



# SANTA FE COUNTY OPEN SPACE AND TRAILS ORTIZ MOUNTAINS OPEN SPACE M A N A G E M E N T P L A N

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## ACKNOWLEDGEMENTS

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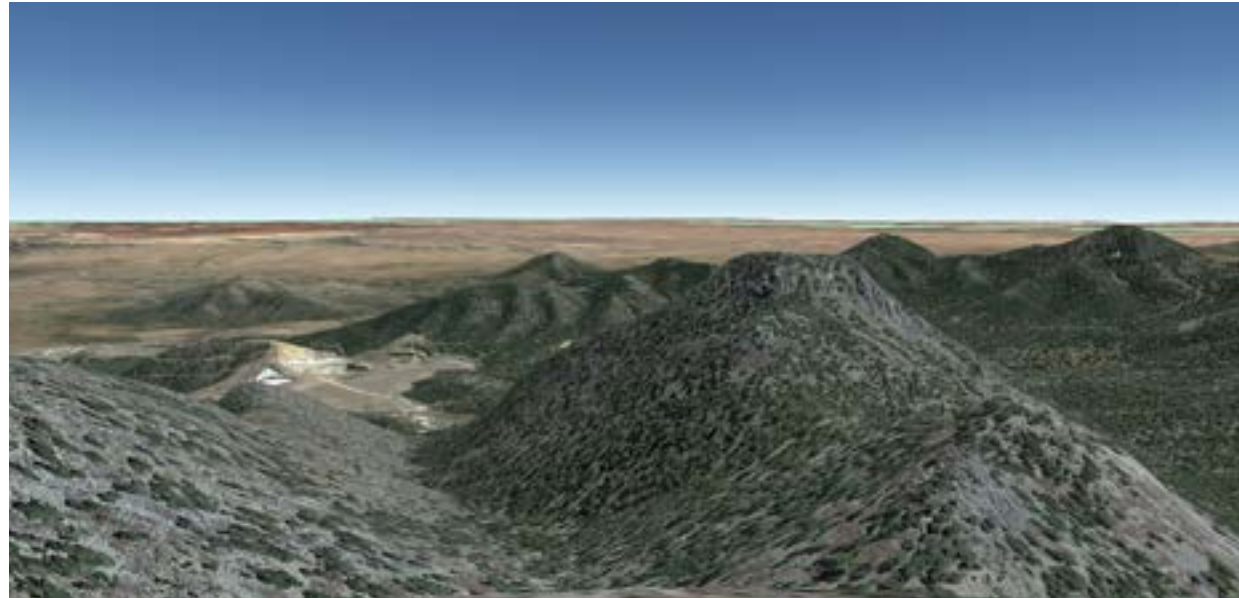
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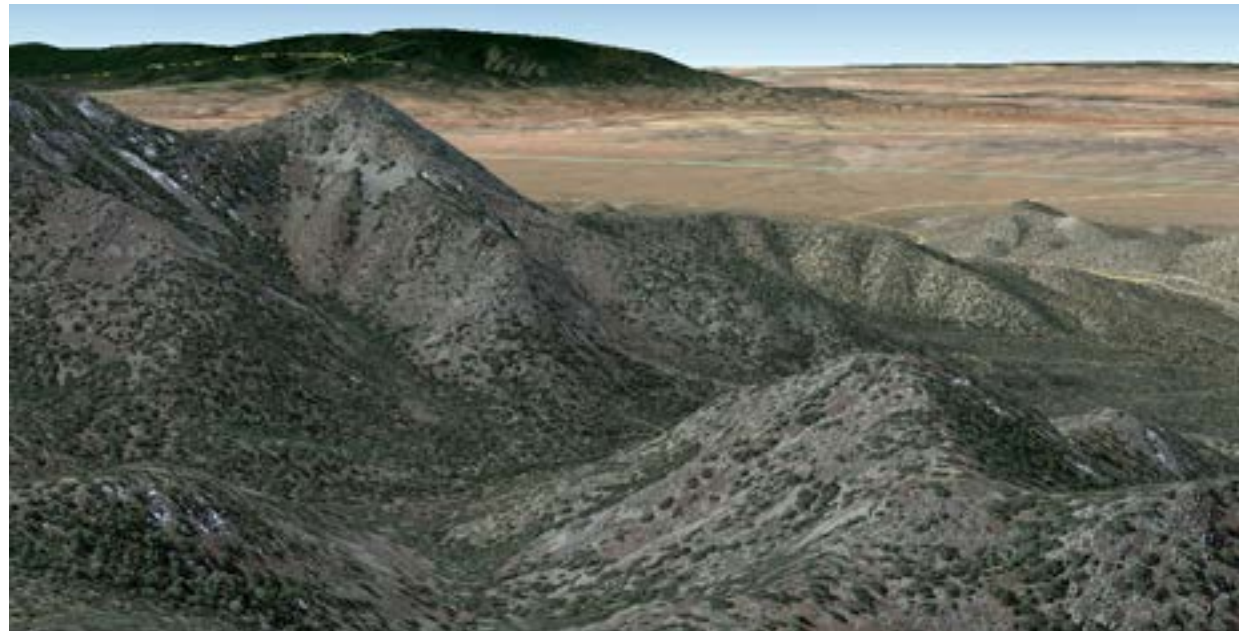
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*Digitally simulated view from North Peak looking southeast toward adjacent open mine on LAC Minerals property.*



*Digitally simulated view from Placer Peak looking north toward Galisteo Basin.*

The Ortiz Mountains Open Space is a 1350 acre property in central Santa Fe County that encompasses the western portion of the Ortiz Mountains. The property was purchased in 2007 to conserve the natural qualities of the site and to continue education opportunities of the ecology and mining history of the area. The goal of this plan is to provide a practical and effective management approach for the Ortiz Mountains Open Space to maintain those attributes while at the same time providing guided educational opportunities to Santa Fe County residents and visitors to highlight and experience the unique property.

