### I. INTRODUCTION

# A. Purpose

This Resource Management Plan (RMP) identifies specific management objectives and strategies to protect the abundant natural resources at Sedillo Ridge Open Space and offer limited, resource-based recreational opportunities. These objectives and strategies are consistent with the natural resource issues that have been identified by the public and staff throughout the planning process. The objectives and strategies contained herein were developed by the East Mountain Open Space Steering Committee through extensive community participation and a consensus-based planning approach. Most importantly, this is a *working* document that describes the site's complexity and provides guidance for future management and use based on a number of regional, higher-ranking plans.

# **B.** General Property Information

Bernalillo County (County) purchased Sedillo Ridge Open Space (Sedillo Ridge) in January of 2000 with mill levy funds from a 1998 referendum that approved ½ mill for open space purchases. Community residents encouraged the County to purchase this property to prevent residential development. The County's Parks & Recreation Department oversees and manages the property.

Sedillo Ridge consists of 496 acres of rolling hills, steep ridges, and open meadows. It is located on the northern plateau of the Manzano Mountain Range, south of Interstate 40, seven miles south of Tijeras Village and approximately 30 miles southeast of Albuquerque. The Cibola National Forest borders the property on the west; the eastern, northern, and southern boundaries abut private lands zoned A-2. Elevation ranges from approximately 7,300 to 7,700 feet above sea level.

The property shows no signs of habitation. It has been used over the years for fuel wood gathering. Sedillo Ridge takes its name from the Spanish Colonial Village of Sedillo Ridge established in the late 1800's north of the site. [See *Tijeras Canyon: Analyses of the Past,* edited by Linda S. Cordell, for a historical reference of the area.]

# C. Legal Description

Sedillo Ridge is located in Bernalillo County; Zone Atlas Volume 2, page M-33. The property is zoned A-2, rural residential and is undeveloped. The parcel listed below comprises the 484-acre property. The legal description is: Parcel C as shown on the land division Plat

Lands of City of Albuquerque. A vicinity map showing Sedillo Ridge's location in relation to the other East Mountain open space properties is included on the following page.



Sedillo Ridge consists of 494 acres of rolling hills, steep ridges, and open meadows. (Photo by Kathy Begeal, 2003.)

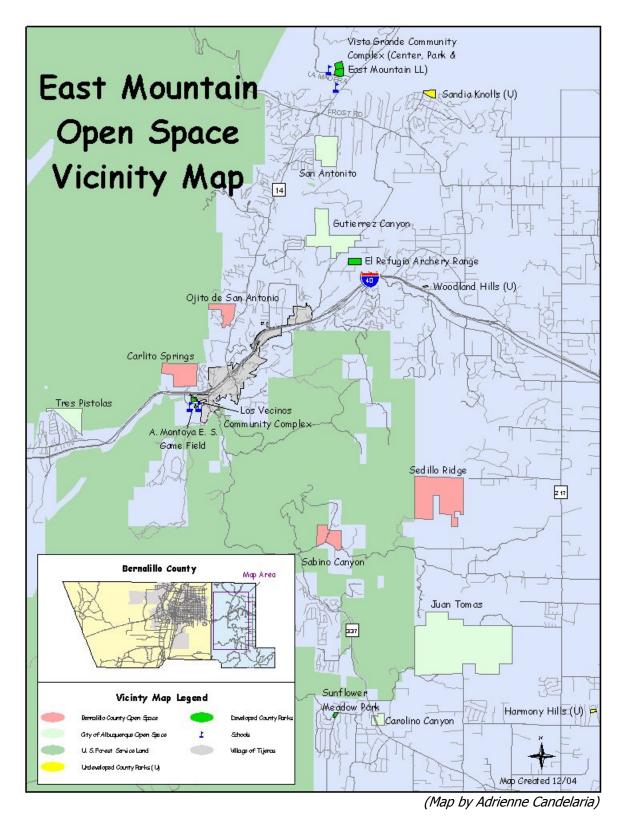
# D. East Mountain Open Space (EMOS) Planning Process

In the fall of 2001, Bernalillo County Parks and Recreation Department (County) applied for and received a technical assistance grant from the Rivers, Trails and Conservation Assistance Program of the National Park Service to support the County's efforts in developing RMPs for recently acquired open space properties in the East Mountains. Recognizing the benefits of partnership planning, the City of Albuquerque Open Space Division and the U.S. Forest Service, Sandia Ranger District, joined the East Mountain Open Space planning process.

The National Park Service facilitated a community-based planning process that made concerted efforts to involve all East Mountain residents in open space management discussions. Key planning steps included:

 Forming a steering committee with individuals representing adjacent neighborhoods, land grant associations, trail users, wildlife interests, youth groups, educators, East Mountain Historical Society members, East Mountain Garden Club members, and land management agencies.

Map 1. East Mountain Open Space Vicinity Map



- Organizing familiarization tours of each property to better understand site issues, unique values and characteristics, and management opportunities.
- Establishing *East Mountain Open Space Vision*; organizational mission, and resource management goals.
- Understanding critical issues and concerns related to natural, historical and cultural resource protection, public use, and adjacent lands.
- Developing site knowledge through trail construction training, fuel load reduction workshops, Global Positioning System (GPS) mapping of property features, Youth Conservation Corps site restoration work, and Talking Talons Youth Leadership environmental education and research.
- Conducting community outreach through neighborhood meetings, additional site visits, and newspaper feature articles.
- Organizing and hosting community design *Charette* workshop to consider appropriate uses, facility, and site design elements.
- Developing RMP with the assistance and support of East Mountain residents.

# EMOS Steering Committee Organizational Mission:

In order to provide sustainable public access with natural resource conservation, we will develop stewardship plans for all the East Mountain Open Space properties.

