

RESOLUTION NO. 21-122

BOARD OF COUNTY COMMISSIONERS
COUNTY OF EL PASO, STATE OF COLORADO

RESOLUTION TO APPROVE THE
SANTA FE OPEN SPACE MASTER PLAN

WHEREAS, the 2013 El Paso County Parks Master Plan recommends development of site-specific master plans for County park properties and regular updates of existing plans to guide capital improvements, support third-party funding requests, and to continue to provide the facilities and services that citizens value; and

WHEREAS, the 2017-2021 El Paso County Strategic Plan supports the development of master plans and the continued improvement of open space facilities and recreation opportunities; and

WHEREAS, the Park Operations Division of the Community Services Department initiated the development of a master plan for the development and management of Santa Fe Open Space in late-2019; and

WHEREAS, the County used a multi-pronged planning process that included the collaboration of internal and external team members, three on-site public hikes, a dedicated project webpage, a two-week public master plan review, and review and approval by the Palmer Land Conservancy, and citizens, special interest groups, and governmental agencies have overwhelmingly expressed their support for the Santa Fe Open Space Master Plan; and

WHEREAS, the El Paso County Park Advisory Board endorsed the Santa Fe Open Space Master Plan at their meeting on February 10, 2021; and

WHEREAS, the Santa Fe Open Space Master Plan was presented to the Board of County Commissioners for review and approval on March 30, 2021.

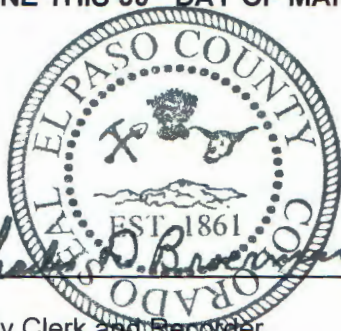
NOW, THEREFORE, BE IT RESOLVED, the Board of County Commissioners of El Paso County, Colorado, hereby approves the Santa Fe Open Space Master Plan.

DONE THIS 30th DAY OF MARCH, 2021 at Colorado Springs, Colorado.

ATTEST:

By: 

County Clerk and Recorder



BOARD OF COUNTY COMMISSIONERS OF
EL PASO COUNTY, COLORADO

By: 

Chair

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~ Santa Fe Open Space ~ Master Plan

March 2021



**~ El Paso County Community Services ~
Park Operations Division**

~ Acknowledgements ~

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CHAPTER 1 – EXECUTIVE SUMMARY

Background

Situated on the sunny southern slopes of Ben Lomand Mountain near Palmer Lake, Colorado, Santa Fe Open Space is El Paso County Parks' newest addition to its parks, trails, and open space system. Purchased from the McQuire/Close Family in May of 2017, the 60 acres of pristine upland ranchland is covered in thick stands of scrub oak, mature ponderosa pine trees, and rolling grass meadows. Located immediately adjacent the popular New Santa Fe Regional Trail, Santa Fe Open Space affords visitors an opportunity to experience a more natural foothills environment with outstanding views in close vicinity to urbanized areas and major trailheads.

Ten years before El Paso County purchased the property, a Conservation Easement was placed over the property to preserve certain natural, scenic, open space, aesthetic, ecological, recreational, historic, and environmental values, collectively known as Conservation Values. The Conservation Easement, administered by the Palmer Land Conservancy, sought to protect the Conservation Values for perpetuity, no matter who owned the property, thus preserving the site for generations to come. As such, recreational opportunities within the open space are limited to passive activities, such as hiking, mountain biking, and horseback riding. Due to these limitations, the Master Planning process focused primarily on such low-impact amenities as trails, overlooks, and interpretive sites.



Figure 1 - Mount Herman as seen from an Overlook at Santa Fe Open Space

Master Plan Purpose

The Santa Fe Open Space Master Plan is a guiding document whose purpose is to strategize and provide passive outdoor recreation opportunities and land stewardship within the open space. The Master Plan endeavors to provide a sustainable approach to allocation of resources for the next seven to ten years, and to provide the elements of a first phase of improvements that will be initiated immediately. The process established essential goals, while incorporating needed changes and new ideas based on input by Parks staff, stakeholders, the general public, and analysis of data. The Master Plan will guide El Paso County Park's efforts to continue to provide a high quality of recreation and educational services that are valued by citizens of all ages and abilities while protecting critical Conservation Values.

El Paso County has been one of the fastest growing counties in the Rocky Mountain Region and is now the second most populous County in Colorado, trailing only Denver City and County. According to estimates by the United States Census Bureau, the population of El Paso County was 546,250 in 2005. Post-recession recovery, boosted by a massive influx of new residents and an increase in military training operations at Fort Carson, helped to propel the countywide population to nearly 720,500 by July 2019. As more housing

developments are planned for construction, the more citizens demand preservation of open space along with enhanced recreational opportunities, thus demonstrating that the acquisition and subsequent development of the Santa Fe Open Space and this Master Plan are very timely and worthwhile endeavors. The Master Plan will be used by County Park staff and policy makers to aid in decisions related to recreational improvements, maintenance, and land stewardship for years to come.

This Master Plan is intended to provide a vision for the future of Santa Fe Open Space as a new location for passive recreational opportunities and educational programs, while preserving the Conservation Values and providing stewardship for the natural environment. It explores existing conditions and future needs from the vantage point of the public, stakeholders, and County staff and leaders to provide a roadmap for the future. This vision is further expressed through the following goals, action items, and implementation plan.

Planning Process

The Santa Fe Open Space Master Plan process began in December 2019 with the establishment of a Master Plan Team, comprised of El Paso County staff members from the Community Services Department (Park Operations, Cultural and Recreational Services, Community Outreach, Environmental Services), as well as a representative from the Trails and Open Space Coalition, a local non-profit organization committed to promoting and preserving parks, trails, and open spaces in El Paso County. The consulting firm, Tapis and Associates, was hired to research and develop the Existing Conditions and Cultural and Historic Resources chapters. Due to restrictions mandated during the Covid-19 pandemic of 2020-2021, no in-person public open house was held. Instead, the public was encouraged to review the draft Santa Fe Open Space Master Plan, as well as attend public hearings before the Park Advisory Board and the Board of County Commissioners in February and March 2021, respectively. Citizens were also provided email links with which to submit comments to the Master Plan Team for review and consideration.

Summary of Master Plan Goals

The establishment of goals specific to the Santa Fe Open Space Master Plan was based upon not only system-wide goals and objectives, but also a thorough analysis and understanding of the community preferences demonstrated by the results of public hiking tours, a public review of the draft Master Plan and input from the Master Plan Team. "Rough draft" goals were refined to better reflect the interconnected values of similar goals, then categorized into groups based upon their specific function within the overall plan. As a result, the following goals have been established for this Master Plan, with primary goals shown in bold:



Figure 2 - Ruins of Ranch Corral at Santa Fe Open Space with Mount Herman in the Background

- ***Conservation and Stewardship***
 - **Create a sustainable future for Santa Fe Open Space with respect for social, conservation, historical, and environmental values.**
 - Protect and enhance the natural features of the site and wildlife habitat, consistent with the provisions of the Conservation Easement.
 - Identify and site future open space amenities and facilities with continued respect for the natural and historical environment.
 - Plan, fund, and construct new park facilities with a focus on user safety, environmental effects, low-impact site accessibility, and passive multi-disciplinary recreational use.
- ***Recreation***
 - **Provide a place for the recreational use and enjoyment of the citizens of El Paso County, consistent with the provisions of the land use restrictions stipulated by Conservation Easement.**
 - Strive to meet the recreational and cultural needs of the citizens regardless of age, activity, or personal abilities.
 - Develop the site as a regional open space area providing a stacked loop trail system serving hikers, cyclists, and equestrians of all ages and abilities.
 - Plan, maintain, and build trails and trail facilities to a more sustainable standard using a hierarchy of multi-use trails and current best management practices.
 - Plan and promote the direct linkage to the New Santa Fe Regional Trail, and its ability to provide the regional trail users an open space experience along an otherwise busy regional trail corridor.
- ***Historic Preservation and Education***
 - **Provide educational program opportunities with respect the historical ranching and railroad heritage and the cultural values of the property.**
 - Provide a wide variety of educational and interpretive opportunities through thoughtful design of recreational facilities and educational open space programming.
- ***Management and Administration***
 - **Assess existing maintenance standards and schedules and apply to the stewardship guidelines of the Conservation Easement.**
 - Consider strategic acquisitions adjacent to the open space to allow for expansion and protect open space Conservation Values.
 - Evaluate current forest and management objectives in regard to tree, shrub, and natural grass health, control of noxious weeds and other invasive species, and wildfire fuels management.
- ***Community Awareness***
 - **Promote environmental awareness and stewardship through healthy, active, outdoor opportunities.**
 - Promote local and regional connectivity between Santa Fe Open Space and surrounding communities.
 - Provide information on open space facilities, programs, and rules governing use.

- **Implementation and Funding**

- Design, build and establish an operational budget for facilities in a way that is sustainable, allowing for future expansion as appropriate, providing adequate maintenance and management, and adjusting the Master Plan and management actions, if needed, to respect resource values and meet the needs of citizens.
- In order to address open space needs, identify and pursue all available funds for implementation of Phase I improvements, as well as future enhancements.

Summary of Recommendations

Based upon the Master Plan Goals list above, the following recommendations were developed:

Conservation and Stewardship – The Palmer Land Conservancy conservation easement not only governs the planning and public use of the Santa Fe Open Space, but it also promotes the preservation of the Conservation Values found within the open space. As outlined in the Existing Conditions Chapter, these values include natural, scenic, open space, aesthetic, ecological, recreational, historic, and environmental characteristics found within or associated with the open space. While somewhat general in nature, these recommendations will help to guide the planning and construction of other more specific recommendations, such as trail networks and interpretive opportunities. Conservation and stewardship action items focused on the utilization of low impact construction techniques and a trail network that flows with the natural environment. Furthermore, goals also included a focus on restricting access to sensitive habitat areas, mitigation of noxious weed species, and the development of a forestry management plan.

Recreation – Santa Fe Open Space is located conveniently adjacent the New Santa Fe Regional Trail, one-half mile southeast of the Town of Palmer Lake and the Palmer Lake Recreation Area and two and a half miles from the Town of Monument. A current lack of vehicular access to the open space, as outlined previously, necessitates that visitors to the open space utilize human- or animal-powered methods to access the Santa Fe Open Space. Hikers, horseback riders, runners, and mountain bikers must utilize existing trailhead facilities in Palmer Lake and Monument – or points beyond – and travel to the open space in a non-motorized manner, except for those individuals whose physical restrictions allow for the use of motorized mobility devices as outlined in the Americans with Disabilities Act (ADA).



Figure 3 - The New Santa Fe Regional Trail as it Approaches Elephant Rock and Santa Fe Open Space from the Southeast

This Master Plan proposes the development of a stacked loop trail system serving users of all ages and abilities and consisting of a combination of Tier I, Tier III, and Tier IV (singletrack) trails. These proposed trail improvements include using environmentally sensitive and sustainable trail design and construction practices to minimize the cost of future maintenance and infrastructure costs, while promoting and preserving the open space conservation values. Other recreational action items include the construction

of an overlook and interpretive display at the open space's high point, the installation of information kiosks and trail wayfinding signage, and the installation of benches at various locations throughout the open space.

Historic Preservation and Education – Situated high on the Palmer Divide near historic Palmer Lake and the nearby Burlington Northern and Santa Fe Railroad, Santa Fe Open Space also serves as an outdoor classroom for a myriad of educational and programming opportunities that are unique when compared to other El Paso County park and open space facilities. As outlined in the Historical and Cultural Resources Chapter, this corner of El Paso County has a rich history, from its natural physical features, to Native American and European settlement, to the influences of the modern-day railroad from which the open space derives its name. Recreational and educational programming, combined with the preservation of natural and historical elements, make the Santa Fe Open Space a prime location for outdoor classes, historic interpretive displays of ranch artifacts, and educational and artistic programs that focus on both the natural and human history of the open space and surrounding region.

Management and Administration – Responsible management and administration of Santa Fe Open Space will ensure that the open space remains financially and environmentally sustainable for years to come while meeting the recreational and educational needs of residents and visitors. Master Plan goals call for researching strategic land acquisitions, installation and maintenance of wildlife friendly perimeter fencing, the development of forestry and noxious weed management plans, as well as maintenance and operation plans that adhere to and promote the guidelines of the Conservation Easement.

Community Awareness – Outreach programs provide awareness, sponsorship, fundraising, and volunteer opportunities to support programs and facility development of El Paso County parks, trails, open spaces, Nature Centers, and other facilities. Outreach services provides opportunities to benefit the community and improve the quality of life for County residents with volunteer opportunities such as Adopt-A-Park/Adopt-A-Trail, Trail Ambassadors, Creek Week, and Friends Groups, as well as donation opportunities through such longstanding programs as Partners in the Park and the Trust for Community Parks.

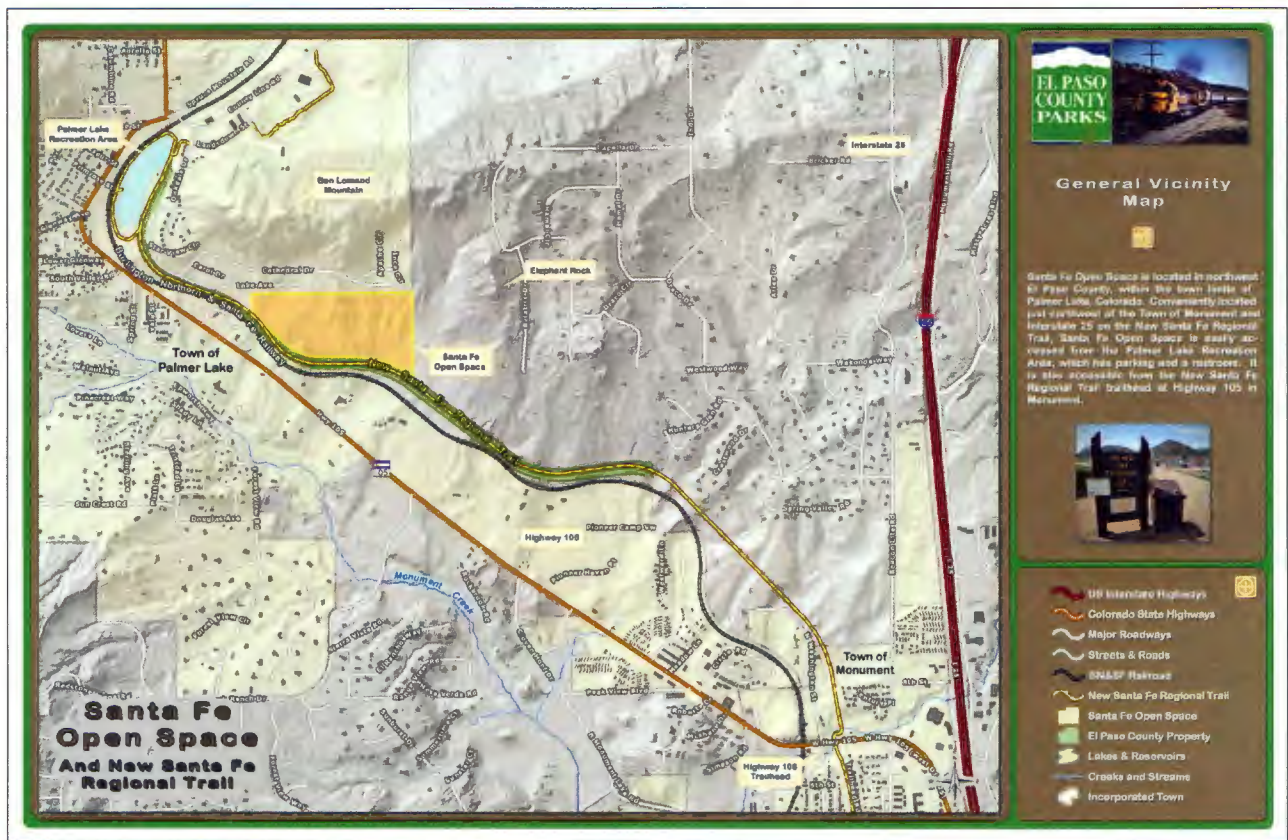


Figure 4 - A Small Grouping of Showy Fleabane (Erigeron speciosus) at Santa Fe Open Space

Implementation and Funding – The prioritization and phasing of capital improvements for Santa Fe Open Space, as expressed in the Implementation Plan in Chapter 8, was derived from input by the public, stakeholders, and Master Plan Team members, with endorsement by the Park Advisory Board and approval by the Board of County Commissioners. This initial capital improvement budget gives consideration to new recreational amenities as well as initial forestry management and maintenance needs, while considering available funding, benefit for cost, project complexity, and improvement urgency. In an effort to bolster the implementation of the open space's facilities and programs, Master Plan goals recommend generating and researching partnership opportunities and funding sources, such as grants, to assist with the planning, development, and implementation of new projects and programs.