The Ortiz Mountains Open Space includes the highest peaks in the Ortiz Mountain range, and is visible throughout Santa Fe County. This property is biologically diverse, contains many wildlife species of conservation need, and is part of the Galisteo Basin wildlife corridor. It also contains many historic mining resources, including the Old Ortiz Mine which is one of the earliest hard-rock mines in the western United States.

Management challenges and opportunities for the Ortiz Mountains Open Space include maintaining safe public access to and on the site, managing educational visits, and managing existing environmental and cultural resources on the steep and rugged property. Access to the site is difficult due to the poor condition and legal restrictions of the access road that is provided through the neighboring gold mine property. Management challenges also include balancing wildlife habitat needs with fuels reduction for wildfire prevention, loss of cultural resources from environmental and user impacts, and long-term habitat consequences related to climate change. This management plan outlines strategies to protect the Ortiz Mountains Open Space by improving access, continuing limited site visits and hikes, conducting science-based management and monitoring to conserve the site's natural and cultural resources, and maintaining existing improvements. The Plan outlines a vision, management goals, project and assessment priorities, site maintenance activities, and community stewardship opportunities.

The Ortiz Mountains Open Space Management Plan identifies short, mid, and long-term management priorities for the property. The short-term priorities include providing safe access to the site by continuing limited educational visits, maintaining existing improvements, and conducting science-based management and monitoring of the natural and cultural resources on the site. In the mid-to-long term, Santa Fe County will work to enhance interpretive educational opportunities at the Ortiz Mountains Open Space and develop a Master Plan for the property.

A Docent Tool Kit is contained in the appendix to this plan which describes the interpretive approach for guided visits and hikes on the Ortiz Mountains Open Space. This Tool Kit also provides a thorough overview of the wonderful and interesting history of the property and the area.

This Management Plan for the Ortiz Mountains Open Space provides the long-term vision and goals for how to manage this remarkable open space and its unique cultural and environmental resources. The Plan's vision and goals reflect the desires of stakeholders and the County to create an exceptional Santa Fe County Open Space and Trails experience.



## 1. BACKGROUND AND EXISTING CONDITIONS



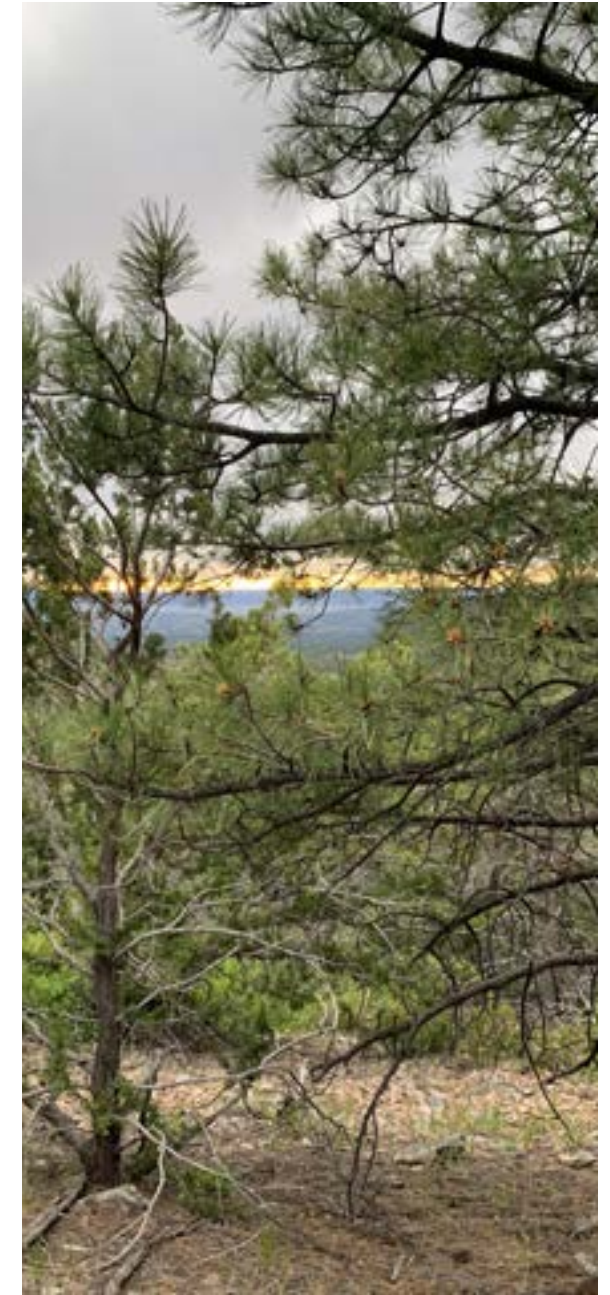
Digitally simulated aerial of the Ortiz Mountains Open Space looking from the north to the south.

### 1.1. PLAN PURPOSE AND NEED

The Ortiz Mountains Open Space Management Plan was developed in order to prioritize management activities in a way that best protects and manages the cultural and natural resources of the property. This plan also carefully considers and examines the feasibility of providing safe experiences on this remote and difficult to access property. The Ortiz Mountains Open Space Management Plan provides direction and specific action priorities for short-term, mid-term, and long-term phases. The purpose of the Ortiz Mountains Open Space Management Plan is to:

- help understand existing environmental conditions,
- clarify priorities for maintenance and resource management,
- identify projects for future investments,
- describe an approach to planning, implementation and maintenance activities, and
- identify stewardship and community educational opportunities.

This management plan will help county staff, volunteers and county residents understand the conditions of the property, and establish the County management vision, goals and strategies for the Ortiz Mountains Open Space.





## 1.2 PLAN PROCESS

The Ortiz Mountains Open Space Management Plan is informed by the County's initial goals for acquisition of the Ortiz Mountains Open Space and a set of planning principles. The planning principles are based on the goals of the Santa Fe County Open Space and Trails Program.

### INITIAL GOALS FOR ACQUISITION OF ORTIZ MOUNTAINS OPEN SPACE

- Preserve and protect the site as an educational preserve.
- Preserve wildlife habitat.
- Preserve cultural resources.
- Provide education on the Ortiz Mountains and its past mining history.

