-9]. Approximately 1.81 miles of "open" trails have already been inventoried, and survey of the remaining 6.32 miles of "open" and "limited" trails will be completed by the end of September 2008 [CR-10].

*Vegetation Treatments* - In sensitive settings, vegetation treatments will be subject to Class III inventory if the use of fire or any form of surface disturbance is proposed, including vehicle use off road and dragging of slash [CR-11]. Based on current information, alluvial valley bottoms (Soil Map Unit 300, see Map 9) and slopes greater than 20 percent are considered not sensitive. Mesa tops and ridge tops are sometimes covered by extensive artifact scatters, which could limit some forms of vegetative treatment.

*Water Resources* - Water wells are located on inholdings or edgeholdings. If these lands are acquired, the BLM will perform cultural

resource inventories to ensure that no damage occurs in association with well use or maintenance [CR-12].

*General* - Aside from the measures described above, no special priority will be given to proactive inventory, protection, or interpretation of cultural resources in the Monument and Southwest Acquisition. Instead, proposals for proactive cultural resource management projects will be based on an evaluation of the importance of the resource, the nature and immediacy of threats to the resource, public demand for interpretation, the cost of the proposed remedy, and the availability of funding. Decisions about funding such projects will be made in the context of the need for similar projects throughout the Albuquerque District.

Activities that involve excavation or collection of cultural materials will be discouraged, and will ordinarily be considered only when such materials face an immediate threat [CR-13]. Archeological resources within the Monument and Southwest Acquisition will be available for scientific study that does not involve excavation or collection of cultural materials [CR-14]. Exceptions to this policy will be made only after extensive consultation with all concerned American Indian tribes.

### ***Implementation Decisions***

The BLM will comply with the National Historic Preservation Act through procedures described in the "Protocol Agreement Between New Mexico Bureau of Land Management and New Mexico State Historic Preservation Officer" (signed in June 2004) or any later agreements [CR-3]. The original agreement normally requires intensive archeological survey (BLM Class III inventory) of areas that will be directly affected by a project or action. If archeological resources are found, the preferred course of action is to redesign the project to avoid them. If this is not possible, the BLM will undertake data recovery or other measures developed in consultation with the New Mexico State Historic Preservation Officer to reduce adverse impacts.

### *Support Services*

No support needs have been identified and none are anticipated.

### **Monitoring**

The condition of cultural resources will be monitored periodically as staff and funding permit. A sample of projects with the potential to affect cultural resources will be monitored to ensure that mitigation measures are successful.



*Manzanita—used for medicinal purposes by American Indians.*

## ENVIRONMENTAL JUSTICE

### Goals and Objectives

The BLM must identify, inform, and consult with minority and low-income groups about Federal actions that may affect them, and should not disproportionately impact these groups in an adverse way [EJ-1]. Minority and low-income people will likely be affected by actions in the Monument and Planning Area. Therefore, they have been and will continue to be consulted and kept informed [EJ-2].

### Management Actions

The BLM will continue to identify, inform, and consult with minority and low-income groups about Federal actions that may affect them, and should not disproportionately impact these groups in an adverse way [EJ-1]. Minority and

low-income people will be consulted and kept informed [EJ-2].

### *Allowable Uses and Actions*

Minority and low-income people will be consulted and kept informed [EJ-2].

### *Implementation Decisions*

None.

### *Support Services*

No support needs have been identified and none are anticipated.

### Monitoring

Existing data sources will be used to track environmental justice concerns.



*Yellow Blanket Flower blooms in the Monument, adding a delightful spot of color against the tents.*

## **FIRE MANAGEMENT**

### **Goals and Objectives**

The goals of the Fire Management Program are to utilize approved fire use and mechanical treatments to restore and maintain primary natural resources and their processes where applicable in order to move the landscape from Fire Regime Condition (FRC) Class II and Class III to FRC Class I, as well as to reduce wildland fire hazard around recreational facilities and identified cultural resources [FM-1]. The BLM will apply mechanical fuel reduction and prescribed fire where applicable around vulnerable recreational facilities and prehistoric and historic cultural resources to avoid or reduce the probability of damage from wildland fire [FM-2].

### **Management Actions**

Three previous planning documents addressed fire management in Kasha-Katuwe Tent Rocks National Monument: *Categorical Exclusion NM-010-2003-066: Tent Rocks Wildland-Urban Interface Hazardous Fuels Reduction Project* (USDI, BLM 2003); *Fire and Fuels Management Resource Management Plan Amendment and Environmental Assessment for BLM Lands in New Mexico and Texas* (USDI, BLM 2004b); and *Albuquerque Field Office Fire Management Plan* (USDI, BLM 2004a). The decisions from these planning and NEPA documents have been incorporated into this stand-alone RMP. Lands within the Planning Area that meet the criteria for treatment have been identified as being in FRC Class II or Class III [FM-4]. Kasha-Katuwe Tent Rocks National Monument is identified as a separate Fire Management Unit (FMU). The Planning Area will be managed as FMU B/4 [FM-3] and managed to treat FRC Class II and Class III lands to move their condition toward Class I [FM-4].

#### *Allowable Uses and Actions*

The Appropriate Management Response (AMR) for FMU B/4 is to prevent wildland fires from

spreading to private lands, cultural resources or improvements on BLM lands, other agencies' lands, and to protect the public users. AMR will be used to manage all fires in accordance with management objectives based on current conditions and fire location [FM-5].

#### *Implementation Decisions*

Fire management treatments will be applied on acreages and areas identified on Map 5 to move the FRC class from Classes II and III toward Class I [FM-4]. The BLM will use Best Management Practices for vegetation treatments (see Appendix C) [VW-4]. Treatments will be prioritized based on percent slope, FRC class, access, and ownership of the areas to be treated. Only areas having slopes less than 15 percent (2,236 acres in the Planning Area) will be treated.

The NM Standards for Public Land Health (USDI, BLM 2000a) will be complied with in implementing fire management treatments [FM-6].

As part of the riparian development program, prescribed fires will be implemented for parts of the Peralta Canyon stream channel to reduce the cover of shrub species [RIP-5].

BLM Road 1011 may be closed seasonally in T. 17 N., R. 4 E., Section 30 for fire protection [AT-19].

#### *Support Services*

##### **- Cadastral Survey**

Cadastral survey may be needed to identify boundaries to avoid implementing fire use and mechanical treatments on private lands without authorization.

#### **Monitoring**

Information will be collected on the fire and fuels treatment areas to determine the effectiveness of the program.

## **HAZARDOUS MATERIALS/ SOLID WASTE**

### **Goals and Objectives**

The BLM investigates reported hazardous materials/solid waste sites, and initiates containment and/or removal actions on a case-by-case basis. Sites that are reported will be handled under current regulations, with potentially responsible parties identified and pursued based on best available information [HzM-1].

### **Management Actions**

No hazardous materials/solid waste sites are known to exist within the Planning Area. The BLM relies on routine fieldwork activities and non-BLM sources to discover and report spills or other releases of hazardous materials/solid wastes on public lands.

### *Allowable Uses and Actions*

The BLM investigates reported hazardous materials/solid waste sites, and initiates containment and/or removal actions on a case-by-case basis. Sites that are reported will be handled under current regulations, with potentially responsible parties identified and pursued based on best available information [HzM-1].

### *Implementation Decisions*

None.

### *Support Services*

- Cadastral Survey

Cadastral survey may be needed to determine ownership of lands at spill sites.

### **Monitoring**

Monitoring would result as a follow up to incident cleanups.



*Wildflowers, such as this Penstemon are commonly seen along the trails in the Monument.*

## LANDS AND REALTY

### Goals and Objectives

The goals of the Lands and Realty Program are to continue to acquire land and easements within the Planning Area, to protect the resources for which the Monument was established, and to ensure that any rights-of-way or land use permits issued are consistent with management goals for other resource programs and uses [LR-1].

### Management Actions

By proclamation, all Federal lands and interests in lands within the boundaries of the Monument are withdrawn from all forms of entry, location, selection, sale, leasing, or other disposition under the public land laws. This withdrawal applies under (but is not limited to) the mining laws and all laws relating to mineral and geothermal leasing. The only exception to this withdrawal would be an exchange that would further the protective purposes of the Monument.

Lands and interests in lands within the Monument boundaries not owned by the United States are reserved as a part of the Monument if title to them is acquired by the United States.

#### *Allowable Uses and Actions*

The Monument is subject to valid existing rights [LR-2].

Nothing in the Proclamation revokes any existing withdrawal, reservation, or appropriation; however, the Monument is the dominant reservation [LR-3].

No person may use, injure, destroy, or remove any feature of the Monument without authorization, nor locate nor settle upon any of the lands [LR-4].