Figure 5 - In this pre-1996 Photo, a pair of Denver and Rio Grande Western Railroad Engines pulls a Train of Tanks and Heavy Artillery from Nearby Fort Carson, as Black Forest, Elephant Rock and Santa Fe Open Space Dominate the Background. (Photo Courtesy of John Goforth / Railpictures.net)



Map 1 - General Vicinity Map for Santa Fe Open Space

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CHAPTER 2 – EXISTING CONDITIONS

Background

In May of 2017, El Paso County purchased 60 acres of pristine upland ranchland on the southern slopes of Ben Lomand Mountain, near Palmer Lake, Colorado. Covered in thick stands of scrub oak, mature ponderosa pine trees, and rolling grass meadows, the property was purchased from the McGuire/Close family with the intention of transforming it into a natural open space that would provide users of the adjacent New Santa Fe Regional Trail an opportunity to experience a more natural foothills environment in close vicinity to urbanized areas and major trailheads.

Ten years before El Paso County purchased the property now known as Santa Fe Open Space, the McGuire/Close placed a conservation easement over the property to preserve certain natural, scenic, open space, aesthetic, ecological, recreational, historic, and environmental values, collectively known as Conservation Values. The conservation easement, administered by the Palmer Land Conservancy, requires the protection of the Conservation Values for perpetuity, no matter who owned the property, thus preserving the Values for generations to come. In preparation for the conservation easement, the landscape architectural firm, LREP, analyzed the property and developed the McGuire/Close Conservation Easement Baseline Report, which, along with other documentation and research, has become the basis for the Existing Conditions chapter of the Santa Fe Open Space Master Plan.



Figure 6 – Nearby Elephant Rock as seen from Santa Fe Open Space

Methodology

An inventory of existing conditions was conducted as part of the planning process for the Santa Fe Open Space. The inventory extended the body of knowledge on which planning decisions could be based. The site inventory provides an understanding of how the land came to exist in its present state and condition, as well as the physical, biological, cultural, management, and social contexts in which it is situated. This information allows decisions to be made in ways that will protect the natural and cultural resources and preserve the conditions that make Santa Fe Open Space unique and desirable as a public amenity.

The existing conditions inventory at Santa Fe Open Space is classified into various categories, based on physical, natural, and human aspects. Physical characteristics include climate, elevation, aspect, geology, soils and hydrography, while natural characteristics are centered around flora, fauna, habitats, and scenic resources. Lastly, human-based characteristics outline the conservation easement, surrounding land uses, wildfire, public service areas, and demographics of the surrounding region.

The numerous components of the Existing Conditions chapter were documented in the aforementioned McGuire/Close Conservation Easement Baseline Report, dated May 2003, and its subsequent updates in 2007 and 2017. These baseline inventories were reviewed and summarized by El Paso County Parks contractor, Tapis Associates. Each component and site characteristic were evaluated individually since their inherent information was considered separately by the decision-makers and the public. Site analysis maps were developed to show locations of various characteristics, further illustrating and delineating areas that would be sensitive to or be negatively impacted by human activity. Information from additional studies, provided by the County, was considered during the inventory.

Topography

Located on the lower southern slopes of Ben Lomand Mountain (see figure 2), Santa Fe Open Space ranges approximately 150 feet in elevation, from the high point of 7,315' near the center of the northern boundary to the low point of 7,165' in the southeast corner. Elevation and topography influence resource preservation, restoration methods, trail alignments, and construction methods. While elevation is an important consideration for site-specific design, the elevation does not specifically influence general Master Plan decisions and recommendations beyond identifying viewpoints and topographic constraints to recreational development.

Overall, the open space consists of moderate slopes, and is generally defined by a series of rolling ridges extending southward from the toe of Ben Lomand Mountain, framed by the iconic Elephant Rock formation to the east. Slope angles are steeper along the crests of these ridges, while the grassy meadows on the western side of the property are far gentler. Geology, soils and erosive actions directly determine the topography and slopes. Slope influences preservation, restoration methods, trail and trailhead locations, construction methods, and forest health management strategies.

Aspect is the direction a piece of land faces. The valleys and ridges create land with diverse aspect throughout Santa Fe Open Space. Land having a particular aspect - facing a particular direction - is subject to the influences of that exposure. For this analysis, shadows on the north facing slopes are based on solar azimuth of 45 degrees from north. The alignment and appropriate grade of trails located on the north aspect required more careful consideration. With regard to user experience and sustainable design, northern exposure is cool in the summer, but holds moisture, snow and ice in the winter, creating hazardous trail conditions that often lead to trail widening and braiding.



Figure 7 - Nearby Ben Lomand Mountain as seen from Santa Fe Open Space

Climate

Located in a semi-arid climatic environment that extends east from the Colorado Front Range along the Palmer Divide, visitors to Santa Fe Open Space can expect to see annually nearly 250 days of sunshine and relatively moderate temperatures, although the Palmer Divide can generate orographic influences on local weather systems, thus generating more precipitation than areas to the south and east. The nearest long-term weather station with a climate similar to that of Santa Fe Open Space is in Castle Rock (Station

Castle Rock, Colorado 051401). The average annual precipitation is just under 17 inches with the highest precipitation in the month of May and the driest months being January and February. Selected climate data since 1948 is displayed below. Detailed information is available from the Western Regional Climate Center.

- Average Annual Max. Temperature: 63.7 degrees Fahrenheit
- Average Annual Min. Temperature: 31.7 degrees Fahrenheit
- Average Annual Total Precipitation: 16.93 inches
- Average Annual Total Snowfall: 59.8 inches
- Average Annual Snow Depth: 0 inches
- Warmest Month of the Year: July, followed by August
- Coldest Month of the Year: December, followed by January
- Month with the Greatest Precipitation: May
- Month with the Least Precipitation: January and February
- Month with the Greatest Snowfall: December

Ms. McGuire and Mr. Close, prior owners of the property until 2017, have observed drier conditions, less snow, fewer wildflowers, and shorter grass height in the recent decades – the exception being the very wet spring of 2019.

Climate projections for the Palmer Divide suggest that extreme events might become more commonplace within the next century. The projected warming for Colorado is as much as 6.5°F by mid-century, which would make the Front Range temperatures more like those found today in Albuquerque, New Mexico. Increased weather variability that might result in greater competition for water resources. State experts have high confidence in continued warming and the warming alone will have impacts on hydrology and water resources, especially the likely continuation of the ongoing shift to earlier timing of snowmelt and runoff. These changes will also have significant impacts on the management of recreational open space lands.

Geologic Features and Soils

Geologic Surface Features – Santa Fe Open Space’s most striking aspect from a distance is the south-facing toe slopes of Ben Lomand Mountain framed on the west side by Elephant Rock. Ben Lomand Mountain and Elephant Rock are part of Dawson Formation (Paleocene and Upper Cretaceous) consisting of Arkosic sandstone, siltstone, claystone, and some conglomerate forming 66 million years ago and are well known to northern El Paso County residents. The rolling ridges and meadows, comprised of unconsolidated material deposited as outwash from the Rampart Range to the west, are made up of Colluvium (Holocene), Slocum Alluvium and Verdos Alluvium (both Pleistocene). This geology is common in this part of the state. While the rock features are dramatic and defining, geology informs the planning and management, although not on a mapped specific basis.

The 1977 Robinson Geologic Hazards Study outlined the following distribution of geologic surface features within the open space boundaries: expansive and potentially expansive soil and bedrock on flat to moderate slopes (0-12%). Engineering considerations should focus on the potential for swell, depth of bedrock, design of structural foundations, and surface drainage (Data: Robinson Study, USGS, 1977).

Soils – Soil matrices represented in Santa Fe Open Space are typical of the area. All the open space’s soils are rated "moderate hazard for erosion" and "moderately limited" for trail construction due

to slope and sandy soil, characteristics by the US Department of Agriculture, Natural Resource Conservation Service (NRCS), El Paso County 1981 Soil Survey. Soil characteristics are uniform throughout the site. An actively eroding channel with alluvial deposits impacts the northeast corner of the property originating from Inca Circle in the Lakeview Heights Subdivision. The erosive and sandy qualities of the soil should be considered during trail layout, construction, and maintenance. Soils are an important consideration for site-specific design, and attention to the highly erosive soil characteristic should be considered in all activities and development causing soil disturbance.

Soils have been mapped and described by the USDA Soil Conservation Service (1981). There are two soil mapping units on the Property as described below:

1. ***Pring Coarse Sandy Loam.*** Pring soils are typically found on alluvial fans, valley side slopes, hills, and ridges. Slope gradients range from 0 to 30 or more percent. The soils formed in parent materials weathered residually or locally transported from the arkose beds of the Dawson and Arapahoe formations. This soil type is found in a north-south band across the eastern third and western tip of the property.
2. ***Tomah-Crowfoot Loamy Sands.*** Crowfoot soils are typically located on alluvial fans, valley side slopes, and upland hills and ridges. Slope gradients range from 2 to 15 or more percent. The soils formed in parent sediments weathered residually or locally transported from the arkosic beds of the Dawson and Arapahoe formations. This soil is common in the central and western part of the property.

Hydrography

Santa Fe Open Space is located on the southern slopes of Ben Lomand Mountain on the Palmer Divide, an upland that separates the headwaters of West Plum Creek in the South Platte River watershed from Monument Creek in the Arkansas River watershed. The open space is located in the Monument Creek watershed, tributary to Fountain Creek and the Arkansas River. Monument Creek is the primary water way in north central El Paso County and is located approximately 0.5 to 1.0 mile south of the Property. The four generally north-south-oriented valleys drain south into Monument Creek – the three easternmost drainages collect prior to crossing beneath the railroad. No permanent springs or seeps were documented or observed; however, it is likely that seasonal seeps exist in the drainages, particularly in the spring months. Drainage ways are sensitive to erosion and sedimentation both naturally occurring and that caused by human disturbance. Preservation and protection of natural hydrological flows throughout the property, and protection of the natural drainage ways influence Master Plan decisions.

Forest and Vegetation

Vegetation in Santa Fe Open Space is dominated by a Ponderosa pine woodland and Gambel oak shrubland communities interspersed with grassland meadows and shrub communities. These communities are described in detail in the baseline inventories and are summarized below. Vegetation resources are directly related to the Scenic, Wildlife and Ecological Conservation Values and require ongoing management decisions.

Ponderosa Pine Woodland. Found in localized pockets within the central and eastern sections of the property, this open woodland community is dominated by ponderosa pine with a scattered understory

of Gambel oak thickets, and occasional patches of mountain mahogany and Douglas fir. The sparse understory includes grasses such as slender wheat grass, mountain muhly, and fringed brome. The larger trees are commonly 8-12" diameter at breast height (DBH), although some scattered individuals may reach up to 24" DBH. Regeneration is present but variable, and typically dominated by ponderosa pine. There is no evidence of historic fire, indicating that the woodland has become both denser over time, and has expanded into neighboring vegetation communities. Forest pathogens are generally not present in any significant amount; however, there have been small infestations of western pine beetle (*Dendroctonus ponderosa*).



Figure 8 - Typical Stand of Ponderosa Pine in Santa Fe Open Space

Common trees, shrubs, forbs, grasses and sedges in the Ponderosa Pine Woodland include Ponderosa Pine (*Pinus ponderosa*), Douglas fir (*Pseudotsuga menziesii*), Gambel oak (*Quercus gambelii*), Kinnikinnick (*Arctostaphylos uva-ursi*), Alderleaf mountain mahogany (*Cercocarpus montanus*), Fendler's sandwort (*Arenaria fendleri*), Fringed sage (*Artemisia frigida*), Louisiana sagewort (*Artemisia ludoviciana*), Pinewoods geranium (*Geranium caespitosum*), Dalmatian toadflax (*Linaria dalmatica*), Fendler's ragwort (*Packera fendleri*), Front Range beardtongue (*Penstemon virens*), Bigflower cinquefoil (*Potentilla fissa*), American pasque flower (*Pulsatilla patens*), Fringed brome (*Bromus ciliates*), Japanese brome (*Bromus japonicus*), Slender wheatgrass (*Elymus trachycaulus*), Mountain muhly (*Muhlenbergia montana*), Kentucky bluegrass (*Poa pratensis*), and Ross's sedge (*Carex rossii*).

Gambel Oak Shrubland. This community is located throughout the open space with large patches in the west region and smaller patches transitioning to the other plant communities. It is dominated by Gambel oak, Western snowberry, and mountain mahogany interspersed with Ponderosa pine. The largest Gambel oak stems commonly measure up to 8" DBH; whereas average sized mature oak stems measure 3-6" DBH. The Oak Shrubland appears to have stable boundaries with the Grassland community. Browsing pressure from deer appears moderate.

Common trees, shrubs, forbs, grasses and sedges in the Gambel Oak Shrubland include Ponderosa Pine (*Pinus ponderosa*), Gambel Oak (*Quercus gambelii*), Kinnikinnick (*Arctostaphylos uva-ursi*), Fendler's ceanothus (*Ceanothus fendleri*), Alderleaf mountain mahogany (*Cercocarpus montanus*), Creeping barberry (*Mahonia repens*), Sunkbush sumac (*Rhus trilobata*), Western snowberry (*Symphoricarpos occidentalis*), Fendler's



Figure 9 - Pasque Flower

sandwort (*Arenaria fendleri*), Violet prairie clover (*Dalea purpurea*), Pinewoods geranium (*Geranium caespitosum*), Hairy goldenaster (*Heterotheca villosa*), Dalmatian toadflax (*Linaria dalmatica*), Prairie flax (*Linum lewisii*), Feathery false lily of the valley (*Maianthemum racemosum*), Wild bergamot (*Monarda fistulosa*), Bigflower cinquefoil (*Potentilla fissa*), American pasque flower (*Pulsatilla patens*), Blue grama (*Bouteloua gracilis*), Smooth brome (*Bromus inermis*), Mountain muhly (*Muhlenbergia montana*), Kentucky bluegrass (*Poa pratensis*), Little bluestem (*Schizachyrium scoparium*), and Sun sedge (*Carex inops* ssp. *Heliophila*).

Grassland Community. The large open grassland in the western portion of the property consists of native grasses such as mountain muhly, bluebunch wheat grass and sleepy grass. Non-native grasses smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), and cheatgrass (*Bromus tectorum*) are dominant along the western and eastern Property boundaries, and in the more disturbed areas of the community. Ms. McGuire and Mr. Close, prior owners of the property, noted wildflowers once prevalent throughout the property are now found mostly on north and east facing slopes; species mentioned include penstemon species, harebells, pasque flowers, sand lilies, mariposa lilies and blue columbine.