### PLANNING PRINCIPLES

- Adhere to the goals and purpose of the Santa Fe County Open Space and Trails program, and the objectives of the conservation easement.
- Promote public safety and access based on the reasons for acquiring the property.
- Develop sustainable facilities to keep maintenance needs to a minimum.
- Invest in strategic, cost effective, long-term improvements.
- Minimize the disturbance of cultural and ecological resources.
- Use science-based natural resource management and monitoring principles.
- Involve youth and create educational opportunities.

### PLAN UPDATING

This plan outlines specific tasks in the short term, and indicates planning goals in the long term. Plan information is more specific for the short-term (1-5 years), descriptive for the mid-term (5-10 years), and preliminary for the long-term (beyond 10 years).

Changing community needs, environmental conditions, and County management capacity will lead to the need for adjustments to the plan. After the mid-term span of 10 years, this plan will need updating. This plan should be evaluated annually for benchmarks and annual goals and to update property maintenance and management needs.

## 1.3 PROPERTY DESCRIPTION + EXISTING CONDITIONS ASSESSMENT

### 1.3.1. Purchase History

The Santa Fe Botanical Garden acquired the Ortiz Mountains Educational Preserve in 1995 as part of a court settlement between LAC Minerals USA, Inc. and the Friends of Santa Fe County to address cleanup of the Cunningham Hill gold mine. The Santa Fe Botanical Gardens was chosen as the beneficiary of the 1350 acres in the western part of the Ortiz Mountains because of their ability to provide an educational experience for visitors while focusing on conservation values. An access easement was granted to the Botanical Garden through LAC Minerals property to the Preserve. A conservation easement was granted to the Santa Fe Conservation Trust in 2001. In 2007, Santa Fe County purchased the property, now the Ortiz Mountains Open Space, from the Botanical Gardens which included the encumbrances outlined in the Conservation Easement and the access easement. The Botanical Gardens continued to operate the property as an educational preserve with limited guided visits until 2015, when full management of the property was handed over to the County. The property's underlying mineral rights were not part of the County's acquisition. Presently, there are limited regulatory restrictions to excavation of the underlying minerals on the property.

### 1.3.2. Geology and Mine History

The Ortiz Mountains Open Space is a 1350 acre property that includes the highest peaks in the Ortiz Mountains--Placer Peak and North Mountain. The Ortiz Mountains sit at the southwestern edge of the Galisteo Basin and are an important landscape feature in central Santa Fe County.

The Ortiz Mountains form part of the watershed boundary between the Rio Grande and the Pecos River. The Ortiz Mountains formation is the head-waters of three small catchment basins. Managing all activities--including hiking--particularly with a view to reducing erosion, catching stormwater and improving drainage on the Ortiz Mountains Open Space is important to the health of the Galisteo Watershed and the site.

The Ortiz Mountains are geologically part of the Ortiz Porphyry Belt of Santa Fe County which also includes the Cerrillos Hills and the San Pedro Mountains. The precious metals in the Ortiz porphyry belt attracted mining activity. Native Americans and Spanish likely did some limited mining for precious metals in the Ortiz Mountains, but the first significant placer workings began in 1821. The underground Ortiz Mine was opened in 1822. By 1832, several gold-

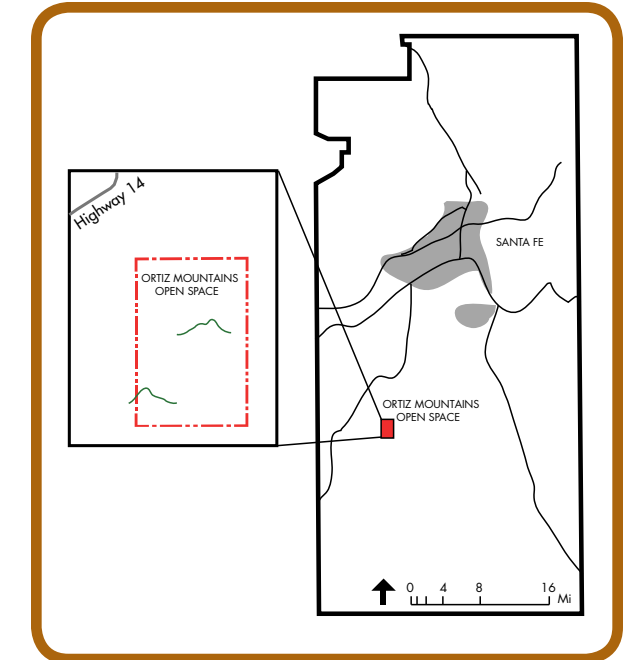
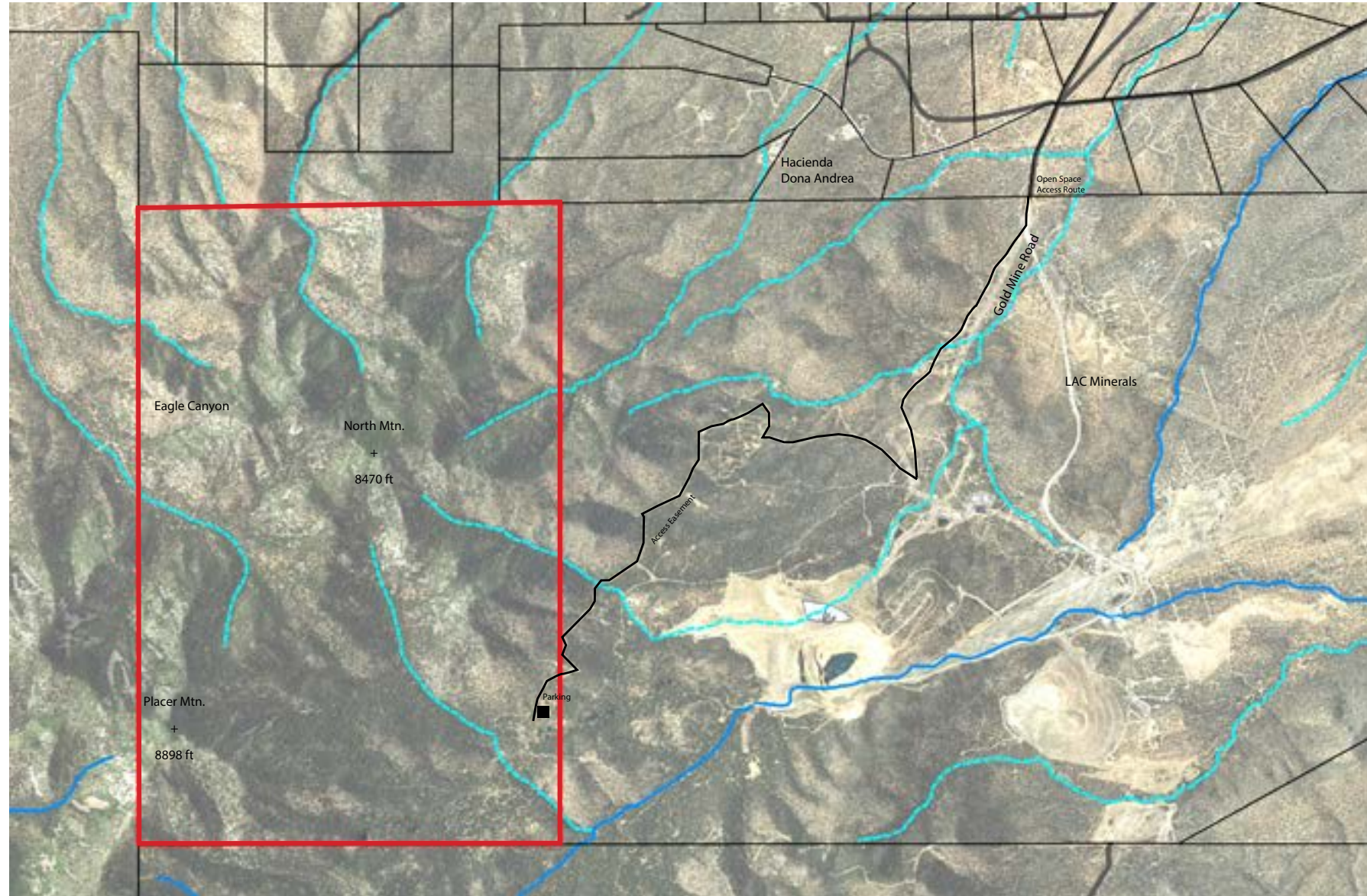