(Adopted by East Mountain Open Space Steering Committee, July 2002)

# i. East Mountain Open Space Steering Committee

Early in the process, citizens endorsed the idea of establishing a project steering committee. Individuals volunteered to serve on the East Mountain Open Space Steering Committee (Steering Committee) to help develop RMPs for each property. Committee members represented neighborhood associations, recreational trail users, adjacent landowners, wildlife interests, forest health, land grant associations, *acequia* organizations, young adults, educators, local media, and regional land management agencies. The key roles and responsibilities of the Steering Committee included:

- Understanding the concerns and desires of the local community regarding open space management.
- Serving as local ambassadors for the project.
- Promoting the values of partnership planning and consensus building.
- Becoming familiar with the issues, concerns, and resources at all of the open space properties.
- Leading community outreach and public involvement activities.
- Agreeing to work with others who may have different opinions.
- Assisting the technical team by organizing meetings, site visits, events, and other community involvement activities.
- Reviewing, developing, and commenting on planning documents.

Subcommittees organized neighborhood meetings and additional site visits to gather more information and to develop issues and opportunities associated with each site. Each open space property was represented by subcommittees that further investigated issues and opportunities associated with each site.

# ii. Public Meetings

San Antonio Acequia Association and the

Office of the State Engineer

In addition to monthly Steering Committee meetings that were open to the public, the County also met with neighborhood and special interest groups regarding Sedillo Ridge and participated in East Mountain area events. These meetings and events are listed in Table 1 below.

Meeting Type/Location Date Attendance **Property** East Mountain Pride Day/Vista Grande Community **All Properties** April 29, 2003 Event booth Center (CC) Neighborhood: Canyon Estates / Wells Fargo Bank Carlito Springs May 22, 2003 10 Blessing of the Spring/ Onsite Ojito de San Antonio May 7, 2003 Event booth Neighborhood/ Onsite Tour Carlito Springs July 22, 2003 East Mountain Discovery Days/ Sandia Ski Area All Properties July 26, 2003 Event booth 22 Neighborhood/ Resident Home Sedillo Ridae July 10, 2003 Sabino Canyon Sept. 7,2003 Neighborhood/ Cedro Campground 15 East Mountain Pride Day/Los Vecinos CC All properties April 25, 2004 Event booth Design Charette/ Tijeras Ranger District All properties Nov. 19, 2003 50 Nov. 16, 2004 San Antonio Acequia Association Ojito 5

Ojito

Dec. 15, 2004

14

Table 1. Public Outreach.

#### E. Relevant Plans

General goals and policies for County open space properties were identified in four higher-ranking plans. Those plans are the Albuquerque/Bernalillo Comprehensive Plan (1988), Major Public Open Space Facility Plan (1999), East Mountain Area Plan (1992), and the Bernalillo County Parks, Open Space, Trails Master Plan (2003). Additional related land management strategies may be found in the Cibola National Forest Land and Resource Management Plan produced by the United States Forest Service as amended in 1990 and 1996 (USFS).

i. Albuquerque/Bernalillo Comprehensive Plan (Comprehensive Plan), 1988.

The Comprehensive Plan gives broad direction for open space acquisition. Sedillo Ridge was acquired because it meets many of the purposes outlined in the Comprehensive Plan. The site conserves natural resources and environmental features and provides for outdoor recreation and education opportunities.

# Major Public Open Space Purposes:

- 1. Conservation of natural resources and environmental features
- 2. Provision of opportunities for outdoor education and recreation
- 3. Shaping of the urban form
- 4. Conservation of archaeological resources
- 5. Provision for trail corridors

Albuquerque/Bernalillo County Comprehensive Plan, 1988

# ii. Major Public Open Space Facility Plan (MPOS), 1999.

The MPOS is more specific than the Comprehensive Plan and was adopted by the County in 1999. The MPOS is the primary policy document for open space management. It establishes policies for many of the natural resource management issues and visitor use. The MPOS categorizes open space properties and their associated uses into several categories. Sedillo Ridge is defined as a *Protected*, *Undeveloped Open Space* because it has limited parking and visitor access will require management to protect the water, plant, and wildlife resources. [See Appendix A, Permissive and Conditional Uses in Major

Public Open Space from the MPOS, for additional information regarding the designations of public open space properties.]

# iii. East Mountain Area Plan (EMAP), 1992

The EMAP provides direction specific to East Mountain open space conditions and goals. It also identifies priority acquisition areas in the East Mountains. The EMAP gives specific policy recommendations in two areas: (i) a mandate for the County to work with the USFS and City of Albuquerque (City) on joint projects, and (ii) a mandate to develop interpretive signage that explains historic, natural, and archaeological features along rural and scenic roadways in the East Mountain area. The EMAP is currently being updated by County Planning staff and East Mountain residents.

iv. Bernalillo County Parks, Open Space, Trails Master Plan (POST), 2003

The POST is the most recent plan completed by the County's Park and Recreation Division. It articulates the County's goals and objectives for its open space program. In addition to providing vision and mission statements for the program, the POST also delineates action items for County open space properties, including Sedillo Ridge. A sampling of pertinent OSAC goals and objectives from the Post follows:

- OSAC Goal 4: Develop management plans for BCOS properties that conserve and enhance natural and cultural resources while providing opportunities for public education and recreation.
- OSAC Goal 5: Preserve and enhance water resources on BCOS properties.
- OSAC Goal 7: Form partnerships with agencies and community organizations to build BCOS capacity for land management.
  - v. Cibola National Forest Land and Resource Management Plan (as amended 1990 and 1996)

Sedillo Ridge is adjacent to the Cibola National Forest along its western boundary.

Because of this proximity to federal land, the Cibola National Forest Land and Forest Resources

Management Plan may outline beneficial resource management strategies applicable to Sedillo

Ridge. It is mentioned here as a necessary reference and guide for future decision-making at
the site. The shared boundary presents numerous challenges and opportunities for future use
and management.

### BERNALILLO COUNTY OPEN SPACE PROGRAM, 2003

#### **VISION**

Bernalillo County Open Space will become a dynamic network of properties with important natural and cultural resources managed to benefit people, plants, and wildlife by protecting or enhancing view sheds, water resources, wildlife habitat, cultural/historic sites, and prime agricultural land; while providing resource-based recreation.