The *Protection Plan for Tent Rocks ACEC* (USDI, BLM 1987) included discussions of Cooperative Agreements with non-Federal landowners who would provide land with uses com-

plementary to the ACEC values. These values have now become Monument values, and non-Federal lands within and adjoining the Monument will be acquired whenever willing sellers are available [LR-5]. The BLM will continue to seek Cooperative Management Agreements with non-Federal landowners if acquisition is not possible [LR-6]. While the Proposed RMP/Final EIS was being prepared, the New Mexico State Land Office (SLO) acquired ownership of what had been the University of New Mexico property known in this document as the “North Edgeholding” (see Map 3). This adjoining parcel of approximately 9,268 surface acres is located north and northeast of the Monument. The BLM has discussed acquisition of these lands with the SLO.

Lands and Realty management involves approximately 15,635 acres of surface and mineral ownership within the Planning Area, including the non-Federal lands recommended for acquisition (see Table 1-1). At the signing of the Record of Decision, surface ownership was 5,089 acres Federal, 9,789 acres State, and 757 acres private. The BLM will manage the 5,089 acres of Federal surface under the RMP decisions contained in this document. The other 10,546 acres will be managed by owner decision or, where possible, by Cooperative Management Agreement to provide for some level of public use [LR-6]. If willing sellers are available in the long term, the BLM will seek to acquire the 1,278 acres of non-Federal land within the Monument and the 9,268-acre North Edgeholding to complement management of Monument values [LR-5].

The Federal government owns 4,565 acres of minerals beneath the Monument. This acreage has been withdrawn from mineral entry by conditions of the Proclamation [LR-7]. As other minerals are acquired within the Monument, they will also be withdrawn from mineral entry under the Proclamation [LR-8].

All minerals under the 965-acre Southwest Acquisition are in Federal ownership. The North Edgeholding (9,268 acres) has split mineral ownership, with gold, silver, and quicksilver/

mercury in Federal ownership and all other minerals in non-Federal ownership. The BLM will seek to acquire these mineral rights along with the surface. The BLM will withdraw all Federal minerals within the Planning Area, subject to valid existing rights **[LR-9]**.

### ***Implementation Decisions***

The 5,402 acres designated by Presidential Proclamation 7394 as the National Monument will also continue to be designated as an Area of Critical Environmental Concern (ACEC) **[LR-10]**. The Monument/ACEC will be managed for Proclamation and ACEC resource values. Management emphasis for the area will continue to be on the interpretation of geologic and scenic values, and on intensive recreational uses, especially semi-primitive non-motorized recreation opportunities **[LR-11]**.

These values will also be emphasized on lands acquired and managed in conjunction with the Monument **[LR-12]**.

The 965-acre Southwest Acquisition recently purchased by the BLM will be managed in conjunction with the Monument, and is recommended for inclusion as part of the Monument (which would require Congressional legislation) **[LR-13]**.

The BLM will seek to acquire the 1,278 surface acres (521 acres State, 757 acres private) within the Monument boundaries not presently in Federal ownership through exchange or purchase from willing sellers **[LR-5]**. The 837 acres (521 acres State, 316 acres private) of non-Federal mineral ownership in the Monument will likewise be acquired if owners are willing. As other minerals are acquired within the Monument, they will also be withdrawn from mineral entry under the Proclamation **[LR-8]**.

Lands and interests in lands acquired within the Monument boundary will become part of the Monument and ACEC. These will be withdrawn from entry or disposal except by exchange, as provided in the Proclamation **[LR-14]**.

The 9,268-acre State-owned North Edgeholding is also identified for acquisition by exchange or purchase, and for management in conjunction with the Monument **[LR-5]**. It is also recommended for inclusion in the Monument (which would require Congressional legislation) **[LR-15]**. All mineral rights with this parcel are in non-Federal ownership except gold, silver and quicksilver, which are Federally owned. The non-Federal minerals will be acquired, if possible, to protect the Monument's resource values **[LR-9]**.

If the North Edgeholding is acquired, it will initially be closed to public entry except access (1) on existing public roads or (2) with prior authorization from the Rio Puerco Field Manager. The BLM may allow a two-year period of resource survey and evaluation before making land and resource allocations. The BLM may provide guided tours in the interim. After consulting with potentially affected American Indian tribes, carrying out resource data inventory, including assessment of cultural resources, and implementing measures to mitigate potential adverse effects to cultural resources and other resources, the area will be opened with appropriate restrictions **[AT-18]**.

If acquisitions within the Monument boundaries are not completed, the BLM will seek to acquire a 1.05-mile easement on the portion of BLM Road 1011 that crosses private surface **[LR-16]**. This will ensure Federal control of access through the Monument.

If non-Federal lands cannot be acquired, the BLM will seek management control through agreements with landowners **[LR-6]**. These agreements will be focused on improving management efficiency and visitor services, and on protecting Monument resource values and non-Federal property rights.

While recognizing valid existing rights, the BLM will consider the Planning Area to be a right-of-way exclusion area. Rights-of-way for uses that do not currently exist will not be considered except for those that would support Monument purposes **[LR-17]**.

### ***Support Services***

- Cadastral Survey

Support services needed include ownership and boundary determinations for lands to be acquired or for which easements are needed.

### **Monitoring**

Any rights-of-way in the Planning Area will be inspected according to a schedule established for each right-of-way to ensure compliance with the requirements of the BLM right-of-way regulations and this RMP.



*View towards Intensive Visitor Use Area from BLM Road 1011.*

## LIVESTOCK GRAZING

### Goals and Objectives

The BLM's goals in permitting livestock grazing on public land, as stated at 43 CFR 4100.0-2, are as follows [LG-1]:

- Promote healthy, sustainable rangeland ecosystems [LG-1a].
- Accelerate the restoration and improvement of public rangelands to properly functioning condition [LG-1b].
- Promote the orderly use, improvement, and development of the public lands [LG-1c].
- Provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy rangelands [LG-1d].
- Establish efficient and effective administration of grazing on public rangelands [LG-1e].

Livestock grazing must be achieved in a manner consistent with land use plans, the principles of multiple use and sustained yield, environmental values, economic and other objectives stated at 43 CFR 1610, the Taylor Grazing Act of June 28, 1934, as amended (43 U.S.C. 315); and Section 102 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1740).

### Management Actions

Presidential Proclamation 7394 states, "The Secretary of the Interior shall retire the portion of the grazing allotments within the Monument, pursuant to applicable law, unless the Secretary specifically finds that livestock grazing will advance the purposes of the Proclamation."

In accordance with the Proclamation, livestock grazing use will be discontinued on the 4,088 acres of Federal land currently under two Federal grazing permits within the Monument [LG-2]. Acreage closed to grazing will be fenced and range developments removed if they are not converted to another purpose (e.g., wildlife waters, recreational uses) [LG-3]. Short-

duration grazing on Federal land within the Planning Area may be allowed under a non-renewable grazing permit if the BLM determines it will advance the purposes of the Proclamation [LG-4]. If such use is allowed, it is expected that it will be focused on helping to attain specific vegetative and ecological objectives.

### *Allowable Uses and Actions*

Before permitting short-term livestock grazing on Federal land within the Planning Area, the BLM will prepare an environmental assessment to determine the impacts of the proposed grazing use [LG-5]. If grazing use is approved, the BLM will issue a non-renewable grazing permit with terms for the proposed grazing period [LG-6]. As stated in the grazing regulations at 43 CFR 4100, non-renewable grazing permits may be issued on an annual basis to qualified applicants when forage is temporarily available, provided that this use is consistent with multiple use objectives and does not interfere with existing livestock operations on public land.

Under the requirements of Presidential Proclamation 7394, livestock grazing will be discontinued in the Monument unless it advances the purposes of the Proclamation [LG-2]. The BLM may permit seasonal, short-duration, non-renewable opportunities for domestic livestock grazing to meet specific ecological objectives [LG-4]. This type of temporary authorized use could include integrated weed management (e.g., grazing of saltcedar and other invasive or noxious plants by livestock, intense grazing of downy brome in early spring), grazing to reduce fine fuels, intense livestock presence and supplemental feeding (not rangeland grazing) to produce "hoof impact" and distribute litter and seeds into the disturbed soil surface.

As part of these short-duration permits, the BLM would specify terms and conditions for grazing to meet ecological and vegetative resource objectives [e.g., number and kind of livestock, period of use, percent allowable use, desired amount of residual vegetation (stubble heights) to be left post-grazing, specified areas for grazing or nonuse for monitoring, herding of ani-

mals]. Any proposed grazing studies must improve the knowledge and understanding of the Planning Area, and sustain the purposes of the Proclamation.

Federally owned range improvements that cannot be effectively converted to such uses as wildlife waters or recreational uses will be removed **[LG-3]**. Privately owned range improvements will be removed by the permittee or purchased by the BLM, at fair market value, if they can be converted to other uses **[LG-7]**. Areas closed to grazing will be fenced **[LG-3]**.

### ***Implementation Decisions***

The following two actions are expected to improve vegetative and land health, watershed condition, and wildlife habitat condition in the short term on the specified lands (see Map 6): (1) livestock grazing on the 4,088 acres of Federal lands within the Monument currently under grazing permit will be discontinued **[LG-2]**, and

(2) no grazing permit will be issued for the 965-acre Southwest Acquisition **[LG-8]**. If, in time, the BLM determines that short-duration grazing would help to achieve specific vegetative or ecological objectives within the Planning Area, a non-renewable permit for such use may be issued **[LG-4]**.