Figure 1. Location Map - Ortiz Mountains Open Space



Ortiz Mountains Open Space - Existing Conditions Map

bearing veins had been discovered. But following World War I, rising mining costs, the low grade of the ores, and the relative lack of water resulted in the closure of the mines. In the 1970s and 1980s, Gold Fields Corporation worked an open pit mine within a half mile of the Old Ortiz Mine. After a joint venture between Pegasus Gold Corporation and LAC Minerals in the late 1980s, LAC Minerals was left with the job of remediation and reclamation of the mine site.

Much more information relating to the history of the Ortiz Mountains and mining can be found in the Docent Tool Kit, Appendix C.

### 1.3.3. Cultural Significance

Because of the prominence of the mountains surrounding the Galisteo Basin, this property has cultural significance to the area pueblos and tribes. A preliminary cultural resources survey has identified sites that will require cultural consultation as the property is developed and opened to the public. A full survey may be required as future access, development, and management activities of the property are explored.

### 1.3.4. Improvements and Existing Infrastructure

#### 1.3.4.1. Existing infrastructure

Facility improvements at the Ortiz Mountains Open Space include a large covered shelter with picnic tables, benches and a vault toilet built in 2002 as part of the Botanical Gardens development of the property. New Mexico Abandoned Mine Lands Program (AML) designed and installed safety improvements to mines and mining relics, including shafts, adits, pits and open stopes including backfilling, plugging with polyurethane foam, and fencing of features. A large steel cupola structure was placed over the old Ortiz Mine entrance to keep people out but allow the bats that live in the mine easy access for daily flights.

#### 1.3.4.2. Trails

Several trail routes were developed by the Santa Fe Botanical Garden. Directional signs for those trails exist on the property. Many of the trails have not been maintained and may not be usable without significant assessment, including the Eagle Canyon Trail and the Skid Trail. North Peak Trail only exists as a route, and no physical trail has been constructed. The Loop Trail was well used for the less strenuous history tours on the property and follows an old road. Placer Peak Trail is in need of re-routing to make it sustainable and less susceptible to erosion, and also to avoid cultural sites.





### 2.1. ACCESS

The condition of the road and the nature of the environment make road maintenance difficult. The combination of the road access restrictions and the existing conservation on the property do not allow for free, open access. The neighboring gold mine has locked gates that restrict access to the public on the access road to the Ortiz Mountains Open Space. As a result, County staff are required to accompany visitors on site which requires significant staff time in coordinating guided events. Safety and access for emergency responders is an on-going concern. An emergency access plan was developed in coordination with the Santa Fe County Office of Emergency Management in 2015. This plan should be evaluated annually as guided tours are scheduled.

#### 2.1.1. Road Condition and Access

Current access to the Ortiz Mountains Open Space is through LAC Minerals property. The 2.5 mile dirt access road starts at the controlled entry gate to the LAC Minerals property. The road is very narrow, rocky, and steep and requires four-wheel drive vehicles, and is unsuited for normal emergency vehicle use. The agreement with LAC Minerals allows only for County escorted access, temporary parking in a designated area, and placement of portable restroom facilities on a seasonal basis. The agreement specifically excludes overnight parking, camping, hunting, recreational use of motorcycles, ATVs, snow mobiles, and equestrian use except pack animals used for maintenance. The current condition of the access road, the County escort requirement, and limits on use make access to the site difficult to manage. The poor road condition also affects site maintenance, as it is difficult to get to the site and complete tasks within a day. Road improvements and maintenance may not be feasible due to the existing conditions of the road. The access and conservation agreements together do not allow equipment, vehicles or people to stay overnight on the property including maintenance equipment, trucks or crews which creates substantial time and operational constraints on site management activities.

