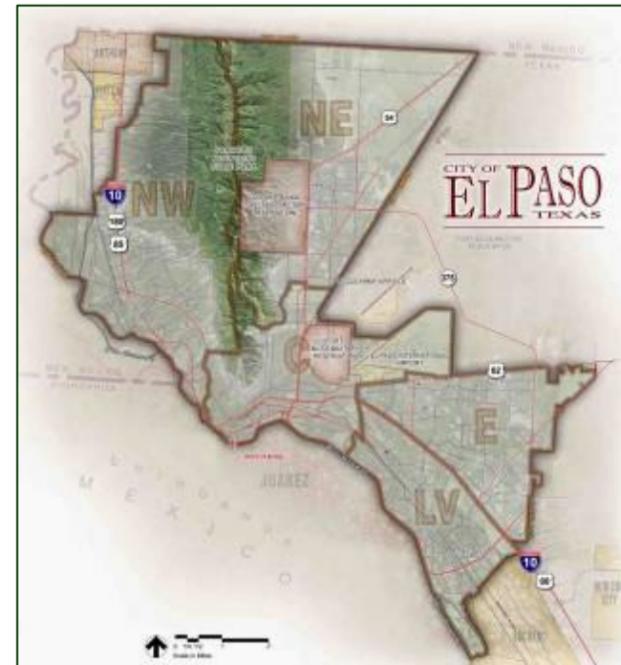
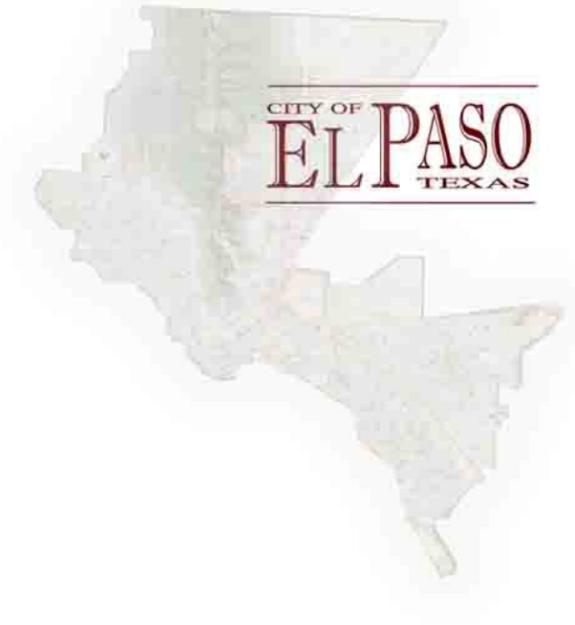


Towards A Bright Future

A Green Infrastructure Plan For El Paso, Texas



January 2007

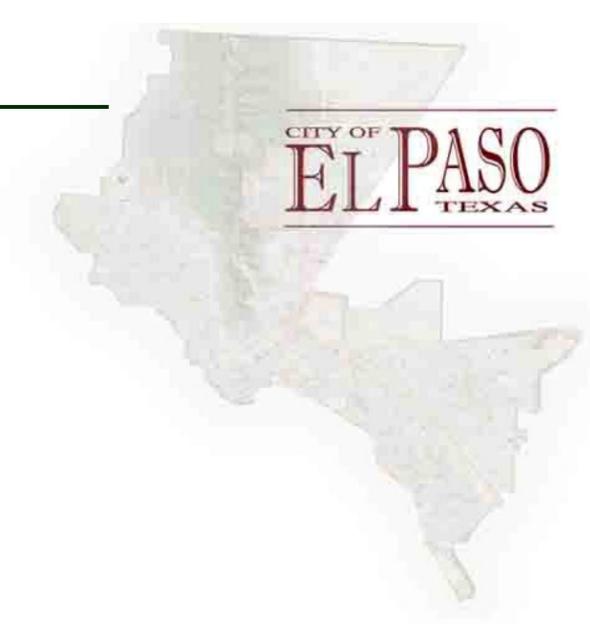
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"Here are bits of eternity, which have a preciousness beyond all accounting. Scientists need them for the study of undisturbed nature. And the generations to come need them for the same breathtaking vistas into the past and into the future. May they remain for all time – islands in time and space, where all living men can detach themselves from their civilization and walk into eternity."

Harvey Broome, Naturalist 1948

Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul.

John Muir, Naturalist

1. Introduction - The Need for Open Space in El Paso

The mountains, the desert, the river...El Paso wouldn't be the same without them. Yet as the City grows, the special places our families remember are disappearing one by one. The El Paso Open Space Plan seeks to preserve some of those special places, so that future generations have a city that is vibrant, beautiful, and truly one of best places to live on this planet.

What is Open Space?

Open space is defined in many different ways, depending on each regions' unique assets and needs. Early uses of the term came from vivid descriptions of the "great open spaces of the American West." The common thread in all definitions of open space is the notion of lands that have not yet been substantially altered by man, or that preserve some vestiges of the natural environment in the urban area that surrounds them.

The definition of open space used by this Open Space Master Plan is as follows.

"Open space is any area that has not been developed or that currently has no significant structures on it. These spaces have some combination of natural scenic beauty, natural resources that are deemed worthy of preservation, or have a cultural or historic significance to the area or region. Open space lands may be under public or private ownership."

Why is Open Space Needed in El Paso?

Today, El Paso is home to the Franklin Mountains State Park. While the 24,248 acres of the park create the second largest "urban" park within the incorporated limits of any city in the United States, the reality is that much of the State Park consists of steep, rugged terrain not readily accessed by most citizens. Considering that there is such a large park very close to the City, why bother to preserve additional undeveloped areas?

El Paso's rugged and spectacular scenery blends the Franklin Mountains, the Rio Grande River Corridor and the beauty of the Chihuahan Desert, and should be preserved for future generations.





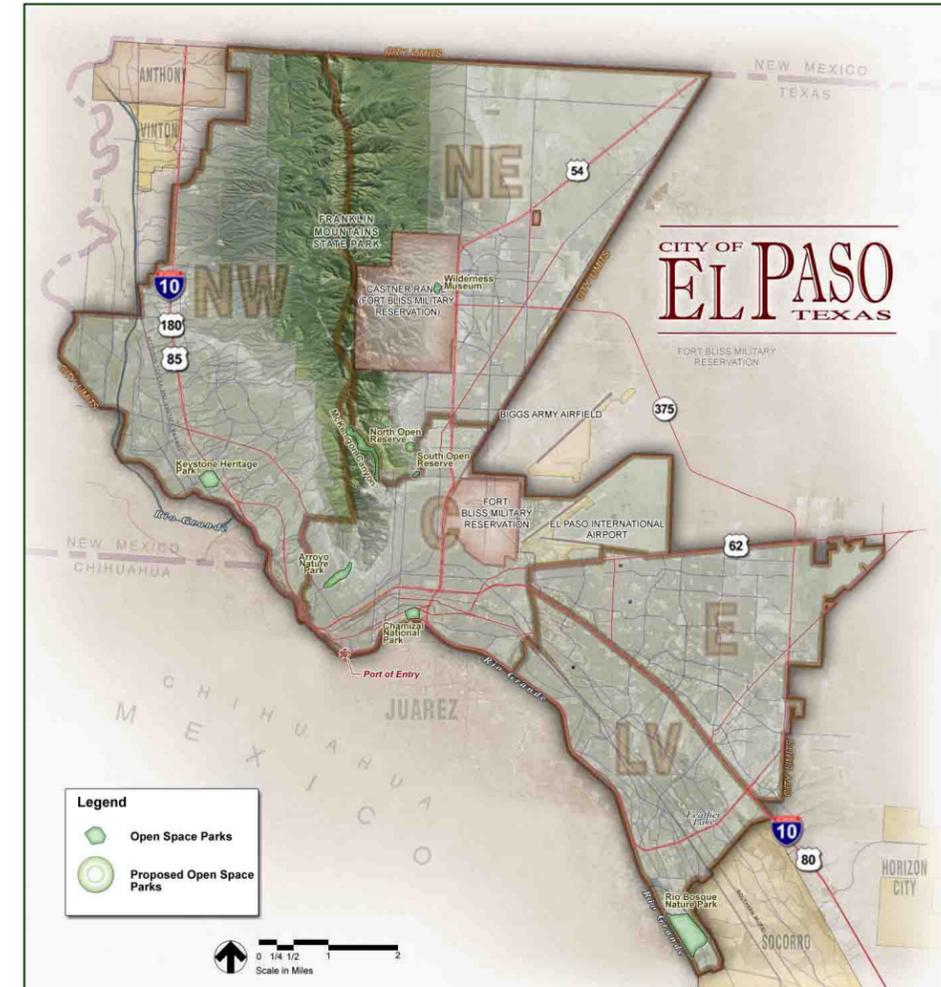
Wouldn't that land have greater value to the City if it were developed? Why then should El Paso preserve open space? The answers lie in the heart of the City, not in the mountains.

El Paso has very little parkland today - Within most of the urbanized parts of the City, very little actual undeveloped open space exists. Excluding the Franklin Mountains State Park, El Paso today has only four acres of parks of any kind for every 1,000 residents of the City, and this ratio will continue to drop as the population of the City increases. Access to the State Park is limited to just a few areas, all of which are far from the heaviest population concentrations in the City.

El Paso has very little "in-town" open space – Excluding the Franklin Mountains, there is very little preserved open space in El Paso today. Major existing open space preserves in or near the City itself total less than 800 acres or about 1 acre for every 792 residents of the City.

The amount of remaining undeveloped land in El Paso and in El Paso County is rapidly decreasing – Of the 224 square miles within the City of El Paso (after excluding the Franklin Mountains), only 50 square miles, or less than 23%, remain largely undeveloped. Of the 1057 square miles in El Paso County, less than 250 square miles remain largely undeveloped or unused for military purposes. Land for open space must be preserved today, or it will be consumed over the next 20 to 40 years.

El Paso has few natural features that have been preserved – apart from the mountains, there are almost no other natural areas that have been preserved within the City. In many other cities, drainage ways, large forests or other significant natural areas have been preserved through past actions. The need to preserve natural drainage corridors has not been perceived as a significant need in the past in El Paso, and as a result few in-town natural areas beyond parks can be found in much of El Paso today.



Existing Open Space in El Paso Today.



Photo by City of El Paso

Many parts of El Paso have very few parks or open space of any kind.



New Development near Loop 375 and Pellicano on the far East side. Growth is consuming undeveloped areas at a rapid rate.



Underdeveloped desert foothills in the Upper Valley, on the West side of the Franklin Mountains.

El Paso needs the scenic beauty of open space – El Paso’s position as an attractive place to live and work is directly impacted by perceptions of the City. Much of the desert around the City is beautiful, but the City itself lacks the attractive open spaces that make many other cities special.

The population of El Paso and El Paso County is growing quickly – El Paso continues to have a rapid rate of growth, and the increasing importance of Fort Bliss to the United States Military will only increase the population of the post. According to the U.S. Census, El Paso County had over 721,000 residents in 2005. By the year 2020, the County is predicted to have more than 980,000 residents, and by 2050 the County is expected to almost double in population to 1,370,000 residents.

Open space and natural drainage are vitally needed in El Paso – As the City has grown, especially on the western side of the Franklin Mountains, natural drainage corridors and arroyos have been dammed or eliminated in favor of man-made channels with less capacity and greater flow velocity. The elimination of natural arroyos has resulted in less open space and more unattractive concrete channels that potentially are overwhelmed during major storm events. Natural drainage through arroyos provides both beautiful natural areas and higher capacity corridors for storm drainage.

Why Now?

Events of the last decade have clearly shown that very little meaningful open space will be preserved unless the City of El

Paso and El Paso County begin to take a more aggressive stand. Open space should be viewed as more than just a series of individual properties that are preserved for some particular reason. Therefore, this plan considers each piece, each area that is preserved, as an integral part of the open space “infrastructure” of El Paso. Instead, open spaces should be connected to become part of a network that encompasses the entire city.

Open space and park planning for major cities has long embraced this idea. Consider the Emerald “Necklace” of Boston, or Minneapolis’ band of parks, or even the recent corridor of greenways that is planned to encircle the entire city of Atlanta. In El Paso, for example, the mountains drain to the river, thereby linking both, and the river travels along the entire length of the City, creating a long necklace of areas that are preserved. El Paso’s green spaces should be viewed as a key infrastructure component of the City; just as vitally important as the road, water or sewer infrastructure that already links the City together. Moreover, green space is visual; one should be able to see it and mentally connect the pieces together.

This plan then seeks to bridge the gap between “discussing” the preservation of open space in El Paso, and “actively engaging” in open space preservation as one of the key infrastructure needs of the City. This plan also seeks to guide, promote, and make clear that the time is now to preserve the remaining natural treasures of the City, or risk losing them forever.



Planning for Open Space in the Past

Planning for the preservation of open space in El Paso has been occurring for a long time, but until recently has not been a high priority in the City. As a result, most previous open space planning and interest in preserving open space has been lead by citizen activists and by neighborhood groups.

While the Kessler Plan in 1925 encouraged the preservation of natural areas, the active preservation of open space did not register as a high priority at that time. Even into the 1950's, El Paso's size and the relatively undeveloped state of much of the mountain areas caused there to be little concern among the residents of the City for the preservation of open space.

During the next three decades, the City's attention was focused on attracting development and economic growth to the area, especially as other communities in the Southwest surpassed El Paso. Using growth to fight poverty was the mantra of the day, and every effort was made to make El Paso as attractive to develop in as possible. Even Parkland Dedication Ordinances were interpreted to allow for very little preservation of parks and open space in the City. However, major strides forward were made when much of the Franklin Mountains were preserved by the creation of the Franklin Mountains State Park by the Texas Legislature in 1979. This resulted from the generous donation of land by the City and County and the subsequent purchase of additional El Paso Water Utility controlled acreage by the State. Today, the

"Foot paths through the mountains to the high points should be built and the native vegetation protected and encouraged. By building rock barriers across the small arroyos at intervals soil can be collected and moisture retained so that the natural trees and bushes of the region may be made to thrive.

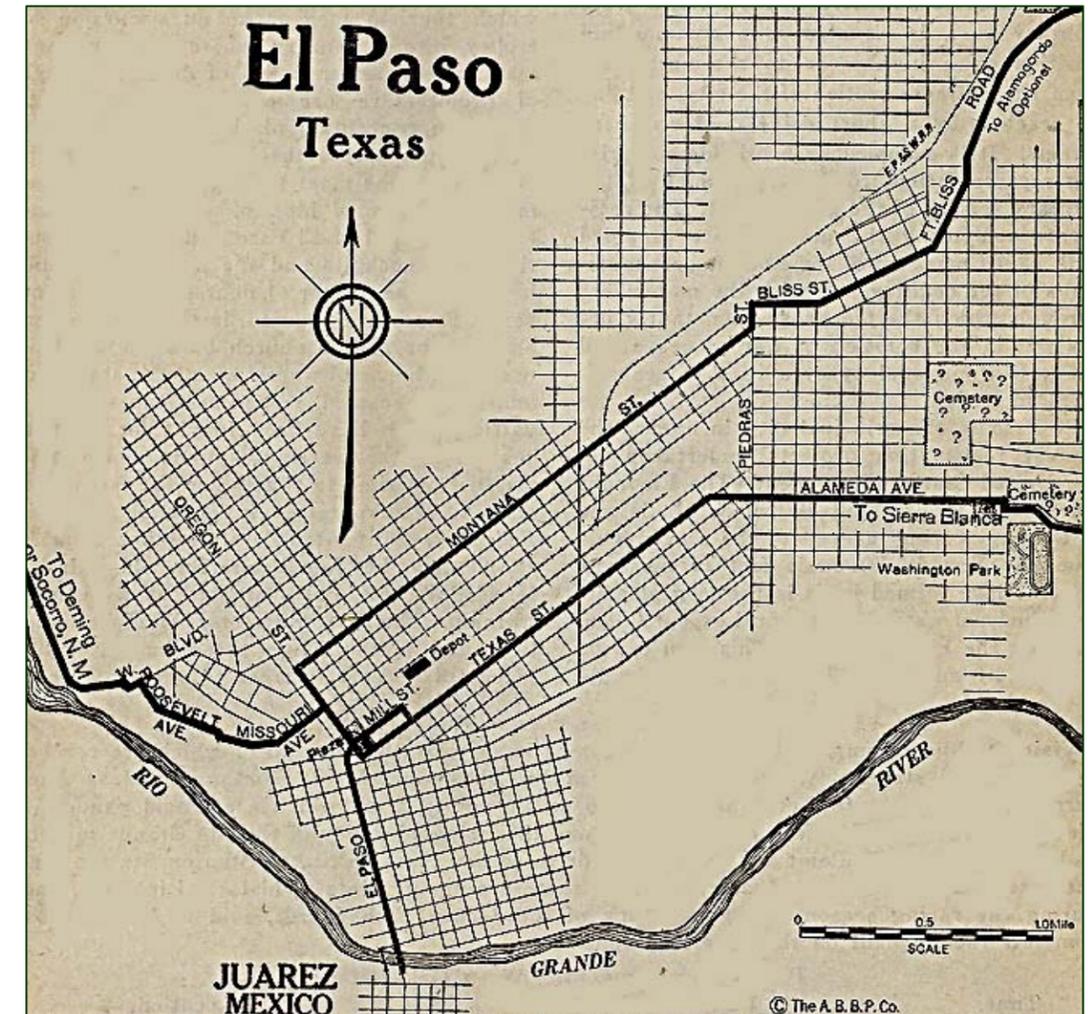
There is more beauty and variety of this vegetation than most people imagine, because few get to the spots where it has grown unmolested."

George Kessler
The Plan for El Paso, 1925

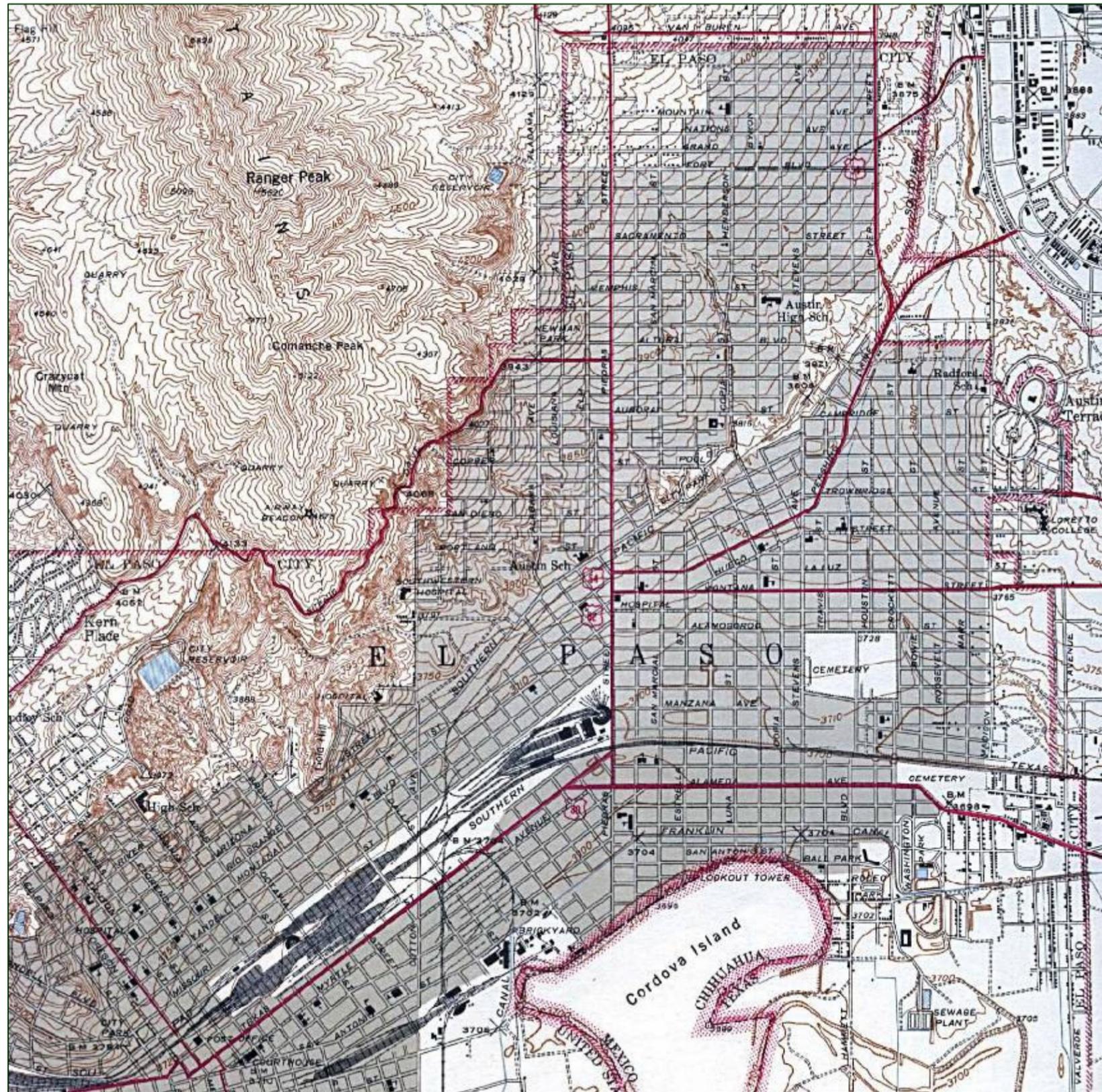
Franklin Mountains State Park provides El Paso with one of the largest open space parks found anywhere in the country.

In the last ten to fifteen years, the ongoing development and subsequent destruction of natural drainage ways and arroyos throughout the City began to attract the concern of many residents of the City. The 1996 Parks Master Plan for El Paso identifies the need to preserve arroyos in the City. The 2006 Parks and Recreation Master Plan for El Paso, called "Towards A Bright Future," recommends that the City of El Paso acquire and preserve at least 15 acres of truly accessible open space for every 1000 residents of the City. This amount is over and above the lands encompassed by the Franklin Mountains State Park.

Between 1950 and 2000, El Paso increased in size ten fold, from 25 sq mi in 1950 to over 251.1 sq mi in 2006.



El Paso in 1920, showing little encroachment on the mountain zones.



1948 USGS Topographic Map of El Paso, showing development over natural drainage and small canyons.

Methodology

This open space plan emphasizes the desires and expectations of the citizens of El Paso. Through public input meetings and surveys, the citizens of El Paso were encouraged to provide their vision for open space. Through the Open Space Advisory Group, interested citizens and stakeholders helped to shape the recommendations of the plan.

The steps in the process are as follows.

1. **Develop a Citizen Driven Vision for Open Space** – with input from the Open Space Advisory Group, prepare a statement that will guide open space decisions over the next decade.
2. **Seek Citizen Input regarding Open Space** – conduct public meetings and surveys to provide citizens with an opportunity to address where they think open space acquisition should occur.
3. **Identify Open Space Opportunities throughout the City** – develop an inventory of undeveloped lands and other open space opportunities throughout the City.
4. **Analyze each opportunity area** for multiple criteria, including ownership and potential cost of acquisition, benefit to the area around it, and quality of the open space asset.
5. **Prioritize Preservation Opportunities throughout the City** - develop an action plan for each key

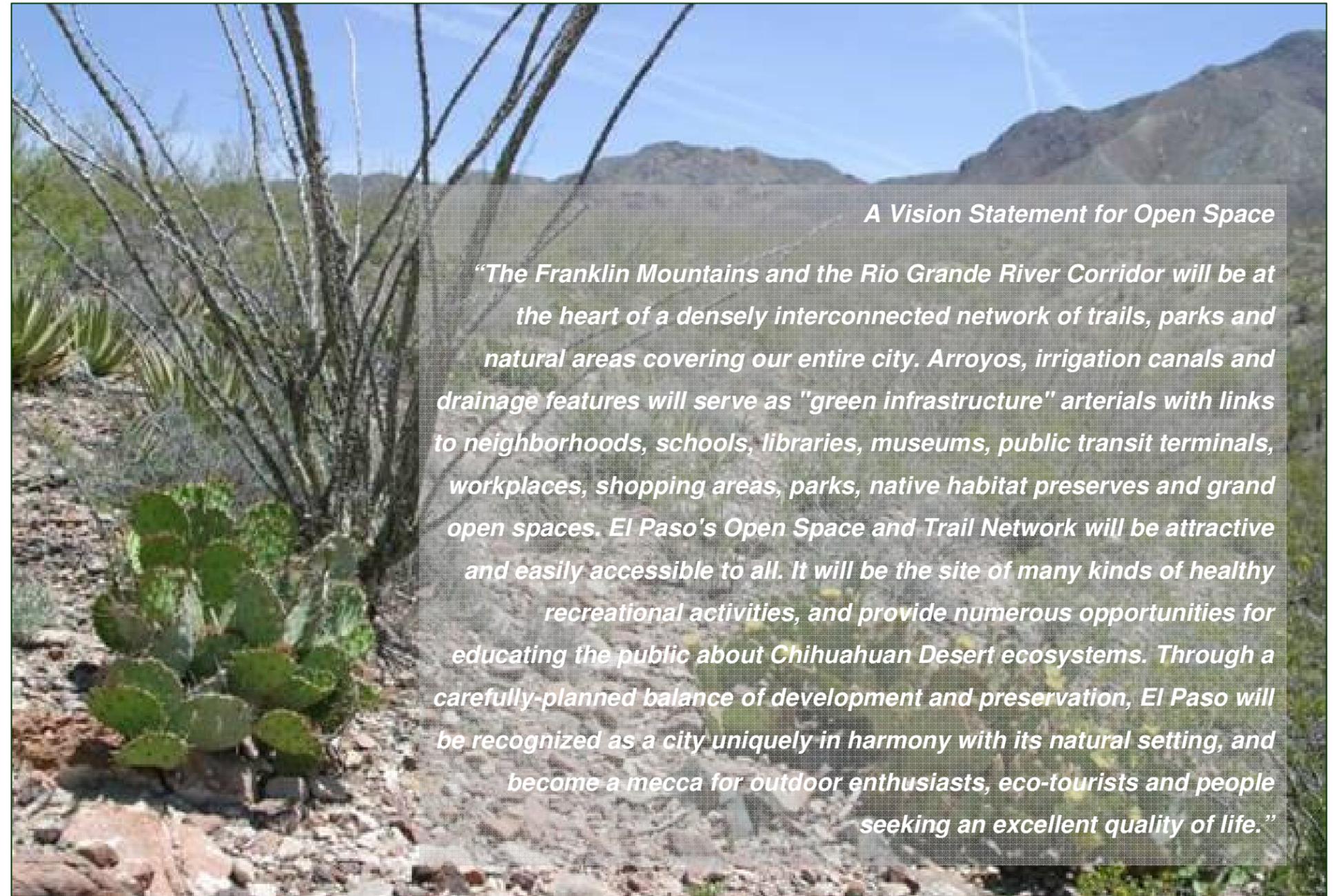


opportunity area. Seek Advisory group input regarding the priorities expressed by the plan.

6. **Develop additional implementation recommendations** – develop a full range of strategies to help preserve key open space areas throughout the City.
7. **Review the Plan Recommendations with the Advisory Group and the citizens of El Paso** – modify the recommendations per the comments received.
8. **Approve the plan as a guiding document** – seek the approval of the City Planning Commission and the City Council.

A Vision Statement for Open Space

The vision for open space is captured by the statements of the members of the Open Space Advisory Group. Twenty similar statements were blended together to capture El Paso’s open space vision for the future as shown on this page.



A Vision Statement for Open Space

“The Franklin Mountains and the Rio Grande River Corridor will be at the heart of a densely interconnected network of trails, parks and natural areas covering our entire city. Arroyos, irrigation canals and drainage features will serve as “green infrastructure” arterials with links to neighborhoods, schools, libraries, museums, public transit terminals, workplaces, shopping areas, parks, native habitat preserves and grand open spaces. El Paso’s Open Space and Trail Network will be attractive and easily accessible to all. It will be the site of many kinds of healthy recreational activities, and provide numerous opportunities for educating the public about Chihuahuan Desert ecosystems. Through a carefully-planned balance of development and preservation, El Paso will be recognized as a city uniquely in harmony with its natural setting, and become a mecca for outdoor enthusiasts, eco-tourists and people seeking an excellent quality of life.”



Major Existing Open Space Preserves in El Paso				
Name	Owner/Manager		Size	Comments
Davis Park	UTEP	Northwest	100 Acres	Mountainous preserve, no public access
Rio Bosque Wetlands Park	UTEP/City of El Paso	Mission Valley	372 Acres	Large recreated wetlands, open to public
Keystone Heritage Park	Keystone Park Inc.	Northwest	35 Acres	Wetlands and botanical gardens, archeological preserve, open to the public
McKelligon Canyon	City of El Paso	Northeast	105 Acres	Picnicking, large open air amphitheater
Feather Lake	El Paso/Trans Texas Audubon Society	Mission Valley	43 Acres	Wetlands and bird watching sanctuary, seasonally open to the public
Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon	Frontera Land Trust	NW	91 Acres	Public access for minimal impact recreation is allowed
Arroyo Park	City of El Paso	Central	60 Acres	City park, access on natural trails allowed
North and South Open Preserves	City of El Paso	Northeast	30 Acres	Open space preserves, no facilities for public access
Subtotal			836 Ac. +/-	
Percentage of Citywide Total Area			0.05%	
Rio Grande River Corridor (IBWC controlled)	IBWC	Northwest, Central, Mission Valley	1,090 Acres +/-	Only small portion (390 acres +/-) in Northwest El Paso easily accessible to the public
Subtotal			1,090 Acres +/-	
Percentage of Citywide Total Area			0.06% +/-	
Franklin Mountains State Park	Texas Parks and Wildlife Department	Citywide	24,247 Acres	State Park, fee required for day or overnight use.
Subtotal			24,247 Acres	
Percentage of Citywide Total Area			14.5% +/-	

2. Existing Open Space in El Paso

The City of El Paso occupies 261 square miles within El Paso County. Existing open space preserves in El Paso include the Franklin Mountains State Park and other smaller areas of land acquired by the City over the past few decades. The Franklin Mountains lands, at 37 square miles, take up 14% of the total area of the City of El Paso. However, if the Franklin Mountains State Park lands are excluded, all other open space areas, including the Rio Grande River corridor, Keystone Heritage Park, McKelligon Canyon, the Rio Bosque Wetlands, Arroyo Park, Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon and the Audubon Society's Feather Lakes property total only 1926 acres, or just over three square miles and only one percent of the total land area of the City. El Paso has a very small overall percentage of open space preserves.

Descriptions of the major existing open space preserves are listed on the adjoining table and described in this chapter.

Franklin Mountains State Park

History - The Franklin Mountains State Park was established by the Texas State Legislature in 1979, prompted in part by increasing development of roads and other facilities along peaks and the sides of the mountains. The formal acquisition of property by the Texas Parks and Wildlife Department began in 1981, and the park opened to the public in 1987. In 1981, the “El Paso County” donated 2,961 acres (McKelligon Canyon and Tom Mays Park area) and the City of El Paso donated 2,577 acres not administered by the El Paso Water Utilities to the State of Texas for the State Park. In addition, the City cancelled leases it held on 5,045.9 acres of Texas General Land Office lands so that these lands could be leased to the Texas Parks and Wildlife for the State Park. In 1989, the City of El Paso sold 6,833.9 acres of El Paso Water Utilities lands to the State for the State Park for the price of \$360,792 (original cost plus 3% interest per year).

Size and Physical Characteristics - According to the Trust for Public Lands, it is the second largest “urban” park in the United States at more than 24,247 acres and almost 38 square miles in size. In fact, the park is not really a city park, but is only considered an urban park because it lies within the incorporated boundaries of the City of El Paso. The park actually splits the City of El Paso effectively into east and west zones, connected by the striking background of the nearby mountains on either side. The mountains slopes are largely pristine along the western side of the park. On the eastern side and in the area facing the City, large telecommunications

towers, their support facilities and the roads that provide access to the peaks stand out sharply from the rugged slopes. Interestingly enough, the front face of the mountain range closest to downtown El Paso is still privately owned and not protected as is the remainder of the State Park.

The park ranges in elevation from just over 4,000 feet above mean sea level at its foothills to over 7,190 feet at the peak of North Franklin Peak. Over 50% of the land within the park boundaries exceeds a 25% slope, making much of it difficult to access.

Facilities at the Site - The park will ultimately include over 118 miles of trails. Of these, all will be available for hiking, and 51 miles will allow mountain biking and 22 will be open to use for horseback riding. Currently the park includes restrooms, 44 shaded picnic sites, and locations for primitive camping.

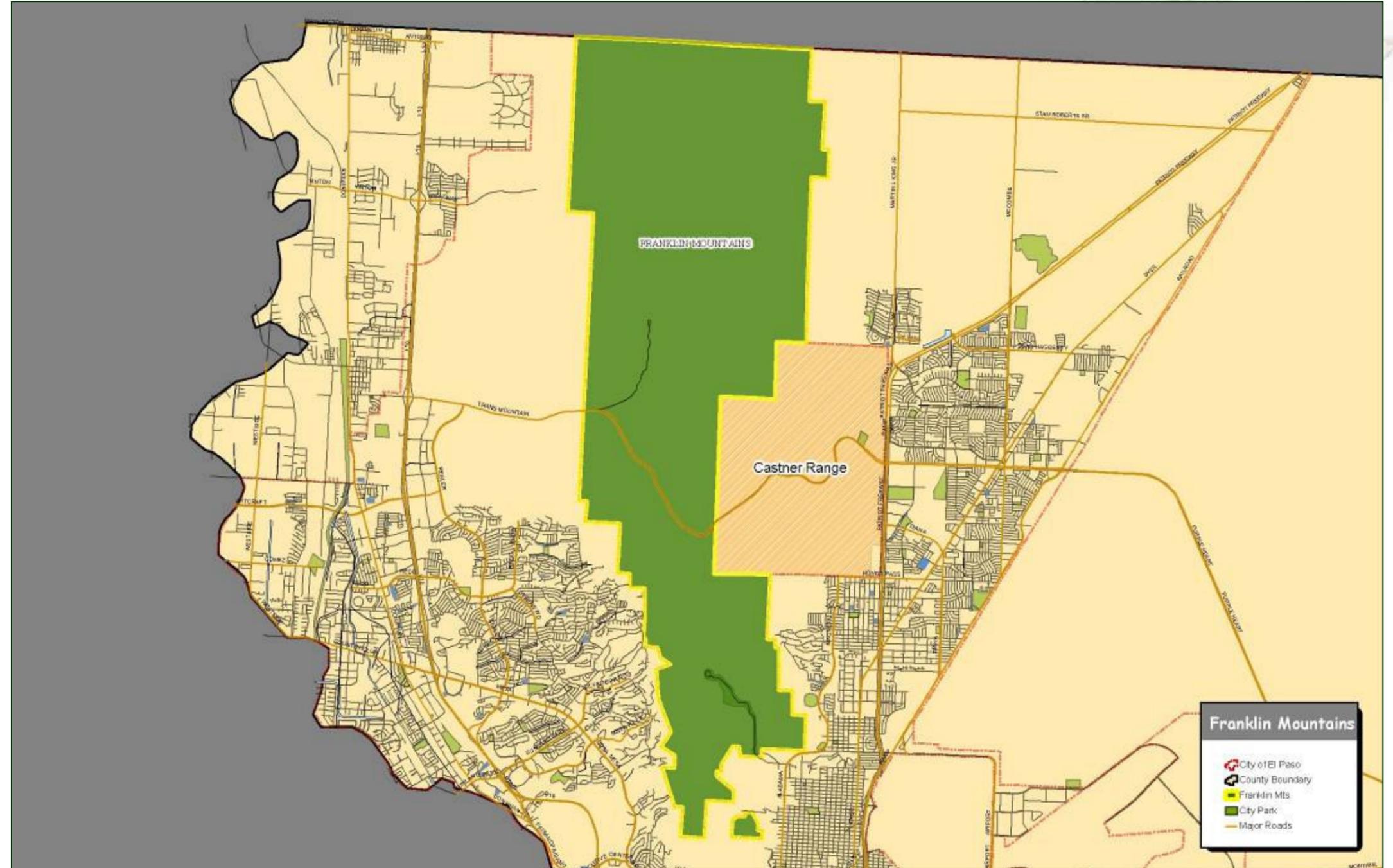
Value as an Open Space Asset – The Franklin Mountains are the single most dominating physical feature in El Paso, and they serve as a backdrop to over 80% of the City. Only in the far southern reaches of the Mission Valley area is one not able to see the mountains in the background. They provide an open space retreat that is within 30 to 45 minutes driving time for most residents of the City and El Paso County. The park also preserves a nearby large area of mountain desert habitat in pristine condition. However, the need to pay a day fee for access to the park may make the park less of a spontaneous and everyday destination for most residents of El Paso.



Views to the Franklin Mountains dominate the skyline of El Paso.



Spectacular scenery and desert views abound in the Franklin Mountains State Park.



Franklin Mountains State Park boundaries.



Rio Grande River

History –The Rio Grande and the passage, or ford across it was one of the reasons for the establishment of El Paso, and moreover, the origin of the City’s name. The river provided a year round source of water, and allowed the farming of large areas along the river floodplain. However, with the creation of Elephant Butte and Caballo Dams in New Mexico, the annual floods and winter flow were severely curtailed, and today the river has only a small percentage of its typical flow.

Size and Physical Characteristics – The Rio Grande River itself in El Paso includes over 1,000 acres and runs for over 32 miles, excluding a five mile segment that traverses Sunland Park in New Mexico. The entire river corridor, which includes flood protection levees, totals more than 1,000 acres of lands that are controlled by the International Boundary and Water Commission (IBWC).

The river corridor was once covered with cottonwood “bosques” at one time, but today most of the tree cover along the river has been removed for flood control purposes. The IBWC has contained the river within a low levee system that essentially separates the river from most of the neighborhoods along the corridor. However, the levees do provide an excellent opportunity for trails in the future.

Facilities along the River Corridor - A continuous 30 mile long trail is planned for the Rio Grande corridor in El Paso County. The initial 7 mile trail from Gallegos Park just south of Vinton to Country Club Drive near Sunland Park has been

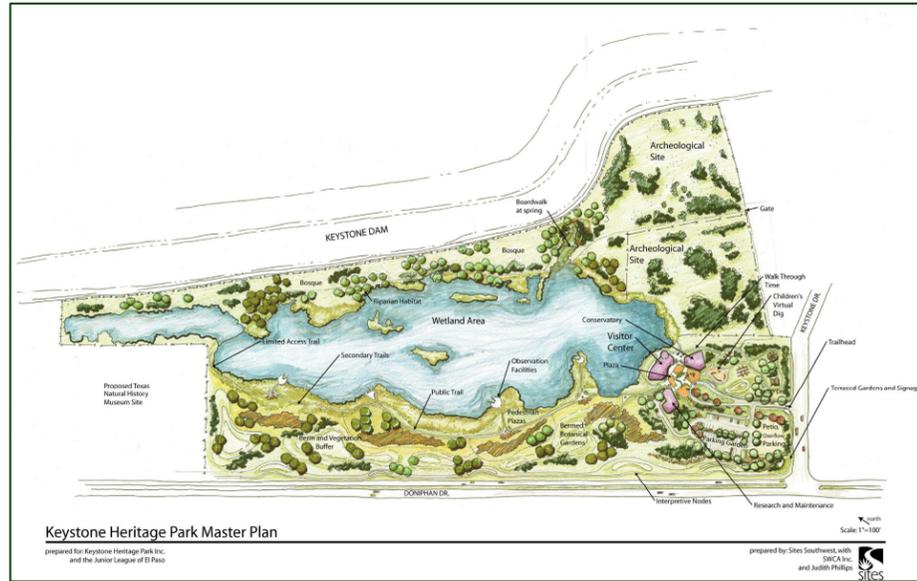
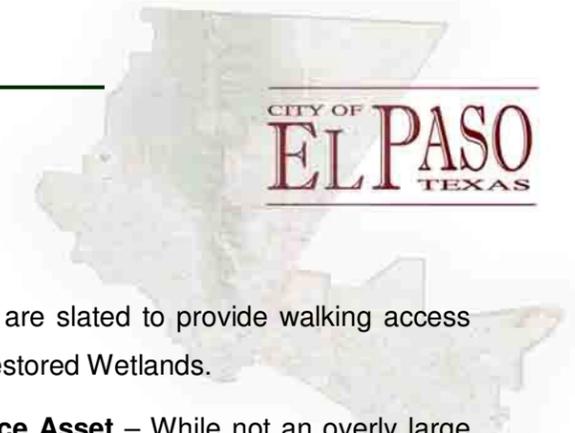


built. Portions in the Mission Valley area are programmed for construction within the next three years.

Value as an Open Space Asset – The Rio Grande River can be the longest continuous open space corridor in El Paso County, traversing over 32 miles. In the areas of the City furthest away from the Franklin Mountains, the river becomes the single most important open space and natural asset in the area. But its use as an international border and an area constantly patrolled for illegal border crossings has transformed over 70% of the length of the Rio Grande in El Paso into a channelized river section that no longer has the beauty of the bosques of cottonwoods that inhabited the river corridor at one point in time. Restoration of the “bosques” should be a high priority of El Paso’s Open Space Plan.



The Rio Grande in El Paso, with low vegetation and occasional remnant “bosques.”



Keystone Heritage Park

History – During planning for the Keystone Dam, the centerpiece of five dams that were designed to provide flood protection for the west side of El Paso, a pre-historic native American settlement was discovered and partially excavated in 1979. The archaeological artifacts date back to around 2,500 B.C. The site was placed on the National Register of Historic Places in 1980 and also designated as a State of Texas Archaeological Landmark in 1983, but portions of the site were sold to the Santa Fe Railroad before they could be permanently preserved. After attempts to build a switching yard in the area were stopped, a settlement was reached in 1993 to protect the wetlands. The Keystone Heritage site is now managed by Keystone Heritage Park Inc., a non-profit organization.