### ***Support Services***

- Cadastral Survey

Cadastral survey is needed to determine where fences should be placed to avoid livestock trespass into the Monument.

### ***Monitoring***

Monitoring would be required to determine the effectiveness of grazing used as a tool for “advancing the purposes of the Proclamation” if any short-duration grazing is allowed.

## NOXIOUS WEED MANAGEMENT

### Goals and Objectives

The goals and strategies identified in the BLM Partners Against Weeds (PAWS) action plan (USDI, BLM 1996) will be implemented as needed for noxious weed management for the Rio Puerco Field Office *[NW-1j]*. A summary of portions of the PAWS action plan which need to be implemented immediately follows:

#### *Goal 1 - Prevention and Detection*

The Field Office will delineate high priority areas for prevention of noxious weed infestation. Review and modify, where necessary, all activities authorized or conducted on BLM land for their potential to spread weeds. This includes evaluating the potential for noxious weed invasion in the effects analysis of each NEPA document. Newly introduced weed species will be identified and documented *[NW-1a]*.

#### *Goal 2 - Education and Awareness*

The Field Office will conduct workshops for all field personnel to update their knowledge of noxious weeds, to include identification and the problems noxious weeds can cause. The Field Office will continue to work to establish county weed associations in developing and implementing outreach plans *[NW-1b]*.

#### *Goal 3 - Inventory*

The Field Office will monitor all known populations of noxious weeds and update the inventory as needed on a yearly basis *[NW-1c]*.

#### *Goal 4 - Planning*

Include provisions for noxious weed management in all BLM-funded or -authorized actions. See Weed Prevention Schedule, Appendix B *[NW-1d]*.

#### *Goal 5 - Integrated Weed Management (IWM)*

The Field Office will determine the best management options using a combination of the four

general categories identified for weed management—Cultural, Physical Control, Biological Control, and Herbicides (see Appendix B) *[NW-1e]*.

#### *Goal 6 - Coordination*

The Field Office will continue and expand cooperation with other Federal agencies, State and county governments, organizations, and private landowners in the fight against weeds *[NW-1f]*.

#### *Goal 7 - Monitoring, Evaluation, Research, and Technology Transfer*

The Field Office will continue to work with the Cooperative Extension Service and others on research for control methods for noxious weeds. Monitoring programs will be established to determine if the BLM is meeting its management objectives with weed management programs *[NW-1g]*.

### Management Actions

One exotic invasive weed species occurs extensively on Federal land within the Planning Area, downy brome grass or “cheatgrass” (*Bromus tectorum*). This grass has spread throughout New Mexico and the Western United States, and the likelihood of successfully controlling it is low.

A few isolated individual saltcedar plants grow in the vicinity of the old pumice mines and in the bottom of Peralta Canyon. The Southwest Acquisition has a small population of exotic thistles. These isolated populations are considered to be easily controllable, while the cheatgrass will likely be very difficult to control.

#### *Allowable Uses and Actions*

Monitoring and a vigorous integrated weed management program will be a part of Planning Area management (including on acquired land), in accordance with the Standard Operating Procedures found in Instruction Memorandum

NM-010-99-01 (“Noxious Weed Prevention Schedule for Albuquerque Field Office”—see Appendix B) [NW-2]. Any Cooperative Agreement that is developed for land use will also include provisions for weed monitoring and treatment [NW-3].

### ***Implementation Decisions***

Noxious weed identification and treatment will be emphasized in the 241-acre intensive visitor use area to reduce weed introduction by recreation users [NW-4].

### ***Support Services***

No support needs have been identified and none are anticipated.

### **Monitoring**

The Field Office will monitor all known populations of noxious weeds and update the inventory as needed on a yearly basis to determine if the BLM is meeting its weed management objectives. Ground-disturbing activities will be monitored for the life of the project for the presence of noxious weeds. Reclamation and revegetation areas will be monitored to determine the weed-free success of the revegetation, and revegetation will continue until successful.



*Saltcedar in bloom.*

## **PALEONTOLOGY**

### **Goals and Objectives**

Paleontological (fossil) resources are of concern and require protection. Federal, State, and private lands within the Planning Area boundaries have the potential for paleontological resources. The BLM's goal for managing these resources is to provide a consistent and comprehensive approach to identification, evaluation, protection, and use **[P-1]**.

### **Management Actions**

No overriding Federal law specifically addresses paleontological resources. Management of the resource is directed principally under the Federal Land Policy and Management Act and the National Environmental Policy Act. The following also afford protection of paleontological resources: the Antiquities Act of 1906, National Natural Landmarks Program under the Historic Sites Act of 1935, Executive Order 11593 (Protection and Enhancement of the Cultural Environment) of 1971, National Historic Preservation Act of 1966 (as amended), Federal Cave Resource Protection Act of 1988 (P.L. 100-691), and Secretarial Order 3104. Various subparts of Title 43 of the Code of Federal Regulations address the collection of invertebrate fossils, fossil plants, and protection of paleontological resources from operations authorized under the mining laws.

### ***Allowable Uses and Actions***

Any ground-disturbing activities on public land in the Planning Area will be considered on a case-by-case basis for the need to mitigate potential impacts to fossil resources **[P-2]**.

The Proclamation states that no person may use, injure, destroy, or remove any feature of this Monument without authorization, nor locate nor settle upon any of the lands. This prohibition applies to invertebrate and vertebrate fossils, as well as plant fossils **[P-3]**.

Fossils are relatively rare, fragile, and nonrenewable resources. Although no fossil resources have been documented within the Planning Area, if any are identified, they will be evaluated, managed, and protected on a case-by-case basis. Visitors will be encouraged to report fossil discoveries to the BLM **[P-4]**.

### ***Implementation Decisions***

None.

### ***Support Services***

No support needs have been identified and none are anticipated.

### **Monitoring**

Monitoring requirements will be established if fossil resources are identified in the Planning Area.

## PUBLIC LAND HEALTH

### Goals and Objectives

Objectives for public land health are found at 43 CFR 4180.1, which mandates the following conditions:

- Watersheds are in—or are making significant progress toward—properly functioning physical condition (including their upland, riparian-wetland, and aquatic components) **[PLH-1a]**.
- The soil and plant conditions support infiltration, soil moisture storage, and the release of water in balance with climate and landform **[PLH-1b]**.
- The soil and plant conditions maintain or improve water quality, water quantity, and timing and duration of flow **[PLH-1c]**.
- Ecological processes—including the hydrologic cycle, nutrient cycle, and energy flow—are maintained, or there is significant progress toward their attainment, to support healthy biotic populations and communities **[PLH-1d]**.

### Management Actions

#### *Allowable Uses and Actions*

The New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (USDI, BLM 2000a), approved by the Secretary of the Interior’s Decision of January 12, 2001, are carried forward into this RMP **[PLH-2]**. These standards include: (1) the upland sites standard; (2) the biotic communities standard (including native, threatened, endangered, and special status species); and (3) the riparian sites standard. The standards are described as follows:

*Upland Sites Standard* - Upland ecological sites are in a productive and sustainable condition within the capability of the site. Upland soils are stabilized and exhibit infiltration and permeability rates that are appropriate for the soil type, climate, and landform. The kind, amount,

and/or pattern of vegetation provide protection on a given site to minimize erosion and assist in meeting State and tribal water quality standards **[PLH-2a]**.

Indicators for this standard may include but are not limited to:

- Consistent with the capability of the ecological site, soils are stabilized by appropriate amounts of standing live vegetation, protective litter, and/or rock cover.
- Erosion is indicated by flow pattern characteristics of surface litter soil movement, gullies and rills, and plant pedestalling.
- Satisfactory plant protection is indicated by the amount and distribution of desired species necessary to prevent accelerated erosion.

*Biotic Communities Standard (Including Native, Threatened, Endangered, and Special Status Species)* - Ecological processes such as hydrologic cycle, nutrient cycle, and energy flow support productive and diverse native biotic communities, including special status, threatened, and endangered species appropriate to site and species. Desired plant community goals maintain and conserve productive and diverse populations of plants and animals which sustain ecological functions and processes. Restoration should first be achieved with native, and when appropriate, non-native plants **[PLH-2b]**.

Indicators for this standard may include but are not limited to the following:

- Commensurate with the capability of the ecological site, plant and animal populations are:
  - Productive
  - Resilient
  - Diverse
  - Sustainable
- Landscapes are composed of communities in a variety of successional stages and patterns.
- Diversity and composition of communities are indicated by the kinds and amount of species.

- Endangered and special status species are secure and recovering, with the goal of de-listing and ensuring that additional species need not be listed within New Mexico.

*Riparian Sites Standard* - Riparian areas are in a productive, properly functioning, and sustainable condition, within the capability of that site. Adequate vegetation of diverse age and composition is present that will withstand high stream flow, capture sediment, provide for groundwater recharge, provide habitat, and assist in meeting State and tribal water quality standards **[PLH-2c]**.

