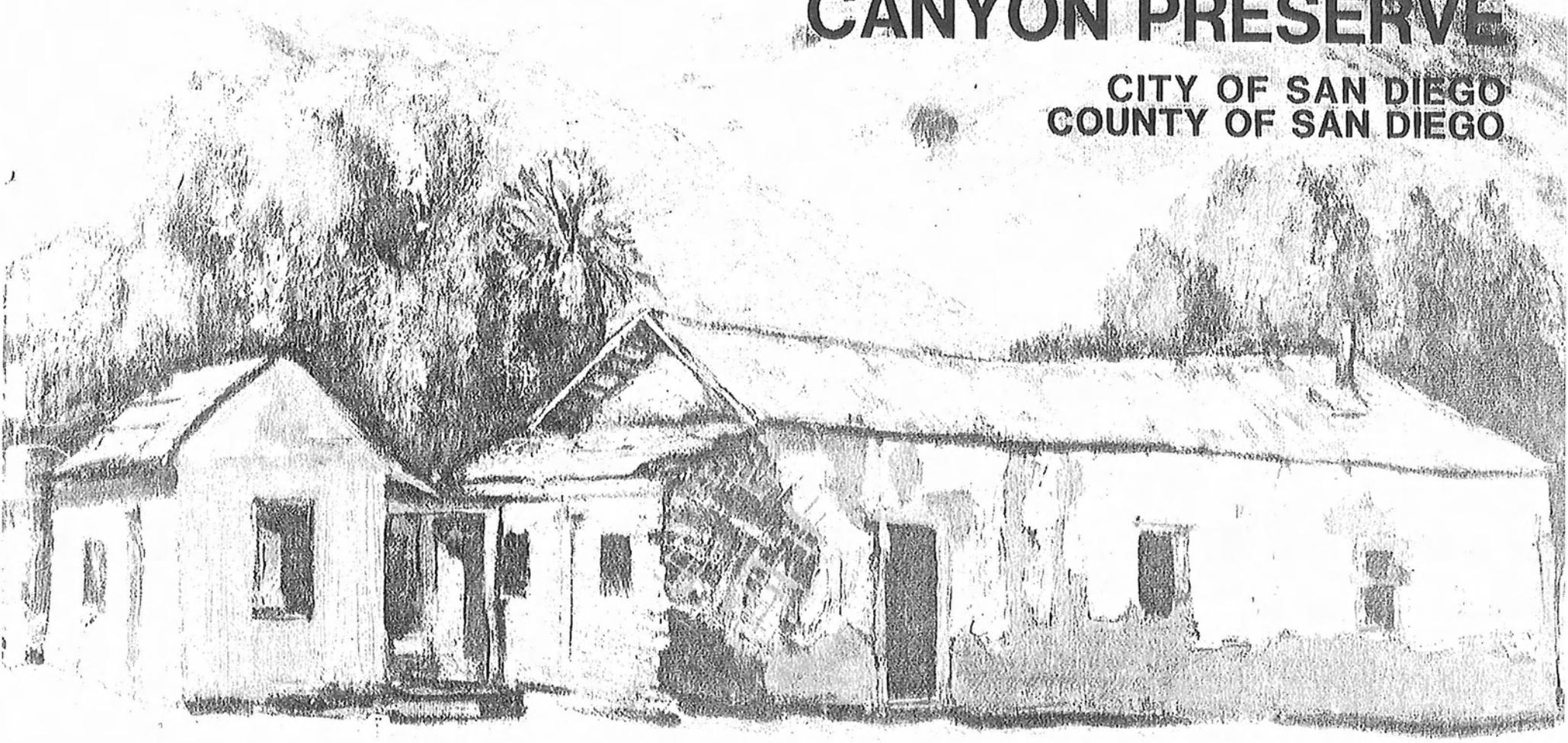


MASTER PLAN
LOS PEÑASQUITOS
CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO

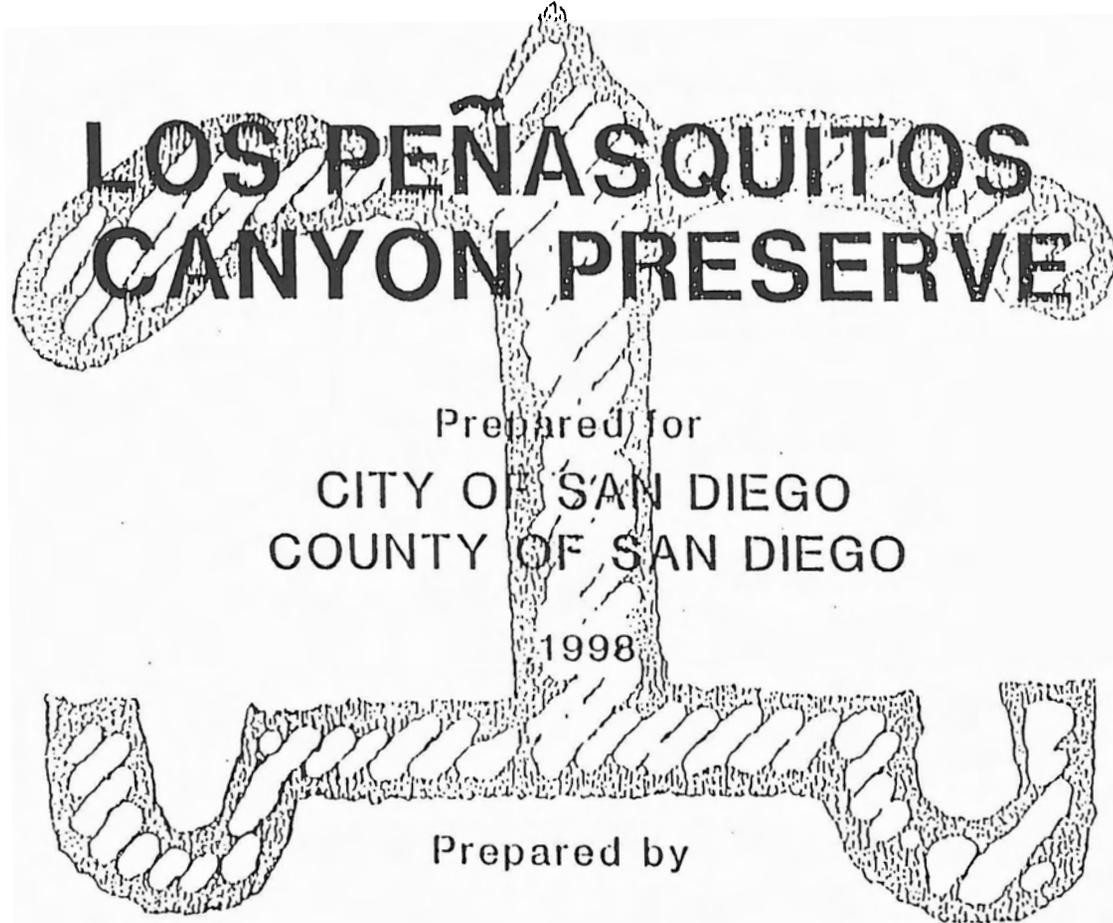


VAN DELL AND ASSOCIATES, INC.

On the Cover:
Painting Courtesy of
San Diego Historical Society
Title Insurance & Trust Collection
Artist Unknown, Circa 1950

On the Title Page:
Cattle brand used by the
historic Penasquitos Ranch ;

MASTER PLAN



Prepared for
CITY OF SAN DIEGO
COUNTY OF SAN DIEGO

1998

Prepared by



VAN DELL AND ASSOCIATES, INC.
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Adopted by City Council on
November 10, 1998 by
Resolution No. R-290948

ACKNOWLEDGEMENTS

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District 3 Pam Slater
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Dedication plaque for the Preserve

Special thanks to Nancy Acevedo, former Deputy Director, City of San Diego Park and Recreation Department

Prepared by:
Nancy Palmer, ASLA/Van Dell and Assoc.

FORWARD

In August of 1980, the Los Penasquitos Canyon Preserve Citizens' Advisory Committee, in conjunction with the Park and Recreation Departments of the City and County of San Diego, prepared the Interim Mananement and Develooment Plan for Los Penasquitos Canyon Preserve. The Interim Plan presented an overall philosophy and use concept and served as a policy document for Preserve management until a final comprehensive master plan could be adopted.

The Interim Plan established the preservation and protection of "all natural habitat, flora and fauna, cultural resources, and the overall environmental integrity" as the primary goal for Los Penasquitos Canyon Preserve. The secondary goal was "minimal development to accommodate recreational activities compatible and in harmony with the natural character of the Preserve."

The Interim Plan also identified several key issues as critical for the achievement of overall goals. These are summarized below:

1. What facilities and activities are to be provided, and where? How do they relate to each other, and how are they compatible with the sensitivity of natural and cultural resources?
2. What is the appropriate relationship of the Preserve to the developments growing up around it? What is the appropriate boundary of the Preserve's open space system, and how is it affected by the policies controlling the development of adjacent communities?

3. What operational, maintenance, and security programs are needed to maintain and enhance the quality of the environment while providing for public enjoyment, health, and safety? How are the responsibilities for long-range management to be shared?
4. What funding sources are available for capital projects?

These issues are addressed in this Master Plan. An Environmental Impact Report (EIR) was completed for the draft Master Plan on November 16, 1992. Mitigations from the EIR have been incorporated into this final version of the Master Plan. Future documents that will continue the work of implementing Preserve goals include a Resource Management Plan, and case-specific environmental analyses as future projects on the site are proposed.

Rock formation at the waterfall in the center of the Preserve.

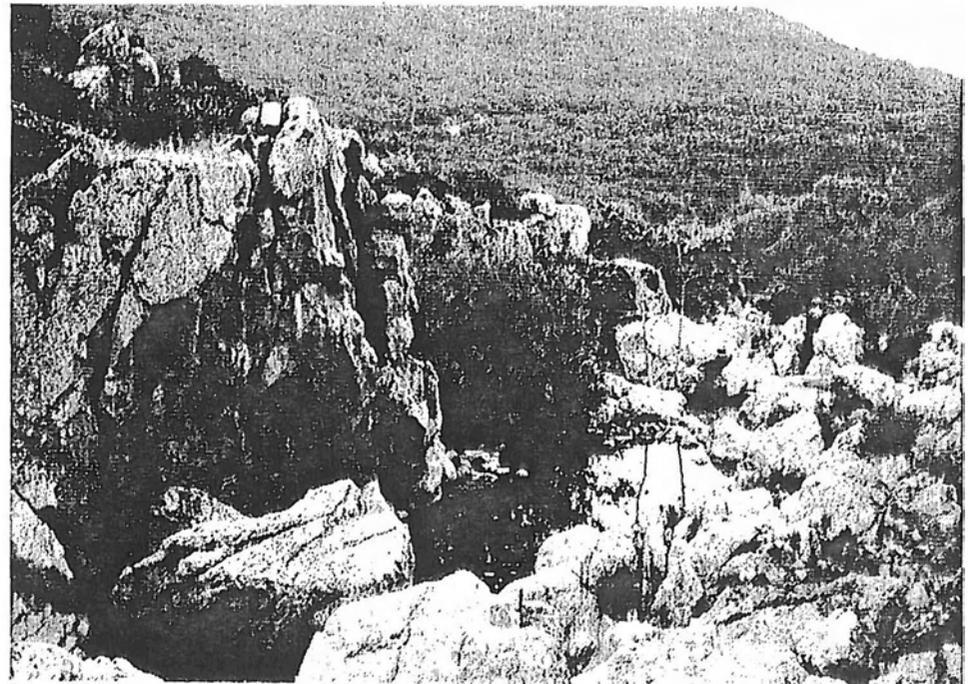


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INTRODUCTION

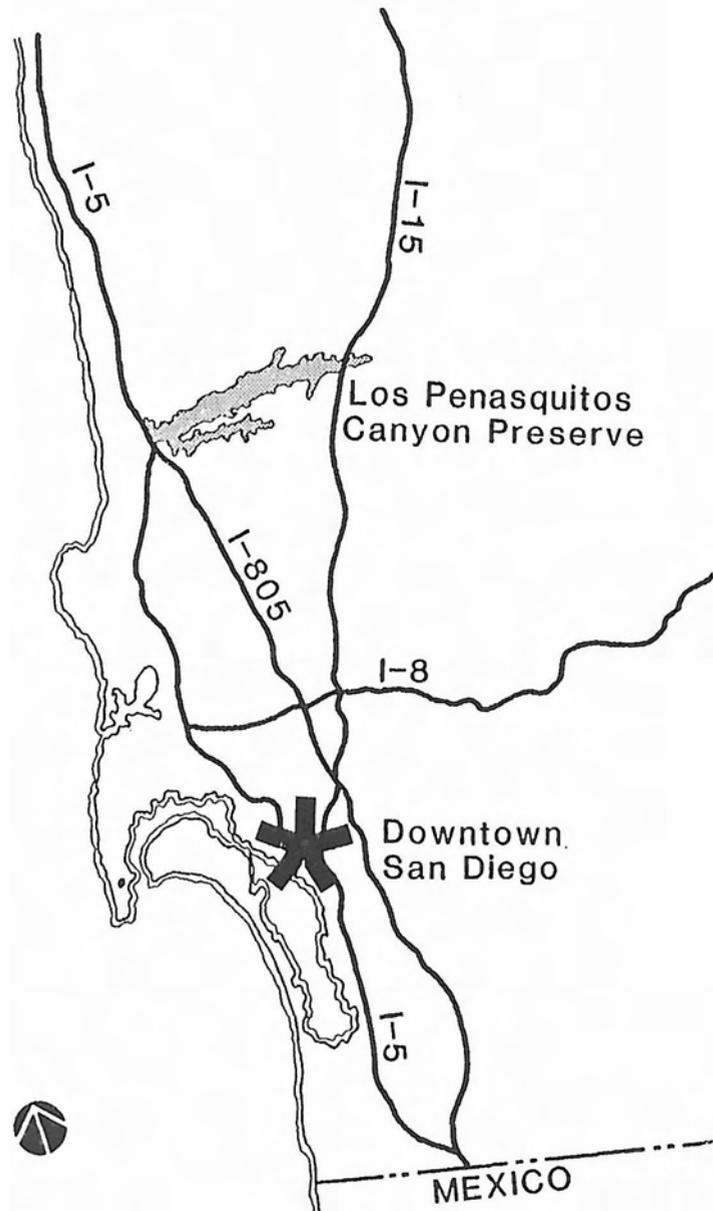
Los Penasquitos Canyon Preserve is located in the City of San Diego between the 1-5 and 1-15 freeways, some twelve miles north of the City's urban center. The Preserve is composed of two large coastal canyons and currently includes over 3,000 acres of publicly owned property.

Both Los Penasquitos Canyon and its tributary, Lopez Canyon, are characterized by perennial streams and steep slopes rising from flat, densely vegetated canyon bottoms. The canyons were created by stream erosion of marine sediments, which in some areas has exposed crystalline bedrock that is 300 million years old.

The scenery of the Preserve is varied, ranging from tangled riparian woodland to open grassland that rises abruptly onto brush-covered slopes. Midway down six-mile long Los Penasquitos Canyon is a boulder-studded waterfall set against an untouched backdrop of rolling hills. Many rare plant and animal species can be found in this area.

Humans, as well, have found the canyons attractive for over six thousand years. Remains of the prehistoric La Jolla culture and the more recent Northern Diegueno Indians can still be found. The Rancho de los Penasquitos was the first Mexican land grant in California, granted to Francisco de Maria Ruiz, who in 1825 built a small adobe which was expanded in 1862 by George Alonzo Johnson. This adobe has been called the Johnson - Taylor Adobe. In 1860 Ruiz's heir, Francisco Alvarado's son, Diego, sold Johnson and his bride, Diego's sister, Estefana, an interest in the adobe.

What was known as the Ruiz - Alvarado Adobe, located at the confluence of Los Penasquitos and Lopez Canyons, is now called El Cuervo Adobe. It was built by the Alvarado family in the mid-1800s. A series of owners used the rancho for cattle grazing during the following century, including Charles Mohnike, who built the Mohnike Adobe in 1910, east of what is now Black Mountain Road.



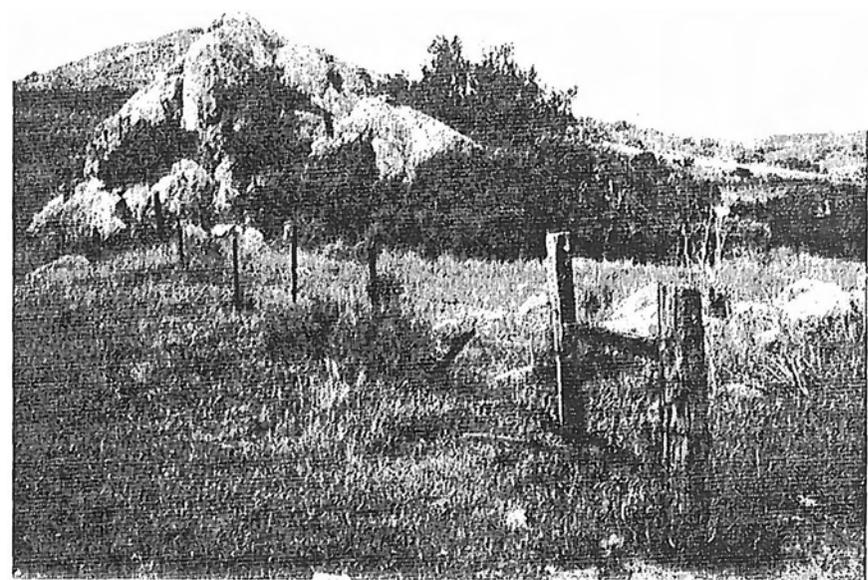
PRESERVE LOCATION

In 1962, the Rancho was sold to Penasquitos, Inc. The northwest area of San Diego was coming under increasing pressure from the burgeoning urban population, but the company's intention to develop the canyon for residential use soon came into conflict with City and County desires to establish it as a regional park.

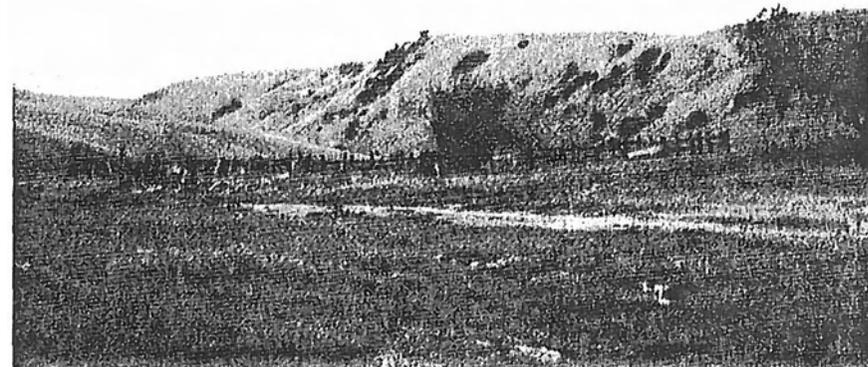
In 1970, the County and City of San Diego, using a grant from the Department of Housing and Urban Development, sponsored the Land Acquisition Report for Los Penasquitos Regional Park, by the firm of Linesch & Reynolds, which recommended the acquisition of 3,400 acres of Los Penasquitos Canyon for park and open space use. In 1974, the County purchased 193 acres in the canyons as part of this effort. This was followed in 1975 by the Penasquitos Regional Park and Land Use Plan, a report sponsored by Penasquitos, Inc., and prepared by the firm of Turrini & Brink, which proposed patterns of development for both the park and the surrounding community. This plan also identified Lopez Canyon as a natural extension of the Los Penasquitos Canyon environmental system.

Correspondingly, the Master Plan stresses the importance of the Preserve as a functioning ecosystem. This can be accomplished through the effective management of sensitive resources, as well as expanding Preserve boundaries to encompass additional habitat areas.

The Los Penasquitos Canyon Preserve Task Force, composed of members of the San Diego City Council and County Board of Supervisors, was created in 1977 to facilitate City/County coordination in the planning, acquisition, and implementation of the proposed regional park. The Task Force subsequently appointed an advisory committee of concerned citizens to provide public input into the planning process. In 1978, Los Penasquitos Canyon was ranked first on a city-wide priority list for retention as open space.



Picturesque terrain of Penasquitos Canyon.



Mouth of Lopez Canyon.

In 1979, 1,806 acres of Los Penasquitos Canyon were conveyed to the City of San Diego by Genstar, which had purchased the property from Penasquitos, Inc. This core of public land was supplemented in subsequent years with land purchases by the City and County in both Los Penasquitos and Lopez Canyons, and by dedications resulting from the subdivision review process as adjacent parcels were developed.

In August of 1980, the Citizen's Advisory Committee and the Parks and Recreation Departments of both the City and County, in conjunction with the Task Force, published the Interim Management and Development Plan for Los Penasquitos Canyon Preserve. The Interim Plan served as a policy document for use and management of the Preserve until a final comprehensive Master Plan was adopted. Its purpose was also to present an overall philosophy and use concept and identify issues to be addressed in the Master Plan. The Interim Plan established the preservation and protection of "all natural habitat, flora and fauna, cultural resources, and the overall environmental integrity" as the primary goal for Los Penasquitos Canyon Preserve. The secondary goal was "minimal development to accommodate recreational activities compatible and in harmony with the natural character of the Preserve." This plan hereby reconfirms these goals.

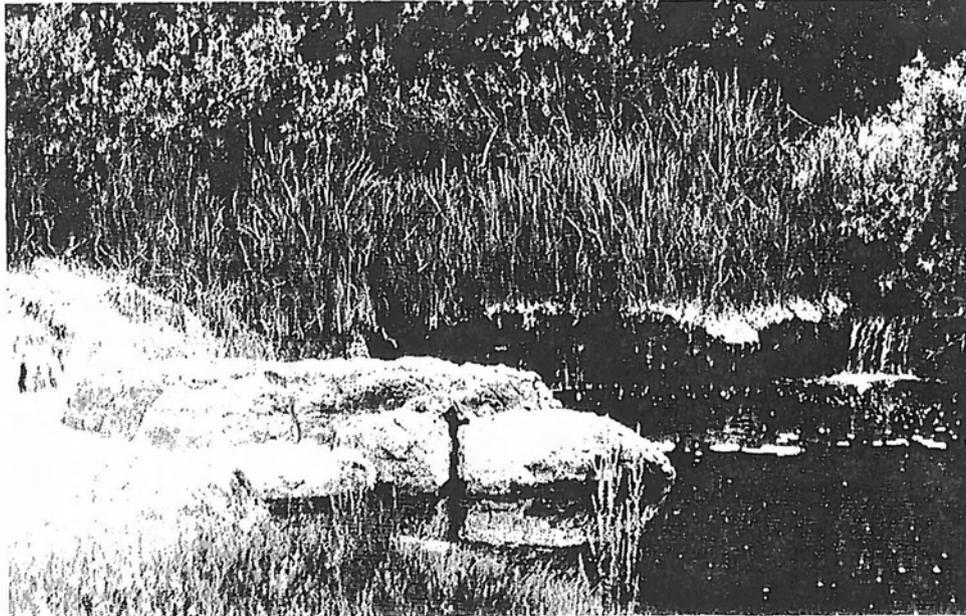
In 1982, the City of San Diego, as principal landowner, contracted with Van Dell and Associates, Inc., to prepare the final Master Plan and Report for Los Penasquitos Canyon Preserve. These documents were to address the issues and questions identified in the Interim Plan as critical for the achievement of overall goals.

The master planning process included updating of resource information and analysis of use and management alternatives. As it was developed, the draft report was presented for feedback at public meetings of the Task Force and Citizens' Advisory Committee. One key result of the draft report was in encouraging negotiation of a land trade between the City and Genstar, now reorganized into Newland California, Inc. The land trade would bring prime natural area near the Preserve's center into public ownership, in exchange for the less pristine land fronting the 15 Freeway.

Approval action on the initial draft completed in 1983 was deferred pending resolution of conflicts with the Master Plan of Arterial Highways. The draft was updated in 1986 and again in 1990 in search of an acceptable compromise. Community plan revisions eliminated the highway conflicts in 1992, and an EIR for the Preserve Master Plan was completed on November 16, 1992. This final version of the Master Plan report was revised in 1993 to delete many features that were identified in the EIR as potentially creating environmental impacts.



Grave stone near Johnson-Taylor Adobe
(John Eichar, 1825-1885).



Marsh pond near the central waterfall.



Enjoying the horses at the equestrian center near the Mohnike Adobe.

SUMMARY OF RECOMMENDATIONS

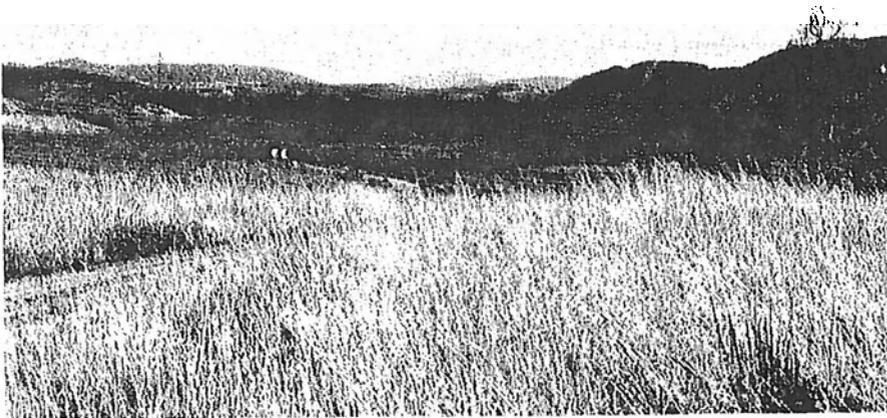
The following recommendations summarize the development, management, and implementation proposals for the Preserve. Details are presented in the body of the report.

GENERAL CONCEPT

1. The primary objective of Los Penasquitos Canyon Preserve should be the preservation and enhancement of its natural and cultural resources. Recreational and educational use by the public should be the secondary objective.
2. Development should be consistent with these objectives, with care taken that public use should not endanger the qualities that make the Preserve unique.

FACILITIES AND ACTIVITIES

1. Moderate levels of human activity should be concentrated around two major access points at each end of Los Penasquitos Canyon. The rest of the Preserve should be reserved for passive day-use enjoyment by users of the trail system connecting the two activity areas.
2. The Los Penasquitos Ranch Area, centered around the Johnson-Taylor Adobe, should be the primary activity node and Preserve access point. The interpretive complex in and around the adobe site will be complemented by the nearby staging area and equestrian center. A residence for a park ranger may be provided.
3. The secondary access point should be in the vicinity of the Ruiz-Alvarado Adobe. The Adobe itself should be protected as an historic resource. A replica could be built nearby as an interpretive center. Support facilities should include parking, restrooms, a picnic area, hitching posts, and, perhaps, a ranger station.