A preliminary GIS analysis was conducted to see if there were other viable off-site access routes to the Ortiz Mountains Open Space. Based on the summary analysis, no other routes from the west, north or south of the site were practical at this time based on cost, construction difficulty, and environmental impacts. Additional routes should be analyzed and explored. There are viable alternate routes on the LAC Minerals site, but use of these alternate routes would require renegotiating the access agreement with LAC Minerals.

#### 2.1.2. Conservation Easement

The Santa Fe Conservation Trust holds the Ortiz Mountains Open Space Conservation Easement. The purpose of the conservation easement is to ensure that the property will be retained forever in its natural, scenic, forested and open space condition and prevent any use that will significantly impair or interfere with the conservation values. Activities that cause significant soil erosion, such as the use of motor vehicles on the site (except on existing roads or for limited emergency access), open fires, building and dumping are prohibited uses. Camping is also a prohibited activity.

#### 2.1.3. Guided Trips and Staff Capacity

Due to the limiting factors of the access agreement and the conservation easement in combination, all visitors to the property must be accompanied by County staff. Past trips have ranged from less strenuous tours along the Loop Trail to very strenuous hikes to Placer Peak or North Mountain. Trips to the property last at least half a day but hikes to Placer Peak and North Mountain regularly take 6 hours or more from start to finish. Staff time for organizing and planning events, and leading these hikes and tours is significant.

In 2015, the County took over active management of the Ortiz Mountains educational visits. County Open Space & Trails staff took on all tasks related to marketing, scheduling and leading visits and hikes. Visits and hikes were limited to three in 2015. The limited schedule heavily strained the small staff and highlighted liability issues.

Issues relating to scheduling tours are:

1. Due to the road conditions Santa Fe County policy states only County vehicles can be used to transport visitors through the LAC property;
2. Risks of liability coverage for visit and hike participants due to the remote location and road condition;
3. Wear and tear on County vehicles that are exacerbated by the poor access road conditions, as well as wear and tear on the road itself;
4. Slow emergency services response due to the access road conditions and unreliable cellular phone service on site.
5. Nature of trails on the property only allow for experienced and well-equipped wilderness hikers





## 2.2. ENVIRONMENTAL RESOURCES

### 2.2.1. Erosion/Soil

An important resource on the property is the soil, which is highly susceptible to erosion due to the area's physical features and the long history of mining. Exploratory trenches and pits exist throughout the property. Extremely steep, rough, and erodible soils make up most of the site. Soils on the property are shallow and very rocky and endure high runoff and erosion rates. The steepness of the slopes is an important, determining factor in the growth form and density of vegetation at the property.

### 2.2.2. Fire Danger/ Forest Health

Fire danger in the Ortiz Mountains Open Space is moderately high due to a high density of trees in some areas, as well as fuel buildup on the forest floor in some areas. A forest health evaluation is in progress to determine appropriate thinning and monitoring of the forest ecosystem in coordination with the County's Wildland Fire crew.

### 2.2.3. Ecosystem and Wildlife

The Ortiz Mountains Open Space is biologically diverse, contains numerous species of conservation need, and is part of a regional critical wildlife corridor (as identified by the New Mexico Department of Game and Fish Critical Habitat Assessment Tool) connecting the Sangre de Cristo and Sandia-Manzano Mountains. Wildlife at the Ortiz Mountains Open Space represent a convergence of species found in different ecoregions, with species more typical of southern ecoregions, such as the Black-chinned Sparrow, sharing the open space with species more typical of northern ecoregions, such as the Olive-sided Flycatcher. Species of high conservation concern using the property include Pinyon Jay, Grace's Warbler, Virginia's Warbler, Juniper Titmouse, Black-chinned Sparrow, and Townsend's Big-eared Bat. Additional baseline assessments are needed to document wildlife species using the property.

There are numerous vegetation communities on the preserve, including: 1.) piñon-juniper woodlands on slopes at numerous elevations, 2.) ponderosa pine forests in higher elevation valleys, and 3.) mixed-conifer forests, containing primarily Douglas fir, white fir, and ponderosa pine, in valleys and shaded north and east-facing slopes at higher elevations. Small clusters of aspen and white pine exist in cool and moist locations at higher elevations. Gambel oak, an important habitat component for numerous wildlife species, exists throughout numerous habitat types, including ponderosa pine forest and mixed-conifer forest. Patches of pinon pine mortality, due to drought and bark beetle infestations, exist throughout the property, and serve as important habitat for species such as mule deer and black-chinned sparrow.





## 3. ORTIZ MOUNTAINS OPEN SPACE MANAGEMENT PLAN

### 2.3. HISTORICAL RESOURCES

#### 2.3.1. Archaeological Survey

An archaeological survey was initially conducted as part of the Abandoned Mine Lands Program (AML) project in the early 1990s. Another survey of a trail reroute to Placer Peak was performed in 2016. Cultural sites have been identified in these preliminary surveys that will require an update to the initial survey and a survey of the entire property may need to be conducted as the property is developed and opened to visitors. An archaeological survey of a limited area near the developed area of the property has been initiated in 2019.

#### 2.3.2. Mine History

The Ortiz Mountains have a long history of mining going back to 1822, and relics of that past remain a visible part of the property. Several historic mining structures including mine pits, shafts and trenches exist, and were safeguarded by AML in 2003. The AML project included backfilling of adits, shafts, pits and open stopes; construction of bat cupolas; fencing and netting of pits and other open structures; and revegetating disturbed areas.

Preservation and stabilization of these features will be important in the development of this property. Interpretation of the mine history of the area is an opportunity to be explored and developed further.



### 3.1. VISION

The vision for the Ortiz Mountains Open Space is based on the existing conservation easement that establishes habitat preservation and education as the primary uses for this site.