Indicators for this standard may include but are not limited to:

- Stream channel morphology and stability as determined by:
  - Gradient
  - Width/depth ratio
  - Channel roughness
  - Sinuosity
- Streambank stability as determined by degree of:
  - Shearing and sloughing
  - Vegetative cover on the bank
- Appropriate riparian vegetation includes a mix of communities comprised of species

with a range of:  
 Age  
 Density  
 Growth form

### ***Implementation Decisions***

The New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (USDI, BLM 2000), approved by the Secretary of the Interior's Decision of January 12, 2001, are carried forward into this RMP **[PLH-2]**. The standards (described above) include: (1) the upland sites standard; (2) the biotic communities standard (including native, threatened, endangered, and special status species); and (3) the riparian sites standard.

### ***Support Services***

No support needs have been identified and none are anticipated.

### ***Monitoring***

As resource development projects are implemented, they will be monitored to ensure that they are contributing to the maintenance or establishment of land health.



*After a great winter of snowfall Tent Rocks had welcome waterflow.*

## RECREATIONAL USES

### Goals and Objectives

The management goals for the BLM's Outdoor Recreation Program are as follows *[RU-1]*:

- Provide a broad spectrum of resource-dependent recreational opportunities to meet public needs and demands *[RU-1a]*.
- Foster agency-wide efforts to improve services to the visiting public *[RU-1b]*.
- Maintain high-quality recreation facilities to meet public needs and enhance the image of the agency *[RU-1c]*.
- Improve public understanding and support by effectively communicating the BLM's mission of multiple-use management to visitors *[RU-1d]*.

For Kasha-Katuwe Tent Rocks National Monument, the following additional objectives apply: Through the Cooperative Agreements between the Pueblo de Cochiti and the BLM, the two entities strive to achieve the following *[RU-2]*:

- Enhance the manageability of the Monument *[RU-2a]*.
- Provide for resource protection, and visitor health and safety *[RU-2b]*.
- Provide outstanding customer service for visitors while controlling visitor use *[RU-2c]*.
- Provide for economic opportunity through employment and services *[RU-2d]*.
- Ensure continuity of traditional tribal practices *[RU-2e]*.
- Maintain tranquility for the Pueblo de Cochiti *[RU-2f]*.

### Management Actions

#### *Allowable Uses and Actions*

As stated in the Proclamation, "for the purpose of protecting the objects identified, the Secretary shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes" *[RU-3]*.

The management actions of the Plan are expected to stabilize visitation at approximately 50,000 visitors per year to minimize intrusion and resource degradation.

The BLM will continue to manage the Monument as a fee site, as originally authorized by the Department of the Interior and Related Agencies Appropriations Act of 1996 (P.L. 104-134) *[RU-4]*. The agency will collect, retain, and reinvest collected fees at this site under the authority of the Federal Lands Recreation Enhancement Act of 2004 (P.L. 108-447), which has replaced the previous fee collection authority.

The Federal Land Policy and Management Act and the Land and Water Conservation Fund Act empower the BLM to issue Special Recreation Permits according to its own procedures and fee schedules for uses such as group activities, commercial recreational tours, and other special recreational uses. Issuing permits is mandatory for commercial and non-commercial recreation-related uses of BLM-administered Federal lands. The BLM may also require permits for any uses in special areas like the Monument where the agency determines that the law requires it. When issuing permits at Kasha-Katuwe Tent Rocks National Monument, the agency will continue to follow the guidelines found in the BLM Manual and Handbook H-2930-1, "Recreation Permit Administration."

For the following recreational elements, BLM management of recreation on the 5,089 acres of Federal land in the Planning Area is as follows (see Table 2-4):

- The ***Recreation Opportunity Spectrum (ROS) system*** (see Appendix E) divides the area into three visitor experience zones—semi-primitive motorized use (2,048 acres), semi-primitive non-motorized use (1,054 acres), and roaded natural use (1,987 acres) (see Map 7) *[RU-5]*.
- ***Hiking use*** will be available on 5.23 miles of trail and ***combined hiking and equestrian use*** will be available on 2.9 miles of trail *[AT-6]*.
- 5.95 miles of roads will be ***open to public use by motorized or mechanized vehicles*** *[AT-2]*;

**TABLE 2-4**

**ELEMENTS OF RECREATIONAL USE IN THE MONUMENT  
& SOUTHWEST ACQUISITION**

<b>Element</b>	<b>Description</b>	<b>Comments</b>
Intensive visitor use area/fee site	241 Federal acres around National Recreation Trail and Scenic Overlook—existing facilities	Day-use visitor facilities and services provided (fee site includes areas with special geologic features)
Dispersed visitor use area	4,848 Federal acres—the BLM will work with private landowners to provide additional recreation opportunities and to assist in preventing trespass	No BLM-built visitor facilities provided (except as needed for resource protection, or visitor health, safety and convenience)
Collector roads	5.9 miles	(See Tables 2-1 and 2-2)
Resource roads	5.5 miles	(See Tables 2-1 and 2-2)
Primitive roads	2.35 miles	(See Tables 2-1 and 2-2)
Roads open to public use by motorized or mechanized vehicles	5.95 miles (designated roads)	(See Tables 2-1 and 2-2)
Roads limited to authorized administrative or emergency use only	7.8 miles	(See Tables 2-1 and 2-2)
Roads closed	11.5 miles—includes 0.7 mile to be converted to hiking use	(See Tables 2-1 and 2-2)
Roaded Natural (see Appendix E)	1,987 acres (39%)	Buffer zone based around BLM Road 1011, a “better than primitive” road
Semi-Primitive Motorized (see Appendix E)	2,048 acres (40%)	Primitive and resource roads, use on all but 0.05 mile limited to authorized administrative or emergency use only
Semi-Primitive Non-motorized (see Appendix E)	1,054 acres (21%)	No road access
Hiking trails	5.23 miles	(See Table 2-3)
Hiking/equestrian trails	2.9 miles	(See Table 2-3) Equestrian use by permit only on case-by case basis
Equestrian use (dispersed)	Federal lands south and west of BLM Road 1011	By permit only on case-by-case basis
Mountain bike use	Allowed on BLM Road 1011 only*	*When open to public use
Research & educational activities	Federal lands in Planning Area	By special-use permit only on case-by-case basis
North Edgeholding (Cañada de Cochiti property)	9,268-acre State parcel in Planning Area proposed for acquisition	If acquired: <ul style="list-style-type: none"> <li>• May be closed to general visitation until resources assessed (assessment not to exceed 2 years duration)</li> <li>• Guided tours may be provided in interim</li> </ul>

7.8 miles of roads will be *limited to authorized administrative or emergency use only [AT-3]*.

- Manage the 241 acres around the picnic facilities, National Recreation Trail, scenic overlook, and special geologic features for *intensive visitation and use [RU-6]*.
- Manage the remaining 4,848 acres for *dispersed visitation and use*, with no BLM facilities being built, except as needed for resource protection, or visitor health, safety and convenience *[RU-7]*.
- Apply the *rules of conduct* for the protection of public land resources and visitors (as established at 43 CFR 8365).
- *Emphasize day use* and prohibit camping or overnight occupancy *[RU-8]*.
- *Collect, retain, and reinvest collected fees* at Kasha Katuwe-Tent Rocks National Monument.
- *Continue the Cooperative Agreement with the Pueblo de Cochiti for assistance* in fee collection.
- Maintain BLM Road 1011/Forest Service Road 266/Tribal Road 92 through the Inter-Governmental Agreement with the Pueblo de Cochiti to allow *continued public access* to and through the Planning Area. The BLM, the Pueblo, and Sandoval County will be involved in this maintenance.
- Issue *Special Recreation Permits* for commercial and non-commercial recreation-related uses (e.g., group activities, commercial recreational tours), and for any other uses for which the BLM determines a permit is needed to support the recreation management objectives of the area and serve the public interest.
- Issue *special-use permits for research and educational activities* on a case-by-case basis.
- Use *interpretive tools* (e.g., signs, kiosks, brochures, websites, and on-the ground presence) to help protect the objects of cultural, biological, and geologic interest by enabling visitors to understand and appreciate these resources *[RU-9]*.

Approval of the Record of Decision has changed the designation of the Planning Area from

“ORV/OHV use limited to existing roads and trails” to “OHV use limited to designated roads and trails” for motorized and mechanized modes of travel *[RU-10]*. This change reduces the mileage available for public use within the Planning Area, as identified in the “Access and Transportation” section. Approximately 0.7 mile of an existing road will be closed to motorized use and converted to pedestrian use *[AT-9]*. This will add to the existing trail system within the Planning Area that provides access to recreation resources. *Mountain bikes and* limited forms of *motorized vehicles* (except all-terrain vehicles and dirt bikes) will be allowed on the primary access road (BLM Road 1011) through the Planning Area when the road is open to public use *[RU-11]*. *Equestrian use* will be authorized on a case-by-case basis and directed to Federal lands in the Monument and Southwest Acquisition that are south and west of BLM Road 1011 *[RU-12]*. BLM Road 1011/FS Road 266/TR 92 and designated travel routes will be scheduled to receive maintenance.