#### **MISSION**

To preserve and provide natural areas, cultural resources and resource-based recreation for Bernalillo County citizens. These lands are acquired and managed to conserve natural and cultural resources, provide opportunities for education and recreation and to shape the urban environment.

### OPEN SPACE ADVISORY COMMITTEE (OSAC) GOALS

These goals were written and approved by the OSAC, a citizen body that advises the Bernalillo County Open Space (BCOS) program. The following goals apply to Sedillo:

- 1. Develop management plans for BCOS properties that conserve and enhance natural and cultural resources while providing opportunities for public education and recreation.
- 2. Preserve and enhance water resources on BCOS properties.
- 3. Develop best management practices for all properties.
- 4. Form partnerships with agencies and community organizations to build BCOS capacity for land management.

### F. Guiding Principles for all East Mountain Open Space Properties

The Steering Committee has developed the following guiding principles for all nine open space properties. These guiding principles were developed to establish a fundamental level of consistency among the sites leading to a more seamless visitor experience.

#### i. Site Improvements

Design and install appropriate site improvements such as boundary fences, trails, and other improvements that will support a quality visitor experience while maintaining the undeveloped character of an open space property.

#### ii. Natural and Cultural Features

Protect and enhance significant natural and cultural features by protecting existing ecosystems and developing strategies to minimize damage, protect riparian areas, re-vegetate disturbed areas, and minimize the risk of fires.

#### iii. Recreational Activities

Safely accommodate shared uses by supporting diverse recreational activities such as hiking, mountain biking, equestrian, and educational activities while minimizing user conflicts and other safety hazards.

### iv. Educational Opportunities

Provide diverse educational opportunities to a variety of open space visitors.

# v. Landowner Cooperation

Cooperate with adjacent landowners/managers to minimize negative impacts and promote opportunities for interagency collaboration.

# vi. Long-term Stewardship

Sustain long-term stewardship by developing management partnerships and funding strategies that address long-term property needs.

# II. EXISTING CONDITIONS

#### A. Climate

Temperatures within the region range from an average low of 10 degrees Fahrenheit (F) in January to 90 degrees (F) in July and August. Temperature extremes vary from -27 degrees (F) to a high of 99 degrees (F).

### B. Geology

The bedrock types within the area include sandstone, claystone, and shale. The New Mexico Bureau of Geology and Mineral Resources Memoir 29 notes that the site lies east of the Tijeras Fault. Geology at the site is typical of the East Mountain area in general (Kelley 1977).

### C. Topography

Site elevation ranges from approximately 7,300 to 7,700 feet above sea level.

#### D. Soil Conditions

Soil types at Sedillo Ridge include soils from the Rock outcrop, Seis, Silver, and Witt series. Rock outcrop series soils are formed where sandstone, limestone, or basalt has been

exposed through major geologic functions such as faulting, uplifting, or stream channel erosion. Seis series soils are moderately deep, well-drained soils that formed in weathered limestone residual materials on the sides of mountains. They are moderately permeable. Silver series soils are deep and well drained that formed in old alluvium derived from mixed sedimentary rocks or piedmonts. Permeability is slow. Witt series soils are deep, well drained soils that formed in sediment derived from mixed rocks on uplands. Witt series soil has moderately slow permeability and is used for range, wildlife habitat, watershed, and community development. More soils information specific to Sedillo Ridge follows (Rich 2000):

# i. ROF: Rock outcrop-Orthids complex

Orthids soils typically occur where bedrock materials are limestone, sandstone, or schist and have been exposed at the surface. Slope conditions range between 40 and 80 percent, surface water runoff is very rapid, and the potential for erosion by water is moderate. These soils are typically thin to very thin, and contain large amounts of oversized materials. Elevation ranges between 6,000 and 10,500 feet above sea level. There is little or no vegetation with this soil type (Rich 2000).

### ii. SWC: Silver and Witt soils

Silver and Witt soils are found in the area east of the Sandia and Manzano Mountains. These soils are 55 percent Silver very fine sandy loam and 25 percent Witt very fine sandy loam. Witt soil is dominant north of Interstate Highway 40 (I-40); Silver soil is dominant south of I-40. Silver and Witt soil is found in conditions with five to nine percent slope, rapid surface water runoff, and moderate to severe water erosion hazard. Range, watershed, wildlife habitat, and community development are appropriate uses for this soil type (Rich 2000).

### iii. Seis-Silver complex

This soil is typical of the area east of the Manzanita Mountains in 10 to 40 percent slope conditions. The Silver soil component is from the alluvial fans below the sides of canyons where surface water runoff is medium to rapid and water erosion hazards and soil blowing are considered moderate (Rich 2000).

# iv. Te: Tesajo-Millett Stony Sandy Loam

These soils occur upon alluvial floodplain surfaces. Runoff is medium and the potential for erosion is moderate. These soils are comprised mainly of sandy and silty gravels with some intervals of silty sand (Rich 2000).

# E. Hydrology and Water Quality

Groundwater depth varies from 200 to 600 feet throughout the property. Annual precipitation at the Sandia Ranger Station (USFS)—the nearest gauging station—is 13.9 inches. No known seeps or springs are located on the property.

#### F. Plant Communities

Soil conditions, precipitation levels, and human influence have contributed significantly to the development of plant life at Sedillo Ridge. Native vegetation is principally grasses and evergreens including Blue Grama, Ring Muhly, Western Wheatgrass, and scattered Piñon Pine, and Oneseed Juniper (Rich 2000). For management purposes, Plant communities at Sedillo Ridge are grouped into two different plant typologies—the Piñon-Juniper community and the Grassland Meadows community.

### i. Piñon-Juniper Community

Approximately 95 percent of the site is comprised of the Piñon-Juniper community. Two rare and sensitive plant species may be found within this community. First is Gypsum Sand Verbena, *Abronia bigelovii*. This is found in both grasslands and Piñon-Juniper woodlands. Second is the Santa Fe Milkvetch, *Astragalus feensis*. This is found primarily in Piñon-Juniper areas. These species have not been located at Sedillo Ridge but the property will continue to be monitored for their presence. [See Appendix B for photos of these rare and sensitive plants.]