Broad vista typical of the Open Corridor Zone.



Rock formations above Penasquitos Creek.

4. The existing trail system should be refurbished, expanded, and/or relocated using environmentally sensitive design criteria. Interpretive markers and directional signs should be provided.

OPEN SPACE SYSTEM BOUNDARY

1. The boundary of the Preserve's open space system should reflect the ultimate configuration of the edge of surrounding developments and should contain all lands under current or proposed public ownership or easement (see map page 9).
2. The open space boundary approved by Council in 1979 should be updated to reflect more recent approvals of adjacent developments, as well as the open space systems outlined in Community Plans adjacent to the Preserve.
3. The entire Preserve should be divided into **eight** management zones according to differing physical characteristics, functional emphases, and relationships to the surrounding developments. Specific management strategies have been set up for each zone (see Master Plan or pages 17-20).
4. Where the ultimate open space boundary has not been defined by existing or approved developments, a proposed boundary should be defined to support the function of the affected management zone and to reflect established policies.
5. Future proposals for adjacent developments should be evaluated with respect to the proposed open space boundary, in order to encourage the cooperation of property owners to develop an optimal location and character for the boundary.
6. The City's Park Sensitive Development Criteria should be extended to include most of the land around the perimeter of the Preserve.

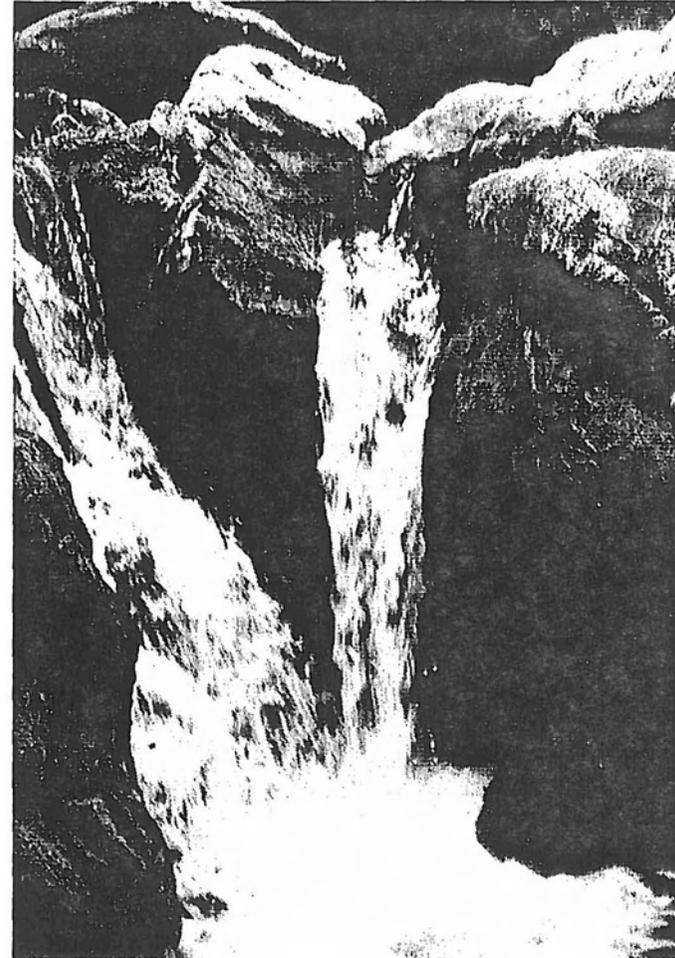
LONG-RANGE MANAGEMENT

1. The goals of long-range Preserve management should be to maintain and enhance the quality of the environment and to provide for public enjoyment, safety, and education.
2. A cooperative agreement between the City and County should be established for the management of the Preserve. Responsibilities for operations, maintenance, and security should be clearly defined.
3. A permanent ranger force could be established in the Preserve to oversee all activities. These rangers should have authority to enforce rules and regulations and issue citations.
4. Rules and regulations should be strictly enforced, with particular emphasis on environmental preservation and vehicle and fire control.
5. The Preserve should operate primarily as a day use facility with night time activities allowed on a permit basis only.
6. A comprehensive Resource Management Plan should be developed and an environmental monitoring program should be instituted to assess impacts of human activity in the Preserve. Uses or activities should be discontinued on a temporary or permanent basis if natural resources are negatively impacted.

IMPLEMENTATION

1. The schedule for development of Preserve facilities should give high priority to resource protection needs.
2. The development of Preserve facilities should be phased, whenever possible, to coincide with infrastructure improvements of proposed adjacent developments.

One of several waterfalls in the Preserve center.



PLANNING BACKGROUND

The first step in the master planning process was the compilation, review, and updating of existing information. The Interim Plan, with its supporting and background documents, had proposed types and locations of recreational activities and identified the need for an environmental assessment of potential impacts. A Preserve open space boundary, including publicly owned land and areas desired for inclusion in the open space system, had been developed and approved by the City Council and Board of Supervisors. Priorities for acquisition of key areas had been determined. The open space boundary also outlined the preliminary study area for the Master Plan.

The earlier Land Acquisition Report and Park and Land Use Plan had compiled data on site resources and surrounding development. This information, including regional context, local land ownership and political jurisdictions, land use patterns, visual quality, hydrologic and geological data, and biological and cultural resources, was updated and evaluated in reference to the issues identified in the Interim Plan. In addition to bringing the information up to date, this study for the master plan provided criteria for planning and design that responded to current environmental and political conditions. Highlights of the analyses are described below.

REGIONAL CONTEXT

Los Penasquitos Canyon Preserve, located in the north central area of San Diego, is surrounded by rapidly developing suburban communities, including Mira Mesa, Rancho Penasquitos (previously known as Penasquitos East), Sorrento Hills, Carmel Valley, and others. Land use is primarily residential, although use is designated as industrial in areas subject to crash and noise impacts from nearby Miramar Naval Air Station. Much of the land in this part of the city is currently undergoing development, and construction of new communities is expected to create an extensive urban complex throughout the area by the year 2010.

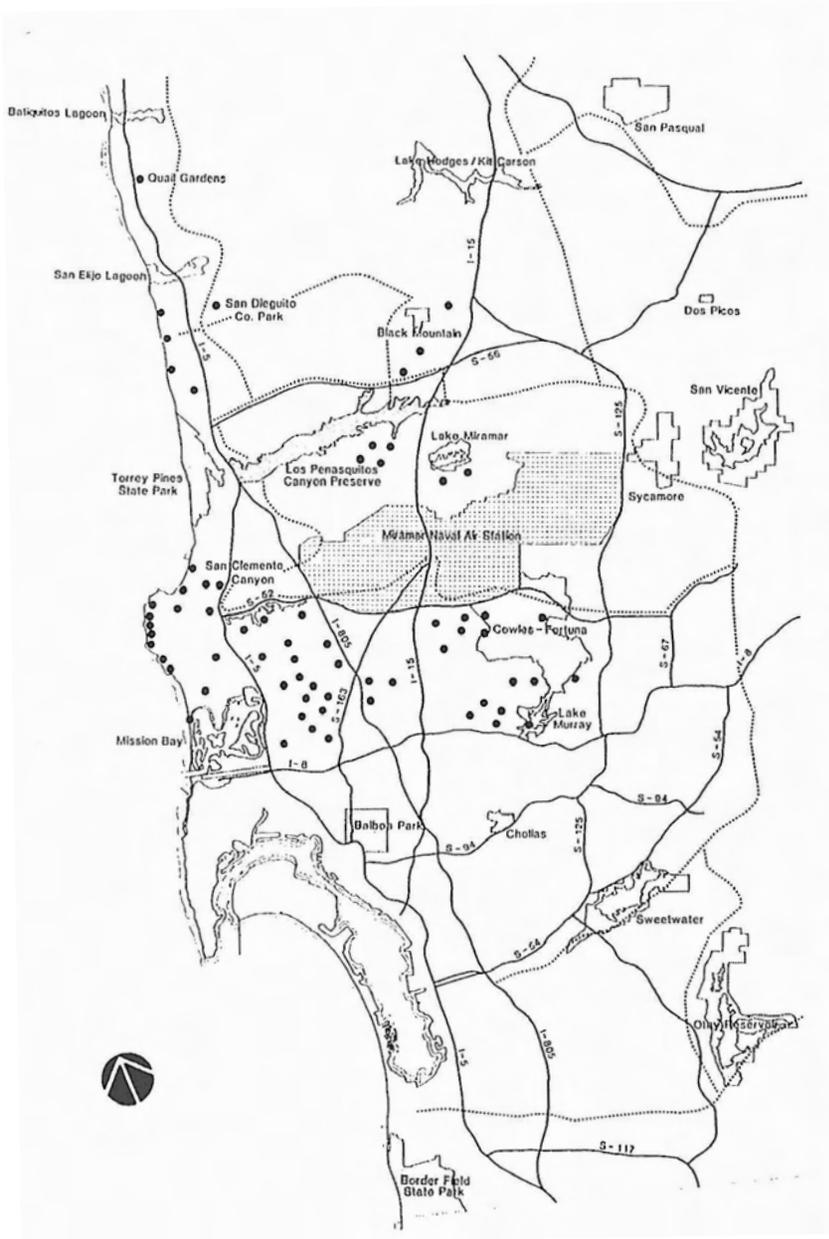
According to the City of San Diego Progress Guide and General Plan, day-to-day recreation opportunities for San Diego residents

are to be provided by a system of population-based neighborhood and community parks. These are supplemented by nearby national, state, and regional parks, sport fields and other facilities. Most of these parks are intended for active, intense levels of use, the demand for which is now only partially met in this portion of the city.

Los Penasquitos Canyon Preserve is not part of this active recreation system but is classified in the City's General Plan as a resource-based park. The purpose of the Preserve is to save the last relatively untouched coastal canyon in the City of San Diego. The Preserve's resources are considered to be of regional importance, drawing people from the entire county and beyond. Its unique combination of environmental amenities provides the major link of a continuous open space corridor reaching from the mountains to the sea.

In the City's north central area, the open space system proposed in the General Plan is composed largely of east-west canyons and their tributaries, which cut into the coastal plain and provide relief from the urbanizing flatlands. Many of these canyons have been incorporated into regional equestrian, bicycle and hiking trail plans. These trails are intended to link together many of the active recreation areas and resource-based parks both within and outside the City of San Diego. As such, they provide the opportunity for tying Los Penasquitos Canyon Preserve into the region's overall parks and open space network.

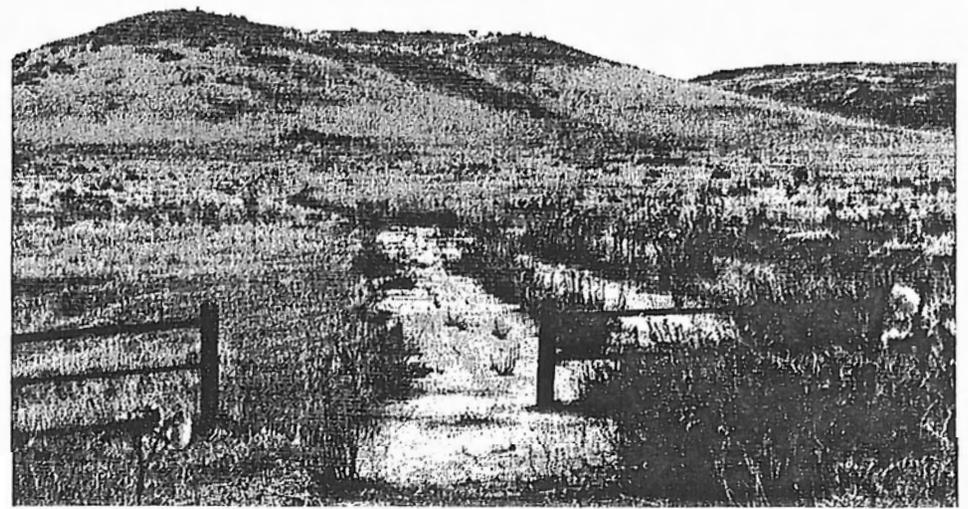




CITY PARKS IN LOS PENASQUITOS VICINITY



Children catching bluegill in Penasquitos Creek.



Old fences are remnants of the canyon's cattle ranch history.

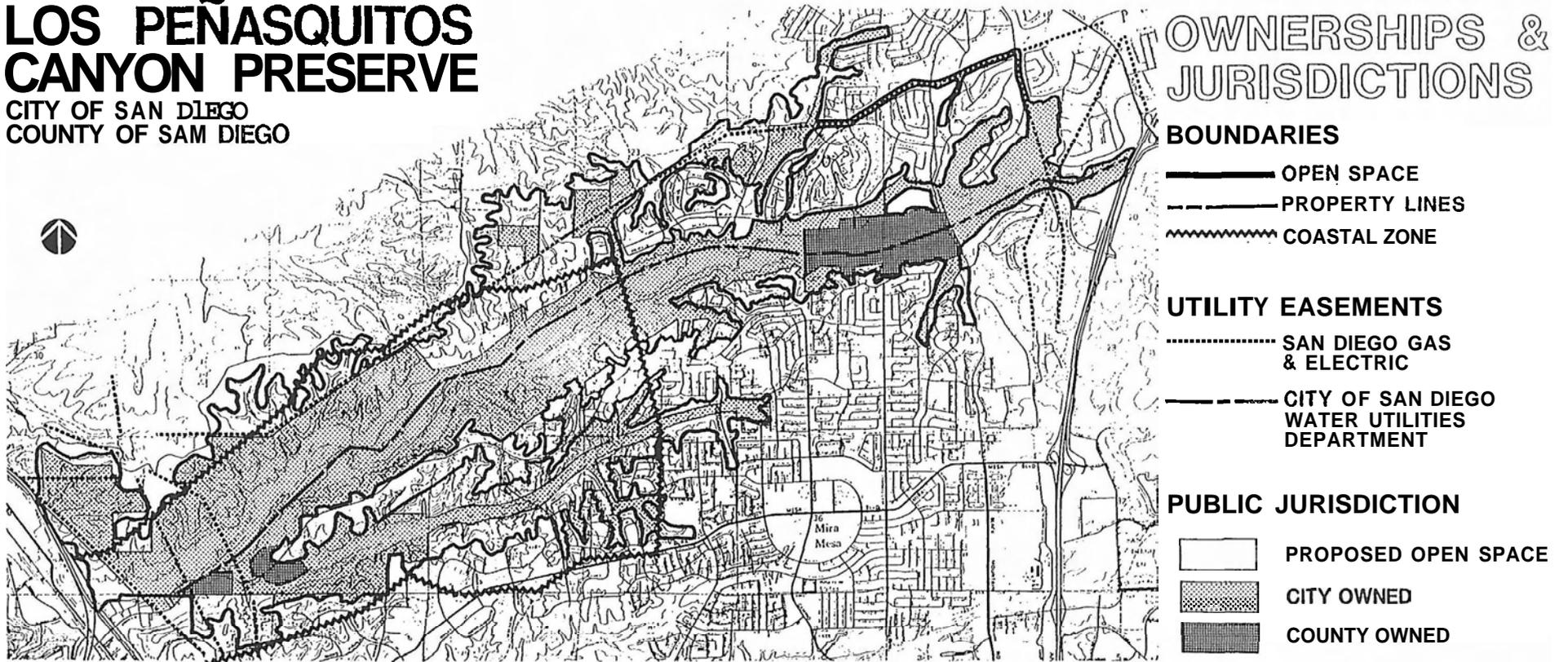
OWNERSHIP/JURISDICTIONS

This study identified the areas and acreage currently in City and County ownership that form the core of the Preserve. It also identified the owners of large adjacent undeveloped properties and of all areas within the proposed open space boundary, including utility easements, as proposed in the Interim Plan. The Interim Plan also defined eight Priority Acquisition Areas. The study revealed inconsistencies in the delineation and meaning of the open space boundary, identified areas where the boundary had been changed since the time of original adoption, and indicated changes in the status of the Priority Acquisition Areas.

As such, this map formed the basis for an updated assessment of the area that is, or will be, provided within the Preserve's open space system. The study also suggested a framework for guiding the future evolution of the open space boundary as adjacent properties are developed. This framework is discussed in detail in the Open Space Boundary section of this report (pages 34-44). The open space boundary shown on the map below is based on the Interim Plan, updated to reflect approved adjacent developments.