The BLM will maintain existing *visitor facilities* in the intensive use area *[RU-13]*, and build new ones, including hard-surfacing 5.9 miles of BLM Road 1011, as needed for resource protection, or visitor health, safety and convenience *[RU-14]*. The BLM will also work with other landowners in the Planning Area (1) to provide additional opportunities, where appropriate, to view the special geologic features and scenic values, and expand recreational use of the area, as well as (2) to prevent unwanted trespass on non-Federal lands *[RU-15]*.



Visitors enjoy lunch at one of the many picnic tables.

The BLM will make *drinking water* available for visitors in or near the Monument [RU-16]. Various alternative methods will be considered, including those listed below. Water pipelines, if used, will be buried adjacent to BLM Road 1011/Tribal Road 92, as much as possible, to reduce surface disturbance.

1. Drill a well with a well house that would include treatment facilities, a water pipeline delivery system, a storage tank with at least a 12,000-gallon capacity, and frost-free hydrants.
2. Use an existing well on Pueblo de Cochiti Tribal land, State, or private land. This would require:
  - a. Authorization through agreements, land exchange, or acquisition by purchase;
  - b. Testing for flow and water quality; and
  - c. Installation of water pipelines.
3. Sell bottled water.

If the North Edgeholding is acquired, the BLM may close it to general visitation for up to two years following acquisition, providing *guided tours* in the interim. After consulting with potentially affected American Indian tribes, carrying out resource data inventory, including assessment of cultural resources, and implementing measures to mitigate potential adverse effects to cultural resources and other resources, the *area will be opened* with appropriate restrictions [AT-18]. The BLM will *utilize the provisions of the Cooperative Management Agreement with the Pueblo de Cochiti for assistance* during the closure to provide an on-the-ground presence until further resource studies are completed [RU-17].

While studies are ongoing, riparian study areas alongside the Peralta Canyon stream channel will be designated as off limits to such recreational uses as hiking and horseback riding to avoid damage to riparian habitat [RIP-10].

### ***Implementation Decisions***

Under the Recreation Opportunity Spectrum classification, public motorized access is provided to approximately 1,987 Federal acres of the Planning Area. Limited motorized access

for authorized administrative or emergency uses only is provided to another 2,048 acres. Non-motorized access is available to approximately 1,054 Federal acres (see Map 7) [RU-5].

The BLM will designate Federal lands within the Planning Area (including any acquired lands) as a Special Recreation Management Area (SRMA) [RU-18]. Acquired lands will be operated under the rules at 43 CFR 8365, as they support the purposes of the Proclamation.

The Monument and Southwest Acquisition will be identified for day use only [RU-8]. If acquired, other parts of the Planning Area will also be day use only, unless a detailed evaluation (including a site-specific environmental analysis) of the resources in portions of the acquired lands shows capabilities of supporting camping without undue resource degradation [RU-19]. Acquired lands will also be studied for their suitability for equestrian use, including overnight pack trips [RU-20].

Hunting regulation will be coordinated with the New Mexico Department of Game and Fish [RU-21].

Special geologic features, mainly the “tent rocks” themselves, will be protected on 167 acres of Federally owned lands in the Monument for visitor viewing and observation. Proposed acquisitions, if completed, could increase this area to as many as 2,284 acres. These features contribute to the remarkable outdoor laboratory identified in the Proclamation.

Visual Resource Management (VRM) Class II designation will be maintained on Federal lands, except on the 1,202-acre VRM Class III area provided to allow for facility improvement (see Map 11) [VR-3, VR-4]. Acquired lands will be inventoried and placed in one of these two classes based on the extent of cultural modification to the landscape; the need to implement future management actions or install facilities to accommodate visitor services; and the need for resource protection and rehabilitation [VR-6].

Noxious weed identification and treatment will be emphasized in the 241-acre intensive use area

to reduce weed introduction by recreation users [NW-4].

### ***Support Services***

#### **- Lands and Realty**

Lands and Realty support is needed for acquisition of public access across non-Federal lands.

Lands and Realty support is also needed for acquisition of non-Federal lands identified in support of recreation use and development throughout the Planning Area.

#### **- Cadastral Survey**

Cadastral survey is a support service needed for establishment of ownership boundaries to prevent trespass on non-Federal property. Cadastral survey may also be needed to ensure proper location of recreational facilities within the Monument and Planning Area.

#### **- Engineering**

Engineering services will be needed for design, construction, and maintenance of visitor service, resource protection, and other appropriate recreation facilities to ensure the long-term use and enjoyment of the resources of the Monument.

### **Monitoring**

The BLM will monitor visitor use on the Federal land in the Planning Area to quantify the number of recreational visits, types of recreational activities and use patterns, accomplishment of management objectives, and potential adverse impacts to resources and visitor experiences. The results of the monitoring will provide opportunities to identify actions to protect resources, enhance visitor experiences, and deal with health and safety needs in the area.

The monitoring program may include such actions as:

- Patrolling roads, trails, and areas to observe where recreation use is concentrated.

- Installing trail and road traffic counters and site registers.
- Establishing photo points in critical areas to monitor change.
- Surveying visitors to better understand their values and expectations while using the area.

Monitoring will help the BLM to detect and document natural and human-induced changes in resource conditions and visitor experiences, and offer insights into the effectiveness of resource management policies and objectives. It will also help the BLM to understand what might be driving the changes requiring intervention (corrective management actions or strategies).

If funding and staff are available, the BLM will develop indicators and standards for monitoring to help determine if Monument resources are being adequately protected as directed in the Proclamation, and if the desired visitor experiences are being provided. Measurable indicators, including linear soil erosion baselines, photo points of manzanita, road/trail counters, and visual monitoring, will be selected for monitoring key aspects of the resources and visitor experiences. Standards represent points at which resource conditions and visitor experiences become unacceptable, not goals or desired conditions, but trigger points for determining when conditions have become unacceptable or are trending towards unacceptable.

Monitoring results will be made available in a usable form and archived for future reference. Reports will be prepared each year, near the end of the calendar year, so they can be studied before the beginning of the next primary use and growing season, and needed management actions can be initiated.

Monitoring will be directed at areas in which specific and important resource values and visitor experiences could be threatened. The Monument and Southwest Acquisition are experiencing increasing use that is affecting resources, infrastructure, and management. Some of the more common impacts to resources as the result of the increasing use are trail deterioration, picnic area deterioration, wildlife impacts, soil compaction, erosion, and loss of vegetation.

Some of the more common impacts to the visitor experience resulting from increased use are crowding, visitor conflicts, pets not under con-

trol, non-compliant behavior, trespass on non-Federal lands, undesirable traffic conditions on the roads, and lack of available parking spaces.



*Two students explore the Slot Canyon while on a school field trip.*

## RIPARIAN AREAS

### Goals and Objectives

The management goals for the Riparian Program are to maintain, restore, improve, protect, and expand riparian-wetlands areas for their productivity, biological diversity, and sustainability so that they are in properly functioning condition **[RIP-1a]**. These goals were established in the *Environmental Impact Statement for Riparian and Aquatic Habitat Management in the Albuquerque Field Office* (USDI, BLM 2000b).

The BLM's Land Use Planning Handbook H-1601-1 directs the agency to "Identify watersheds that may need special protection from the standpoint of human health concerns, aquatic ecosystem health, or other public uses. For riparian areas, identify desired width/depth ratios, streambank conditions, channel substrate conditions, and large woody material characteristics" **[RIP-1b]**.

### Management Actions

#### *Allowable Uses and Actions*

The BLM will attempt to acquire the State and private inholdings in the Planning Area **[LR-5]**. If these acquisitions are completed, the BLM will manage an additional 1.62 miles of the Peralta Canyon stream channel (less than 5 additional acres), along with three windmill wells.

To assess the potential of Peralta Canyon to support riparian habitat, the BLM will conduct hydrologic studies and analysis, including appropriate stream flow monitoring of the channel (see Map 8). A riparian monitoring and development plan for these actions has been developed (USDI, BLM 2005b) **[RIP-2]**.

The BLM will establish a program to monitor the magnitudes and durations of the flows through the 2.05 miles of Peralta Canyon on Federal land in the Monument using the following means: (1) three alluvial water table wells (one each in the upper, middle, and lower por-

tions), and (2) two stream gauge stations (in the upper and lower portions) **[RIP-3]**. This program will be part of a larger study to determine whether the development of a riparian area along the Peralta Canyon stream channel is possible.

Alongside the channel, the BLM will develop a 3-acre enclosure on Federal land to monitor vegetation supported by available water during the runoff season. A vegetation inventory will be conducted along the stream channel within the enclosure and a comparable distance outside the enclosure **[RIP-4]**.