Figure 10 - Wild Bergamot

Common shrubs, forbs, grasses and sedges in the Grassland community include Wood's rose (*Rosa woodsia*), Western snowberry (*Symphoricarpos occidentalis*), Small-leaf pussytoes (*Antennaria parvifolia*), Field sagewort (*Artemisia campestris*), Wild tarragon/wormwood (*Artemisia dracunculus*), Fringed sage (*Artemisia frigida*), Louisiana sagewort (*Artemisia ludoviciana*), Hoary false madwort (*Berteroa incana*), Canada thistle (*Cirsium arvense*), Violet prairie clover (*Dalea purpurea*), Pinewoods geranium (*Geranium caespitosum*), Hairy goldenaster (*Heterotheca villosa*), Dalmatian toadflax (*Linaria dalmatica*), Prairie flax (*Linum lewisii*), Bigflower cinquefoil (*Potentilla fissa*), Sleepygrass (*Achnatherum robustum*), Purple Threeawn (*Aristida purpurea*), Blue grama (*Bouteloua gracilis*), Smooth brome (*Bromus inermis*), Mountain muhly (*Muhlenbergia montana*), Kentucky bluegrass (*Poa pratensis*), Bluebunch wheatgrass (*Pseudoroegneria spicata*), Little bluestem (*Schizachyrium scoparium*), and Sun sedge (*Carex inops* ssp. *Heliophila*).

Others. Other communities occurring in small patches in the open space include Douglas fir-Juniper Woodland, Mountain Mahogany-Grasslands, and Disturbed Grasslands. Disturbed sites are generally located next to roadways and residences and include large forestry slash piles. This vegetation type is typically dominated by native and nonnative weeds.

Common forbs and grasses in the Disturbed Sites include Musk thistle (*Carduus nutans*), Diffuse white knapweed (*Centaurea diffusa*), Canada thistle (*Cirsium arvense*), Dalmatian toadflax (*Linaria dalmatica*), Smooth brome (*Bromus inermis*).

Noxious Weeds. Noxious weeds are of importance since severe infestations can conceivably adversely impact the Conservation Values of the Santa Fe Open Space. The documented noxious weed conditions have changed over time. The 2003 Baseline Report noted, the presence of diffuse and spotted knapweed and widespread colonies of Dalmatian toadflax.

In the 2017 baseline update, the only noted change in the baseline conditions pertained to noxious weeds, noting that noxious weed populations have worsened since the initial Baseline (2003) and Baseline Update (2007) reports. For instance, common mullein was previously identified as uncommon in grasslands, and this species was found commonly in grassland areas at densities of 5 to 30 percent. Knapweed species were scattered throughout the site but were primarily found in grassland areas at densities of 5 to 30 percent. North of the Property boundary, knapweed species were found at higher densities of approximately 40 to 60 percent and were concentrated around roadways. Dalmatian toadflax colonies continue to be widespread on the open space.



Figure 11 - Rocky Mountain Juniper Located on a Central Ridgeline in Santa Fe Open Space

Management and control of noxious weeds to preserve the Conservation Values and to improve ecosystem health and wildlife habitat resources on the property may require ongoing management decisions, which may be integrated with management of vegetation on the open space.

Threatened Species Under the Endangered Species Act. The original baseline report found no recorded data nor documented any threatened, endangered or sensitive plants then listed in the Colorado Natural Heritage Program. According to the 2017 Baseline Survey, species listed since the initial Baseline Report that could occur in the vicinity but are unlikely to occur on the Property due to a lack of habitat, include the Colorado butterfly plant and Ute ladies'-tresses orchid.

Wildlife and Habitat

Santa Fe Open Space is identified a "High to Very High Value" wildlife habitat in the 2013 El Paso County Parks Master Plan's Open Space Values Attributes mapping. Wildlife resources support the Ecological Conservation Value. The open space contains ecosystem types that provide food, shelter, breeding ground, and migration corridors for several wildlife species. Species potentially occurring in the open space include, but are not limited to, Abert's squirrel, black bear, Brazilian free-tailed bat, elk, mountain lion, mule and white-tailed deer, wild turkey, fox, coyote, breeding birds, and numerous small mammals and reptiles. Ms. McGuire recalls also seeing red-tailed hawks, golden eagle and bobcats on the property. She has observed a recent increase in gophers and decrease in predators.

Wildlife species of concern that were originally identified in the initial Baseline Report (2003) but are no longer listed under the Endangered Species Act include the bald eagle and American peregrine falcon. The Preble's meadow jumping mouse and the Mexican spotted owl, newly listed since the initial baseline report, could occur in the vicinity but are unlikely to occur in the open space due to a lack of prime habitat.

Management of wildlife and wildlife habitat resources on the property may require ongoing management decisions, which may be integrated with management of vegetation on the open space.



Figure 12 - Typical Black Bear (Shutterstock Photo)

Scenic Resources

Scenic resources, as defined by Scenic America, are “the visual attributes of landscape that include features having natural, cultural, social, historic, archaeological, and recreational significance; and views that are distinctly characteristic of a region” (Byers & Ponte 2005). Internal Revenue Service Code §1.170A-14 expands the definition of “scenic” for conservation easement purposes, to include the preservation of open space for the scenic enjoyment of the general public. The IRS Code suggests the factors to be considered when evaluating scenic and open-space qualities of a landscape include: the compatibility of the land use with other land in the vicinity, visual contrast, openness, relief from urban closeness, harmonious variety of shapes and textures, the degree to which the land use maintains the scale and character of the landscape (to preserve open space, visual enjoyment, and sunlight for the surrounding area), and consistency of the proposed scenic view with a state scenic identification program. Various land management agencies and land trusts also have methodologies for assessing and protecting visual quality that echo the characteristics described above.



Figure 13 - Sweeping Views of the Southern Colorado Front Range from the High Point of Santa Fe Open Space

The location of Santa Fe Open Space, high on the slopes of the Palmer Divide and Ben Lomand Mountain, affords the visitor incredibly sweeping views of the southern Colorado Front Range within El Paso County. Depending on the location of the viewer, many notable landmarks and landforms can be seen from within the open space. These include such landforms as Ben Lomand Mountain, Elephant Rock, Mount Herman, Monument Rock, Sundance Mountain, Chautauqua Mountain, Blodgett Peak, and Cheyenne Mountain far to the south. Landmarks and other areas of note visible from Santa Fe Open Space include the Town

of Palmer Lake to the west, Black Forest to the east, and the northern reaches of the United States Air Force Academy to the south.

Numerous viewpoints have been identified within the property – each one offering the visitor a different view while being surrounded by the open space’s grassy meadows, Ponderosa pine stands, and vast acreages of scrub oak. Near the old ranch corral, one can see the Town of Palmer Lake and its mountain backdrop. At the property’s high point, nearly all of the aforementioned landforms can be seen, while one secluded viewpoint offers a solitary tree-framed view of Mount Herman. Providing visitor access to these viewpoints is a primary goal of this master plan, while at the same time promoting and preserving the site’s unique aesthetic and scenic conservation values.

Conservation Easement

Santa Fe Open Space was originally conserved by Palmer Land Conservancy and the original landowners, McGuire & Close, in 2007. The property was conserved to ensure the scenic views, open space character, and wildlife habitat of the property were protected forever. The landowners, recognizing the potential for the property to provide much-needed public access in the region, sold the property to El Paso County in 2017. Funding for the purchase of the property came from the 2015 Ballot Question 1A and Regional Park Fee funds, and in 2016, the final piece of funding was secured, and the parties moved forward with the transaction.

El Paso County and Palmer Land Conservancy worked together to amend the easement to accommodate the new public access and to acknowledge El Paso County as the new landowner. The conservation easement still permanently protects the original conservation values including scenic and aesthetic resources, open space and development buffer, wildlife, ecological, and public recreation and education. Overall, the Conservation Easement ensures that the Santa Fe Open Space property will be preserved forever, predominantly in its natural condition, and will be available for public outdoor recreation and education. The Palmer Land Trust reviews compliance with the stipulations of the Conservation Easement annually.

The Conservation Easement defines a building envelope in the northwest corner where parking, restrooms and a gazebo may be constructed in the future when vehicular access is established. As part of the purchase a 30-foot wide access easement and a building envelope easement are located along the north west property line. Utility easements currently exist within the open space. The Tri Mountain States Telephone & Telegraph Co. easement paralleling the entire eastern boundary is 6 feet wide. These easements and envelopes are clearly defined in the ALTO/NSPS Land Title Survey dated January 2017.

Wildfire Management

Although there are a few trees with scars from lightning strikes around Santa Fe Open Space, there is no evidence of recent wildfire within the property. There is one old large ponderosa pine with a fire scar on the adjacent property to the east. Historically, the railroad was the cause of numerous small fires in this area, however snags and downfall on Santa Fe Open Space do not have charcoal deposits. Ms. McGuire recalls using a shovel to contain railroad-initiated fires until the Palmer Lake Fire Department arrived at the scene.

Wildfire hazard on the Property varies with location and terrain. The northern portions, including the lower slopes of Ben Lomand Mountain, are estimated to have a moderate to severe hazard rating. The southern and western portions that are less densely forested and have more grasslands are estimated have a low to moderate wildfire hazard rating. The Property is served by the Tri-Lakes Fire Protection

District. El Paso County requires wildfire mitigation for new development including defensible space around inhabited structures and emergency vehicle access.

Surrounding Land Use and Park Service Areas

Santa Fe Open Space is surrounded by significant conserved lands. The 3000-acre Greenland Ranch Open Space, administered by Douglas County, is 0.5 mile to the north and the Pike National Forest is 1 mile to the west and 1.5 miles to the south. The 38-acre Schmidt Conservation Easement is one mile to the southwest, while the 29-acre Burlage Conservation Easement is located one-half mile south, both administered by El Paso County. The conservation context of Santa Fe Open Space is greatly enhanced by its long-term potential to serve as a connection between these other protected public lands, helping to connect the low elevation landscape and ecosystems on Greenland Ranch to higher elevation federal lands to the southwest.

Directly adjacent to the open space on the north, east and west borders are several private residences and partially developed subdivisions. While the properties directly north of the open space are subdivided for residential development, the lack of available water supply and infrastructure will likely preclude residential development in the future and open opportunities for expansion of the open space.

El Paso County's New Santa Fe Regional Trail defines the southern boundary with the trail being bound to the south by the right of way for the Denver and Rio Grande Railroad. Trails on the open space will connect with an extensive network of trails on adjoining public lands administered by El Paso County via the New Santa Fe Regional Trail, which is part of the American Discovery Trail that connects several of the nation's principal north-south trails and many local and regional trails, including 1,153 miles of trails in the State of Colorado.

Land Uses Surrounding Santa Fe Open Space	
Land Uses Within 15 Miles	
Use Description	Total Acres
Federal Land (USNFS & USAFA)	87,943.28
Single Family Residential	52,474.06
Agricultural Land	23,294.58
Vacant Land	10,600.80
Political Subdivision	6,370.57
Commerical Land	4,772.53
Other Uses (Religious, Special Use)	4,524.44
Forest Land (Not National Forest)	2,484.17
County Land	1,593.79
State Land	1,188.94
Multi-Family Residential	641.42
Manufacturing and Industrial	511.55
Mobile Home Property	345.78
Land Uses Within 5 Miles	
Use Description	Total Acres
Federal Land (National Forest)	36,496.680
Single Family Residential	8,857.650
Agricultural Land	1,108.120
Political Subdivision	1,018.090
Vacant Land	721.750
Other Uses (Religious, Special Use)	629.780
Commerical Land	452.000
Forest Land (Not National Forest)	415.450
County Land	183.330
State Land	102.120
Mobile Home Property	50.940
Manufacturing and Industrial	42.810
Multi-Family Residential	35.390
Land Uses Within 1000 Feet	
Use Description	Total Acres
Forest Land (Not National Forest)	92.17
County Land (SFOS & NSFRT)	82.99
Agricultural Land	67.06
Vacant Land	55.40
Other Uses (Religious, Special Use)	28.75
Single Family Residential	7.54
Commercial Land	0.27
*Note: Due to lack of land use information, data only represents those land uses in El Paso County.	

Table 1 - Land Use Table

Based on a park users presumed willingness to travel to a facility, the 2013 El Paso County Parks Master Plan established service areas for each type of park facility, including regional and neighborhood parks, in an effort to determine gaps in available park services for El Paso County residents. Local access to parks was measured with a 5-mile radius for neighborhood parks, while regional access was measured with a 15-mile radius for regional parks, which include open spaces.

While classified as an open space with exclusively passive activities such as hiking and nature watching, Santa Fe Open Space also fulfills the function of both a community park and a passive-use regional park, depending primarily on the origin of the park user. Residents of the nearby towns of Monument and Palmer Lake may utilize the open space for daily exercise, to include hiking, mountain biking, and dog walking, while outlying populations may travel greater distances for the same type of activities, albeit as a regional destination rather than a local neighborhood amenity.

Using the 5- and 15-mile radii criteria, Planning staff analyzed the demographics and land use of each service area to provide better understanding of the population and area that the park serves. Utilizing a geographic information system (GIS) and parcel/land use data available from the El Paso County Assessor's Office, a spatial analysis was performed to identify land uses within the regional and neighborhood park service areas, with an additional analysis performed for those properties within 1000 feet of the park's boundaries as an effort to highlight the adjacent land use.

The Land Use Table (Table 1) highlights the major land use categories located within the aforementioned 15- and 5-mile service areas and those land uses within 1000 feet of the park boundary. Due to Santa Fe Open Space's location near the El Paso County / Douglas County line, as well as a lack of available data for Douglas County, the land use analysis results are restricted to El Paso County. The 15-mile radius reaches rural locations to the south, southwest, and east of the park, thus increasing the acreage of federally owned lands (Pike National Forest and the United States Air Force Academy) and agricultural grazing lands. Because the 15-mile radius also includes the towns of Palmer Lake and Monument, as well as portions of northern Colorado Springs, the residential land use acreage is also a prominent category.



Figure 14 - Rural Residential Housing as Seen from Santa Fe Open Space, Looking South Toward Mount Herman

The land use classifications found within the 5-mile radius are very similar to the 15-mile, albeit with major reductions in acreage for each category. This is due to the lack of the Air Force Academy in federal lands and the fact that Colorado Springs is located outside of the 5-mile radius.

Agricultural lands are reduced due to the higher amount of rural residential land uses in the northwestern El Paso County area.

The 1000-foot radius focuses primarily on forest (non-National Forest lands), agricultural, vacant lands, and the El Paso County-owned properties of the New Santa Fe Regional Trail and Santa Fe Open Space. Rural residential acreage is greatly reduced as well, indicating a lack of encroachment of residential land uses on the open space.

Demographics

El Paso County has been one of the fastest growing counties in the Rocky Mountain Region and is now the second most populous County in Colorado, trailing only Denver County by an estimated 7,000 residents, according to estimates by the United States Census Bureau. In 2005, the population was 546,250, and by 2010 the population was 622,263, an increase of approximately 13% under less than robust economic conditions. Post-recession recovery, boosted by a massive influx of new residents and an increase in military training operations at Fort Carson, helped to propel the countywide population to nearly 720,500 by July 2019. Population is concentrated along the Interstate-25 corridor, with approximately 70 percent of all County residents living in the Colorado Springs Metropolitan area. Most of the county residents live in the western one-third of the county.

Due to the large size and high level of diversity in El Paso County, the 2013 El Paso County Master Plan divided El Paso County into demographic subareas. Santa Fe Open Space is located within the Northwest subarea, as are the nearby communities of Palmer Lake and Monument, as well as the United States Air Force Academy.

The least populated, the Northwest Subarea contains approximately 2.5% of El Paso County's population yet has a median household income exceeding \$110,000. It is one of the least diverse subareas with a 92.5% Caucasian population. The median age is 38.6 years old and a large percentage possesses some college education or a bachelor's degree.