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAM DIEGO



OWNERSHIPS & JURISDICTIONS

BOUNDARIES

- OPEN SPACE
- - - PROPERTY LINES
- ~~~~~ COASTAL ZONE

UTILITY EASEMENTS

- SAN DIEGO GAS & ELECTRIC
- - - CITY OF SAN DIEGO WATER UTILITIES DEPARTMENT

PUBLIC JURISDICTION

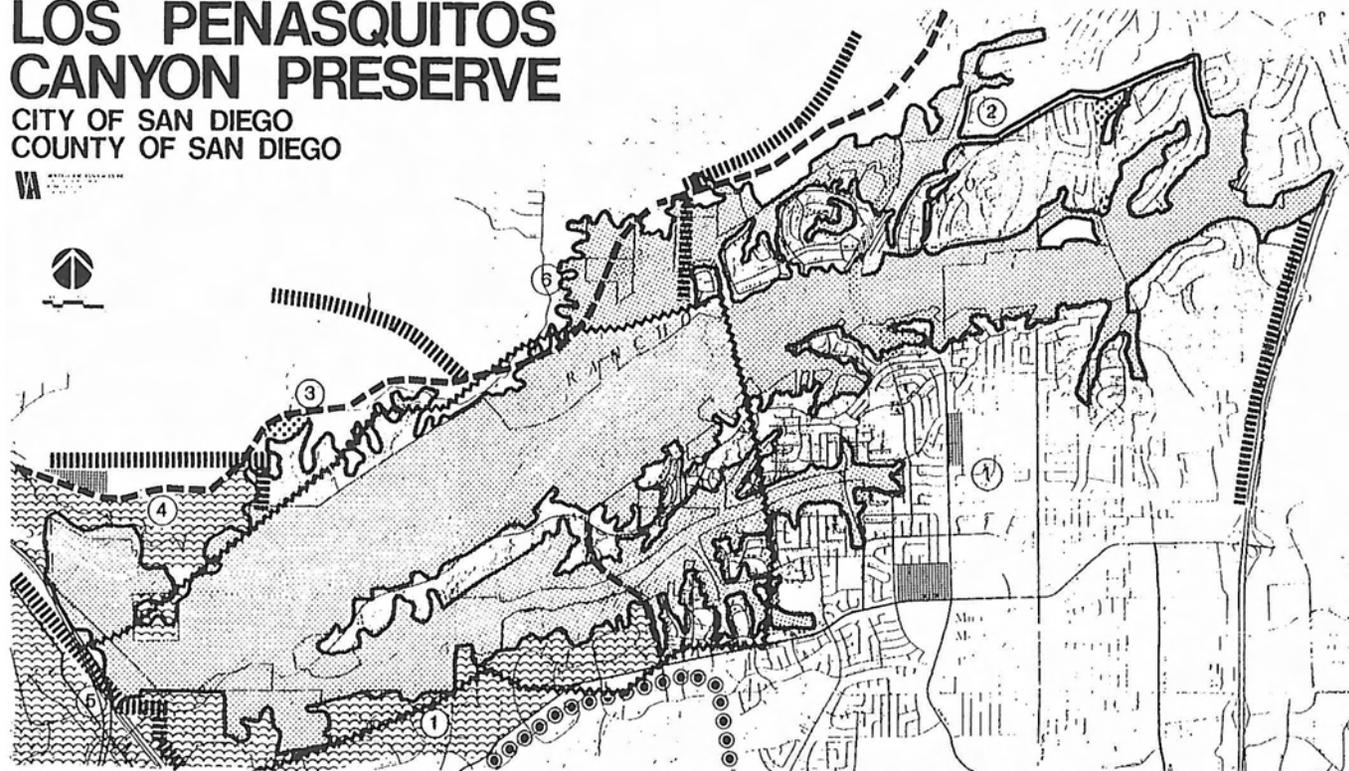
- PROPOSED OPEN SPACE
- ▒ CITY OWNED
- COUNTY OWNED

LAND USE

The land use analysis identified the location and type of existing and proposed land uses adjacent to the Preserve. It was used in identifying probable points of access to the Preserve from developments around the periphery.

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO



LAND USE

BOUNDARIES

- OPEN SPACE
- PUBLIC PROPERTY
- COASTAL ZONE
- COMMUNITY PLAN
- 65 CNEL
- PROPOSED ROADWAYS

COMMUNITY PLANS

- MIRA MESA
- RANCHO PENASQUITOS
- CARMEL VALLEY
- SORRENTO HILLS (DRAFT)
- TORREY PINES
- FUTURE URBANIZING AREA

LAND USE

- RESIDENTIAL
- INDUSTRIAL
- COMMERCIAL
- INSTITUTIONAL PARKS
- OPEN SPACE

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO



VISUAL RESOURCES

- BOUNDARIES**
- OPEN SPACE
 - PUBLIC PROPERTY LINE
 - COASTAL ZONE
- NATURAL VISUAL FEATURES**
- RIPARIAN VEGETATION/CREEK BED
 - OAK WOODLAND
 - PROMINENT LANDFORMS
 - WATERFALL AREA
 - VISTA POINTS
- ADJACENT VISIBLE DEVELOPMENT**
- EXISTING
 - PLANNED
 - TRANSMISSION CORRIDORS
- PARK USER VIEW ORIENTATION**
- INWARD
 - OUTWARD
 - PARK SENSITIVE DEVELOPMENT

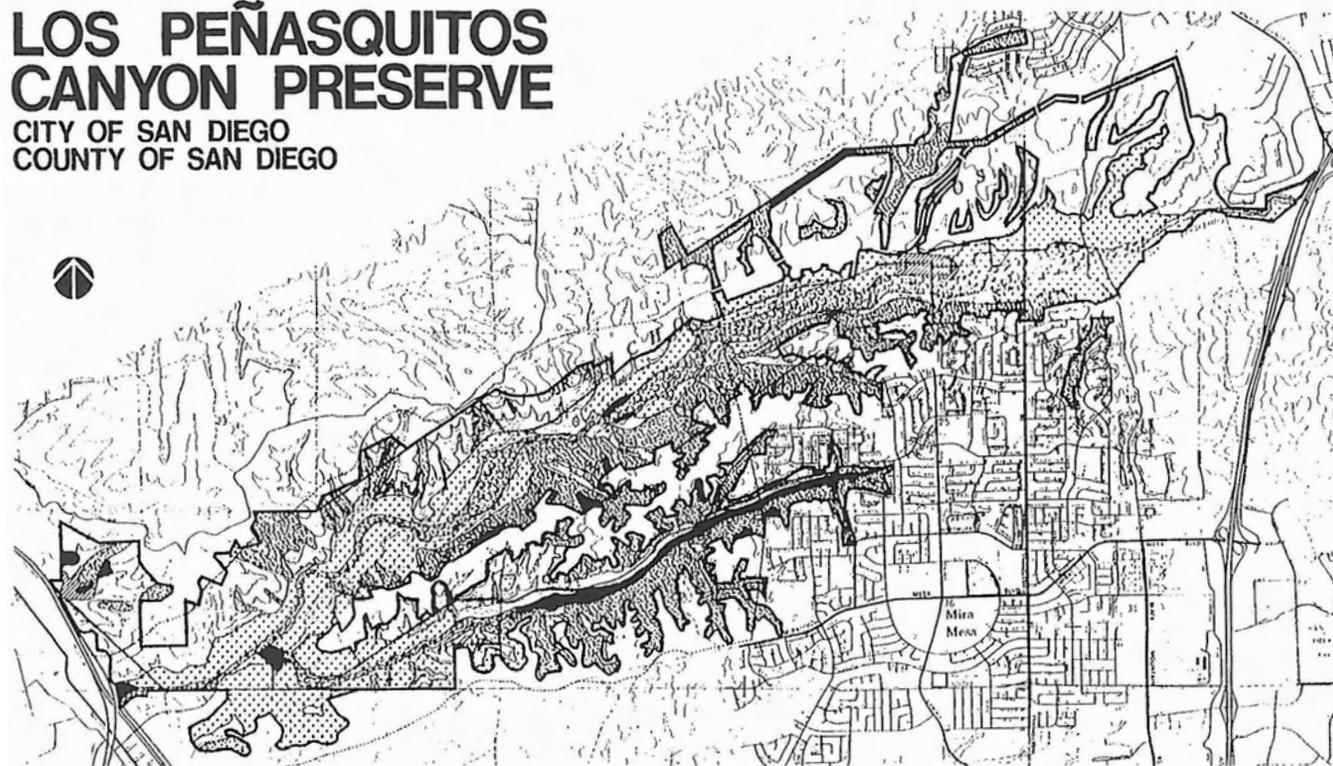
VISUAL RESOURCES

This study inventoried the diverse visual character and special natural and man-made features that are major attractions - and in some cases, detractors - of the Preserve. Areas that are or will be visually impacted by existing and proposed adjacent

developments, as well as areas with the potential for being preserved in a relatively pristine condition, were identified. The study also located vista points and other scenic features of particular value. Visual quality control became a key element in the overall Preserve development and management concept.

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO



BIOLOGICAL RESOURCES

This study, carried out by ERC Environmental and Energy Services Company, Inc., examined the various plant and animal communities found in Los Peñasquitos and Lopez Canyons. Sensitive plant species and habitats for sensitive animal species

within the Preserve boundaries were identified. Based on this inventory, criteria were developed for locating trails and other use areas in a manner compatible with wildlife resources. Existing trails requiring relocation were also identified. The Preserve's biological resources are considered a key aspect of the proposed interpretive program.

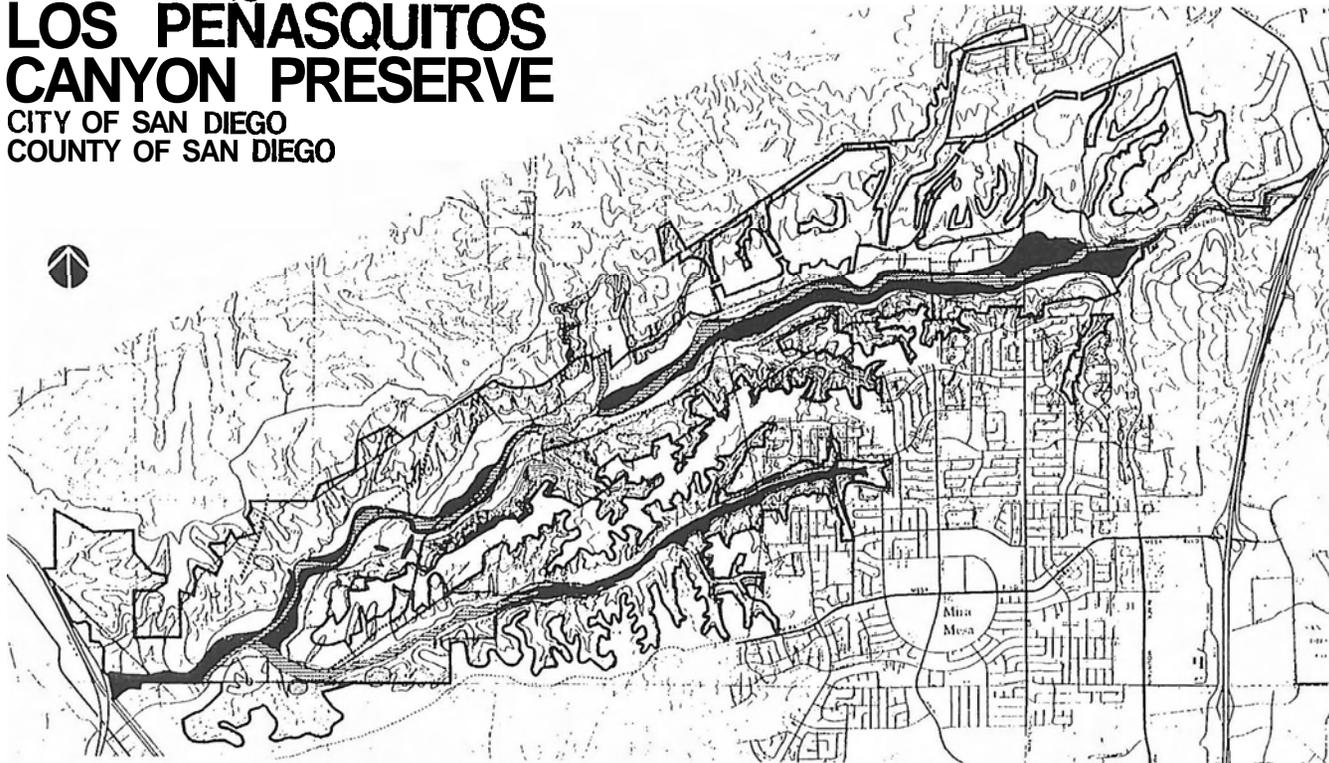
HYDROLOGY/GEOLOGY

The hydrology/geology study by ERC identified sensitive and potentially hazardous areas, including the creek floodway, 100-year flood plain, past landslides and severely eroded areas.

Erosion potential on canyon side slopes indicated the need for sensitive trail location and design. The study also raised the issues of public safety and emergency access, which are discussed in the Long-Range Management section.

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO



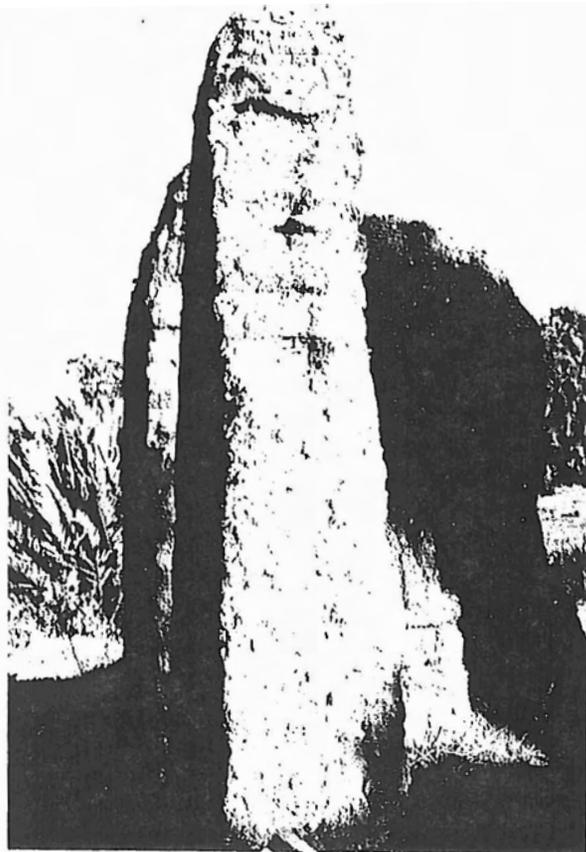
GEOLOGY/ HYDROLOGY

BOUNDARIES

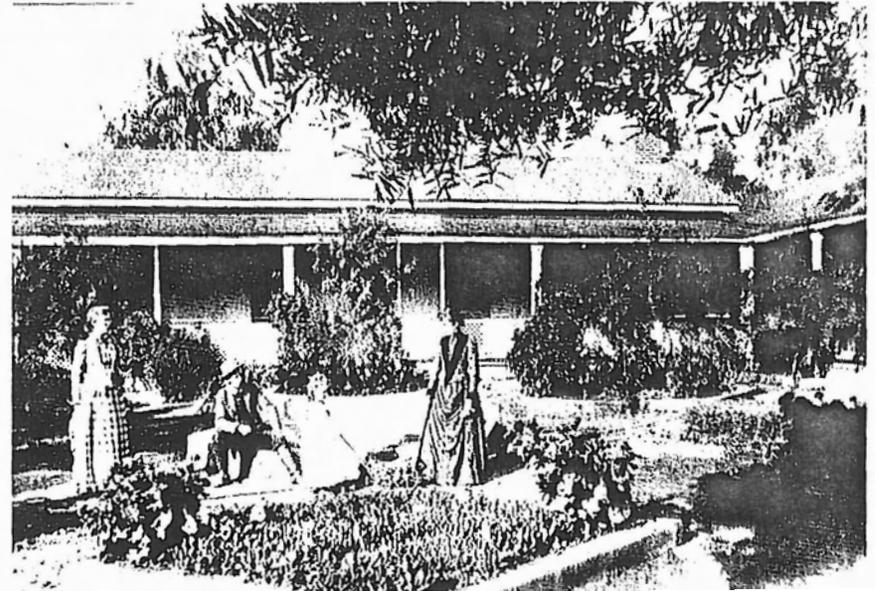
- OPEN SPACE
- - - PUBLIC PROPERTY LINE
- - - - COASTAL ZONE
- [Stippled pattern] AREA OVER 25% SLOPE
- [Wavy pattern] HIGHLY ERODED AREAS
- [Wavy pattern] CREEK FLOODWAY
- [Solid black] 100 YEAR FLOODPLAN
- [Cross-hatched pattern] METAVOLCANIC ROCK
- [Dotted pattern] LANDSLIDES
- - - - - FAULT TRACES

CULTURAL RESOURCES

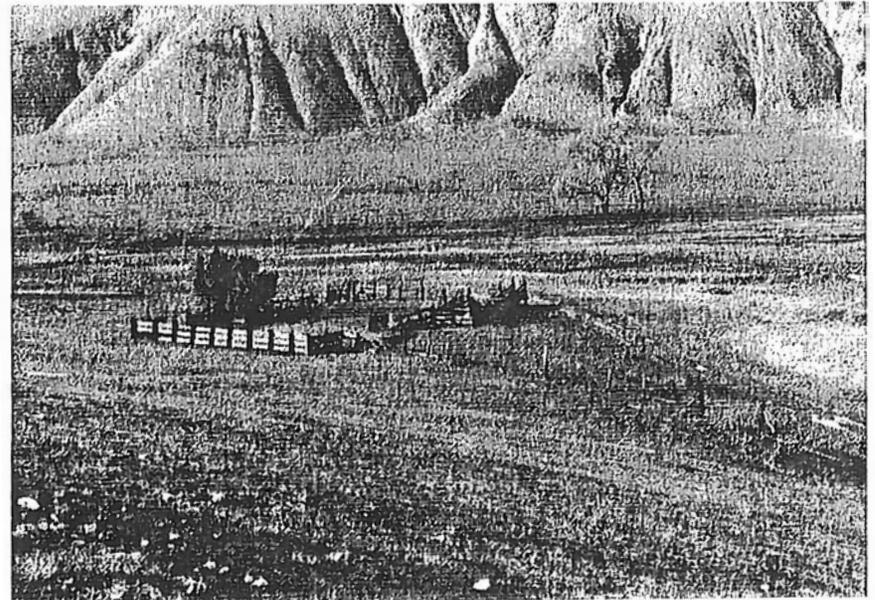
This study by ERC was primarily an inventory of known historic and prehistoric cultural resources within the Preserve. In addition to the landmarks provided by the historic Ruiz-Alvarado, Johnson-Taylor and Mohnike Adobes, this study identified archaeological and paleontological sites throughout the Preserve. Some of these sites have good potential for on-site interpretation, while others are sensitive areas that should be avoided, or should undergo further testing, excavation, and/or analysis before public access is permitted. For those sites where testing is required, the potential for display of the resources elsewhere within the Preserve, to facilitate interpretive opportunities, was identified. This study is in the Technical Appendix to the Master Plan Report.



Ruiz-Alvarado Adobe walls, deteriorated by weather, photo circa 1983.



Courtyard of the Johnson-Taylor Adobe, circa 1889. Photo courtesy of the San Diego Historical Society, Ticor Collection.



Corral at the Ruiz-Alvarado Adobe site.

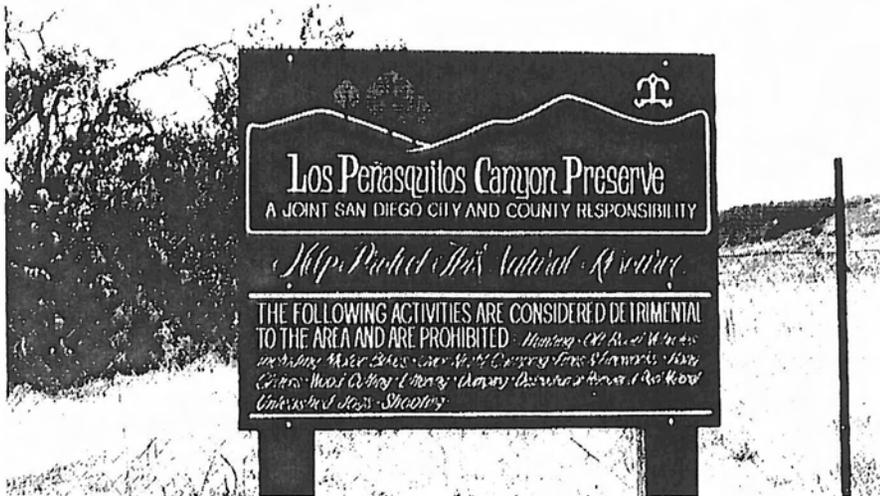
THE MASTER PLAN

USE CONCEPTS

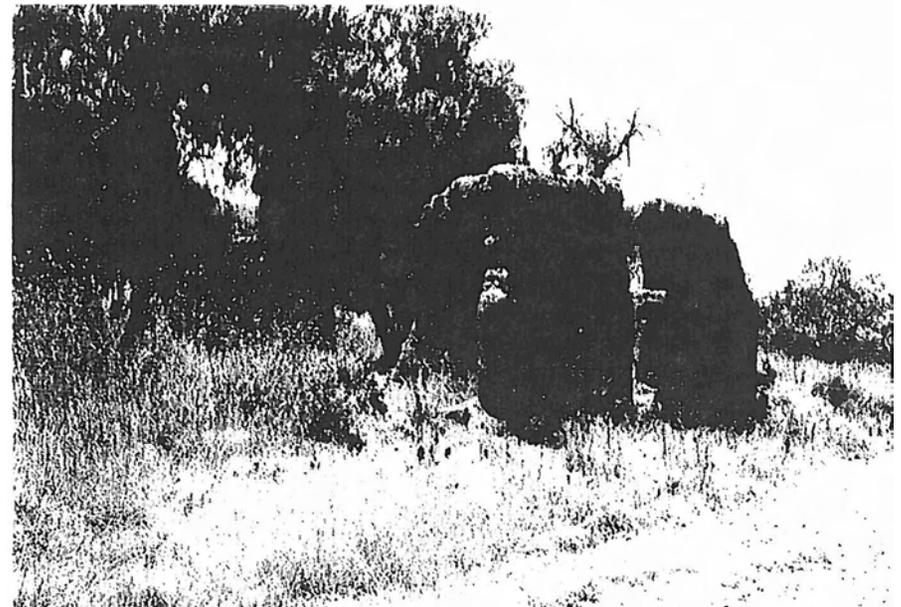
The primary goal of this Master Plan is the preservation of Los Peñasquitos Canyon Preserve as a unique natural and cultural resource. Recreational and educational opportunities that utilize these resources are provided where consistent with their preservation.

The overall concept of the plan is to cluster major access and other facilities at each end of the Preserve while leaving the interior essentially undeveloped. The primary entry and activity

area is proposed at the east end of the Preserve off Black Mountain Road. Peñasquitos Ranch, the equestrian center, and the staging area are major use areas at this end. The west end of the park, accessible via Sorrento Valley Boulevard, is intended as a secondary entry. Major features at this end will be the Ruiz-Alvarado Adobe ruins, interpretive/information kiosks, and a parking/staging area. The rest of the Preserve will remain essentially natural, except for a proposed trail network. These trails will allow visitor dispersal throughout the Preserve, take advantage of the many interpretive opportunities, and provide for access into the Preserve from designated points around the perimeter.



Entry sign to preserve trail

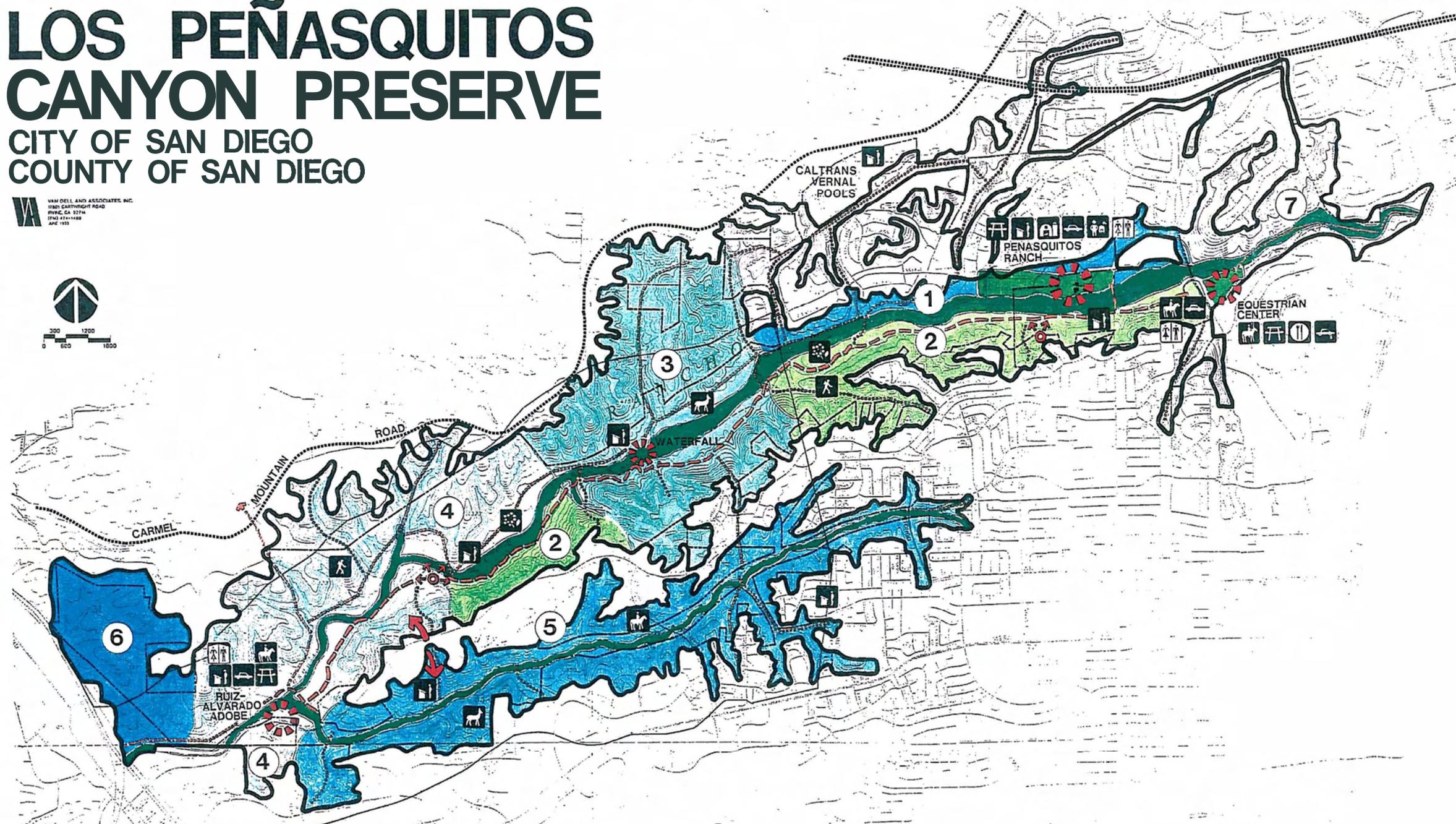


Ruiz-Alvarado Adobe site.

LOS PEÑASQUITOS CANYON PRESERVE

CITY OF SAN DIEGO
COUNTY OF SAN DIEGO

VAN DELL AND ASSOCIATES, INC.
1820 EASTWIGHT ROAD
SAN DIEGO, CA 92108
TEL: 619-441-1888
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MASTER PLAN

MANAGEMENT ZONES

- RIPARIAN CORRIDOR
- 1 VILLAGE VIEW
- 2 ENCLOSED CORRIDOR
- 3 CENTRAL PRESERVE
- 4 OPEN CORRIDOR
- 5 LOPEZ CANYON
- 6 FREEWAY ORIENTATION
- 7 ACCESS CORRIDOR

FACILITIES

- MAIN TRAIL (10'-12')
- EQUESTRIAN TRAIL (4'-8')
- HIKING TRAIL (2'-4')
- ROADWAY (PROPOSED)
- WILDLIFE CORRIDOR
- VISTA POINT
- SPECIAL FEATURE

BOUNDARIES

- OPEN SPACE
- PUBLIC PROPERTY
- COASTAL ZONE

ACTIVITIES

- HIKING
- EQUESTRIAN
- PICNIC
- WILDLIFE
- PARKING
- INTERPRETIVE S M
- RESTROOMS
- SNACK BAR
- NATURE STUDY
- MODEL RANCH
- RANGER STATION

MANAGEMENT ZONES

The Master Plan divides the Preserve into eight zones, each differing in its physical, visual, and environmental characteristics. Associated with each zone is a particular functional emphasis that contributes to the overall Preserve use pattern and open space system. These zones are introduced below.

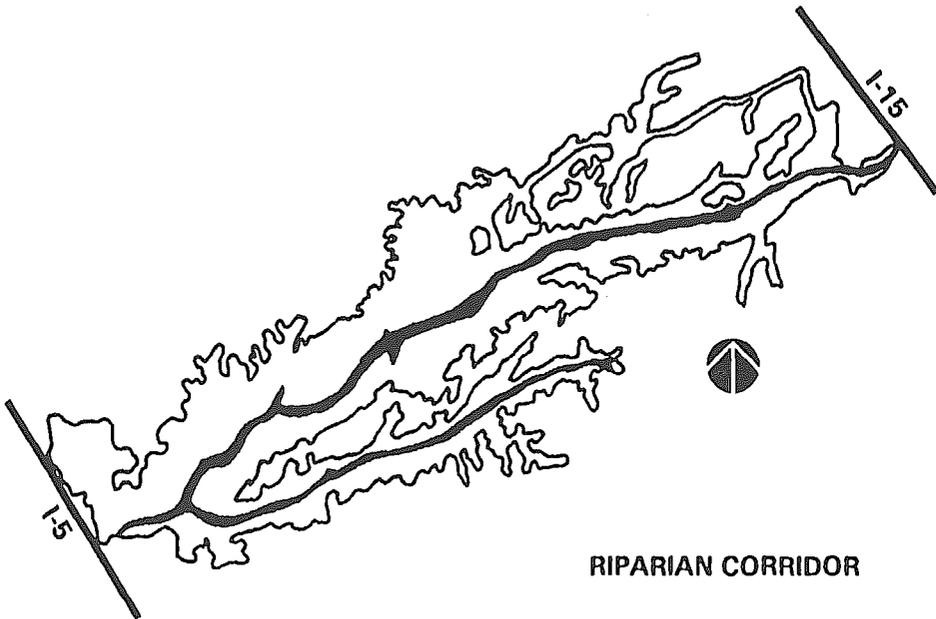
Riparian Corridor Zone

The Riparian Corridor Zone includes the watercourses and parts of the floodplains of both Los Penasquitos and Lopez Creeks. It is characterized by riparian vegetation, ranging from dense woodland to grassy marshes. These creeks form the backbone of the Preserve, running its entire length and comprising a major attraction for human users.

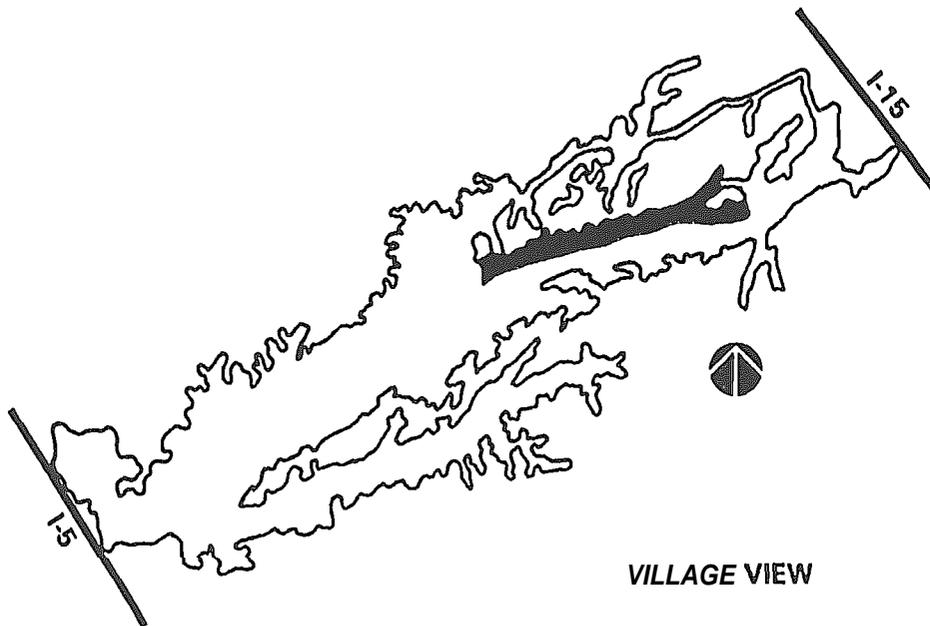
The key function of this zone, however, is environmental: in addition to its basic necessity as a drainageway, it is essential for wildlife, serving as a place for feeding and breeding and as a corridor for movement through the canyons. The protection and integrity of this resource is thus critical both ecologically and for long-term human enjoyment. Aside from a few designated crossing points, human use of the Riparian Corridor is restricted to dispersed nature observation and study.

Village View Zone

The Village View Zone is a flat to rolling grassy area north of Penasquitos Creek in the eastern half of the Preserve adjacent to the partially developed Penasquitos park Village residential area. The proximity and visibility of this development will create an ambience suitable for a higher degree of activity in this area of the Preserve. The Johnson - Taylor Adobe interpretive center and its outlying improvements, known collectively as Los Penasquitos Ranch House Area, are located here.



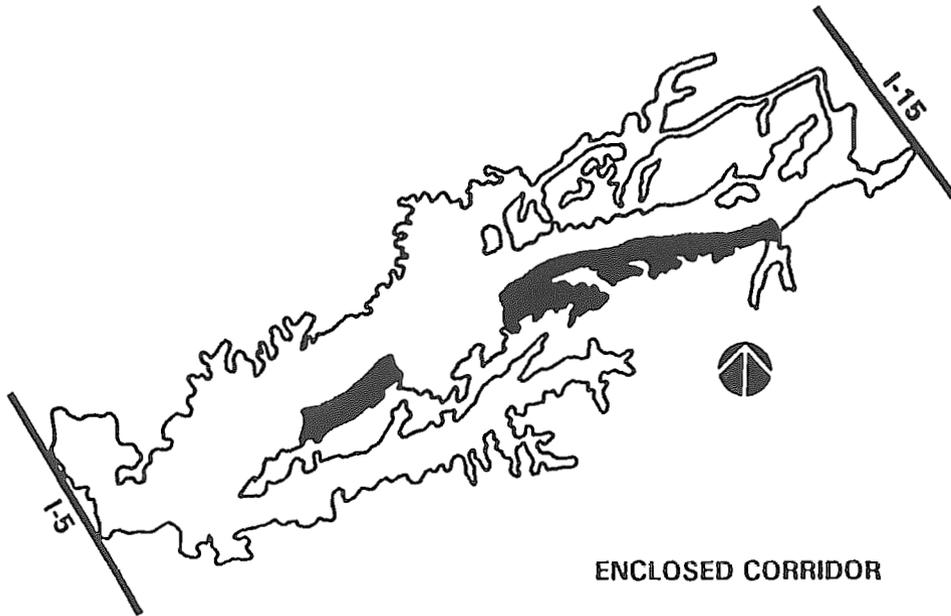
RIPARIAN CORRIDOR



VILLAGE VIEW

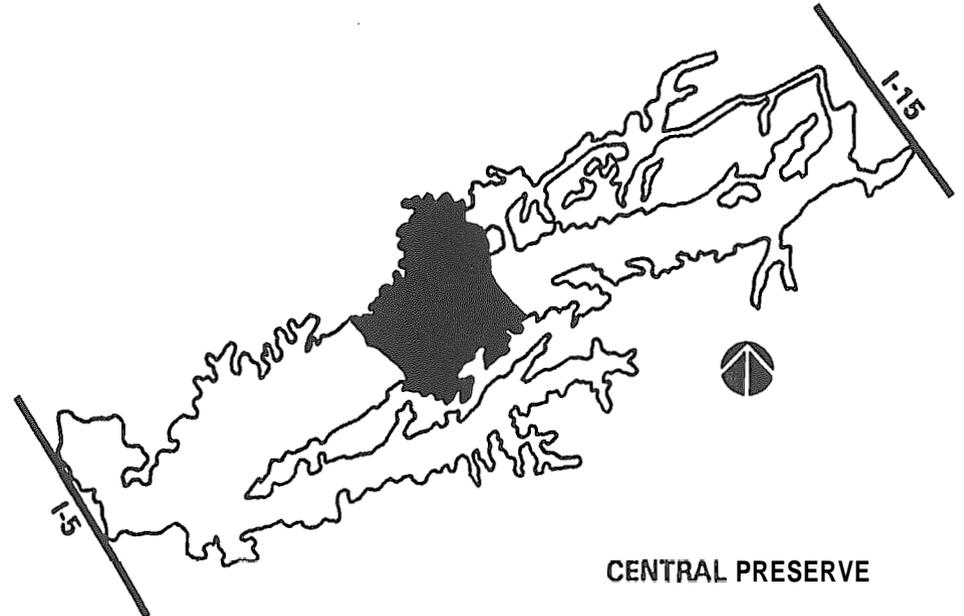
Enclosed Corridor Zone

The Enclosed Corridor Zone contains two separate but similar areas running along the south side of Penasquitos Creek. They are enclosed by the creek's riparian woodland on one side and by steep, brush-covered slopes on the other. Intermittent tree cover contributes to the overall sense of enclosure, creating an impression of isolation despite the proximity of residences at the top of the slope. The major use of this zone is as a trail corridor and transition area leading from the activity areas at either end of the Preserve. It also has good potential for interpretive sites due to the convergence here of diverse plant communities.



Central Preserve Zone

The Central Preserve Zone is the area of Los Penasquitos Canyon furthest removed from the park's activity centers. Here are found some of the Preserve's most valuable assets, including a rocky waterfall, expansive views onto untouched terrain, archaeological artifact sites and excellent wildlife habitats. This area is expected to be a major destination point for trail users. Reached via the increasingly primitive experience provided by the Enclosed Corridor zones, the key value of the Central Preserve lies in preserving it in as pristine a state as possible.



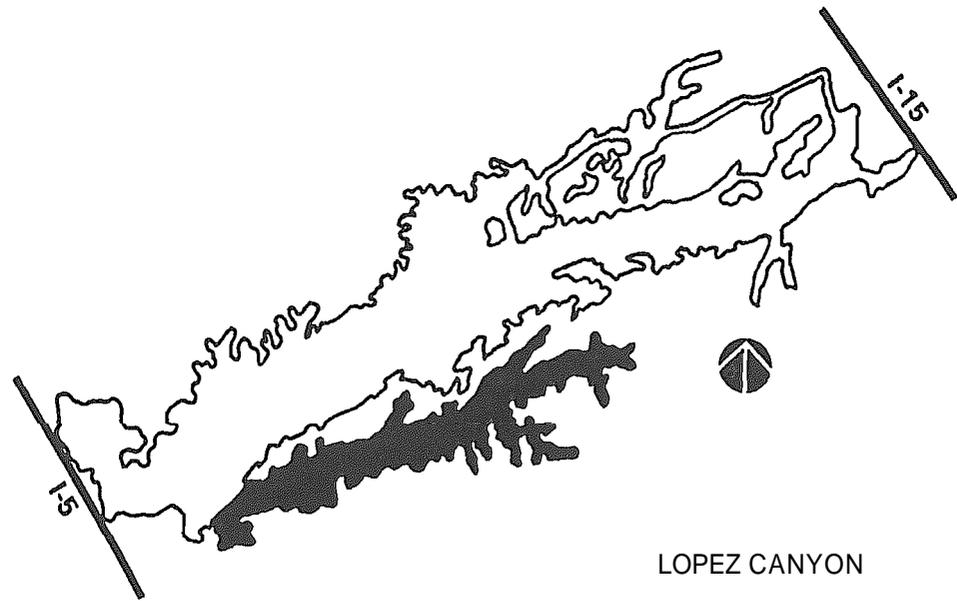
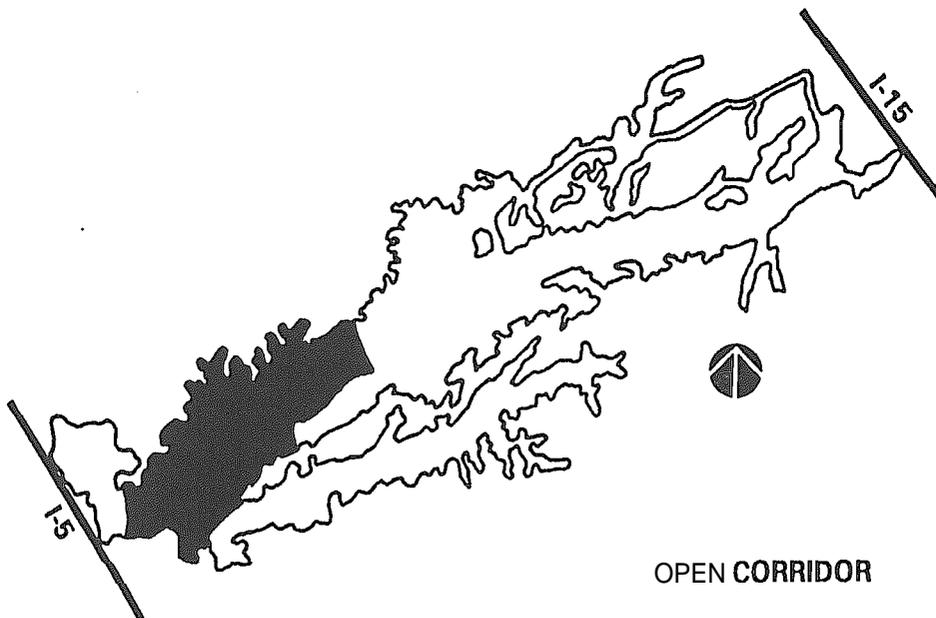
Open Corridor Zone

The Open Corridor Zone encompasses most of the grassy areas in the western portion of Los Penasquitos Canyon, which include the flat canyon bottom as well as the rolling to steep side slopes. The area is characterized by expansive views which will be impacted to varying degrees by the easterly extension of Sorrento Valley Boulevard and the industrial and residential developments existing or planned for adjacent properties. The Ruiz-Alvarado Adobe ruins and western Preserve access and activity areas are located here. The Open Corridor serves as an entrance and transition zone, both physically due to its parking and trail facilities, and visually due to views into the more remote areas of the Preserve.

Lopes Canyon Zone

Lopez Canyon is a major tributary to the Los Penasquitos watershed. It is characterized by steep side slopes and dense vegetation. The entire rim is planned for development. The most important function of Lopez Canyon is as a habitat for wildlife. The canyon's riparian corridor, dense and varied vegetation communities, and "off-the-beaten-path" status make it highly suitable for this purpose.

Camino Santa Fe crosses Lopez Canyon, but no public access to the park is proposed for this location and hiker/equestrian flow will be provided under the bridge. The easterly end of Lopez Canyon is crossed at grade by the existing Montongo Road.

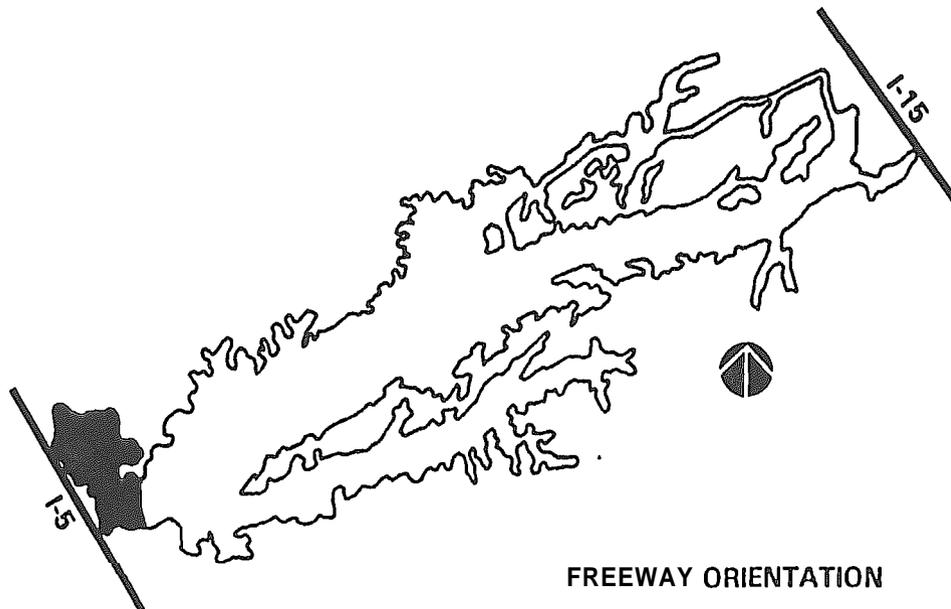


Freeway Orientation Zone

The Freeway Orientation Zone is a steep, grassy area at the extreme western end of the Preserve. The slopes face out over the 1-5 freeway and the industrial developments in Sorrento Valley. This area has limited value for the Preserve as a buffer zone between the intensely developed freeway area and the quiet interior of the park. Most of it is physically separated from the Preserve topographically.

The southern portion of the Freeway Orientation Zone, where it abuts Penasquitos Creek, is important as a potential corridor for wildlife and for connecting the Preserve's trail system downstream to Penasquitos Lagoon and Torrey Pines State Park.

A land trade has been proposed by Newland California, Inc. and approved by the voters that would remove most of this zone from public ownership in exchange for acreage adjacent to the Central Preserve zone. If this trade is consummated, most of the Freeway-Orientation Zone would become part of the Sorrento Hills industrial/commercial development. Additional discussion and maps of the proposed trade are included in the "Open Space System Boundary" section of this report.

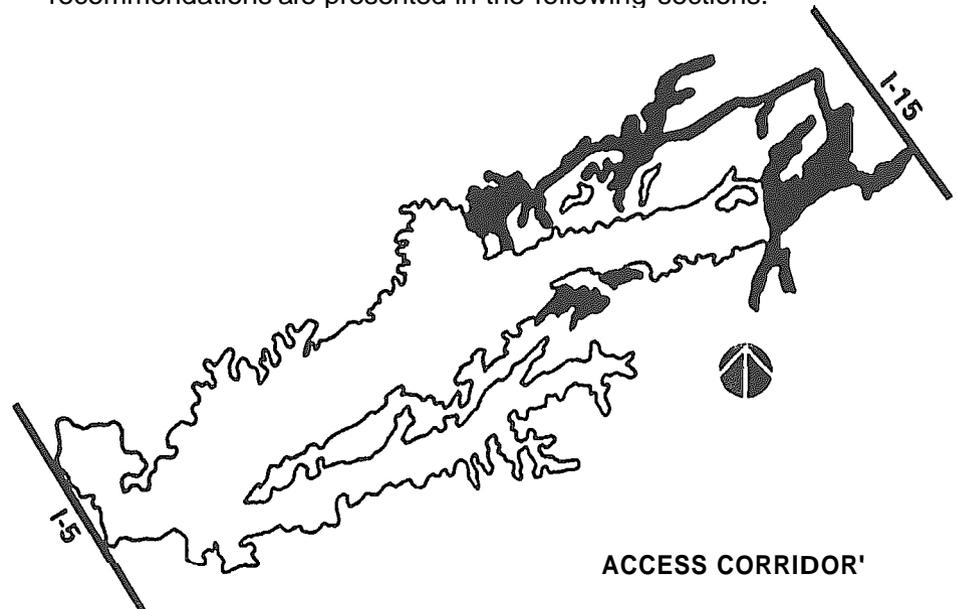


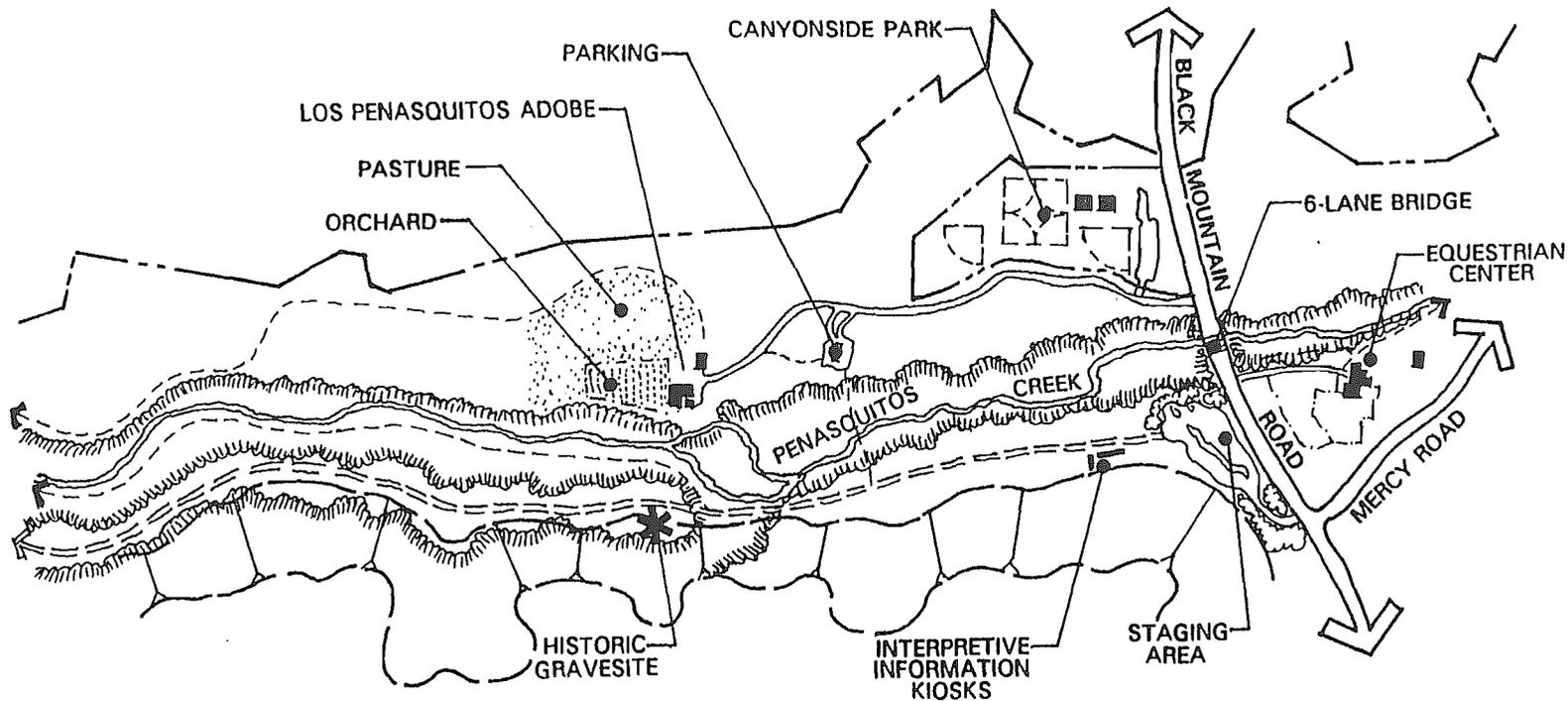
Access Corridors Zone

The Access Corridors Zone consists of a group of upper and lateral canyons and utility easements that are essentially fingers of open space reaching into adjacent developed areas. The canyons are characterized by steep side slopes and support a variety of vegetation types. They typically have an increasingly close visual relation to the developed areas as the ground elevation rises and are used as access routes to the main canyon and to regional trail systems. They are important ecologically for their watershed value and as refuges for wildlife where the vegetation is dense. Storm drains from rim top developments will concentrate water coming down into the canyon at certain locations with a potential negative impact on riparian habitat and Los Penasquitos Lagoon Natural Preserve. Restoration, revegetation, and sediment and pollutant control programs will be needed.

Zones Summary

The zones described above form the basis for organizing specific proposals for activities and facility development. The zones also have ramifications for the delineation and treatment of the Preserve's open space system boundary. Specific proposals and recommendations are presented in the following sections.





FACILITIES AND ACTIVITIES

LOS PENASQUITOS RANCH HOUSE AREA EAST END ACTIVITY COMPLEX

East End Activity Complex

The primary entry to Los Penasquitos Canyon Preserve will be from Black Mountain Road, a six-lane roadway, which runs north-south across the upper end of the main canyon between the Rancho Penasquitos and Mira Mesa communities. Black Mountain Road serves the equestrian center, a parking/staging area and the Los Penasquitos Ranch House Area facilities. As the equestrian center is located on the east side of Black Mountain Road, equestrians must cross under the roadway bridge by way of an equestrian trail to gain access to the main part of the Preserve and to the Preserve's east-end parking/stage area. Mercy Road provides a link between Black Mountain Road and the I-5 Freeway.

A popular visitor facility currently operating in the Preserve is the 16-acre equestrian center leased from the City of San Diego. This site, immediately east of Black Mountain Road, features the historic Mohnike Adobe, a snack bar and picnic area, restrooms and parking in addition to its horse boarding and trail staging facilities. Employees of the lessee also reside on the site.