Size and Physical Characteristics –The Keystone site includes approximately 35 acres located to the south and west of the Keystone Dam. The site includes both the remnant marshes and wetlands found along the base of the dam structure, and a very well developed interpretive garden area depicting plants of the Chihuahuan Desert. The master plan for the site shown on this page, seeks the eventual restoration of the marshes between the dam and Doniphan Drive.

Facilities – Much of the Chihuahuan Desert Garden area along with parking areas for visitors have been built. Restoration of the wetlands and marshy areas has not yet

been completed. Trails are slated to provide walking access along the edges of the restored Wetlands.

Value as an Open Space Asset – While not an overly large site, Keystone Heritage Park does preserve a key archaeological site. It also seeks to restore a small piece of the marshy wetlands that existed in the Rio Grande floodplains at one time. It protects a one of a kind cultural resource that cannot be replaced.

Davis Park (University of Texas – El Paso)

History – Davis Park is a mountainous tract of land located between I-10 and UTEP. The land was originally acquired by the City of El Paso, but was eventually incorporated into UTEP lands. The land includes foreground mountains and arroyos that can link UTEP with the Rio Grande river corridor on the west side of I-10.

Size – Approximately 100 acres.

Value as an Open Space Asset – Davis Park is largely undeveloped, and provides a very close remnant of the mountainous foothills between the Franklin Mountains of Texas and the Sierra de Juarez across the border.

Rio Bosque Park

History – Much of the park was originally created when the Rio Grande River was initially channelized in the mid 1930's. In 1973, the Federal government conveyed approximately 277



Established interpretive features.



Zone of future wetland restoration.

The wetlands of Rio Bosque Park provide a taste of the character of the Rio Grande floodplain before El Paso was founded.



acres to the City of El Paso to become the Rio Bosque Park. An additional 9 acres of land were conveyed in 1976 by the US Government, and the City of El Paso added another 86 acres to the park.

The wetland cells in the park were constructed by the IBWC as mitigation for the American Canal extension from downtown to a point near the Rio Bosque project. Water for the wetlands comes from treated effluent discharged from the adjacent Robert Bustamante Treatment Plant. Management of the wetlands park has been conveyed to the University of Texas at El Paso.

The Rio Bosque has a visitor center and four and a half miles of self guided interpretive trails, including a 0.6 mile fully accessible trail. The Rio Bosque lacks a reliable source of water to feed its wetland cells, which is compounded by difficult access from nearby roadways.

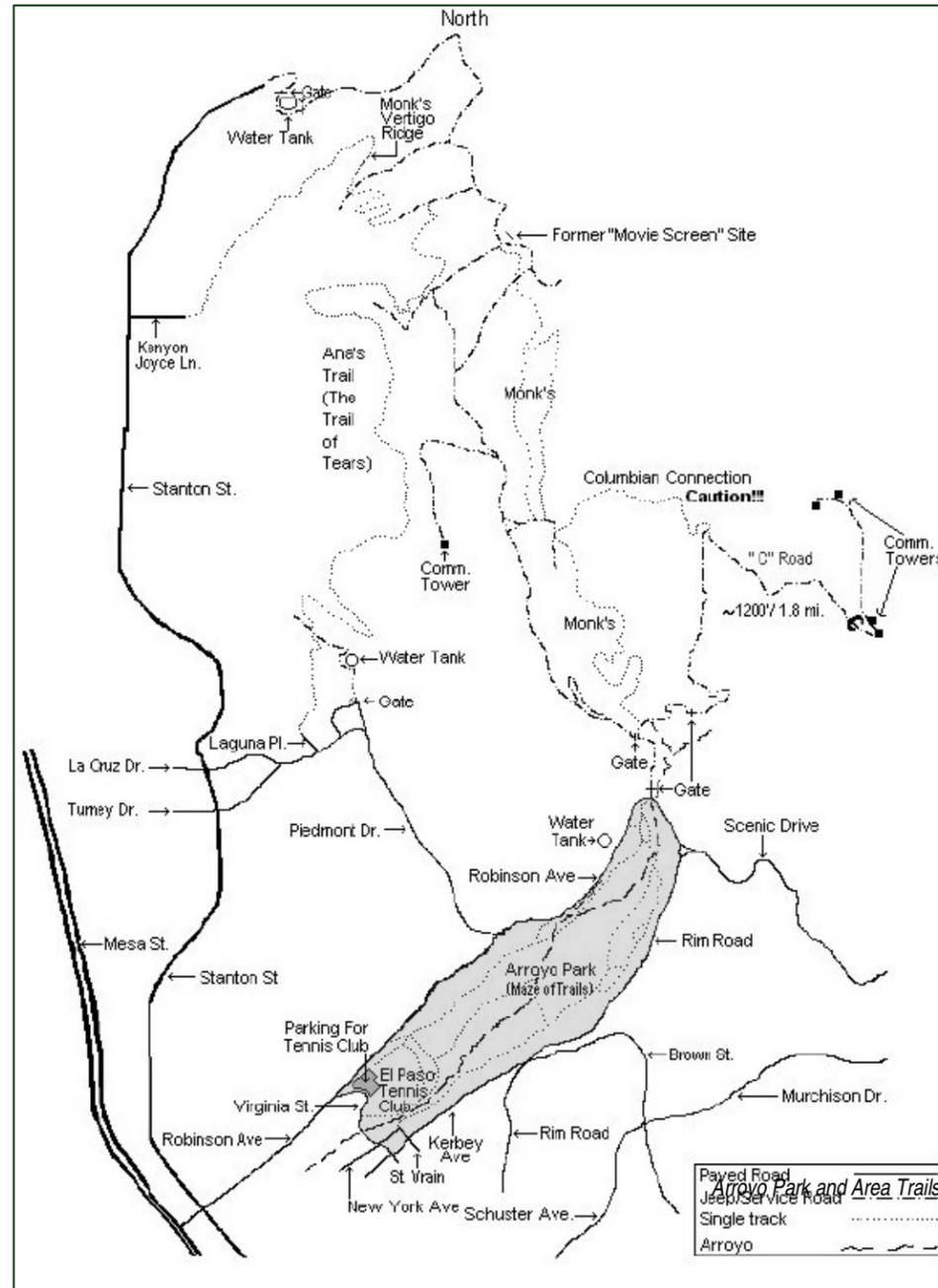
Size - Rio Bosque totals approximately 372 acres.

Value as an Open Space Asset – The Rio Bosque site is planned to one day duplicate the forested areas that existed along the banks of the Rio Grande River. It will also be the largest wetlands area in the El Paso region, and provides excellent learning opportunities.

Arroyo Park

History – Arroyo Park was acquired and designated as a park in the early part of the 20th Century.

Size and Physical Condition – Arroyo Park includes approximately 60 acres of desert lands with a shallow arroyo traversing the site. The property is located in the heart of the historic Kern Place neighborhood, and provides a strong sense of the desert environment very close to central El Paso. Although the El Paso Tennis and Swim club is located in the middle of the property, the tract is mostly preserved in an undeveloped condition. In places, Arroyo Park is over 1,000



feet in width, and the overall length of the park exceeds one mile. The park is bounded by Rim Road to the north and Campbell Street in the south, and is flanked by Robinson and Piedmont Streets to the west and New York Drive and private residences to the east.

Value as an Open Space Preserve – Arroyo Park, along with The Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon, is a classic example of how to fully preserve an existing arroyo to serve as open space, drainage, and scenic parkland. The width of the property allows the arroyo channel to vary with periodic flood events, much as it would do in an undisturbed natural condition, and allows space for both habitat and vegetation.



Aerial map of The Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon.

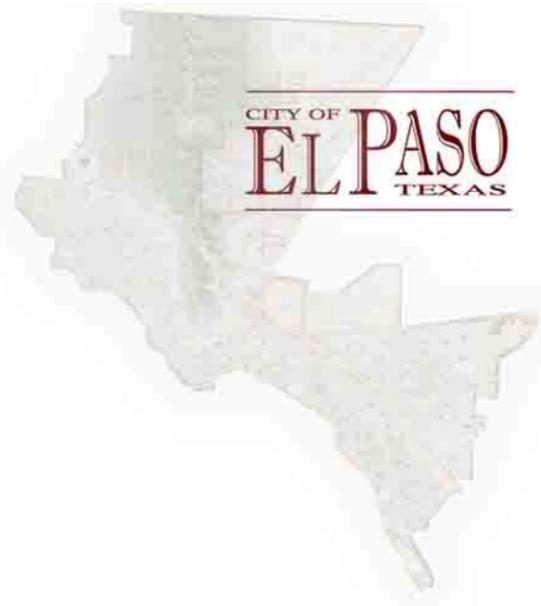
The Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon

History- The Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon was purchased by Dr. Richard Teschner in 2005. Dr. Teschner then donated the property to the Frontera Land Alliance, a private land conservation trust, in January 2006. The acquisition does allow for the future development of some rim areas, but the majority of this very visible and scenic gateway into northwest El Paso is now preserved as an asset for all of El Paso.

The preserve is open to the public for hiking, birding and other forms of minimal impact recreation.

Size and Physical Condition – The Charlie Wakeem/Richard Teschner Nature Preserve of Resler Canyon extends about one mile in length between I-10 and Mesa Street and is 90 acres in size. The arroyo has well defined side slopes and varies from 300 to 700 feet in width between Resler Drive and the Coronado neighborhood.

Value as an Open Space Preserve – The Charlie Wakeem/Richard Teschner Nature Preserve's value is in its very high visibility from I-10. The arroyo has a strong meandering form, and can provide a crucial linkage point under I-10 between Cloudview Park and the Keystone Heritage Wetlands and Park. Public access for walking is permitted, and ties into the notion of minimal impact recreation within open space preserves.



Feather Lake



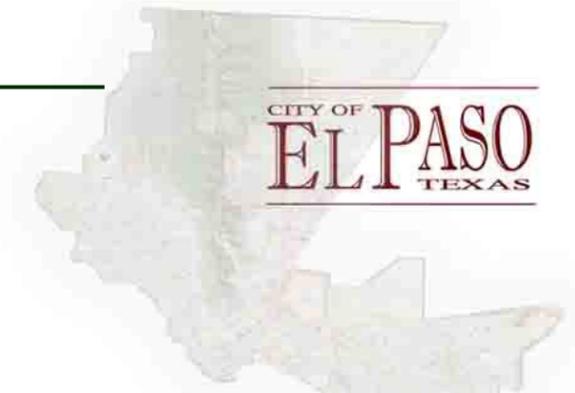
History –Feather Lake is a City of El Paso storm water detention basin built in 1969 that has been leased and managed as a wildlife sanctuary by the El Paso/Trans Pecos Audubon Society since 1976. Because it is filled via rainfall, water levels within the basin vary considerably.

Size and Physical Characteristics – Feather Lake is located south of North Loop Drive and west of Loop 375 in the Mission Valley area of El Paso. The land encompasses approximately 44 acres, and includes a 40 acre wetlands zone. The pond includes a trail around the lake. Over 195 species of birds have been identified within the sanctuary, as well as other mammals, turtles and amphibious species.

Value as an Open Space Preserve – Feather Lake is not only an important stop-over for viewing migrating birds, but also provides a glimpse of the ecosystems that the wetlands and riverside woods along the Rio Grande River used to provide. Since these areas are now virtually gone, areas like Feather Lake should serve as a reminder of the habitat that has been lost.



Feather Lake, El Paso.



3. Open Space Opportunities in El Paso

El Paso has many opportunities to provide open space for its residents and to address the significant deficiencies that exist in many parts of the city. These opportunities range from small individual remnants of farmlands and miles of lowland river corridors to the remaining arroyos and drainage areas that can create significant linkage corridors throughout the city.

The opportunity sites identified in this section will become the much broader “palette” of options that can be acquired by both the public and private sectors in El Paso over the next few years. While the preservation of all of these is unlikely, the prioritization of the properties and decisions as to how best to preserve the most valuable areas.

Many of the opportunity areas in El Paso have one common theme – They are a direct or indirect result of the flow of water through the natural and manmade landscape of the area. In flowing from the mountains downstream on its way to the river, water creates arroyos, washes, low lying areas, and other features that must be preserved in order to ensure the safety of life and property. The Rio Grande River is the recipient of this flow, and thus ties the mountains to the river in the Green Infrastructure plan for El Paso.

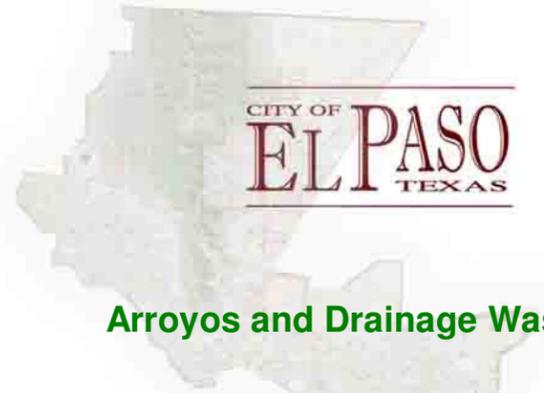
In reviewing and evaluating opportunities for open space, the following questions were explored.

What is its potential value as an open space asset? Does it include a land form or cultural feature that is unique to that part of El Paso? Does it remind us of El Paso’s unique history and heritage? Is the property valuable simply because it is a remnant of undeveloped land in an area that has largely been urbanized through development?

Is the land area unique in some way? Does it preserve a valuable natural feature?

Is the land really acquirable? Is the potential cost of acquisition so high that the acquisition of other lands in El Paso would be negatively impacted? Is the land owned by a public or quasi-public entity?

Is the land in danger of being developed? Is the property in an area that is rapidly developing? Could the land be transferred from public to private ownership soon? Do the owners of the property have plans that have been disclosed that could irrevocably transform the unique natural character of the land? In other words, how significant is the threat to this particular open space feature?



Arroyos and Drainage Washes

Apart from the mountains, arroyos are one of the most distinguishable natural features in the El Paso area. These natural drainage corridors create intriguing and irregularly shaped channels full of vegetation and wildlife that can transform that part of the city.

Because they are caused by drainage runoff, arroyos should be viewed in their collective sense as “systems”, rather than as individual features. They are also extremely dynamic – water creates them, makes them deeper, but also frequently changes the course that it takes through the sandy material of the arroyo, resulting in the wider bottom area that is characteristic of older arroyo areas.

Arroyos are the “de facto” creek, stream and river corridors that are found in most non-desert climate cities. In most cities, these areas are preserved because they are heavily vegetated with older more mature trees, and because they frequently flood and are beneficial to the community as conveyors of flood waters. But they also serve as buffer zones that break up the continuous pattern of development in an urban area. They help us transition from one part of a city to another. Much of El Paso has been built without the benefit of these buffer zones. Neighborhood after neighborhood simply grows together, resulting in a monotonous monochromatic urban form.

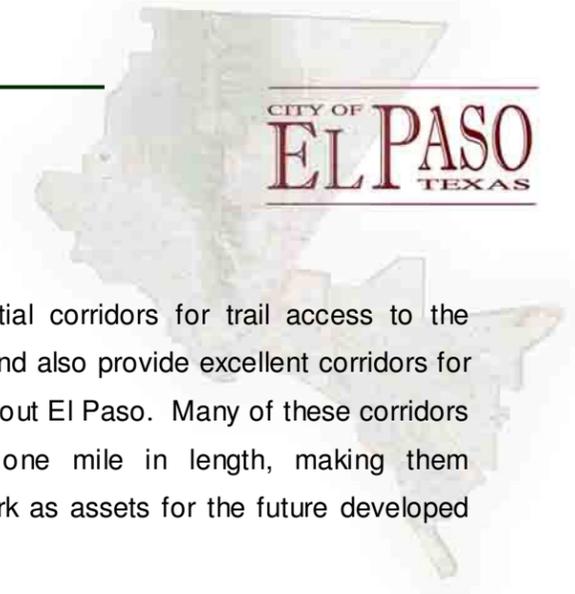
But El Paso does not have to be this way. Where arroyos have been preserved as natural features, some of the most interesting and high valued neighborhoods in El Paso have been created around them. Arroyos also identify the precise path that runoff from the mountains will take on its way to the river. For these reasons, preservation of the remaining undeveloped arroyos in El Paso should be an extremely high priority.

Arroyos at one time existed along the entire perimeter of the Franklin Mountains. Unfortunately, as the city grew to surround the lower 50% of the mountain range, most of the arroyos in these areas were channelized or covered over, starting with development in the 1920’s. Today, from Hondo Pass south on the northeast side of the mountains, and from Helen of Troy south on the west side of the mountains, 90% of the natural arroyos in the area have been displaced. Small remnant pieces remain, but these do not connect together in any meaningful way. Only arroyo corridors near Asarco and the lands previously impacted by pollution from the smelter have remained intact.

Arroyo Inventory - An inventory of the remaining arroyos in the El Paso area was undertaken by the City of El Paso Long Range Planning Section in 2005. The inventory identified 8,910 acres of arroyo corridors within the city limits of El Paso. The length of ephemeral stream beds identified in the inventory totaled 175 miles.

Table 3.1 Arroyo Ownership in El Paso ⁽¹⁾		
Owner	Area (Acres)	Percentage
City of El Paso	3,704	41.5 %
Federal Government	1,074	12.1 %
State of Texas (General Land Office)	271	3.0 %
Private Ownership	3,861	43.4 %
Total	8,910 Acres	100 %

(1) Ownership information compiled by City of El Paso Long Range Planning Section



The "Mountains to River" arroyo system in west El Paso can create a continuous greenbelt between the Franklin Mountains and the Rio Grande.

Table 3.1 on the previous page shows the division of ownership between private and governmental entities.

The majority of City of El Paso owned arroyos are actually controlled by El Paso's Public Service Board, and occur in the far northwest and northeast planning areas of El Paso. The largest and best defined remaining arroyos can be found on the western side of the Franklin Mountains north of Transmountain Road.

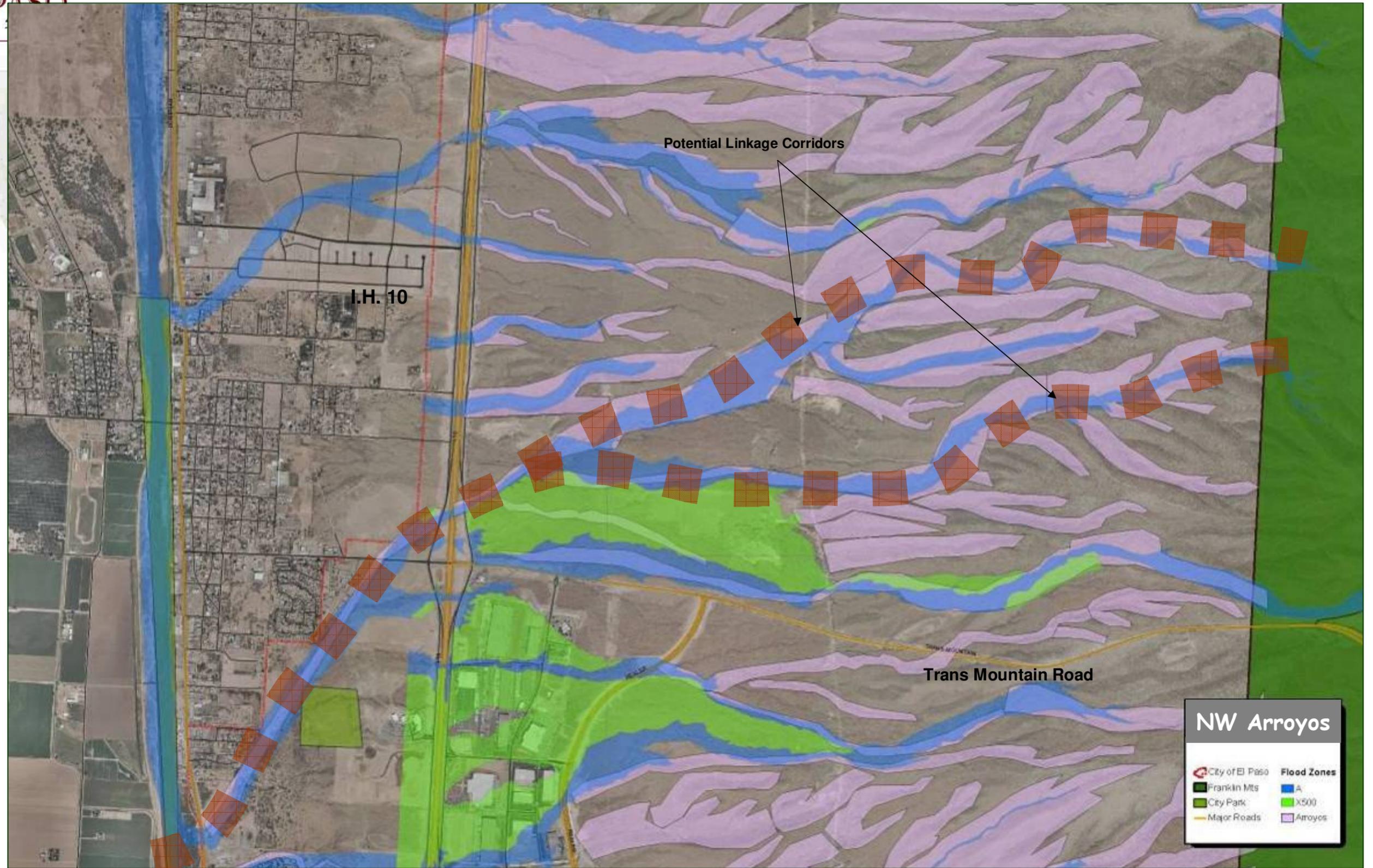
All of the Federal Government owned arroyo corridors are contained in the Castner Range property, and will be considered as part of the discussion of that property.

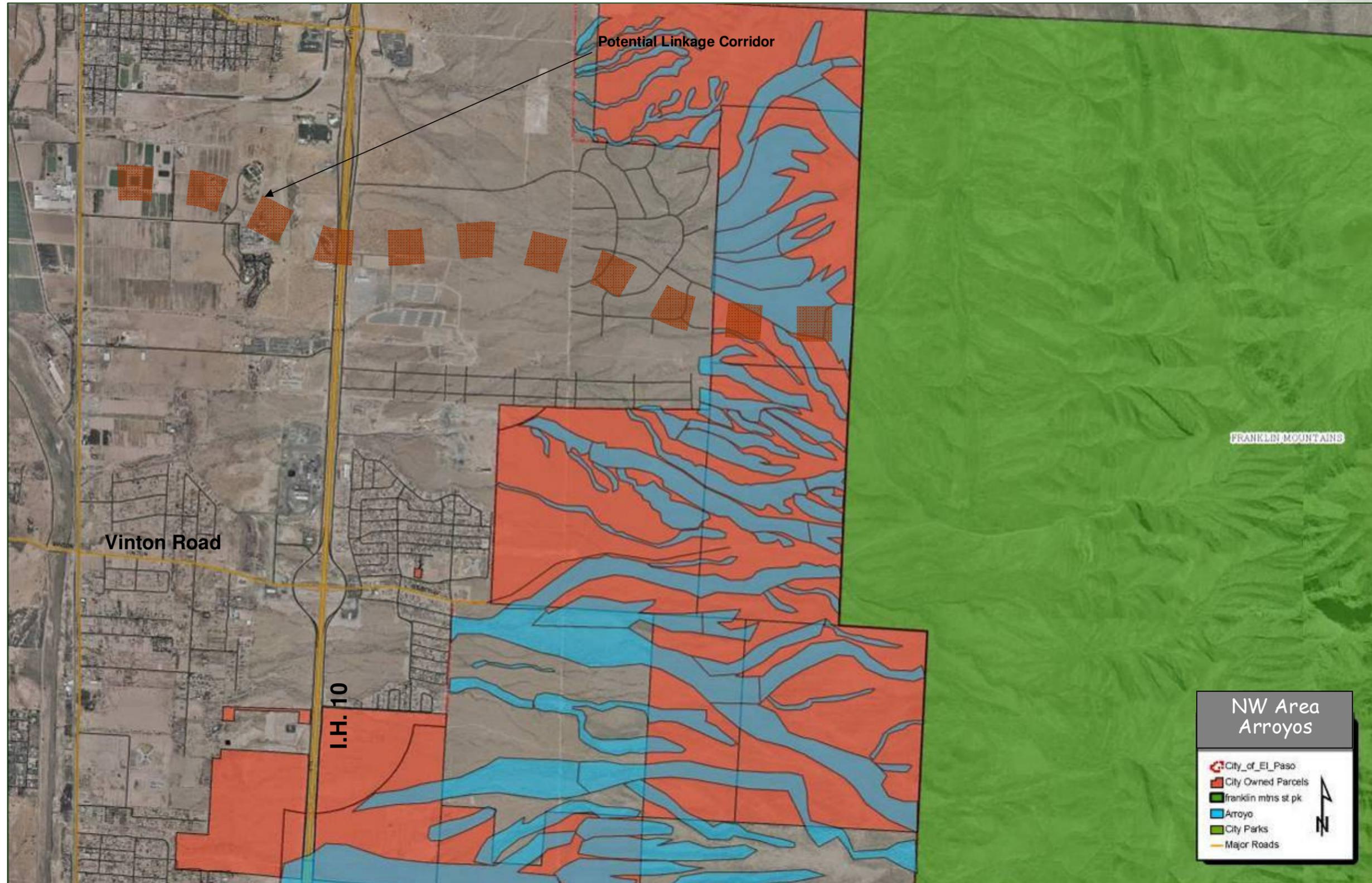
Mountain to River arroyo corridors – Of all the drainage systems along the 15 mile length of the Franklin Mountains east of the Rio Grande River in northwest El Paso, only one arroyo corridor remains that still connects the State Park with the river. This corridor occurs north of Transmountain Road, and has been designated as Arroyo Corridor 42B. This area of El Paso is on the verge of becoming the next sector for development, and as such, the preservation of this arroyo system should be considered an extremely high priority. The area closest to I-10 is already being planned for near-term development.

Arroyos that connect to the Franklin Mountains – Approximately 30% of the remaining arroyos connect to the edge of the Franklin Mountains State Park property. These

provide excellent potential corridors for trail access to the lower mountain areas, and also provide excellent corridors for natural drainage throughout El Paso. Many of these corridors are also longer than one mile in length, making them equivalent to Arroyo Park as assets for the future developed areas around them.

Northwest arroyo systems – The area north of Transmountain Road has not yet been developed, and the arroyos in this area are largely intact. The arroyos in this area consist of the single largest collection of arroyos in the city, and together total more than 30% of the remaining arroyos. They also exist as a "system" that connects them together, which provide increased trail connectivity. However, two recent development actions demonstrate how easily arroyos can be damaged. A construction road built to install a major gas transmission line crossing this area has dammed and disrupted the flow of many of the arroyos in this area, and vividly illustrates how fragile the desert landscape can be. Spoil from the road construction has created small ponds where the arroyo flow has been stopped. Preservation efforts in this area should include reversing the damage caused by this road where feasible.





In-town remnant arroyos – South of Transmountain Road on the west side of El Paso, almost all of the arroyo corridors in the area have been filled in. Even the small remaining pieces such as the channel near the Wildwood development are being channelized to allow for new housing development.

Examples of homes built within the former flow areas of arroyos can be found, as shown on the next page. The few remaining unplatted arroyo segments should be preserved as a high priority. The scarcity of land in the area for development, combined with the high cost of acquiring land may make this goal difficult.

On the eastern side of the Franklin Mountains, approximately 410 acres of undeveloped arroyos remain south of Hondo Pass. Development is already being planned for these areas, and it is anticipated that much of these arroyos could be lost.

Castner Range area arroyos – Approximately 965 acres of major arroyo corridors have been identified in the Castner Range tract. These segments are valuable in that they offer continuous and lengthy connections into the Franklin Mountains. The arroyos in the Caster Range are controlled by the Federal Government and do not face any immediate development threat, but should be acquired as part of the acquisition of the larger Castner Range tract.

Far northeast area arroyos – The dryer eastern side of the Franklin Mountains has fewer well defined arroyos, and many of those are preserved as part of the State Park. Only 381

acres of arroyo corridors have been inventoried in this area. North of the Castner Range, all of the remaining arroyos are on lands controlled by El Paso’s Public Service Board. The lack of arroyo corridors in this area makes the preservation of the few remaining ones much more critical.

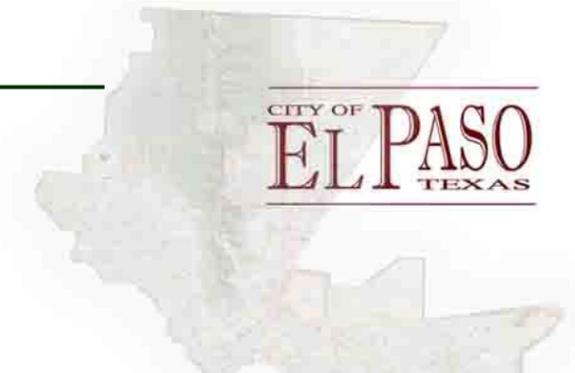
Drainage Washes

In the flatter fringe areas of the mountains and undeveloped desert, arroyos flatten out and become shallower, more ephemeral drainage washes. These may create temporary drainage corridors that move over time depending on the frequency and intensity of rainfall. These washes are extremely valuable in that they may be the only component of the existing natural environment that is left undeveloped in the flatter portions of the city. If they are channelized, no natural areas will remain in vast portions of the city. This condition already exists in much of the eastern areas of the city.

The common engineering practice in El Paso is to capture these washes in concrete channels that completely remove any resemblance to the natural desert environment. If wider corridors were preserved, more natural treatments of the washes could be employed, resulting in much more attractive greenbelt corridors in the areas of the city that need them the most.



View from Scenic Drive Overlook



Blackie Chesser drainage channel.

Drainage Channels

In areas of the city where drainage corridors have already been channelized, those corridors are some of the best opportunities for instituting open space features. The drainage channels typically traverse significant distances, connect neighborhoods, and have fringe areas that in some cases can be planted with trees and other natural features. Trails can be installed that create lengthy linkage corridors throughout much of the city.

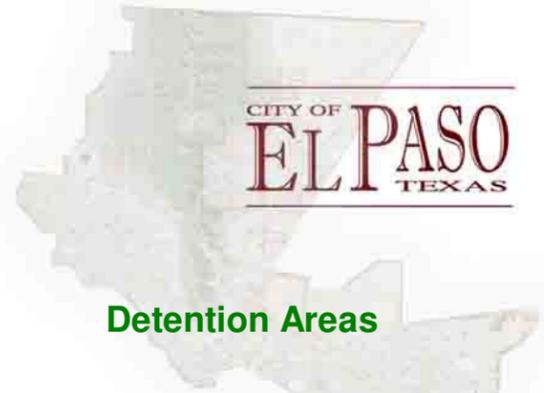
In the future, drainage channels should be treated much as natural flat desert washes are treated. The drainage corridors should have flatter side slopes, and should have park-like fringe areas that contain trails, trees and open recreation areas. In fact, many of the drainage channels can become the new “bosques” of El Paso, providing green corridors that stretch across the city and link neighborhoods together.



Concrete channel in the Mission Valley area.



Existing earthen drainage channel in northeast El Paso.



Detention Areas

El Paso has developed an extensive network of detention areas. Some are regional in nature, collecting and holding water for large areas of the city. Others are more localized, serving individual neighborhoods. Most of the local detention “ponds” are small, fairly deep, and are surrounded by fences and walls to keep children and others from using the ponds for recreation when they hold water. The upper fringe maintenance zone around many of these smaller ponds can be planted with trees and used as pockets of vegetated open space in the middle of their neighborhoods.

The larger detention ponds hold great promise as newly created wetlands. Feather Lake in the Mission Valley area is a prime example of the conversion of a detention pond into a wetland feature. The 40 acre pond can still retain overflow stormwater from major rainfall events, but the vegetation that is allowed to grow in the pond has created a unique environment for birdwatching and to learn about local fauna.

El Paso has many large detention areas that could be enhanced as natural and partial wetland areas. In the northeast, several large detention basins cover more than 700 acres that are linked together by channels. Those basins, if enhanced as wetlands and equipped with trails, could become a significant environmental and park-like feature for the entire city.

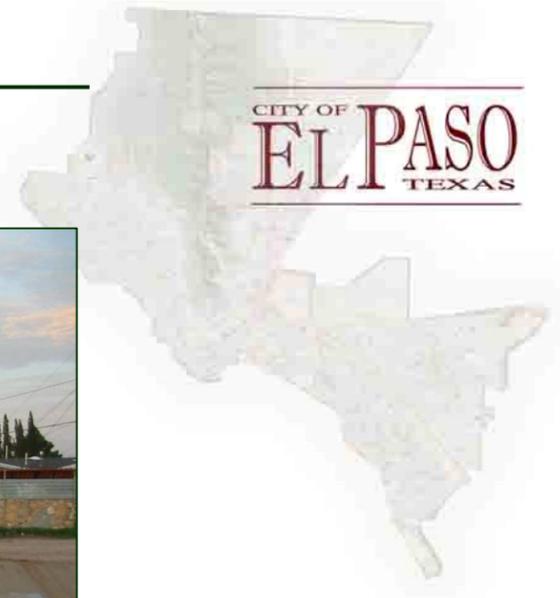
In the future, planning for multiple uses of detention areas will be critical to the future of the city. These areas can and should serve as parks, open space and at the same time provide safe places to hold stormwater overflow. The city’s ordinances and regulations should move towards requiring that detention basins be treated in this manner.



Feather Lake in the Mission Valley Area, a detention pond into a wetland feature.



Mesa drain at Bordeaux.



Radio tower pond at Barker and Playa drain.



Playa drain at Croom.



Franklin Canal.



The Rio Grande River Corridor and River Bottomlands

The Rio Grande River extends for over 32 miles within the city limits of El Paso, and creates the longest continuous corridor anywhere in the city. However, from central El Paso towards the Mission Valley area, the corridor is difficult to access because of fencing and security features that are placed parallel to the river to impede illegal border crossings. While the 1000+ acres of the river corridor are valuable as open space, the most significant opportunity zones occur in the Upper Valley, both within and adjacent to the river corridor, and in the Mission Valley area outside of, but adjacent to the river.

Upper Valley River Corridor – In the Upper Valley, the Rio Grande River is contained within a low levee system. The entire levee to levee corridor averages approximately 300 to 500 feet in width. This area is already preserved by the IBWC for flood control, and is generally available for trails and park features that do not obstruct flood flow. However, to maintain adequate floodwater conveyance, no planting of trees within the levee zone is generally allowed by the IBWC.

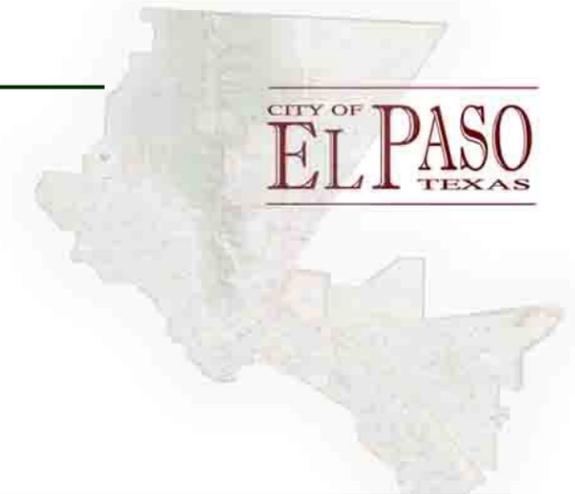
Preserving lands directly adjacent to the levees throughout this area can be beneficial in two ways. In some areas, the levees can be relocated further away from the river, allowing space for tree planting along the river corridor. In other areas, lands next to the outside face of the levees can be planted with trees

to begin to replicate the ancient bosques of trees that existed along the Rio Grande River.

North of Artcraft Road, most of the lands adjacent to the river are still used for agriculture or large residential tracts of lands. These areas provide the greatest opportunity for enhancing the river corridor. Over 1,000 acres of undeveloped river corridor lands remain along in the Upper Valley corridor north of the current City limits, but within El Paso County.

Mission Valley River Corridor Opportunity areas – Opportunity areas in the Mission Valley area are contained between the river levees and the Border Highway. These areas are largely used for drainage storage, but there are also a few remaining tracts of land used for agricultural purposes that could be developed. Approximately 300 acres of undeveloped lands remain in this area. Other fringe right-of-way areas along the Border Highway could be planted with bosques to simulate the older stands of trees that once existed along the river.





Rio Grande Corridor in the Upper Valley.



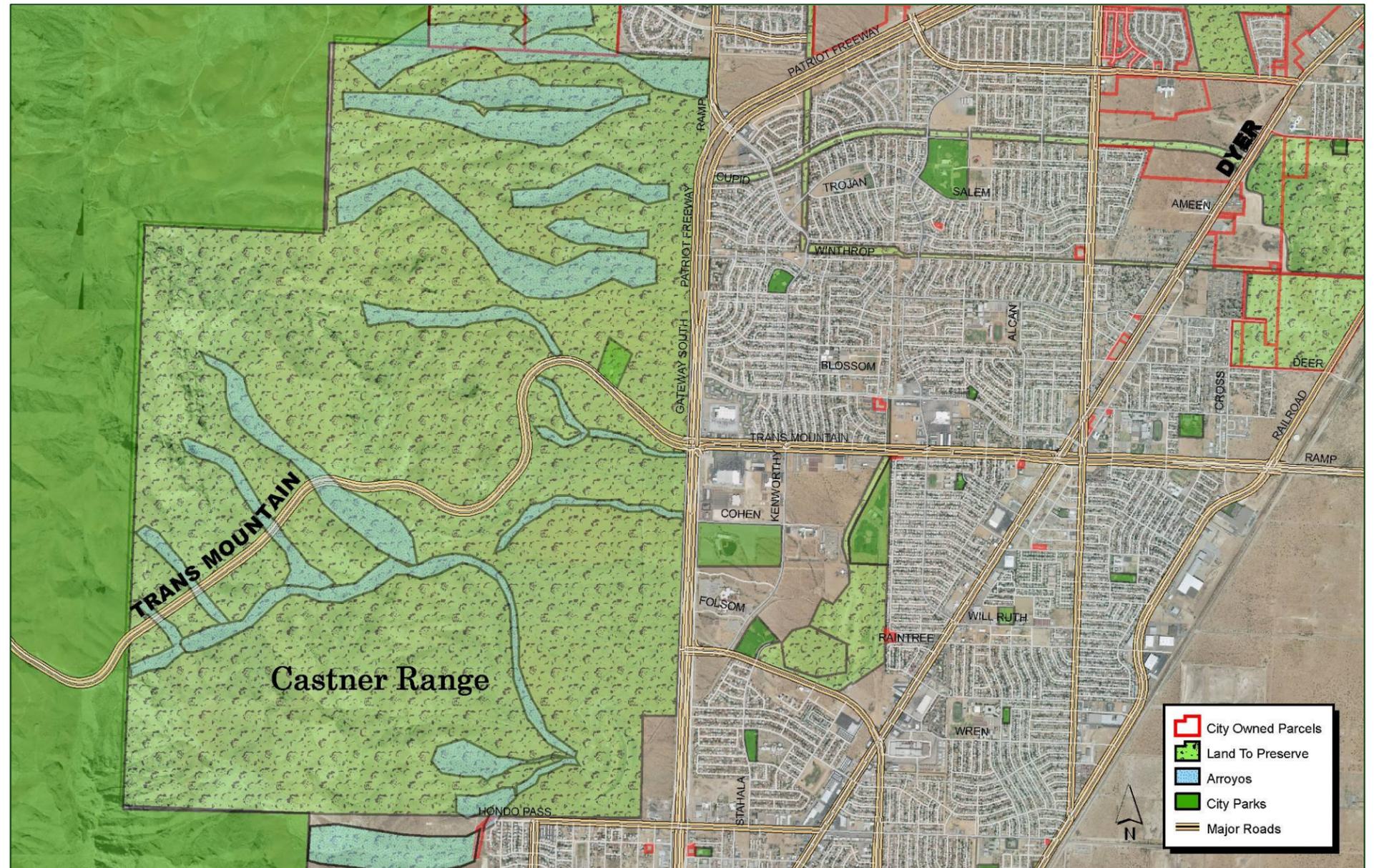
Agricultural Heritage Tracts

Much of the land within three to five miles from the Rio Grande River was used for agricultural purposes between the 1880's and the 1970's. The availability of irrigation water from the river and the rich river bottomland soils made these areas invaluable for cotton and other crops. As the city grew rapidly from the 1960's onward, much of those areas have been developed as residential areas. Over 90% of the lands near the river in the Mission Valley area have been developed. In the Upper Valley, over 80% have been developed.

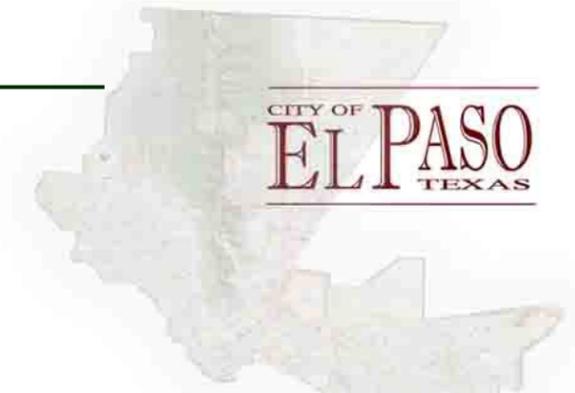
A total of 300 acres in the Upper Valley and 150 acres in the Mission Valley area have been identified as opportunity areas. These areas are easily developed because they are level and typically exist in areas where infrastructure is already in place. Select representative examples should be preserved as either examples of the past agricultural heritage of the area or as open space preserves.

Castner Range

The 7,000 + acres of the Castner Range represent one of the most significant opportunities in the city for permanent open space acquisition. The land is owned by the Department of Defense, and would require transfer to the City of El Paso.



The 7,000 + acres of the Castner Range.



Utility Corridors

Power and gas corridors cross much of the city and provide opportunities for linkage corridors and linear parks. These corridors are either owned or controlled by utility providers who will have to grant permission to construct trails and park facilities. Up to 10 miles of linkage corridors have been identified throughout El Paso.