### ii. Grassland Meadows Community

Grassland meadows comprise approximately 5 percent of the vegetation types at Sedillo Ridge. Native grasses include blue grama, ring muhly, and western wheatgrass, among others.





Native grasses, such as these at nearby Sabino Canyon Open Space, are indicative of those found within the Sedillo Ridge Grassland Meadows plant community. (Photos by Lisa Powell © 2004)

#### G. Forest Health and Fuel Load Reduction

Vegetation within the Piñon-Juniper forested areas is generally thick and overgrown at Sedillo Ridge. Existing conditions may require a significant fuel load reduction effort to include trimming, thinning, and removal to lower fire risk, increase water infiltration, and reduce susceptibility to plant and insect diseases.

# **H. Forest Pests**

Primary pests are those that attack tree species and that are likely to be found at Sedillo Ridge. Open space management should be concerned with Ips Bark Beetles, Piñon Pitch Nodule Moth, Western Cedar Bore, Twig Beetles, Round headed, and Fatheaded Wood Borer. Piñon pine dieoff is occurring in this area of the East Mountains as a result of persistent drought and Ips Bark Beetle infestations.



Approximately 95 percent of Sedillo Ridge is comprised of the Piñon-Juniper plant community.

#### I. Noxious Weeds

There are three classes of noxious weeds in New Mexico as defined by the New Mexico State University Cooperative Extension Services publication, *New Mexico's Invasive Weeds* (Lee 1999). Class A weeds are not native to an ecosystem and are not presently found in the state but are threatening to invade. Preventing infestations and eliminating new infestations is the highest priority for this class. Class B weeds are not native to the ecosystem and are presently limited to particular areas within the state. Preventing new infestations should be a priority for weeds in this class. Class C weeds are also not native to the state yet are widespread throughout the state. The following noxious weeds are likely at Sedillo Ridge: Class A—Hoary cress (*Cardaira draba*), Canada thistle (*Cirsium arvense*), and Scotch thistle (*Onopordum acanthium*); Class B—Russian knapweed (*Acroptilon repens*), and Musk thistle (*Carduus nutans*); and, Class C—Field bindweed (*Convolvulus arvensis*), and Jointed goatgrass (*Aegilops cylindrica*).

Noxious weeds require long-term treatment to effectively control their populations. The County will consider incorporating environmentally sensitive control measures to control weed infestations.

#### J. Wildlife Communities

The availability of plant forage attracts many animal species to Sedillo Ridge. Good vegetative cover at Sedillo Ridge is also favored by many animals as wildlife corridor habitat. Evidence of deer, mountain lion, and black bear presence at Sedillo Ridge has been found. The most prevalent, large mammal found at Sedillo Ridge is the mule deer. It is not uncommon to find them bedded in the juniper during the summer months, or traveling to and from water sources. Sedillo Ridge provides habitat for these large animals during times of drought and its location minimizes potential conflicts that may occur if they had to travel longer distances for food and water.

## i. Federal Endangered Species

There are two endangered mammals found in Bernalillo County—the Spotted Bat and the Meadow Jumping Mouse. The Spotted Bat habitat includes all forest types found in the area; however, it is known to occur less than regularly in this area. A variety of rangeland management activities contribute to the loss of habitat for the Meadow Jumping Mouse. The

degradation of habitat in areas where these bats and mice exist can be detrimental to their populations.

# ii. State Sensitive Species

A wildlife biology inventory will be conducted to assess habitat viability for federally listed threatened and endangered species as well as state listed and candidate species of concern. Where appropriate, site improvements will be considered to enhance the viability of the identified species at Sedillo Ridge. In addition to site-specific enhancements, it is recognized that encouraging wildlife corridors throughout open space properties in the East Mountains, including those owned by the City of Albuquerque, Bernalillo County, and the U.S. Forest Service, is an important consideration in the resource development at all open space properties.

#### III. HISTORY AND CULTURE

The land originally supported the nearby communities of Juan Tomás and Sedillo Ridge. These communities historically used the property for hunting and firewood gathering in addition to other traditional uses such as grazing and dry land farming. Over time, much of the property was acquired by the USFS. During the 1970s, the USFS traded this land with the City of Albuquerque for a portion of the Elena Gallegos foothills area on the west side of the Sandia Mountains.

The City of Albuquerque sold the Sedillo Ridge land to a developer in the early 1990s. The property was slated for development as a residential subdivision. Local residents banned together to fight development plans. Sedillo Ridge was purchased by the County in January 2000 with funding generated from a 1998 mill levy referendum that approved a ½ mill increase for open space purchases.

#### IV. LAND USE

#### A. Onsite Activities

The County has been relying on nearby residents to report suspicious and illegal activity on the property. No improvements have been made and there have been no coordinated activities at Sedillo Ridge since the County purchased it.

#### **B. Structures**

There are no known structures at Sedillo Ridge.

#### C. Resource-based Recreation

Primary recreational opportunities will be hiking, horseback riding, mountain biking, picnicking. Wildlife is prominent in the area making Sedillo Ridge suitable for wildlife watching. Several informal trails wind through the site to USFS land. Local residents use these trails frequently. They have been mapped and many are listed by the USFS and other user groups.

Currently, there is no vehicular access to the property. Bear Scat Trail—the only road to the property—was recently closed by the USFS. The remnants of old wagon trails and roads can be found on the property and older residents remember taking these paths to gather firewood years ago.

# D. Education and Interpretation

#### i. Wildlife Habitat Degradation

Collaborate with Talking Talons Youth Leadership Center and Moriarty Public Schools to develop school group seminars and interpretive displays that illustrate the hazardous effects of motorized uses on wildlife habitat

#### ii. Healthy Forest Initiative

Collaborate with Talking Talons Youth Leadership Center and Moriarty Public Schools to develop seminars, work days, and interpretive displays that convey the importance of healthy forests and the effects of human impacts in context to local, regional, and global forest conditions.