The lessee has kept approximately 120 horses on-site, with the intent to rent 40 of these on a concession basis. Riding lessons, hayrides, summer day camps and horse shows have been among the activities provided. The renting of horses to the public is a desirable feature of the Preserve.

Trail users with their own horses or who prefer to visit the Preserve on foot are served by a staging area, completed by the County in 1982. This facility, which contains spaces for 50 vehicles, is located just west of Black Mountain Road and south of Penasquitos Creek. The staging area features rustic fencing, trash containers, and access control gates. Signs are provided to identify the Preserve, display maps and regulations, and orient the user. Interpretive and information kiosks will be erected just west of the staging area, along the main trail. A caretaker, currently residing in a trailer at the staging area, opens and closes the central access gates daily and provides minor maintenance.

North of the creek and adjacent to Black Mountain Road is Canyonside Community Park, which is a traditional community park not within the Preserve boundary. A two-lane paved access road from Black Mountain Road to the Los Penasquitos Ranch House Area runs along Canyonside Community Park's southern boundary. A buffer zone of landscape screening seeded with native grasses provides an additional sense of separation.

To the west of Canyonside Community Park is the Los Penasquitos Ranch House Area. The Ranch is centered around the 25-acre Los Penasquitos (Johnson - Taylor) Adobe historical site. The core of the adobe building was constructed in 1824-25 and was modified by subsequent owners. The Adobe, historically known as "Rancho Santa Maria de Los Penasquitos," has been restored by the County to serve as a major interpretive center. This restoration restored the Adobe to its 1880s appearance.

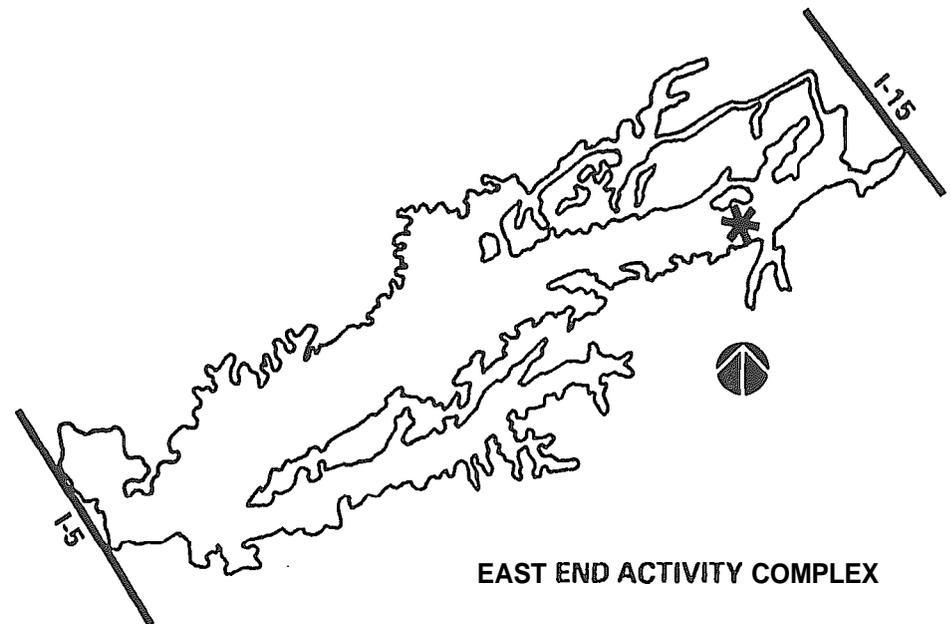
Included in the Johnson-Taylor Adobe are exhibits, a library and audiovisual room, offices, and restrooms. The courtyard of the Adobe has been rehabilitated and is being used for outdoor activities and fundraisers.

A caretaker currently resides in a trailer kept on the historic site. Under agreement with the County, the caretaker has access to the Adobe's outbuildings, including a barn and equipment shed. It is recommended that the caretaker arrangement continue for an indefinite period.

The interpretive center's activities include educational and interpretive programs, guided and self-guided tours of the Preserve, and miscellaneous fund-raising special events. A short interpretive walking trail may be developed to take advantage of the historic, archaeological, and natural resources in the immediate vicinity of the Adobe and possibly paved to allow barrier-free access. The interpretive center focuses on the Preserve's archaeological, historical, and environmental resources.

Another proposal for the Los Penasquitos Ranch House Area is the development of a model "working ranch" on the grounds surrounding the Adobe to recreate the 19th Century rancho atmosphere. A few horses and other farm animals would be kept on-site. The historic orchard and vineyard site west of the Adobe would be replanted. A reservoir could also be developed to serve as a watering hole and interpretive feature.

Other improvements by the County in the vicinity of the Adobe include paved parking, drop-off and turnaround areas, and a picnic area. Signage to identify the site, direct visitors, and post operating regulations and fire hazard warnings are planned. Bicycle racks and trash dumpsters are available near the Adobe.



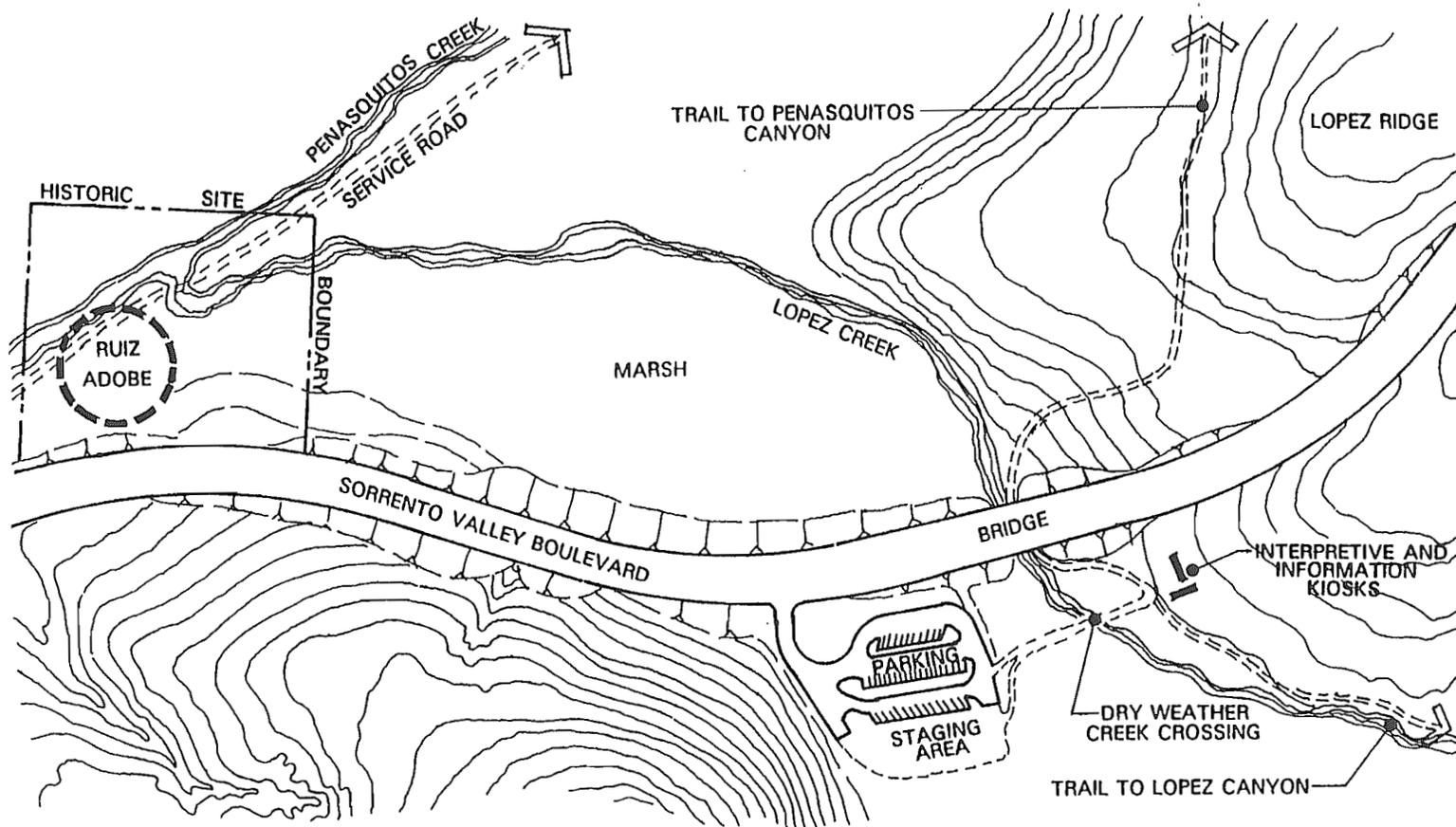
West End Activity Complex

Access to the west end of Los Penasquitos Canyon Preserve is from Sorrento Valley Boulevard near the east end of the Sorrento Valley at Industrial Park. This road extends through the Lopez Ridge Planned Residential Development site, cutting south of the Ruiz-Alvarado Adobe and bridging the marsh at the confluence of Los Penasquitos and Lopez Canyons.

Construction of a parking lot near the confluence of the canyons has allowed improved public access to this end of the Preserve. The extension of Sorrento Valley Boulevard is a four-lane arterial.

This access point is considered secondary to the major access from Black Mountain Road and provides less parking and fewer activities than are offered at the east end. Minimum parking lot capacity is 50 vehicles, including horse trailers. Access is provided from the parking lot across Lopez Creek and under the bridge for maintenance vehicles, mounted equestrians, and pedestrians (14-foot clearance). A key function of the west end complex is to provide an access point for trails leading into the Preserve. The trail will be located outside a sensitive marsh habitat area at the confluence of the Los Penasquitos and Lopez Canyons.

WEST END ACTIVITY COMPLEX



Featured at this end of the Preserve is the historic Ruiz-Alvarado Adobe, which currently consists of a few walls which are protected from rapid deterioration by an overhead structure and surrounding fence. A project to stabilize the remaining walls has been completed. Nearby are the remains of old outbuildings and a corral. Archaeological investigations may continue at the site, at a later date, with consideration being given to creating a replica of the Adobe near the parking area for use as an interpretive center. The original Ruiz-Alvarado Adobe site, known as "El Cuervo" (The Crow), is on the National Register of Historic Places.

Associated with the Adobe ruins may be a picnic area landscaped with native trees. An equestrian rest stop may also be provided and equipped with a watering trough and hitching posts. Interpretive and information kiosks will also be erected along the Preserve's west end entrance trail, adjacent to Lopez Creek and the bridge overpass. These kiosks will feature displays on historic archaeological and natural resources within the Preserve and within the immediate vicinity of the Adobe.

It is recommended that a security or ranger presence be provided to ensure a greater degree of protection for the site. A nearby fire hydrant, fencing, and a dumpster would better enable the performance of this task. It is expected that utilities will be available from the extended Sorrento Valley Boulevard, with sewer hookups possible to the existing Penasquitos trunk sewer.

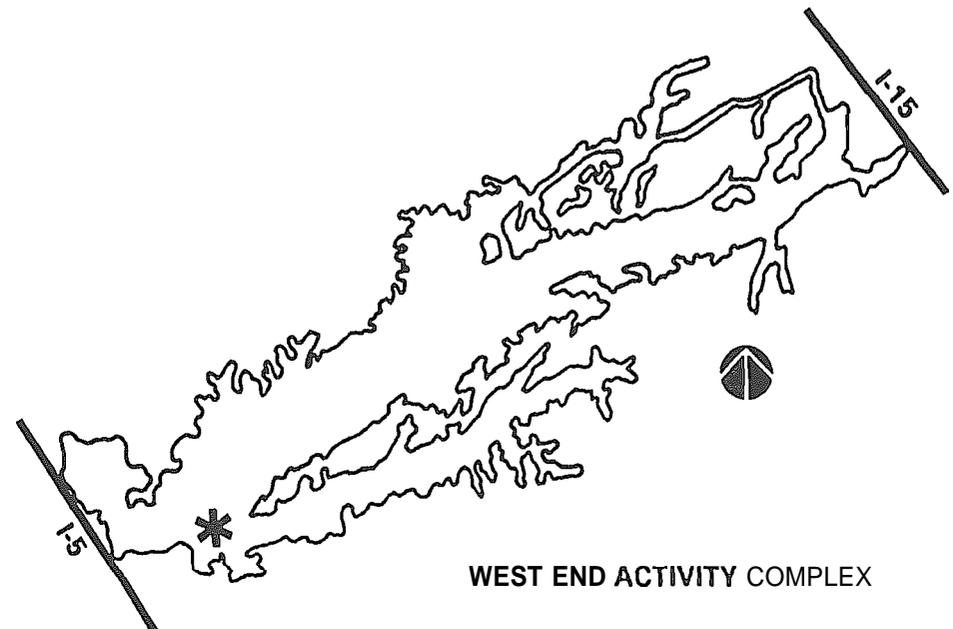
Other options for visitor information and increased security in the western preserve could include, but not be limited to, a ranger office in the Sorrento Valley Boulevard industrial complex or the purchase of land in the western Lopez Ridge residential development for a ranger/office residence.

Hang-gliding training on the north side of Lopez Ridge is discussed in more detail in the operations section of this report. Consideration could be given to adding fishing in the Canyon for children under the age of 16 years without a license. This could require restocking of streams and ponds as indicated.

interior Trails and Other Facilities

User facilities provided in the interior of the Preserve are primarily trails. An informal network of trails and utility service roads already exists, many of them suffering from recurrent erosion problems. Others cross environmentally sensitive areas and are recommended for relocation.

The proposed trail system as shown on the Master Plan map is organized into a hierarchy based on width and functional emphasis. The main trail/service road is graded 10 to 12 feet wide and provides access for service and emergency vehicles as well as for bicyclists, hikers, and equestrians. Equestrian trails will be 4 to 8 feet wide to allow for horses passing or riding abreast. Hiking trails will be 2 to 4 feet wide. Both equestrian and hiking trails can be used interchangeably by pedestrians and horses. Segregated trails should be provided intermittently to minimize the negative impacts of sharing trails with hikers, horses, and vehicles. Wider trails should be provided on the less steep or more popular routes. Bicyclists should be restricted to the main roads/trails. In emergencies, service vehicles can utilize any trail available.

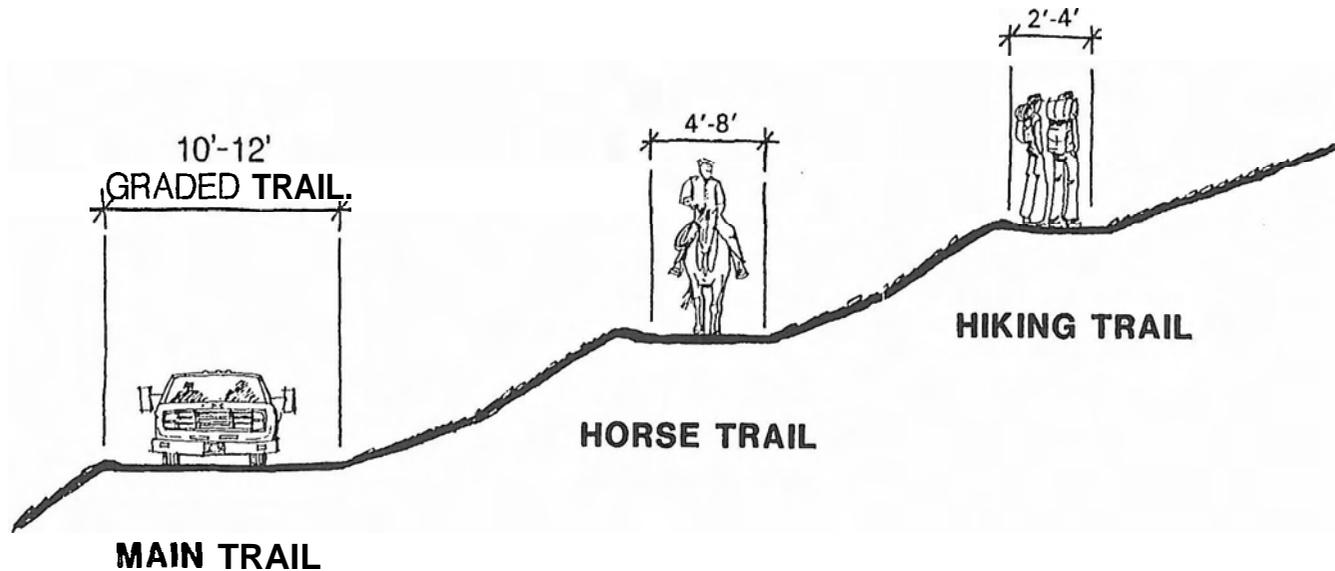


WEST END ACTIVITY COMPLEX

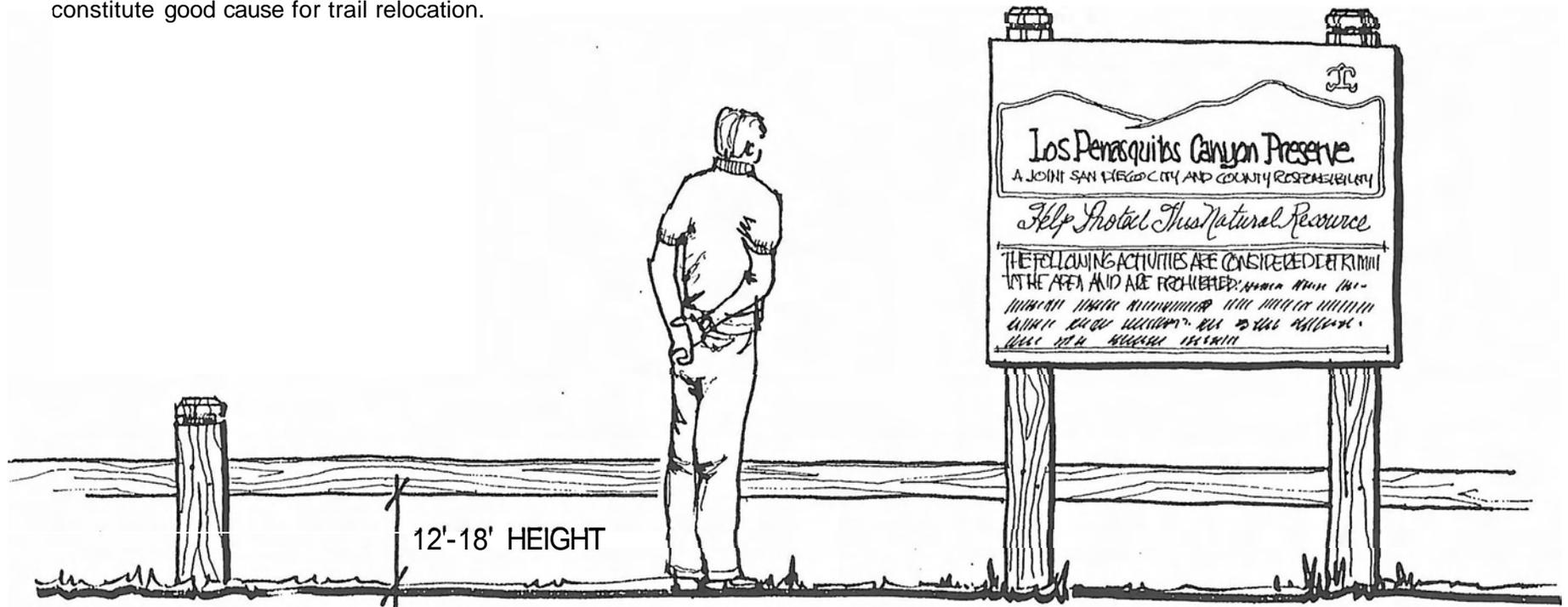
The Master Plan map does not show the entire trail network. It is intended to show the basic skeleton of the trail system in concept only, with many less important trails not included. Portions of certain existing trails have been deleted intentionally from the Plan because they cross environmentally sensitive areas. A main trail (10 feet wide) should be designated on the north side of Pensaquitos Creek in portions where appropriate to provide for loop circulation. Strategic environmentally sensitive crossings of the creek should be provided to link the main trails.

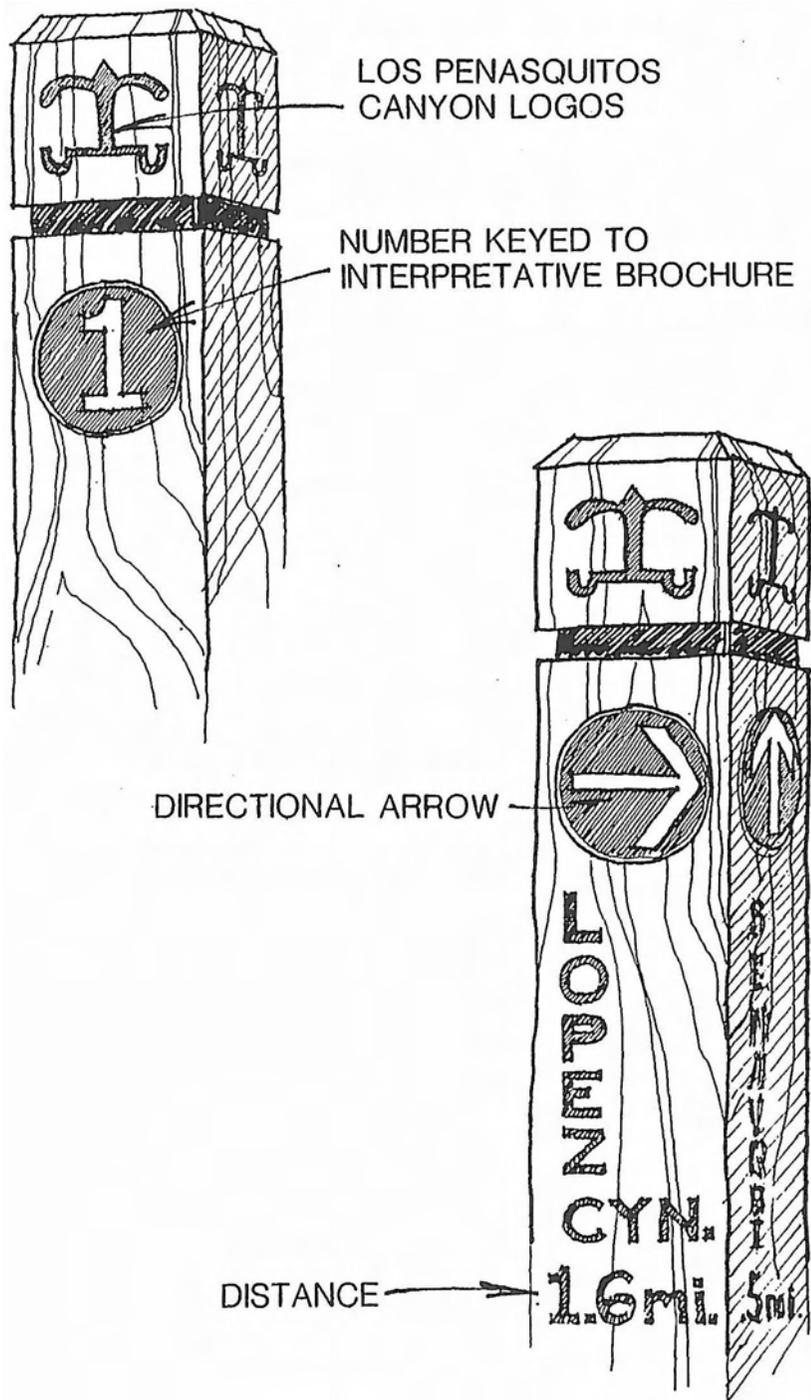
Interpretive and information kiosks will also be erected along the Preserve's west end entrance trail, adjacent to Lopez Creek and the bridge overpass. These kiosks will feature displays on historic archaeological and natural resources within the Preserve and within immediate vicinity of the Adobe. Direction and distance signs should be provided at trailheads and key intersections throughout the trail system. Trailheads around the perimeter of the Preserve will be marked with low-key identification signs that also post regulations and prohibited uses. These may be combined with off-road vehicle barriers or service vehicle access gates where applicable.

Johnson-Taylor Adobe and Orchard, circa 1890. Photo courtesy of San Diego Historical Society, Tlcor Collection



Rehabilitation of existing trails as well as construction of new trails should follow environmentally conscientious design criteria to reduce existing or potential impacts. When trail improvements have the potential for creating biological impacts, these improvements will be monitored by a biologist. In general, existing roads and trails should be utilized as much as possible. Where an existing trail crosses an area identified in the environmental analysis as particularly sensitive, the trail should be relocated and the old trail eliminated. This may include physical removal of the trail in certain critical areas such as the marsh. Other tactics to discourage use of certain trails include signage and omission from trail guides. Endangered plant species, key wildlife breeding habitats, and archaeological sites with surface artifacts all constitute good cause for trail relocation.





The number of creek crossings should be minimized. Trails should pass only intermittently through the riparian vegetation corridor, in order to prevent continuous disruption of wildlife movement into and out of this key habitat. Trails should wind between different plant communities to provide a high level of interest for the user while minimizing the visual impact that may result from a trail running across the middle of an open area.

Future development around the Preserve will displace many trails that are currently used as routes into the canyons. Where possible, these accesses should be retained by tying them into proposed local parks or community open space systems. Well-planned trails should also be constructed where informal routes would otherwise be blazed, such as near school sites or where residential neighborhood roads front on the Preserve. Construction of trails will require environmental review, to localize the impacts and permit the installation of erosion control measures. Where trails cross steep or densely vegetated areas, manual construction methods should be particularly emphasized. Developer cooperation in the construction of these access trails should be encouraged. An environmental education program should be directed towards the neighboring communities to discourage careless trail use.

Erosion has been an ongoing problem on the existing trails. Rehabilitation of existing trails and new trails to be constructed should follow guidelines to reduce this impact. Whenever possible, steep areas should be avoided when grading for trails. The basic principle of erosion control on trails is to avoid the concentration of runoff. Wherever possible, trails should be constructed parallel to the slope contours, with the cross-slope toward the downhill side of the trail. Where the trail must go directly down the slope, a course of large stones or a log should be embedded perpendicular to the trail. This treatment may have to be repeated every 10 to 25 feet if erosion along the length of the trail is severe. Where natural swales must be crossed, a course of large stones should be embedded along the downhill edge of the trail. Pipe culverts with riprap on the downstream side should be substituted where water concentrates.

Specific trails and allied facilities are discussed below, according to the management zone in which they occur. The proposed trail system should be regarded as conceptual in nature, with exact locations to be determined in the field.

Village View and Enclosed Corridor Zones

The trail system in these zones link together the various active-use areas at the east end of the Preserve. A localized network of segregated hiker and equestrian trails, featuring nearby interpretive sites, will serve users who are staying only for short periods or who do not wish to venture further down the canyon. A low-water crossing where the main trail fords Penasquitos Creek will allow the staging area to be used for overflow parking for special Los Penasquitos Ranch House Area activities. Fast-growing native trees will be planted in order to screen the staging area and the main trail from the Mira Mesa residences at the top of the slope to the south. Another trail will climb to a nearby vista point and up into Mira Mesa.

Central Preserve Zone

This zone is the site of some of the Preserve's most valuable environmental assets. Development of an interpretive network in the vicinity of the waterfall will take advantage of prehistoric grinding mortars and stone rooms as well as special geological and biological features of the area. Well-defined trails here will discourage the casual, but ecologically damaging, wanderings of hikers that may result from the waterfall's function as a destination and resting place. Trails in this area should take advantage of scenic potential but should be located to avoid views that may be impacted by existing or future developments. A horse tethering area has been installed near the waterfall in an area removed from the interpretive sites and far enough from the creek to prevent negative impacts on water quality and vegetation. Prior to any construction in this area, plans will be prepared and additional environmental studies will be completed.

The existing main trail upstream of the waterfall and downstream of the electrical transmission lines is recommended to be substantially rerouted to skirt a particularly valuable bird breeding habitat. Another existing trail on the north side of the creek passes through an area populated by endangered plant species. This trail should be removed, and dispersed wandering in the area should be discouraged. Equestrians arriving at the waterfall via the access trail in the side canyon to the north will be directed by signs to use the crossing downstream.