Additional measures will include the following: (1) prescribed fires for parts of the Peralta Canyon stream channel to reduce the cover of shrub species **[RIP-5]**; (2) prescribed fires may be followed by herbicide treatment of re-sprouting shrubs **[RIP-6]**; (3) areas currently lacking in grass and forb species will be seeded **[RIP-7]**; and, (4) if riparian conditions develop, cottonwood, willow, and other riparian species will be planted **[RIP-8]**.

If riparian vegetation becomes established in the stream channel, and the private inholdings are acquired, the entire riparian habitat within Peralta Canyon inside the Monument will be managed as a riparian area. The BLM will then assess the area for properly functioning condition **[RIP-9]**. As studies are being conducted, study areas alongside the Peralta Canyon stream channel will be designated as off limits to such recreational uses as hiking and horseback riding to avoid damage to riparian habitat **[RIP-10]**. If inholdings are not acquired, the BLM will pursue Cooperative Management Agreements with willing landowners to protect any riparian areas that develop on private land **[RIP-11]**.

#### *Implementation Decisions*

A riparian monitoring program will be established on a few acres of Federal land to determine the potential for riparian habitat development **[RIP-3]**. If potential is shown, a more intense riparian restoration program will be pursued **[RIP-8]**. Acquisition of the private land along Peralta Canyon from willing sellers could

increase this potential. Riparian habitat will be expanded to the extent that potential is indicated (see Map 8) *[RIP-8]*.

### ***Support Services***

#### **- Lands and Realty**

Lands and Realty support is needed for acquisition of the remaining 1.6 miles of the Peralta Canyon stream bottom.

### **Monitoring**

To assess the potential of Peralta Canyon to support riparian habitat, the BLM will conduct hydrologic studies and analysis, including appropriate stream flow monitoring of the channel. A riparian development plan for these actions has been developed (USDI, BLM 2005b) *[RIP-2]*.

Under this plan, the BLM will establish a program to monitor the magnitudes and durations of the flows through the 2.05 miles of Peralta Canyon on Federal land in the Monument using the following means: (1) three alluvial water table wells (one each in the upper, middle, and lower portions), and (2) two stream gauge stations (in the upper and lower portions). This program will be part of a larger study to determine whether the development of a riparian area along the Peralta Canyon stream channel is possible.

Alongside the channel, the BLM will develop a 3-acre enclosure on Federal land to monitor vegetation supported by available water during the runoff season. A vegetation inventory will be conducted along the stream channel within the enclosure and a comparable distance outside of the enclosure. Obvious changes toward a riparian plant community will trigger the initiation of more intense restoration activities.

## **SOCIAL AND ECONOMIC CONDITIONS**

### **Goals and Objectives**

The goal of this program is compliance with the principles of Environmental Justice. Consideration is given to the health and well-being of minority and low income communities and avoidance of inequitable distribution of adverse impacts to these communities *[SE-1]*.

### **Management Actions**

#### *Allowable Uses and Actions*

The social and economic conditions attributable to management of the Planning Area include social values associated with environmental education *[SE-2]* as well as economic values associated with part-time employment for 4 to 5 persons and income to the Pueblo de Cochiti amounting to \$25,000 to \$50,000 per year *[SE-3]*. This figure is likely to increase over the life of this plan. In addition, some tourism dollars will be spent in the local and regional economy. However, the size of the local community

does not encourage long stays and the percentage of out-of-state visitors is low (less than 25 percent in 2002), so tourism income is expected to remain low. Acquired lands may add to Sandoval County's entitlement acres, increasing the Federal government's payment in lieu of taxes (PILT) to the County. (In 2004, PILT to Sandoval County amounted to \$1.34 per entitlement acre.)

#### *Implementation Decisions*

Communities of concern have been consulted and informed. The Pueblo de Cochiti will continue to participate in management of the Monument and Planning Area *[AIU-6]*.

#### *Support Services*

No support needs have been identified and none are anticipated.

#### **Monitoring**

Social and economic factors may be monitored through visitor use data collected as part of the Monument Recreation Management Program.

## SOIL AND WATER RESOURCES

### Goals and Objectives

The management objectives for the Soil and Water Resources programs are as follows:

- Protect, maintain, or improve the quality of the soil, water, and air resources and watershed values associated with the public lands, including natural site productivity, air quality, and surface and ground water quality, quantity, and timing *[SW-1a]*.
- Prevent deterioration of soil, air quality, and watershed conditions where technically and economically feasible, and rehabilitate areas in which accelerated erosion and runoff have resulted in unacceptable resource conditions *[SW-1b]*.
- Prevent or minimize threats to public health and safety, damage to natural site characteristics, or economic losses due to floods, sedimentation, decreased water and air quality, or accelerated runoff and erosion *[SW-1c]*.
- Prevent impairment of soil productivity due to accelerated soil loss or physical or chemical degradation of the soil resource *[SW-1d]*.
- Ensure that BLM management actions and objectives are consistent with soil resource capabilities *[SW-1e]*.
- Maintain or improve surface and ground water quality consistent with existing and anticipated uses and applicable state and Federal water quality standards *[SW-1f]*.
- Minimize the harmful consequences of overland flow and surface runoff on or arising from BLM-administered lands *[SW-1g]*.
- Provide for the physical and legal availability of water to facilitate authorized uses of the public lands *[SW-1h]*.

### Management Actions

Presidential Proclamation 7394 did not reserve water as a matter of Federal law. However, any water use or rights reserved or appropriated by the United States on or before the date of the Proclamation are not reduced or relinquished. The Secretary of the Interior will work with ap-

propriate State authorities to ensure that any water resources needed for Monument purposes are available.

### *Allowable Uses and Actions*

Management of the Soils and Water Resources programs involves direct activities as well as support for other program activities. The BLM will maintain water source inventories, participate in State water rights adjudications (none of which affect the Monument at this time), and evaluate watershed conditions in terms of erosion/sedimentation, water quality, and supply *[SW-2]*. As needed, the BLM will also plan, implement, monitor, and maintain watershed rehabilitation projects *[SW-3]*.

The Soils and Water Resources programs will support facilities and land management activities in the Planning Area by providing input for properly locating facilities, hydrologic design, assessing impacts, and recommending mitigation measures. The soil types found in the Monument and Southwest Acquisition are shown on Map 9. Soils and water resources information for non-Federal lands in the Planning Area will be developed as needed when Cooperative Management Agreements or acquisitions are made.

The “Access and Transportation” section of this RMP identifies which roads and trails will remain open for use, and which will be closed. For closed roads and trails to be rehabilitated, the BLM will implement appropriate protection measures (Best Management Practices) to minimize watershed impacts and/or restore natural conditions *[SW-4]*. The BLM will assess physical water availability and quality for visitor use, acquire water rights (if needed), and ensure continued compliance with the Safe Drinking Water Act *[SW-5]*. To assess the potential of Peralta Canyon to support riparian habitat, the BLM will conduct hydrologic studies and analysis, including appropriate stream flow monitoring of the channel *[RIP-2]*.

For water resource management, the term “Best Management Practices” or “BMPs” is defined by 40 CFR 130, “Water Quality Planning and Management,” as “methods, measures, or prac-

tices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.”

### ***Implementation Decisions***

The New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (USDI, BLM 2000a), approved by the Secretary of the Interior’s Decision of January 12, 2001 and carried forward into this RMP, will be complied with *[PLH-2]*. The standards include: (1) the upland sites standard; (2) the biotic communities standard (including native, threatened, endangered, and special status species); and (3) the riparian sites standard. These

standards are described in the “Public Land Health” section.

### ***Support Services***

No support needs have been identified and none are anticipated.

### **Monitoring**

Monitoring efforts conducted or supported by the Soils and Water Resources programs will be under the adaptive management approach. The levels of monitoring and the techniques employed will be adapted as necessary as monitoring efforts proceed and as understanding of resource conditions improves, ensuring efficient use of limited monitoring resources.

If a local source of water is developed, it will be monitored to ensure compliance with the Safe Drinking Water Act.



*Snow emphasizes the layering of the tent walls.*

## **SPECIAL GEOLOGIC FEATURES**

### **Goals and Objectives**

The Monument and Planning Area contain a unique combination of geologic features, including exposed faults, “tents,” and remarkably informative volcanic tuff outcrops; these are referred to as “special geologic features” in this Plan (see Map 10). By definition, these features have extremely well-represented geology, with high aesthetic and educational value. There are special geologic features on 167 acres of Federal land, 439 acres of private land, and 23 acres of State land in the Monument, as well as on 1,655 acres of State land in the North Edgeholding (Cañada de Cochiti) proposed for acquisition.

The BLM’s management goal is to protect these important, environmentally sensitive geologic resources in their natural condition (subject to ecological processes), while allowing recreation, and scientific research and collection [SGF-1]. Because the 4,565 acres of Federally owned minerals within the Monument have been withdrawn from mineral entry, only the 837 acres of non-Federal minerals (316 acres private and 521 acres State) could be developed. If the non-Federal mineral resources are developed, the BLM’s management goal will be to protect the special geologic features to the extent possible [SGF-2].