Many other communities, such as The Blue Bonnet Trail System in Dallas, Texas have successfully incorporated utility corridors as linkage parks, and have become key components of the overall green infrastructure system.

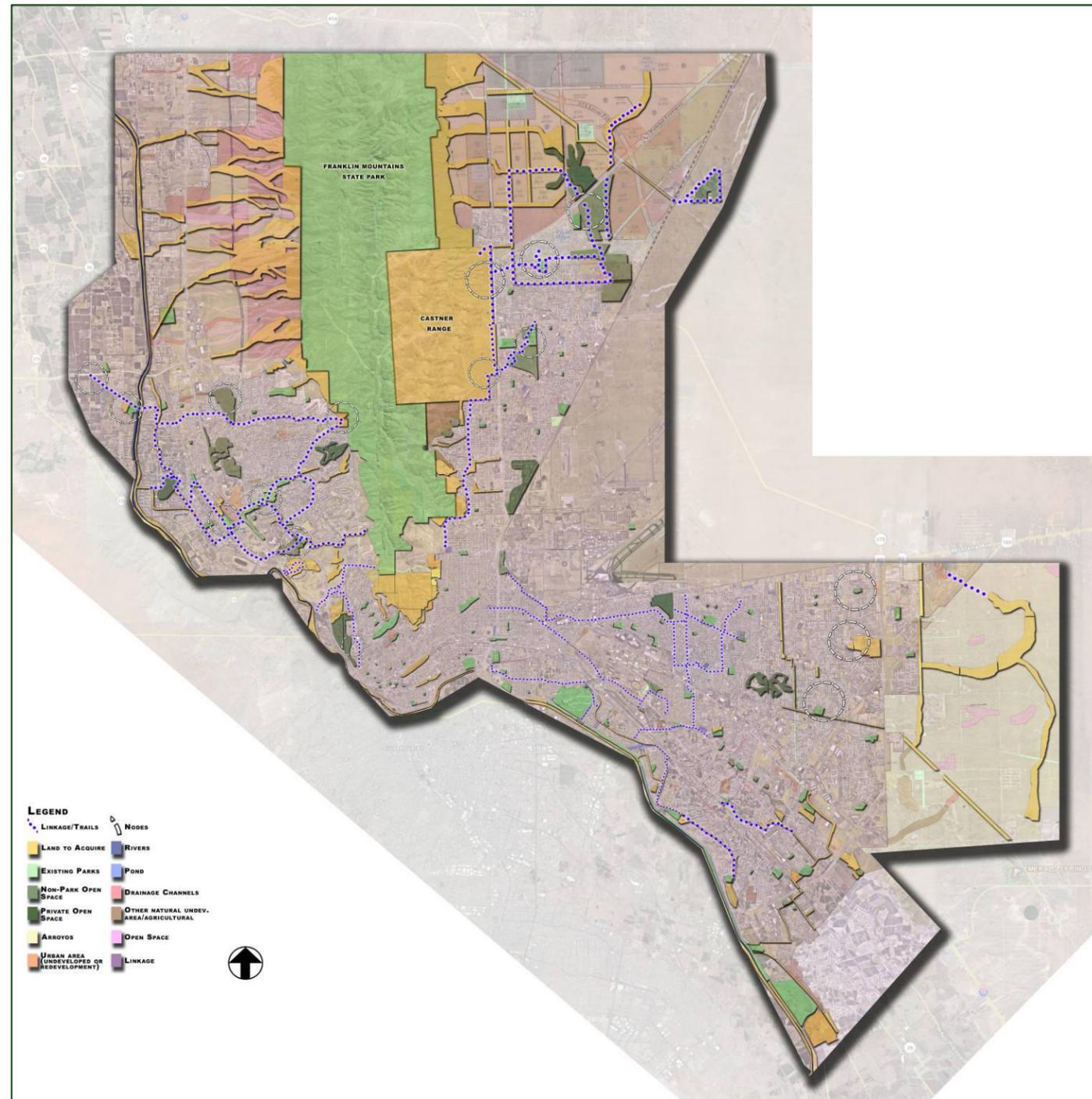


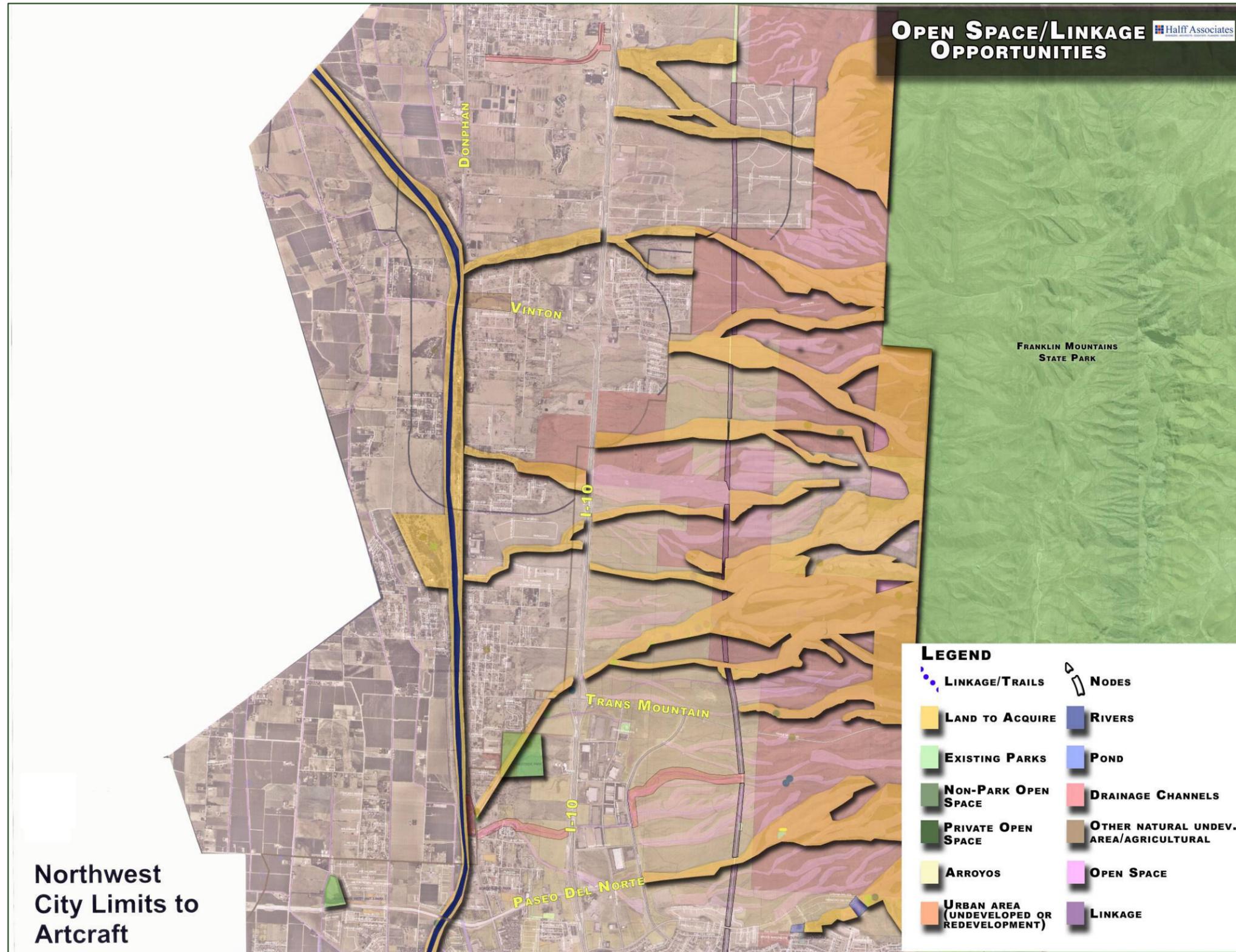
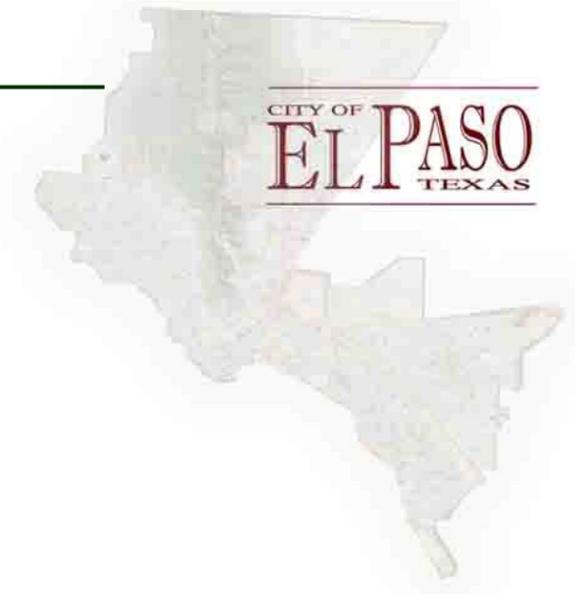
City of El Paso Utility Corridors.

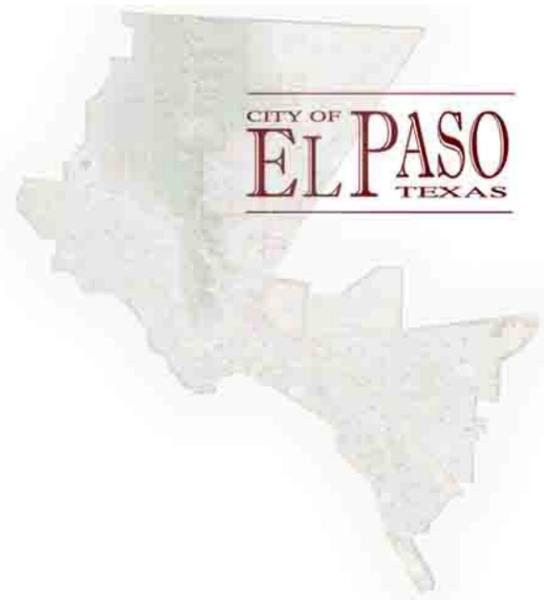


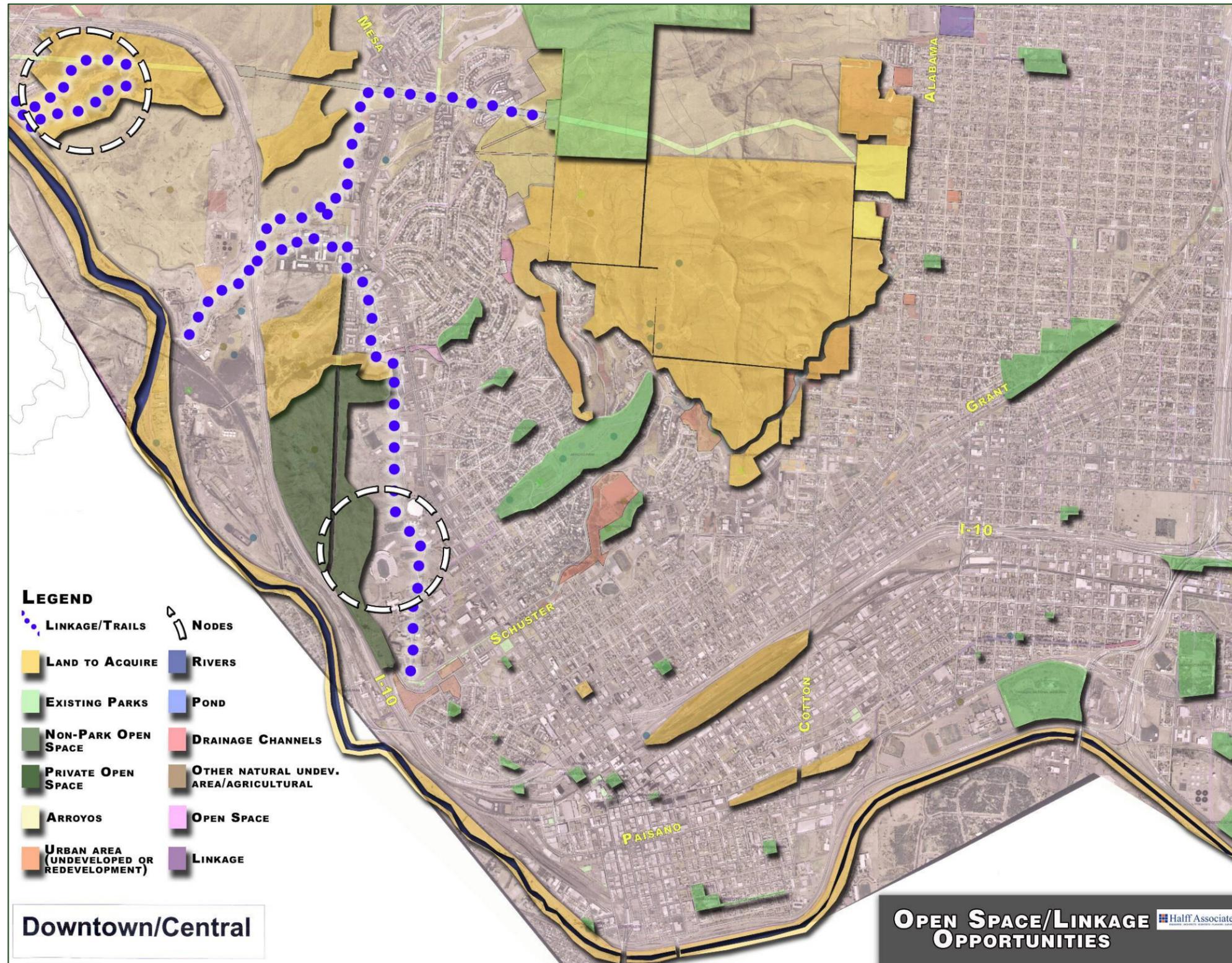
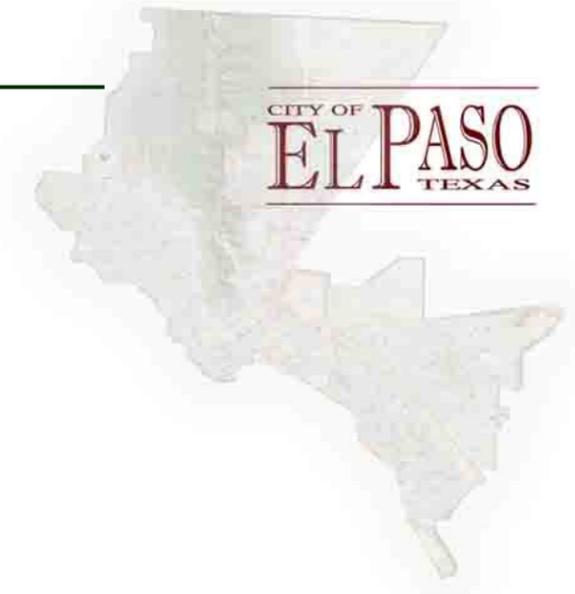
Summary of Opportunity Areas

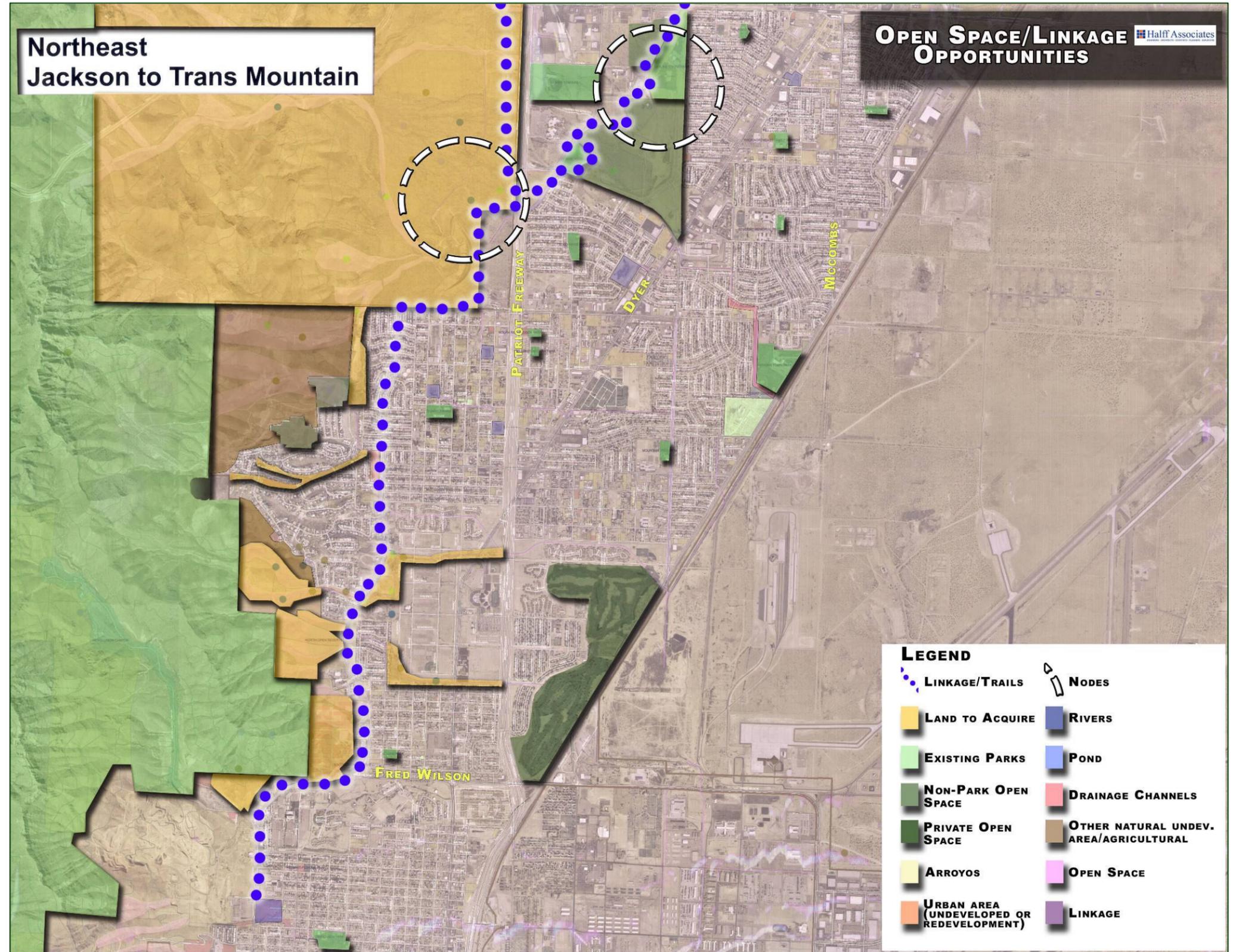
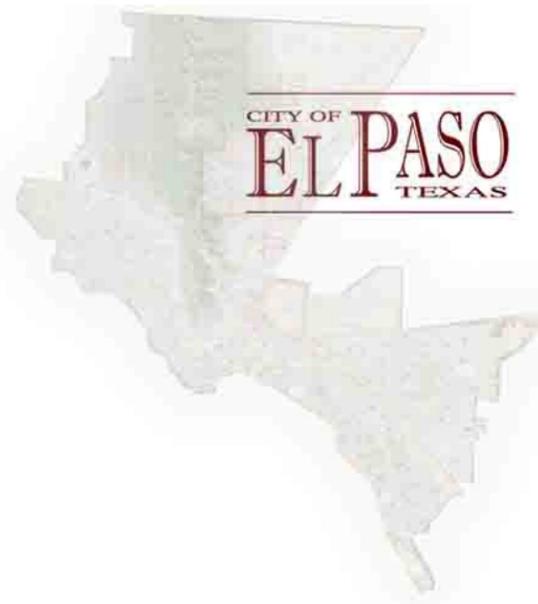
An inventory of potential open space opportunities was provided by the City of El Paso Planning Division. These areas were then augmented with other areas identified by citizens during five citizen input meetings, and by the Planning Team and City staff during reconnaissance visits throughout El Paso. The potential areas were mapped in both GIS and in graphic formats, and are shown in the maps on the following page. The overall map is shown on this page.

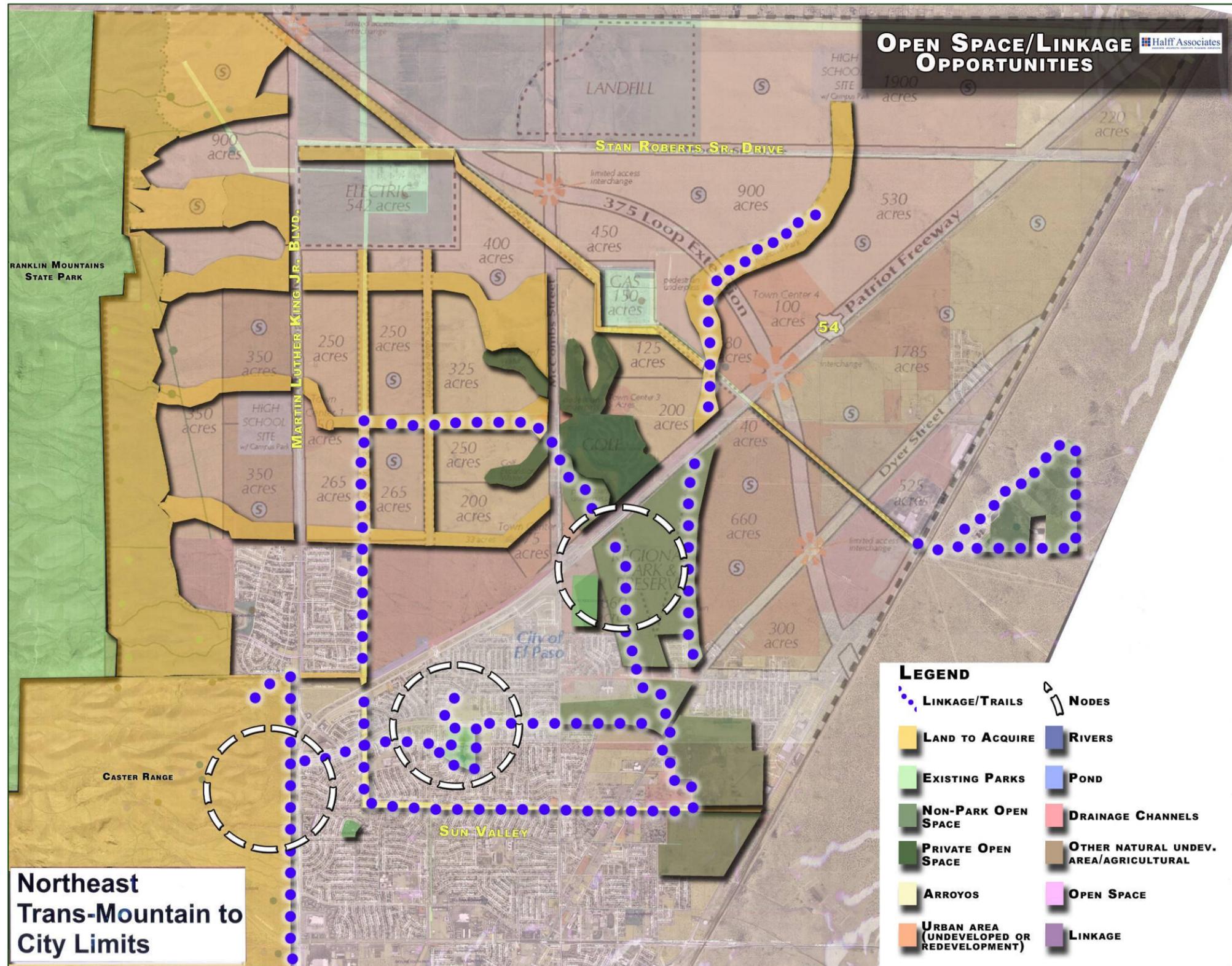


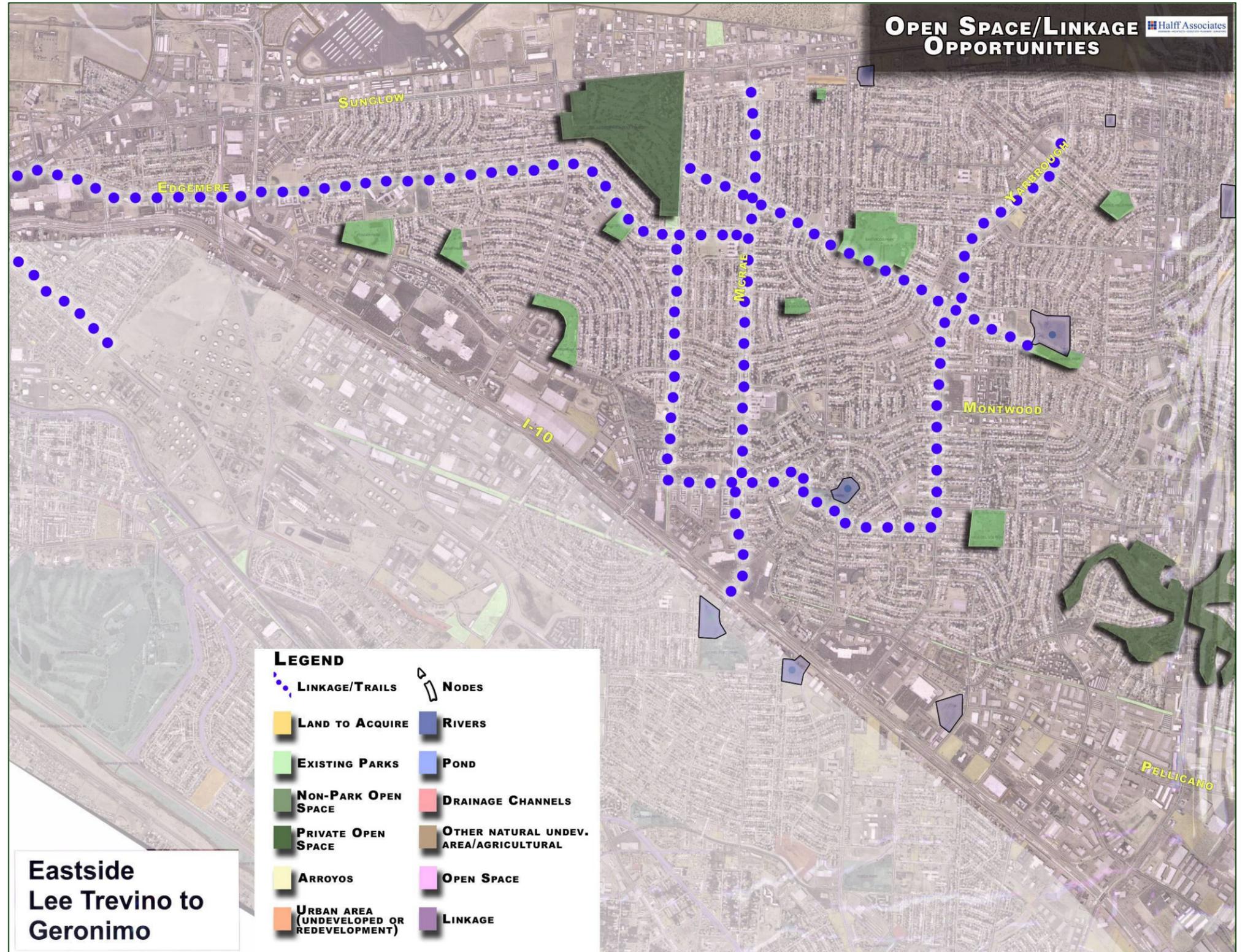
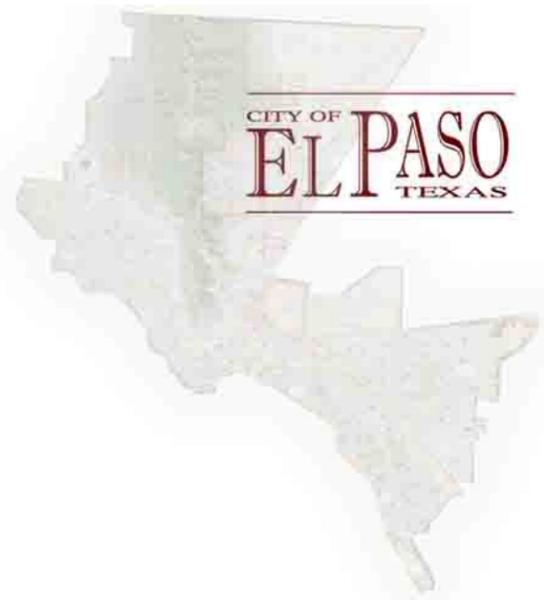


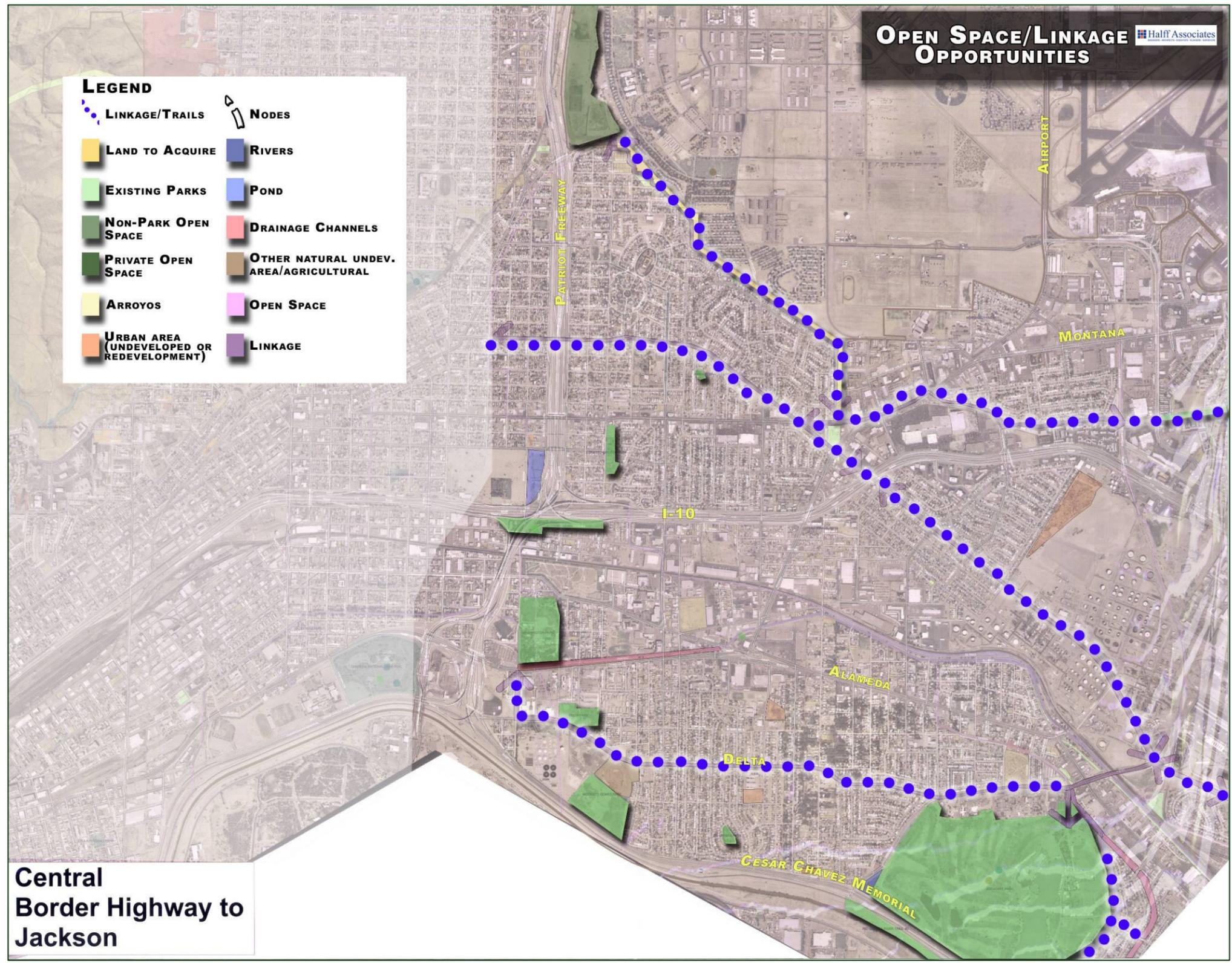
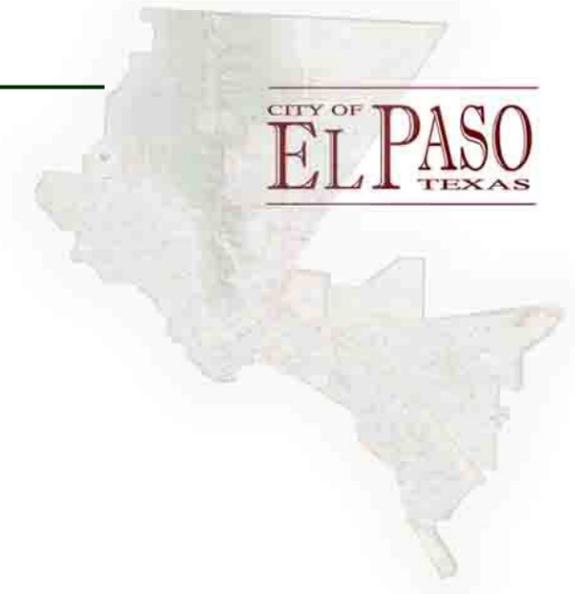


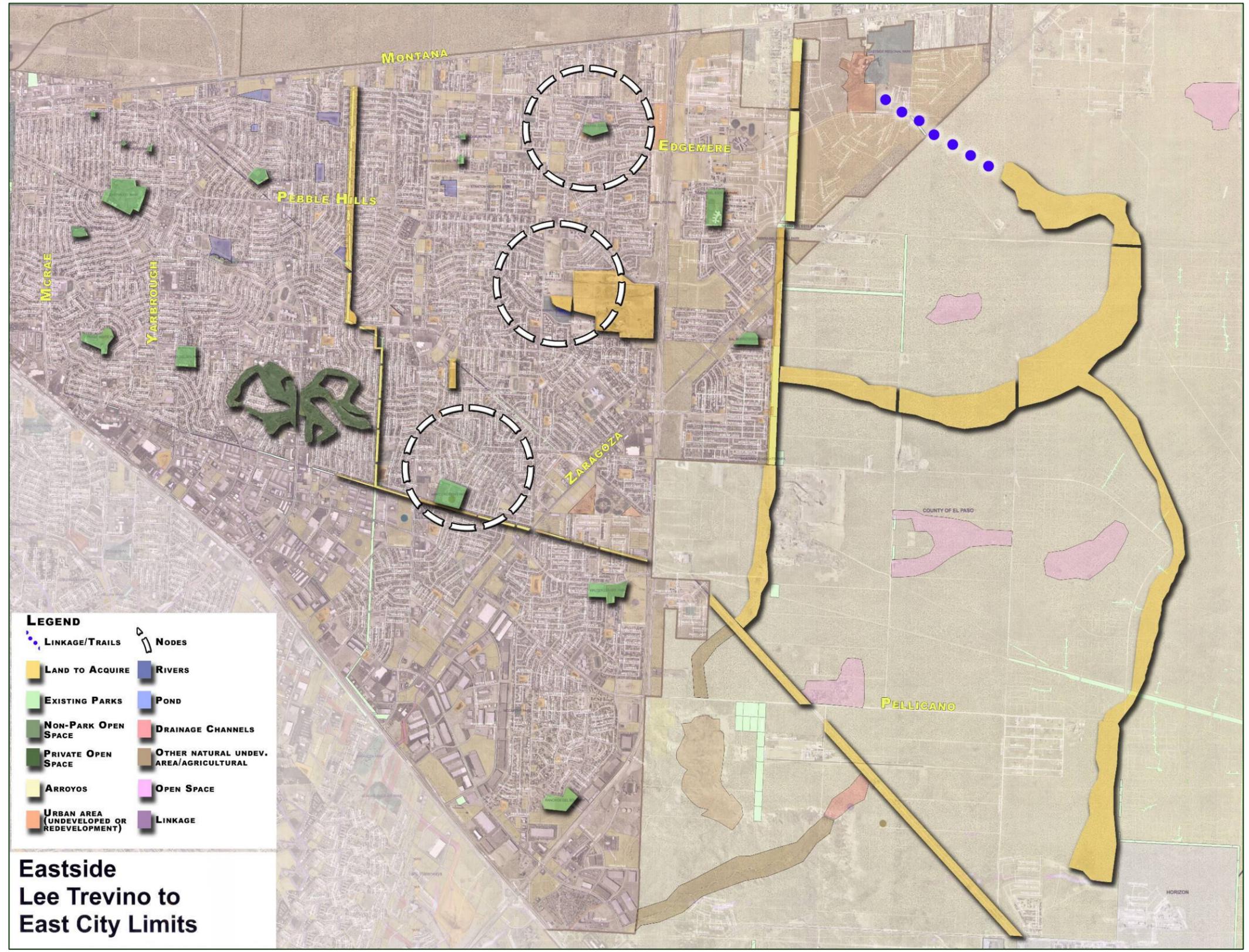
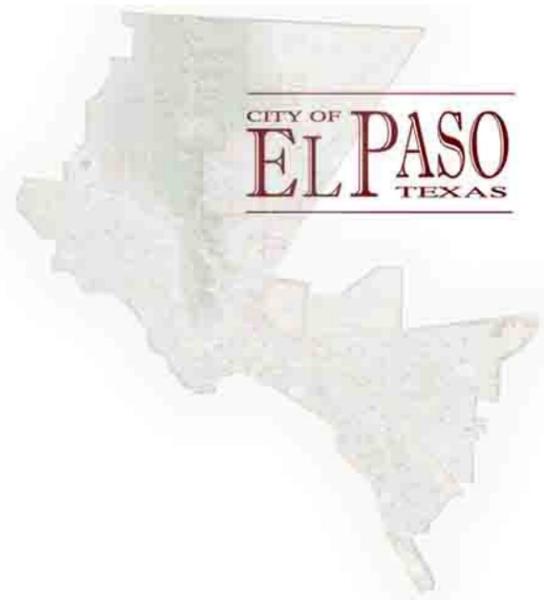


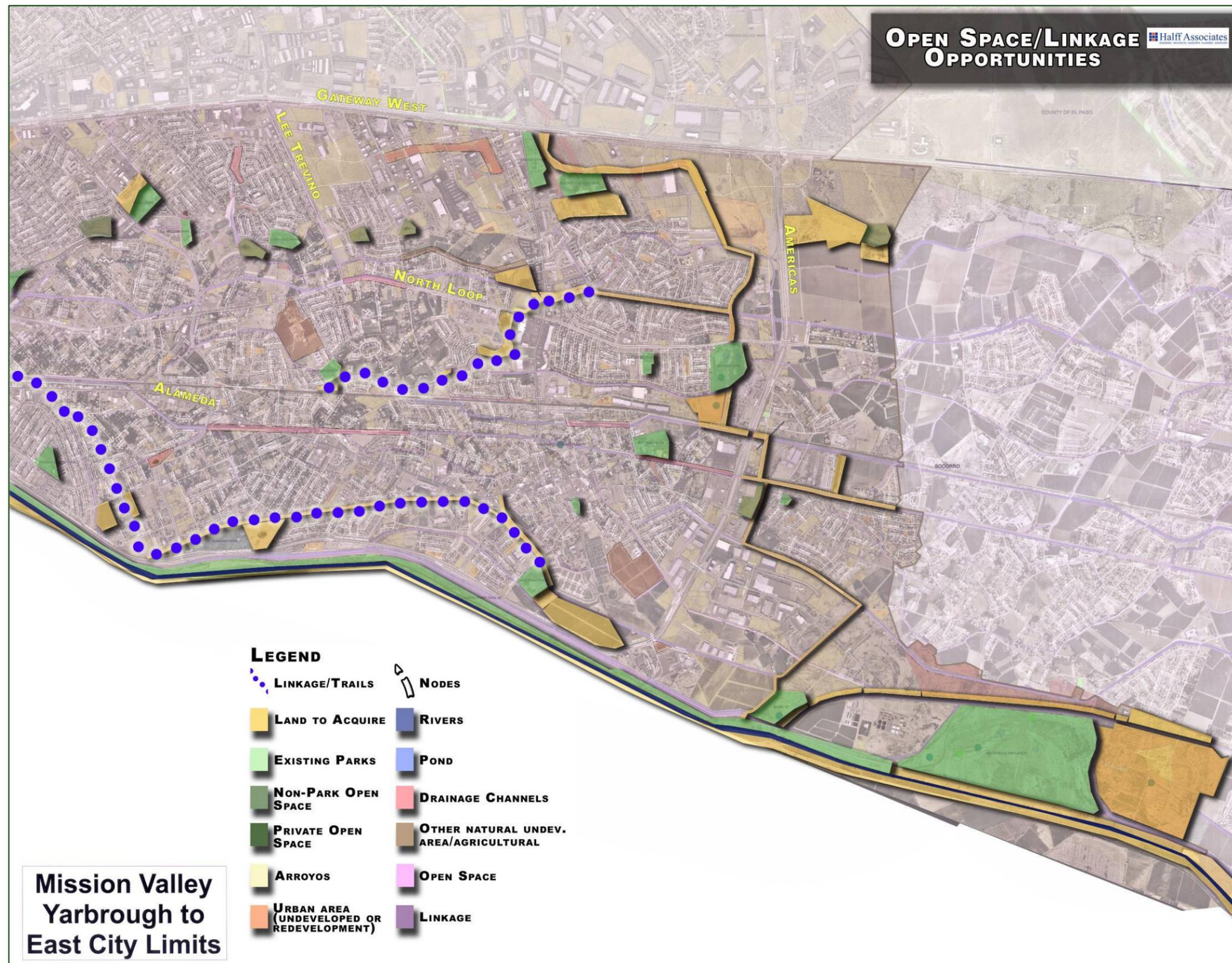
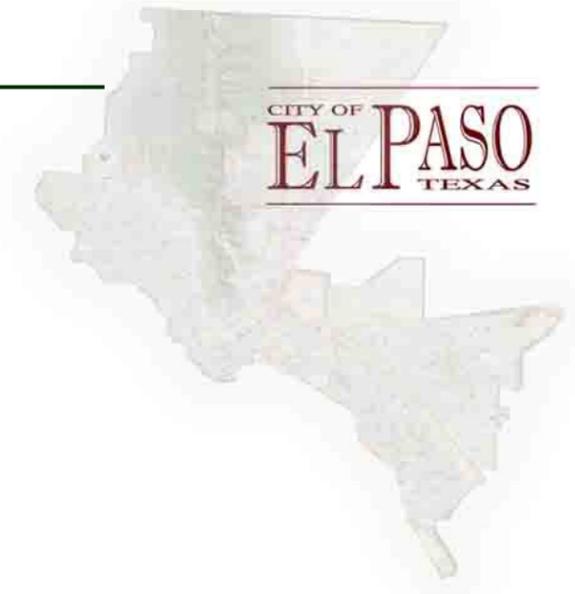


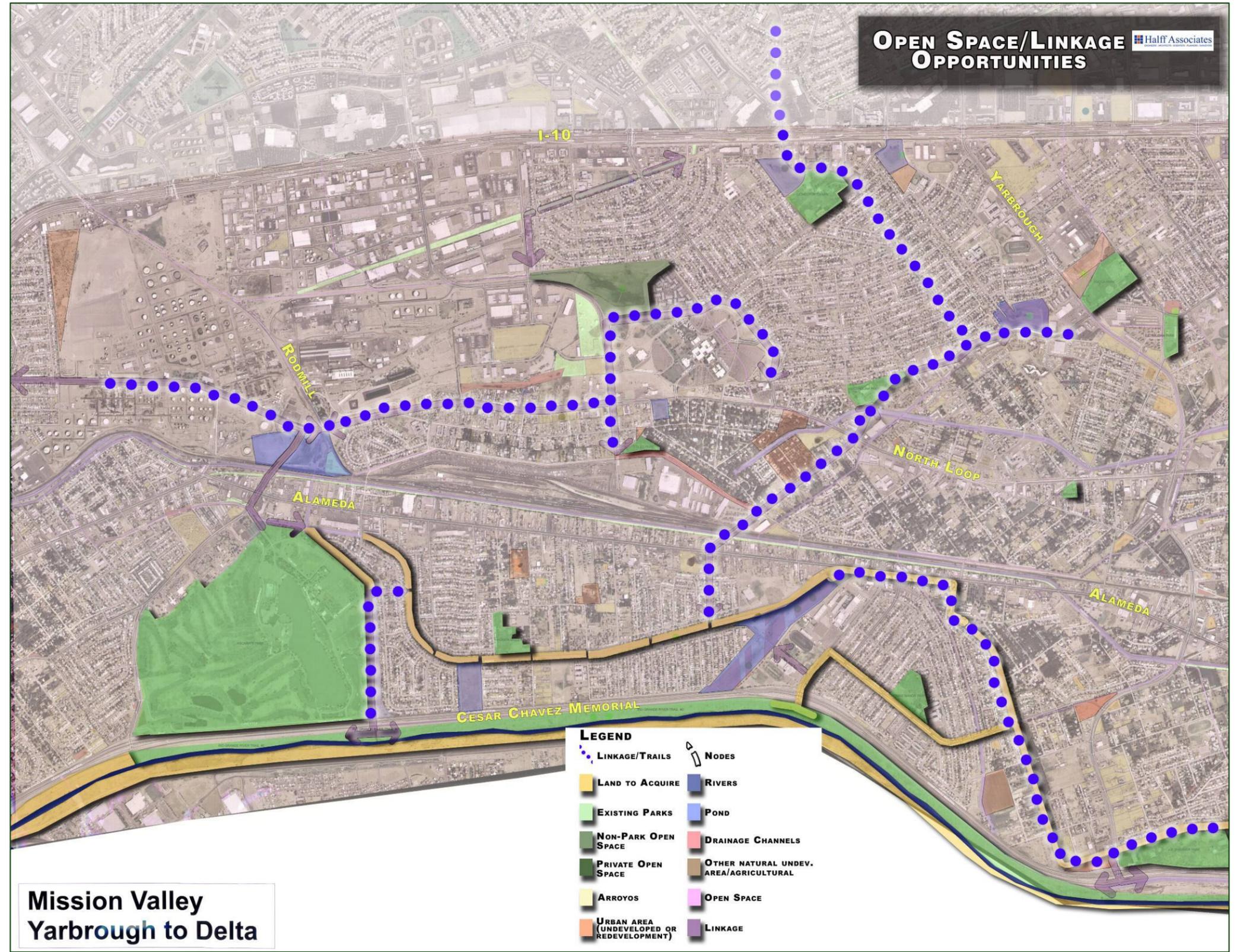
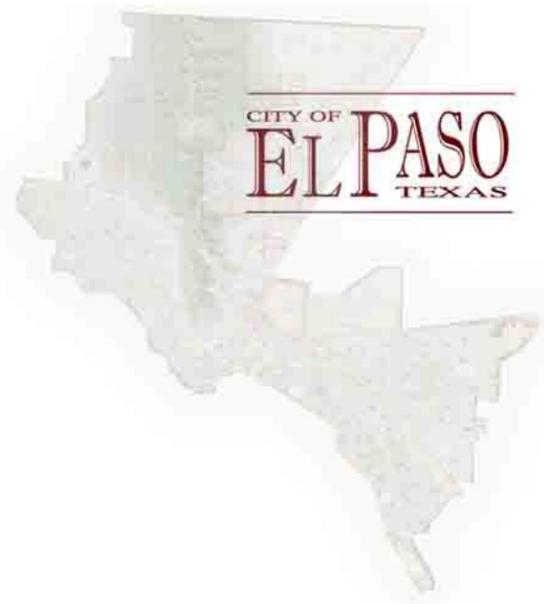
















4. Citizen Input Regarding Open Space

Why is Citizen Input Important?