# E. Access and Parking

To access the site from I-40, proceed south on South 14 to Juan Tomes Road. Non-vehicular access to the site begins at Bear Scat Trailhead, with no formal parking area yet established. Vehicles typically park along the road across from the trailhead in an area cleared of vegetation. Parking is very limited.

# F. Fencing & Signage

The County has installed limited signage and fencing at Sedillo Ridge.

# G. Adjacent Land Use

Sedillo Ridge is surrounded by single-family, residential development along the eastern and southern boundaries. There are undeveloped private land holdings to the northeast of the property and the entire western boundary abuts the Cibola National Forest. This portion of the Motorized and non-motorized vehicles as well as hiking, horseback riding, and nature observing frequently use Cibola National Forest.

#### V. COMMUNITY FEEDBACK

The Steering Committee played an important role in planning efforts by participating in dialogue about management goals for Sedillo Ridge. Their responses to key questions regarding values, issues and concerns, and opportunities reflect current and future management goals at Sedillo Ridge. Their responses are summarized below.

# What do you think are the most important values?

- The property currently supports multiple non-motorized uses.
- Adjoins Cibola National Forest and direct linkage to Cedro Peak Recreation Area.
- Property once belonged to USFS and before that land grant lands.
- The NE corner of the property contains old growth piñon trees.
- Mapped trails already exist for the site.
- Constituency in place already using property. Three neighborhood organizations supported County acquisition of the Property.
- Firebreak was constructed on the Open Space.

# What are the **issues and concerns** that need to be addressed?

- There is increasing use of all terrain vehicles (ATVs) on the property.
- The fuel load is heavy throughout the site.
- The property is landlocked because of bankrupt developers. A bank owns tracts surrounding Sedillo Ridge Open Space.
- Accommodating motorized users will be a major issue for East Mountain Open Space planning. Some concerns about displacing motorized use to other locations.
- Vehicle access to the site will be difficult.

#### What **opportunities** present themselves at the site?

- Consider a regional trails park concept. Explore trails systems for separate users.
- Link Loma Ponderosa, Juan Tomás and National Forest as regional open space trails park.
- The property's geographical features could be used to manage recreational uses.
- Wildlife Preserve; evidence of animal activity along ridges.
- Grant writing opportunities exist for trails development.

### What information exists and who has it?

- The previous property owner/developer completed various studies. Bernalillo County has the resource studies.
- Elaine Morrell has agreed to summarize the information for the Steering Committee.

# VI. MANAGEMENT OBJECTIVES FOR RESOURCES, VISITORS, AND STEWARDSHIP

The information compiled in this section is a result of analyzing site baseline data and key issues identified through community input. This section begins with a statement that describes the desired future conditions at Sedillo Ridge. This statement was developed with strong community involvement and it is not meant to limit future site opportunities or decisions.

"Sedillo Ridge will be a place for resource based recreation and forest health restoration. People will come to the site to hike, bike, ride, and walk. This site will develop as the hub of a larger (non-motorized) trail network within the East Mountain area that will connect other public lands to this trail system. Neighboring residents and community organizations will become stewards of the property, helping to accomplish these restoration and trails projects. The County will provide leadership that will leverage funding and reinforce stewardship partnerships.

The County will use management objectives to assure that all resources are available to the public, yet cared for in a manner that will sustain them over time. Early in the planning process, those involved recognized the need for balancing habitat protection with public use. These management objectives try to achieve such a balance. Zones have been developed with specific objectives and strategies in mind. Despite similarities, they may vary considerably from one zone to the next. The management objectives and strategies included in this section are not static and will be reviewed periodically in terms of their effectiveness. If changes are needed, they will be implemented in a timely manner to assure that damage or misuse does not continue unchecked.



Sedillo Ridge's plant communities are grouped into two different plant typologies the Piñon-Juniper community and the Grassland Meadows community. (Photo by Kathy Begeal, 2003)

# A. Management Zones

# i. Forest Management Zone

The majority of the property falls within this management zone. Piñon pine, juniper, and Gambel oak are good examples of the trees one expects to find in this management zone at Sedillo Ridge, especially along the bottom reaches of cliffs and escarpments.

# ii. Grassland Meadow Management Zone

There are several native grass meadows of varying size on the property. Although these meadows comprise less than 5 percent of the total land area at Sedillo Ridge the degradation of many of our native grasslands statewide warrants their listing as a separate management zone.

# B. Management Objectives and Strategies

- i. Forest Zone Management Objectives and Strategies
- Trails in this area shall be of a lower design standard to maintain the natural character of the area. Less disturbance and more fuel loading adjacent to such trails is appropriate.
- Maintain the rural nature of this area with special attention given to ensuring a healthy balance of forest resources coupled with appropriate fire suppression.
- Re-establish healthy forest conditions throughout the property
  - Adopt and implement a Sedillo Ridge Forest Health Restoration Plan
  - Reduce risks of catastrophic wildfire on property
  - Heavily wooded areas should be thinned from the current stocking levels of up to 160 square feet (trunk area) per acre to 40 to 60 square feet (trunk area) per acre. Removing less favorable tree species in this zone will accomplish this. The trees to be selected to keep are as follows (listed in priority):

Alligator Juniper Ponderosa Pine Piñon Pine Rocky Mountain Juniper (Local Priority) One Seed Juniper

- Update emergency responders
  - Inform responders as to open space accessibility
  - Inform responders as to general fuel-load condition onsite
  - Organize interagency workshop to coordinate cooperative response in case of a major fire event.
- Maintain and enhance wildlife habitat
  - Designate and separate wildlife habitat corridors from visitor use
  - Complete an inventory of wildlife species
  - Monitor wildlife behavior and activity
  - Conduct a wildlife biology inventory to assess habitat viability for federally listed threatened and endangered species as well as state listed and candidate species of concern.
- Inventory plant species on the property
  - Inventory and monitor presence of invasive species
  - Implement volunteer plant removal projects
  - Monitor for possible presence of sensitive plant species.
- Develop visitor management programs that protect bird nesting activities and wildlife foraging.