Rushing waters of Penasquitos Creek, a year-round stream.

Open Corridor Zone

Trails through this zone will provide links to the proposed El Camino Real Equestrian Trail and to the regional trail proposed to reach Penasquitos Lagoon and Torrey Pines State Park.

Interpretive resources in this zone include a prehistoric grinding mortars site and a panoramic vista point located on a knoll rising from the canyon bottom. Development of this vista point will be monitored by a biologist.

Lopez Canyon Zone

In 1983, a trunk sewer was installed in the bottom of Lopez Canyon. At Camino Santa Fe, the sewer service road goes under a bridge spanning Lopez Canyon. At Montongo Street, which is at-grade, service access will be provided to the Preserve. Construction of a gated security fence along the right-of-way lines is recommended to reduce unauthorized vehicle entry from Montongo Street.

Lopez Canyon's function as a wildlife habitat will be supported by a wildlife corridor that will allow passage of animals over Lopez Ridge to Los Penasquitos Canyon. The corridor is being provided in conjunction with the Lopez Ridge Planned Residential Development. The wildlife corridor features a culvert under Sorrento Valley Boulevard with the routes into and out of the culverts protected from lights and fenced to keep out human intruders. Additional needs and opportunities for wildlife corridors should be evaluated, both across Lopez Ridge and around the perimeter of the Preserve.



Equestrian activity is a popular Preserve use.

Access Corridors

Various trails will be provided for access from adjacent developments into the Preserve. An equestrian trail will be provided through upper Los Penasquitos Canyon that will ultimately link to the proposed San Vicente equestrian trail a few miles to the east. Additional trail links to the proposed Carmel Valley trail system and to Black Mountain Park should also be developed.

Interpretive trail markers are proposed for two vernal pool sites northwest of Penasquitos Park View Estates. The vernal pool sites are linked into the Preserve system by trails running through the existing SDG&E easements north of the estates site. When transmission lines are constructed in this easement in the future, the utility service roads may double for trail use.

User Facilities Summary

The User Capacity Chart summarizes the facilities provided and users theoretically served at one time when the Preserve is fully developed. Determination of user number is based on average



Erosion damage at Penasquitos Creek crossing.

design standards and is, at best, approximate and subject to qualifications. For example, the main trail in the canyon will be used interchangeably by hikers and equestrians, so its eight miles are counted for both groups. Picnicking is expected to occur on an informal basis throughout the Preserve, but only the number of picnickers using developed facilities can be realistically estimated.

The number of interpretive center visitors is not specified, as these users may arrive singly, or in large groups for special events. The number of users served by available parking may be greatly expanded for special events by utilization of trailer spaces for bus parking and by overflow into the 151 parking spaces available at Canyonside Community Park. Parking at the equestrian center is informal, so both capacity and the proportion of cars to trailers may vary. In addition, many users may arrive on foot, on bicycles, or by public transit.

When fully developed, Los Penasquitos will have the capacity to meet approximately 63% of the 1995 peak period demand for hiking for residents within the local service radius of the Preserve. Approximately 48% of the total demand for equestrian trails will be met, and 10% of the demand for picnicking will be provided by developed facilities. These figures are based on an updated analysis of recreation demand and design standards used in previous studies of Los Penasquitos and the County of San Diego as a whole. It should be stressed, however, that Los Penasquitos is not a local park but effectively a regional resource, with its service radius including the entire County.

It should be noted that theoretical capacity is not equivalent to actual usage. By 1992, peak passive use of the Preserve averaged 200 people per weekend day, of which 50% to 62% were bicyclists. Until 1993, bicycling has been technically an unauthorized use. However, with the adoption of the new Municipal Code 63.01 02(b)(19), bicycle use is allowed, but regulated, on City-owned park land,

USER CAPACITY"

<u>Activity</u>	<u>Facility</u>	<u>User/Unit Activity</u>	<u>User # Capacity</u>
<u>Passive Activities</u>			
Hiking (all trail types)	25.4 Miles of Trail	15 Hikers/Mile	381
Horseback Riding	14.6 Miles of Trail	20 Equestrians/Mile	292
Picnicking (at developed sites)	21 Tables	4 People/Table	<u>84</u>
Total Users at One Time			757
<u>Day Use Parking</u>			
Penasquitos Ranch House Area	48 Car Spaces	3.0 People/Car	144
East End Staging Area	25 Car Spaces	3.0 People/Car	75
	25 Trailer Spaces	1.5 Equestrians/Trailer	37
Equestrian Center	50 Car Spaces	3.0 People/Car	150
	20 Trailer Spaces	1.5 Equestrians/Trailer	30
West End Staging Area	44 Car Spaces	3.0 People/Car	132
	<u>6 Trailer Spaces</u>	1.5 Equestrians/Trailer	9
Total	218 Spaces		<u>577 Users</u> Arriving by Vehicle

IVOTE: Bicycling has increased within the Preserve. Approximate capacity would be 90 bicyclists at one time, assuming 6.0 miles of main trail and 15 bicyclists per mile.

"Excludes interpretive center visitors, special events for which overflow parking is made available, and large groups arriving by bus.

OPEN SPACE SYSTEM BOUNDARY

An open space boundary, containing the proposed Preserve area, was outlined by the documents accompanying the Interim Plan and approved by the City Council and Board of Supervisors in 1979. The location of the boundary reflected existing property lines, community plans, tentative tract maps, and open space easements existing at the time. This original open space boundary was adjusted in certain locations at the start of the master plan study to reflect approvals of tract and record maps that occurred since 1979.

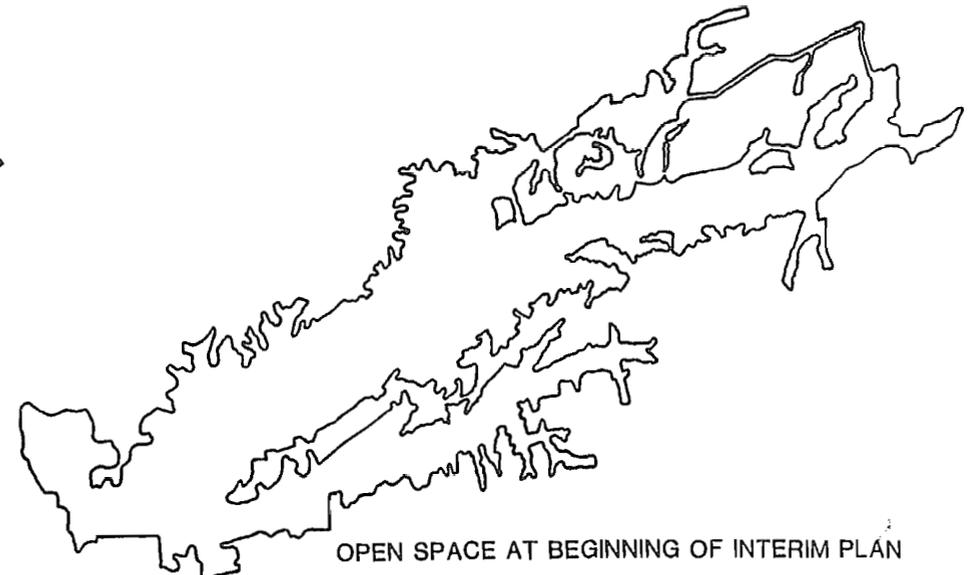
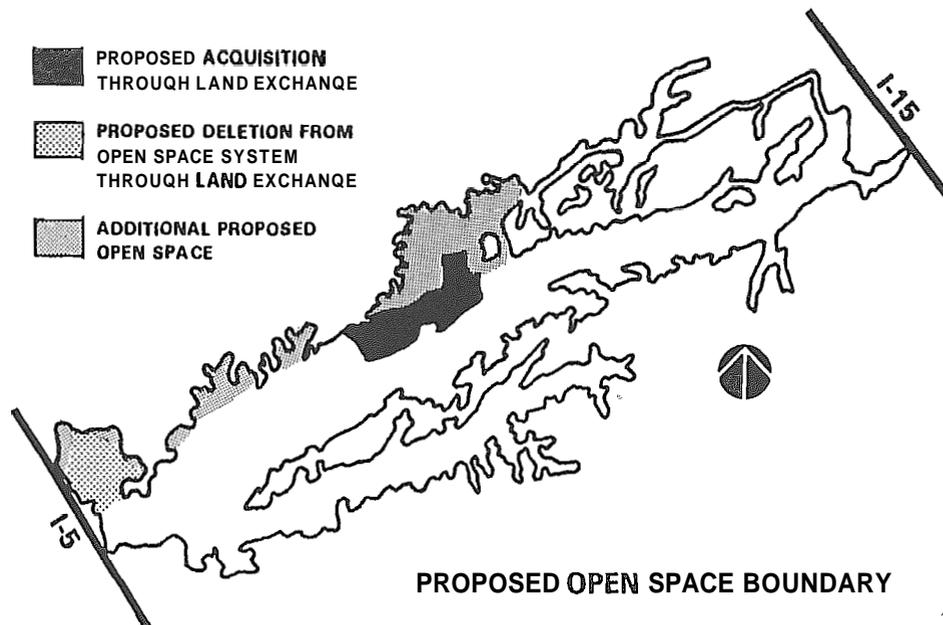
Additional revisions are now proposed because the rationale behind the location of the original open space boundary was inconsistent and varied around the periphery of the Preserve. In some areas it corresponded to the property line of the publicly-owned land that formed the core of the Preserve. In others it represented the edge of an existing or approved adjacent development. In certain undeveloped areas, the line was drawn at the canyon's rim. Some development proposals have been approved since 1979 that encroach into the original open space system, thus bringing the intent of the approved boundary into question.

Reappraisal of this boundary was one of the objectives of this Master Plan. The reevaluation was based on developing a clear definition of the boundary's significance and a consistent, applicable rationale to govern its location and character.

In an ideal sense, the open space boundary should be simply defined as enclosing all areas that ultimately will be included in the Preserve's open space system. These areas should either be under public ownership or be protected by open space or other related easements that would prevent most kinds of development. The map below shows the additional proposed areas, compared to the Interim Plan.

In reality, this definition is inadequate because development around the Preserve is still incomplete, and most of the adjacent open space is in private ownership. Where the open space boundary is not now fixed by adjacent developments, it should be defined instead by policy criteria that will in the future guide its ultimate location and character.

Where development is existing or tract maps have been approved or recorded, the open space boundary is fixed and revisions are not warranted. Where final development plans have not been approved or proposed, the proposed open space boundary should be recognized as inexact. As developments are proposed, the



boundary will be subject to evolution through all phases of the planning process, within the context of applicable policies. This evolution will continue until all developments around the Preserve are completed. The participation of adjacent landowners is thus a necessary part of the implementation process for the open space system. Their cooperation in seeking mutually acceptable solutions to the potential conflicts between preservation and development should be encouraged.

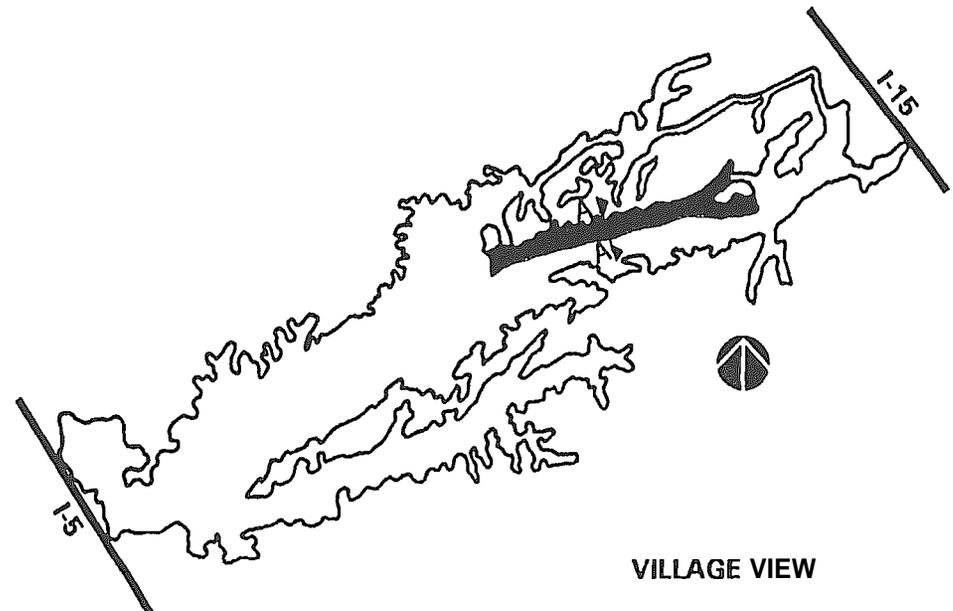
From the public standpoint, future evolution of the open space boundary will be guided by policy provisions. Influence and control over the open space boundary is possible through several avenues. This Master Plan, when approved, will join the Progress Guide and General Plan, Community Plans, Local Coastal Program, and other documents as part of the review process for policy consistency to which all draft community plans and subdivision proposals are subject. The Park-Sensitive Development Criteria are also part of this process. Specific legal requirements for implementing policy guidelines are provided by the Resource Protection Ordinance, city zoning ordinances, including the Hillside Review, Floodway, Floodplain Fringe and proposed Sensitive Coastal Resource overlay zones. The Planned Residential Development (PRD), Planned Industrial Development (PID), Planned Commercial Development (PCD), and Specific Plan processes provide for site-specific negotiations and tradeoffs which may be utilized to acquire or protect certain areas especially desirable for the Preserve through dedication in fee or open space easements. Other options are purchases by the County or City, or trading for other publicly owned parcels. Future development proposals around the Preserve will be evaluated on an individual basis in light of these options and requirements.

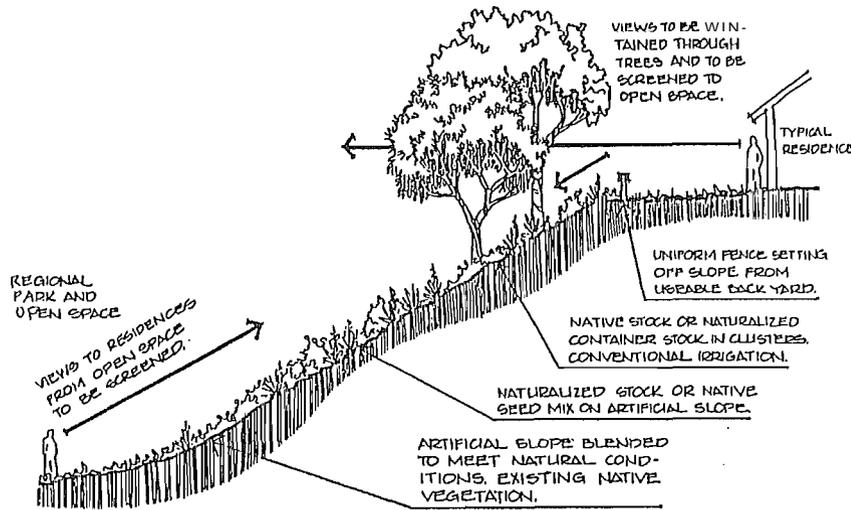
This Master Plan proposes a revised open space boundary that reflects a consistent application of approved and recommended policy goals and criteria against which future development proposals can be evaluated. The proposed location and treatment of the boundary would consider the activities and facilities within the Preserve, their physical relationship to adjacent development sites, and the type and characteristics of the proposed private land use.

The management zones introduced in the previous section of this report, which were defined according to physical and functional characteristics, form the basis for the recommended revisions in the open space system boundary. The approved and recommended policies and plans which affect the boundary and its character are discussed below by zone, along with a description of the proposed revisions.

Village View Zone

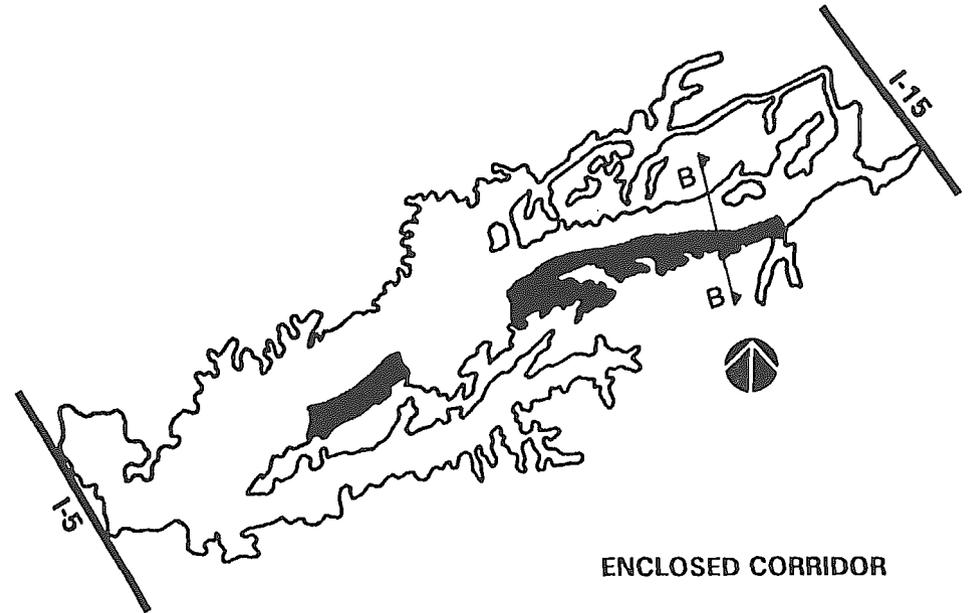
The open space boundary in this high-activity zone is defined by completed tracts for the Park Village Planned Residential Development. The area between the proposed development edge and the current public property boundary will be dedicated to the City upon recordation of the maps. The character of the boundary is controlled by community design compatibility criteria set forth in the Rancho Penasquitos Community Plan. Installation of landscaping that blends into the native plant community and construction of a uniform fence along the length of the Park Village development are the main features of the transition area.





SECTION A-A

PENASQUITOS CANYON TRANSITION
RANCHO PENASQUITOS COMMUNITY PLAN



ENCLOSED CORRIDOR

Enclosed Corridor Zone

Both of the two Enclosed Corridor Zones border the Mira Mesa community. The open space boundary along the eastern portion of this zone corresponds closely to the existing public property boundary and is well defined by a border of existing houses. These houses fall within the Mira Mesa Community Plan area where specific development criteria are included within the Community Plan to address the visibility of structures and fill slopes from the Preserve. As an additional measure, in order to reduce the visual impact of the existing buildings along the rim, it is recommended that trees be planted at strategic locations along the main trail in this zone. This step will reinforce the enclosed, isolated character of the zone and promote its value as a transition space into the canyon's interior. In addition, the City's Park Sensitive Development Criteria should be applied to all undeveloped property along the rim next to this zone.

The most specific planning documents affecting the westerly portion of the Enclosed Corridor Zone are the Lopez Ridge PRD approved tentative tract maps. These maps clearly define the open space boundary and provide for open space easements on the land between the development edge and the existing public property boundary. This development falls within the Coastal Zone. In response to the Coastal Commission conditions of approval for the PRD, a wildlife corridor has been provided across the Ridge, as shown in the Master Plan exhibit. The area is also within the Mira Mesa Community Plan boundary for which specific development criteria are outlined in the Community Plan to govern grading issues and the visibility of structures and fill slopes, which minimize impacts on the Preserve. The criteria generally correspond to the City's Park Sensitive Development Criteria, which are also applicable to most of the development boundary in this area. The function of this park zone is comparable to that of the eastern portion of the Enclosed Corridor, so supplemental landscape screening is also recommended along the main trail where needed to reinforce the isolated quality of the trail.

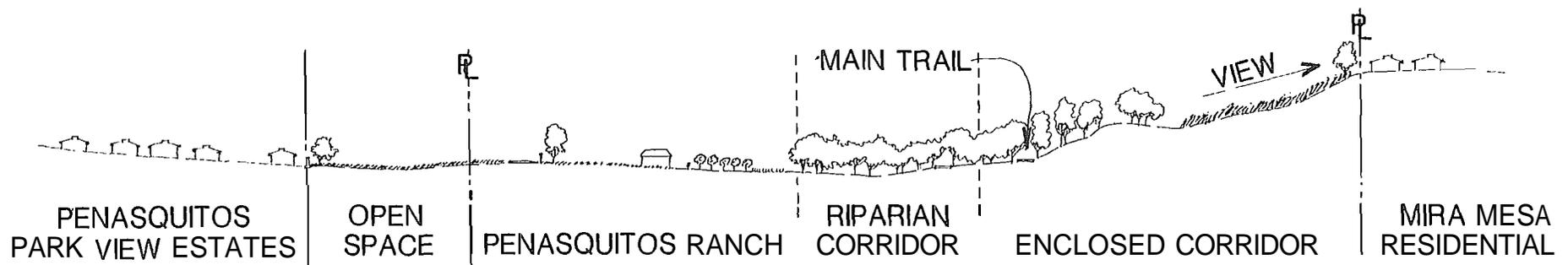
Central Preserve Zone

This zone has been identified as an area where careful preservation of scenic and ecological values is critical to its function. The ultimate open space boundary of this zone is currently the least precisely defined of any area of the Preserve. The Central Preserve lies partly within the Coastal Zone and is affected by the Mira Mesa Community Plan and the North City Future Urbanizing Area Framework Plan.

The southern edge of the zone fronts on an area of Mira Mesa destined, according to the Community Plan, for residential use. Some of the side canyons to the east are affected by the Fieldstone project's approved tentative tract maps, which provide for dedication of the canyon bottoms to the City and open space easements on the canyon side slopes. The Central Preserve's southern edge falls within the Mira Mesa Community Plan area where development adjacent to the Preserve must follow specific development criteria outlined within the Community Plan. The Park Sensitive Development Criteria are also applicable to most of this area. Another key influence is that of the Coastal zone, which includes the entire Lopez Ridge area as well as most of the land designated as the Central Preserve Zone.