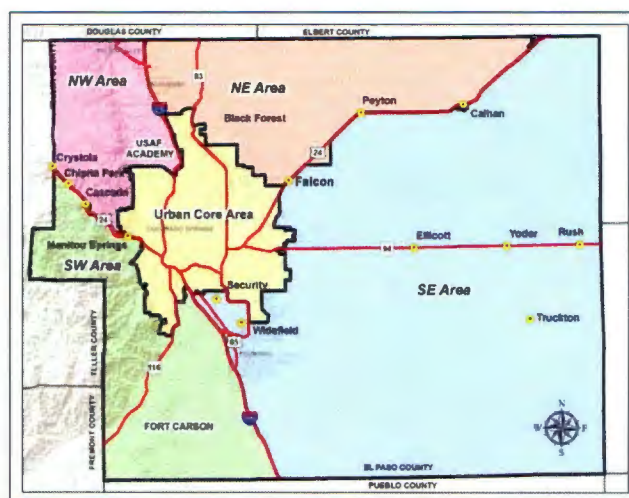


Figure 15 - El Paso County Master Plan (2013)
Demographic Subareas

The population data used in this demographic profile of El Paso County was derived from ESRI Business Information Solutions, with data based on the U.S. Census Bureau and American Community Survey, as well as GIS analysis performed in ESRI Community Analyst. Data outlined in this section will be compared to both that of El Paso County as a whole and, when available, of the El Paso County Parks Master Plan Northwest Subarea.

Population. In 2019, the estimated population of El Paso County was 720,403, having seen a growth of 15.8% since 2010, when the population was 622,263. The Northwest Subarea showed a 2010 population of 14,870 and a projected 2020 population of 15,936 for an increase of 7.2%. During a similar time period (current population estimates include 2019), the 15-mile service area of Santa Fe Open Space,

which includes the far northern sections of Colorado Springs and the towns of Palmer Lake and Monument, increased at an incredibly high rate of 20.9% from 169,201 to 204,533, with the high rate of increase due in part to greater residential development in the northern sections of Colorado Springs. The 5-mile service area increased at an even higher growth rate of 26.7%, from 20,455 in 2010 to 25,922 in 2019. This higher rate of increase may be attributed to increase rates of housing development, particularly in the Monument area.

Households and Housing Units. In 2018, El Paso County had 245,287 households with an average household size of 2.64 persons. The Santa Fe Open Space 15-mile service area had 73,503 households in 2019, with an average of 2.71 persons per household, while the 5-mile service area had 9,188 households averaging 2.82 persons per household. The 5-mile service area has not only seen a larger rate of population increase over the last 5 years; its household size is significantly larger than that of El Paso County as a whole.

In 2019, El Paso County had an estimated 280,718 housing units – an increase of 10.8% from 2010, which saw 253,379 units. During the 2010-2019 time period, the housing units in the 15-mile service area increased at much higher rate of 21.2% from 60,659 to 73,504. In the 5-mile service area, housing units increased at an even higher rate of 25.9% from 7,295 to 9,188, possibly due to the aforementioned increased rates of housing development in the Monument area, particularly near the I-25 corridor.

Median Household Income. In 2018, the median household income of El Paso County was \$65,334, while the 2019 estimate for the 5-mile service area was significantly higher at \$112,438. The estimated 2019 15-mile service area median household income was only slightly lower at \$101,601, due to the inclusion of lower-income areas in northern Colorado Springs. The annual rate of increase from 2019 to 2024 is projected to increase 1.15% for the 15-mile catchment area, while slightly higher at 2.38% for the 5-mile area.

Conclusion. The El Paso County Parks Master Plan and the census data anticipate population growth greater than the state average in the Santa Fe Open Space vicinity, including the towns of Palmer Lake and Monument and surrounding unincorporated El Paso County. The data also projects both increases in wealth and age of the surrounding communities. The trail and interpretive opportunities in the open space should be tailored to serve the changing demographics of the community.

Santa Fe Open Space will serve as an extended trail option for New Santa Fe Regional Trail users and as a local open space amenity for a growing population. This would be a change from the open space's current character as a relatively isolated property to both a regional and local recreational destination.

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Map 2 - Santa Fe Open Space Existing Conditions Map



Located in the northwest section of the County near the Town of Palmer Lake, Santa Fe Open Space consists of approximately 800 acres of pristine wildland ranchland on the western slopes of El Cerro Mountain. Covered in thick stands of aspen, oak, mature ponderosa pine trees, and rolling grass meadows, the property was purchased from the McGowan-Cole family with the intention of transforming it into a natural open space that provides users of the adjacent New Santa Fe Regional Trail an opportunity to experience a more natural foothills environment in close vicinity to urban areas and major thoroughfares.



Driving Directions

Take Interstate 25 north from Colorado Springs to Monument, then Highway 150 northwest to Palmer Lake. Turn right on County Line Road. Drive immediately right into Palmer Lake Recreation Area. Head south on the New Santa Fe Regional Trail for 0.70 mile to the northern entrance of the Santa Fe Open Space.



Location & Hours of Operation

New Santa Fe Regional Trail
Palmer Lake, CO 80138

Park Hours:
Dawn to Dusk
For Additional Information:
Call (719) 520-7570



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CHAPTER 3 – CULTURAL AND HISTORICAL RESOURCES

Background and Methodology

Located on the Palmer Divide between the Platte and the Arkansas river watersheds, the lands surrounding the Santa Fe Open Space have a rich history. Although not physically located within the open space parcel, the Elephant Rock formation has long drawn people to the area. The historic and cultural resources timeline which follows includes events pertinent to the open space property. Resources in the bibliography offer abundant historical information about the towns of Palmer Lake and Monument. Five themes span the Santa Fe Open Space Timeline including geologic and prerecorded history; early recorded history; railroads and Chautauqua; the Close Family ownership; and conservation and recreation.



Figure 16 - Former Rancher, Herman Kyle's Abandoned 1953 Dodge Coronet Suburban rests on the sunny slopes of Ben Lomand Mountain, in the background

Cultural Resources

Within the Baseline inventories and reports, no cultural resources are identified in the open space. An abandoned corral, ranch artifacts, and old roadbed are physically evident on the property and may warrant further study. Ms. McGuire recalls the abandoned roadbed was used by the railroad as a service access road during her childhood.

The trash piles were not assigned relevant cultural value in the baseline reports and inventoried as follows:

- Abandoned ranch equipment and miscellaneous appliances in the far western portion of the Property.
- An old corral in the western portion of the Property with abandoned ranch equipment.
- Abandoned car (see Figure 16).
- The 2017 baseline update identified two small trash piles previously undocumented. One contained three metal pieces and one contained two pieces of old culverts/piping.



Figure 17 – Corral Ruins with Mount Chautauqua and Ben Lomand Mountain in the Background

Historical Timeline



Dawson Arkose Formation deposited. Nearby Ben Lomond Mountain and Elephant Rock are formed.

66 million
years BCE

The earliest known area inhabitants were native-American tribes that date to the Folsom period, 10,000 years ago. More recently the Mountain Ute, Arapahoe, Kiowa, Sioux and Cheyenne and others have been present.

10,000
BCE

Army Exploration Expedition commanded by Major Stephen H. Long, camps near Elephant Rock, July 11th, naming it "Castle Rock." Later it would be called the Arched Rock, then Phoebe's Arch. In 1887; the formation was named Elephant Rock.

Samuel Seymour was the Long Expeditions' 'landscape painter' and several sketches are published in the expedition's atlas. One named "View of the Castle Rock on a branch of the Arkansas at the Base of the Rocky Mountains" is a view from the west by southwest direction.

1820

First Regiment of Dragoons to the Rocky Mountains lead by Col. Henry Dodge. Sgt. Hugh Evans wrote, "July 26 Continued the march this morning up Beaver Creek until we came to the dividing ridge between the waters of the Platte and Arkansas rivers. This was a high commanding eminence: where we could look and behold a beautiful scenery of nature while to our right we could see the high and lofty Mountains towering almost to the lowering clouds... Immediately in front & rear was a beautiful valley from a ¼ to ½ mile wide covered with the most beautiful variety of wildflowers..."

1835

Dr. Edwin James wrote, "From our encampment we travelled nearly south and, crossing a small ridge dividing the waters of the Platte from those of the Arkansas, halted to dine on a tributary of the latter. In an excursion from this place we collected a large species of columbine...heretofore unknown to the Flora of the United States... it may receive the name *Aquilegia coerulea*...[later to be officially named the state flower in 1899]...One of the singular hills, of which Mr. Seymour has preserved a sketch, was called Castle Rock, on account of it striking resemblance to a work of art. It has columns, and porticoes, and arches, and when seen from a distance, has an astonishingly regular and artificial appearance. ... This is surrounded by scanty soil in which grew a few stunted

The expedition lead by Lt. John Charles Fremont. Fremont wrote, "As we approached the dividing ridge, the whole valley was radiant with flowers: blue, yellow, pink, white, scarlet, and purple."

1843

The Bennett family established a homestead near the north end of the lake; their Ben Lomond Ranch spanned northward across the El Paso and Douglas county border. Locals refer to Elephant Rock as "Citadel Rock."

1869



The open space property initially acquired by General William Jackson Palmer as part of the Monument Farms & Lake Property to start the Denver & Rio Grande Railroad.

Hundreds of men and teams are at work in the pineries of the Divide, cutting and hauling ties to the line of the new railroad. After General Palmer's advertisement in the *Rocky Mountain News* 700 teams were at work. This action likely striped the area of useable timber and significantly altered the vegetation along the Divide.

Denver & Rio Grande Railway, a 3-foot narrow gauge line, opened for business to the public in January 1872. Palmer Lake was critical to the railroad because the steam trains chugged up to the Palmer-Divide summit and had to take on water to head back down. Passenger trains would stop for 10 minutes to take on water and passengers could get off for a day of picnicking, fishing, boating or wildflower hikes for a fee of \$1.50 roundtrip from Denver.



The first Rocky Mountain Chautauqua held in Glen Park. Events spanned four weeks and included over eighty classes spanning politics, education, religion, industry, literature, astronomy, geology, botany, and elocution. Professors from Denver University provided many classes accepting cottage lots in lieu of pay. Programs in music, hiking, and boating supplemented the lectures. Elephant Rock was a popular hiking and picnic destination. The Chautauqua in Glen Park continued until 1910.



The stop atop the divide held various names including Divide, Lake Katrine, and Weissport until settling on Palmer Lake in January 1884.

Estemere Estate constructed by Dr. William Finley Thompson for his family home.

The Santa Fe Railroad lays tracks along the east side of the lake and starts operation between Pueblo and Denver.

1870

1871

1872

1884

1887

1887

Town of Palmer Lake incorporated 23 February 1889 comprised of 2,800 acres.

In the late 1890's Special trains for "wheelmen" (and women) were operated from Denver to Palmer Lake and other popular resort towns as bicycle riding was a fashionable outdoor sport. In 1897, building on the 11-mile Denver-Littleton Cycle Path, the Denver-Palmer Lake Cycle Path Association raised funds and acquired rights-of-way for an extension to Palmer Lake, a 50-mile route. Some cyclists rode the 100-mile round trip, but many cyclists preferred to take their bikes on the train to Palmer Lake, a 2000' vertical gain, and ride mostly downhill to Denver.

Thomas H. Close purchases Santa Fe Open Space property from Mr. Sweet, a rancher.

Mr. Close planted wheat and grazed cattle in the western portions of the open space. The open space was grazed until the late 1970's. Thomas' son, Harland Close, was born in 1915.

During the 1940's, Harland Close's children, Catherine Close McGuire and Thomas Close II are born.

Herman Kyle, a resident of Palmer Lake, renowned water witcher and welder, leased the property to graze cattle throughout the forties and fifties. The corrals, debris files and old vehicle are remnants of Mr. Kyle.

Building the United States Air Force Academy stimulates land values and development in Palmer Lake.

Palmer Lake Historical Society incorporated.



1889 1898 1920 1940 1954 1956



The historic Ben Lomond ranch house demolished.

1958



The Palmer Lake Historical Society starts a Museum and Library in the former Santa Fe Railroad Section Foreman's house.

1964



The combined depot of the Denver & Rio Grande and Santa Fe Railroads is closed and moved to South Park.

1967

A ribbon cutting ceremony is held in April 1982 to commemorate the formal opening in Palmer Lake of the County's New Santa Fe Regional Trail, which extends 15 miles from Palmer Lake in the north to the United States Air Force Academy in the south.

1982

The Tri-Lakes Comprehensive Plan is adopted and sets the stage for planned and enhanced recreational development in the Palmer Lake and Monument region.

1983

El Paso County Parks and the Town of Palmer Lake collaborate on improvements and management of lakeside recreation facilities including grading and seeding, parking facilities, restrooms, picnic tables, a floating dock and a pavilion.

1986



A Conservation Easement, administered by the Palmer Land Conservancy, is established for the Close/McGuire Property including the later-to-be established Santa Fe Open Space.

2007 | **2017** | **2021**



El Paso County acquires Santa Fe Open Space from the McGuire and Close Family.

Santa Fe Open Space Master Plan completed.

~ Santa Fe Open Space ~ Master Plan

March 2021



~ El Paso County Community Services ~
Park Operations Division

CHAPTER 4 – PUBLIC OUTREACH AND INPUT

Introduction

When developing Master Plans, El Paso County Parks is committed to encouraging a broad spectrum of County stakeholders to participate in an open and transparent public involvement process. This process is designed to provide citizens and organizations information about the purpose of Master Plan development and ultimately, the recommended improvements to their parks, trails, and open space.

The Santa Fe Open Space Master Plan, however, posed new challenges for the public input process for a variety of reasons. First and foremost, Santa Fe Open Space is governed by the guidelines and limitations as set forth by the Conservation Easement, administered by the Palmer Land Conservancy. The Conservation Easement limits the type of activities that are allowed on the property, and as such, recreational opportunities are limited to such passive activities as hiking, mountain biking, horseback riding, photography, and viewing nature. In terms of recreational facilities, the open space is limited to trails, overlooks, and interpretive signage – no other active use facilities are permitted.

Furthermore, the Conservation Easement defines the boundaries of a building envelope, in which facilities such as a small parking area, restroom, and outdoor classroom or gazebo may one day be planned or constructed. Public vehicular access to the building envelope is only possible from decommissioned roads located to the north of the open space, and further restricted by the location of private property between the roads and the building envelope itself. The Town of Palmer Lake does not maintain these roads, and as such, they are closed to the public. Due to the lack of vehicular access to the building envelope, there are no plans to construct trailhead amenities during the 7-10-year lifecycle of this Master Plan, and therefore no public input is necessary for the planning and construction of trailhead amenities.



Figure 18 - Citizens Learn About the Old Ranch Corral During an August 2019 Public Hike at Santa Fe Open Space

Public Hiking Tours

Three public hiking tours of the Santa Fe Open Space property have taken place since the acreage was acquired by El Paso County – September 2015, October 2016, and August 2019. For the 2019 event, El Paso County Parks and the Trails and Open Space Coalition (TOSC) invited the public to view the not-yet-opened Santa Fe Open Space. Approximately twenty citizens joined Parks and TOSC staff on an 2-mile hike throughout the open space, and were able to learn about the history of the property from the former landowners themselves, as well as hearing about plans for the property when it becomes public open space. Attendees were able to convey their suggestions and comments, most of which were positive and enthusiastic about the prospect of a new open space in El Paso County.

Stakeholder and Public Review of Draft Master Plan

The Covid-19 pandemic of 2020-2021 severely limited opportunities to engage the public. Originally, an online presentation of site analysis and draft recommendations was planned. The public would be able to view the recommendations and provide comment through an email link. However, it appeared redundant and inefficient to provide the public with the same information as found in the draft Master Plan document. As such, a decision was made to provide the entire draft Master Plan document for public review. Reviewers were encouraged to provide comments and suggestions via an email link.

Public Meetings

As noted previously, the Covid-19 pandemic and the accompanying restrictions on public gatherings limited El Paso County Parks' ability to offer in-person public meetings. However, the public was invited to provide comments at the February 10, 2021, Park Advisory Board meeting, as well as at the March 2, 2021, Board of County Commissioner meeting, both of which continued to offer in-person public meetings throughout the Covid-19 pandemic. Notes summarizing the comments provided at both meetings are included as Appendices at the end of this Master Plan.