### **Management Actions**

#### *Allowable Uses and Actions*

The Proclamation states that the Monument “is a remarkable outdoor laboratory, offering an opportunity to observe, study, and experience the geologic processes that shape natural landscapes, as well as other cultural and biological objects of interest.” “For purposes of protecting the objects identified above, the Secretary shall prohibit all motorized and mechanized vehicle use off road, except for emergency or authorized administrative purposes” [AT-12].

The BLM will develop appropriate interpretive materials (e.g., signs, brochures) to explain the special geologic features such as tents, faults, and flows [SGF-3].

Scientific collection and research will be allowed only by accredited universities or other organizations under permit. Permits will be issued only in the areas determined to be the least susceptible to impacts and will not be issued in areas composed of the “tents.” When proposals are submitted for scientific research and collection in the Planning Area, the BLM will (1) evaluate the proposals and permit applications, (2) develop appropriate stipulations for geological resource protection, and (3) conduct compliance inspections. If the inspections indicate that any study is unduly and unnecessarily degrading the natural landscape within the Planning Area, the BLM will severely limit or eliminate study in affected areas [SGF-4].

#### *Implementation Decisions*

Special geologic features will be protected on 167 acres of Federally owned Monument lands for visitor viewing and observation. Identified acquisitions, if completed, could increase this area to as much as 2,284 acres. These features represent the remarkable outdoor laboratory identified in the Proclamation [SGF-5].

#### *Support Services*

- Engineering

Engineering support will encourage development and maintenance of recreational and visitor use facilities so as to avoid degradation of the special geologic resources.

#### **Monitoring**

Photo monitoring points and a schedule will be established to observe change in the geologic features in the special geologic observation areas.

## **SPECIAL STATUS PLANTS**

### **Goals and Objectives**

The goal of the Special Status Plant Program is compliance with the Endangered Species Act. The BLM manages the public land to maintain, restore, improve, or enhance habitats which maintain or lead to recovery of Federally listed species populations and to preclude the need for listing proposed, candidate, and other special status species *[SS-1a]*. Special status species are species that are (1) officially listed, proposed for listing, or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the Endangered Species Act, (2) listed or proposed for listing by a state in a category implying potential endangerment or extinction, or (3) designated by the BLM as “sensitive.” Resource Management Plan decisions should do all that is reasonable to protect special status species and their habitat from degradation to the end that the species will not have to be listed as threatened or endangered.

The objective of the Special Status Plant Program is to continue to monitor and inventory special status species and their habitats to ensure that appropriate management, protections, and mitigations are developed and applied *[SS-1b]*.

### **Management Actions**

#### *Allowable Uses and Actions*

No special status plant species have been identified within the Monument or Southwest Acquisition. Any plants located will be managed on a case-by-case basis *[SS-2]*.

#### *Implementation Decisions*

Any special status plant species located within the Planning Area will be managed on a case-by-case basis. Consultation with the U.S. Fish and Wildlife Service for listed species will be carried out as required by the Endangered Species Act *[SS-2]*.

#### *Support Services*

- Engineering

Engineering support services may be needed to locate visitor use facilities in a manner so as to avoid degradation of special status plant species habitat.

#### **Monitoring**

The Special Status Plant Program will monitor and inventory special status species and their habitats to ensure that appropriate management, protections, and mitigations are developed and applied.

## THREATENED, ENDANGERED, AND SENSITIVE WILDLIFE SPECIES

### Goals and Objectives

The goal of the Threatened, Endangered, and Sensitive Wildlife Species Program is compliance with the Endangered Species Act. The BLM manages the public land to maintain, restore, improve, or enhance habitats which maintain or lead to recovery of Federally listed species populations and to preclude the need for listing proposed, candidate, and other special status species [TE-1a]. Special status species are species that are (1) officially listed, proposed for listing, or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the Endangered Species Act, (2) listed or proposed for listing by a state in a category implying potential endangerment or extinction, or (3) designated by the BLM as “sensitive.” Resource Management Plan decisions should do all that is reasonable to protect special status species and their habitat from degradation to the end that the species will not have to be listed as threatened or endangered.

The objective of the Threatened, Endangered, and Sensitive Wildlife Species Program is to continue to monitor and inventory special status species and their habitats to ensure that appropriate management, protections, and mitigations are developed and applied [TE-1b].

### Management Actions

The Endangered Species Act (ESA) requires special protection and management of Federally listed threatened and endangered (T&E), proposed, and candidate plant and animal species (16 U.S.C. 1531-1544, as amended). The BLM implements the ESA through its National Special Status Species Policy contained in BLM Manual 6840 [TE-2]. This policy directs the BLM to plan and implement programs to conserve T&E species, and to ensure that actions authorized, funded, or carried out do not jeopardize listed species or contribute to the need to list a species [TE-3]. This policy further charges BLM State Directors with the responsibility of

giving state-designated species the same level of protection provided for Federal candidate species [TE-4].

Specifically, the BLM is to carry out the following:

- Determine the distribution, abundance, and reasons for the current status, and habitat needs for candidate (and sensitive) species occurring on land administered by the BLM, and evaluate the significance of BLM-administered lands or actions in maintaining those species [TE-5a].
- For those species where BLM-administered lands or actions have a significant effect on their status, manage the habitat to conserve the species by the following means [TE-5b]:
- Include candidate (and sensitive) species as priority species in land use plans [TE-5c].
- Develop and implement area-wide and/or site-specific management plans for candidate (and sensitive) species that include specific habitat and population management objectives designed for recovery, as well as the management strategies necessary to meet those objectives [TE-5d].
- Ensure that BLM activities that affect the habitat of candidate (and sensitive) species are carried out in a manner consistent with the objectives for those species [TE-5e].
- Monitor populations and habitats of candidate (and sensitive) species to determine whether management objectives are being met [TE-5f].

### *Allowable Uses and Actions*

The BLM has made a “No Affect” determination for the Monument for all the listed, proposed and candidate species, and critical habitat identified by the U.S. Fish and Wildlife Service as potentially occurring in Sandoval County [TE-6]. No current or potential habitat exists in the Monument to support these species.

The BLM has identified 13 sensitive species as potentially occurring or having suitable habitat within the Monument and Southwest Acquisition. The BLM will manage these species in

accordance with the BLM 6840 Manual if any are identified [TE-7].

The BLM will evaluate the Monument for new special status species as the special status species list for Sandoval County is updated [TE-8].

### ***Implementation Decisions***

None.

### ***Support Services***

- Engineering

Engineering support services may be needed to locate visitor use facilities in a manner so as to avoid degradation of special status species habitat.

### **Monitoring**

The Monument, Southwest Acquisition, and any acquired lands will be evaluated for potential habitats of known listed and other special status

species. These evaluations will be updated as special status lists are updated and/or as the BLM acquires land in the Planning Area.

Potential suitable habitats for listed or other special status species found on the Monument will be inventoried for their presence. Endangered Species Act consultation with the U.S. Fish and Wildlife Service will be initiated for listed species at that time and will determine further monitoring needs. Consultation with the New Mexico Department of Game and Fish could begin as well.

Known populations of other special status species will be monitored according to current protocols or current best information.

Changes in population trends will be evaluated. Negative changes will result in change in management of the Monument, and for listed species, re-initiation of Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service.

## VEGETATION AND WOODLANDS MANAGEMENT

### Goals and Objectives

BLM Handbook H-1601 states that the BLM's goals for vegetation are to: (1) Identify desired future conditions for vegetative resources, including the desired mix of vegetative types, structural stages, and landscape and riparian functions, and provide for native plant, fish, and wildlife habitats. (2) Identify the actions and area-wide use restrictions needed to achieve desired vegetative conditions [VW-1].

The objectives of vegetation treatments are as follows:

- Reduce the risk of hazardous vegetative fuels to human life and property [VW-2a].
- Reduce the risk or cost of fire suppression in areas of hazardous fuels buildup [VW-2b].
- Achieve other resource objectives (e.g., improve native plant and wildlife habitat) [VW-2c].
- Treat lands that are in Fire Regime Condition (FRC) Classes II and III [VW-2d].
- Maintain lands that are in FRC Class I [VW-2e].

### Management Actions

#### *Allowable Uses and Actions*

Where needed, vegetation and woodland treatments will consist of prescribed fire, mechanical methods, physical removal of excess vegetation, and chemical methods [VW-3]. The BLM will follow Best Management Practices (BMPs) for vegetation treatments (see Appendix C). Some treatments may need to be combined with others for best results, and some areas may need to be treated repeatedly to achieve the desired results [VW-4].

Three previous planning documents addressed fire and fuels/vegetation management in Kasha-Katuwe Tent Rocks National Monument: *Categorical Exclusion NM-010-2003-066: Tent*

*Rocks Wildland-Urban Interface Hazardous Fuels Reduction Project* (USDI, BLM 2003); *Fire and Fuels Management Resource Management Plan Amendment and Environmental Assessment for BLM Lands in New Mexico and Texas* (USDI, BLM 2004b); and *Albuquerque Field Office Fire Management Plan* (USDI, BLM 2004a). The decisions from these planning and NEPA documents have been incorporated into this stand-alone RMP. The Planning Area is identified as a separate Fire Management Unit (FMU). It will be managed as FMU B/4, defined as an area "where unplanned wildland fire is not desired because of current conditions" [FM-3]. Through proposed vegetation treatments, the BLM will focus on moving the landscape from FRC Classes II and III toward the desired future condition of FRC Class I (see Map 5 and "Fire Management," above) [FM-4].