The open space boundary on the northern edge of the Central Preserve Zone was defined in the Interim Plan as the public property boundary, with the exception that certain additional areas, among them a piece designated for Priority 5 acquisition, were also included. The Priority 5 parcel (see page 43) is part of the land trade negotiation with Newland California, Inc. The City has adopted the North City Future Urbanizing Area Framework Plan for property adjacent to the north of the Central Preserve Zone, which provides guiding principles for development of this area, including the preservation of open space and the protection of sensitive natural resources.

The special value of the Central Preserve Zone lies in its expansive, untouched vistas, its high-quality wildlife habitat and its unique interpretive resources. Policy statements relative to protecting the environmental resources within this zone are included in specific language of the North City Local Coastal Program-Land Use Plan: The canyon bottoms of Los Penasquitos and Lopez Canyons, with their riparian habitat, should remain as open space. Similar habitat areas in side canyons also should be protected. 'Buffer zones' sufficient to protect these environmentally sensitive habitat areas



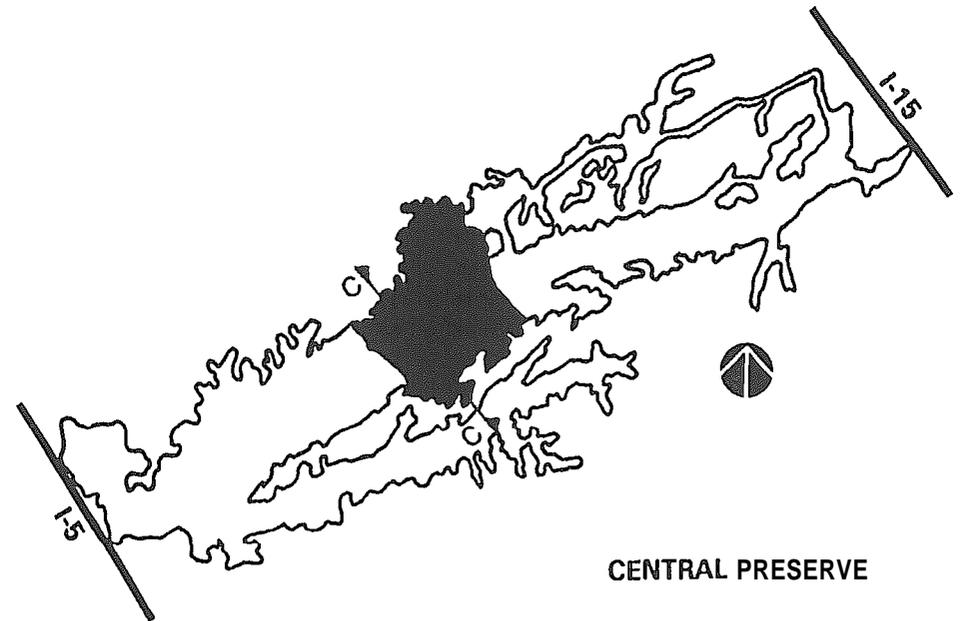
SECTION B-B

should be established for development adjacent to these areas. The standard for evaluating development is the extent to which the proposed development maintains the functional capacity of such areas. The criteria for establishing buffer zones includes a determination of: a) the biological significance of adjacent lands; b) the sensitivity of species to disturbance; c) the susceptibility of the parcels to erosion; and d) the type, scale, and function of adjacent urban development proposed.

The buffer zones established for this area should recognize the presence of sensitive and endangered plant species as well as archaeological sites on the slopes north of the waterfall. The value of lateral canyons as refuges for wildlife during periods of human activity in the main canyon should also be considered, as well as their watershed functions.

Protection of the Central Preserve's scenic resources can be accomplished in part by the application of the Park Sensitive Development Criteria as a minimal standard for all lands bordering this portion of the Preserve open space system. In order to strengthen this policy, it is recommended that no development or fill whatsoever should be visible from the key use area around the waterfall. In addition, no development should be visible from the main trails in the bottom of Los Penasquitos Canyon. It is recognized that views from the trails are largely determined by their location. Control of the viewshed should, therefore, be an important factor in siting and design of the trail system itself to avoid undue limitations on adjacent sites that are otherwise developable. Exceptions to the policy should be made where developments are already approved, but their potential visibility should be mitigated by sensitive trail design and landscape screening where appropriate,

It is proposed that the open space boundary for the Central Preserve be revised to reflect the approved and recommended policies described above. The southern boundary should remain basically unchanged from that of the Interim Plan, although an additional wildlife corridor should be provided across Lopez Ridge. This is reflected in an update to the Mira Mesa Community Plan.



The northern boundary has been substantially redrawn to approximate the visibility and buffer zone criteria described above. Essentially, the rim of the main and side canyons becomes the open space boundary. This proposed revision would bring approximately 400 additional acres into the Preserve open space system compared to the boundary defined in the Interim Plan. Acquisition of the bulk of this area is currently being negotiated as part of a land trade with Newland, California, Inc. Ownership of the rest of the area is currently split among the City and several private parties, so that if acquisition of these lands for the Preserve through the development process is not possible, then additional purchase by the City or County should be considered. Implementation of the boundary will be contingent upon a coordinated effort that includes landowner participation in the boundary evolution process.

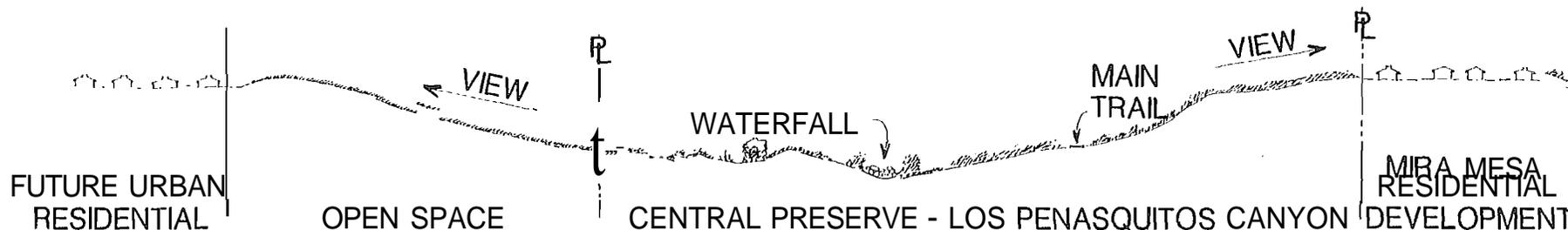
A large percentage of the new area brought into the proposed open space system has a slope greater than 25% and should thus have good potential for protection by future open space easements or dedication through the hillside review process. The North City Future Urbanizing Area Framework Plan requires sufficient setbacks and low-profile buildings and landscaping to prevent impacts on the viewshed. A detailed study identifying areas to be preserved and controlling the treatment of the developed edge is also included within the Framework Plan.

The environmental reviews associated with future specific development proposals should evaluate visibility and the extent of the environmental buffer zone. It is recommended that this area be developed using the PRD process to allow maximum potential for tradeoffs beneficial to the Preserve.

Open Corridor Zone

The open space boundary along the southern edge of the Open Corridor is defined by approved tentative maps and projects under construction for the Lopez Ridge PRD. These maps provide for open space easements on the slopes between the proposed developed edge and the existing public property boundary. The edge of the zone to the south of the Ruiz Adobe is based on the Mira Mesa Community Plan.

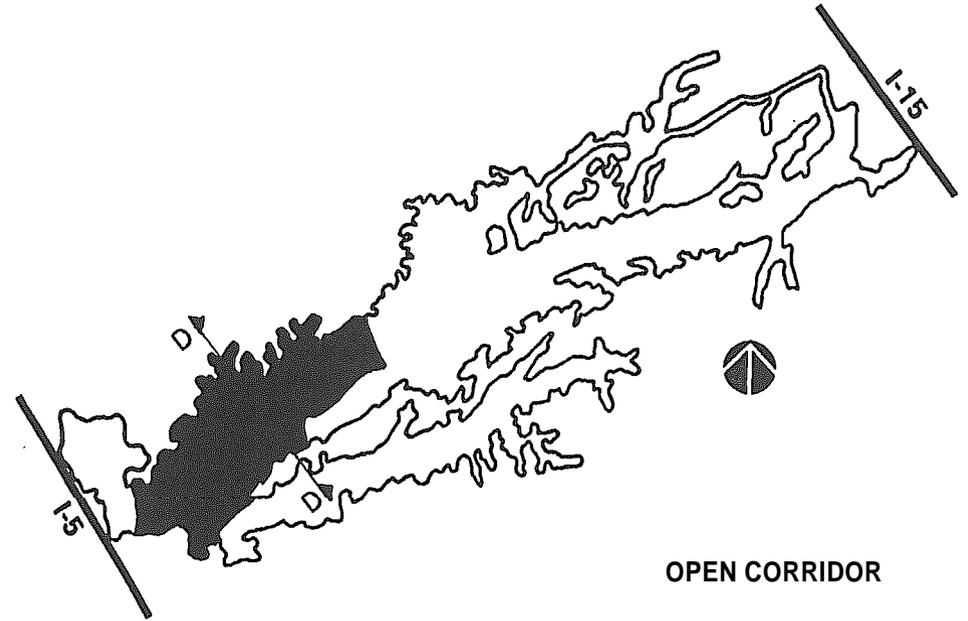
The northern open space boundary is shown in the Interim Plan as corresponding to the existing public property line. The Sorrento Hills and Carmel Valley Community Plans for the adjacent private properties show significant additional areas of open space that will in effect become part of the Preserve's open space system. The Preserve open space boundary has been revised as part of this master plan to reflect these community plans.



SECTION C-C

The approved Carmel Valley Community Plan (previously known as North City West) does not address the design treatment or character of the open space boundary that relates the community to the Preserve. The draft Sorrento Hills Community Plan considers this relationship in its discussion of areas of special sensitivity and proposed controls on grading, vegetation, and building forms. These controls should be extended to the Carmel Valley community as well.

The Open Corridor Zone functions as a transition area from the industrial development just west of the Ruiz-Alvarado Adobe to the more remote parts of the Preserve. As such, the distant view from the canyon bottom to future developments on the rim will not be a seriously negative impact if sufficient horizontal and vertical separation is maintained. The Park Sensitive Development Criteria should be applied all along the perimeter of this zone, with the intent to keep the edge of development at the edge or 'skyline' of the viewshed from canyon bottom trails. Where the adjacent use is industrial, views into the Preserve are not necessary except at designated public vista points, and industrial buildings should be completely screened with landscaping.



OPEN CORRIDOR



SECTION D-D

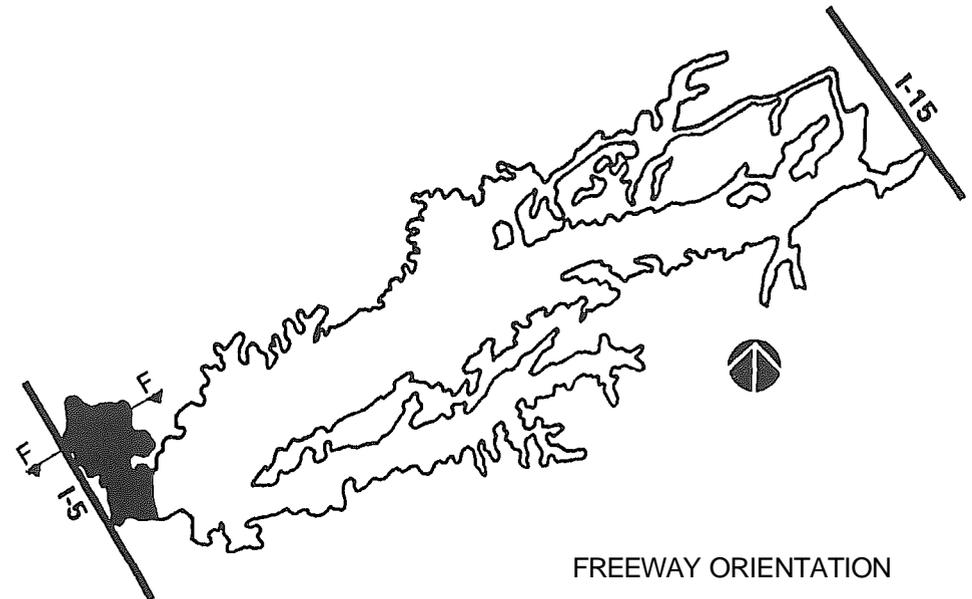
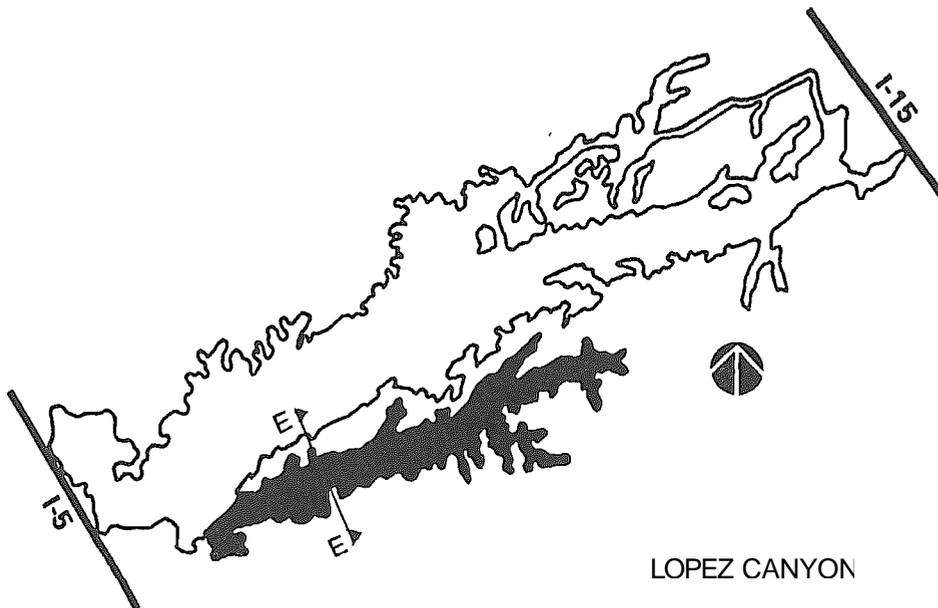
Lopez Canyon Zone

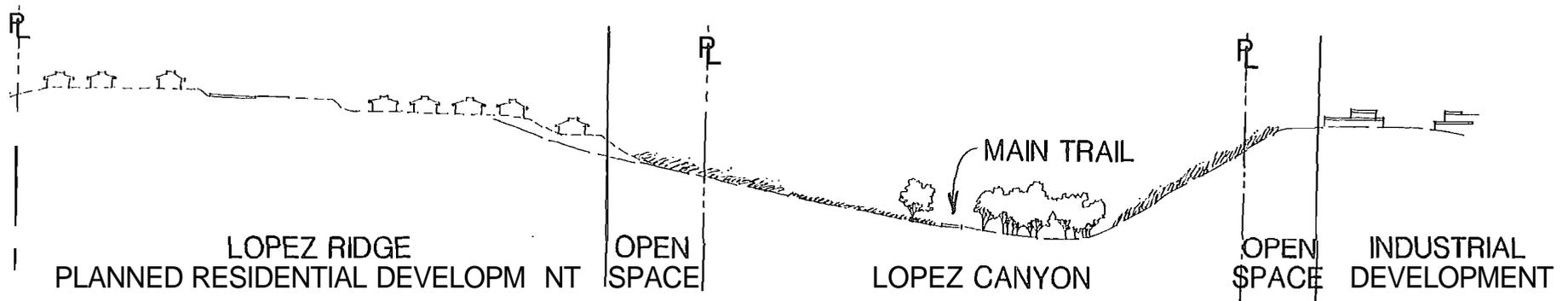
The open space boundary of the Lopez Canyon Zone is shown in the Interim Plan at the canyon rim, generally the top of steep side slopes that cut through the flat, developable mesa. This boundary has been revised to reflect the edge of development of Pacific Corporate Center and as shown in the Lopez Ridge PRD and Fieldstone project approved tentative maps and other residential developments completed or under way in Mira Mesa.

The Interim Plan open space boundary is not entirely coincidental with the Mira Mesa Community Plan open space element. Inasmuch as the Interim Plan map is at a larger, more detailed scale, the Interim Plan open space boundary has been basically retained for this Master Plan. Pacific Corporate Center plans provide for daylight cuts on City property in exchange for providing public viewpoints, trail access, and parking.

The important function of Lopez Canyon as a wildlife habitat will be reflected in an update to the resource section of the approved Mira Mesa Community Plan. As part of the update, an additional wildlife corridor across Lopez Ridge, as suggested in the Local Coastal Program, should be provided west of the SDG&E transmission line to supplement the corridor that bisects the Lopez Ridge PRD.

The important function of Lopez Canyon as a wildlife habitat is reflected in the resource section of the Mira Mesa Community Plan update. Buffer zones for wildlife should maintain a diverse range of plant communities with sufficient area for each community to be self-sustaining. Side canyons with dense vegetative cover should be protected as refuges for wildlife during periods of human use of the main canyon. The Local Coastal Program policies supplement the Park Sensitive Development Criteria, which should be applied to all future development proposals along the rim of Lopez Canyon.





SECTION E-E

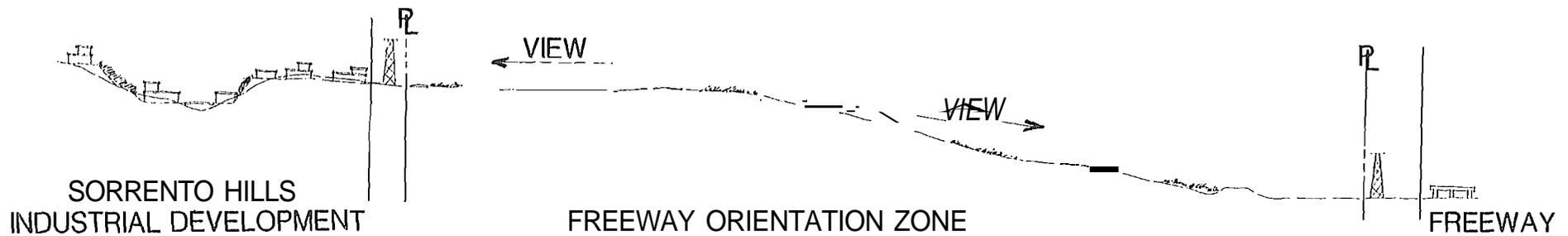
Freeway Orientation Zone

The open space boundary shown in the Interim Plan for this zone corresponds for the most part to the existing public property line. The boundary also encloses two privately owned parcels to the west adjacent to the 1-5 Freeway. The southern parcel is located in the coastal zone and was designated for Priority Acquisition 3 by the Interim Plan.

The open space boundary should be revised to conform to the Sorrento Hills Community Plan. The 1983 Community Plan preserves most of the steeper slopes on the adjacent property as open space. In reality, most of the area within this zone has limited value as part of the Preserve open space system. This is particularly true of the sloped area adjacent to the freeway which is separated from the main canyon by an east-west ridge. This area was identified as a 'freeway orientation' zone in the 1983 Sorrento Hills Community Plan. The close relationship of this area to the freeway and to the proposed industrial park in Sorrento Hills makes it potentially more valuable for development than for open space. Since this area is currently under City ownership, it is recommended for consideration as a candidate

for exchange, for acquisition of another area more desirable for inclusion in the Preserve. An agreement between the City and Newland California, Inc. to exchange 291 acres in the Central Preserve zone for 162 acres of land in the Freeway Orientation Zone has been approved by the voters contingent upon future approval of several discretionary actions. An April 1990 draft of the Sorrento Hills Community Plan shows this revision.

Priority Acquisition Area 3 contains steep slopes and a marshy section of Penasquitos Creek just upstream of the 1-5 Freeway. In accordance with Local Coastal Program intent, the riparian zone should be preserved as a wildlife habitat and as a potential trail route that follows Penasquitos Creek down to the coastal lagoon. It is recommended that the steep, grassy slopes to the north, if developed, should use a PID process in order to provide adequate buffer zones for the creek and to encourage siting of buildings that will be sensitive to the views from the Preserve. Bridging of Penasquitos Creek to provide vehicular access to the site should not be allowed.



SECTION F-F

Access Corridors Zones

The open space boundary in most of the areas designated as Access Corridors is well defined, either by the edge of existing developments or by approved tentative tract or record maps. Undeveloped areas where the boundary is likely to undergo future evolution include the head of the tributary canyon that borders the west end of Penasquitos Park Village. In addition, the open space boundary should be revised to link into the north-south tributary canyon just west of Black Mountain Road, in order to comply with the Mira Mesa Community Plan.

The tributary canyon west of Penasquitos Park Village is part of the Access Corridors Zone buffer area recommended for the Central Preserve Zone. A geometrically-shaped portion of the head of this canyon was identified as open space in the Interim Plan. Revision of the boundary is recommended to correspond to the natural rim of the side canyon.

The relationship of the access corridors to adjacent developments varies from place to place, depending on the width of the corridor and its topographical character. The intent of these corridors is to provide access and a transition between the urbanized and wildland areas. The character of the open space boundary should be evaluated in relationship to the distance from the main body of the Preserve.

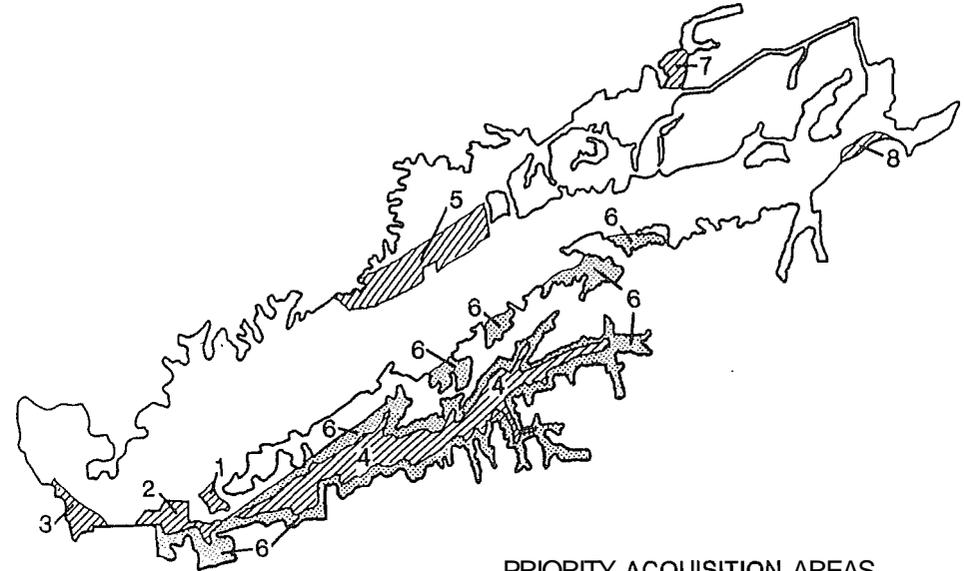
Priority Acquisition Areas

The Interim Plan identified eight Priority Acquisition Areas for the Preserve. In the time since the Interim Plan was approved, the status of several of the areas has changed, as described below:

1. Area #1, the nose of Lopez Ridge, is currently owned by the County and is considered part of the Preserve under the proposed joint operating agreement.

2. Area #2, including steeper slopes to the south of the Ruiz Adobe, is mostly owned by the County but some area is still under private ownership.
3. Area #3, next to the 1-5 Freeway, is still under private ownership. The desirability of acquiring the northern parcel is questionable considering the adjacent portion of Freeway Orientation Zone may be traded into private ownership under the exchange agreement with Newland California, Inc.
4. Area #4, the floor of Lopez Canyon and its tributaries, has for the most part been acquired by the City through purchase. Rights to some of the side canyons have been established through open space easements or dedications resulting from the subdivision process.
5. Area #5, north of the waterfall, currently owned by Newland California, Inc., is part of the land trade and is now proposed for City ownership.
6. Area #6, includes several side canyons on the south side of Los Penasquitos Canyon, as well as the side slopes of most of Lopez Canyon. Much of this area remains under private ownership, but some has been acquired through the development process, some has been protected by open space easements, and additional easements are anticipated since most of the land is too steep to be buildable.
7. Area #7, a tributary canyon to Los Penasquitos, extends north of the Park Village PRD in the Rancho Penasquitos Community Plan Area. The northern portion is now City owned, and the southern half is protected by an open space easement.
8. Area #8, adjacent to Mercy Road, has been protected as open space under the Conditions of Approval for Mercy Mira Mesa.

Although much remains to be done, significant progress has been made with regard to the original eight Priority Acquisition Areas since the approval of the Interim Plan. In light of revisions to the