County Website and Email

El Paso County Parks developed and maintained a website dedicated to the Santa Fe Open Space Master Plan process. The website provided a summary of the Master Plan process, a link to the draft Master Plan for public review, and email link with which to submit comments. Stakeholders and members of the public were encouraged to review the Master Plan through mass emailing, press releases, and social media posts.

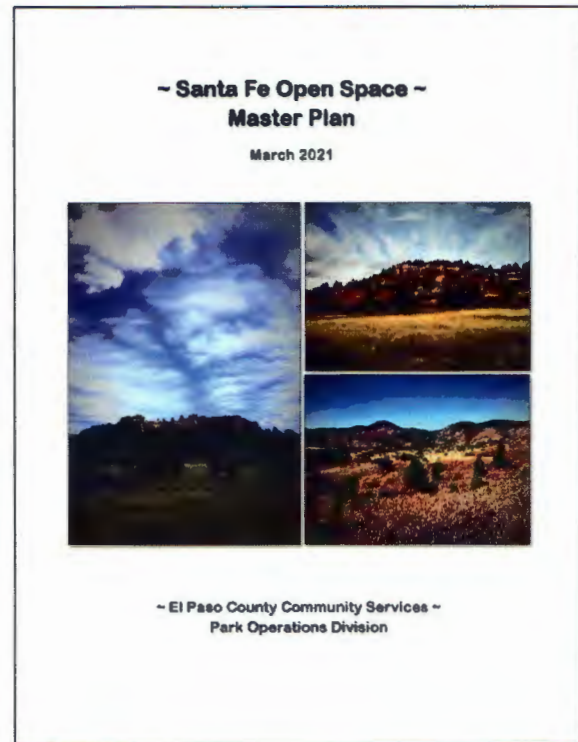


Figure 19 - Santa Fe Open Space Master Plan Cover

CHAPTER 5 – MASTER PLAN GOALS

Goals serve to establish the foundation of the Master Plan, as they guide decisions on future use of the property and provide direction and structure for the master planning process. The goals and objectives created for this plan were derived from the El Paso County Parks Master Plan (2013), input from the Master Plan Team, and from citizens as part of public input opportunities. The existing Parks mission and goals and specific goals for Santa Fe Open Space are as follows.

El Paso County Parks Master Plan – The El Paso County Parks Master Plan (2013) includes the following Mission Statement:

“The Mission of El Paso County Parks is to enhance quality of life in El Paso County by:

- Acquiring, developing, maintaining, and preserving regional parks, trails, and open space.*
- Providing responsible resource management for open space lands characterized by unique natural environments.*
- Providing natural and cultural history interpretation, education, and information services.*
- Supporting major community events and festivals that celebrate our County’s heritage and culture.”*
- Providing and managing visitor destinations and experiences.”*

In concert with this Mission Statement, a number of goals and objectives were established in the Parks Master Plan for County Parks as a whole. Included among these goals are several statements that can be related to open space areas such as Santa Fe Open Space. The following are examples of these more specific goals and objectives:

- “Protect and enhance El Paso County’s legacy of unique natural features and areas and cultural resources, working in collaboration with others to conserve high priority open space areas in the County.”*
- “Investigate opportunities for protecting open space through a variety of techniques from fee-simple purchase to conservation easements, to use of regulatory tools, and partnerships with private landowners, other jurisdictions, or advocacy organizations.”*
- “Work with other public entities to conserve open space, consider connectivity, and provide appropriate recreational access.”*
- “Provide high quality recreation and educational experiences for users of county park facilities and recreational areas.”*
- “Expand recreation and education opportunities and programs that build upon the area’s natural and cultural resources and agricultural heritage and promote conservation and stewardship.”*

The goals and the mission statement listed above assist in providing a basis for the planning of Santa Fe Open Space and for the further development of site-specific goals and recommendations to be included in the plan.

Candidate Open Space – The 2013 El Paso County Park Master Plan identifies the open space and surrounding area in the Candidate Open Space Resource Recommendations. The Master Plan identifies the community values inherent in the scenic and open space protection of the area as well and the regional connectivity potential. It states:

“Ben Lomond Mountain and Elephant Rock (Elev. 7,636 feet; just east of Palmer Lake; Elephant Rock slightly further [3/4 mile] east of mountain) – These regionally significant landmarks are located near Palmer Lake along State Highway 105. Elephant Rock is an isolated cluster of cap rock that extends off Ben Lomond Mountain, standing above the surrounding pines like a castle ruin. The overall landscape is very scenic. The higher portions of Ben Lomond Mountain are a series of cliff faces that have shed huge blocks of rock lying along the lower slopes. Ponderosa pine and scrub oak blend into an extensive and gently sloping meadow that meets the base of the mountain and emphasizes its abrupt rise. Protection of this area would preserve two notable landmarks and a critical backdrop to the popular Palmer Lake Recreation Area. The area is also traversed by the New Santa Fe Trail and it represents one of the more scenic settings along the trail. However, the meadows and flanks of the mountain face imminent development that may preclude the exploration of protection options unless discussions begin immediately. As a natural area, development of facilities would be minimal, and access controlled to protect sensitive areas and steep slopes. Future trail connections could also be made that would link the area to existing Forest Service trails up nearby canyons to the west. The result could be a trail through land managed by the Forest Service, El Paso County and other jurisdictions.”



Figure 20 - Ben Lomond Mountain Serves as a Dramatic Backdrop to Santa Fe Open Space

Community Needs Assessment – The El Paso County Parks Master Plan, based on projected recreational needs for anticipated population growth as outlined in Chapter 2, suggests the need for additional recreational opportunities in the vicinity of Palmer Lake and Monument. Santa Fe Open Space development is limited by the guidelines of the Conservation Easement and cannot provide active recreation facilities, such as multi-use activity fields and playgrounds. To serve a role in supporting the assessed community needs that are compatible with its development restrictions, Santa Fe Open Space will provide passive recreational amenities such as trails through preserved open space, as well as possible future trailhead facilities. Santa Fe Open Space and its trails will become part of a regional trails and open space network as envisioned in the El Paso County Parks Master Plan.

Santa Fe Open Space Master Plan Goals – The establishment of goals specific to the Santa Fe Open Space Master Plan was based upon not only system-wide goals and objectives, but also a thorough analysis and understanding of the community preferences demonstrated by the public review of the draft Master Plan, public hiking tours of the open space, and input from the Master Plan Team. “Rough draft” goals were refined to better reflect the interconnected values of similar goals, then categorized into groups based upon their specific function within the overall plan. As a result, the following goals have been established for this Master Plan, with primary goals shown in bold:

- **Conservation and Stewardship**

- Create a sustainable future for Santa Fe Open Space with respect for social, conservation, historical, and environmental values.
- Protect and enhance the natural features of the site and wildlife habitat, consistent with the provisions of the Conservation Easement.
- Identify and site future open space amenities and facilities with continued respect for the natural and historical environment.
- Plan, fund, and construct new park facilities with a focus on user safety, environmental effects, low-impact site accessibility, and passive multi-disciplinary recreational use.

- **Recreation**

- Provide a place for the recreational use and enjoyment of the citizens of El Paso County, consistent with the provisions of the land use restrictions stipulated by Conservation Easement.
- Strive to meet the recreational and cultural needs of the citizens regardless of age, activity, or personal abilities.
- Develop the site as a regional open space area providing a stacked loop trail system serving hikers, cyclists, and equestrians of all ages and abilities.
- Plan, build, and maintain trails and trail facilities to a more sustainable standard using a hierarchy of multi-use trails and current best management practices.
- Plan and promote the direct linkage to the New Santa Fe Regional Trail, and its ability to provide the regional trail users an open space experience along an otherwise busy regional trail corridor.

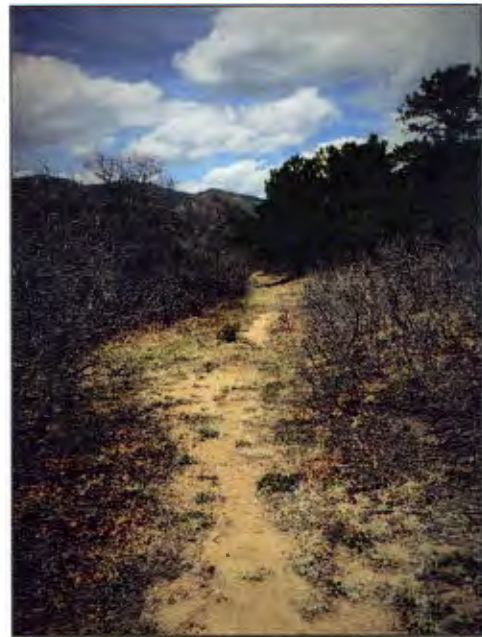


Figure 21 – The Historic Ranch Road in the Southern Portion of Santa Fe Open Space

- **Historic Preservation and Education**

- Provide educational program opportunities with respect the historical ranching and railroad heritage and the cultural values of the property.
- Provide a wide variety of educational and interpretive opportunities through thoughtful design of recreational facilities and educational open space programming.

- **Management and Administration**

- Assess existing maintenance standards and schedules and apply to the stewardship guidelines of the Conservation Easement.
- Consider strategic acquisitions adjacent to the open space to allow for expansion and protect park values.
- Evaluate current forest and management objectives in regard to tree, shrub, and natural grass health, control of noxious weeds and other invasive species, and wildfire fuels management.

- **Community Awareness**
 - Promote environmental awareness and stewardship through healthy, active, outdoor opportunities.
 - Promote local and regional connectivity between Santa Fe Open Space and surrounding communities.
 - Provide information on open space facilities, programs, and rules governing use.
- **Implementation and Funding**
 - Design, build and establish an operational budget for facilities in a way that is sustainable, allowing for future expansion as appropriate, providing adequate maintenance and management, and adjusting the Master Plan and management actions, if needed, to respect resource values and meet the needs of citizens.
 - In order to address open space needs, identify and pursue all available funds for implementation of Phase I improvements, as well as future enhancements.



Figure 22 – In this Historic Photo, a Santa Fe Railroad Freight Train Passes by Santa Fe Open Space. In 1997, the Santa Fe Railroad Merged with the Burlington Northern Railroad, and is Now Called the Burlington Northern and Santa Fe Railroad. (Photo Courtesy of Train Watchers Journal)

CHAPTER 6 – INPUT COMPILATION AND SITE ANALYSIS

Input Compilation

As noted in Chapter 4, El Paso County Parks sought to incorporate input from the public through an on-site visit, public and stakeholder review of the draft Master Plan, and through Park Advisory Board and Board of County Commissioner public meetings. By soliciting comments, suggestions, and solutions to problems, County Staff was able to identify reoccurring themes, generate a large spectrum of publicly oriented goals and recommendations, and prioritize proposed improvements to Santa Fe Open Space. Staff undertook a technical analysis of the physical attributes of the site so that these new amenities, such as trails and overlooks, could be located in the

most suitable areas with the least impact to the surrounding environment. The planning process provides a means of synthesizing technical, science-based information, combined with the needs and desires expressed by the public, in the form of a written and graphic Master Plan as illustrated in Figure 23.

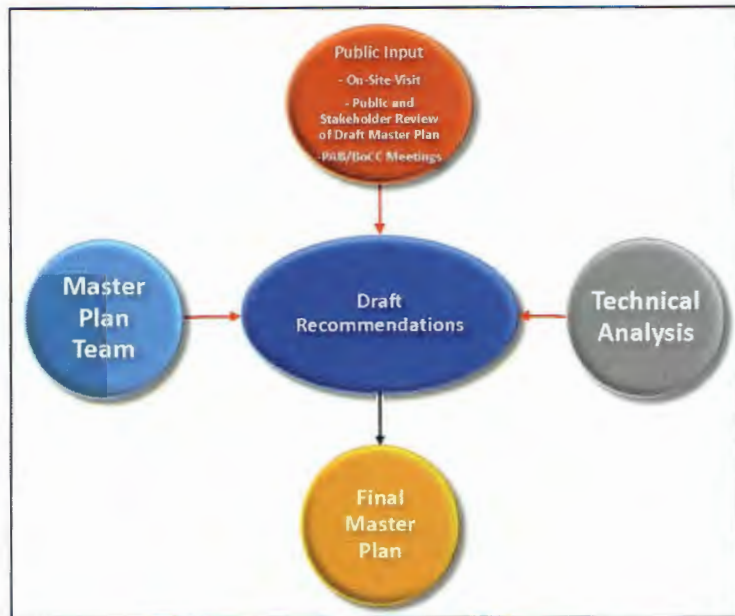


Figure 23 - The Santa Fe Open Space Master Plan Process

Site Analysis

Located on the lower southern slopes of Ben Lomand Mountain, Santa Fe Open Space ranges approximately 150 feet in elevation, from the high point of 7,315' near the center of the northern boundary to the low point of 7,165' in the southeast corner. Elevation and topography influence resource and habitat preservation, site restoration methods, trail alignments, and trail construction methods. While elevation is an important consideration for site-specific design, the elevation does not specifically influence general Master Plan decisions and recommendations beyond identifying viewpoints and topographic constraints to recreational development.



Figure 24 - Mount Chautaugua as seen from a Santa Fe Open Space's Highest Viewpoint on a Centrally Located Ridgeline

Overall, the open space consists of moderate slopes, and is intersected by a series of rolling ridges extending southward from the toe of Ben Lomand Mountain. Slope angles are steeper along the crests of these ridges and in valley floors where incised drainages exist, while the grassy meadows on the western side of the property are far gentler. Slope greatly influences the planning of perspective trail alignments and trail construction methods, which are outlined in the Trail Analysis section below.

Aspect is the direction a piece of land faces. Generally speaking, Santa Fe Open Space faces south, although the aforementioned valleys and ridges described previously create land with diverse aspect throughout the property. Land having a particular aspect - facing a particular direction - is subject to the influences of that exposure. For this analysis, shadows on the north facing slopes on the north-south trending ridges are based on solar azimuth of 45 degrees from north. The alignment and appropriate grade of trails located on the north aspect required more careful consideration. With regard to user experience and sustainable design, northern exposure is cool in the summer, but holds moisture, snow and ice in the winter, creating hazardous trail conditions that often lead to trail widening or social trail development.

Given Santa Fe Open Space's overwhelming abundance of natural resources combined with the guidelines and restrictions of the Conservation Easement, a thorough site analysis was necessary to pinpoint those areas that are not conducive to the planning and development of recreational amenities, and identify areas suitable for construction of new facilities without disturbing critical wildlife habitat or environmentally-sensitive areas, such as wetlands, lowland meadows, and riparian areas.

The Site Analysis map displays man-made and natural landscape features that are critical when planning infrastructure: steep slopes, major ridgelines, intermittent drainageways, wetlands, critical habitat, and both pedestrian and future vehicular park entry points, although vehicular entry to the open space is not anticipated during the 7-10 year duration of this Master Plan. Frequent on-site visits were part of the analysis and provided firsthand knowledge of both natural and man-made characteristics, the latter of which are constrained to the historic ranch road and corral. In preparation for the analysis, detailed terrain and aerial photography data was sourced from



Figure 25 - Ponderosa Pines Nestled in an Intermittent Drainage in the Eastern Portion of Santa Fe Open Space



Figure 26 - Typical Lowland Meadow in Eastern Portion of Santa Fe Open Space

El Paso County IT/GIS Services, while wetlands data was obtained from the U.S. Fish and Wildlife Service, National Wetlands Inventory (NWI 2014). High resolution 2018 El Paso County aerial photography was used to verify on-site information, as observed during site visits. Also included in the analysis are 30% slopes, trees, and terrain hillshade, all generated from high-resolution 2011 topographic elevation data, sourced from El Paso County.

The geospatial data was introduced into a geographic information system (GIS), and layered and analyzed in an effort to delineate those areas where planned infrastructure development should be avoided or constructed in such a way as to have a negligible impact to the surrounding environment. Due to further constraints set forth in the Conservation Easement, only passive recreational amenities were planned for the open space, restricting activities to those which can be conducted in a trail network. Where NWI jurisdictional wetlands and critical habitats are affected, El Paso County Parks will work with the US Fish and Wildlife Service to secure necessary permitting and/or clearances and will implement best management practices during the construction of trails within these areas.