#### SEDILLO RIDGE RESOURCE MANAGEMENT PLAN

# ii. Grassland Meadow Management Zone Objectives and Strategies

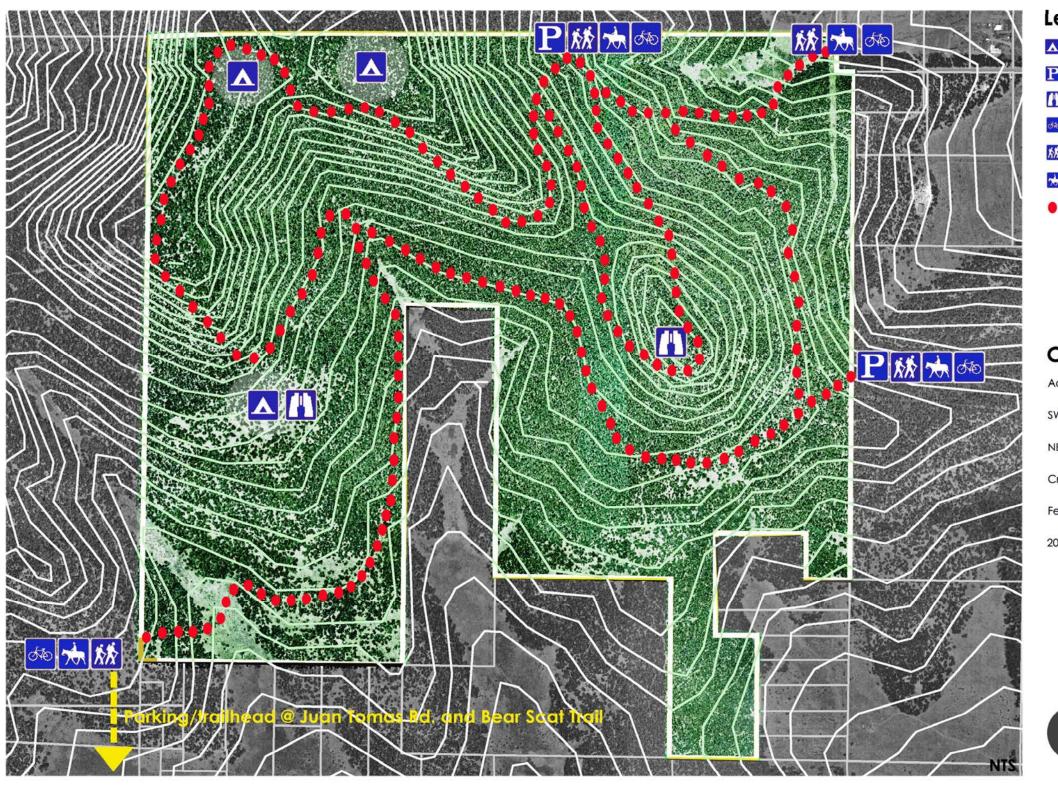
- Inventory plant and animal species on the property
  - Inventory and monitor presence of invasive species
  - Implement volunteer plant removal projects
  - Monitor for possible presence of sensitive plant species.
- Develop meadow management program that enhances native grass health and production.

# iii. Visitor Management Objectives and Strategies

The open space environment at Sedillo Ridge is a natural draw to people seeking quiet refuge. Public access to Sedillo Ridge is important because it fulfills a goal of the *Major Public Open Space Facility Plan*. Sedillo Ridge's role as wildlife habitat for bird and animal species requires that recreational use be balanced with natural resource conservation. Appropriate recreational activities include hiking, picnicking, nature walks, research, and other educational activities.

- Balance recreational and educational uses with conservation of wildlife habitat and cultural resources
  - Assess the site's ecological, physical, facility, and social carrying capacity (Shelby and Heberlein 1986)
  - Develop baseline standards for monitoring impacts and change at Sabino and implement corrective action using *Limits of Acceptable Change* models (see Section C. Management Method)
  - Minimize human and wildlife conflicts through trail location and design, signage, and education
  - Educate visitors and enforce Bernalillo County Open Space Rules and Regulations.
- Provide adequate parking, trails, and other facilities as needed for visitor activities.
  - Evaluate potential parking areas and assess limitations.
  - Encourage hiking, mountain biking, and equestrian access to the Cibola National Forest from Sedillo Ridge.
  - Post regulations at information kiosk.
  - Explore site access and trail development opportunities appropriate for use by disabled visitors.
- Develop visitor management programs that protect bird nesting activities and wildlife foraging. (See site plan on next page.)

Map 2. Sedillo Ridge Site Plan



# Legend:

- A Primitive camping
- Parking area
- Scenic views
- Mountain bikes allowed
- Trailhead
- Equestrian use allowed
- Proposed trail network

# Comments:

Accessibility is biggest challenge.

SW trailhead would be located at Juan Tomas.

NE trailhead is neighborhood access only.

Cross country travelers infiltrate from USFS land.

Fencing would be extrememly difficult.

20' contour lines



#### SEDILLO RIDGE RESOURCE MANAGEMENT PLAN

- Build sustainable trail network at Sedillo Ridge to reduce maintenance requirements over time.
- Develop interpretive programs and exhibits that explore the site's natural resources.
  - Include community organizations such as Talking Talons Youth Leadership Center and Moriarty Public Schools
  - Offer field trip opportunities to school groups
  - Conduct grassland meadow management seminars
  - Conduct trail building and maintenance seminars
  - Install signage highlighting notable species and habitat conservation themes.
- Adopt specific rules and regulations for visitor use
  - Pets shall be allowed in this area, but shall be kept on a leash
  - No person shall smoke in this area
  - No fireworks are allowed in this area
  - No person shall damage, injure, collect, remove or disturb any object of paleontological, archaeological, or historical interest or value located on these lands
  - No trapping, hunting, or fishing shall be allowed in this area
  - There shall be no games or miscellaneous activities in this area without written approval from the Parks and Recreation Department
  - Request amendment to Bernalillo County ordinance to strengthen these rules and regulations.