Citizen input is a critical component of any major community planning effort. Any plan that involves thinking about actions that impact all of El Paso should incorporate the wishes of the citizens of the city. The city after all, with its staff and elected officials, represents all of the citizens of the city, from the far west reaches to the Mission Valley area, to the upper reaches of the mountains, to the residents of the Segundo Barrio – all can and should benefit from the actions of this plan.

Citizen input also lends greater credibility to the plan as it is used to pursue funding. Foundations and grant sources specifically look to the efforts made towards gathering citizen input to ensure that the plan is truly universal, that it benefits many, and not just



a few. Ultimately, the

recommendations of this plan should express the desires and needs of the citizens of El Paso, and not just its staff and elected or appointed officials.

Methods of Gaining Citizen Input

A variety of methods were used to gather citizen input. These include:

A citywide citizen telephone survey, conducted as part of the Parks and Recreation Master Plan development process – the survey included many questions regarding the importance of open space to the citizens of El Paso.

Open Space Advisory Group (OSAG) – The city appointed a committee of 40 members from the community, representing many diverse points of view, to help strategize and fine tune the recommendations of the Green Infrastructure Plan.

Citizen Survey – A survey that was geared specifically to open space issues was prepared by the City of El Paso and disseminated via the City’s web site and at public meetings.

Public Meetings – Public meetings were held in every planning area of El Paso to allow for citizen input regarding open space. A total of five meetings were held. The Eastside meeting was postponed due to the 2006 Storm in early August, and was rescheduled. The initial meeting, held at City Hall, was simulcast the first time this has been done in El Paso.

Final Public Boards and Commissions Review – All of the recommendations of the plan were vetted with multiple boards and commissions that will play a role in implementing the plan.

These include the City's Parks and Recreation Advisory Board, the City Planning Commission, and the City Council. Each is discussed in further detail in this chapter.

STATEMENT	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	AGREEMENT RATIO
■ Parks contribute to the quality of life in our city.	■ 48%	■ 48%	■ 2%	■ 0%	■ 0%	■ 48.0:1
■ I feel safe when I visit parks in my area.	■ 16%	■ 64%	■ 15%	■ 2%	■ 3%	■ 4.7:1
■ The appearance of parks in the city is adequate.	■ 6%	■ 62%	■ 27%	■ 3%	■ 2%	■ 2.3:1
■ Better parks will help to improve our city image.	■ 35%	■ 62%	■ 2%	■ 0%	■ 1%	■ 48.5:1
■ I feel that parks contribute to the economic viability of the city.	■ 20%	■ 68%	■ 7%	■ 2%	■ 4%	■ 9.8:1

Citywide Telephone Survey

Raymond Turco & Associates conducted the city's Recreation Needs Assessment and Attitude Survey in 2005 as a component of the city's Parks and Recreation Master Plan update. The public opinion poll captured attitudes on parks and recreational issues in the community from respondents randomly selected from phone-matched households. Respondents were interviewed with a comprehensive questionnaire that collected attitudinal data on a variety of recreational issues. A survey of this sample size is accurate to within 4% at the 95% confidence level. This means there is less than one chance in twenty that the survey results may vary by up to 4% from the results that would be obtained by polling the entire population in the study area.

- In the survey, citizens were asked what their favorite recreation activity was. The single highest response in all parts of the city was by far walking or hiking. Twenty-seven percent of the respondents ranked this as their favorite activity.

- In every planning area of the city, the single greatest need as expressed by respondents to the survey was more parks.
- Residents of El Paso were asked whether they agreed or not with a series of statements about parks. The levels of agreement were extremely high for many of the statements that relate directly to the need and desire for more open space for recreation and preservation. These results indicated a high degree of support for park and open space initiatives.

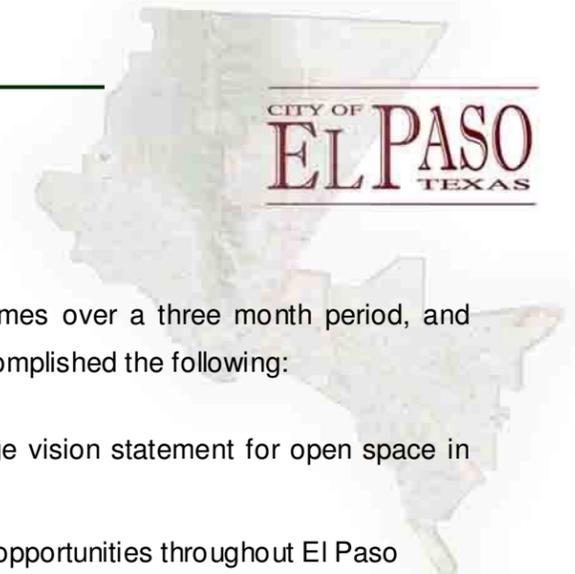
- "Better parks will help improve our city image" (97%-2%, 49.0:1).
- "Parks contribute to the quality of life in our city" (96%-2%, 48.0:1) generated the highest ratio of agreement to disagreement among survey participants.
- "I feel that parks contribute to the economic viability of the city" (88%-9%, 9.8:1).
- In comparison, support was not nearly as strong for the statement "the appearance of parks in the city is adequate" (68%-30%, 2.3:1).

- **Degree of passion** - The statements that generated the greatest passion (strong agreement) were that parks contribute to the quality of life in our city (48%). But the level of intensity was lowest for the statement about the



appearance of parks in the city being adequate, with just 6% of the respondents feeling truly passionate about the appearance of parks in El Paso.

- **In the survey, several key city characteristics that were tested rated negatively by respondents, including:**
 - The number of parks in the city was judged to be adequate by only 1 out of every 3 respondents, a very low ratio (34%-62%, 0.5:1).
 - The ratio being lowest for amount of hike and bike trails in the city – only 22% rated the amount of trails as being adequate, while over 68% or more than two-thirds of the citizens ranked the number as being inadequate (22%-68%, 0.3:1).
 - Having hike and bike trails conveniently located for people in your area - only 22% of the respondents noted that trails were well located and available, while again over two-thirds rated them as not available in their area (22%-66%, 0.3:1).



Open Space Advisory Group (OSAG)

City staff convened a committee of 40 plus members from the community, representing many diverse points of view, to help strategize and fine tune the recommendations of the Green Infrastructure Plan. Committee members represented neighborhood groups, entities interested in preservation such as the Frontera Land Alliance, recreation groups that were interested in the outdoors, representatives of the development community, and representatives from other city entities such as Parks, Engineering, and the Long Range Planning Division.

The committee met five times over a three month period, and during those meetings accomplished the following:

- Developed a long range vision statement for open space in El Paso
- Reviewed open space opportunities throughout El Paso
- Selected their preferred areas that should be focused on as high priorities
- Commented on methods that should be used to implement the recommendations of the open space plan.
- Reviewed and helped refine the final Open Space document prior to its adoption by the City Council.





Open Space Citizen Survey (Citywide)

A survey that specifically addressed open space issues and needs was developed by the Planning Division and placed on the City’s web site, and disseminated at public meetings. Over 100 responses were received and the overall results are as follows.

1. Have you ever been to or used any of the following in and around El Paso?

Natural open space (Mountains/desert)	82%	National Park	61%
State Park	73%	City Park	83%
Jogging Path	53%	Hike/Bike Trail	55%
Mountain Trail	57%		

2. Where, around El Paso, do you prefer to go for outdoor recreation?

Don't go anywhere	1%	City park	44%
Ascarate Park	16%	McKelligon Canyon	41%
Tom Mays State Park	32%	Red Sands	6%
Upper Valley Levee	29%	Transmountain Rd.	39%
Franklin Mtns State Pk	62%	Wilderness Museum area	25%
Other	28%		

3. How often do you engage in outdoor activities?

Never	0%	Once in a while (1-2 times a year)	4%
Sometimes (3-4 times a year)	14%	Regularly (1-2 times a month)	19%
Often (3+ times a month)	51%		

4. How far do you need to travel for outdoor recreation?

Start recreation from home	18%	Less than ¼ mile	8%
Less than ½ mile	2%	Less than 1 mile	20%
Less than 5 miles	16%	More than 5 miles	23%

5. What types of outdoor activities do you enjoy?

Walking/Jogging	80%	Hiking/Backpacking	48%
Bicycling	39%	Swimming/Wading	35%
Fishing	19%	Picnicking	56%
Nature/Bird-watching	39%	Orienteering	1%
Overnight backpacking	14%	Overnight camping	34%
4-wheeling/Motorbiking	4%	Organized activities	21%
Just enjoy being outdoors	66%	Other	15%

7. Which of the following elements would you be most likely to use?

Parking	51%	Public Transportation	14%
Routes between accessible elements	32%	Hiking/Biking (Trails-Paved)	48%
Hiking/Biking (Trails-Unpaved)	49%	Restrooms	57%
Dog parks	30%	Scenic areas/Overlooks	65%
Interpretive displays or presentations	22%		

8. Has anything prevented you from fully enjoying your visit at an outdoor recreational site?

Lack of parking	20%	Lack of public transportation	7%
Lack of routes between accessible elements	20%	Lack of hiking/biking trails-Paved	26%
Lack of hiking/biking trails-Unpaved	20%	Lack of interpretive displays/presentations	6%
Lack of restrooms	38%	Lack of dog parks	21%
Lack of scenic areas/overlooks	19%	Lack of time	29%
Lack of money	10%	My personal health	5%
Concern for personal safety	17%	Crowded areas	22%
Inadequate transportation	2%	Pollution	13%
No assistance for physical condition	1%	Other	17%





9. Outdoor recreational activities and open spaces provide benefits to our community. Please rate the following statements as to how important they are to you:

	1 Not important	2 Somewhat important	3 Important	4 Very important
Increase physical fitness	1%	7%	28%	51%
Enhance overall health and well-being	1%	3%	25%	58%
Increase self-esteem and positive image	4%	19%	30%	34%
Reduce stress level	1%	7%	28%	51%
Increase sense of community	3%	14%	34%	35%
Help families spend time together	3%	11%	28%	45%
Provide greater appreciation for nature	0%	6%	26%	55%
Conquer boredom	14%	23%	25%	24%
Increase tourism potential	8%	14%	27%	37%
Open spaces make our community more desirable for residents and businesses	3%	7%	23%	54%
Open spaces and developed parks improve our quality-of-life	0%	3%	17%	67%

Open spaces and parks help preserve our landscapes, native plants, and animals	0%	3%	15%	68%
Outdoor recreation is an important part of our community's quality-of-life	1%	3%	22%	61%
Outdoor recreation is an important part of my personal or my family's quality-of-life	0%	5%	22%	59%

10. What would encourage you to participate in more outdoor recreation?

Availability of information	51%	Organized Events	11%
Place/person to answer questions	33%	Someone/group to accompany	14%
Other	22%		

11. AGES-How many people in your family/recreation group are?

Age	# (Average)	Age	# (Average)
Under 5 years	0	6-10 years	0
11-17 years	0	18-25 years	1
26-39 years	1	40-55 years	1
56-65 years	1	65+ years	0

- Over 68% of the respondents to the survey agreed with the statement that “Open spaces and parks help preserve our landscapes, native plants, and animals.” This was the highest rated statement by respondents.
- 67% of the respondents also agreed that “Open spaces and developed parks improve our quality-of-life.”
- 54% agreed that “Open spaces make our community more desirable for residents and businesses.”
- More than 50% of the respondents would prefer to travel less than one mile for outdoor recreation. Only 1 in five respondents would travel more than 5 miles to an outdoor recreation location.
- Over 82% of the respondents had visited the open desert or mountains around El Paso. Over 73% had visited the Franklin Mountains State Park at one time or another. Eighty-three percent of the respondent had used or visited a city park.
- The State Park and city parks were the top two choices for outdoor recreation, with 60% choosing the State Park and 44% using city parks. Other top choices included McKelligon Canyon and the Transmountain Road area at around 40% each.
- Walking and jogging and just being outdoors were the two most popular outdoor recreation activities.
- When queried about what they most needed to help them visit open spaces, the number one choice was restrooms, at nearly 40% of the respondents. The second choice was the

lack of time, at nearly 29%, and the lack of paving trails at over 20%.

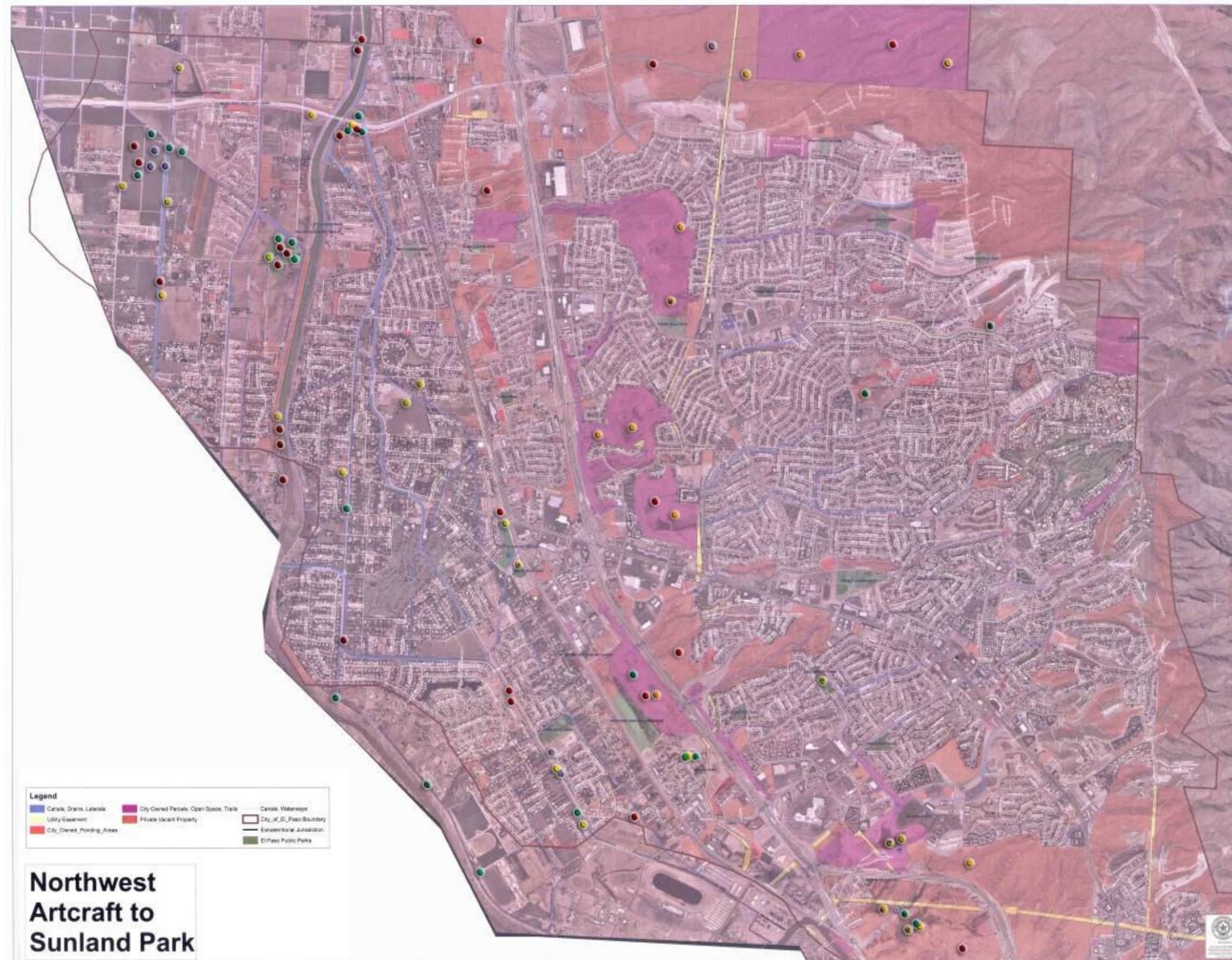
Public Meetings

Meetings were held in every planning area of the city. Because of the rainfall events during August 2006, one of the meetings was rescheduled to give citizens an opportunity to attend. During the five meetings, the open space planning process was discussed, and maps illustrating all of the potential open space opportunities in the city were presented so that citizens could add their ideas about what areas should be considered. Citizens were asked to use dots and note cards to represent the places in their part of the city as well as other unique areas that they would like to see preserved.

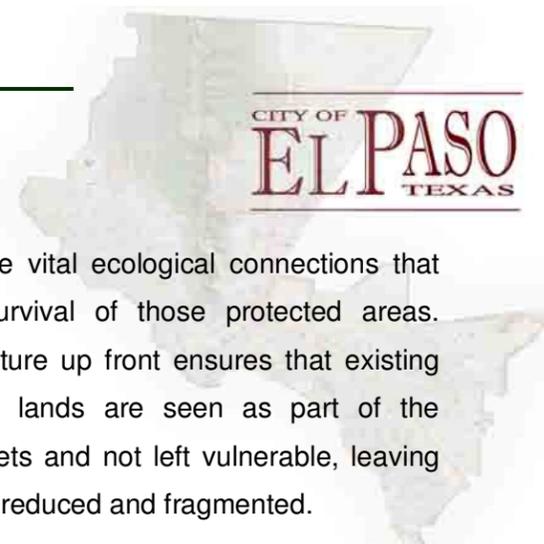
A sample map with citizen comments is shown on the following page.

Review by Boards and Commissions

Draft recommendations of the plan were presented to key Boards and Commissions for their review and comment. These include the City Plan Commission, and the City Council of El Paso.



Sample Map with citizen suggestions for green space preservation



"I look forward to an America which will not be afraid of grace and beauty, which will protect the beauty of our natural environment, which will preserve the great old American houses and squares and parks of our national past and which will build handsome and balanced cities for our future."

John F. Kennedy



Views and access to the Franklin Mountains remain one of the major principles of the Green Infrastructure Plan.

5. The Open Space Master Plan for El Paso

The recommended open space plan for El Paso combines the input from the Advisory Group and the citizens of El Paso with an analysis of many potential open space opportunities. It incorporates both general and specific principles and goals to guide decision making, prioritizes where preservation should occur, and recommends specific actions aimed at acquiring key areas.

General Principles of Green Infrastructure

The following principles create the overall framework for this open space plan. These principles are common to open space preservation everywhere, and provide the scientific underpinnings of this plan.

Principle 1: Green infrastructure should be the framework for conservation and development - Most of our nation's land conservation programs over the last century have focused on the protection of individual parks, preserves, or other isolated areas that have important natural or cultural resources. By contrast, roads and other forms of gray infrastructure upon which America's communities depend — and that provide the framework for future growth and development — are planned, built and maintained as a system of inter-connected parts.

Communities can plan for and protect interconnected, green space systems. Where isolated "islands" of nature already exist, green infrastructure planning can help them identify

opportunities to restore the vital ecological connections that are necessary for the survival of those protected areas. Protecting green infrastructure up front ensures that existing open space and working lands are seen as part of the community's essential assets and not left vulnerable, leaving green infrastructure further reduced and fragmented.

Principle 2: Design and plan green infrastructure before development - Planning for and protecting green space systems should come before development whenever possible. But in situations in which development has already occurred, it is still important to assess where restoring green infrastructure would benefit people and natural systems. A green infrastructure plan will focus acquisition and restoration priorities and help communities take advantage of opportunities to reconnect isolated habitat islands as existing developed areas and built infrastructure or other redevelopment opportunities occur.

Principle 3: Linkage is key - The desired outcome for all green infrastructure initiatives is the creation of a green space network that functions as an ecological whole, not as a random assemblage of separate, unrelated parts. The strategic connection of different system components is critical to maintaining vital ecological processes and services (e.g., carrying and filtering storm-water runoff, storing and cleaning fresh water, cleaning urban air) and to maintaining the health and biodiversity of wildlife populations. In addition, green infrastructure requires linkages to be made among different agencies, nongovernmental organizations, and the private sector.



Integrating green infrastructure with programs that focus on growth and development will aid state and community efforts to protect vital agricultural and other working lands. Partnerships also should be forged among foundations, regional councils, government agencies, universities, non-profits, and other organizations that are already funding projects and initiatives with similar goals to protect, restore, connect, or improve management of natural areas, parks, trails, and greenways.

Principle 4: Green infrastructure functions across multiple jurisdictions and at different scales - Our nation’s transportation, power, telecommunication and other gray infrastructure systems are designed to connect across multiple jurisdictions and incorporate facilities that function at different scales. Likewise, we need to design green infrastructure systems strategically to connect across urban, suburban, rural and wilderness landscapes and incorporate green space elements and functions at the state, regional, community and parcel scales. Green infrastructure may be most successful when it functions at multiple scales in tandem. For example, Toronto’s “Greening the Portlands” project in Ontario, Canada focuses on major parks, minor parks, wide corridors, narrow corridors, and development parcel landscapes.

El Paso needs to work with all levels of government and private landowners at various scales to plan and implement green infrastructure.

Our state and local governments would never fund and construct highway systems without a multi-year transportation plan and an associated public communication plan that lays

out all the implementation steps in a logical and orderly fashion. Therefore, creating an orderly well thought out green infrastructure plan is crucial for serious consideration by public officials. It is important to note that green infrastructure systems do not require or even imply public ownership of all the land in the system. Clearly privately owned land, particularly working farms and forests, can play an important role in any green space system.

Principle 5: Green infrastructure is grounded in sound science and land-use planning theories and practices.

The theories and practices of many scientific and land planning professions — including conservation biology, landscape ecology, urban and regional planning, landscape architecture, geography, and civil engineering — all contribute to the successful design and planning of green infrastructure systems. Scientists, engineers, and land use planners have come to recognize that natural systems already function efficiently when it comes to protecting our water supply and air resources. With strategic use of environmental design, professionals and laypersons alike are finding that networks of linked natural areas and habitats managed for biodiversity purposes can also protect developed urban and rural areas from natural disasters, can improve the general health of the human community, and can provide recreation opportunities and other public amenities. Green infrastructure initiatives should engage and incorporate the expertise of professionals from all relevant disciplines.

Principle 6: Green infrastructure is a critical public investment- The functions, values and benefits of green



Preservation of the mountain landscape is a key component of the Plan.

infrastructure are available for everyone. Creating interconnected green space systems benefits communities by providing land for resource protection and restoration, recreation and other public values. More importantly, strategic placement of green infrastructure reduces the need for some gray infrastructure, freeing up public funds for other community needs. For example, one third of weekday trail users are commuting in major urban areas with trail systems such as Washington, D.C., Seattle, Washington, Tampa, and Florida, greatly reducing the need for road construction and other expensive transportation infrastructure. Recognizing the public benefits of green infrastructure is an important first step in providing adequate funding. For all of these reasons, green infrastructure is an appropriate and necessary use of public funds.

The new accounting standard, GASB-34, may be one method to incorporate green infrastructure into a city or state's budget, by highlighting the economic trade-offs between built and natural infrastructure. It is also important to tap resources in state and federal agencies for planning and management activities, including protecting public lands that can serve as building blocks for a viable green infrastructure.

Green infrastructure provides a diversity of public and private functions and values that address both natural and human needs and benefit the environment and communities. These benefits need to be documented, both in terms of their ecological values for people and the environment and their economic values to society. Just as all forms of built infrastructure are promoted for the wide range of public and

private benefits they provide, we need to promote green infrastructure systems actively for the wide range of essential ecological, economic and social functions, values and benefits that accrue to people and nature. Green infrastructure initiatives describe and define the values and functions of interconnected networks of open space in a context that enables citizens to understand the ecological, human, and economic benefits.

Principle 7: Green infrastructure involves diverse stakeholders - The stakeholders of green infrastructure initiatives have diverse backgrounds and needs. Community buy-in is better than mandates or regulations, because community support is lasting and sensitive to the economic value of the land, private property rights/responsibilities and local home rule. Successful green infrastructure efforts forge alliances and interrelationships among both public and private organizations.

By necessity, green infrastructure projects incorporate the experiences and programs of diverse public, private and nonprofit partners. For this reason, it is critical to provide open forums that bring together key individuals, organizations and agencies to coordinate and help guide the activities that will make green infrastructure a reality. To be successful, green infrastructure initiatives must excite people, engage from the beginning, and keep them involved. It is important to involve participants in the creation of a shared vision that can help drive the process and forge consensus. The community should be engaged in seeking ways to build on its history and existing



Major portions of the undeveloped lands along Scenic Drive are privately owned and could be developed in the future.

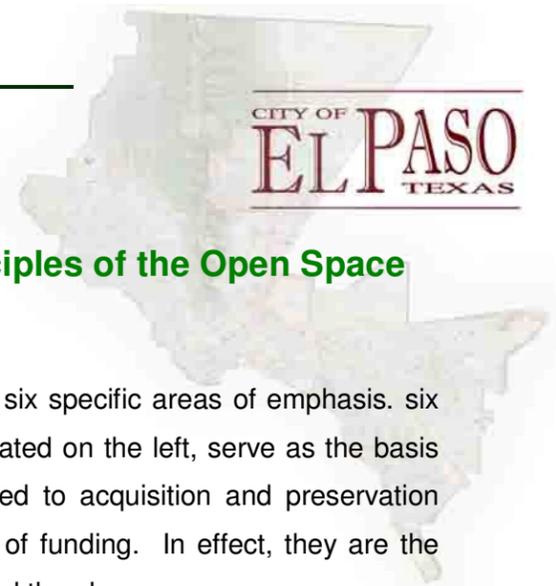


assets and to extend the benefits into underserved and growing areas.

Successful citizen involvement programs go beyond traditional methods of engaging citizens to find informal and creative ways to get their attention. Among the strategies that might be effective are placing greenspace maps in post offices, libraries, schools, city hall, etc., to invite input, and working with the media to get out the message. Techniques include direct mailings to landowners, marketing posters, news releases and newspaper stories, public surveys, and public hearings.



Scenic areas can be found throughout the city. These views illustrate the beauty of the Rio Grande corridor.



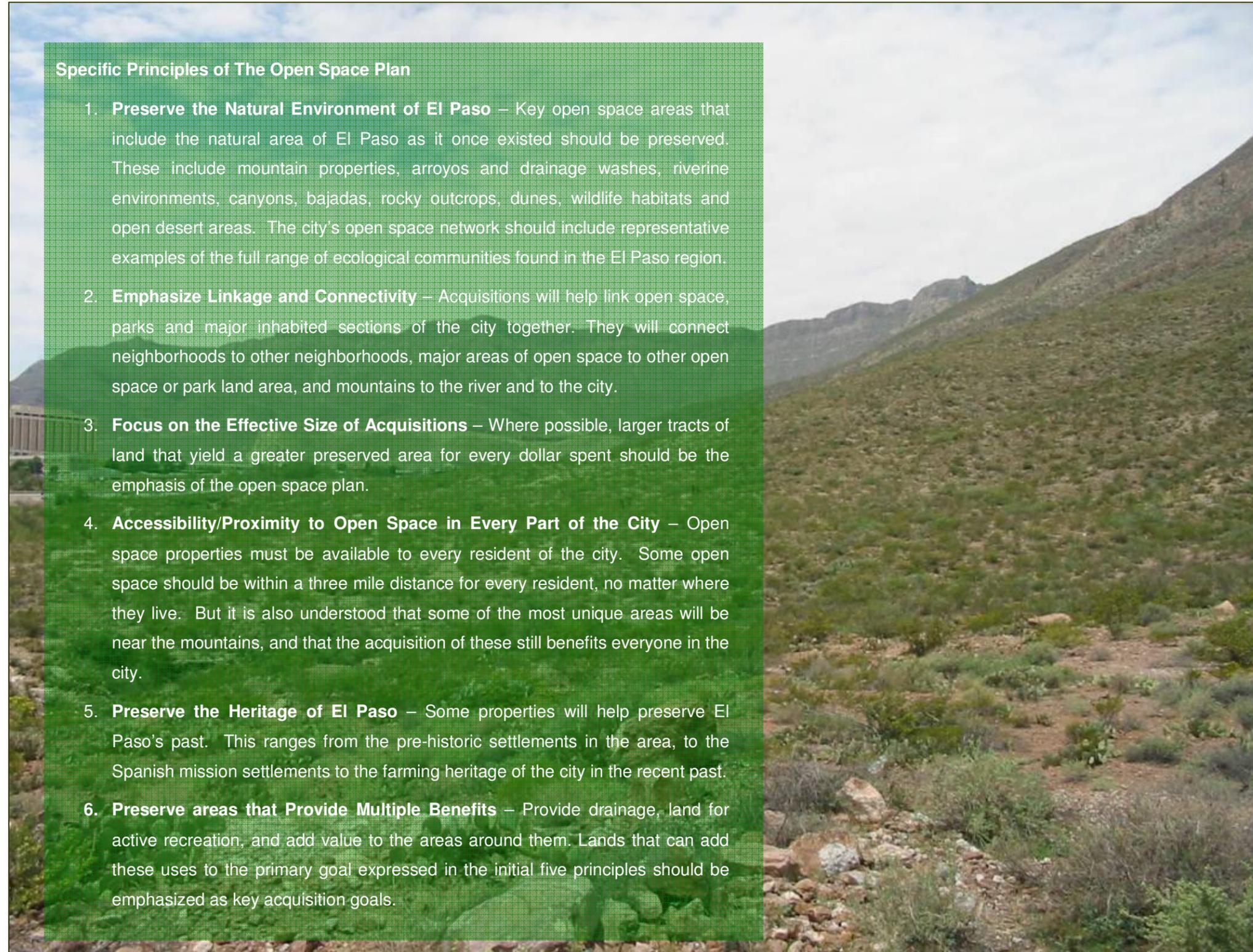
Specific Principles of the Open Space Plan

The plan includes six specific areas of emphasis. six principles, enumerated on the left, serve as the basis for decisions related to acquisition and preservation and the allocation of funding. In effect, they are the guiding force behind the plan.

As a statement of policy, any acquisition must meet the criteria laid down by at least three of these six guiding principles. This ensures that acquisition decisions will provide a significant level of benefit.

Specific Principles of The Open Space Plan

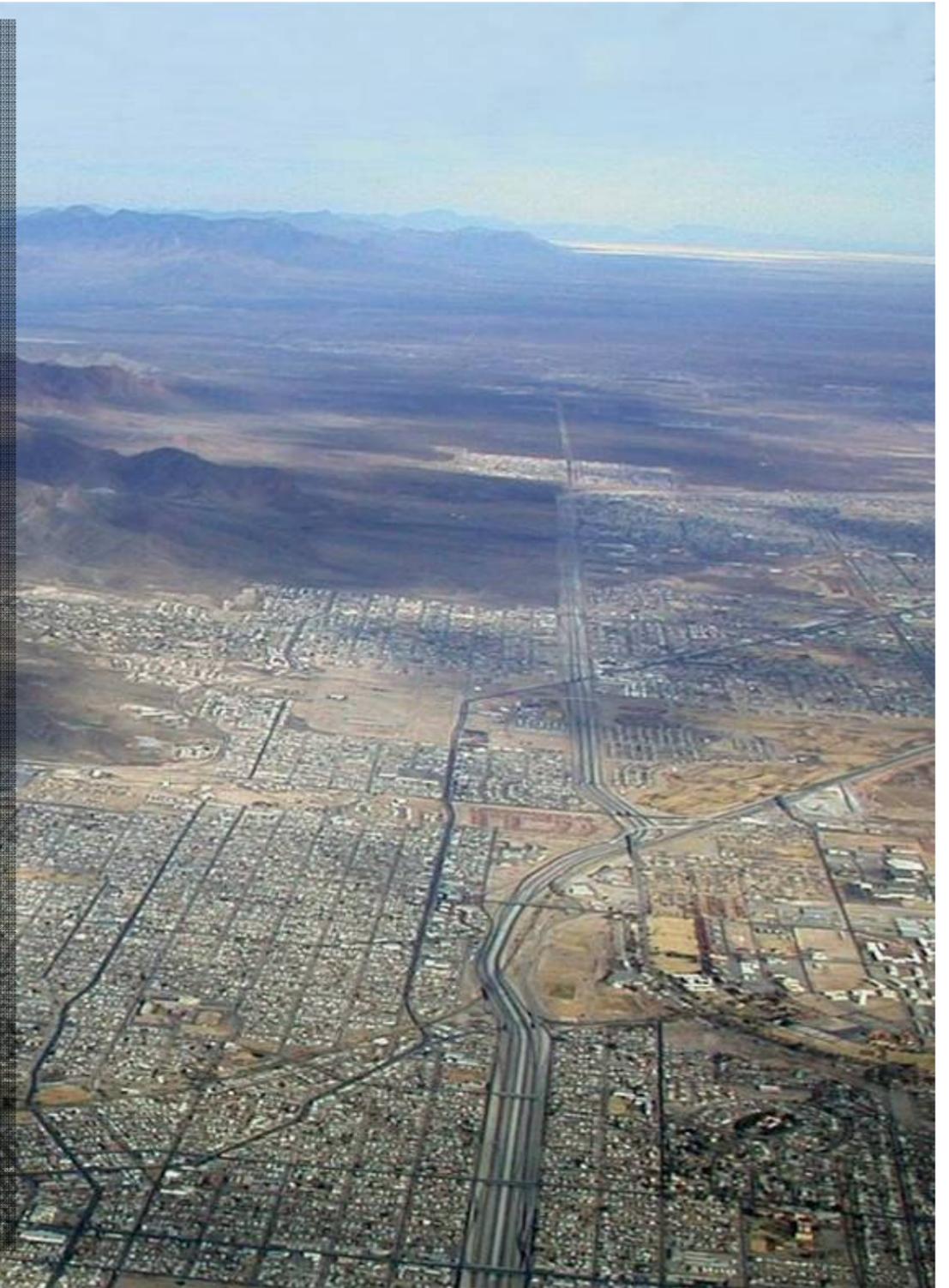
1. **Preserve the Natural Environment of El Paso** – Key open space areas that include the natural area of El Paso as it once existed should be preserved. These include mountain properties, arroyos and drainage washes, riverine environments, canyons, bajadas, rocky outcrops, dunes, wildlife habitats and open desert areas. The city’s open space network should include representative examples of the full range of ecological communities found in the El Paso region.
2. **Emphasize Linkage and Connectivity** – Acquisitions will help link open space, parks and major inhabited sections of the city together. They will connect neighborhoods to other neighborhoods, major areas of open space to other open space or park land area, and mountains to the river and to the city.
3. **Focus on the Effective Size of Acquisitions** – Where possible, larger tracts of land that yield a greater preserved area for every dollar spent should be the emphasis of the open space plan.
4. **Accessibility/Proximity to Open Space in Every Part of the City** – Open space properties must be available to every resident of the city. Some open space should be within a three mile distance for every resident, no matter where they live. But it is also understood that some of the most unique areas will be near the mountains, and that the acquisition of these still benefits everyone in the city.
5. **Preserve the Heritage of El Paso** – Some properties will help preserve El Paso’s past. This ranges from the pre-historic settlements in the area, to the Spanish mission settlements to the farming heritage of the city in the recent past.
6. **Preserve areas that Provide Multiple Benefits** – Provide drainage, land for active recreation, and add value to the areas around them. Lands that can add these uses to the primary goal expressed in the initial five principles should be emphasized as key acquisition goals.