Trail Analysis

The site analysis also allowed for an in-depth examination of possible trail corridors. Terrain and hillshade data were utilized to generate 1- and 2-foot contours, as well as major ridgeline and intermittent drainage way delineation. Areas which possess slopes of greater than or equal to 30 percent were also highlighted, along with NWI wetland and USFWS critical habitats. Lastly, numerous years of high-resolution aerial photography were added to the analysis as a way to show clear pathways through the dense vegetation found in Santa Fe Open Space. All of these attributes combined to show areas that are not suitable for trail construction or long-term trail sustainability.

A stacked-loop trail network was envisioned for the open space, allowing for a varied user experience, whether that user is hiking, mountain biking, or horseback riding. Following trail design best practices, trail corridors were located – whenever possible – away from ridgelines and drainage ways, and only crossing them at perpendicular angles over short distances. Trails follow contours and avoid fall lines to prevent erosion and uncontrollable stormwater runoff. In an effort to reduce problematic trail construction, once the trail alignments were conceptually planned, they were further refined using aerial photography to confine them to unvegetated corridors as much as possible. These final trail alignments will undergo field verification prior to trail construction during the trail flagging process.



Figure 27 - A Section of the Historic Ranch Road Located in the Southern and Central Portion of Santa Fe Open Space

The Site and Trail Analysis map is found on the page 41.

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Map 3 - Santa Fe Open Space General Site and Trail Alignment Analysis Map

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CHAPTER 7 – RECOMMENDED IMPROVEMENTS

Introduction

This Master Plan has been developed through site analysis and the input of the Master Plan Team, stakeholders, and the general public via the outreach and communication process outlined in Chapter 4. The Master Plan Team collaborated to generate goals and objectives, analyze public comments and suggestions, and address priorities for Master Plan recommendations. As members of the Master Plan Team, North District Park Operations staff were key contributors, bringing in-depth knowledge of both the strengths and challenges of offering continuing management and maintenance of public recreational facilities in the Black Forest region of northern El Paso. Combined, these valuable sources of input helped ensure that recommendations included in this chapter will make the best use of limited resources in a relatively small, 60-acre open space area. Given available resources, the Master Plan Team assumed that action items would be implemented according to a phased schedule. More information about implementation and phasing is included in Chapter 8. In accordance with many of the master plan goals, this plan was developed with sustainability and responsible resource management as key principles.



Figure 28 - Mount Chautauqua overlooks the Corral Ruins at Santa Fe Open Space

Conservation Easement and Building Envelope

Ten years before El Paso County purchased the property now known as Santa Fe Open Space, the McGuire/Close Family, through the administration and oversight of the Palmer Land Conservancy, placed a conservation easement over the property to preserve certain natural, scenic, open space, aesthetic, ecological, recreational, historic, and environmental values, collectively known as Conservation Values. After El Paso County's purchase of the open space, the Deed of Conservation was updated to accommodate the new public recreational use. The 2017 Amended and Restated Deed of Conservation Easement serves to administer continuing protection of Santa Fe Open Space's conservation values.

The Conservation Easement defines a building envelope in the northwest corner where trailhead parking, restrooms, and a gazebo may one day be constructed. Public vehicular access to the building envelope is only possible from decommissioned streets/roads located to the north of the open space, and further restricted by the location of private property between the roads and the building envelope itself. The Town of Palmer Lake does not maintain these roads, and as such, they are closed to the public. Due to the lack of vehicular access to the building envelope, there are no plans to construct trailhead amenities during the 7-10-year lifecycle of this Master Plan. While the building envelope is shown for reference on the Phase I Recommendations map, no improvements are being planned or constructed in the foreseeable future, and therefore are not included in the Master Plan recommendations.

The recommendations that follow are organized into categories that reflect the established Master Plan goals:

- **Conservation and Stewardship**
- **Recreation**
- **Historic Preservation and Education**
- **Management and Administration**
- **Community Awareness**
- **Implementation and Funding**

Master Plan Recommendations and Action Items

Based upon the Master Plan Goals outlined in Chapter 4, the following improvements are recommended:

Conservation and Stewardship – The Palmer Land Conservancy conservation easement not only governs the planning and public use of the Santa Fe Open Space, but it also promotes the preservation of the Conservation Values found within the open space. As outlined in the Existing Conditions Chapter, these values include natural, scenic, open space, aesthetic, ecological, recreational, historic, and environmental characteristics found within or associated with the open space. While somewhat general in nature, these recommendations will help to guide the planning and construction of other more specific recommendations, such as trail networks and interpretive opportunities.

1. Plan and develop open space recreational amenities with an emphasis on environmentally friendly construction techniques, such as hand-built singletrack trails and limiting the use of heavy equipment, except in those cases where low-impact techniques cannot accomplish certain tasks without undue hardship on contractors and staff.
2. Consider the modification of County trail specifications to better blend with the natural environment. Tier I and III Trails may be constructed to a narrower width, so as to leave a smaller footprint on natural spaces. These modifications will also allow for smaller equipment needed to construct these wider, smoother-surfaced trails.
3. Restrict access to environmentally sensitive areas in the open space, such as wetlands and drainage areas where certain species of flora and fauna thrive. Tier I and III trails should utilize natural features, such as ridgelines, scrub oak thickets, and ponderosa pine stands to encourage open space users to remain on trails and out of sensitive areas.
4. Because invasive noxious weeds have been identified within and surrounding the open space, particularly within the open grasslands found in the western reaches of the property, coordinate with El Paso County Environmental Services to establish a noxious weed



Figure 29 – A Small Mammal Skull Located Near the High Point of Santa Fe Open Space

identification and mitigation program. Annual surveys and noxious weed removal will allow the grasslands to return to a more natural and sustainable state.

5. Develop a partnership with outside agencies, such as the Colorado Native Plant Society, to conduct systematic seasonal rare plant surveys within the open space, to allow for ongoing preservation and monitoring of sensitive habitat areas.
6. Continue El Paso County Park's ongoing partnership with the Aiken Audubon Society to conduct annual assessments of raptors, nesting, and migratory birds. Currently, annual assessments take place in other parks and open spaces.
7. Develop a forestry management plan with an emphasis on wildland fire fuels reduction, further protecting natural and biological values while maximizing the open space's ecological health and internal scenic resources.

Recreation – Santa Fe Open Space is located conveniently adjacent to the New Santa Fe Regional Trail, only one-half mile southeast of the Town of Palmer Lake and the Palmer Lake Recreation Area and two and a half miles from the Town of Monument. A current lack of vehicular access to the open space, as outlined previously, necessitates that visitors travel to the open space in a non-motorized manner, except for those individuals whose physical restrictions allow for the use of motorized mobility devices as outlined in the Americans with Disabilities Act (ADA).

This Master Plan proposes the development of a stacked loop trail system serving users of all ages and abilities and consisting of a combination of Tier I, Tier III, and Tier IV (singletrack) trails. These proposed trail improvements include using environmentally sensitive and sustainable trail design and construction practices to minimize the cost of future maintenance and infrastructure costs, while promoting and preserving the open space conservation values. These trail design principles include the use of trail tread cross slopes to keep water in sheet flow, grade reversals to keep water from gaining momentum, and kinks to divert water off of the trail. These are the Recreation action items:



Figure 30 - Typical Hand-Built 18"-24" Singletrack Trail. This Section is Located in Pineries Open Space.

1. Utilizing an existing historic ranch road, a 2,300' 4'-6' wide modified-width Tier I trail will be constructed along the southern border of the open space, providing visitors an opportunity to leave the adjacent New Santa Fe Regional Trail for approximately 2/3 of a mile, allowing for a short tour of the Santa Fe Open Space. Due to trail material specifications, light-weight mechanized equipment should be utilized during construction. Additionally, environmental impacts shall be minimalized through the alignment of the trail on the existing ranch road.
2. Approximately 1,585 feet of modified-width Tier III (3'-4') trail will connect the Tier I trail to the existing corral and northwestern grassland areas. Until such time that a trailhead facility and improved corral are developed, this Tier III trail may initially be only Tier IV (singletrack).

3. Approximately 5,950 feet of Tier IV singletrack (18"-24") multi-use trails will be constructed throughout the central and northern portions of the open space. These trails will allow users to choose between a series of stacked loops, which will meander over hills and valleys, through thickets of scrub oak and Ponderosa Pine, and offer outstanding views of the southern Front Range. The Tier IV trails will be more "backcountry" in nature. All trails will be open to hikers, equestrian use, and mountain bikers, although certain aspects of the Tier IV trails may make them less attractive to certain users.



Figure 31 - Conceptual Design of the High Point Overlook with Mount Herman in the Background

4. Comprised of locally-sourced stone, construct a semi-circular overlook area near the open space's high point, along one of the Tier IV singletrack trails, to include an semi-circular stone wall, benches, and interpretive panel that informs the reader of the locations of various landmarks along the southern Front Range, all viewable from the overlook.
5. Install two small information kiosks at each end of the Tier I trail providing information regarding public use of the open space. Maps, open space rules, and information regarding volunteer and educational opportunities will be available at the kiosks, which will be lockable and weatherproof.
6. Install standardized entrance, wayfinding, and trail marker signage throughout the trail loop system. As compared to other standard El Paso County Parks entrance signs, the Santa Fe Open Space entrance signs may be reduced in size to lessen visual impact, while still conveying all necessary information.
7. If necessary, in certain locations, install wooden puncheons or boardwalks where trails enter sensitive habit areas, such as grasslands located in intermittent drainages.
8. Install benches at various locations throughout the open space, primarily in locations which offer visitors views of the Colorado Front Range, while providing for rest and shade.



Figure 32 – Conceptual Design of Bench Located at an Overlook Area in the Lower Reaches of the Open Space with Mount Herman Dominating the Horizon

Historic Preservation and Education – Situated high on the Palmer Divide near historic Palmer Lake and the nearby Burlington Northern and Santa Fe Railroad, Santa Fe Open Space also serves as an outdoor classroom for a myriad of educational and programming opportunities that are unique when compared to other El Paso County park and open space facilities. As outlined in the Historical and Cultural Resources Chapter, this corner of El Paso County has a rich history, from its natural physical features, to Native American and European settlement, to the influences of the modern-day railroad from which the open space derives its name. Recreational and educational programming, combined with the preservation of natural and historical elements, make the Santa Fe Open Space a prime location for outdoor classrooms. The following are action items for Historic Preservation and Education:

1. Develop and install interpretive signage to inform visitors of both the natural history and human influence on Santa Fe Open Space and the surrounding area.
2. Coordinate with History Colorado and the Palmer Lake Historical Society to categorize the contents of the existing ranch artifacts, whose location is shown on the Existing Conditions map. Items in these loose collections of discarded ranch materials have been estimated initially to be over 50 years old, and some of the pieces (grass cutter, water pump, bathtub/trough, etc.) may be retained for display alongside the abandoned vehicle or as part of a future educational display. Other non-historic ranch artifacts or those considered to be rubbish in nature will be removed from the site for proper disposal.
3. Once belonging to rancher, Herman Kyle, take steps to secure the abandoned automobile (weld hood, doors, secure to ground on timbers) and install post and dowel fencing to create a display space for the automobile and other notable ranch artifacts. Design and install interpretive signage to explain its past and how it and the other artifacts eventually came to rest in the open space.
4. Develop educational and artistic programs that highlight the natural and man-made features in and around Santa Fe Open Space. Educational opportunities may focus on the Palmer Divide and its geology, climatic impacts, wildlife, and natural resources; the history of El Paso County's indigenous peoples, including the Mountain Ute, Arapahoe, Kiowa, Sioux, Cheyenne tribes; modern history with focus on the railroad and its economic impacts, as well as the original residents of Santa Fe Open Space; interesting historical moments, from the bicycle craze of the late 1890s to the Rocky Mountain Chautauqua to the influences of Scottish settlers in the region; in depth discussions about habitat for localized flora and fauna communities; and impacts humans have on the natural environment.



Figure 33 - A Burlington Northern and Santa Fe Train Passes an old Irrigation Pump at Santa Fe Open Space

Management and Administration – Responsible management and administration of Santa Fe Open Space will ensure that the open space remains financially and environmentally sustainable for years to come while meeting the recreational and educational needs of residents and visitors. Master Plan goals call for the development of forestry and noxious weed management plans, as well as maintenance and operation plans that adhere to and promote the guidelines of the Conservation Easement.

The following are action items for open space management and administration:

1. Install approximately 1,425 feet of 4-wire wildlife friendly fencing along the eastern property line to prevent unauthorized public access of the adjacent neighbor's properties, which includes the Elephant Rock formation. Sporadic sections of fencing may need to be installed along the western and northern boundaries as well, as both have proven to be in poor condition with numerous breaks.
2. Coordinate with El Paso County Environmental Services to establish a noxious weed identification and mitigation program. Annual noxious weed surveys and subsequent invasive species mitigation will allow the native environment to return to a more natural and sustainable state.
3. Develop a forestry management plan with an emphasis on wildland fire fuels reduction, further protecting natural and biological values while maximizing the open space's ecological health and internal scenic resources.
4. Consider strategic land acquisitions to not only expand recreational opportunities, but also to create buffer zones around the Conservation Easement as an ongoing means to protect its Conservation Values against outside development.

Community Awareness – Outreach programs provide awareness, sponsorship, fundraising, and volunteer opportunities to support programs and facility development of El Paso County parks, trails, open spaces, Nature Centers and other facilities. Outreach services provides opportunities to benefit the community and improve the quality of life for County residents with volunteer opportunities such as Adopt-A-Park/Adopt-A-Trail, Trail Ambassadors, Creek Week, and friends groups, as well as donation opportunities through such longstanding programs as Partners in the Park and the Trust for Community Parks. The following are action items for Community Awareness:

1. Create a Santa Fe Open Space friends group to promote ongoing volunteer opportunities within the open space, as well as a source for continuing fiscal support for open space projects by those who have a dedicated and vested interest in the long term stability of the open space.



Figure 34 – Combined El Paso County Parks and Trails and Open Space Coalition Group Hike at Santa Fe Open Space

2. Through the use of social media, brochures, signage, and email, provide the community with updated park information including new or updated recreational amenities, open space rules and regulations, as well as educational programming.
3. Generate positive interaction with the citizens Palmer Lake and Monument, encouraging responsible open space use and public input and awareness.
4. Promote neighborhood and regional connectivity between Santa Fe Open Space and nearby recreational opportunities, including but not limited to such park, trail, and open space facilities as the New Santa Fe Regional Trail, Palmer Lake Recreation Area, Monument Preserve, Mount Herman, and the extensive trail and road network of Pike National Forest.

Implementation and Funding – The prioritization and phasing of capital improvements for Santa Fe Open Space, as expressed in the Implementation Plan in Chapter 8, was derived from input by the public, stakeholders, and Master Plan Team members, with endorsement by the Park Advisory Board and approval by the Board of County Commissioners. This initial capital improvement budget gives consideration to new recreational amenities as well as initial forestry management and maintenance needs, while considering available funding, benefit for cost, project complexity, and improvement urgency. In an effort to bolster the implementation of the open space’s facilities and programs, Master Plan goals recommend generating and researching partnership opportunities and funding sources to assist with the planning, development, and implementation of new projects and programs. Chapter 8 provides a detailed explanation of existing and possible funding sources, and a structured view of the proposed phased improvements, to be completed within the next ten years. The following action items are recommended for Implementation and Funding:



Figure 35 - Citizen Volunteers from Rocky Mountain Field Institute Preparing to Build Singletrack Trail at Pinerias Open Space

1. As a means to establish long-lasting and sustainable local support for Santa Fe Open Space, develop partnerships with local organizations, businesses, and agencies, such as the Town of Palmer Lake, Rocky Mountain Field Institute, Trails and Open Space Coalition, Mile High Youth Corps, Pikes Peak Brewing, the Palmer Lake Historical Society, the Town of Monument, and Lewis-Palmer School District 38 to assist with the funding, development, maintenance, and/or promotion of the open space and its educational and recreational opportunities.
2. Research and pursue financial grants, such as those from Great Outdoors Colorado (GOCO) and Colorado Parks and Wildlife, to allow for enhanced funding of future park improvements.