# iv. Site Stewardship Management Objectives and Strategies

Volunteers from the Horseshoe Valley Neighborhood Association have played an important role at Sedillo Ridge since its purchase in 2000. Many community organizations have donated time to help inventory resources and begin improvements for natural resource restoration and to enhance public safety. Site stewardship is critical for the success of the County's open space program. The following management objectives and strategies will foster a sustainable stewardship program at Sedillo Ridge:

- Organize a cadre of East Mountain Open Space volunteers
  - Broaden the scope of existing open space organizations to support East Mountain projects
  - Develop consistent communication tools among volunteers, community organizations, and land managers.
- Support volunteer initiatives at Sedillo Ridge in a timely manner
  - Improve efficiency of Bernalillo County response to volunteer requests
  - Identify primary contacts for Sedillo Ridge and Bernalillo County

- Collaboratively develop annual work plans considering staff, equipment and budget needs.
- Develop stewardship projects that significantly improve Sedillo Ridge and provide benefits to adjacent landowners.

# C. Management Method

The *Limits of Acceptable Change* (LAC) is a management tool that identifies recreational carrying capacity standards for a specific land area. Principally, the LAC process is a means of resolving conflict. It may be thought of as a method for land managers to resolve conflicts between "managing visitors to provide for the experiences they seek and to deal with the problems of their social and biophysical impacts" (McCool 1996). The LAC process is most beneficial in situations where (1) stakeholders are willing to establish a hierarchy of natural resource goals, (2) where two or more established goals are in conflict, and (3) where all goals may be compromised to some extent as long as they meet or exceed established standards (Cole and McCool 1998). Where these conditions can be established, Bernalillo County intends to use the LAC method as a strategy for continued planning and implementation of resource-based recreational activities at Sedillo Ridge. [See Appendix D for more LAC information.]

### D. Operations and Maintenance

The operation and maintenance of Sedillo Ridge depends heavily on County staff working with community organizations and residents on stewardship projects. The Horseshoe Valley Canyon Neighborhood Association has expressed an interest in helping the County manage the property. Administration of these partnerships will require County staff time. The County would like to formalize a Memorandum of Agreement with the Horseshoe Valley Canyon Neighborhood Association to assist with work on the property. This arrangement will include property improvements with the County providing funding, equipment, and staff time to assist where possible. Maintenance needs range from staff time to coordinate forestry-thinning projects, site improvements, to trail rehabilitation and maintenance. Estimates for site maintenance are included in Appendix E.

# VII. INTERAGENCY COORDINATION

Sedillo Ridge will benefit from interagency coordination in several ways. Key coordinating partners and issues are listed below.

### A. United States Forest Service/Cibola National Forest

The Cibola National Forest borders Sedillo Ridge along the far northwestern and western boundaries. The site has good potential to provide connector trails to existing USFS trails in the Cibola National Forest. Potential trail connections to be evaluated in conjunction with the USFS include:

- Sedillo Ridge to Cedro Peak trail system
- Sedillo Ridge to Juan Tomás Open Space
- Sedillo Ridge to Sabino Canyon Open Space.

# B. Bernalillo County Parks and Recreation Department, Public Works Division, and the New Mexico Department of Transportation

Bernalillo County Parks and Recreation (BCPR) and Public Works Division (BCPW) have Prepared an East Mountain Trails and Bikeways Master Plan. Adoption of this plan is concurrent with approval of the RMPs in the spring of 2005. The Trails and Bikeways Master Plan attempts to link County- and City-owned open space properties, residential areas, commercial nodes, and lands of the Sandia Ranger District. This will be accomplished through a system of suitable shoulder improvements on State of New Mexico and County roads and hard and soft surface trails either within public rights-of-way or on private properties. The Trails and Bikeways Master Plan has incorporated all County and City open space properties and their respective access points and trailheads identified in each RMP. Continued coordination with BCPR and BCPW shall be maintained as the Trails and Bikeways Master Plan and each RMP are implemented.

### C. New Mexico Department of Game and Fish

The New Mexico Department of Game and Fish could provide biological reviews, habitat assessments, wildlife inventories, and baseline studies at all four County EMOS properties. These types of wildlife evaluations may expand our appreciation for the role that any future development, including simple fencing projects, may play in enhancing or degrading wildlife viability at Sedillo Ridge.

### D. New Mexico Forestry Division

The New Mexico State Forestry Division may be able to offer assistance with determining Basal area calculations of the Piton-Juniper plant community at Sedillo Ridge. Basal area is defined as the cross sectional area of the tree at breast height. For example, a tree 16 inches in diameter would have a basal area of 1 square foot. Basal area is calculated to show how trees are distributed on a site. A larger basal area number means that trees are growing closer together which has a variety of effects on forest health, including higher fire risk, decreased water infiltration, and additional susceptibility to plant and insect diseases.

# E. Moriarity Public Schools and Bernalillo County Community Centers

Both of these entities are potential partners for a variety of educational and stewardship projects. A common thread throughout the planning process has been the community's desire to increase educational opportunities at Sedillo Ridge. The County should form partnerships with both school staff and community center staff to initiate curriculum development, student field trips, community events, and other educational activities. Certain events at Sedillo Ridge will require parking along Brannan Road due to limited parking capacity onsite and the need to lessen vehicle impacts.