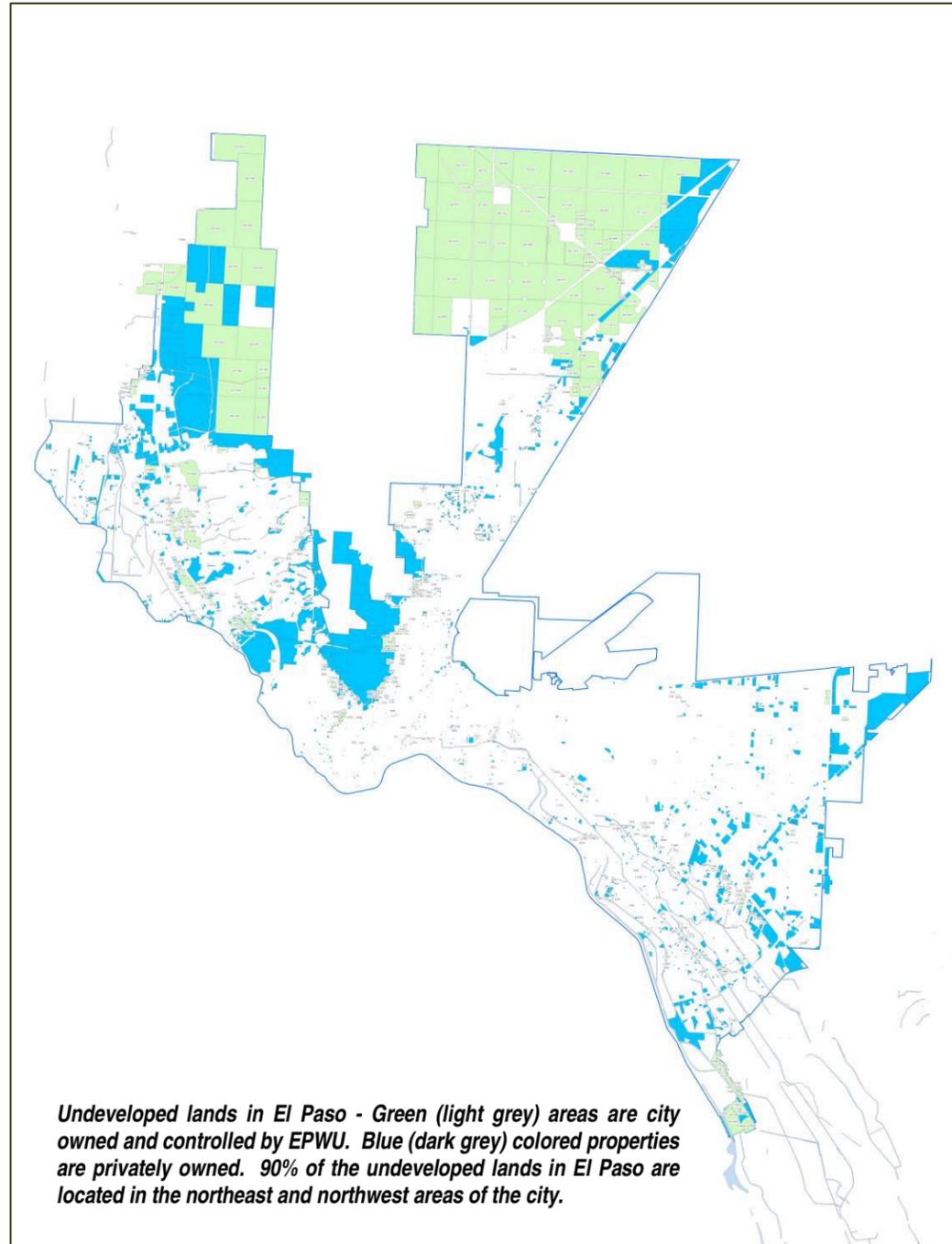


Goals of the Open Space Plan

Specific goals are recommended as part of the plan. They establish targets that measure the progress that El Paso makes towards the preservation of open space throughout the city.

- Excluding the Franklin Mountain lands, establish a goal of maintaining at least 15 acres of open space for every 1,000 residents of El Paso.
- Preserve at least 75% of all remaining arroyos in El Paso on private lands in an existing undeveloped natural state.
- Preserve at least 75% of all remaining arroyos on publicly owned lands in their existing natural state.
- Initiate actions to preserve at least 5% of the gross in-town land area of East El Paso as undeveloped open space.
- To ensure balance, increase the actual amount of open space in underserved planning areas of the city by at least 100%.
- Preserve a significant fringe “bosque” area along the Rio Grande in both the Upper and Mission Valley areas. This addresses needs for open space as well as the need for areas that can act as safety valves for flood events.
- Emphasize the use of greenbelt and linear park corridors to link green areas and parks together.
- As part of the new drainage plan for El Paso, enhance the capacity of large regional detention facilities so that at least 10% to 20% of the area of each pond can be converted to a vegetated open space use such as wetlands or fringe vegetated buffer zones.
- Preserve the undeveloped mountain face as the signature feature of El Paso for future generations.
- Permanently preserve all of the Castner Range lands as an open space gift to the future citizens of El Paso. It should be noted that any development on the Castner Range would probably occur on the alluvial fans at the lower elevations bordering the Patriot Highway. These alluvial fans have significant open space value, and elsewhere around the Franklin Mountains comparable landforms have either been developed or are slated for future development.
- Develop an immediately available source of funding for immediate acquisition of key open space assets as they become available.
- Modify the city’s ordinances and codes to mandate the preservation of open space in the city.





Criteria used to Prioritize Lands for Preservation

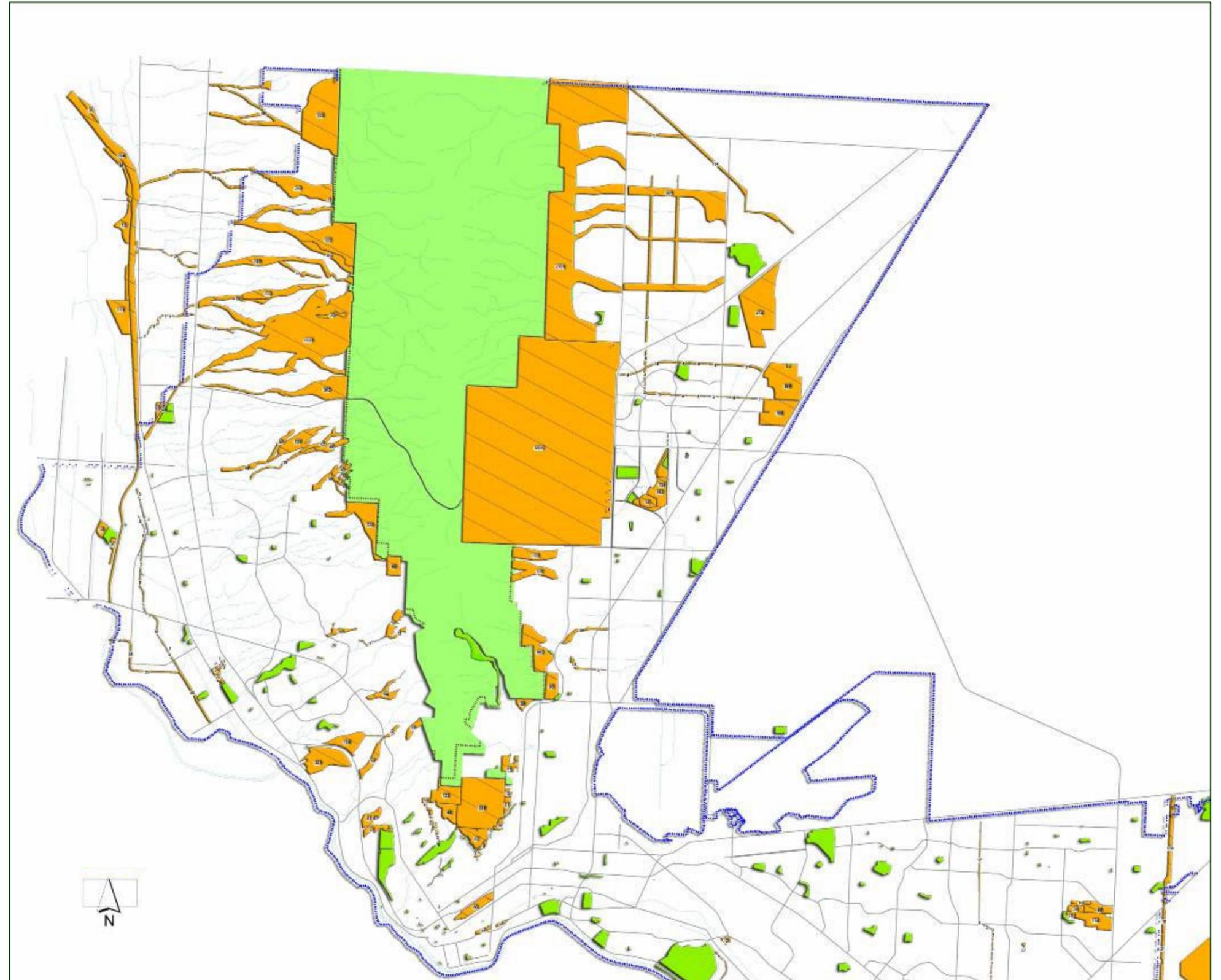
The following criteria have been developed to assess the preservation value of lands that are recommended for acquisition. This includes areas identified in this plan, as well as other lands that may become available in the future.

- Addresses availability of open space
- Located where future growth is anticipated
- Located away from other large reserves of open space
- Facilitates linkage with other open spaces
- Open space reserves should be at least 75 acres
- Associated with streams, lakes and ridge tops
- Near population centers
- Correlated with historic and cultural resources
- Complements farmland preservation
- Associated with aquifers
- Cost effectiveness
- Availability of land
- Ratio of size to cost
- Meets at least two of the five key principles of the plan.

Specific Threatened Open Space Areas to be preserved

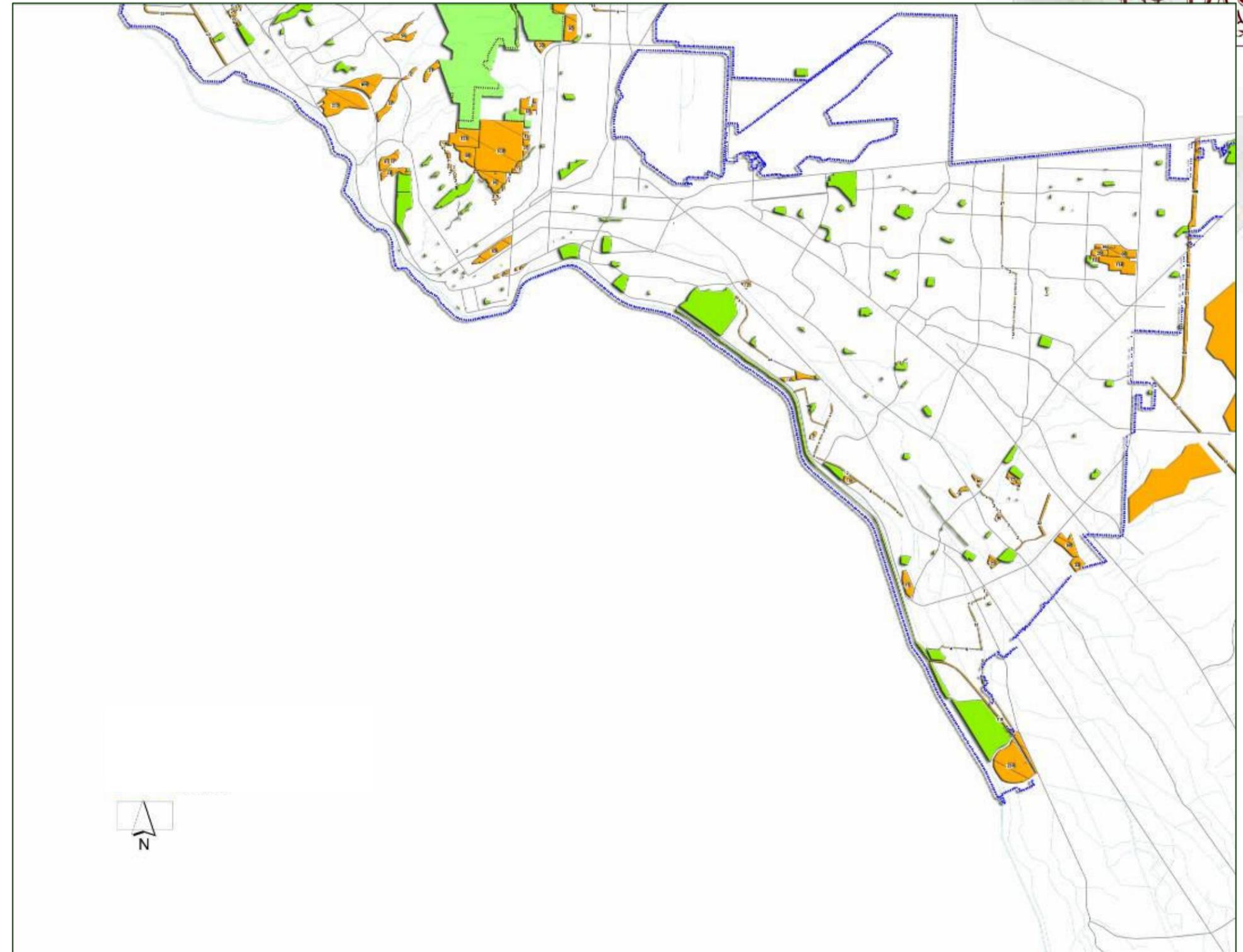
The following twenty-five areas have been identified as the highest priorities to be preserved in El Paso. Much of the lands in these areas are currently available for development, and could be lost as open space features of El Paso if not preserved in the near future. Each will be discussed further in the chapter, along with recommended preservation strategies for each area.

The overall framework plan illustration is shown on the following pages. The tables that follow lists the broad categories of recommended open spaces to be preserved, as well as potential actions to preserve each area.



Northwest and Northeast El Paso

-  Lands to Preserve
-  Existing Parklands or Open Space



Central, East and Lower Valley Areas El Paso

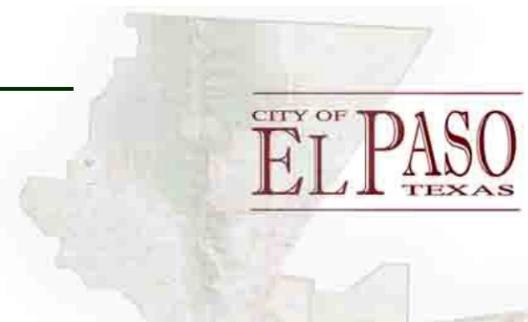
-  Lands to Preserve
-  Existing Parklands or Open Space



Mountains to River - A Green Infrastructure Plan for El Paso Recommended Prioritization

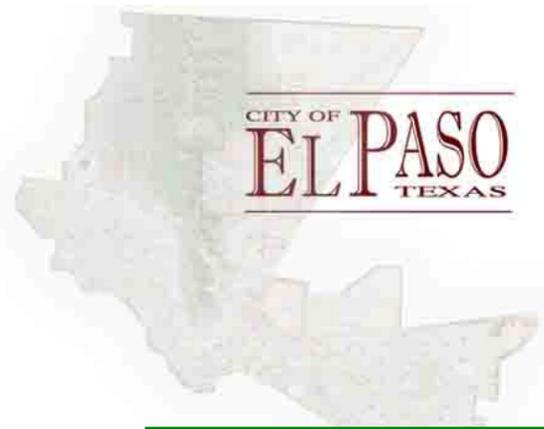
Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
NW	Immediate	Mountain to River Arroyo System (41B and 42) Arroyo and canal system providing continuous linkage to Rio Grande	500	Privately Owned portions	\$ 5,000,000	Dedication, acquisition of portions via purchase only as necessary	1. Negotiate dedication of land for drainage and for additional incentives.	City of El Paso (Planning, Property Division, Parks)	Fall 2006		High
							2. As last resort, develop agreement for future purchase of portion for negotiated price.	City of El Paso (Planning, Property Division, Parks)	Spring 2007	Future Open Space Bond Sales, donations	
NW	Immediate	Mountain to River Arroyo System (41B and 42) Arroyo and canal system providing continuous linkage to Rio Grande	900	EPWU Portion	Publicly Owned	Preservation in non-developed state by El Paso Water Utilities - donation to City as open space/park land.	1. City Council action to request reservation of land for future regional park in the area.	City of El Paso (Planning, Property Division, Parks), Public Service Board	Fall 2006		High
							2. Define boundaries in concert with EPWU.	City of El Paso (Planning, Property Division, Parks), Public Service Board	Fall 2006 to Spring 2007		
							3. Develop agreement with EPWU for preservation. (Note, no current master plan, may require some flexibility to adapt if future master plan recommends alternative).	City of El Paso (Planning, Property Division, Parks), Public Service Board	Spring 2007		
							4. Donation to count as parkland dedication for adjacent EPWU lands for sale.				
NW	Immediate	Keystone Addition (adjacent properties to expand and buffer regional park)	35	Private - 8 tracts	\$1,000,000 to \$1,500,000	Purchase or donation	1. Negotiate purchase price for properties, beginning with largest first.	City of El Paso (Planning, Property Division, Parks)	Fall 2006 to Spring 2007	Future Open Space Bond Sales, donations	Very High
							2. Develop agreement to acquire for future payment (may require option on property)	City of El Paso (Planning, Property Division, Parks)	Spring 2007		

Summary of Cost - Immediate Items	\$6,000,000 to \$6,500,000
Potential Acres to be preserved	1435
Cost per Acre preserved	\$4,530



Mountains to River - A Green Infrastructure Plan for El Paso Action Plan

Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
NW	Immediate to High	Rio Grande in the Upper Valley - 11 mile Corridor from El Paso County limits to Sunland Park city limits - River Corridor outside and adjacent to levees where appropriate to partially reestablish bosque	300	Majority Privately owned /EPWU	\$ 7,500,000	Purchase of development rights, outright purchase, development incentives to preserve buffer zone along river	1. Identify acquisition cost for specific tracts that are available.	City of El Paso (Planning, Property Division, Parks); Area Land Trusts	Early 2007	Bond funds, Local and National Land Trusts	Immediate to High - ongoing development pressure along corridor
							2. Meet with owners to discuss development rights cost or purchase price.		Early 2007		
							3. Pursue option or other agreements to preserve property until acquisition funds become available		Early 2007		
MV	Immediate to High	Rio Grande Corridor in Mission Valley - River Corridor Outside Levees from Downtown to Socorro - River Corridor outside and adjacent to levees where appropriate to partially reestablish bosque	150	IBWC/TxDOT/Private	unknown	Purchase of development rights, outright purchase, development incentives to preserve buffer zone along river	1. Identify acquisition cost for specific tracts that are available.	City of El Paso (Planning, Property Division, Parks); Area Land Trusts	Early 2007	Bond funds, Local and National Land Trusts	Immediate to High - ongoing development along corridor
							2. Meet with owners to discuss development rights cost or purchase price.		Early 2007		
							3. Pursue option or other agreements to preserve property until acquisition funds become available		Early 2007		
NE	Immediate to High	Northeast Open Space - Bajadas, arroyos and canyons in buffer zone	990	EPWU	No cost - city owned	Permanent preservation as part of Northeast Master Plan	1. Meet with EPWU representatives and define limits of area.	City of El Paso (Planning, Property Division, Parks), Public Service Board, CPC, El Paso City Council	Fall 2006	No funding required, preservation of land that is already city owned	Immediate - long range develop plan pending
NE	Immediate to High	Northeast Arroyos - Arroyo systems and canyons	700	EPWU	No cost - city owned		2. In concert with EPWU, determine ultimate absolute limits for each type of preserved land.		Fall 2006	No funding required, preservation of land that is already city owned	
NE	Immediate to High	Northeast Greenbelt Corridors - Drainage and detention areas for EPWU lands	1100	EPWU	No cost - city owned		3. Develop language to be inserted in Northeast Master Plan document prior to approval by City Council ensuring permanent preservation of designated areas.		Fall 2006	No funding required, preservation of land that is already city owned	



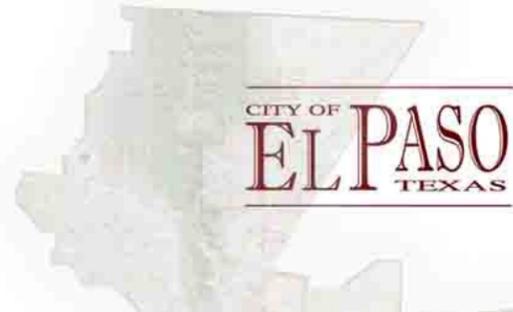
**Mountains to River - A Green Infrastructure Plan for El Paso
Action Plan**

Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
Central	High	Near Mountain Canyons - Canyon system accessed from Scenic and Rim Road	200	Private - 2+ parcels	\$ 4,000,000	Joint development agreement	1. Meet with owners to discuss joint development or purchase price.	City of El Paso (Planning, Property Division, Parks)	Spring 2007	Bond funds	High - properties in area currently offered for sale
							2. Develop concept for joint development, city funds utility infrastructure cost.	City of El Paso (Planning, Engineering, Property Division, Parks)	Spring 2007	Bond funds	
							3. Develop agreement with property owners, may require option to hold property.	City of El Paso (Planning, Engineering, Property Division, Parks)	Spring/Summer 2007	Bond funds	
							4. Fund acquisition through bond sales.	City of El Paso (Planning, Property Division, Parks)	Summer 2007	Bond funds	
NW	High	West Upper Valley Agricultural Preserves - Select agricultural heritage and heavily vegetated lands	250	Private	\$ 5,000,000	Purchase of development rights, outright purchase	1. Identify acquisition cost for specific tracts that are available. 2. Meet with owners to discuss development rights cost or purchase price.	City of El Paso (Planning, Property Division, Parks); Area Land Trusts		Bond funds	High
MV	High	Mission Valley - Agricultural and natural preserves in the area	125	Private - up to 10 parcels	\$1,250,000 to \$2,500,000	Purchase of development rights, outright purchase	1. Identify acquisition cost for specific tracts that are available. 2. Meet with owners to discuss development rights cost or purchase price.	City of El Paso (Planning, Property Division, Parks); Area Land Trusts		Bond funds	High
NE	High	Castner Range - Mountains and bajadas	7000	US Government	\$ -	Acquire from DOD	1. Pursue agreement with D.O.D. for first rights to property 2. Negotiate acquisition/transfer cost (if any)	City of El Paso (Planning, Property Division, Parks)	2007-2008	General Fund (for transfer costs)	High



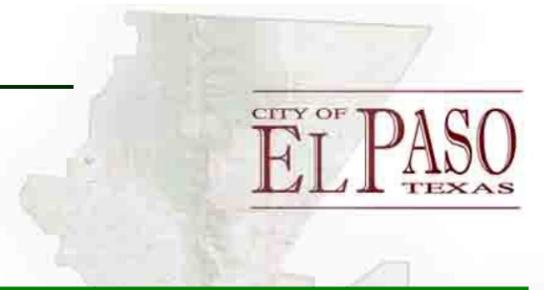
Mountains to River - A Green Infrastructure Plan for El Paso Action Plan

Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
East	High	East Desert Greenbelts - Greenbelt corridors for open space, drainage, aquifer recharge	1500	Private	\$ 15,000,000	Consider donation, purchase for aquifer recharge by EPWU. 50% for drainage and detention	1. Identify specific tracts for preservation.	City of El Paso (Planning, Engineering, Property Division, Parks)	2007	Bond Funds, EPWU Funds	Medium to High - Development east of Loop 375 continues to move eastward
							2. Identify cost of preservation.	City of El Paso (Planning, Engineering, Property Division, Parks)	2007		
							3. Acquire as feasible.	City of El Paso (Planning, Engineering, Property Division, Parks)	2007		
Central and NW	High	Dispersed Arroyos - Remaining in-town undeveloped arroyos	150	Private	\$ 7,500,000	Pursue through donation, required for drainage		Remaining in-town undeveloped arroyos		Gross value at \$50,000 per acre. Potential acquisition through donation or reduced cost.	High
East	High	East Urban Open Space - Quarry lands along Loop 375	220	Private	\$ 6,000,000	Consider donation or purchase of development rights.		Quarry lands along Loop 375			High
Central	Medium	Near Mountain Lower Terrace - Portions above Scenic Drive	220	Private	\$ 6,500,000	Purchase of development rights, outright purchase, Agreements with developer to guide development		Portions above Scenic Drive		Bond funds	High



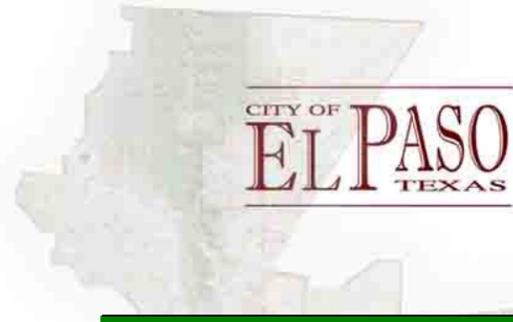
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NE/ Central	Medium	Northeast Lower Bajadas and Arroyos - Foothills and arroyos north of McKelligon Canyon	635	Private 50%, City of El Paso 50%	\$9,500,000 to \$12,700,000	Work with developer to preserve, purchase of development rights, outright purchase		Foothills and arroyos north of McKelligon Canyon			Medium
NW	Medium - Currently preserved but could be sold	West Irrigation Canal system - Acquire use for trail corridors	95	Irrigation District(s)	unknown	Acquire easement for public use. Probably requires maintenance of corridor and public use infrastructure		Canal system		Probably requires purchase of right of entry. Cost to be negotiated with district	Low
NW	Medium - key linkage segments are needed	West El Paso Linkages - Linkage connections along drainage and ponds	25	Portions needed are private	\$1,000,000 to \$2,000,000	Acquire easement for public use. Probably requires maintenance of corridor and public use infrastructure		Linkage connections along drainage and ponds		Purchase right to access property. In some cases may require outright purchase	Low



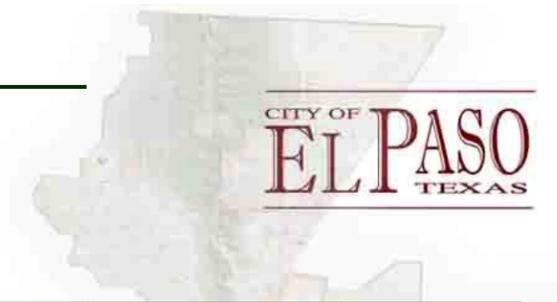
**Mountains to River - A Green Infrastructure Plan for El Paso
Action Plan**

Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
NW	Preserve - Develop as Linkage when feasible	Rio Grande - 11 mile Corridor from El Paso County limits to Sunland Park city limits	500	IBWC		Requires access infrastructure, development of permanent trail in portions	River Corridor inside and including levee system	River Corridor inside and including levee system		Requires purchase of development rights and provision for periodic access points to river	Low
NW	Medium	Upper Northwest Arroyos - Arroyos, lowland drainage to river	1900	EPWU 75%, Private 25%	\$ 5,000,000	Preserve public lands through EPWU Master Plan. 50% of private reserved for drainage, 50% purchase of development rights		Arroyos, lowland drainage to river		\$2,500,000 required at \$10,000 per acre - Bond funds? No acquisition cost provided for EPWU lands	Low to Medium
Central	Medium	Cement Lake Wetlands - Existing spring fed lake and surrounding wetlands	150	Private	\$3,000,000 to \$4,000,000	Donation, with owner retaining right to use water		Existing spring fed lake and surrounding wetlands		Gross value at \$25,000 per acre. Potential acquisition through donation or reduced cost.	Low
Central	Medium	Near Mountain - Front face of Franklin Mountains	600	Private	\$ 18,000,000	Purchase of development rights, outright purchase		Front face of Franklin Mountains		Preserves mountain face most visible to city.	Medium



Mountains to River - A Green Infrastructure Plan for El Paso Action Plan

Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
MV	Preserved - Develop as Linkage when feasible	Central and Mission Valley Linear Parks - Existing drainage corridors - Playa Drain	160	City-owned	\$ -	Property owned by city, development cost is potentially high	Existing drainage corridors - Playa Drain	Existing drainage corridors - Playa Drain		Requires some development to allow access	Low
MV	Preserved - Develop as linear parks when feasible	Mission Valley Linear Parks		City owned	\$ -	Property owned by city, development cost is potentially high	Mesa and Middle Drains	Mesa and Middle Drains		Requires some development to allow access	Low
MV	Preserved - Develop as Linkage when feasible	Mission Valley - River Corridor Inside Levees		IBWC	\$ -	Access rights and type of access need to be negotiated	Rio Grande Corridor - inside Levees	Rio Grande Corridor - inside Levees		Requires development of access, border issues make use of this area difficult	Low
East	Preserved - Develop as Linkage when feasible	East Linkage Corridors - in town	60	Utility Ownership	Unknown	Acquire easement for public access	Corridors along utility easements - power and gas	Corridors along utility easements - power and gas		Requires some development to allow access	Low
East	Preserved - Develop as Linkage when feasible	East Linkage Corridors - in new development	350	Utility Ownership	Unknown	Acquire easement for public access	Corridors along utility easements - power and gas	Corridors along utility easements - power and gas		Requires some development to allow access	Low



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Planning Area	Recommended Priority Level	Name / Description	Approximate Size (Acres)	Current Ownership (1)	Approximate Current Value (if acquired)	Potential Acquisition Method(s)	Action(s) - In sequential order	Responsible Entity	Timeframe	Potential Sources of Funding	Potential For Immediate Development
East	Medium	Aquifer Storage and Recharge Lands	1,000	Private, Federal and State Government	\$ 10,000,000	Consider donation, purchase for aquifer recharge by EPWU. 50% for drainage and detention	Additional lands at low areas for recharge	Additional lands at low areas for recharge			Medium
Central	Currently preserved as Utility corridor - Develop trail when feasible	Fort Bliss Linkage Corridor	20	Utility Ownership	\$ -	Requires permission for use, address Fort Bliss security concerns if necessary	Utility corridor along Fort Bliss perimeter	Utility corridor along Fort Bliss perimeter		Requires some development to allow access	Low
NE	Preserved - consider revegetation to create wetlands	Northeast "Natural" Ponds and Dams	1,450	city owned	\$ -	No acquisition cost, development cost to retrofit for some access	Major Ponds and Dams	Major Ponds and Dams			Low
NE	Preserved - Develop as Linkage when feasible	Northeast Linkage Corridors	150	City of El Paso, Utility Ownership	\$ -	Acquire easement for public access	Major utility and drainage corridors	Major utility and drainage corridors		Requires extensive development for public access	Low
Total Potential Acres			21,435								
Total Potential Acquisition Cost											

Acres and land values shown are approximate and subject to change.

1. The “Mountains to River” Arroyo System north of Trans Mountain Road

Designated arroyos 41 and 42 are located north of Transmountain Road, but link to existing drainage channels west of Interstate Highway 10 and provide a continuous link to the Rio Grande corridor. This is one of the last remaining corridors that can connect the Franklin Mountains to the river.

Ownership – 60% of this corridor is publicly owned and are controlled by EPWU. The lands that will be made available for development in the near future. Privately owned areas are being master planned, and a 300’ wide corridor has been left open for drainage and public use. The corridor from IH 10 west to the river is already used for drainage, and is available as a trail corridor.

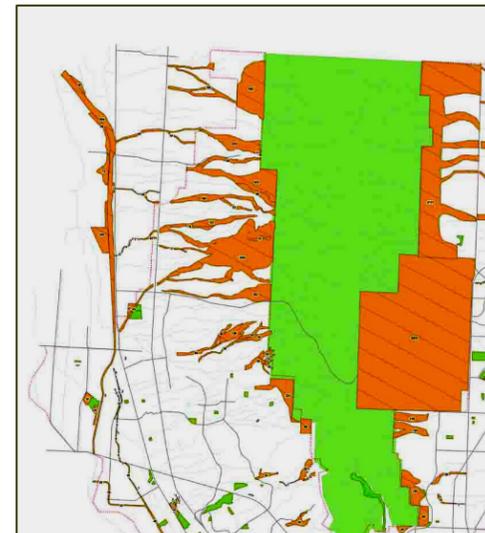
Level of Threat – the level of threat to much of this corridor is very high. Portions near IH 10 are already being planned for development, and lands closer to the mountains will soon be sold by EPWU for revenue unless permanently preserved.

Importance of Preservation – this is the only direct corridor remaining on the northwest side of El Paso that directly connects the Franklin Mountains State Park to the Rio Grande corridor. With the exception of an at-grade crossing of Doniphan Road, the entire corridor is continuous and unbroken by roadways. This continuous corridor is an extremely rare condition in El Paso today.

Strategy for Preservation

1. The arroyo system within EPWU lands should be permanently reserved as a large regional desert park for the entire northwest planning area of the city. A total of at least 500 acres +/- of EPWU controlled lands that encompass the rim to rim zone of each arroyo should be preserved. Upper mesa areas within the EPWU owned lands can be developed as small residential enclaves with 5,000 to 7,000 square foot “clustered” lots, so as to maintain EPWU’s land values in the area.
2. Private land owners west of the EPWU controlled portions should use natural drainage techniques and combine drainage and parkland corridors to preserve most or all of the existing arroyo corridors. In these areas, the arroyo corridor should be left in a largely natural state. Additional development rights can be granted in exchange for the donation of these lands, and/or parkland requirements can be met through the donation of some of these upper rim areas.

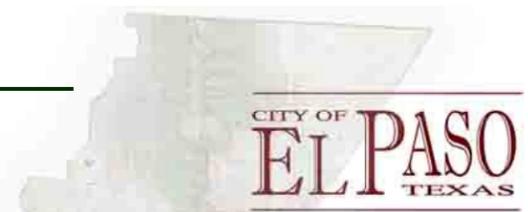
A new local parkway that runs north/south should be planned in the vicinity of the existing gas line corridor.



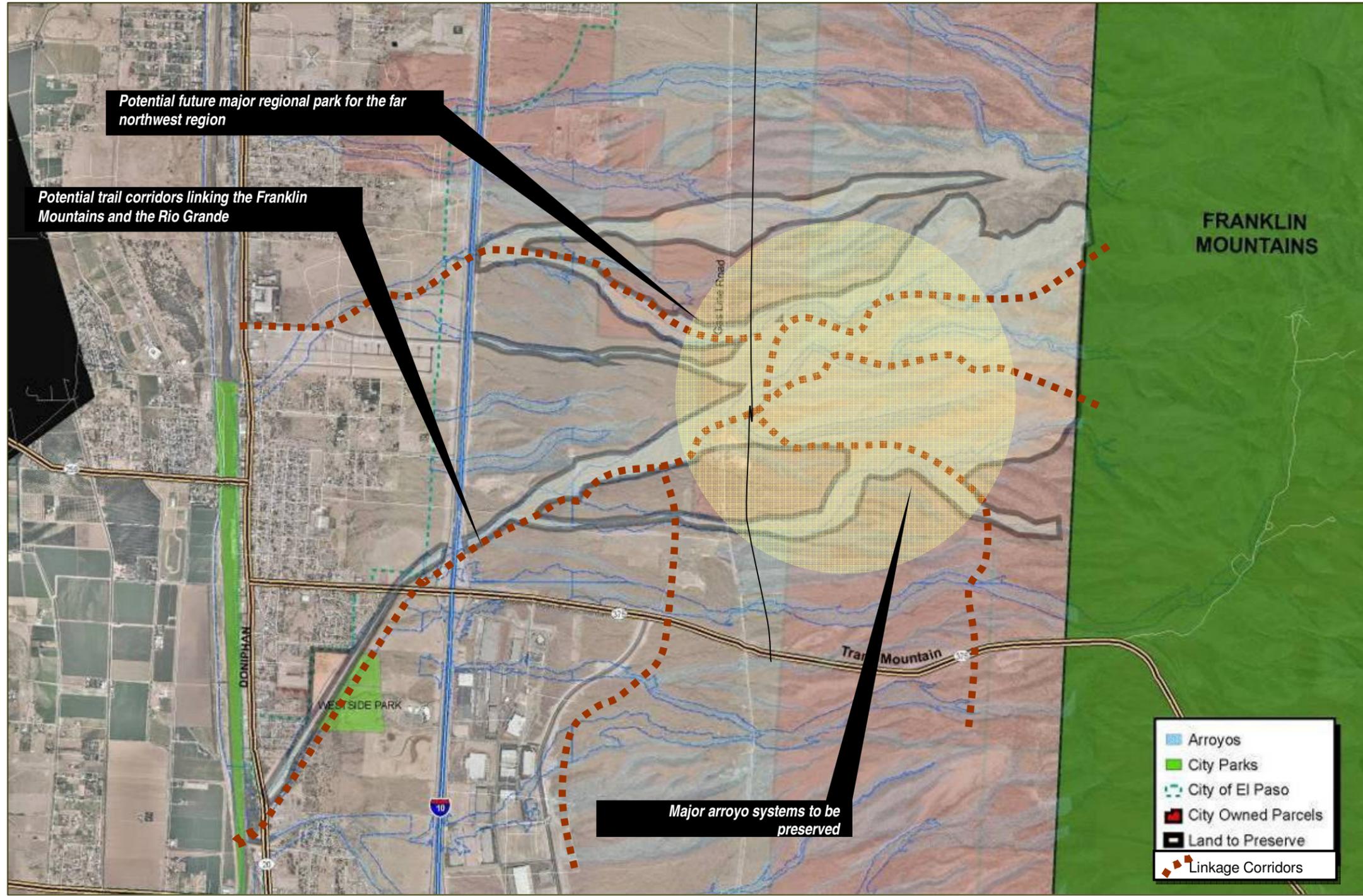
Private owners should be made aware of the significant potential gain in value accrued to their property if a long continuous nature park corridor is preserved.



The mountain to river arroyo systems in the Northwest sector of the city include deep, well defined arroyos.



← Preservation of major arroyo corridors for linkage and drainage below and west of the gas line road. | Limited development and preservation of entire arroyo systems above the gas line easement road. →



This parkway will become the eastern boundary of the developed area. Any development between this parkway and the edge of the Franklin Mountains State Park should be limited and only occur on the top of existing arroyo rims and mesas.

Amount of land to be preserved – the entire corridor, including drainage, parkland and open space components, if preserved as envisioned, totals 700 - 1,000 acres.

Funding required for Preservation – ideally, no additional funding will be required for acquisition. Development of trails along this corridor can occur in the future as the area population increases, and is estimated to cost \$3 million for 7 miles of nature trails, nodes and access parks.

Recommended Timeframe – Actions to preserve this corridor are already ongoing. Agreements to preserve lands controlled by EPWU should be completed within six months.

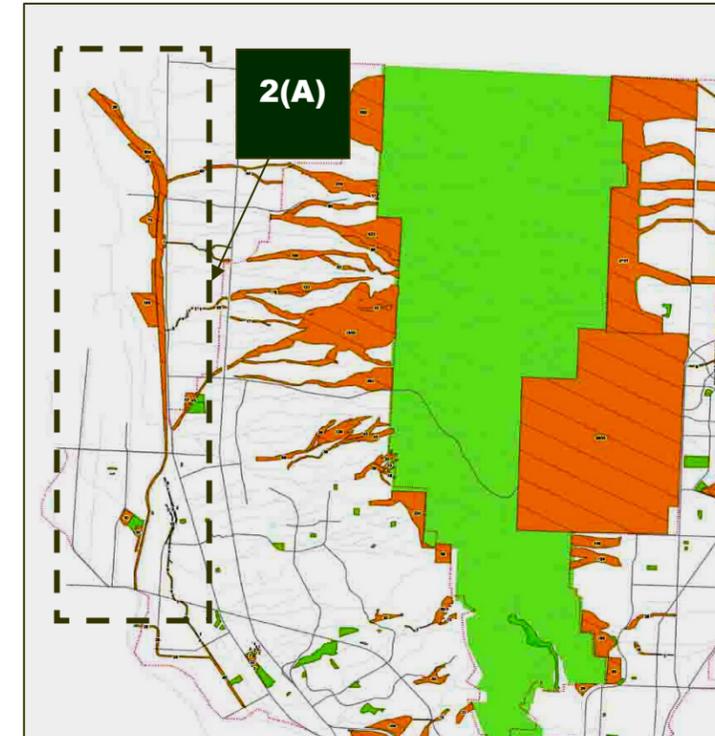
2(A) “Bosque” Linear Park along the Rio Grande in the Upper Valley

Ownership – the river corridor itself is entirely controlled by the IBWC. However, 90% of the fringe lands south of Transmountain inside the current city limits are privately owned and already developed. A total of 15 undeveloped tracts, totaling 100 acres have been identified adjacent to the river. Any remaining undeveloped piece should be immediately considered for preservation.

Preservation should at a minimum include a strip of undeveloped lands adjacent to the levees that is at least 200 to 300 feet wide. This area will be targeted for eventual re-forestation and recreation of the original cottonwood “bosques” along the Rio Grande. Similar bosques have been preserved in the upper reaches of the Rio Grande near Albuquerque.

Level of Threat – within the city limits of El Paso, very few undeveloped properties remain along the river, therefore ensuring a very high level of threat of development. These undeveloped properties gain increased value from their proximity to the river corridor and the residential and commercial development in the area.

Importance of Acquisition – additional preservation enhances the already long linear corridor controlled by the IBWC. Since very little additional tree planting can occur inside the levees, any bosque creation must take place along the fringes of the river. These can create a lush natural environment in the middle of the city and the desert climate. The corridor also benefits and links many different neighborhoods.



The Rio Grande flows between levees through much of El Paso.

Strategy for Preservation and Recreation of the “Bosques”

Outright acquisition of fringe lands adjacent to the levees is not absolutely critical. Rather, these areas are an ideal target for preservation through conservation easements.