*In 2025, the Ortiz Mountains Open Space is the “wild-ness” component of the Santa Fe County Open Space system. The site is a preserve for wildlife and the natural systems they rely on. The fauna and flora that share this land remain the fundamental element of the preserve in the future.*

*Guided groups visit the site to learn about and appreciate these rugged mountains, and, about the specific details of this place and how it affects the lands around it. Participants learn about the site’s importance for wildlife species, including species of conservation need. The site educates about the history of mining on Ortiz Mountains and how land restoration continues.*

*The property is an example of science-based land restoration practices, and the community and County are engaged together in maintenance and stewardship of the land including trails and educational improvements.*

### 3.2. MANAGEMENT GOALS

The Ortiz Mountains Open Space management goal states the vision in terms of actions that can be implemented and monitored.

*Santa Fe County will maintain educational opportunities and support the existing wildlife and habitat at the Ortiz Mountains Open Space. The management goal is to encourage community stewardship, involve citizens in monitoring, and protect the habitat and cultural resources on the site. Public access to the site is limited for educational purposes and to allow the natural processes to thrive.*





### 3.2.1 Specific Management Goals

Specific management goals in support of the Ortiz Mountains Open Space Vision are:

- A. **Holistic & Inclusive.** The Ortiz Mountains Open Space is managed in a transparent manner through on-going communication with the community about planning, implementation and management activities for the site.
- B. **Education and Research.** Education and research is supported to understand in depth the Ortiz Mountains Open Space, the historic context of the site, and its environment.
- C. **Ecological Health.** The ecological health and resilience of the Ortiz Mountains Open Space is maintained through minimizing new impacts and science-based management and monitoring.
- D. **Natural Appearance.** The Ortiz Mountains Open Space appearance and mining history are complemented by using natural design principles and materials that reflect the history and environment of the site.
- E. **Cultural Resources.** The cultural resources on the Ortiz Mountains Open Space are conserved through monitoring of the resources and in-situ protection.
- F. **Access.** Management policies for the Ortiz Mountains Open Space balance desires for increased community visitation and the goal to protect the site.
- G. **Infrastructure.** Infrastructure on the Ortiz Mountains Open Space will be limited while being appropriately designed and maintained to allow emergency access and minimize impacts on the property.

### 3.3. ORTIZ MOUNTAINS OPEN SPACE MANAGEMENT PLAN

The Plan for Ortiz Mountains Open Space describes proposed management strategies, projects and associated investments to support the Ortiz Mountains Open Space Vision and Management Goal. The Plan recommends planning actions; projects with their purposes and priority; maintenance and community stewardship activities; and a possible timeline for implementation.

Plan actions are focused on:

- achieving safe access to the site;
- continuing limited scheduled educational visits and hikes;
- resolving constraints both legal and physical to make access and maintenance of the site more practical;
- maintaining the existing trails and improvements on site,
- managing ecosystem health on the property, and
- building staff capacity with stewardship and community outreach and programming.

Any long-term expansion of interpretive education improvements, trails, and public access will be evaluated based on conducting a property-wide cultural survey and detailed environmental assessment.





### 3.3.1. Visitor Management

#### 3.3.1.1. Guided trips

The County needs to establish short- and long-term management for Ortiz Mountains Open Space visitors. In the short-term the Plan anticipates that the County will continue to manage the visits and hikes. This will mean establishing a tour schedule with limited visits, developing a robust docent training and interpretive program, and managing the facilities for safety and visitor impacts.

Santa Fe County recognizes the opportunity for educational programming and guided tours to the Ortiz Mountains Open Space. Currently, County resources and staff capacity is limited for these activities. The County has identified that partnerships with non-profits and other entities could be a cost-effective method to provide for public educational opportunities at the property. Partnerships in the short term could include organized hikes or interpretive tours in which the partner organization takes the lead in organizing the events.

Long term options should be evaluated to assess implications for staffing, operations, maintenance, liability and financial arrangements. Long-term options that should be considered include:

**County Management.** Identify any permanent increase in County staff and staff hours needed; process to allocate County vehicles with appropriately licensed drivers to escort participants; tour and hike management protocols and liability issues.

**Community Partner.** The County either helps form or finds a capable partner to conduct the visits and hikes. Clear criteria on the organizational, financial and longevity of the partner, and service agreement requirements should be identified.

**Concessionaire.** The County would need to determine the types of activities; operational, maintenance and insurance requirements; and assignment of liabilities..

**Agency Cohort.** This approach could be similar to the arrangements the County has with New Mexico State Parks for management of Cerrillos Hills State Park.

#### 3.3.1.2. Docents

There is already a contingent of dedicated docents who have been involved with the property since the time of the Botanical Garden management. This group has special and intimate knowledge of the property and the County should utilize this asset in developing tour material and schedules.

A training protocol needs to be developed for these and additional docents that is consistent with the County's interpretive goals for the property, as outlined in the Docent Toolkit (Appendix C). Educational material should also be consistent with the Docent Toolkit. Docents should be actively recruited to support tour operations.

#### 3.3.1.3. Staff capacity

In the long term, dedicated staff may be considered at this property. An interpretive ranger, with the ability to organize, lead and provide interpretive tours may be needed to provide access to the public.

### 3.3.2. Partnerships

**A. LAC Minerals** (Barrick Gold) should continue to be an important partner in developing education for and access at the Ortiz Mountains Open Space. Partnership opportunities with LAC Minerals include:

- Interpretive opportunities include current mining, reclamation, revegetation, water monitoring, etc.
- Developing additional or improved access to the site, either through moving or improving the current access easement.
- As their planning effort moves forward, the County is interested in continuing a dialogue to help develop appropriate use of the neighboring property.

**B. Santa Fe Conservation Trust** (SFCT)

- The County will work with SFCT to amend the Conservation Easement to streamline management of environmental conditions of property.
- Explore docent recruitment, training.

Santa Fe County will work with the community to establish a communication structure and methodology which could include community liaisons and trained docents. Santa Fe County intends to engage a diverse group of community stakeholders in maintenance and educational activities at the Ortiz Mountains Open Space.