PRIORITY ACQUISITION AREAS,
FROM 1980 INTERIM PLAN

Preserve's open space system boundary proposed by this plan, additional acquisition areas will be targeted and prioritized, particularly along the northwest boundary of the Preserve.

Summary

The proposed open space system for the Preserve, as shown in the Master Plan exhibit, corresponds to 1990 conditions and planning documents. Complete implementation of the proposed boundary would result in a substantial increase in land within the Preserve open space system, compared to acreages included at the beginning of the Master Plan study process. These changes are summarized in the following table. The figures are approximate and do not reflect the proposed Newland land exchange. If the Newland land exchange is consummated, the 1990 figure will be reduced by 162 acres.

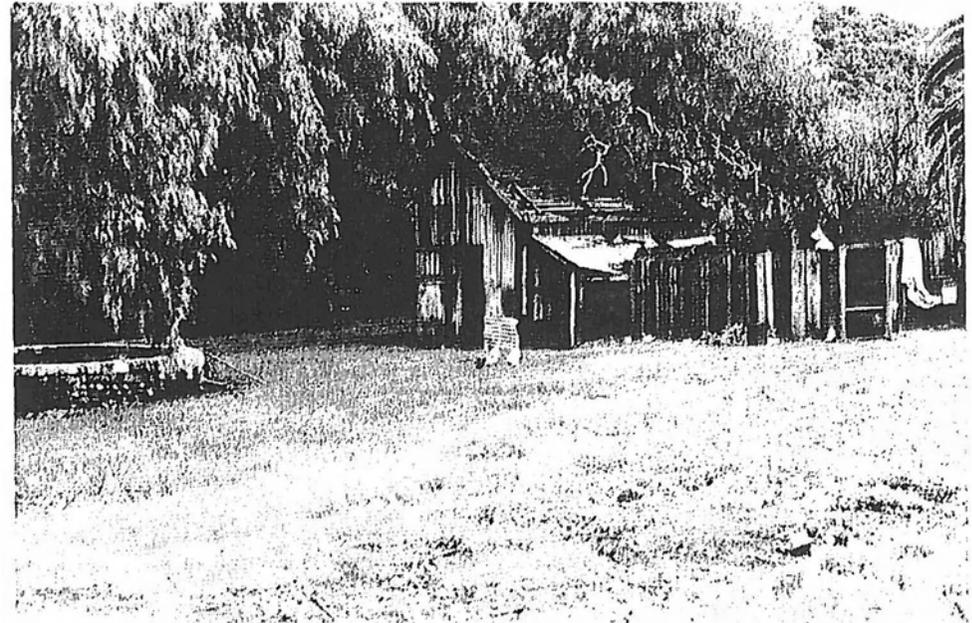
At beginning of study (<u>Interim Plan</u> open space system)	3,340 acres
Implementation per Master Plan (1990 proposed open space system)	4,471 acres

LONG-RANGE MANAGEMENT

The primary goal of long-term Preserve management is preservation and enhancement of the environmental and cultural resources that are the Preserve's reason for being. In order to achieve this goal, public enjoyment of the Preserve's resources is restricted to those activities and programs compatible with the Preserve's natural environmental values. Increases in public use of the Preserve are expected to result from development of the facilities described in this Master Plan as well as the expansion of surrounding residential communities. As public use increases, clear policies and programs for maintaining the quality of the environment and providing for public health and safety will become more and more valuable.

The components of a long-range Preserve management plan may be broken down into the following programs:

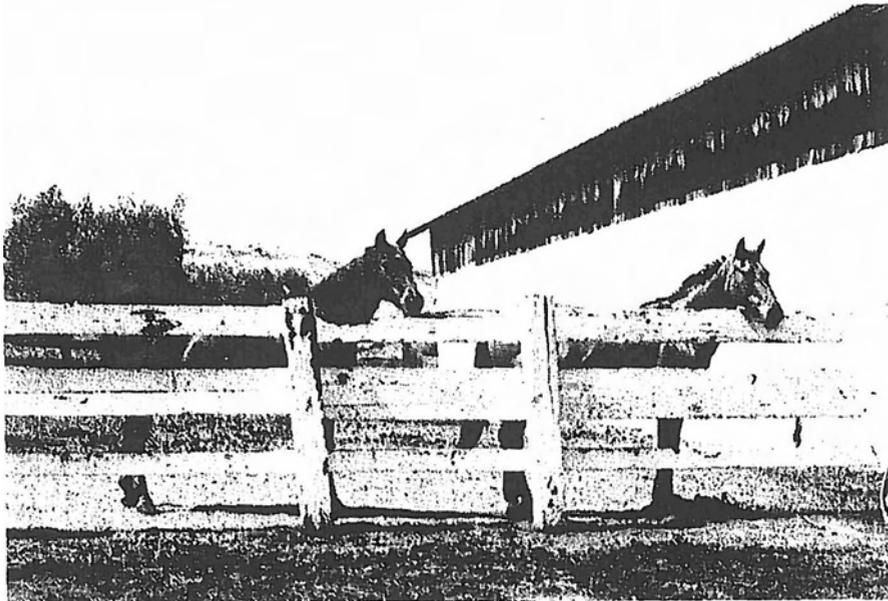
1. Operational, including service personnel staffing, and regulations governing public use of the Preserve;
2. Security and safety, including enforcement of regulations and emergency response;
3. Fire protection, including fire/fuel management and fire-fighting equipment;
4. Maintenance, including waste collection and disposal, facility maintenance, and equipment needs;
5. Operating responsibilities and revenues;
6. Environmental management, including impact evaluation, repair of damage and preventative management; and
7. Landscaping guidelines, including vegetation types and maintenance.



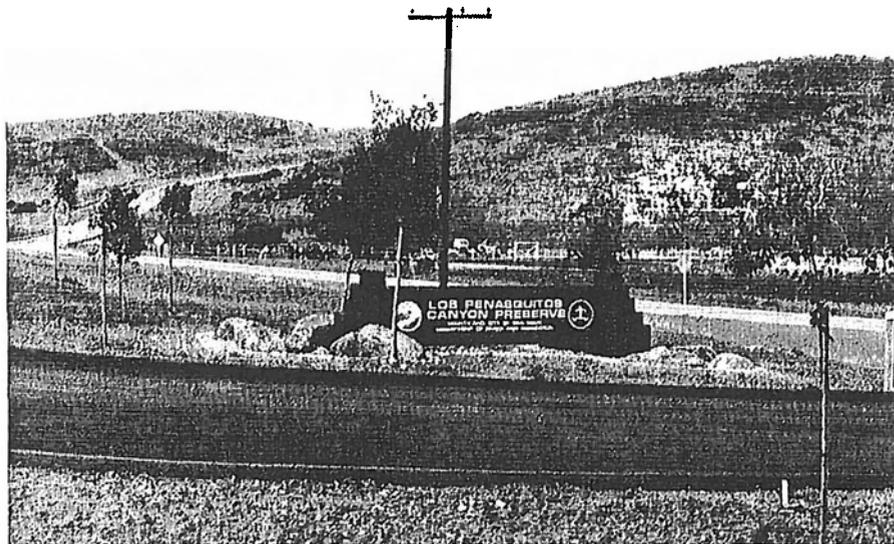
Old well and lath barn at the Johnson-Taylor Adobe.



Heavy rains flood the marsh at the mouth of Lopez Canyon.



Horses at the adobe barn next to the Johnson-Taylor Adobe.



Entrance to the staging area off Black Mountain Road.

Each of these programs is discussed in detail below.

Operational Programs

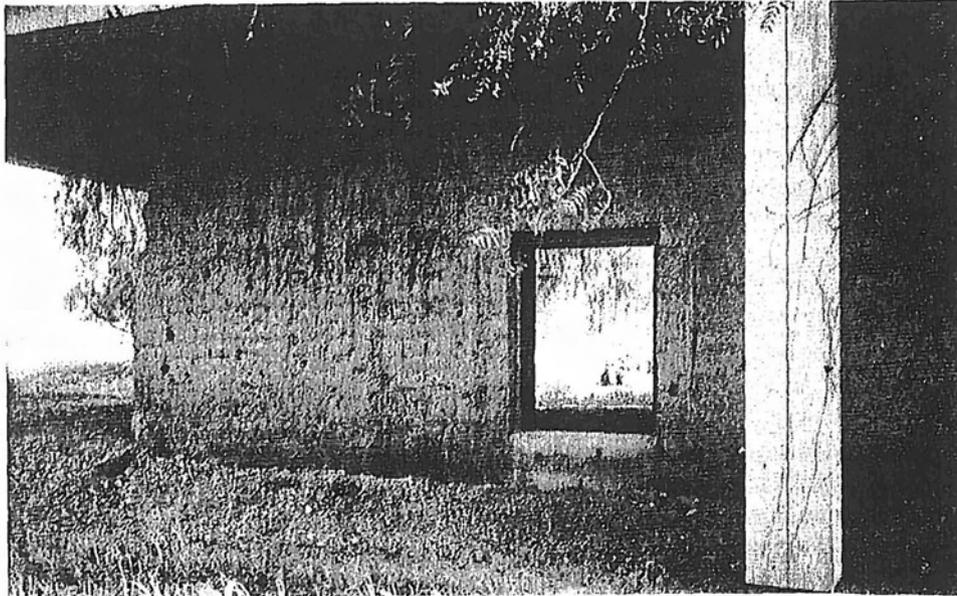
The general operational program for the Preserve was outlined in the 'Use Policies' section of the [Interim Plan](#). Updating of this policy is necessary to reflect the more complex use patterns that will occur with the development of user facilities. In general, the focus of the operational program is to enhance user appreciation and enjoyment of the Preserve's resources.

In order to protect both the Canyon's resources and the wilderness quality of the user's experience, motorized vehicles should be confined to the designated parking areas in the activity complexes near Black Mountain Road and the Ruiz-Alvarado Adobe. Only emergency and other authorized vehicles should be permitted beyond these points.

The use of nonmotorized mountain bicycles should be restricted to the main service road and specifically designated bicycle routes in conformance with Municipal Code Section 63.02 01(b)(19). All narrower trails should be posted on the park perimeter and at intersections with the main service road to prohibit bicycle usage. Signs should be provided advising bicyclists of substantial penalties for riding in an unsafe manner, damaging public resources, or riding on unauthorized routes or areas. Bicycle usage should be monitored for environmental impacts and user safety concerns. Continuation of this activity should be evaluated regularly by the Park and Recreation Directors,

Normal use hours for the Preserve should be dawn to dusk. Special evening or night activities should be individually authorized by permit. Use fees may be charged for the activity if appropriate.

The major evening activities expected are fund raising and interpretive programs at the Johnson-Taylor Adobe. Sponsoring organizations should be responsible for policing their activities and ensuring compliance with Preserve regulations and policies. Organized daytime activities involving a significant number of people may also be subject to the permit process.



A protective cover was built over the Ruiz Adobe in the mid-1980's.



Going fishing near the Penasquitos Creek waterfall.

Hang-gliding could be allowed on a permit basis only. Impacts should be carefully monitored with the use discontinued if the impacts are unacceptable. Impacts should be assessed not only from the ecological viewpoint, but also from the broader social context, as adjacent properties are developed. The number of participants and vehicles carrying gear to the designated sites should be limited, with their entrance strictly controlled.

The Preserve should be staffed by a minimum of two park rangers, one of which should be supervisory. Additional ranger staff should be provided during the summer and on weekends, as the need dictates. Presently there are both a County Park Ranger and a City Senior Park Ranger who work cooperatively to provide a Ranger presence seven days a week. City Ranger staff are empowered and authorized to enforce California Fish and Game regulations, California Vehicle code regulations, and the City of San Diego Municipal Code; this includes the issuance of citations for damaging the Preserve's environmental resources.

It is expected that the supervising park ranger will be based at the Penasquitos Ranch House area. Rangers will serve some interpretive functions and be responsible for enforcing rules and regulations, patrolling the Preserve and overseeing security and maintenance needs. Other ranger staff will also provide general visitor orientation as well as regulations enforcement. Four-wheel drive vehicles equipped with radio communication, first aid kits, fire extinguisher, bullhorn, shovels and other tools should be kept on site for each ranger. Horses and/or mountain bikes could also be available for rangers to travel on narrow trails or difficult terrain.

Security and Safety Programs

Preserve security and safety programs should be designed to protect the quality of the environment and provide a safe, enjoyable experience for the park user. A basic day-to-day requirement is the enforcement of Preserve rules and regulations. A City Ranger Program was initiated for this purpose in 1991. The rangers are supplemented by two resident caretakers, one at the Penasquitos Ranch House area and one at the east end staging area.

Written detailed reports including estimated visitor attendance, type and location of illegal activities, hazardous conditions, etc., should be made daily by the patrolling park rangers in order to provide a record of activities and incidents for planning and corrective actions. Radio contact with the police, the fire department, the Los Penasquitos Ranch House Area, and possibly the West End Activity Center, is important for the rangers' effectiveness.

Enforcement of Preserve regulations can be facilitated by certain physical design features. One of the most common violations is the intrusion of off-road vehicles into the interior of the Preserve. While it may be impossible to totally eliminate this problem due to the many points of access available, it can be discouraged by installation of barriers or fencing along all adjacent roadways and around Preserve parking areas. Gates should be designed in such a manner to prevent access by motorized dirt bikes and motorcycles and to provide access for those user groups--pedestrians, equestrians, and/or bicyclists--appropriate for entry at those specific sites. Low barriers at trailheads from adjacent developments and local parks should be combined with signs that identify the Preserve and list regulations for use as well as penalties for noncompliance.

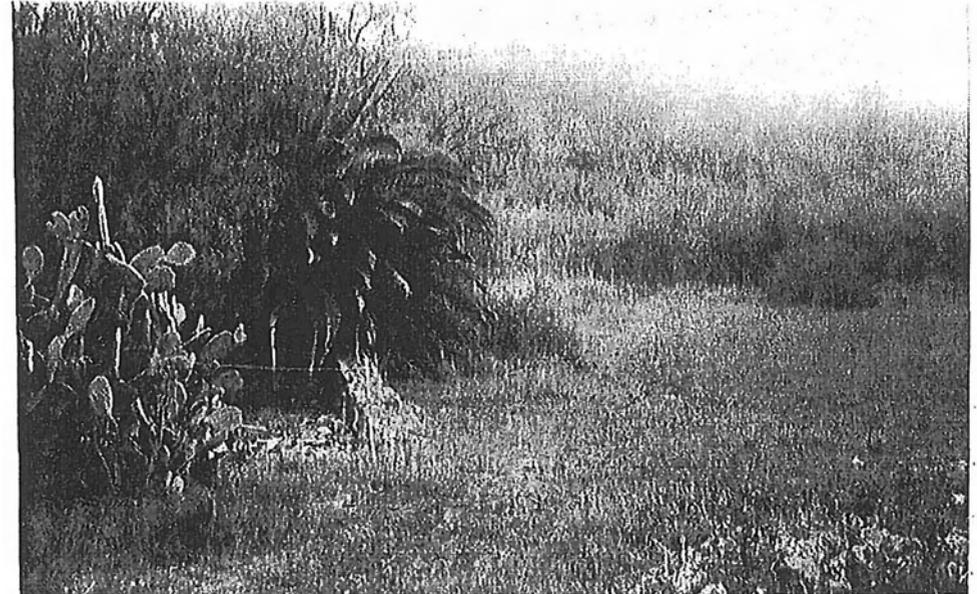
Unauthorized access outside normal visiting hours should be discouraged by locking gates and posting regulations at the

entrances to Preserve parking areas. Although lighting of parking areas is not recommended due to negative impacts on wildlife movement, the design of developed sites should incorporate other concepts of defensible space. These include clear visual access through the site for surveillance, and non-isolation of use facilities such as restrooms. Architecture and site furniture should also incorporate vandal-resistant design elements.

Involvement of the general public in protecting their canyon preserve is another way to supplement the eyes and ears of park rangers. In 1991, a 35-member Volunteer Patrol composed of hikers, equestrians, and bicyclists was organized to assist the Ranger staff in protecting the Preserve assets by informing the public of the Preserve rules and regulations, assisting in emergency situations, and providing first aid to injured park users. Equipped with radios for direct access to the Rangers, they patrol the Preserve on Saturdays and Sundays and special occasions. A 'Preserve Watch' program, similar to the Neighborhood Watch programs sponsored by many city police departments to thwart crime, should also be instituted. Residents around the perimeter of the Preserve in many cases have excellent vantage points for spotting or hearing suspicious activities, and should be encouraged to alert the police when this occurs. Such a program could be publicized through local media and homeowners' associations.



Oak tree canopy covers the Enclosed Corridor Zone.



Grounds around the Johnson-Taylor Adobe.

Response to emergencies is a critical function whether the situation is a security violation, a medical problem, or a natural disaster. All rangers should be trained in first aid, CPR, search and rescue, and fire-fighting techniques.

Fire Protection

Fire protection is a key issue due to the flammability of much of the Preserve's vegetation during the dry season and the proximity of existing and proposed developments. The first component of a fire management system is fire prevention. No smoking, campfires, or cooking fires should be allowed outside the developed activity areas of the Preserve. The relative fire hazard for each day should be posted at major entry points, perhaps borrowing the general sign format used by the U.S. Forest Service.

Fire fuel management can significantly reduce fire hazard to buildings. Fire-retardant plant species should be used for all landscaping in developed sites, and plantings in the immediate vicinity of structures should be irrigated. Review of excess dead fire fuel to identify removal needs should be conducted at least annually, but with recognition of the environmental value of dead/decaying plant material in riparian or woodland areas. Fuel management efforts on private property, which in many cases includes brush-covered slopes under open space easement next to residential developments, are the responsibility of the property owner. Buffer zones of irrigated low-volume plantings are advisable. Specific guidelines are provided in the City Planning Department's "Landscape Technical Manual Brush Management Program."

The first priority of the fire department is to protect homes and structures. Fires in the Preserve represent an immediate hazard to houses on the canyon rim due to the tendency of fires to burn uphill, often pushed by winds funneling up the main and side canyons. Access to the rim for fire-fighting is typically from residential streets. The strategic location of these access points and associated fire hydrants is reviewed by the fire department whenever development plans are submitted for canyon-side sites.

Fire vehicle access into the Preserve itself is, for the most part, limited to the entry points off Black Mountain Road, Montongo Street, and Sorrento Valley Boulevard. The main trail, and the

narrower trails if necessary, can be traversed by fire-fighting vehicles. Access to both the north and south sides of the creek is currently possible from Black Mountain Road, and construction of the recommended low-water crossing would provide the same capability at the western end of the Preserve. Depending on road conditions, response time to the waterfall area midway down the canyon is ten minutes.

Fire hydrants are currently located at the end of Sorrento Valley Boulevard, on Black Mountain Road at the entrance to the Preserve, and on the Penasquitos Ranch House access road, half way between Black Mountain Road and the Johnson-Taylor Adobe. Additional hydrants are recommended near the adobe itself and at the Ruiz-Alvarado Adobe activity area.

Fire Station #40, in Penasquitos East, is usually the first to respond to fires in Los Penasquitos Canyon. The station crews are specifically trained in wildland fire-fighting and are expanded to 15 fire-fighters during the summer fire season. Their equipment includes three brush rigs, a 3000 gallon water tanker and an 800 gallon pumper. Brush rigs are equipped with shovels and 2800 feet of lightweight hose, which is sufficient to stretch more than half way across the canyon at its widest points.

Fire Station #24, in Del Mar Heights, responds to fires at the west end of the Preserve. Their equipment includes a brush rig. Response time to the Ruiz-Alvarado Adobe is five minutes. If necessary, fire-fighting crews can be pulled from any unit in the City. Additional support is available from Poway, Del Mar, and from the California Division of Forestry in El Cajon.

Maintenance

Maintenance of the Preserve is currently provided by several different entities. The City has programs for tree trimming, trail grading, and erosion control, with work done by outside contractor by service requests between City departments. Maintenance in the vicinity of the County-owned Johnson-Taylor Adobe is performed by the resident caretaker or the County. The equestrian center is maintained by the City's lessee. In order to maintain the quality of the Preserve environment as the site develops over the long term,

an organized program with consistent policies and well-defined responsibilities is necessary.

A key concept of the maintenance program for this basically natural area should be controlled neglect. The native ecological communities should be recognized as sufficient in themselves, and a balance should be found between user needs and natural processes. An ongoing environmental monitoring system will be necessary to ensure that maintenance efforts are achieving the designed long-term results.