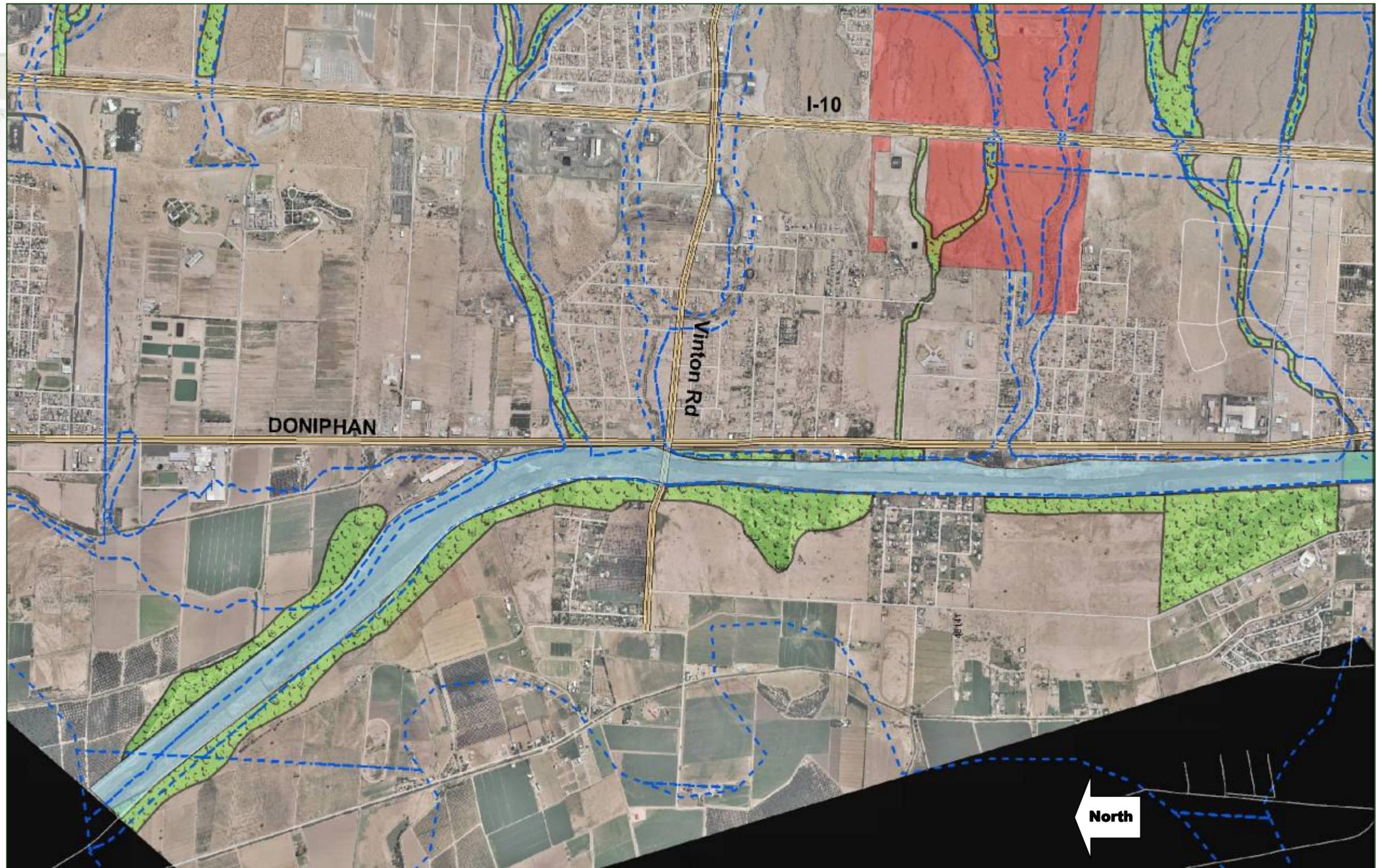
- 1. Acquire Development Rights** - where feasible, acquire or negotiate development rights to a 200' to 300' wide portion of any undeveloped tracts along the river.
- 2. Public access typically not required** - where development rights are acquired, general public access is probably not critical since the river corridor within the levee area already provides pedestrian access.
- 3. Permit re-establishment of trees** - negotiate agreements to permit eventual re-establishment of trees in the preserved areas.

- 4. Avoid impacts to the levees** - Trees will need to remain clear of the levees to avoid any root impacts and to permit inspection and maintenance of the outer levee face.
- 5. Dual duty as detention areas** – if appropriate, larger tracts of land in the upper reaches north of the city limits and Vinton could be used for detention as well as recreated wetlands and forested areas.

Timeframe – development of many of these properties is possible immediately; therefore preservation efforts should begin immediately. Preservation agreements should be concluded within 12 months, with funding to follow.

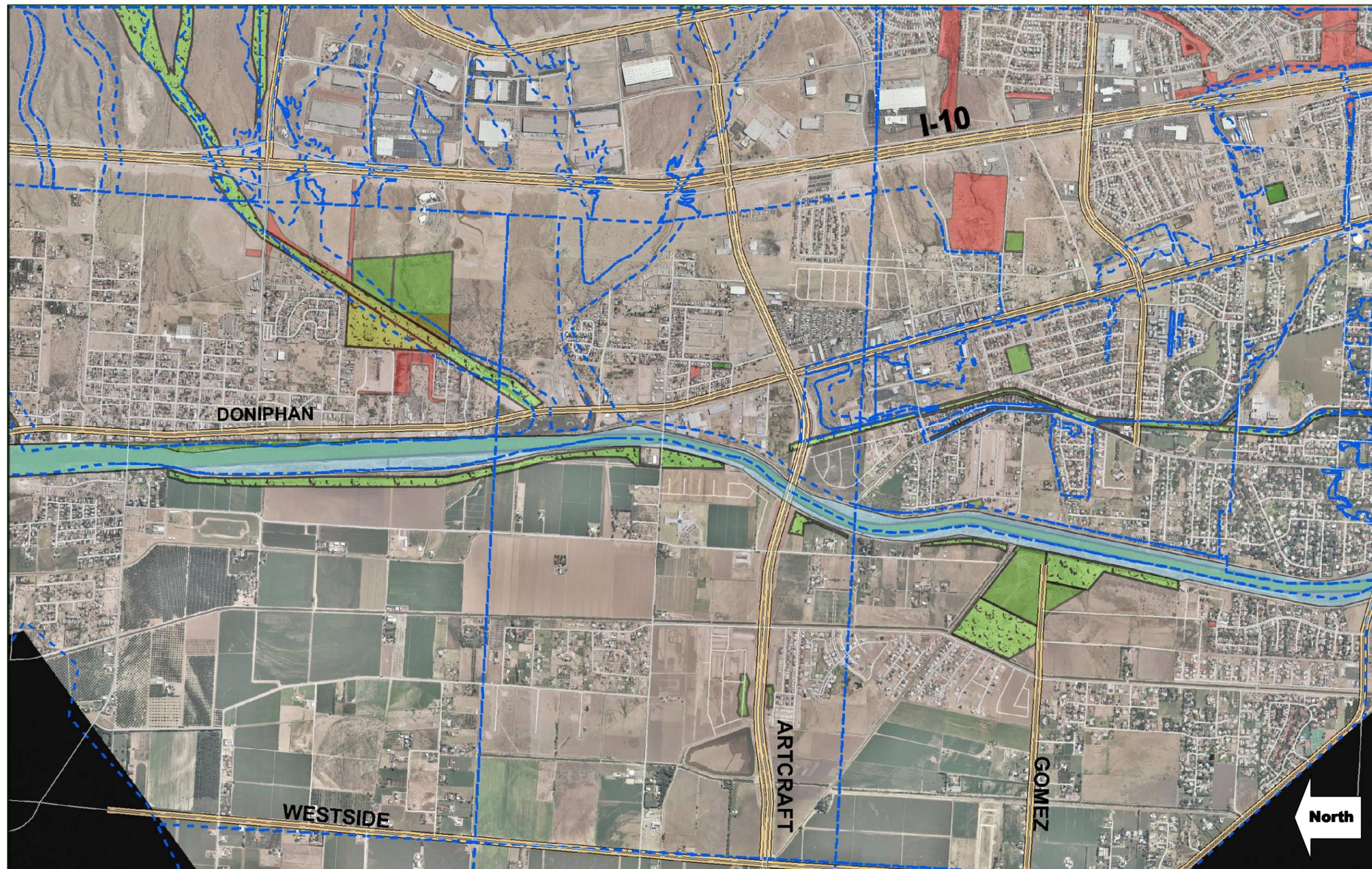


The original “bosques” of trees that once lined the banks of the river have been removed over the past century.



-  City Owned Parcels
-  Land To Preserve
-  City Parks
-  Rio Grande Water Way
-  100yr_fp
-  Major Roads

Undeveloped lands along the Rio Grande in the Upper Valley where recreation of a "bosque" could occur.



- City Owned Parcels
- Land To Preserve
- City Parks
- Rio Grande Water Way
- 100yr_fp
- Major Roads

Undeveloped lands along the Rio Grande in the Upper Valley – fewer undeveloped lands remain in this area and further to the south.

2(B) “Bosque” Linear Park along the Rio Grande in the Mission Valley Area

South and east of the downtown area, the river corridor is much more man-made, and is largely separated from the city by fencing. The river in this area forms the border with Ciudad Juarez and Mexico, and therefore is much more difficult to access.

However, most of this corridor is paralleled by the Border Highway. The highway creates a unique opportunity to partially re-create bosques that can make the levees and fencing along the border zone more attractive.

Ownership – as in the Upper Valley portions, the river corridor itself from levee to levee is entirely controlled by the IBWC. However, unlike the Upper Valley, 90% of the lands between the levee and the border highway are publicly owned by TxDOT. North of the Border Highway, 90% of the lands are privately owned.

Level of Threat – redevelopment of privately owned major portions of this corridor on the north side of the Border Highway is ongoing, and will eliminate opportunities for preservation. The Border Highway itself will continue to be reconfigured over time, including within the next two to three years. As such, decisions regarding permanent preservation in this area are imminently required.

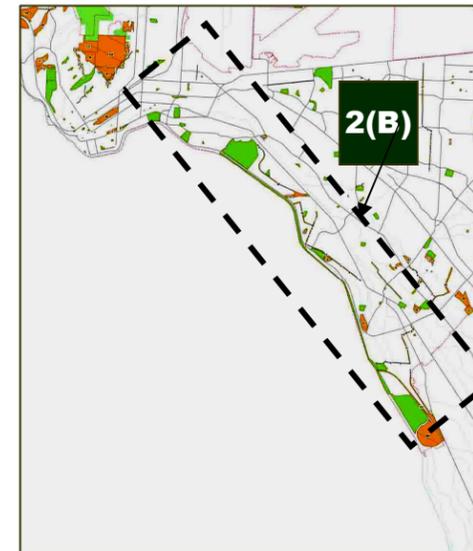
Importance of Acquisition – additional preservation enhances the already long linear corridor controlled by the IBWC. Since very little additional tree planting can occur

inside the levees, new bosque re-creation must take place along the fringes of the river and the Border Highway. The highway offers a truly unique opportunity to create an urban bosque that offers a lush natural environment in the middle of the city and the desert climate. With the addition of trails, the corridor also links many different neighborhoods.

Strategy for Preservation and Re-creation of the Bosques

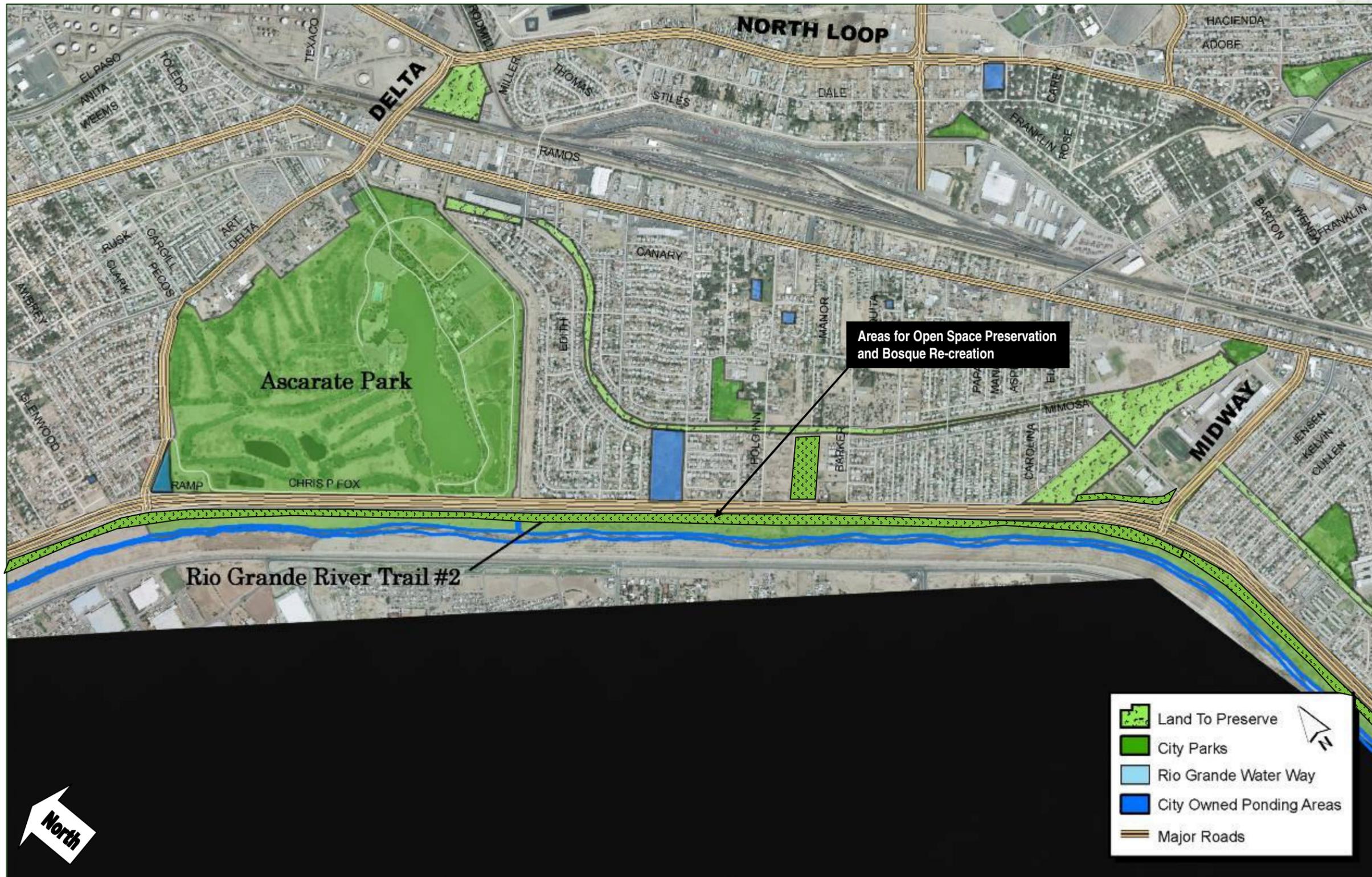
- 1. Acquire Development Rights** – in a fringe area along the northern edge of the Border Highway, acquire development rights to a 200’ wide strip of lands that are still undeveloped. These mainly occur south of Yarbrough.
- 2. Acquisition of Unused Lands** – lands south of the Border Highway midway between Yarbrough and Padres should be preserved where feasible. At a minimum, agreements to incorporate bosque re-creation around these properties should be obtained.
- 3. Re-creation of bosques along the Border Highway** – the city should work with TxDOT to explore the re-creation of bosques along the Border Highway in this area. In essence, the highway would become the “new-river” with forested areas alongside it.

Timeframe – acquisition of development rights for fringe portions of larger undeveloped properties should occur immediately. Development and implementation of concepts for open space landscaping along the highway may take one to three years.



Most of the available lands for open space preservation along the Rio Grande in the Mission Valley area are along the Border Highway.





Area 2B (North Portion) - Areas along and adjacent to the right of way of the Border Highway create an opportunity for a "bosque" along the Rio Grande in the Mission Valley area.



Rio Grande River Trail #2

J.P. Shawver Park



Area 2B (Middle Portion) - Areas along and adjacent to the right of way of the Border Highway create an opportunity for a "bosque" along the Rio Grande in the Mission Valley area.



Area 2B (Southeast Portion) - Areas along and adjacent to the right of way of the Border Highway create an opportunity for a "bosque" along the Rio Grande in the Mission Valley area.



3. Northeast Area City Owned Lands

Lands north of Highway 54 and east of the Franklin Mountains State Park are largely owned by the City of El Paso and controlled by the El Paso Water Utilities (EPWU). A master plan for the 16,000 acres of publicly owned lands was prepared and approved in 2005. A revised master plan has been prepared that would reconfigure the land uses in the area to better conform to the housing market in El Paso. In that master plan, a total of 1,980 acres of open space, drainage corridors and parklands are reserved for potential preservation.

The publicly owned lands in the Northeast area encompass the vast majority of the undeveloped lands from the current edge of development to the state line. Once these areas are designated for development, any opportunity for meaningful preservation of open space will be lost.

Both the northeast and the northwest areas, with their very large percentage of publicly owned lands, offer the unprecedented opportunity to develop in a new manner, making the desert and the natural area part of the plan. These desert "greenbelts" can become the signature feature of the new El Paso. This is a one time opportunity that El Paso cannot afford to lose.



The plans on these two pages illustrate the proposed revised long range plan for the area. The enlarged area represents the initial 3,000 acres that are slated to be sold within a year for residential development over the next ten years.

The illustrations on the following page illustrate suggested additions and concepts for creating true desert greenbelts in this area. These concepts include:

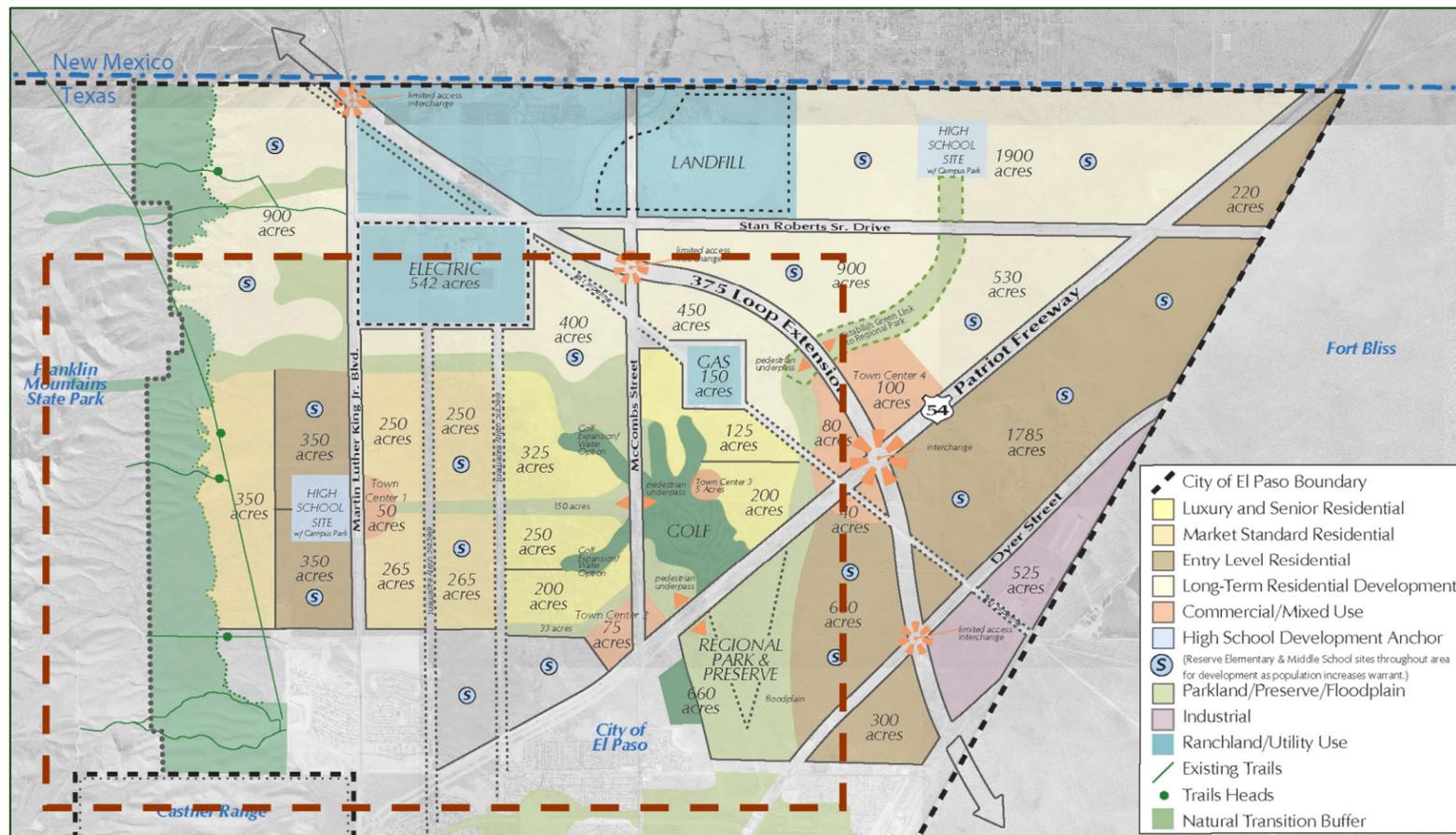
A. Incorporate wide greenbelts – these greenbelts should vary in width, with a minimum width of 250’ and an average width of 300 to 400’, and should meander much as a natural

arroyo would. They should incorporate natural drainage ways, not concrete lined channels (with manmade pilot channels considered only where critically needed). These greenbelts should be desert-like in appearance, with small park-like irrigated nodes at key points.

B. Connect the desert greenbelts to the nearby bajadas and the Franklin Mountains. Extend the desert greenbelts across residential areas so that they preserve remnant shallow arroyos and provide connections to the mountains. These corridors should broaden as they near the mountains to preserve views of the mountains from afar.

C. Cluster development near the mountains to allow broader sections of foothills without development. This will preserve more of the signature look of the mountains within the entire northeast area.

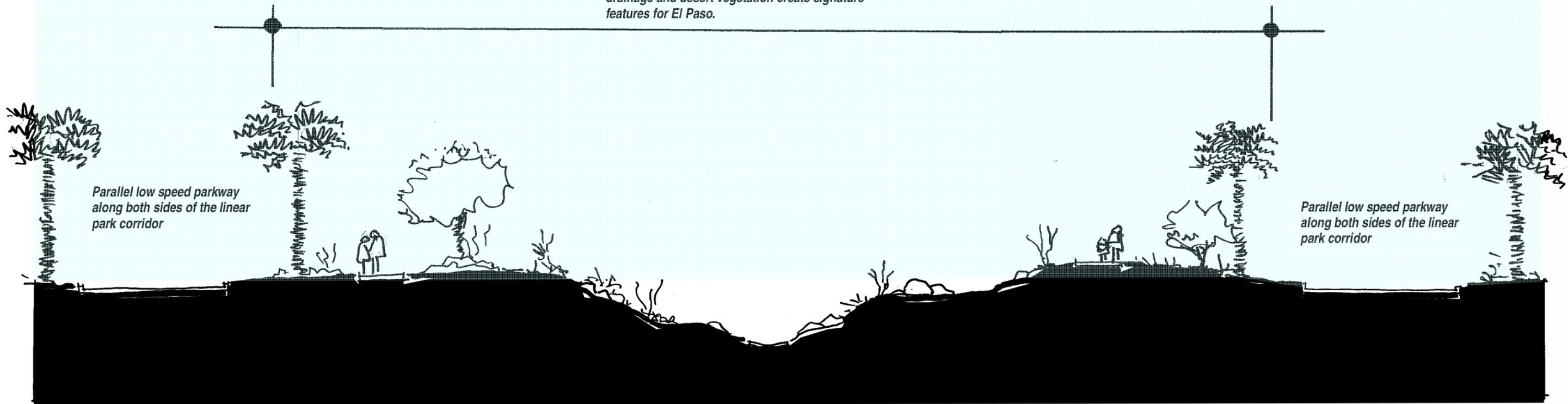
D. Create “parkways” along the outside edges of the greenbelts – curving parkways, similar in character and landscape to Resler Drive in Northwest El Paso, can also become signature features of the area and define a new development pattern in El Paso.





Desert parkways, linear parks and extensive trails are hallmarks of development in Phoenix and Las Vegas. EPWU's control of lands on which upcoming developments will be built offer the best chance for El Paso to create a new, more sustainable and much better pattern of development for the future.

Linear Park created around drainage corridor – natural drainage and desert vegetation create signature features for El Paso.





Neighborhood streets open onto the park, making it accessible for the entire neighborhood instead of a backyard feature.

Trails on either side of the corridor provide access to the natural beauty of the linear park.



Wider corridor width of at least 300' allows for natural drainage and the preservation of the desert environment.

Pocket parks along the corridor create nodes of green that contrast with the beauty of the desert.

4. Lands for Completion of Keystone Heritage Wetlands

Keystone Heritage Wetlands Park is a key cultural site as well as the remnant of a unique wetlands zone. Preservation of undeveloped lands around the park should be a high priority of the city in the near future.

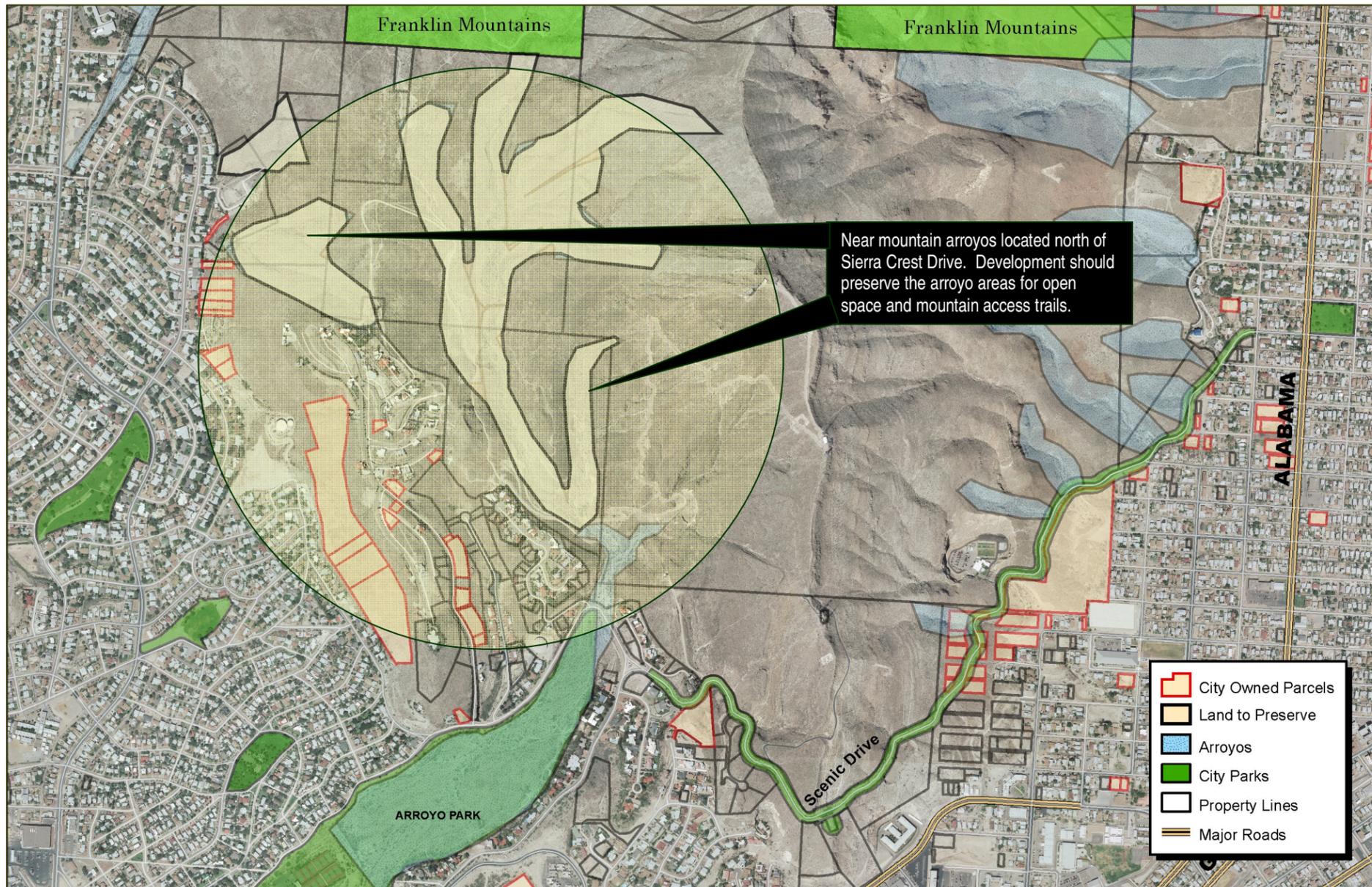
Ownership – all lands around the park site are privately owned, and would have to be acquired.

Level of Threat – Because of its proximity to I-10, development in the area around Keystone Heritage Park continues at a rapid pace. The remaining undeveloped lands will probably be developed within the next few years.

Importance of Preservation – without the acquisition of the remaining 20 acres around the park, the facility will be a mere shadow of what it could have been.

Strategy for Preservation – the lands may be acquired via purchase or trade for other city owned lands.





5. Near Mountain Canyons

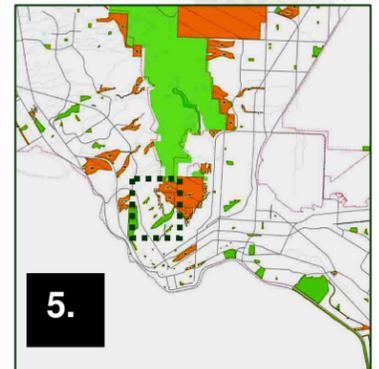
Significant canyons still remain in a largely natural state very close to downtown El Paso. These canyons and arroyos also encompass much of the foothills of the Franklin Mountains.

Ownership – all lands in this area are privately owned. Portions of the properties are listed for sale.

Level of Threat –Locations close to residential development with views of natural areas are in short supply.

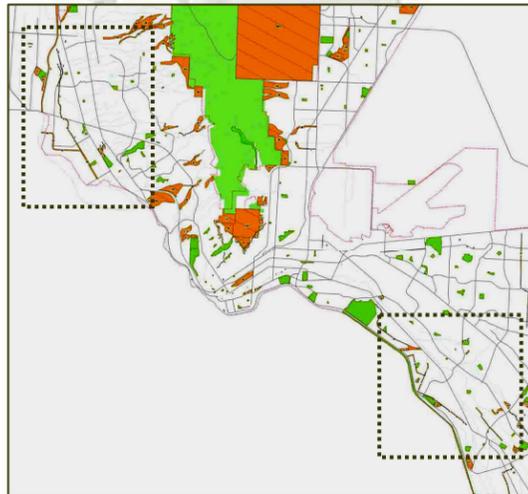
Importance of Preservation – This area is the upper portion of Arroyo Park, and can provide a continuous link into the Franklin Mountains from UTEP and much of Central El Paso.

Strategy for Preservation – work with property owners and developers to preserve canyon portions of the property. Limit development to mesas and high areas. Consider provision of some city services in exchange for preservation. Determine least intrusive methods of providing road access rather than most convenient or least costly. Maintain arroyos and canyons in their existing state. Outright acquisition of properties in the area should only be considered if adequate funding is available.





6. Agricultural Preserves – Upper Valley and Mission Valley



Driven by the ease of development and good highway access, development in both the Upper Valley and Mission Valley continues.

Without preservation of some green areas, complete urbanization and “wall to wall” development will take place.

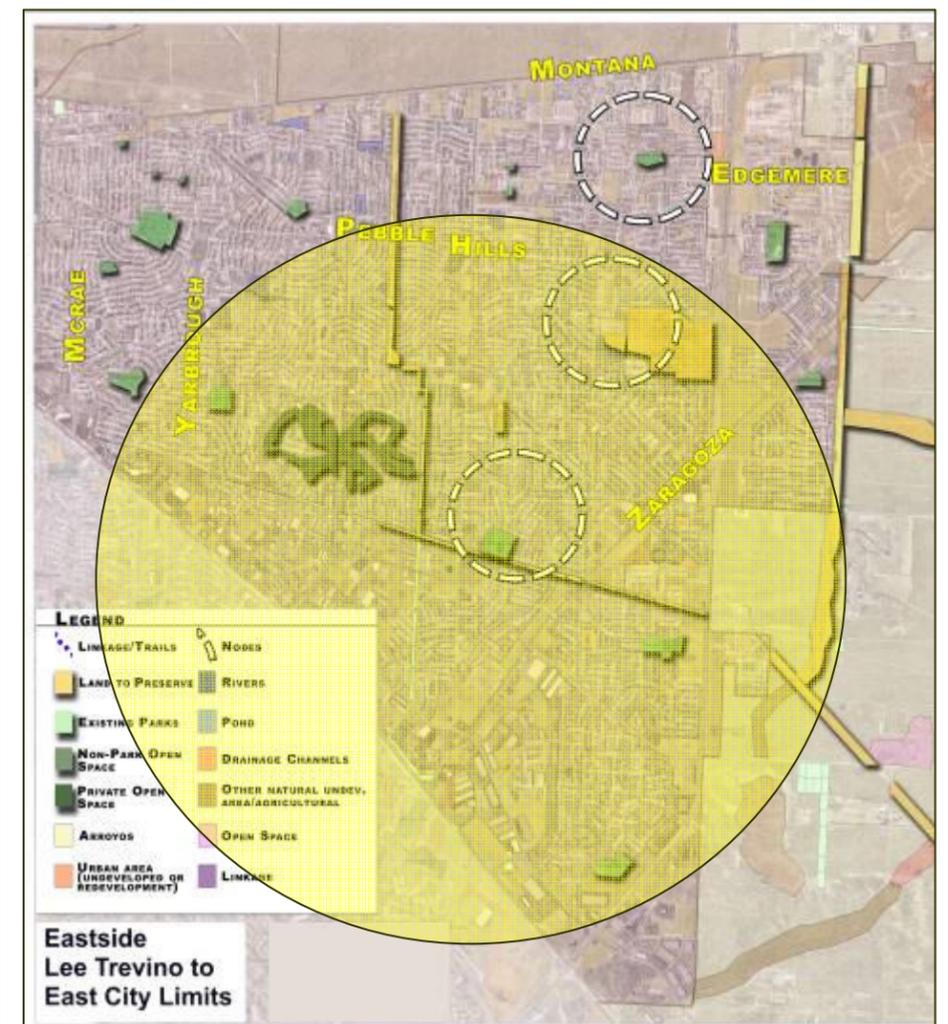
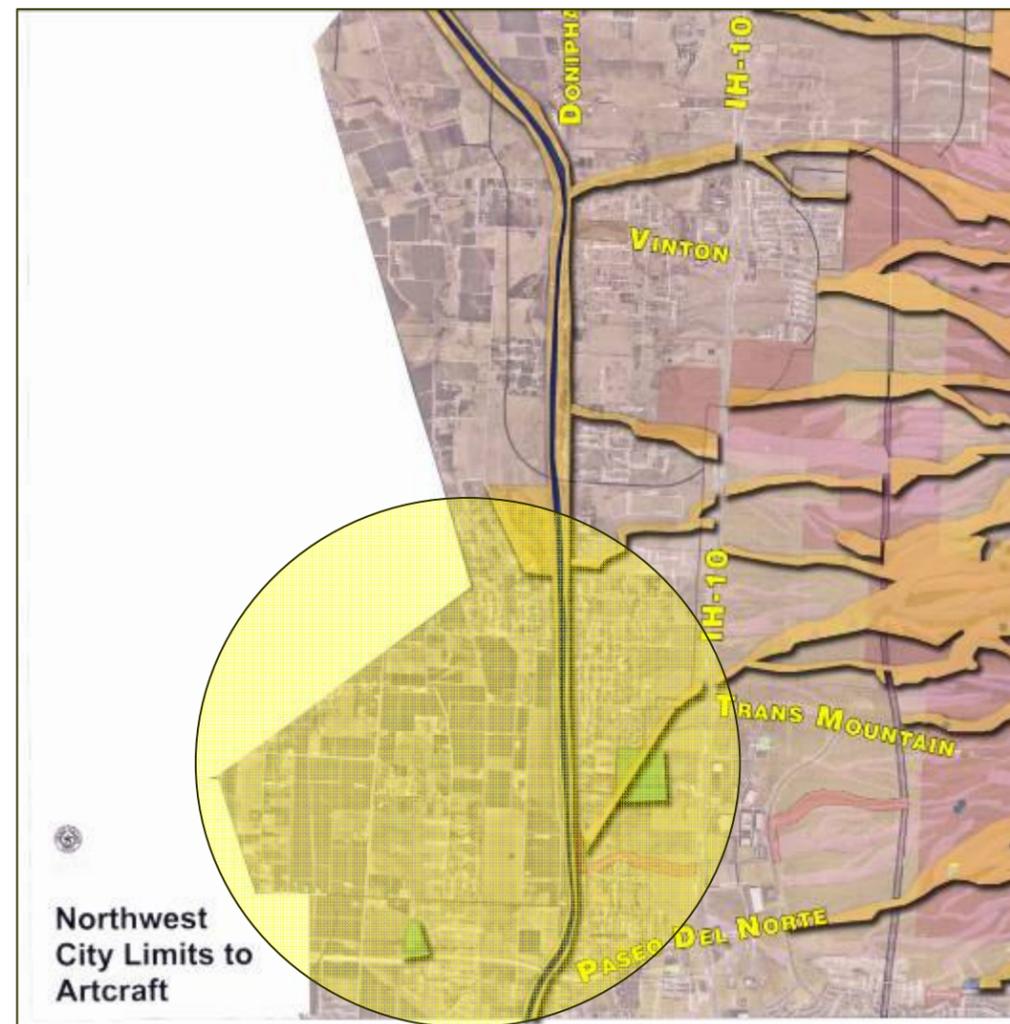
Ownership – ownership of these lands is private.

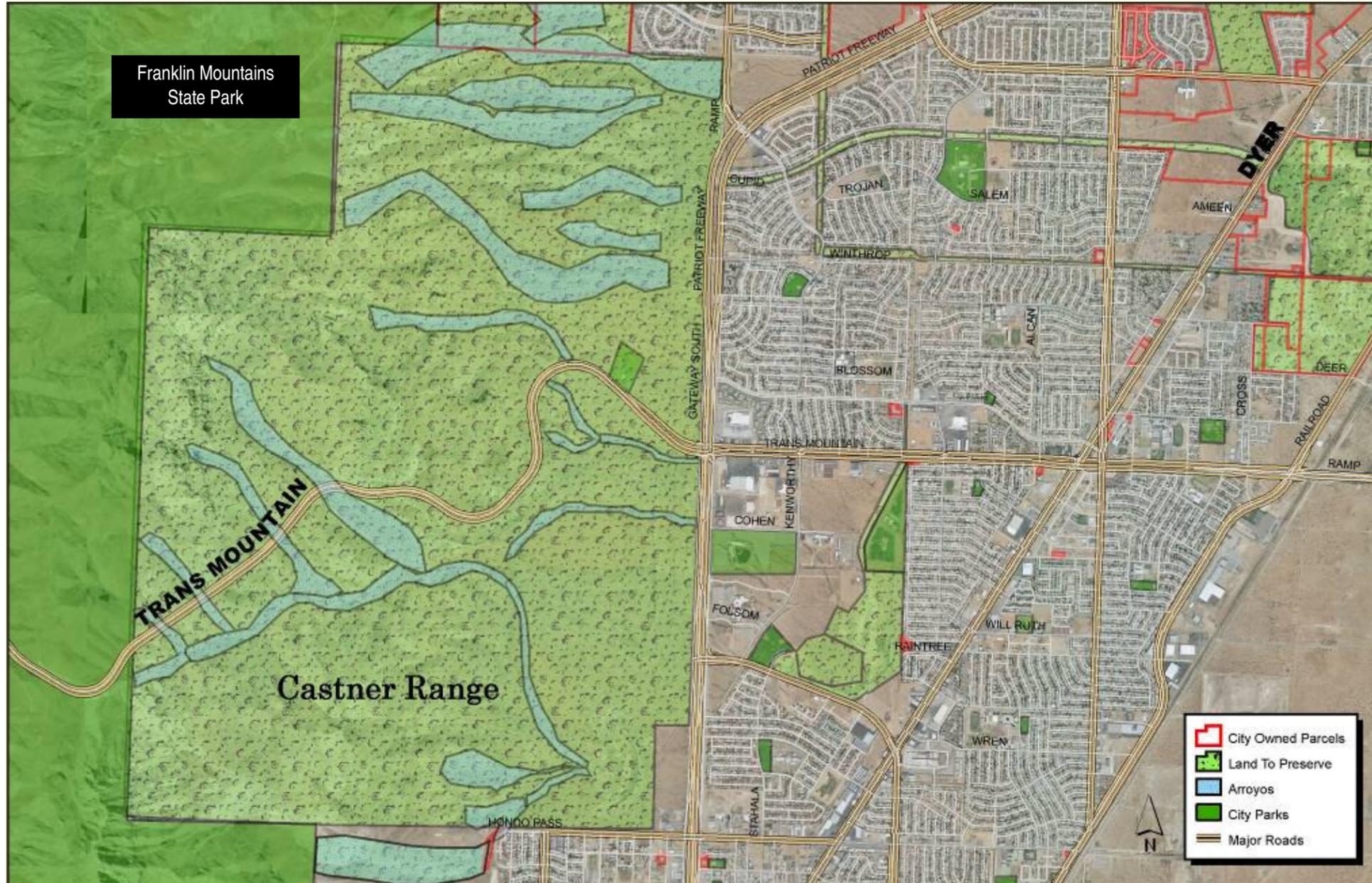
Level of Threat – residential development is rapidly consuming lands in the area, and these will be completely lost within the next few years if not immediately preserved.

Importance of Preservation – With the exception of the river corridor, there is very little open space preserved in both of these areas. Preservation of agricultural areas in town is vital, both to point to the rich heritage of the river floodplains as agricultural lands, as well as to simply provide green areas in the midst of the urbanized areas of the valleys.

Strategy for Preservation – conservation easements should be acquired immediately for lands in this area. This may be the most important location for expenditure of some of the

available bond funds for open space acquisition. Ideally, these lands should remain in an agricultural use as part of the agreements.





7. Castner Range

Permanent long term preservation of the 7,000 acre Castner Range property should be a high priority of the City of El Paso. This property forms the foothills of the Franklin Mountains, and includes many alluvial fans that are not found elsewhere along the base of the mountain range.

Ownership – the land is owned by the Department of Defense.

Level of Threat – The property was used for ordinance testing and live-fire exercises. Prior remediation efforts have been undertaken, and some portions of the property may soon be available for development. Portions along the Patriot Freeway are already being eyed for both governmental and private development.

Importance of Preservation – The Caster Range property remains one of the largest undeveloped properties in El Paso. It covers the full range of open space areas found in the city, and would be a major addition to the Franklin Mountains State Park.

Strategy for Preservation – control of the property should be



negotiated with the Department of Defense.

8. East Desert Greenbelts

Recent improvements to Loop 375 between Montana, I-10 and the Border Highway have greatly improved access to the far eastern portions of the city and the undeveloped nearby county lands. Development is now accelerating in the area, and the relative ease of construction makes this an attractive area for expansion.