- Immediate neighbors and adjacent communities of Cerrillos, Madrid, and Galisteo
- New Mexico Abandoned Mine Lands
- Santa Fe Botanical Gardens and its prior docents and volunteers.
- Local youth and students (e.g., all Santa Fe area public and private schools)
- Mining history and geology interest groups
- Ecological monitoring groups or researchers
- Regional conservation, hiking and outdoor organizations interested in the Ortiz Mountains Open Space.

**C. Sierra Club, and similar groups**

- Explore options with the Sierra Club and similar groups to provide hike leaders with safety and backcountry experience training. Determine interpretive capacity.
- Explore docent recruitment, training.
- Explore using Sierra Club leader training for OSTP docent training.

**D. Abandoned Mine Lands Program (AML)**

- Work with AML to determine any remaining mine hazards and to safeguard those hazards if they exist. Santa Fe County intends to develop and maintain productive, collaborative relations with the community and other stakeholders as a critical activity of the Ortiz Mountains Open Space Management Plan.

**3.4. MONITORING AND MAINTENANCE**

A maintenance schedule will be developed which includes seasonal tasks to open and close the property. The County will lead the organization of maintenance activities and maintain the existing on-site improvements. Strategies to optimize maintenance effort include:

- collaboration with civic organizations, other agencies and community stewards to leverage the efficiency of working together;
- invest in smaller, consistent well-planned maintenance activities;
- conduct maintenance activities at the optimum time based on monitoring or a regular schedule.

**3.4.1. Terrain Management Units**

A Baseline natural resources assessment was conducted in 2018 and 2019. As part of this assessment, active natural resource management areas were identified, and serve as the basis for the terrain management units which are described below and mapped on the next page.

Maintenance tasks will be identified in the future from regular monitoring activities.

**OMOS-ACS: Access easement corridor**

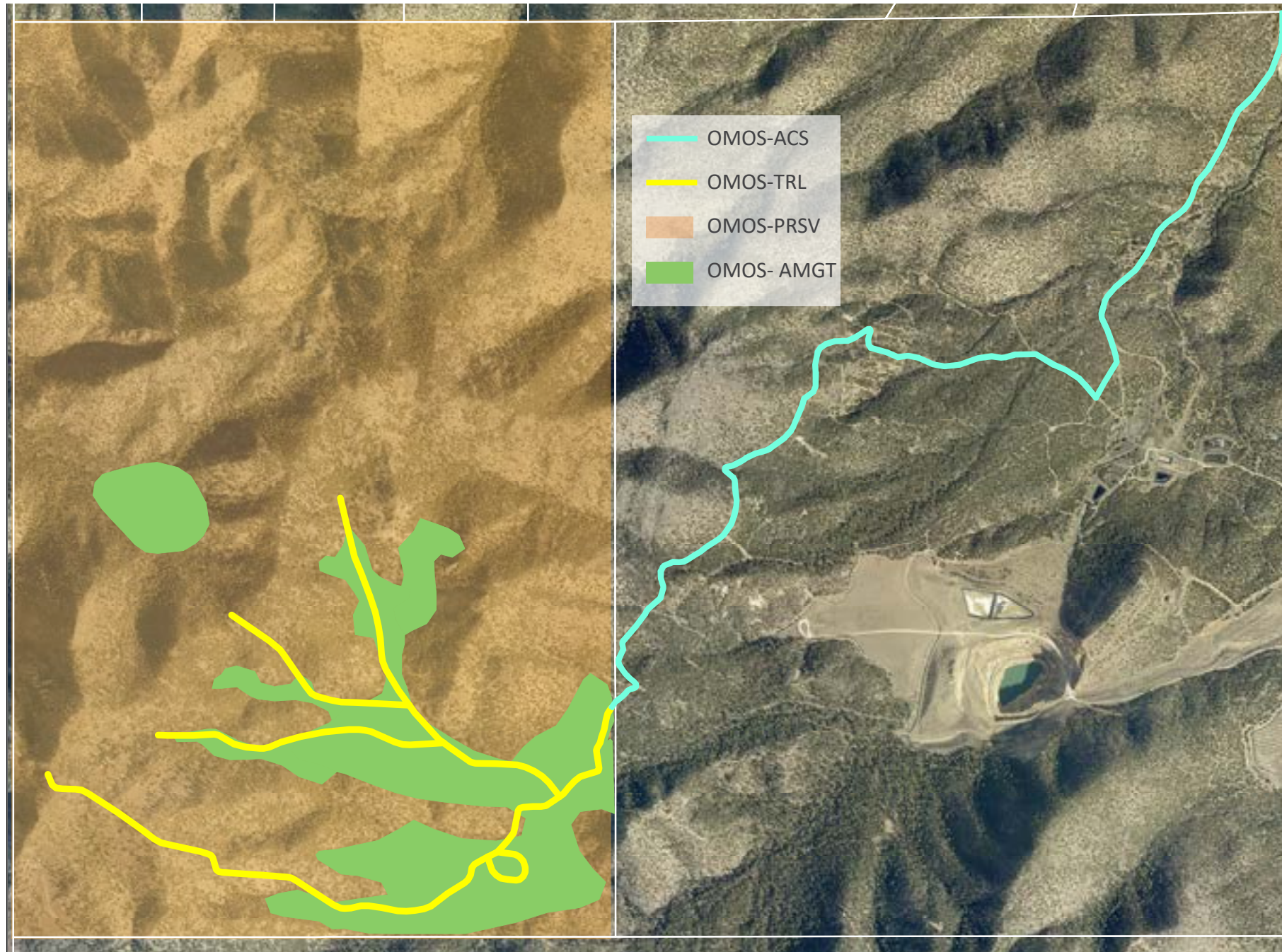
**OMOS-TRL: Trail corridors**

**OMOS-PRSV: Preserve**

**OMOS-AMGT: Active Management Area\***

\*This area is consistent with the Forest Management Plan for Ortiz Mountains Open Space. As this Forest Management Plan is implemented, this area may expand. The Active Management Area may be updated in the future to reflect any changes.