#### *Implementation Decisions*

Woodlands and vegetative treatments will be applied on acreages and areas identified on Map 5 to move the FRC class from Classes II and III toward Class I [FM-4]. The BLM will use BMPs for vegetation treatment (see Appendix C) [VW-4]. Treatments will be prioritized based on percent slope, FRC class, access, and ownership of the areas to be treated. Only areas having slopes less than 15 percent (2,236 acres in the Planning Area) will be treated.

The NM Standards for Public Land Health (USDI, BLM 2000a) will be complied with in establishing woodlands and vegetative treatments as management moves toward desired future conditions [VW-5].

#### *Support Services*

No support needs have been identified and none are anticipated.

#### *Monitoring*

Areas treated will be monitored for effectiveness of treatment and to determine needs for additional treatments to achieve the desired FRC Class I condition.

## VISUAL RESOURCES

### Goals and Objectives

The BLM's overall goal for visual resources is to manage Federal lands in a manner that protects scenic (visual) values [VR-1a]. The objectives for the two Visual Resource Management (VRM) classes assigned to Federal lands in the Planning Area are as follows. Additional information on visual resource management is contained in Appendix D.

- Class II - Retain the existing character of the landscape, and prevent changes resulting from use authorizations and management actions that would attract attention. Changes in the landscape should repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape [VR-1b].
- Class III - Activities and structures may attract attention but not dominate the view of the casual observer. Changes should borrow from the basic elements found in the natural features of the surrounding characteristic landscape [VR-1c].

### Management Actions

Both the Federal Land Policy and Management Act and the National Environmental Policy Act require that Federal (public) lands be managed to protect the quality of their scenic values. Presidential Proclamation 7394 created Kasha-Katuwe Tent Rocks National Monument under the Antiquities Act of 1906 to protect the complex landscape and spectacular geologic scenery. BLM Manual 8400 is the BLM's guide for managing visual resources on Federal lands; visual resource management is a management responsibility shared by all resource programs. BLM Handbooks H-8410-1 (Visual Resource Inventory) and H-8431-1 (Visual Resource Contrast Rating) also provide guidance.

#### *Allowable Uses and Actions*

Objectives for VRM Classes II and III will be used to guide management actions on the public lands within the Planning Area [VR-2]. In areas

of intensive recreational use and along the existing primary vehicular route (BLM Road 1011) through the Monument, VRM Class III has been assigned to the 1,202 acres that encompass the immediate foreground (¼ mile) surrounding the developed facilities (see Map 11). On the Class III lands, only activities and structures that would attract attention but not dominate the view of the casual observer will be allowed. Any changes would borrow from the basic elements found in the natural features of the surrounding characteristic landscape [VR-3]. VRM Class II has been assigned to the 3,887 remaining acres of public lands, where the intent will be to retain the existing character of the landscape by keeping implementation actions from attracting attention [VR-4].

The BLM will use a contrast rating process to determine the level of contrast acceptable under the assigned VRM class objectives. The contrasts will be measured by comparing the proposed project's basic design elements of form, line, color, and texture with those same elements found in the landform, water, vegetative, and structural features of the surrounding landscape as observed from key observation points. Design principles, techniques, and mitigation measures will be applied to minimize visual impacts [VR-5].

The degrees of contrast are as follows:

- None - Element contrast is not visible or perceived.
- Weak - Element contrast can be seen but does not attract attention.
- Moderate - Element contrast begins to attract attention and dominate the characteristic landscape.
- Strong - Element contrast demands attention, will not be overlooked.

Acquired lands will be inventoried and placed in VRM Class II or III based on the extent of cultural modifications to the landscape, the need to implement future management actions or install facilities to accommodate visitor services, and the need for resource protection and rehabilitation [VR-6].

### ***Implementation Decisions***

VRM Classes II and III will be used to guide management actions on the public lands within the Planning Area [VR-2].

### ***Support Services***

- Engineering Support

Engineering support services will help to locate facilities using effective design principles and

techniques to create the minimum level of visual contrast and to maintain VRM classes through effective use of mitigation measures.

### **Monitoring**

VRM design principles, techniques, and mitigation measures will be applied to projects within the Planning Area. Completed projects will be assessed to ensure that mitigation measures were successful.



*View of the Slot Canyon from BLM Road 1011.*

## **WILDERNESS AND WILDERNESS STUDY AREAS**

### **Goals and Objectives**

There are no wilderness study areas or designated wilderness within the Planning Area. Therefore goals and objectives were not established.

### **Management Actions**

#### *Allowable Uses and Actions*

There are no wilderness study areas or designated wilderness within the Planning Area. However, the Santa Fe National Forest's Dome

Wilderness and the National Park Service's Bandelier Wilderness adjoin the north edge of the Planning Area. None of these special areas is expected to affect the others' resource values.

#### *Implementation Decisions*

None.

#### *Support Services*

No support needs have been identified and none are anticipated.

### **Monitoring**

None required.



*Native Thistle.*

## WILDLIFE HABITAT MANAGEMENT

### Goals and Objectives

The management goals for the Wildlife Habitat Management Program listed below were carried forward from the *Final Protection Plan for Tent Rocks, An Area of Critical Environmental Concern* (USDI, BLM 1987). The BLM will manage the Planning Area in the following ways to maintain and improve healthy habitats for wildlife *[WL-1]*:

- Promote awareness of wildlife values *[WL-1a]*.
- Protect habitat for non-game birds and improve big-game winter habitat *[WL-1b]*.
- Provide water development and rehabilitate grassland parks *[WL-1c]*.

### Management Actions

Nothing in the Proclamation enlarges or diminishes the jurisdiction of the State of New Mexico over fish and wildlife management *[WL-2]*.

Executive Order 13186 (2001) directs Federal agencies to “. . . promote the conservation of migratory bird populations . . .” and to “. . . support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.” It is therefore important that the BLM provide adequate habitat for these bird species *[WL-3]*.

Among the goals and objectives of the Vegetation and Woodlands Management Program are “provide for native plant, fish, and wildlife habitats” and “achieve other resource objectives (e.g., improve native plant and wildlife habitat)” *[VW-1, VW-2c]*. The goals of the Wildlife Habitat Management Program will be achieved to a large extent through the actions of the Vegetation and Woodlands Management Program. Likewise, other goals of the Wildlife Habitat Management Program will be achieved through

the actions of other programs. For instance, when long-term livestock grazing is discontinued within the Monument, livestock water developments will be considered for conversion to wildlife waters *[LG-3]*. Wildlife and wildlife habitat will be among the features of the Monument interpreted for visitors with signs, kiosks, brochures, and websites *[RU-9]*.

### *Allowable Uses and Actions*

The BLM will implement the following actions to maintain and enhance healthy habitats for wildlife populations within the boundaries of the Planning Area *[WL-4]*:

- Conduct a complete biotic survey of the area to determine the plant and animal species present, including vascular and non-vascular plants; soil macro- and micro-invertebrates for each soil type; arthropods, mollusks, and crustaceans; and miscellaneous other invertebrates as they become known *[WL-4a]*.
- Conduct breeding bird surveys on a regular and repeating schedule. If populations decline, develop a mitigation plan in coordination with the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish (NMDG&F) *[WL-4b]*.
- Survey the stream bottom of Peralta Canyon every three years for evidence of riparian and wetland development. If such development occurs, pursue a more intensive riparian restoration program with specific actions to protect and promote the development (based on best science). This will also be applied to any springs or seeps discovered *[WL-4c]*.
- Fence the south and west boundaries of the Planning Area and any acquired lands to prevent damage to big-game winter habitat from trespass livestock *[WL-4d]*.
- Coordinate wildlife management activities with the NMDG&F (including but not limited to game species management and special status species management) *[WL-4e]*.

### *Implementation Decisions*

None.

### ***Support Services***

#### **- Lands and Realty**

Development of a transportation plan will support reduction of road miles and reduce habitat segmentation.

#### **- Engineering**

Engineering support is needed for design, construction, and maintenance of visitor services, resource protection, and other appropriate recreation facilities to ensure long-term wildlife habitat improvement on public land.

#### **- Cadastral Survey**

Cadastral survey is needed to establish lines for boundary fences.

### **Monitoring**

The BLM will conduct a complete biotic survey of the area to determine the plant and animal species present.

Breeding bird surveys will be conducted on a regular and repeating schedule.

Overall habitat condition and trend monitoring will be conducted informally by the BLM. Apparent negative trends will be evaluated and may result in changes to Monument management.

Special circumstances may necessitate monitoring of a specific species. These will be determined through special evaluation, and specific monitoring methods and schedules will be developed at that time.



*Wilson's Warbler.*