Design Guidelines

Design Guidelines are intended to aid in the design and implementation of the proposed site improvements and amenities with a cohesive and visually appealing pallet of materials that can be implemented throughout Santa Fe Open Space. In order to blend well with the natural surroundings while also taking into account the open space’s historic past, new site improvements such as trails, benches, fencing, signage, and general thematic elements should not contrast or distract from the natural and/or

historical environment. At the same time, new open space amenities should embody current trends in park improvements, with a focus on sustainable materials requiring low maintenance. El Paso County Parks always strives to use best management practices in the design and construction of park, trail, and open space improvements.

As noted throughout this Master Plan, the natural setting of Santa Fe Open Space, as well as the provisions and guidelines of the Conservation Easement, dictates the need for passive activities, such as hiking, mountain biking, and horseback riding, which have a low impact on the surrounding environment. All proposed projects that implement the recommendations and goals of this Master Plan should include detailed planning of trails, grading and drainage, fencing, signage, and site furnishings. All projects must be performed in accordance with all applicable local, state, and federal rules, regulations, and standards.

Drainage and Grading – Located on the southern slopes of Ben Lomand Mountain, Santa Fe Open Space slopes moderately to the south, intersected by approximately five north-south-trending drainages which intermittently funnel snowmelt and stormwater runoff to Monument Creek, located approximately one-half mile to the south. Where small drainages exist, drainage improvements, such as culverts, puncheons/boardwalks, and berms may be necessary when planning the proposed trail system. Improvements should not increase runoff from what historically exists. Disturbances of more than one acre, which are not proposed in this Master Plan, trigger erosion control and air quality permitting.

Trail Standards – All proposed trails in Santa Fe Open Space will conform to El Paso County's trail classifications and standards and will be constructed for sustainability. Currently three trail standards exist for the trails proposed for construction within the open space: Tier I, which is the primary standard for Primary Regional Trails; Tier III, which is primarily used for well-traveled internal park trails; and Tier IV, which is a singletrack trail. As previously described in the Recreation recommendation section, the Tier I and Tier III trails may be planned and constructed to a modified and narrowed width. For long-term durability, Tier I Trails would still require road base and crusher fine construction methods, while Tier III trails would only require a crusher fine surfacing. Tier IV or singletrack trails have natural surfacing, which requires well-planned and sustainable trail construction practices.

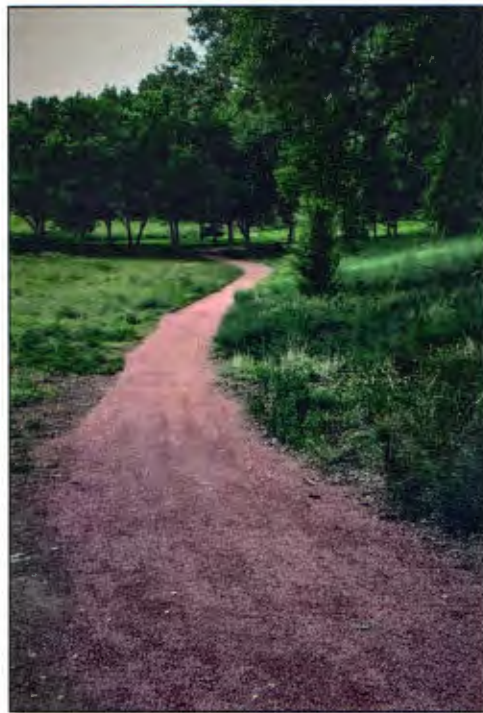


Figure 36 - Typical Tier III Internal Park Trail, this Example Located at Widefield Community Park

Signage – A successful signage program provides regulatory, interpretive (educational) and directional or wayfinding information. All County signs should be designed in accordance with El Paso County Parks standards. Signs should be compatible and consistent with accurate trail identification and wayfinding.

1. **Regulatory** – Regulatory signage is used to identify the rules and regulations. It should be placed in strategic access points such as staging areas and trailheads and may include hours

of operation, appropriate use and activity information, open space rules and regulations, and public notices and general information.

2. **Interpretive** – Interpretive signage is used to identify and educate about topics such as natural and cultural resources. It should be placed in strategic areas such as staging areas, viewpoints and other features of interest. Interpretative signage can include trail etiquette, identification and description of key plant and tree species, wildlife habitat and education about land stewardship and resource degradation (public misuse, urban runoff, noxious plants invasion, overuse, trash, feral animals, etc.).
3. **Directional** – Directional signage is used to identify location, direction, distance and places of interest for trails users. Markers should be placed at strategic intervals or at strategic areas such as viewpoints or intersections. Directional signage should include designation and length and provide trail user location.
4. **Wayfinding** – This sign type includes park entry signs, general park boundary markers, trail maps, and wayfinding signage specific to open space facilities.



Figure 37 – Example of Standard El Paso County Open Space Entrance Sign

Fencing – Two types of fencing are being proposed for use within Santa Fe Open Space, each for a different purpose. These fence types include:

1. **Two-Rail or Three-Rail Post and Dowel Fence** – Post and dowel fencing would be used primarily to delineate spaces and provide barriers in appropriate areas, such as interpretive sites or at scenic overlooks. This type of fence promotes proper trail use and reduces the formation of social trails and overland foot traffic in high-use areas or in those locations when two sections of trail are easily visible and accessible to each other. This is the preferred alternative to split-rail fencing, which is not as durable.



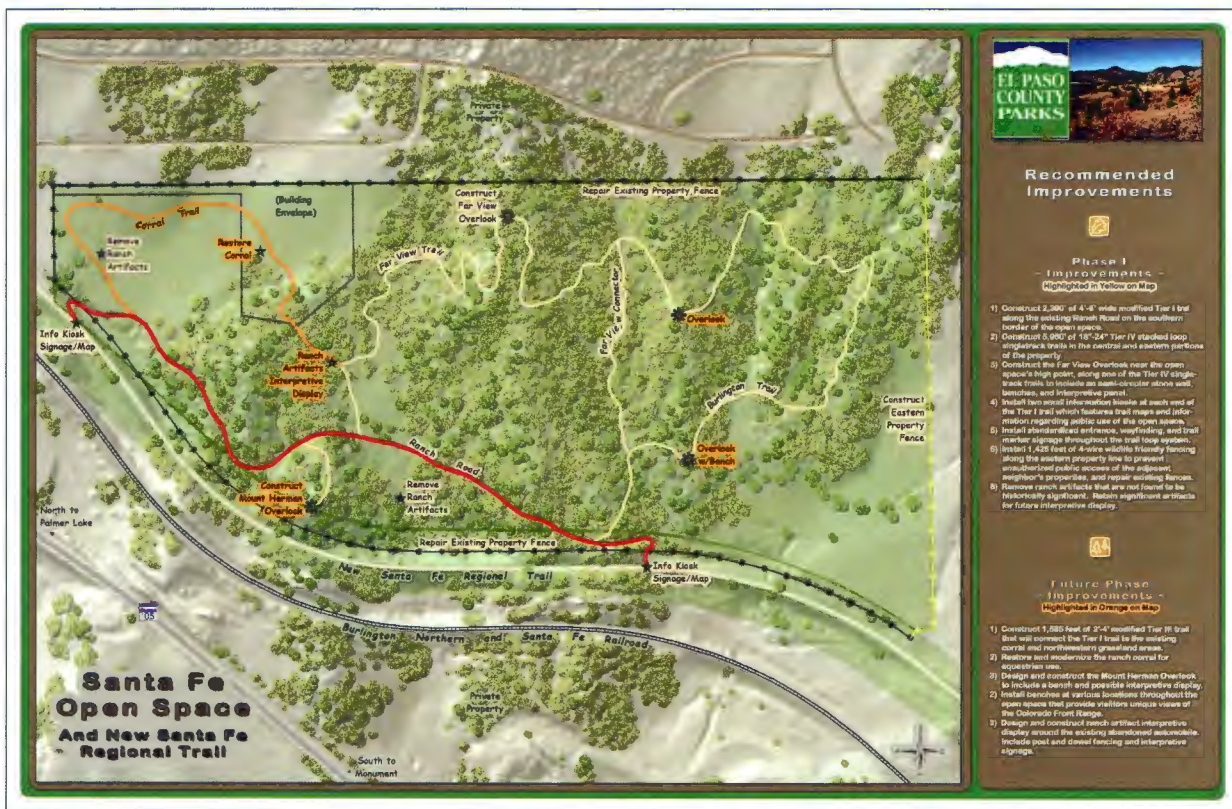
Figure 38 - Example of Post and Dowel Fencing

2. **Wire Fence** – Four-wire wildlife friendly wire fencing, which allows for safe passage of wildlife, is used to outline the boundary of the park, especially in areas that border private property that houses livestock. This type of fence is found around the McCrae Reservoir area of the park, as all other areas are bounded by private residential fencing, consisting of chain link and a variety of wooden fencing.

Site Furnishings – Site furnishings within the open space should include benches, trash receptacles, information kiosks, and other minimal site furnishings, such as dog waste stations, as deemed necessary. Utilizing earth-tone colors such as dark brown and forest green, site furnishings should be reasonably consistent and compatible in style throughout the open space and include designs that blend with the landscape and promote the site’s historic past and native environment. Types of site furniture selected should be sustainable, low-maintenance, durable, and vandal resistant. As such, painted or intentionally-rusted steel will be utilized more often than wood construction, depending primarily on the location and use of the amenity – e.g., benches verses interpretive signs.



Figure 39 - Example of Site Furnishings: Information Kiosk and Steel Park Bench



Map 4 - Santa Fe Open Space Phase I and Future Phase Recommended Improvements Map

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CHAPTER 8 – PLAN IMPLEMENTATION

Introduction

The Santa Fe Open Space Master Plan is intended to be a guiding document for the initial development and phased improvements to this property over a period of 7-10 years. Understanding that the current budget of \$165,000 for planning, design, and implementation will cover only a portion of the Master Plan's recommendations, as outlined in Chapter 7, the Master Plan is designed to be implemented in multiple phases. This chapter of the Master Plan outlines the planning-level costs for implementing each phase of improvements and provides general guidance and explanation of possible revenue sources for the continued improvement and maintenance of Santa Fe Open Space.

Existing Revenue Sources

El Paso County Parks is comprised of two major divisions – Park Operations and Recreation and Cultural Services. Although a separate team from Park Operations, Community Outreach staff provides additional monetary and volunteer support for Parks and other County programs, as needed. El Paso County Parks is operated on a predetermined yearly budget through a variety of funding sources, with funds being applied to both ongoing park operations, such as salaries, materials, and maintenance of existing facilities, as well as major capital improvement projects for new park, trail, and open space facilities. Park operations, major maintenance projects, and capital improvement projects, such as those proposed in this master plan, are funded through the following sources:

General Fund Tax Support – El Paso County Parks are funded in part by approximately \$2.8 million each year from the County General Fund. These funds are supported from a combination of property tax and sales tax, as well as various fees and charges. These funds are used primarily for administrative and supervisory salaries, materials and supplies, and other general operation expenses, although approximately \$975,000 is designated annually for capital improvement and major maintenance projects.

Conservation Trust Funds – El Paso County Parks currently receives approximately \$1.4 million annually from the State of Colorado Department of Local Affairs' (DOLA) Conservation Trust Fund (CTF). DOLA distributes CTF dollars quarterly, on a per capita basis, to over 470 eligible local governments: counties, cities, towns, and special districts that provide park and recreation services to the public. Funding can be used for the acquisition, development, maintenance, and capital improvement of new or existing publicly accessible recreational facility.

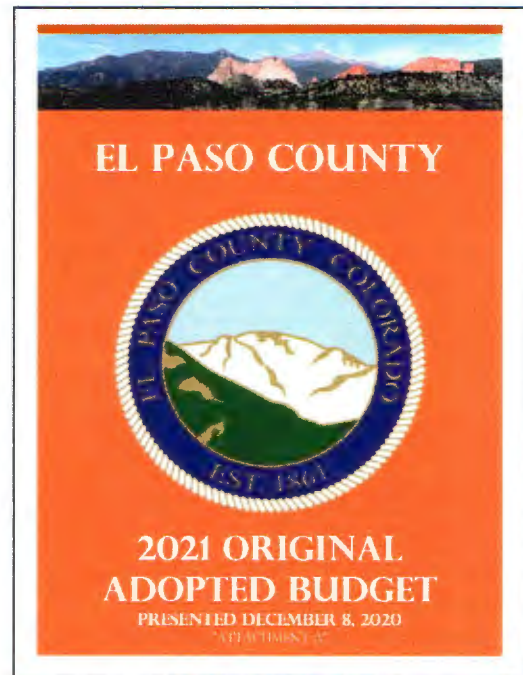


Figure 40 - The 2021 El Paso County Annual Adopted Budget

El Paso County utilizes a majority of the annual allotment of CTF funds for ongoing operation and maintenance of its parks, trails, and open space facilities, with only \$35,000 designated for capital

improvement projects. As such, no CTF funds will be utilized for Santa Fe Open Space Phase I capital improvements.

Development Fees and Land Dedication – Development fees are one-time charges imposed on residential subdivision development projects at the time of final platting to recover capital costs for public recreational facilities needed to serve new developments and the additional residents, employees, and visitors they bring to the community. State laws and local regulations, with a few minor exceptions, prohibit the use of development fees for ongoing maintenance or operations costs, therefore funds are designated primarily for capital improvement projects.

El Paso County Parks receives approximately \$200,000-\$300,000 annually in regional park fees, which can be used for development and/or improvement of regional park, trail, or open space facilities or for the purchase of park or open space property. The regional fees must be used in designated areas where the fees were collected.

Urban park fees, of which El Paso County Parks receives approximately \$100,000-\$150,000 annually, may be used for the development and/or improvement of smaller community, neighborhood, or pocket parks and recreation facilities by the County or by another governmental or quasi-governmental entity, such as a school or metropolitan district, through the County's Urban Park Grant Program.

Program and Facility Use Fees – These fees are charged for a variety of individual or group uses currently generating approximately \$500,000 per year for the park system overall. Examples of user fees employed by El Paso County include park and recreation facility rentals, recreational program fees, booth leases (for vendors in parks, special events, and tournaments), special use permits, admissions/ticket sales, and County Fair fees. These funds are utilized primarily to fund ongoing park operations and minor maintenance.

Grants – Grants often supplement or match funds that have already been received. For example, grants can be used for programs, planning, design, seed capital, and construction of major capital improvement projects. Due to their generally unpredictable nature, grants are often used to fund a specific venture and should not be viewed as a continuous source of funding. Through a successful grant writing program, El Paso County Parks has been awarded a five-year annual average of \$500,000-\$1,000,000 through various types of grant awards. County Parks actively pursues grants on a yearly basis for individual park and trail projects from Great Outdoor Colorado (GOCO), Community Development Block Grants (CDBG), Colorado Parks and Wildlife Trails grants, federal transportation and enhancement funds, and state and local private foundations, such as Colorado Springs Health Foundation.



Figure 41 - Funded through a Great Outdoors Colorado (GOCO) Grant, Crew Members from Mile High Youth Corps Build Singletrack Trail by Hand in Pineries Open Space

Volunteer Programs – Programs such as Adopt-a-Park and Friends Groups may be created with and supported by the residents, businesses, and/or organizations located in the park’s vicinity. These programs allow volunteers to actively assist in improving and maintaining parks, related facilities, and the community in which they live, thus allowing the community to have an active investment in their parks, trails, and open spaces.