Ownership – the majority of lands in the area are privately owned. Fractured ownership in the area from prior “colonia” developments may make consolidation of land difficult.

Level of Threat – Development will continue to expand eastward and outward from the current city limits of El Paso. Planning for development is already taking place – preservation of these greenbelts will become increasingly difficult and expensive as time goes by.

Importance of Preservation – if these greenbelts are not preserved, there will likely be no green areas included in new developments in far east El Paso. While parkland ordinance requirements in the incorporated portions will provide minimal amounts of green areas, these will still be limited to a very small area. No other natural features such as the mountain ranges or the river exist in this area. These desert greenbelts will in effect become the natural corridors of this area, making them as important as any other green area in El Paso.

Strategy for Preservation – preserve wide greenbelts for natural drainage corridors prior to development occurring. These greenbelts should also serve as regional detention areas and places for aquifer recharge. To serve as drainage

corridors, low areas in the relatively flat topography of east El Paso should be reserved for the greenbelts. Parks can be built into them at key locations to provide the contrast of green park lands with the preserved beauty of the desert around each park. The greenbelts should vary in width, but should at a minimum encompass 500 feet in width and should average over 1,000 feet in width. In some areas the greenbelts can be over a half mile in width. They should create corridors that interconnect.

Preservation of lands should be a joint venture of El Paso County and the City of El Paso. Because most of the areas to be preserved will be in the unincorporated county, El Paso County should be a key player in preserving these areas.

Rapid development in East El Paso threatens to leave almost no preserved natural areas or green space in the city or county.





The plan on this page illustrates the general concept of interconnected greenbelts in far east El Paso. However, the exact location, width and connectivity of these greenbelts should be determined in concert with area property owners after identifying the specific location of preferred drainage corridors and aquifer recharge zones.

9. Dispersed Arroyos

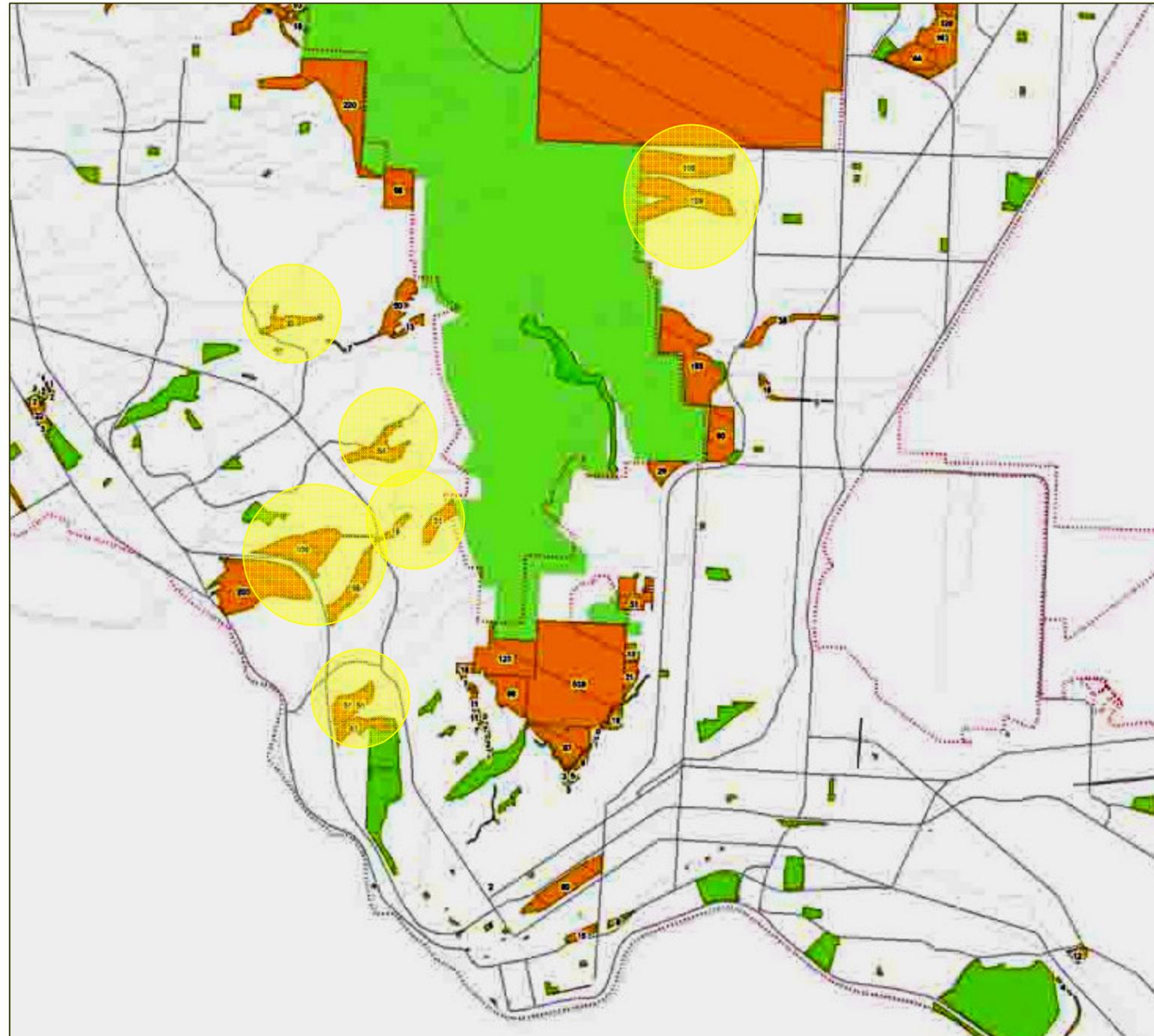
Remnant arroyos remain along the fringes of the Franklin Mountains in northeast El Paso and in the developed portions of central and northwest El Paso. Where these remain, they should be preserved in their current state as drainage corridors. The plan on this page illustrates the general locations of some of these arroyo remnants.

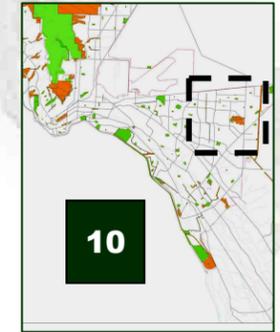
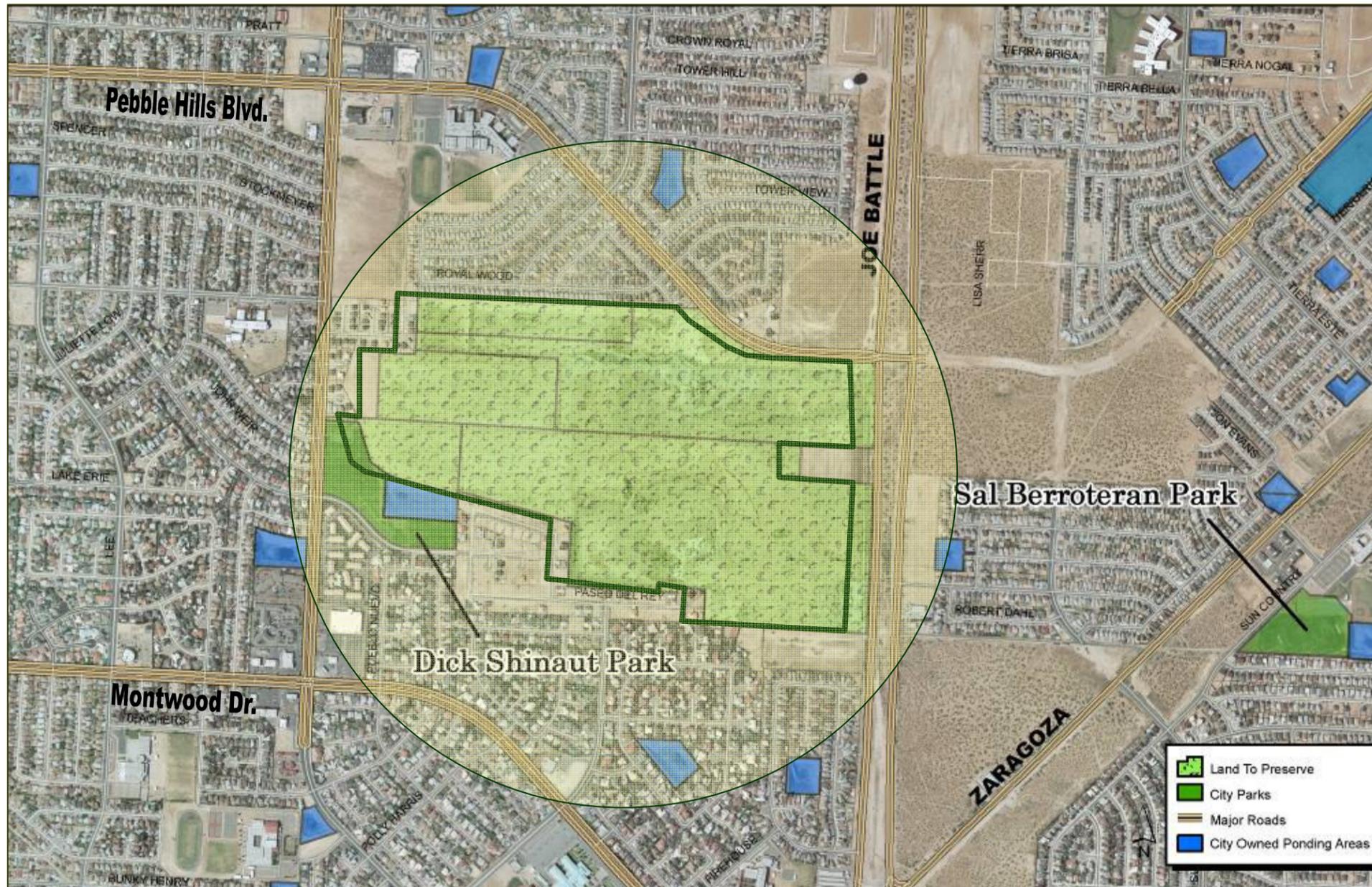
Ownership – these arroyos are privately owned.

Level of Threat – before the floods of August 2006, these arroyos were in grave danger of being developed. Undeveloped lands in central and northwest El Paso are increasingly rare, making these areas valuable development targets. The need for increased drainage as a result of the recent floods may relieve some of the immediate pressure, but does not preserve these corridors in their natural state.

Importance of Preservation – Arroyo Park and other preserved canyons and arroyos clearly point out the benefits and beauty of these green areas in the middle of the city. Because so many have already been lost, these should be preserved in their entirety as linkage corridors and open space.

Strategy for Preservation – acquire and preserve for drainage purposes, with stipulation that they remain in a natural state. Utilize drainage funds for acquisition. Limited existing open space bond funds should be reserved for other acquisition needs and should not be used for acquisition of these remnant areas.





10. East El Paso Urban Open Space/Park Land

Within the developed portions of East El Paso, very few open space opportunities are available. One such opportunity occurs along the west right of way of Loop 375 south of

Pebble Hills Boulevard, and includes over 200 acres of land that could become a significant and very valuable open space preserve for the area.

East El Paso has the second lowest amount of parkland in the city, and the area along Joe Battle is one of the most deficient sectors of the city.

Ownership – the land is privately owned.

Level of Threat – development is occurring at an extremely rapid pace along Joe Battle, and it is probable that the properties will not be available in the near future. Even now, the scarcity of large contiguous tracts of land west of the Loop may make preservation of this property difficult.

Importance of Preservation – once the full frontage of the Loop is developed, there will be no undeveloped land in the area. The largest park in the area is the undeveloped East Regional Park site, and at 90 acres it is less than half the size of this property.

Strategy for Preservation – pursue an option on the property; consider preserving the rear 80% of the property and leaving the highway frontage to be developed. As an alternative, this site may be suitable for increased density bonuses or trade for other city-owned sites elsewhere.

11. Near Mountain Lower Terrace

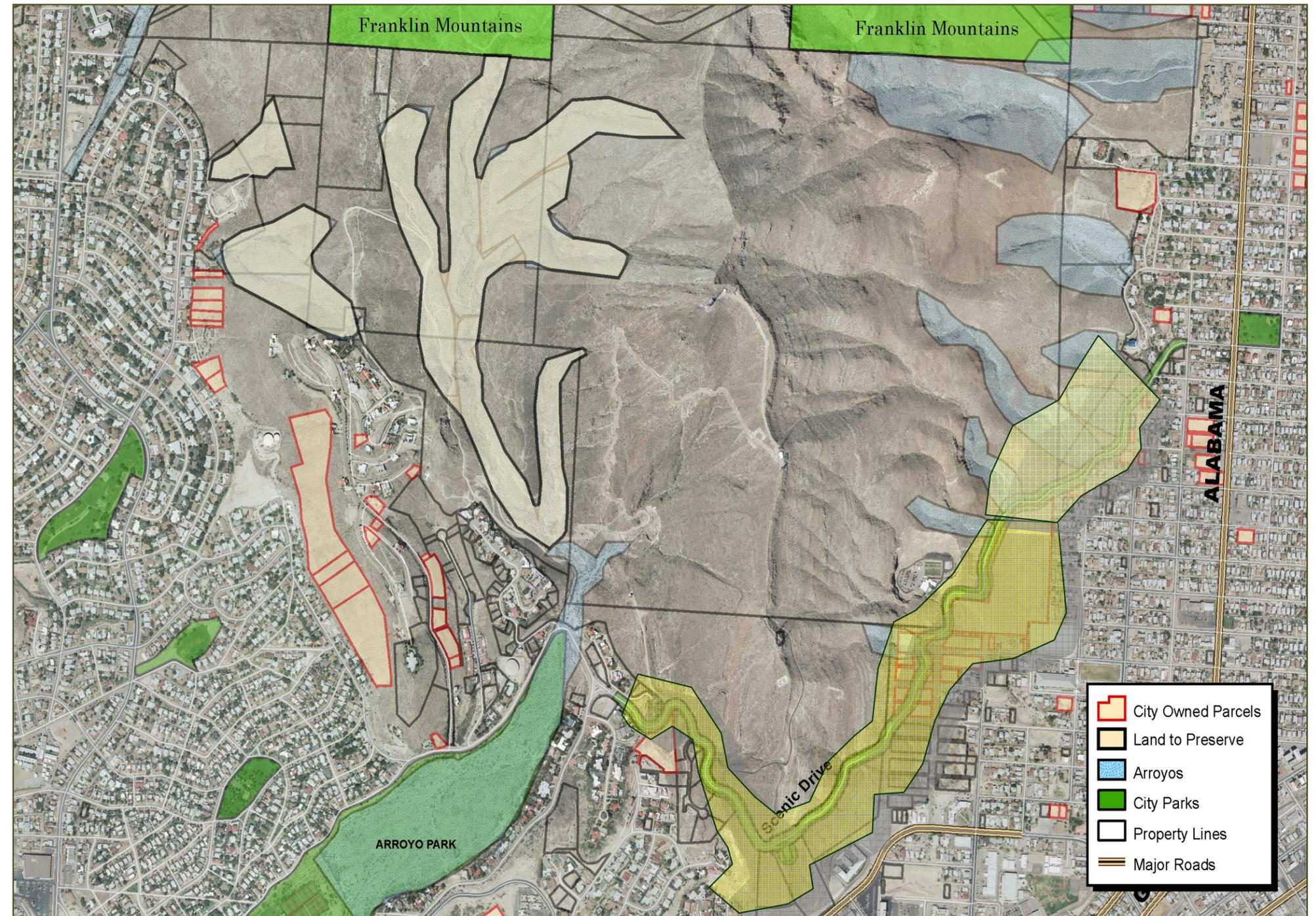
Properties below Scenic Drive are visible from much of the city, and are a key part of El Paso's most recognizable physical feature.

Ownership – the City of El Paso through EPWU owns 20% of the lands along Scenic Drive. But the remaining 80% are privately owned, and could be developed at some point.

Level of Threat – properties with a view of the city below are much in demand.

Importance of Preservation – development of the mountain slopes below Scenic Drive are highly visible, and create a foreground for much of the mountain zone above.

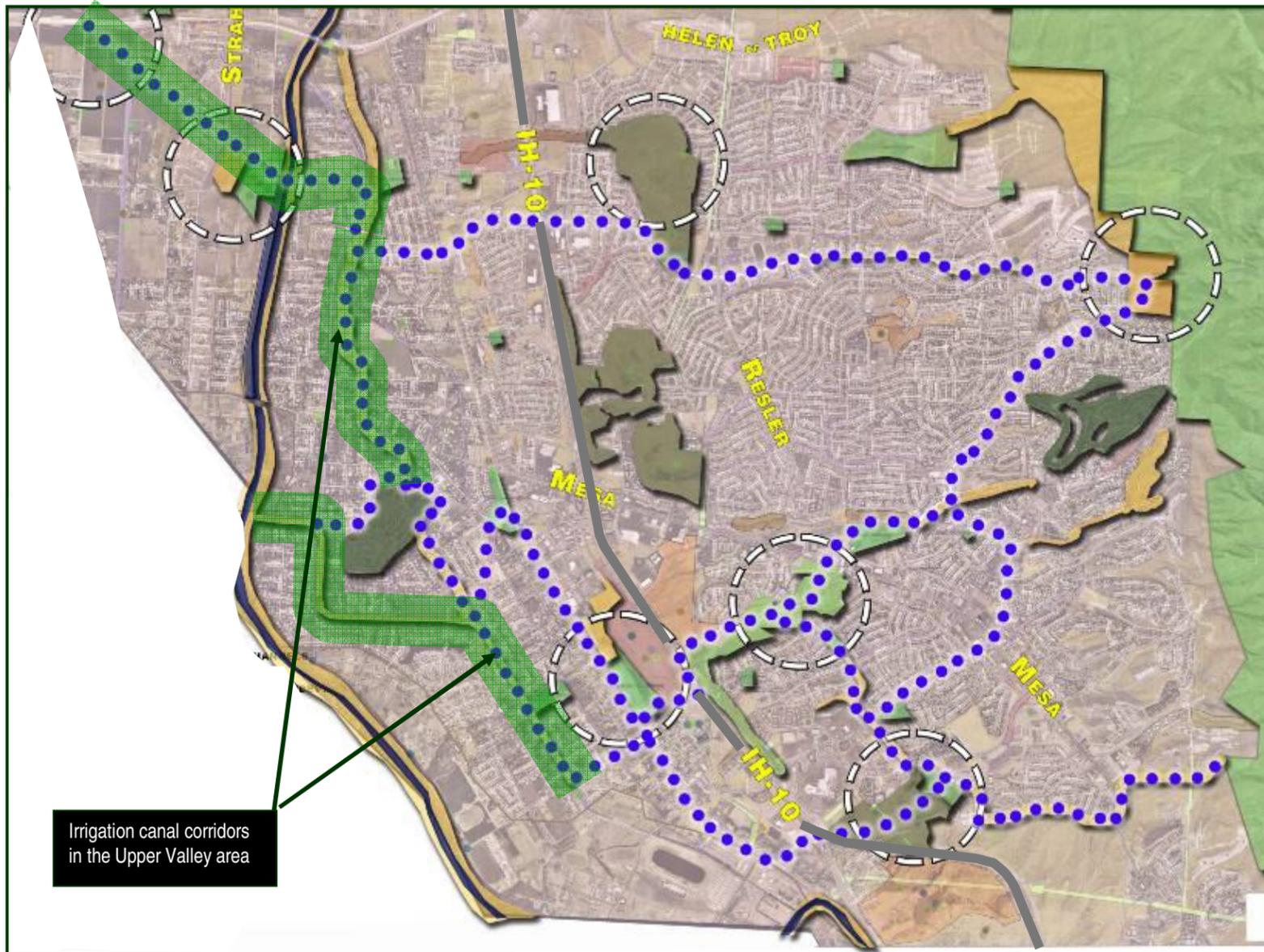
Strategy for Preservation – acquire fringe properties below Scenic Drive where feasible. When acquisition fails, work with development to preserve views both from Scenic Drive and from below up towards Scenic Drive.





12. Irrigation Canal Greenbelts and Linkages

Irrigation canals that once provided water to vast agricultural areas in the upper and lower valleys still remain in some parts of the city. These canals carry water from the Rio Grande to the remnant farmlands that have not yet been



developed. The canals and associated 50' to 100' wide corridors are owned by several area irrigation districts.

Ownership – all irrigation corridors are privately owned.

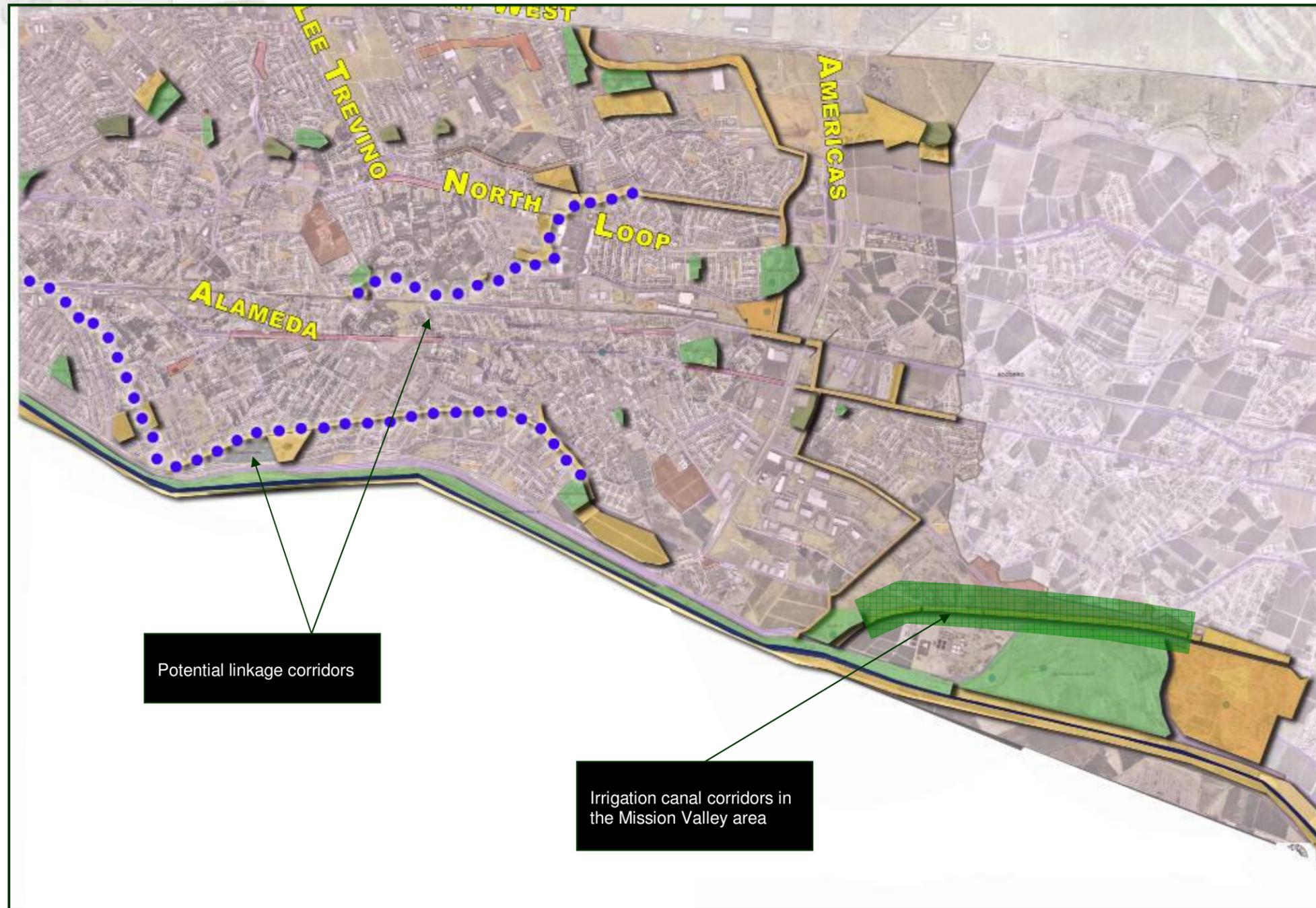
Level of Threat – many of the canals continue to convey water, but demand for irrigation water is dropping as farm lands are developed. Irrigation districts may begin to sell the corridors to adjacent property owners as the need for the corridors diminishes.

Importance of Preservation – these corridors provide some of the best linkage opportunities in both the upper and Mission Valley areas. They are raised up, typically do not have many road crossings, and often have some fence-line vegetation.

Flat areas used for maintenance access and inspection can very easily provide a location for trails. The adjacent presence of water in the canal also makes the corridors a pleasant place to walk or ride. Finally, these corridors can provide excellent locations for equestrian trails.



Strategy for Preservation – for canals that are still used to convey water, negotiate with each irrigation district to gain access and to address liability and maintenance issues. Where canals are no longer needed and may be offered for sale, work with irrigation districts to acquire each corridor. Consider acquisition of development rights and permanent access as an alternative to outright acquisition.



Irrigation and other linkage corridors in the Mission Valley area are shown on this page.

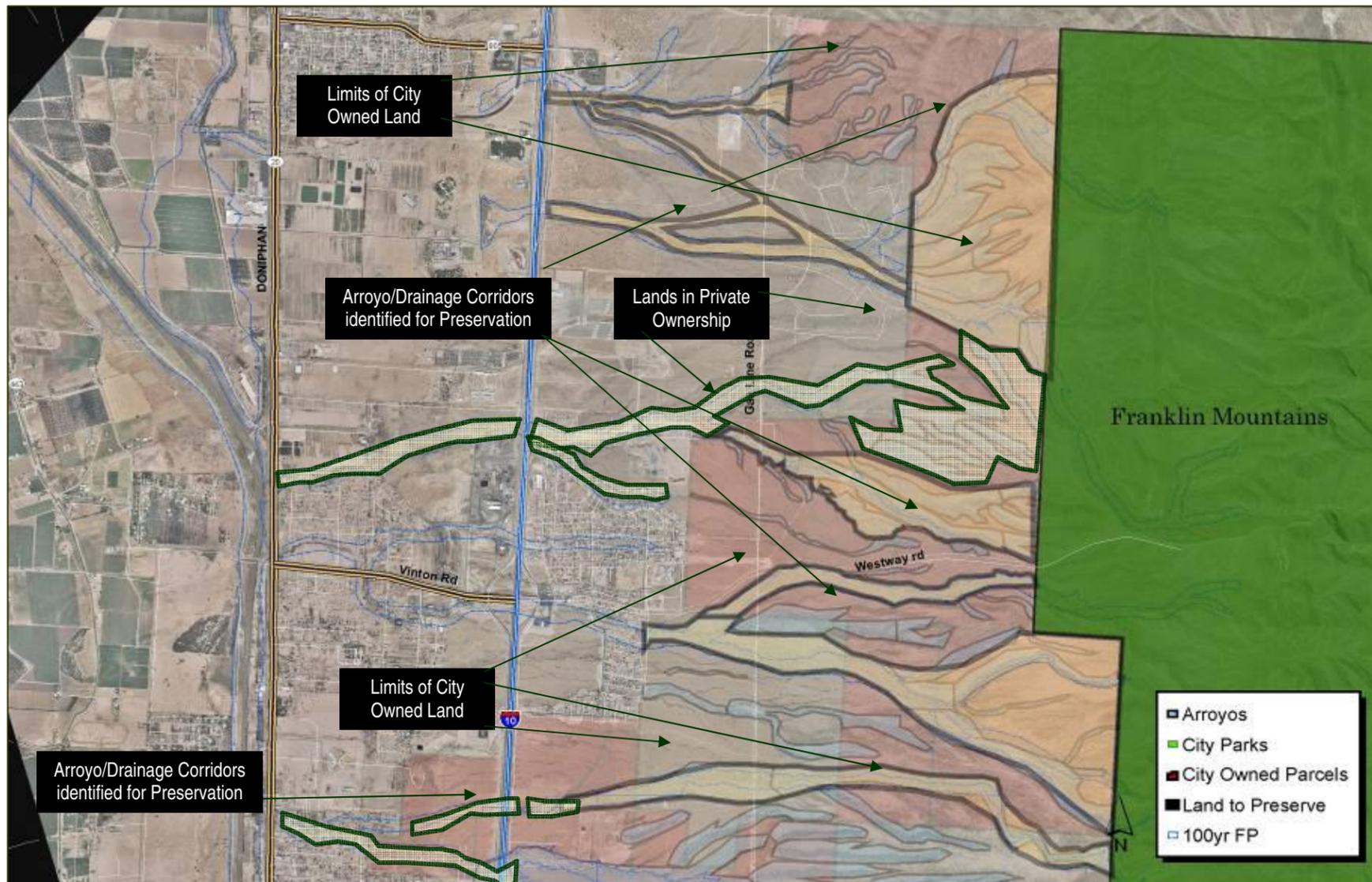
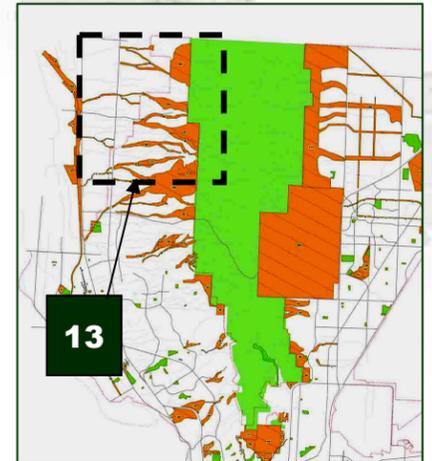


13. Upper Northwest Arroyos

Several other arroyo systems travel down from the Franklin Mountains north of the Mountain to River arroyos described earlier.

Ownership – many of these arroyos occur on lands controlled by EPWU. Because the undeveloped EPWU lands occupy the

foothills and bajadas of the Franklin Mountains, 50% of those lands contain some arroyos. Other areas to preserve occur on General Land Office properties, and approximately 50% of the remainder are on privately owned lands.

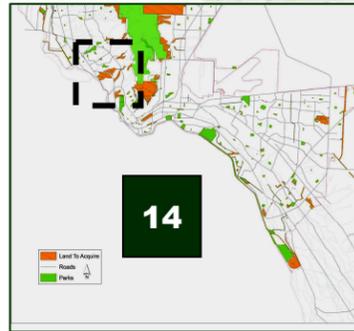


Level of Threat – While development may still be some years away, planning for development in this area is already occurring.

Importance of Preservation – these arroyos are some of the most attractive natural features in the entire El Paso area. Because development has not yet reached this area, most of the arroyos have not been impacted by roads or grading. However, the damage caused by the construction of a natural gas pipeline and an access road through the area clearly demonstrates the kinds of scars that can result from poor design.

Strategy for Preservation – 70% of the arroyo systems to be preserved are on land controlled by EPWU. Establish policies that preserve the arroyo areas as master planning occurs, and require that EPWU work closely with the Planning and Parks Departments during master planning and development of the area. On private lands, require that arroyos be preserved to provide natural drainage courses.

14. "Cement Lake" and Arroyos near Central El Paso



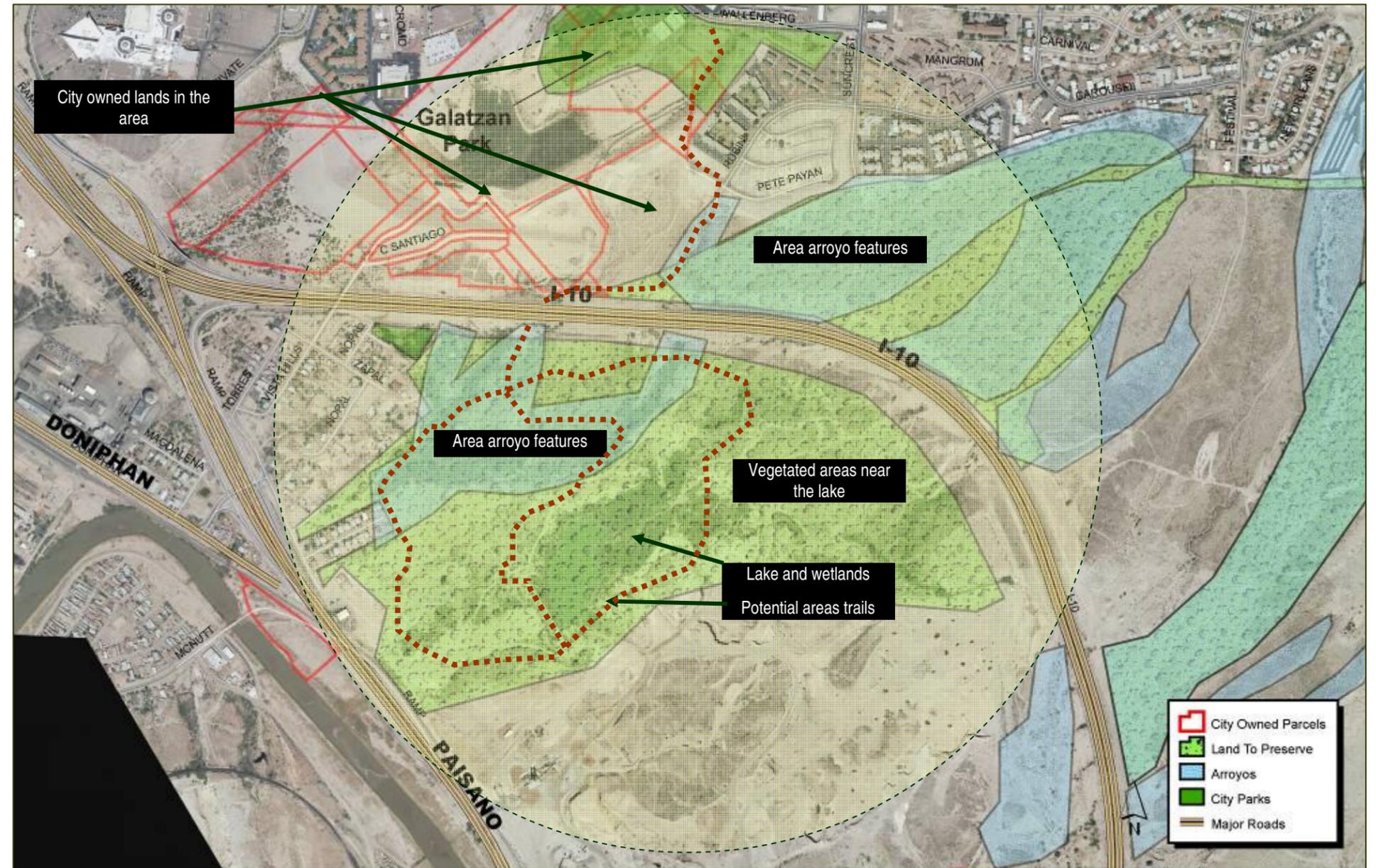
The northwestern portion of the Asarco Plant property located along I-10 includes a lake that was used to provide water for operations within the plant.

Ownership – the land is currently under private ownership.

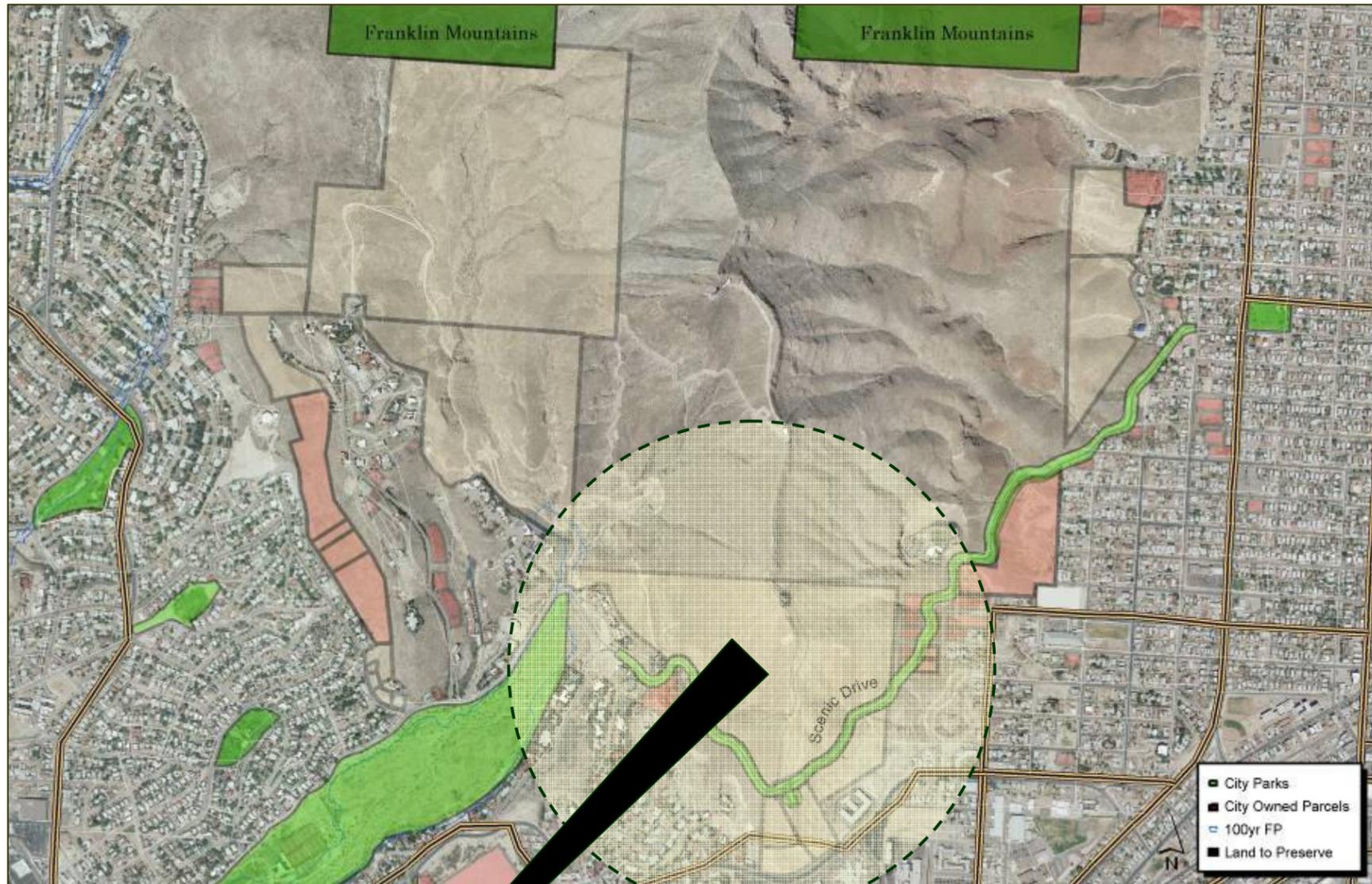
Level of Threat – this portion of the property has significant frontage I-10. Current ownership does not appear to have immediate plans for development, but any change of ownership or the increased demand for frontage along the freeway could result in the pressure to develop portions of the property.

Importance of Preservation – the existing lake is fed by area springs, and maintains an unusual wetlands ecosystem that is physically separated from the Rio Grande. The pond and surrounding vegetation is visible from I-10 and is the one green area in an otherwise heavily industrialized area.

Strategy for Preservation – work with current property owners to seek donation of the property as open space. The current owner will require use of a portion of the lake's water as a source of water for dust control.



Cement Lake and the arroyos that drain into it.

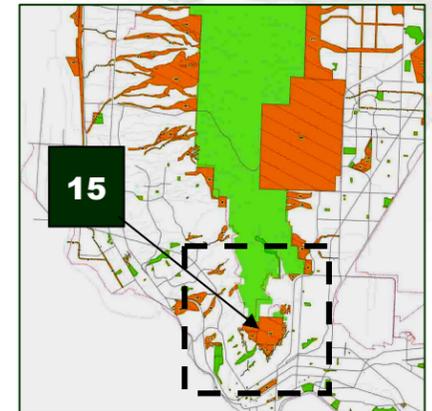


Location of the near mountain face.



15. Near Mountain – Front Face of Franklin Mountains

The area above and directly below Scenic Drive is perhaps the most visible face of the Franklin Mountains, dominating the view from downtown El Paso and from I-10.



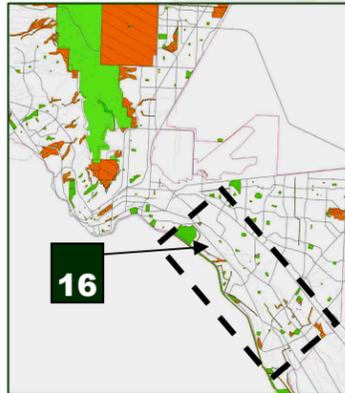
Ownership – all of the lands above Scenic Drive to the near mountain peak are privately owned. Below Scenic Drive, most of the undeveloped lands are privately owned and could be developed.

Level of Threat – while development near the mountain face would be difficult, it is feasible and would have unparalleled views of the Rio Grande valley and Ciudad Juarez in the distance. Any development along the mountain side will require roads, retaining walls and foundations, all of which would probably severely scar the mountain face.

Importance of Preservation – this portion of the mountain face is an important image of El Paso, and should be preserved in a natural, unblemished state.

Strategy for Preservation – work with property owners to preserve the mountain face. Acquire development rights to this area if feasible. If unsuccessful, monitor development attempts to ensure that the mountain side is not scarred by unattractive development and road building.

16. Central and Mission Valley Linear Greenbelt Corridors



Drainage corridors and the ponds and parks along their edges remain one of the few opportunities for new green space in the Mission Valley area. These corridors are unattractive and not living up to their potential as neighborhood assets.

Ownership – the majority of the lands along the drains are publicly owned, and are used for drainage.

Level of Threat – No further development beyond expansion of the width of the drainage corridors is likely.