### 3.4.2. Monitoring

Monitoring will be an important aspect of maintaining the health of the property. This will include assessment and monitoring of ecological health; erosion—especially at the used trails and trailhead area and the areas disturbed by previous mining activity; cultural and historical resources; and wildlife. Additional monitoring will focus on the safety of the site and will include condition of the access road; the built elements including the shade structure and picnic tables, signs, restroom facility, and mine safeguard features and fences at mine entries.

No.	TMU	Conditions Monitored	Mgmt. Objectives	Indicators and Monitoring Method	Monitoring Frequency and Season
1	OMOS-ACS	Condition of access road and infrastructure (shelter, signs, gates, etc.)	Access	Visual assessment; GPS and photo documentation of any issues	Annually in spring
2	OMOS-TRL	Trail condition	Ecological Health / Public Safety	Visual assessment; GPS and photo documentation of any issues	Annually in fall
3	Entire Property	Erosion along drainages, mining trenches, and roads	Ecological Health / Public Safety	Visual assessment; GPS and photo documentation of any issues	Once every 3 years
4	OMOS-AMGT	Wildlife response to forest management	Ecological Health	Bird species occupancy and density, using point count surveys	Annually in the spring/early summer
5	OMOS-AMGT, and Select Other Locations	Landscape ecological health	Ecological Health	Picture posts and Bullseye surveys	Once every 2-3 years
6	OMOS-AMGT	Fine Fuels Abundance	Ecological Health/Public Safety	Brown's line surveys	Once every 3 years
7	OMOS-AMGT OMOS-TRL OMOS-PRSV	Cultural resources	Cultural Resources	Visual observation; monitoring will be per plan based on cultural resources survey	Once every 2 years



### 3.4.3. Needed Assessments and Studies

A number of assessments are necessary to inform management, master planning and operations in the short and long term. Some necessary assessments have been conducted, while others still need to be completed.

#### In process assessments:

- Wildlife baseline assessments, including rare, threatened, and endangered species.
- A forest health analysis, including fuel loads and trees per acre.

#### Needed assessments:

- A trail assessment needs to be completed in order to determine the current safety and sustainability of existing trails. Trails maintenance and repair/reroutes will then be done on a priority basis depending on staff approved educational programming schedules, staff capacity, and allocated budget.
- A monitoring plan needs to be developed in order to manage the environmental and cultural resources on the property and to guide property restoration activities including forest health and thinning, and soil stabilization.
- A property wide cultural resources survey may need to be conducted as a master plan is developed to guide how the property can be developed for recreation and education facilities.

The assessments will better characterize and document resources on the Ortiz Mountains Open Space and help identify specific areas that need protection to support habitat health and protect cultural resources.

### 3.5. POLICIES

In order to protect and manage the property resources in a way that is consistent with the reason for purchase, policies have been developed to guide staff specific to this property:

- Staff will only drive on existing roads, as per the Conservation Easement, in order to limit erosion and impacts.
- No tours will be scheduled to Placer Peak until a trail reroute is complete.
- Guided tours will be scheduled on a limited basis, and will only access the property by hiking up the road. Vehicles will not be used to access the site for guided tours.
- All natural resource management will be grounded in the best available science
- Monitoring and adaptive management will be used when managing all natural resources
- Property improvements will only proceed after conducting natural and cultural resource evaluations

### 3.6. PLAN IMPLEMENTATION

Plan implementation will start by identifying priorities and timelines among staff for activities regarding maintenance, planning, project preparation, community outreach and stewardship. Prioritization will be based on balancing the tasks at hand, the staff and funds available to accomplish the tasks. A matrix of recommended management activities over the short, mid, and long term phases is contained in Overall Management Activities Matrix for Ortiz Mountains Open Space (see Appendix A). This Plan will be updated after the short term projects have been completed.

#### Short Term Implementation

Implementation of this plan will begin upon approval of the Ortiz Mountains Open Space Management Plan by the Santa Fe County Board of Commissioners. Recommended Year-1 implementation activities include:

- Environmental Assessments
- Trail Assessments
- Developing monitoring schedule
- Developing Tour Educational Material
- Developing a Docent Training Protocol
- Tour schedule and programming

Project	Short-Term 1- 5 years	Mid-Term 5-10 years	Long -Term 10 + years
1. Environmental Assessments	■		
2. Trail Assessments	■		
3. Develop monitoring schedule	■		
4. Tour Education Material	■		
5. Docent Training Protocol	■		
6. Docent Training	■		
7. Schedule tours	■		
8. Explore amending Conservation Easement	■		
9. Explore tour partnerships		■	
10. Develop Master Plan		■	
11. Determine Alternative Access			■
12. Implement Master Plan			■
13. Dedicate staff, Interpretive Ranger			■





Docent Training Protocol needs to be developed to determine appropriate training and scheduling of tours. This will determine the capacity of interested volunteers to run tours as well as the interpretive focus and schedule for tours.

While continued visitation of the property is a goal of the County for Ortiz Mountains Open Space, it will require careful consideration of staff and operational resources needed to regularly provide tour opportunities either through the County or with partnering groups. Additionally, while tour and docent planning is underway, work on the access and uses permitted will be required to allow for a functioning tour option at the site. Environmental Assessments need to be conducted to determine what impacts, if any, tours will have on the property, and how to best mitigate those impacts. A trail assessment is a priority to determine what the maintenance and safety status is of each trail in order to determine the appropriateness of tours in that location. In the short term, this will help to determine the best way to manage and schedule tours. Additionally, these analyses will help to develop the maintenance schedule, amend the conservation and access easement, and inform the development of a master plan.

#### **ORTIZ MOUNTAINS OPEN SPACE APPENDICES (Separate Document)**

- APPENDIX A: Overall Management Activities Matrix for Ortiz Mountains Open Space, May 2019
- APPENDIX B: Least-Cost Alternate Road Analysis, June 2016
- APPENDIX C: Ortiz Mountains Docent Tool Kit, Draft August 2016
- APPENDIX D: Ortiz Mountains Open Space, Existing Habitat and Wildlife Summary
- APPENDIX E: Draft Forest Management Plan for Ortiz Mountains Open Space