In addition, volunteers, citizens, and local business owners provide generous funding for ongoing park operations, either through volunteer hours or through various methods of financial support. Each year, volunteers donate approximately 20,000 hours of service to El Paso County Parks and its nature centers, worth an estimated \$544,000. Over the last five years, the successful Partners in the Park program raised \$195,000, while donations to the Trust for County Parks has totaled \$300,000 during the same time period. These funds reduce financial strain while at the same time providing for enhanced educational programs, greater maintenance, and improved recreational amenities throughout the park system.

In the case of Santa Fe Open Space, volunteer and Friends Groups could be established to assist in the ongoing improvement and maintenance of trails, interpretive displays, and overlooks, as well as conducting clean-up and noxious weed management programs. Volunteer-based programs such as these illustrate the creative efforts that have been undertaken to continue to provide park and recreational services while boosting the available funding to improve and maintain parks, trails, and open space.



Figure 42 – Citizen Volunteers Build Singletrack Trail at Pineries Open Space as part of a Rocky Mountain Field Institute Volunteer Day

Additional Funding Opportunities

In addition to the current and more recognizable funding sources listed above, additional funding opportunities may be available to supplement existing funds. Examples of these are recreation service fees, naming rights, payments for utility and telecommunication infrastructure on park property, merchandising, gifts in perpetuity, bonds, real estate and assessment fees, leases and easements, permits and licensing rights, and various federal park and open space funds. These additional funding opportunities are explained in detail in Chapter 9 of the 2013 El Paso County Parks Master Plan.

Capital Improvement Costs and Phasing

The phasing, or prioritization, of capital improvement projects for Santa Fe Open Space was derived through the stakeholder and public input process, as well as continuing collaboration with Master Plan Team members. An initial capital improvement budget for new and improved facilities and critical maintenance needs was developed. Benefit for cost, project complexity, and improvement urgency were considered in project prioritization.

The following tables provide proposed Phase I and Future Phase Improvements, including a general improvement name, a description of proposed action items, and estimated capital improvement costs, the latter of which is based upon previous projects of a similar nature. The Phase I Improvements are tied to an initial budget of \$50,000 in regional park fees, in addition to \$115,000 of dedicated capital improvement funding. The Phase I Improvements are scheduled to be completed within one to two years, while the Future Phase Improvements will be completed in the following 3-7 years, dependent on available funding and planned in accordance with the EPC Parks Capital Improvement Program.

Santa Fe Open Space Master Plan - Phase I Capital Improvement Costs		
Phase One	Action Items	Estimated Costs
Tier I Trail Construction	Solicit bids, select contractor, finalize trail corridor, complete construction of ~2,300 feet of trail	\$55,000
Tier IV Singletrack Trail Construction	Solicit bids, select contractor, finalize trail corridors, complete construction of ~5,950 feet of singletrack trail	\$75,000
Overlook Construction	Solicit bids, select contractor, prepare design plans, complete construction of stonework overlook and interpretive signage	\$15,000
4-Wire Wildlife Friendly Fencing Installation	Solicit bids, select contractor, complete installation of ~1,400 feet of fencing along the eastern open space border	\$10,000
Information Kiosk Installation	In-house: solicit cost estimates, approve design, complete installation of two information kiosks	\$4,000
Main Open Space Entrance Signs Installation	In-house: solicit cost estimates for signs and frames, approve design, complete installation of two main entrance signs	\$4,000
Trail and Miscellaneous Sign Installation	In-house: solicit cost estimates, approve final designs, complete installation of trail, wayfinding, and miscellaneous signage	\$2,000
Total Phase One Costs:		\$165,000

Table 2 - Proposed Phase I Improvements and Estimated Costs

Santa Fe Open Space Master Plan - Future Phase Capital Improvement Costs		
Phase One	Action Items	Estimated Costs
Tier III Trail Construction	Solicit bids, select contractor, finalize trail corridor, complete construction of ~1,585 feet of trail	\$25,000
Corral Restoration	Solicit bids, select contractor, finalize plans, complete construction / restoration of historic ranch corral	\$10,000
Interpretive Displays	Solicit bids, design and approve final designs, complete installation of interpretive displays	\$7,000
Mount Herman Overlook Construction	Solicit bids, select contractor, prepare design plans, complete construction of overlook with bench seating	\$5,000
Ranch Artifacts Display Area	In-house: finalize display layout design, purchase and install post and dowel fencing, secure automobile and other ranch artifacts, design and install interpretive signage	\$5,000
Bench Program	In-house: solicit cost estimates for benches, confirm locations, complete installation of benches	\$6,000
Total Future Phase Costs:		\$58,000

Table 3 - Proposed Future Phase Improvements and Estimated Costs

Operating and Maintenance Costs

Many of the recommended Santa Fe Open Space Master Plan improvements will be designed and constructed in such a manner as to reduce future maintenance costs. The utilization of sustainable infrastructure design principles, and use of high-quality, sustainable materials with strength to withstand harsh weather conditions and heavy usage, will lead to more cost-effective operations, better utilization of El Paso County staff time, and reduced planning and maintenance costs over time. Santa Fe Open Space's relatively small size and its lack of parking or restroom amenities significantly reduces maintenance costs as compared to other El Paso County park and open space facilities.

Santa Fe Open Space Master Plan - Estimated Phase I Annual Maintenance Costs				
Maintenance Item	Action Items	Estimated Contracted Costs	Estimated In-House Costs (\$25/hr - Labor) (\$15/hr - Equipment)	Estimated Annual Costs
Forestry Management	Ladder fuels reduction, dog hair tree removal, scrub oak thinning	*	24	\$960
Fence Repairs	Repair and replacement of sections of damaged or aging perimeter fence - cost includes \$200 materials	*	16	\$840
Other Contracted Services	Other services not included in routine daily maintenance or capital improvement projects	*	*	\$660
Trash Removal	Removal of trash from trash receptacles, removal of trash from open space	*	12	\$480
Sign / Kiosk Repairs	If damaged or vandalized, replacement of trail, interpretive, and information kiosk signs - cost includes \$100 materials	*	8	\$420
Noxious Weed Management	Identification and removal of invasive noxious weeds from meadow areas	65 acres @ ~\$5 per acre	*	\$320
Trail Maintenance	Repair trail tread, encroaching shrub removal, stormwater runoff repairs	*	8	\$320
Total Estimated Phase I Annual Maintenance Costs:				\$4,000

Table 4 – Estimated Santa Fe Open Space Phase I Annual Maintenance Costs



Figure 43 - A Burlington Northern and Santa Fe Train makes an Evening Pass of Santa Fe Open Space. In the Background, the New Santa Fe Regional Trail Follows the Former Santa Fe Railroad Grade. (Photo Courtesy of Lauryn Richelle)

~ Bibliography ~

- 1)** El Paso County Parks Master Plan, June 2013
- 2)** Close, Dr. Thomas and McGuire, Ms. Catherine. Personal interview. 20 December 2019.
- 3)** Figgs, Michael G., Figgs, Terri A., Lederer, Nancy D., LREP, Inc. "McGuire/Close Conservation Easement Baseline Report, El Paso County, Colorado." May 2003.
- 4)** Figgs, Michael G., President, LREP, Inc. "Update for the McGuire/Close Conservation Easement Baseline Report 2007 Grant." Letter to Thomas E. Berg. 28 January 2007.
- 5)** Greulich, Melissa, Owner, Ecologist Collective Ecological Consulting, LLC. "Collective Ecological Consulting – Elephant Rock Open Space Current Conditions Report." Letter to Elaine Kleckner. 27 April 2017.
- 6)** Larsen, Lynn S. Soil Survey of El Paso County Area, Colorado. USDA Soil Conservation Service. June 1981.
- 7)** Luaks, Jeff. Climate Change in Colorado - A Synthesis to Support Water Resources Management and Adaptation. University of Colorado Boulder. August 2014. Second Edition.
- 8)** United States. NOAA Science & Information for a Climate-Smart Nation. Climate.gov. Future Temperature and Precipitation Change in Colorado. 18 Aug 2014. 15 Dec 2019.
- 9)** ESRI Demographic and Income Profile, Detailed Age Profile and ACS Population Summary. Trans. and ed. Ross Williams. 9 Dec 2019.
- 10)** Anthony, Jack. "History Trail Run – Monument to Palmer Lake." Unknown. 10 December 2019.
- lose, Dr. Thomas and McGuire, Ms. Catherine. Personal interview. 20 December 2019.**
- 11)** Figgs, Michael G., Figgs, Terri A., Lederer, Nancy D., LREP, Inc. "McGuire/Close Conservation Easement Baseline Report, El Paso County, Colorado." May 2003.
- 12)** James, Dr. Edwin. An Account of an Expedition from Pittsburgh to the Rocky Mountains Performed in the Years 1819,1820 come in 3 volumes. London: Longman, Hurst, Rees, Orme and Brown. 1823.
- 13)** Palmer Lake Historical Society. "History of Palmer Lake." 2009. 10 December 2019. [<https://www.townofpalmerlake.com/community/page/history-palmer-lake>].
- 14)** Palmer Lake Historical Society. "Brief History of the Palmer-divide Area." 2009. 10 December 2019. [<http://www.palmerdividehistory.org/history.html>].
- 15)** Sabin, Marion Savage. Palmer Lake – A Historical Narrative. Edited by McFarling, Lloyd. Monument, CO: Tri-Lakes Printing. 1957. Third printing 1996.

- 16)** Sawatzki, Jim. Telephone Interview. 19 March 2020.
- 17)** Wikipedia. "Palmer Lake, Colorado." 2019. 10 December 2019.
[https://en.wikipedia.org/wiki/Palmer_Lake,_Colorado].
- 18)** Southwest GAP Analysis, Utah State University: (<http://swregap.nmsu.edu/>)
- 19)** National Wetlands Inventory, U.S. Fish & Wildlife Service: (<http://www.fws.gov/wetlands/>)
- 20)** High Plains National Regional Climate Center, NOAA: (<http://www.hprcc.unl.edu/>)
- 21)** Geologic Hazards Study, United States Geologic Survey, Robinson, 1977
- 22)** Natural Resources Conservation Service (NRCS): (<http://www.nrcs.usda.gov/>)
- 23)** Soil Survey of El Paso County Area, Colorado, U.S. Department of Agriculture, Soil Conservation Service, 1980
- 24)** Fountain Creek Watershed Study and Watershed Management Plan, United States Army Corps Engineers, 2009
- 25)** Fountain Creek Corridor Restoration Master Plan, 2011
- 26)** Remediation Scenarios for Attenuating Peak Flows and Reducing Sediment Transport in Fountain Creek, Colorado, United States Geologic Survey, 2013
- 27)** Colorado Natural Heritage Program (CNHP): (<http://www.cnhp.colostate.edu/>)
- 28)** The Conservation Easement Handbook, The Land Trust Alliance and The Trust for Public Land, Byers, E. & Ponte, K.M., 2005
- 29)** United States Census Bureau: (<http://www.census.gov/en.html>)
- 30)** American Community Survey: (<https://www.census.gov/programs-surveys/acs/>)

~ Appendices ~

~ Public Review of Draft Master Plan ~

On February 2, 2021, the public was invited to review the draft version of the Santa Fe Open Space Master Plan. Potential reviewers were notified via email blasts, an official press release, and social media posts on Facebook and Twitter. The invitation and press release are shown on the following pages. Additionally, local parks, trails, and open space organizations also shared the invitation via email and social media outlets, thus reaching more possible reviewers. The review period was open for two weeks, concluding at the close of business on February 17th, although comments were gladly received well into March 2021.

At the conclusion of the review period, a total of 22 individual responses were received, many from representatives from local recreation and land stewardship organizations. These included:

- Palmer Land Conservancy
- Town of Palmer Lake
- Lewis-Palmer School District 38
- US Fish and Wildlife Service
- Trails and Open Space Coalition
- Black Forest Trails Association
- Friends of Ute Valley Park
- Medicine Wheel Trail Advocates
- Colorado Mountain Club, Pikes Peak Group
- Historic Lakewood Riding Club

Comments received from the public review process ranged from straightforward and often enthusiastic approval to questions regarding off-leash dog parks, trail planning and construction partnerships, multi-agency land and wildlife stewardship partnerships, and suggestions for a more accessible and enjoyable horseback riding experience. There were no responses that could be interpreted as negative or not supportive of the Master Plan and open space.

The review by Palmer Land Conservancy resulted in changes to the proposed singletrack trail system, primarily due to redundancy between two sections of parallel trails, as well as possible impacts to Preble's Meadow Jumping Mouse (PMJM) habitat. Modifications to the trail system greatly reduced these possible impacts and shortened the singletrack trail network from 7,100 feet to 5,950 feet – a reduction of 1,050 feet. As a result of these modifications, the Palmer Land Conservancy approved the Santa Fe Open Space Master Plan, a requirement of the 2017 Amended Conservation Easement itself.



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Carrie Geitner, District 2
Stan VanderWerf, District 3
Longinos Gonzalez, Jr, District 4
Cami Bremer, District 5

News Release

El Paso County Parks Invites the Public To Review the Draft Santa Fe Open Space Master Plan

El Paso County, CO, February 4, 2019 – El Paso County

El Paso County Parks invites the public to review the draft Santa Fe Open Space Master Plan. The Master Plan provides guidance for the next seven to ten years for capital improvements, construction of open space amenities, implementation of educational programs, and operations and maintenance.

Situated on the sunny southern slopes of Ben Lomand Mountain near Palmer Lake, Colorado, Santa Fe Open Space is El Paso County Parks' newest addition to its parks, trails, and open space system. The 60 acres of pristine upland ranchland is covered in thick stands of scrub oak, mature ponderosa pine trees, and rolling grass meadows. Located immediately adjacent the popular New Santa Fe Regional Trail, Santa Fe Open Space affords visitors an opportunity to experience a more natural foothills environment with outstanding views in close vicinity to urbanized areas and major trailheads.

A conservation easement governs the use of the site and limits activities to passive recreation opportunities like hiking, mountain biking, and horseback riding.

The draft Master Plan is available to review at the following online locations:

- Direct Link: https://communityservices.elpasoco.com/wp-content/uploads/Parks_Planning/SFOS-Master-Plan-Web-DRAFT.pdf
- Santa Fe Open Space Webpage: <https://communityservices.elpasoco.com/parks-and-recreation/santa-fe-open-space/>
- Park Planning Webpage: <https://communityservices.elpasoco.com/parks-planning/>

Please send your comments to Ross Williams, El Paso County Community Services Park Planner via email at rosswilliams@elpasoco.com by Wednesday, February 17th.

Figure 44 - Press Release for Public Review of Draft Santa Fe Open Space Master Plan



**You Are Invited to Review the Draft
Santa Fe Open Space Master Plan!**

El Paso County Parks invites you to download and review the draft Santa Fe Open Space Master Plan. The plan addresses conservation, trails, open space, recreation and cultural services needs, so El Paso County Parks can continue to provide the facilities and services that citizens value. The Master Plan provides guidance for the next seven to ten years for capital improvements, construction of open space amenities, implementation of educational programs, and operations and maintenance.



The draft Master Plan is available to download in Adobe PDF format at the following online locations:

- **Direct Link:** https://communityservices.elpasoco.com/wp-content/uploads/Parks_Planning/SFOS-Master-Plan-Web-DRAFT.pdf
- **Santa Fe Open Space Webpage:** <https://communityservices.elpasoco.com/parks-and-recreation/santa-fe-open-space/>
- **Park Planning Webpage:** <https://communityservices.elpasoco.com/parks-planning/>

Please send your comments to Ross Williams, El Paso County Community Services Park Planner via email at rosswilliams@elpasoco.com by Wednesday, February 17th. Thank you!

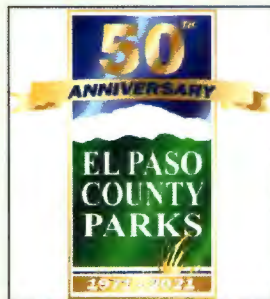


Figure 45 - Email Invitation for Public Review of Draft Santa Fe Open Space Master Plan