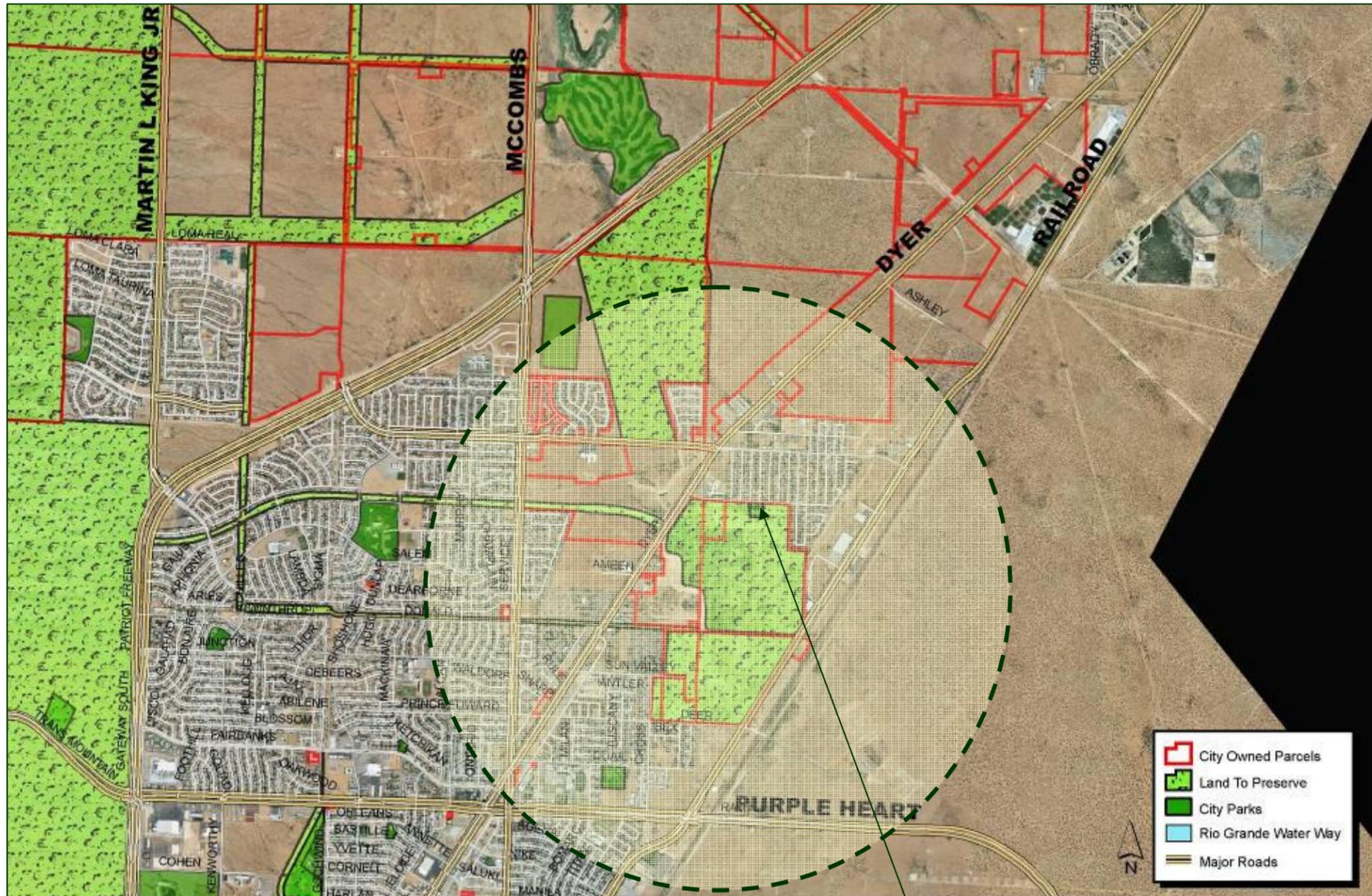
Importance of Development as Greenbelts – In the developed areas of Mission Valley and Central El Paso, few other opportunities for greenspace to occur. These drainage corridors extend for miles and link many neighborhoods, schools, parks and neighborhood retail areas. El Paso already has excellent examples of drainage corridors that have been converted into linear parks, such as the Pueblo Viejo corridor in the far southeastern Mission Valley area.

Strategy for Preservation – establish policies that treat these drainage corridors as greenbelts as well as channels. Keep maintenance corridors alongside the channels, but install walking areas, trees, desert landscaping, signs and benches.



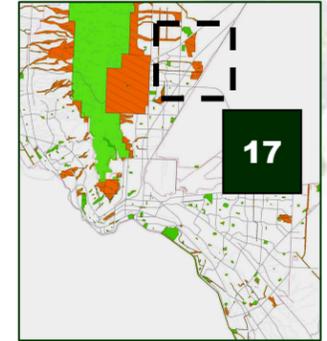
Location of drainage corridors in the Mission Valley area





17. Northeast El Paso Regional Detention Ponds and Linear Park Corridors

Major regional detention areas that have been constructed by the City of El Paso and the Corps of Engineers in the northeast sector of the city are excellent opportunities for greenspace and wetlands. Currently, these areas are fenced off, and most of the time are extraordinarily unattractive and unused. They are vital flood mitigation structures, and it is understood that that will always be their primary use. **However, in a city that is lacking attractive open space, these areas offer an opportunity for almost 1,000 acres of readily available passive park land and open space in NE El Paso.**



Ownership – City of El Paso

Strategy for Conversion/Dual Use – portions of the detention area can be built up to create viewing and nesting islands. Perimeter trails and viewing areas can be developed to allow for wildlife observation. Trees and desert vegetation can be introduced along the edges of the ponds, and in some cases in the bottom of the ponds. If reconfigured correctly, vegetation should not unduly interfere with the flow and storage of flood waters in the ponds.

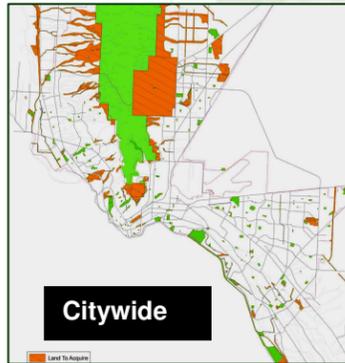
As part of the overall drainage master plan, reconfiguration of these areas should be undertaken.



Regional detention ponds in the far northeast sector of the city readily lend themselves to also serve as accessible open space.

18. Citywide - Detention Ponds and Linear Park Corridors

Detention Ponds throughout El Paso offer enormous opportunities for open space. The prototype is Feather Lake in the Mission Valley area, which has become a renowned bird watching location, but which still functions as a viable detention basin. El Paso has more than 100 existing detention ponds totaling more than 1,000 acres, and in many cases these are the only open undeveloped areas in the neighborhood that surrounds them.



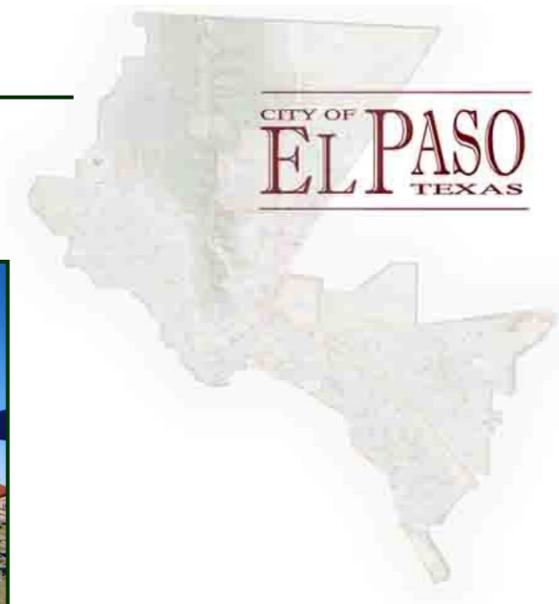
As the city re-considers its drainage master plan, these areas should be adapted to serve multiple purposes. They can readily continue to serve as detention areas in times of extreme floods such as the events of August 2006, but at the same time can be converted into wetlands and passive parks with additional landscaping, trees, walking trails and shade pavilions. The practice of “walling off” these areas from the neighborhoods around them should be discontinued. Instead, the ponds should be refitted with gentler side slopes that do not exceed a 4:1 ratio (slope to rise). Pilot channels and lower areas at the bottom of ponds can contain periodic normal rainfall events and leave the remainder of the pond as usable area. Even if the bottom is not accessible, the perimeter

access drive should be configured to be park-like in appearance and in use.

The updated drainage master plan should not be looked on as a way to further limit the use of drainage channels and detention ponds as open space assets. El Paso cannot afford to revert to techniques that have been abandoned in other cities in favor of more attractive uses. If some additional detention areas are required to permit the introduction of wetlands and passive parks into the existing detention areas, then the tradeoff in cost is still much more efficient and helpful in creating a better El Paso for the future. Examples of detention parks in two other cities are shown on the following pages.



Detention areas in northeast El Paso that could also be used as parklands and open space preserves.



Hobbs, New Mexico – Soccer Complex built into a regional detention pond. Note pilot channels for periodic flow (also used as sidewalks), raised structures, and flood outflow structure. The entire area is contained by a fence for closure during flood events. Restrooms and concession facilities are located along the top of the adjacent levee. Stairs and ramps provide access from parking and surrounding neighborhoods.



McAllen, Texas – Regional detention structure and park. During flood events, the park is enclosed by automatic gates. However, to not have such an imposing appearance, the surrounding fence is only 4' high. Ball fields will be located in the bottom of the detention area. The facility was photographed at a 90% complete stage.



"We must make every piece of space do double and triple duty, and we have all the tools and precedents we need. With ingenuity, we can make the smaller spaces seem larger; we can find ways to link them and to emphasize their continuities; we can make them far more accessible to people, and if not to the foot at least to the eye. It is the effect of open space we are seeking, not just the space, and with this approach a given acreage of open spaces can be knit into a pattern more pleasing, more useful, and seemingly more expansive than a far greater acreage laid out in conventional fashion."

William H. Whyte, The Last Landscape.

6. An Implementation Plan for Open Space Preservation

This section discusses methods that should be used to preserve open space, recommended funding sources, and a timetable for initiating preservation actions. The critical ongoing loss of the remaining open space lands around the mountains as well as in the northeast and far east El Paso points to the need for immediate action to preserve key open space lands.

Preservation Methods

The Open Space Plan for El Paso should include consideration and possible acquisition of all of the opportunity areas shown in Chapter 3. However, the cost to preserve all of those areas will be significant, and will be more than the city can bear at one time. Therefore, a combination of different methods should be used to draw more attention to the need for open space and to bring consideration of open space into the development process. These methods can be grouped into four general categories shown in the box on this page.

A. Regulation Methods

A-1. Rezoning of Newly Annexed Properties

– lands that have been

General Open Space Preservation Methods for El Paso

- A. Regulation** – adjust subdivision and zoning regulations and requirements
- B. Acquisition or preservation** – cash purchase, trade or donation. Create mechanisms for the city to welcome donations of open space and accept the operational responsibility for each new open space. Preserve key open space assets that are already city controlled.
- C. Incentives** – development bonuses or trades in exchange for open space preservation, trading of open space for development flexibility
- D. Conservation** – acquisition of development rights

annexed into the city in recent years, especially in the far Northwest sector of the city, have been zoned for R-3 development. R-3 allows 7,000 square foot single family lots at a typical density of 3.5 to 4.5 gross units per acre. This introduces a high level of value for these areas without the benefit of any planning at all. While the perceived value to the city in the form of higher land appraisals may be significant, the R-3 zoning sets up the city to lose much of its ability to influence development through the zoning process.

The rezoning of all of the currently undeveloped lands that do not have approved master plans or land studies to the Rural Farm (RF) zoning category should occur immediately. The City Attorney's office should be consulted to ensure that this occurs in a legal manner. The precedent for establishing more compatible zoning for a broad area through "down-zoning" has been established in other communities.

As of May 2006, policies have been changed and approved by the City Plan Commission and the City Council to mandate that newly annexed areas, unless part of a major master planning effort, be brought into the city at the lowest possible zoning category.

Required Action – city initiated zoning change.

Recommended Timeframe – within six to twelve months.

A-2. Create an Open Space Zoning Category

In some communities, an “open space” zoning category has been created for newly annexed lands. Examples of cities with an open space zoning category include Denver, Co., Boston, MA., and Pasadena, CA. The designation has specific zoning requirements attached to it, such as very low development densities. The benefit of designating some lands with this zoning category is that performance standards to develop in areas with such a zoning designation are quite stringent and focus on maintaining the quality of the spaces.

Required Action – policy change to Zoning Code

Recommended Timeframe – six to twelve months.

A-3. Extend the Mountain development zone to encompass a larger area adjacent to the Franklin Mountains.

Portions of the far northeast and northwest areas might be better protected if the Mountain Development District were extended to a lower level north of Transmountain on the northwest side and Highway 54 on the northeast.

Required Action – policy change to Zoning Code

Recommended Timeframe – six to twelve months.

A-4. Making Drainage and Ponding an Integral Part of the Open Space Plan

Through changes to both zoning and subdivision regulations, require that drainage and pond features be designed to have a much more natural appearance. These features are required in every development. Why then not make them an

integral part of the development, rather than an afterthought or features to be hidden away as unusable space while the remainder of the development has no other open areas? While this may require some additional land, the resultant benefits to the appearance of the city as a whole are far greater.

Required Action – change to Subdivision Regulations.

Recommended Timeframe – six to twelve months.

A-5. Require the Preservation of at least 75% of the Land Area of Existing Arroyos in Undeveloped Areas.

Through subdivision regulations, require that a minimum of 75% of the rim to rim area of existing arroyos or drainage washes in undeveloped lands be preserved. These areas should be permanently preserved as open space parks, but can also be used for drainage if left in a mostly natural condition. In areas designated as parks, arroyos should remain in their existing natural state.

Required Action – policy change to Subdivision Regulations approval by CPC and the City Council.

Recommended Timeframe – six to twelve months.

A-6. Incorporate Open Space Donations as a Part of the Parkland Dedication Ordinance

The Parkland Dedication Ordinance was recently amended to require 1 acre of parkland for every 100 residential units. At this level, this roughly equates to about 1 acre of parkland for every 25 to 40 acres of gross residential development.

On specific properties where unique natural features cross a tract of land that is slated for development, the parkland donation can encompass some of that unique area. Given the small amount of land for parks that is required, the required donation would probably not encompass an entire arroyo, but might help to defray the cost of purchasing some of the natural feature.

Required Action – policy change to Parkland Dedication Ordinance, approval by City Plan Commission and the City Council.

Recommended Timeframe – six to twelve months.

A Scenario to Illustrate this Methodology - A typical scenario might be a 100 acre tract of land slated to be developed at a ratio of 3.5 units to the acre. The 350 units would require 3.5 acres of parkland donation. If the land has a natural arroyo crossing it with a rim to rim area of 20 acres, a portion could be reserved as required natural drainage, encompassing for example seven or eight acres, and another 3.5 acres of the arroyo could replace the required parkland donation. In addition, the developer is required to contribute approximately \$1,000 per lot in built park facilities to help kick start the park site. The cost of the developer required park improvements (as much as \$350,000 in this scenario) could instead be traded for an additional five to ten acres of the remaining arroyo area. Installation of features to provide minimal access by the developer would still be required.

It is important to note that when trading for open space instead of parkland, an “active” park that might have served that neighborhood will not be built. But the city might accrue additional savings from the reduced maintenance of open space instead of a major park. The 3.5 acre park might require over \$30,000 annually (\$10,000 per acre) in maintenance funds, whereas the 20 acre natural area, outfitted with natural trails, benches and an overlook area, might only require \$100 to \$300 per acre annually to maintain it. That reduced operational cost could result in a savings of over \$25,000 per year in operations for one facility alone.

Required Actions – the parkland dedication ordinance must be changed to incorporate the following:

- Permit open space as an acceptable donation option to meet dedication requirements, but only at the discretion of the city parks and planning directors. The choice of parkland or open space should be driven by the City, not by the developer.
- Specifically mandate that the drainage area channels not be allowed to count as parkland dedication. However, allow arroyos left in a natural state, but used for drainage purposes, to count as parkland (if deemed acceptable by the City Parks and Planning Directors). Only excess fringe areas should be allowed to serve as parkland.
- Permit the trading of open space land (only if acceptable to the City) in exchange for required park improvements. Make this an option that the city can mandate as opposed to letting it be the choice of the developer.



- Add language that allows fees collected as part of the parkland dedication process to be used to acquire either parkland or open space.
- Require that existing natural drainage be maintained wherever possible, rather than allowing significant channelization of drainage features. The engineering department, rather than the developer, shall direct the city's preference. Changes to the city's standards for channel design should focus on natural solutions as a way of drainage, beautification and open space enhancements for the residents of the city.

A-7. Modify subdivision regulations to require preservation of views and access to open spaces when adjacent areas are developed.

In areas where arroyos or very unique natural areas occur, the subdivision regulations should be required to provide better access and views to the open space. For example, at least 75% of the perimeter of arroyos and other unique areas should be bounded by streets or accessible space rather than the backyards of homes. Open spaces, if acquired as part of the public domain, should not be reserved for just a few, but should be accessible to the general public.

Required Action – policy change to Subdivision Regulations

Recommended Timeframe – six to twelve months.

B. Acquisition and Preservation Strategies

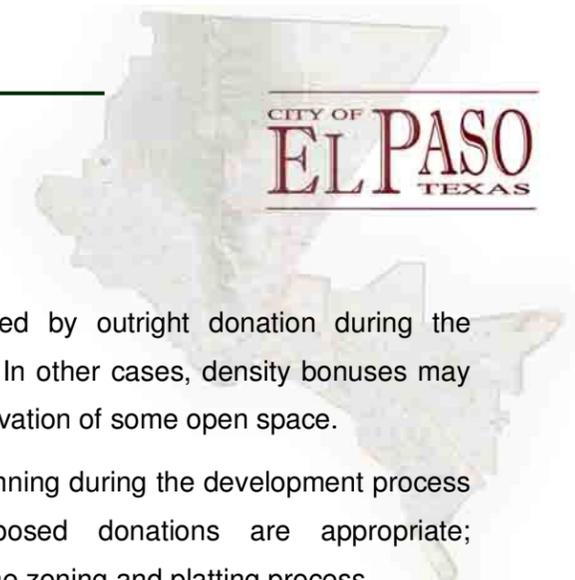
B-1. Through council action, permanent preservation of critical open space assets that are already City owned

Designated open space opportunity lands now owned by the City or controlled by the El Paso Water Utilities could be permanently preserved by action from the El Paso City Council.

Past ordinances may require that the El Paso Water Utilities lands be purchased at the original rate of purchase which is somewhere in the vicinity of \$30 per acre. A policy included in the "Memorandum of Policies Concurred by the City Council and the Public Service Board," dated September 9, 1965, stated that:

"(3) When the City acquires land from the Public Service Board for the purposes of any other City department, the City will pay to the Public Service Board the original cost of the land to the Department of Water Utilities, plus interest at 3% per annum, plus any specific cost which had been incurred by the Public Service Board in improving the property."

If significant improvements have been made to the property, then this policy appears to be reasonable. In the past, such a policy would have restrained the Mayor and City Council from using EPWU lands for personal or political gain. However, in today's environment of more enlightened as well as more visible and scrutinized public transactions, it seems inappropriate that one branch of the City should have to use scarce funds to pay another branch of the City for a City-owned asset that benefits all of the residents of El Paso. The policy regarding acquisition of EPWU lands for other vital City purposes should be clarified and updated for the 21st Century El Paso.



Required Action – designate specific properties that should be preserved, negotiate with the El Paso Water Utilities, approval by the Public Service Board and the City Council.

Recommended Timeframe – within six months to twelve months.

B-2. Acquisition via Purchase by the City of El Paso.

Where funding is available, land can be purchased by the City of El Paso. The high cost of land and the scarcity of available funding makes this option feasible only in rare instances.

Required Action – acquisition using available \$2,000,000 in 2004 bonds.

Recommended Timeframe – within six to twelve months.

B-3. Acquisition via Purchase by Area School Districts.

As districts acquire land for new schools, the locations can be planned to be adjacent to valuable open areas. Districts typically acquire land well in advance of development when land values are low. The open space areas over and above the pure needs of the new school can be retained by the district and traded to the City of El Paso in exchange for complimentary services.

Required Action – joint planning with school districts to identify potential acquisitions, develop memorandum of understanding for acquisition, purchase by districts.

Recommended Timeframe – within six months to two years.

B-4. Donation through the Development Process.

Lands may be acquired by outright donation during the development process. In other cases, density bonuses may be traded for the preservation of some open space.

Required Action – planning during the development process to ensure that proposed donations are appropriate; acceptance as part of the zoning and platting process.

Recommended Timeframe – ongoing as development occurs. Ensure that city staff members are trained to recognize potential open space opportunities.

B-5. Acquisition via Trade for other City Owned Lands.

In some cases, lands that are considered extremely valuable open space assets could be acquired by trading them for other city owned lands. In particular, unassigned lands controlled by the El Paso Water Utilities could be used for this purpose if authorized by City Council. This may be a last resort methodology, but could help to preserve truly valuable areas of land. A prime example may be the undeveloped lands in the vicinity of the Keystone Heritage Wetlands. Trading suggestions should be initiated by staff or Council only, and not by the property owner.

Required Action – policy change to Subdivision Regulations; designate staff to respond to potential trade opportunities.

Recommended Timeframe – within six to twelve months.

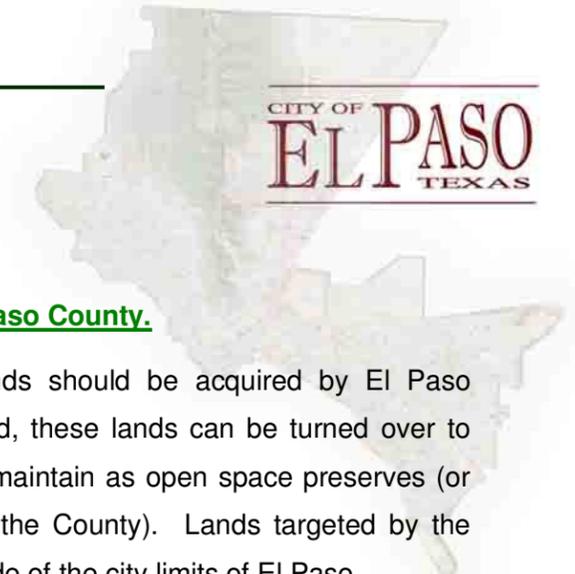
B-6. Acquisition through Purchase by other Entities.



Local, state and national land trusts can raise funds to acquire open space, and then manage the lands or pass them on to the City of El Paso.

Required Action – policy to establish conditions under which the City would accept lands acquired by other entities.

Recommended Timeframe – within six to twelve months.



B-7. Acquisition by Private Homeowner Associations

The acquisition of Thunder Canyon through the creation of a public improvement district (PID) highlighted a strong tool that can be used to acquire open space properties that benefit a specific interest group. The PID allowed the purchase to be financed over time, with the city picking up the responsibility for collecting reimbursement funds. In essence, the area homeowners pay an additional amount over their normal tax responsibilities to pay for the land acquisition. Deed restrictions that permanently designate the acquisition as open space should be established. Where the city is involved, public access to the land via trails should be provided.

B-8. Acquisition by Private Sources for Private Use.

Private groups may also acquire open space with their own funding. Deed restrictions that permanently designate the acquisition as open space should be established. Where acquisition is funded in this manner, the land may be maintained by the private source and access restrictions may be imposed. However, the open space should remain visible from publicly accessed roads, and in some cases where key linkages must go through the property, trails should be considered.

Required Action – no immediate action, establish policy and criteria for consideration if necessary (but recent action already sets precedent).

Recommended Timeframe – no immediate action.

B-9. Acquisition by El Paso County.

Some open space lands should be acquired by El Paso County. Once acquired, these lands can be turned over to the City of El Paso to maintain as open space preserves (or could be managed by the County). Lands targeted by the County should be outside of the city limits of El Paso.

Required Action – agreement with El Paso County, requires County to designate funding.

Recommended Timeframe – as opportunities arise.

C. Incentives to Preserve Open Space

C-1. Allow trading of density for preservation of open space.

Higher densities may be allowed through special ordinances in exchange for the preservation of open spaces over and above what is already required.

Required Action – policy change to Zoning Code, approval by CPC and City Council.

Recommended Timeframe – within six to twelve months.

C-2. Allow cluster development to preserve open space.

Allow development to be clustered at higher densities so as to preserve open space in other parts of the development.

Required Action – policy change to Zoning Code, approval by CPC and City Council

Recommended Timeframe – within six to twelve months.

C-3. Allow private open space in select cases where development bonuses are granted.

In selected cases, the preserved open space may be designated as private open space only for the use of area residents. In such cases, the open space must be permanently preserved as part of the platting process. However, the open space must be visible from nearby public streets. Where the open space provides a critical linkage opportunity, accessible public trails should be provided.

Required Action – policy change to Subdivision Regulations

Recommended Timeframe – within six to twelve months.

C-4. Allow the waiving of development fees.

In exchange for open space, development fees may be waived on a case by case basis. While the value of this incentive is relatively small, it may still allow additional smaller pieces of open space to be preserved.

Required Action – policy change to Subdivision Regulations

Recommended Timeframe – within six to twelve months.

C-5. Deferral of property taxes.

In exchange for permanently preserved open space, and only in very specific cases, property taxes may be deferred or frozen for a contiguous property. Public benefits, such as access or preservation of view corridors may be required if appropriate.

Required Action – establish conditions and city policy for deferral.

Recommended Timeframe – establish policy within twelve months

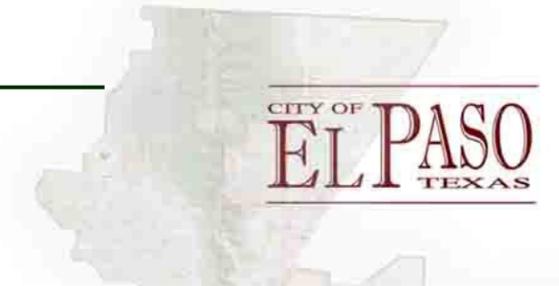
D. Conservation Easements

The use of conservation easements exploded in the 1990's, and it is estimated that over 9 million acres of privately owned lands have been preserved nationwide. Conservation easements may well be replacing outright acquisition as the primary tool for preservation.

The major selling point of conservation easements is their price. The cost of easements varies, but can generally cost about half as much as fee simple acquisition. The reduction in the cost of long-term management is a further benefit. Parks require annual funding for a long period of time, whereas conservation easements are maintained by the original owner instead of the City. A park is a public expense for generations to come; on an easement property, the owner bears the bulk of the maintenance costs. In particular, conservation easements have proved to be an exceptional tool in the protection of agricultural landscapes.

D-1. Acquire development rights to key properties.

Prevent key properties from being developed by acquiring the development rights to each property. Conservation easements may also be used to preserve property. This technique is recommended for the preservation of farmland and orchards in key areas. Funding to acquire development rights must be identified.



Required Action – identify funding source for conservation easements, and identify possible properties for acquisition via conservation easement.

Recommended Timeframe – ongoing, no immediate timeframe.

Potential Funding Strategies

Funding to preserve open space is unlike other types of funding, in that it must be flexible in nature and able to respond quickly to acquisition opportunities as they arise. Valuable open space lands are disappearing every day, and once gone cannot be replaced.

In many other jurisdictions throughout the United States, funding has specifically been designated to preserve and protect dwindling open space. In some cases, this protects farmlands, and in other cases it serves to buy key open space tracts.

Several options for funding open space preservation are presented in this plan. Key conditions when considering how to fund open space acquisition are:

- **A balanced palette of funding sources is needed** – preserved lands benefit everyone, not just a few. They benefit all residents of El Paso County, as well as businesses and the City. Funding should come from both the City and El Paso County, from sources supported by all of the residents of the city and the county (i.e. bond funds supported by property taxes), from private sources such land

Funding Case Study – Albuquerque

Albuquerque has over 24,000 acres of open space that is owned or controlled by the City, and when combined with the 7,000 acres owned by Bernadillo County, provide almost 31,000 acres for the citizens of the region. Another 37,900 acres are contained in the Sandia Wilderness which is adjacent to city open space on the east side of Albuquerque.

Land acquisition began in the 1960's, and by 1968 over 8,500 acres had been acquired. As far back as 1969, a goal was established by the City to "preserve the unique natural features of the metropolitan area by achieving a pattern of development and open space respecting the river, land, mesa, mountains, volcanoes, and arroyos." In 1975 the City/County comprehensive Plan was set in place, with The Plan for Major Public Open Space being one of three volumes of the Comprehensive Plan. The Plan for Major Open Space recommended the acquisition or public control of the major features of the city's natural setting. During the 1970's and early 1980's, land trades, general obligation bonds and federal matching funds through the Land and Water Conservation Fund resulted in obtaining control of all of the five volcanic cones, nearly 4,000 acres on top of the west mesa and volcanic escarpment; a 177-acre nature preserve parcel adjacent to the Rio Grande (Candelaria Farm), and about 1,000 acres in the Sandia foothills. No propositions for local bond issue for open space acquisition failed during this time period.

A key ingredient of the open space system was the historic Elena Gallegos grant, an 8,000-acre parcel that comprised one fourth of the city's Sandia Mountain backdrop. After earlier attempts to secure the required \$26,000,000 in funding failed, a three year quarter cent sales tax was approved by the voters and the citizens. Most of the 8,000 acres was then turned over to the U.S. Forest Service in exchange for federal surplus lands, which were subsequently sold to fund a permanent open space trust fund. This fund provides a funding mechanism for development of appropriate park facilities and the ongoing management of open space.

In the 1980's, the State Legislature approved the creation of a state park along a 20 mile stretch of the Rio Grande through the middle of Albuquerque. Because of the trust fund, the city was able to take on the management of this park.

More recent actions include the Bosque Action Plan, approved in 1993 to jointly develop and manage bosque areas along the Rio Grande. A new quarter cent sales tax initiative approved in 1998 raised an additional \$36 million to purchase over 2,000 acres of new open space lands. Some of these included farm lands that are managed as cooperative farms by the Open Space Division.

The City created the Open Space Division, which manages and maintains Open Space lands. The Division includes three sections: Operations and Maintenance, Law Enforcement and Visitor Services. These three sections employ over 35 full time staff members.

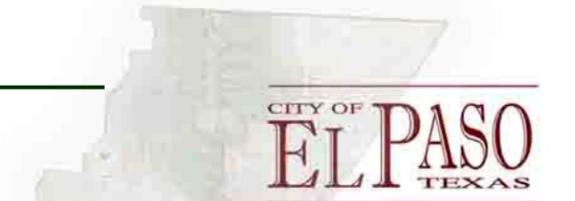
trusts and foundations, and from those who benefit directly from open space, such as nearby homeowner associations.

- **Funding sources must be replenished annually** – opportunities will arise on an annual basis, and there needs to be a readily available fund that can be used for quick acquisitions.
- **Funds must be made available quickly**, so that as much as possible can be preserved at today's land values.
- **Funds must be administered uniformly and fairly** - this plan suggests a criteria system to prioritize and evaluate potential open space acquisitions.

Recommended Funding Sources

Table 6.1 on the following page illustrates a recommended funding scenario for El Paso for the next 10 years. Recommended funding sources are discussed below

Current Bond Funds - \$2,000,000 was authorized by the voters of El Paso in 2004. Bonds in that amount should be sold so that the \$2,000,000 can be used immediately before land values increase even higher. This funding could be used to acquire and preserve a significant portion of the PSB controlled arroyos on the northwest side of El Paso. It could also be used to enhance portions of the Mountains to River arroyo corridor north of Transmountain. Finally, it could be used to acquire development rights to lands along the Rio Grande corridor.



**Table 6.1
Recommended Funding Strategies for Open Space Actions in El Paso**

Funding Source (1)	Type of Fund	Annual Amount	One Time Amount	Suggested Use of Funds
City of El Paso	Current Bond Funding (not yet sold)		\$2,000,000	Immediate Acquisition of High Priority Properties
City of El Paso	Future Bond Funding (within next three years)		\$5,000,000	Immediate Acquisition of High Priority Properties (some may be joint acquisition for drainage or park land)
City of El Paso	Annual allotment for open space acquisition	\$500,000		Match for acquisition by land trust or for immediate opportunities as they become available
El Paso County	Annual allotment for open space acquisition	\$300,000 to \$500,000		For next five years – match for acquisition or for immediate opportunities as they become available
Federal Government	Ear Mark -Grant funding for open space acquisition		\$1,000,000	One time allotment by Congress for acquisition
Local Land Trust(s)	Annual fund-raising for acquisition and acquisition costs	\$250,000		For costs related to conservation and acquisition, raised with annual events
National Land Trusts	Contributions for Open Space preservation		\$1,000,000 over a five year period	For acquisition of key properties
State of Texas – Texas Parks and Wildlife	Grant funding for park development (should always have acquisition component)		\$1,000,000 (only half available for acquisition, remainder for development)	Pursue two \$500,000 grants within next five years
Public Service Board (EPWU)	Percentage from annual land sales	\$250,000 to \$500,000 annually for next ten years		For acquisition of key properties
Special Local Assessments (real estate transfer charge)	From 1/20 to 1/2 percent assessment on each real estate transaction)	\$1,500,000 annually (estimated, based on 30,000 annual transactions)		For immediate land acquisition and open space development citywide
(1) Scenario only – Consent of all entities is required				
Estimated Totals		\$1,550,000 to \$2,000,000 annually (for next five to ten years)	\$10,000,000	Total Over 10 Years with all funding sources \$20,000,000 to \$25,000,000 (note – funding by all possible sources is unlikely)

Future Bond Funds – additional bond funding is recommended in the future. As a starting point, \$5,000,000 in future bond funds is recommended. At \$10,000 per acre for raw land, this fund could acquire as much 500 acres of undeveloped lands. This funding could be used to acquire park lands, purchase conservation easements, or to acquire small but valuable in-town tracts of land.

Percentage of PSB land sales – the reinvestment of a portion of funds generated through the sale of El Paso Water Utilities lands towards open space could provide a much needed revenue source for preservation. An amount ranging from 1 to 3% of the gross land sale value could periodically raise anywhere from \$300,000 to almost \$1,000,000. It should be noted that these funds would otherwise be used to service and provide water for El Paso, so the funds allocated to open space could delay actions planned by the PSB.

Dedicated property tax assessment - a specific levee could be issued, if agreed to by the voters of the city, to issue a special assessment to raise funds for open space acquisition. This amount, at less than 1 cent for every \$100 of value, could raise more than \$1,500,000 annually.

Dedicated Sales Tax (1/2 to 1 cent) – if permitted by the Texas State Legislature, increases in the local sales tax may be available in the next few years. Each cent currently raises approximately \$28 million annually in El Paso County. A small percentage of that amount, renewed annually, could significantly benefit open space preservation in the area. The combination of park and open space needs being funded by a



1/2 cent sales tax increase, with approximately \$12 to 13 million allocated for park needs and \$1 to \$4 million annually allocated for open space acquisition or preservation could dramatically change the nature of open space in El Paso.

Real Estate Transfer Charge – nationally, other jurisdictions have established a supplemental assessment that is added to all real-estate transactions. These monies are allocated to a special fund that acquires open space or parklands throughout the City. The fees in other jurisdictions range from 1/20 of 1% up to 1/2 of 1% of the gross transaction cost, and apply to sales or exchanges of real property. With over 15,000 real estate transactions (7,000 existing home sales, 4,000 new home permits, 4,000 other non-single family transactions) recorded in El Paso County in 2005, such a charge could raise up to \$1,000,000 annually that may help preserve open space in the area.

Grants and special contributions – grant sources should be pursued to add to the available funding for open space. Participation by national and local foundations or other public entities may also play a small role in the acquisition of open space.

Land Trust Funding – support of local land trusts by the City of El Paso should be an extremely high priority. Trusts such as the Frontera Land Trust can move quickly to negotiate and buy development rights or properties, but cannot do so if it is under-funded. A regular annual contribution from the city to support the efforts of the Trust should be made, beginning with the current fiscal year. Other support in the way of staff and coordination should also be provided to help the Frontera Land Alliance seek private donations. Facilities should also be provided at a low cost where feasible to assist with fund-raising activities.



A Timeframe for Open Space Actions

Open Space preservation must be an extremely high priority for the City over the next one to five years. Within that timeframe, it is probable that decisions related to most remaining undeveloped areas of the city will occur. As each decision is made, whether by private or governmental entities, it becomes more difficult to reverse actions and preserve key tracts of land. Preservation and acquisition of land may in some cases even supersede the development of parks, even though those are critically needed. Development of parks and other city facilities can be deferred, but acquisition opportunities, once lost, are almost impossible to reverse.

The recommended timeframe for open space actions is shown on this page. Individual actions may be accelerated or deferred as opportunities or constraints arise, but the overall sense of urgency conveyed by this action plan should be maintained.

Preservation and acquisition of land may in some cases even supersede the development of parks, even though those are critically needed. Development of parks and other city facilities can be deferred, but acquisition opportunities, once lost, are almost impossible to reverse.

**Table 6.2
Action Plan for Open Space Preservation in El Paso**

Action	Responsible Entity	Recommended Timeframe
Immediate Critical Actions		
Approve Green Infrastructure Plan as presented and as modified per council comments.	CPC, City Council	February 2007
Develop modifications to Drainage and Ponding regulations to make them more complimentary to open space requirements	City staff, CPC, City Council	Spring 2007
Authorize incentive levels recommended by plan.	City staff, CPC, City Council	Spring 2007
Cluster zoning		
Donation of Land in lieu of park development requirements		
Donation of Land for additional development rights		
Acceptance by city of maintenance of donated lands		
Waiver of some or all development fees (up to \$500 per acre)		
Develop permanent agreement for all open space areas on all remaining undeveloped PSB controlled lands (Northwest, Northeast)	PSB, City staff, CPC, City Council	By Spring 2007
Develop list of PSB and City Owned lands that could be traded for open space assets in other parts of the city	PSB, City staff, CPC, City Council	By Summer 2007
Develop strategy for immediate funding arrangements for key short term open space acquisition.		By Summer 2007
Rezone undeveloped land areas in newly annexed areas to Rural Farm Category	City staff, CPC, City Council	By Summer 2007
Make \$2,000,000 in bond funds available for immediate funding actions	City staff, CPC, City Council	By early Summer 2007
Consider emergency bond sale for \$2 to 5 million in 2007 to 2008	City staff, CPC, City Council	Decision by Summer 2007
Funding through PSB fund source	PSB, City staff, CPC, City Council	Summer 2007
Decisions related to funding allocations in 2007-2008 Budget	City staff, CPC, City Council	Decision by Summer 2007
Develop temporary holding agreements for critical privately owned parcels of land (requires funding source)	City Staff, Land Trust, OSAG	By early Summer 2007



The Open Space Decision Making Process

Decisions related to open space acquisitions, development and strategies will occur from time to time, and it is recommended that the following processes be used.

- The City should establish, within the Parks and Recreation Department, an Open Space Division that would be responsible for coordinating implementation of this plan and management of City-owned components of the open-space network.
- The Open Space Advisory Group should convene on a quarterly basis to review progress and receive updates.
- Situations requiring immediate citizen input may mandate specially called meetings on an as-needed basis.
- The Open Space plan should be reviewed and updated internally on an annual basis to gauge year to year progress.
- An annual update should be given to the City Plan Commission and the City Council regarding open space actions and progress. Performance standards recommended by this document should be reviewed to determine progress to date.
- The Parks and Recreation Department should also report to the City Plan Commission and the City Council annually on the operational levels required by existing and planned open space acquisitions.

For decisions related to the selection or acceptance of open space candidate sites, the process illustrated in the diagram on this page is recommended.



Summary – A Call to Action

El Paso is fortunate to have the Franklin Mountains as a spectacular natural backdrop. But within the city itself, and even along the lower fringes of the mountain zone, very little open space has been preserved. The result is a distant glimpse of the beauty of the mountains, tempered by little access to nearby open space within the vast majority of the city.

The time to act is now. One can only consider what El Paso could have been like had the vision of George Kessler been fully followed in 1925 when he published the Plan for El Paso. Arroyos are mostly gone, the river has been channelized and fenced, and even the nearby desert fringes are disappearing at a rapid pace. The need for new housing and the opening up of El Paso Water Utilities lands in the far Northwest and Northeast will further increase the pressure on arroyos, desert lands and mountain bajadas that are all too fragile and easily developed. And once open space is developed, it is gone forever. All of this simply points to the need for an immediate focus on open space preservation. Beginning this process even five years from now may be too late. Indeed, most of what is worth preserving may have long disappeared by then.

Funding is a critical component of this open space preservation. No city, El Paso included, can afford to preserve every single possible open space asset. However, some financial resources must be directed

towards acquisition. This plan recommends that at least \$5 million be allocated in the short term, followed by additional amounts over the next ten years. This is in addition to the \$2 million allocated in current bond funding. Other funding sources recommended in this plan should be considered, so as to give the effort a real chance of success. There are no other “magic bullet” solutions that can quickly preserve land.

All City departments and public entities must participate in this effort. The new emphasis on drainage and flood protection, the need to provide new housing, the planning of parks to serve the future population of the city, and the provision of water to meet the needs of new homes are all connected by open space preservation goals. All city entities must embrace this effort and work together to provide a portion of the overall answer, with the common understanding that open space preservation benefits every citizen of El Paso, and makes the city a better place in which to live. El Paso County must ultimately also embrace this effort and assist in making it happen.

The private sector is a key component of this preservation effort. Private development must understand that preservation begins in each individual development, and that the preservation of a piece here, a sliver somewhere else, or the contribution of funding to buy open space somewhere in the city ultimately makes El Paso a more viable community. The time for stating that it

is only the city’s responsibility to preserve open space has long gone. The private sector must recognize the city as a partner in a process that can transform El Paso into a jewel of the Southwest. But the City of El Paso cannot do this alone.

Staff Resources are critically needed for this effort.

The City’s focus on open space preservation can best be proven by the commitment of staff that focus on acquisition, funding and the care of open space areas.

Green Infrastructure will be a huge selling point for El Paso. An aggressive and active commitment to linkages, green corridors, preservation of open space, natural drainage channels, scenic overlooks and a new river “bosque” can ultimately be one of the main reasons why people and businesses flock to El Paso in the decades to come. Very few other places have the raw materials for such a spectacular city. It is simply waiting to happen.