# F. Law Enforcement and Emergency Responders

Illegal wood hauling, paintball activities, and all terrain vehicle use have been identified as primary law enforcement issues at Sedillo Ridge. Currently, the Bernalillo County Sheriff's Department is responsible for responding to emergency calls at all nine East Mountain Open Space properties (City and County). City of Albuquerque Open Space rules and regulations have been adopted by the County as the governing ordinance for its open space properties. As a result, it could be mutually beneficial for the City and the County to cooperatively fund open space ranger personnel dedicated to the East Mountain area. Although funding is currently not allocated to fill such positions, open space planners from the City and the County should begin a collaborative training effort to assist fire, emergency medical personnel, and law enforcement agencies by preparing detailed response plans. At the same time, predicting public use at the properties during the next 5 to 10 years is essential. These response plans should be presented in an interagency workshop format. The following is a list of items to be included in the response plans along with suggestions for improving the implementation of the plans:

- Compile briefing packets that include detailed maps, sites plans, boundary information, aerial photos, and driving directions to all nine open space properties.
- Include copies of all relevant City/County Open Space ordinances and USFS rules and regulations.
- Distribute briefing packets to appropriate Bernalillo County Sheriff's deputies, management, and support staff as soon as possible.
- Request City and County information technology departments to enter open space property descriptions and pertinent GPS information into Map Quest for patrol unit reference.
- Train site stewards (including neighborhood association and Crime Watch volunteers) in incident report preparation.
- Distribute a comprehensive list of interagency personnel contact information and emergency response telephone numbers.

### VIII. COMMUNITY PARTNERSHIPS

Continued coordination with community organizations will be essential if site development at Sedillo Ridge is to reach its capacity for providing recreational and educational activities. At a minimum, two volunteer oriented stewardship activities should be conducted every year. Several groups have shown an interest in stewardship opportunities at Sedillo Ridge.

# A. Open Space Stewardship

Another goal of this RMP is to develop sustainable stewardship practices for East Mountain Open Space. Currently, neither the City of Albuquerque nor Bernalillo County Open Space programs have the staff or financial resources to fully develop the recommendations identified in these site plans. A key finding of this planning process is the need for neighborhood associations, community organizations, trail user groups, business community members, and schools to take an active part in open space management.

Some community stewardship activity is already occurring. Some examples are Trail
Partners performing trail maintenance, East Mountain High School and the Intermountain
Conservation Trust addressing watershed restoration concerns, the Carnuel Land Grant
Association tackling forest health issues, Talking Talons Youth Leadership Center committing to
environmental education programs, neighbors training as Trail Watch volunteers, the

Albuquerque Amateur Radio Club providing detailed maps, and the Horseshoe Valley Neighborhood Association helping to protect the Sedillo Ridge Open Space. These activities should continue with better coordination between land management agencies.

Demonstration projects have been completed that illustrate neighbors and community groups can organize and complete open space resource management projects. In March 2003, more than 25 volunteers attended a trail construction and maintenance workshop that taught participants skills to assess and improve open space trails. In December 2003, more than 25 volunteers learned fuel-load reduction techniques and applied that knowledge on land at San Antonito Open Space. Additional training workshops in orchard trimming, invasive species removal, historical and cultural site preservation, wildlife monitoring, erosion control, forest restoration and other topics will provide open space land managers with a cadre of volunteers who can assist with land management and take home skills to better manage their own land. Continued training and support of volunteers is critical for a sustainable stewardship program. Stewardship goals and strategies for East Mountain Open Space are being developed.

# **B. Volunteer Organizations**

Volunteers have played an important role in Sedillo Ridge since it's purchase in 1999. The primary community organization that has been involved with Sedillo Ridge is the Neighborhood Association. Continued coordination with this organization will be helpful to Sedillo Ridge as the site's recreational and educational capacity is developed. Neighborhood associations can also provide a watchful eye and instill local ownership of the property. Bernalillo County intends to foster this partnership and forge new relationships with additional Groups as well. The following groups have shown an interest in Sedillo Ridge:

### i. Horseshoe Valley Neighborhood Association

The primary community organization that has been involved with Sedillo Ridge is the Horseshoe Valley Neighborhood Association (HVNA). Neighbors may be interested in participating in site stewardship projects, such as fuel reduction workdays and *Adopt-an-Area* programs. The HVNA can also provide a watchful eye and instill a sense of local ownership of the property.

#### SEDILLO RIDGE RESOURCE MANAGEMENT PLAN

# ii. Talking Talons Youth Leadership Center (Talking Talons)

Continue to partner with Talking Talons and their Youth Conservation Corps work teams to accomplish management objectives and strategies including educational components, trail building, and other projects.

# iii. East Mountain Garden Society

East Mountain Garden Society members could help identify and inventory plants onsite. In addition, they may be willing to help the County develop a guided interpretive walk that highlights the property's diversity of plants.

# iv. Thursday Birders/Partners In Flight

Talking Talons has worked closely with members of these two groups at Carlito Springs and Ojito de San Antonio. These groups can provide technical assistance for conducting bird species inventories and developing management objectives and strategies that sustain and/or expand bird habitat at Sedillo Ridge.

# v. Albuquerque Amateur Radio Club

The Albuquerque Amateur Radio Club assisted Bernalillo County's site mapping efforts by producing a detailed site map for Sedillo Ridge using GPS technology in 2003. The remaining County-owned EMOS properties also need to be mapped at this level. It may be possible to procure these services from the Albuquerque Amateur Radio Club in exchange for access to these sites for Club sponsored events.

#### SEDILLO RIDGE RESOURCE MANAGEMENT PLAN

# IX. CONCLUSION

Bernalillo County purchased Sedillo Ridge to preserve and protect its natural resources and environmental features as a *Protected, Undeveloped Space*. In addition, the purchase of the property was intended to provide resource based recreation and education opportunities for residents and visitors to Bernalillo County. The purpose of this Resource Management Plan is to provide a roadmap to achieve these original goals in addition to the management objectives and strategies agreed to by community stakeholders during the two-year, comprehensive planning effort.

Bernalillo County Parks and Recreation and its Open Space staff would like to offer a sincere and well-deserved *thank you* to all of the concerned citizens who have generously participated throughout this process. In addition an open invitation to all Bernalillo County residents is extended—especially those living in the East Mountains—to actively engage in the implementation of this RMP. The County, along with the local community, can now move forward to the next phase of planning and implementation at Sedillo Ridge with renewed commitment and a common vision.

Dated:	
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