The level of maintenance required will vary for different use areas. The activity areas at both ends of the Preserve will require the highest degree of maintenance due to the concentration of users and developed facilities. In general, maintenance responsibilities should be divided according to the entity having jurisdiction over a given area. The City will maintain the interior trail system and the Ruiz Adobe area. The equestrian center lessee maintains its own site, and the County or its lessee will maintain the Johnson-Taylor Adobe and its grounds. The County will maintain the outlying County-owned area and the **parking/staging** at the east end. Preserve maintenance is expected to be a continuous process and should be scheduled by the supervising park ranger with the City or County maintenance crews.

Trash collection and disposal are key aspects of preserving the quality of the environment and the user's perception of wilderness. No trash containers should be located in the interior of the Preserve. Trail users should be required to haul out their own trash, with supplemental pickup provided by the patrolling rangers, maintenance crews, and volunteer organizations. Trash containers at the activity centers should blend in form and color with the rustic character of the other facilities and the natural environment. If use warrants, dumpsters should be discreetly located near picnic areas for convenience in trash disposal. Establishment of recycling bins for metals and glass generated by Preserve users is also recommended. No glass beverage containers are permitted in the Preserve.

Maintenance of roads and trails should be handled by maintenance staff, or by outside contract if the repairs needed are extensive. Trails should be inspected on a regular basis by the supervising park ranger for signs of erosion or obstructions. Damage to trails



Outbuilding near the Johnson-Taylor Adobe.

or the adjacent environment from excessive use by mountain bikers or other users should result in corrective measures, potentially including closure or other restrictions, at the discretion of the Park and Recreations Directors. The main trail, which will handle the heaviest traffic of trail users and service vehicles, should be dressed up at least twice a year. Brush and weeds should be controlled next to roads and high activity areas to reduce fire hazard. Limited tree trimming may be required near trails and use facilities to decrease the potential for harm to users and liability for the City or County. If dry brush accumulates sufficiently to create a significant fire hazard, the brush should be hand-cleared.

The maintenance needs associated with equestrian use are a potential problem, especially in areas where the use is intense. The equestrian center maintains its own grounds. Staging areas, as well as the equestrian rest stop near the Ruiz Adobe, should be cleaned frequently of manure to control problems with odor and flies.

Operating Responsibilities and Revenues

The responsibilities for operating and maintaining the Preserve are currently divided among several entities by virtue of land ownership or lease agreements. As the Preserve facilities are developed and park attendance and maintenance needs increase, a clearly-defined division of responsibilities will become more critical. The partners in this effort will include the City and county of San Diego and their private lessees and concessionaires, as well as private landowners and utility companies.

The City of San Diego is the major landowner in the Preserve. Its major operating and maintenance responsibilities will include the Ruiz-Alvarado Adobe complex, in addition to general monitoring and maintenance in the Preserve's interior. Revenues from park operations should be used to help offset costs. These could additionally include admission fees, fees for special use permits, fines resulting from citations for violating Preserve regulations, and sales of trail guides and interpretive brochures.

Currently, City revenue from the equestrian center goes to a special revenue fund for use in the Preserve.



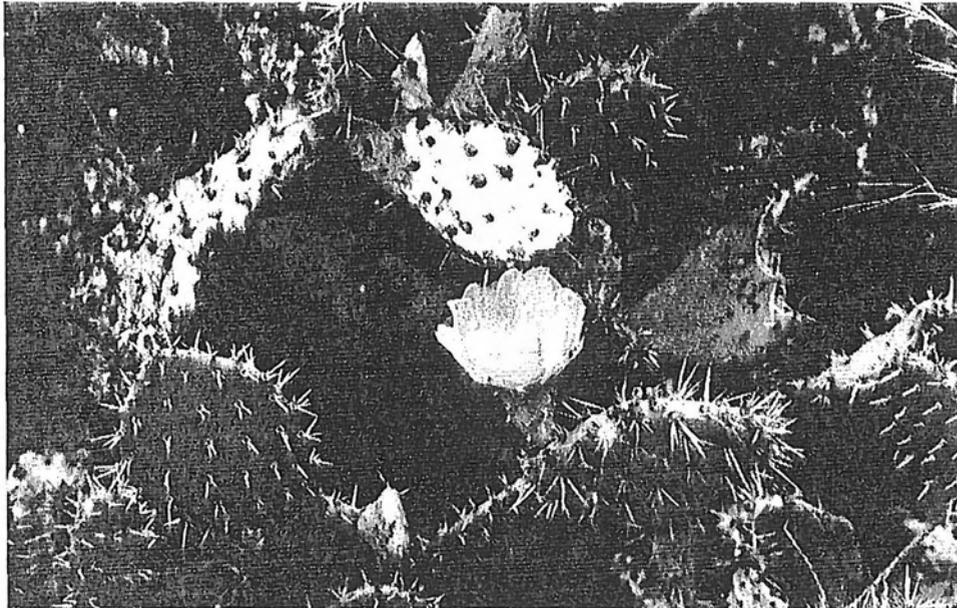
Wildflowers cover the Open Corridor Zone in early spring.



A relaxed moment near the barn at the Johnson-Taylor Adobe.



Lush riparian vegetation near Lopez Creek.



Bright-colored bloom of the prickly pear cactus.

The County of San Diego owns several parcels in the Preserve but now actively maintains only the 193-acre Los Penasquitos Ranch Area. The other parcels are smaller and surrounded by City-owned property. A joint operating agreement of the City and County should identify maintenance and operations responsibilities. The Penasquitos Ranch House area is centered around the 25-acre Johnson-Taylor Adobe, a National Register property. The County or its lessee will be responsible for maintaining the site, covering operating costs, and contributing to site development. Revenues may come from admission fees, food concessions, sale of interpretive materials and trail guides, fundraising events, community services, and donations.

One of the major operating costs for the Preserve will be for the ranger force. County park ranger staffing has been provided for some time. A City park ranger has been assigned to the Preserve since 1991. Revenue generated by the Newland California, Inc. land swap has been earmarked by the City Council to provide funds for City operations, including park ranger staffing.

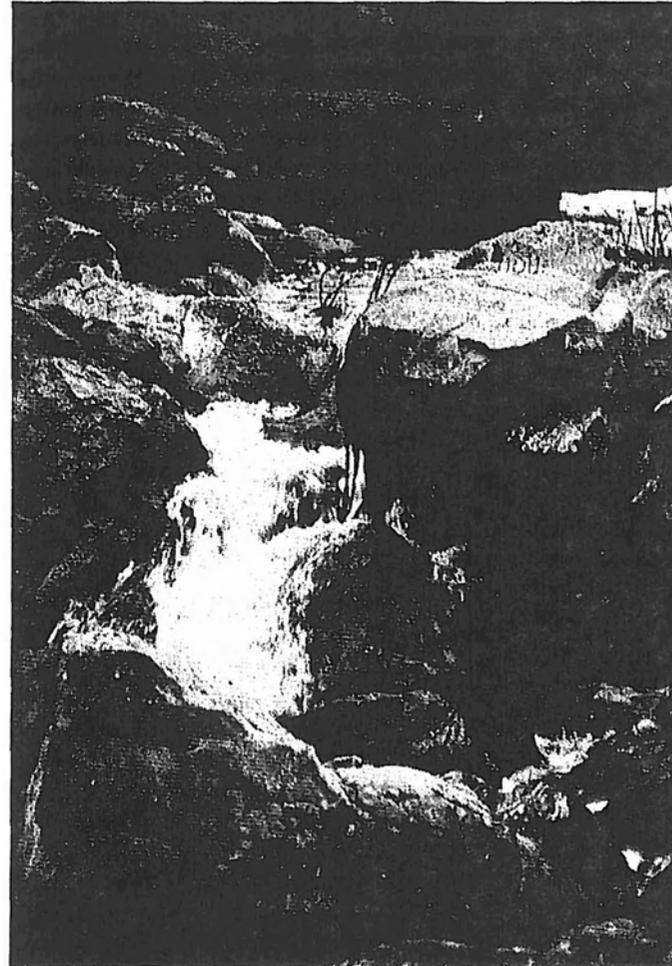
A portion of the area around the edge of the Preserve open space boundary is privately owned land under open space easement. The responsibility for maintaining these areas lies with the property owner. Individual private land owners should be aware of the location of the open space easement and their legal and maintenance responsibilities. These responsibilities include brush removal to reduce fire hazard, erosion control, and preservation of open space. SDG&E also has an easement over City owned land. Certain trails in the Preserve are actually utility service roads following SDG&E transmission lines or sewer lines. Maintenance of these roads is the responsibility of the respective utility. Maintenance of these roads should include sensitive brush and weed control to reduce fire hazard, erosion control, and removal of obstructions such as tree limbs. The City should notify the respective utilities or homeowners when their maintenance responsibilities are not being met and advise them of potential consequences and penalties.

Environmental Management

The purpose and character of the Preserve make long-term vegetation and wildlife management a critical aspect of the Preserve maintenance program. Early identification and control of the environmental impacts associated with human use in and around the canyons are essential for their preservation as viable ecological communities. Elements of an effective environmental management program include strict enforcement of Preserve rules and regulations, a monitoring program to identify problems as they occur, and an operational and maintenance program to correct the problems.

Protection of environmental resources is the motivating factor behind many regulations. The following activities should be specifically prohibited:

1. Private motorized vehicles, with particular reference to off-road vehicles, except within designated parking areas, or as authorized by permit.
2. Smoking or fires, except within designated picnic or other authorized areas.
3. No dogs shall be permitted west of Black Mountain Road. Dogs are to be kept on a leash in the parking lot and vicinity.
4. Damage and vandalism to vegetation.
5. Collection and/or removal of Preserve plants, animals, or archaeological artifacts,
6. Feeding of wild animals.
7. Leaving trash or food anywhere other than in designated receptacles.
8. Any human activity within designated wildlife corridors, unless otherwise posted.



A rocky waterfall in the Central Preserve Zone.

Posting of regulations at all access points to the Preserve should be supplemented by interpretive programs explaining the potential impacts of the prohibited activities in order to increase public awareness and cooperation.

A comprehensive Resource Management Plan should be developed, providing for mitigation monitoring and reporting programs for all future potential resource impacts and corrective action for existing problems. A monitoring program to assess environmental impacts resulting from human use should be established, and its findings coordinated with maintenance or corrective activities. The supervising park ranger, with assistance from local specialists, should inspect the entire Preserve approximately four times a year. Photographs and notes of each inspection trip should be retained for comparative evaluation with the findings of earlier surveys. Sites used for special permit activities, including hang gliding, should be inspected after each event.

Findings to which corrective attention should be paid include:

1. Destruction of habitats through human activity or overuse.
2. Disappearance of wildlife species such as large mammals or predators.
3. Increases in populations of small animals such as rodents.
4. Infestations of exotic or undesirable plant materials.
5. Compaction or erosion.
6. Damage to or denudation of vegetation.
7. Deterioration of sensitive species such as oaks.
8. Impact on fish population and fishing in the Preserve.
9. Damage or vandalism at archaeological sites.

Removal of invasive nonnative plant species such as pampas grass is particularly important. Park attendance during different seasons should be surveyed and the use levels of different activities recorded to identify any clear correlations between use and impact.

The maintenance response to identified problems should be geared to natural processes of environmental healing, if possible. Essentially, this implies a reduction in human activity in the impacted area, which may include temporary or permanent closure of the area to human use, or prohibition of a particular kind of use. Trails may be closed alternately or seasonally, and key habitats may be posted as off-limits during the breeding season.

Areas requiring direct resource management attention:

1. Wildlife tunnel.
2. Vernal pool preserve.

Landscaping Guidelines

Criteria for landscape planting in the Preserve vary according to the particular area being considered. Three basic conditions occur, each with special problems and requirements. These conditions are 1) developed sites within the Preserve, 2) transition areas between the Preserve and adjacent development, and 3) natural areas.

Plant material at developed sites is used to screen and direct views, create spatial definition and interest, and reinforce the theme or character of the area. The 'rancho' atmosphere can be enhanced by use of such trees as coast live oaks and sycamores. In addition to aesthetic qualities, plant materials at developed sites should be selected and located with fire management as an important parameter. Plantings in the immediate vicinity of structures should be irrigated, with preference given to low-volume evergreen species that burn slowly. Plants in irrigated areas can be planted from containers to provide a quick effect. Drought-tolerant species can be planted from small containers or liners and watered occasionally during dry periods for the first year or two until they become well established.

Plantings along the transition areas between open space and adjacent developments should also incorporate a buffer zone of irrigated and low-volume plants to reduce fire hazards. Visual screening of structures while allowing filtered views into the Preserve is another key consideration. Plant species should be selected for compatibility with the native community in terms of color and texture, in order to provide a pleasing visual transition from developed to undeveloped areas. In most cases, these

plantings and fuel management activities will be the responsibility of the developer or homeowner.

Planting in undeveloped natural areas is primarily for erosion control or repair of damaged sites, although enhancements such as shade or screening may be desired in certain spots such as rest stops. A detailed Revegetation Plan should be prepared by a qualified biologist and landscape architect for all proposed development, including future trail development and trail closures. Any sensitive habitat areas adjacent to construction should be fenced or flagged to prevent disturbance. Ecological suitability is critical for the survival of such plantings, as they may receive little or no maintenance. Species should be selected according to the biotic community in which they are being planted. Native species are preferable. Certain exotics could be introduced in the immediate vicinity of developed sites if appropriate for historical restoration. No exotics which are aggressive and spread freely, such as Scotch broom, eucalyptus or pampas grass, should be introduced. Where these occur already, consideration should be given to removing them. However, removals should be handled in a resource-sensitive manner. Along creek embankments, tree removal should occur only during no-rainfall, low-flow conditions with steps taken to prevent runoff of sediment. Mature trees with nest sites should be left in place. Trunks of removed exotic trees may be left on the canyon floor to provide habitat for ground dwellers. Planting should be by direct seeding or liners, and should be done at the beginning of the rainy season to permit maximum establishment before the stress of dry weather begins. Suggested plants appropriate to the various biotic communities in the Preserve are listed below.

Riparian or Oak Woodland Plant Community

Quercus agrifolia
Platanus racemosa
Salix lasiolepis
Umbellularia californica
Sambucus mexicana
Vitis girdiana
Typha latifolia
Scirpus spp.
Rosa californica
Baccharis viminea
Baccharis pilularis

Coastal Sae Scrub Community

Artemisia californica
Encelia californica
Eriogonum fasciculatum
Lotus scoparius
Mimulus spp.
Isomeris arborea
Lupinus hirsutissima
Orthocarpus purpurascens
Malosma laurina
Salvia apiana
Ribes spp.
Rhus integrifolia

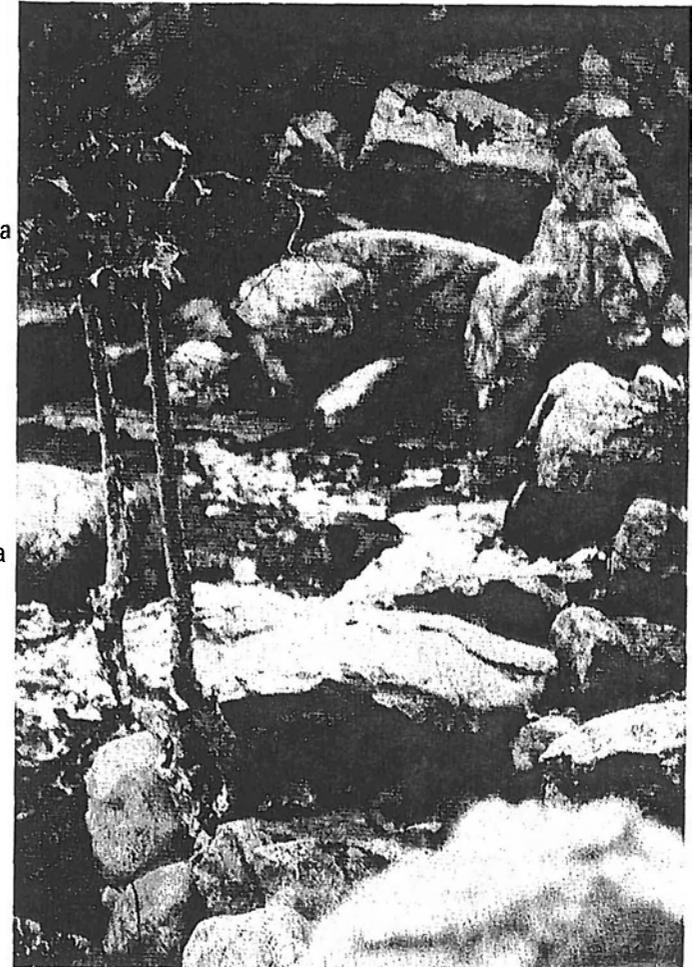
Grassland Community

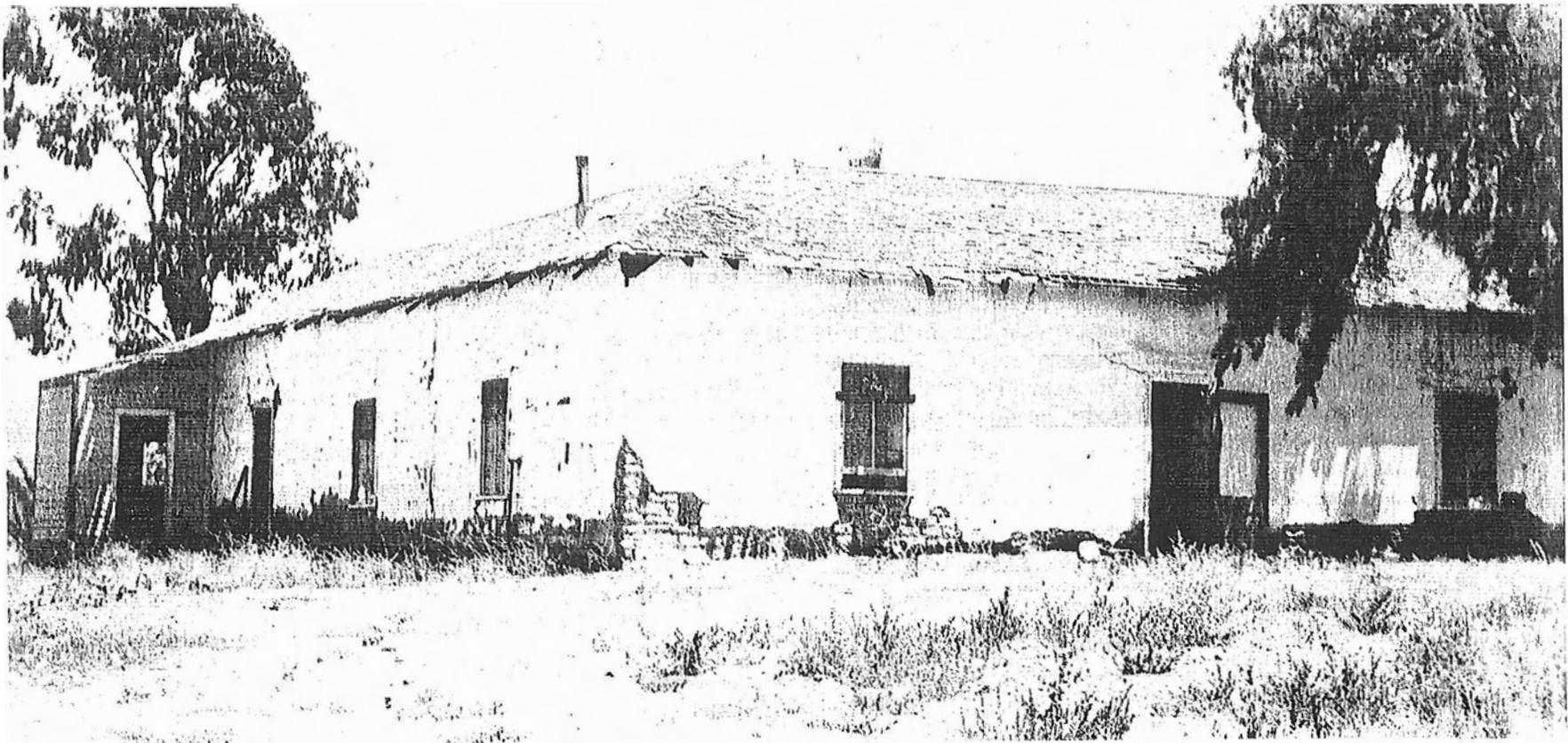
Quercus agrifolia
Sambucus mexicana
Stipa spp.
Melica spp.
Eschscholzia californica
Linanthus spp.
Lupinus spp.
Brodiaea spp.
Dodecatheon spp.
Sisyrinchium bellum
Poa secunda

Chaparral Community

Heteromeles arbutifolia
Ceanothus spp.
Prunus ilicifolia
Rhamnus spp.
Rhus integrifolia
Malosma laurina

A young sycamore clings to a precarious hold above Penasquitos Creek.





IMPLEMENTATION

Phasing Program

implementation of the Master Plan should follow a logical schedule based on clearly defined priorities. An important consideration of the schedule is the fact that some facilities are already existing, while others are funded and scheduled for construction in the near future. The Preserve is also currently open to the public. In certain respects, this Master Plan is thus simply a status report in the ongoing process of Preserve development. Priorities should be established, however, to guide the remainder of the implementation and management process to meet planning goals.

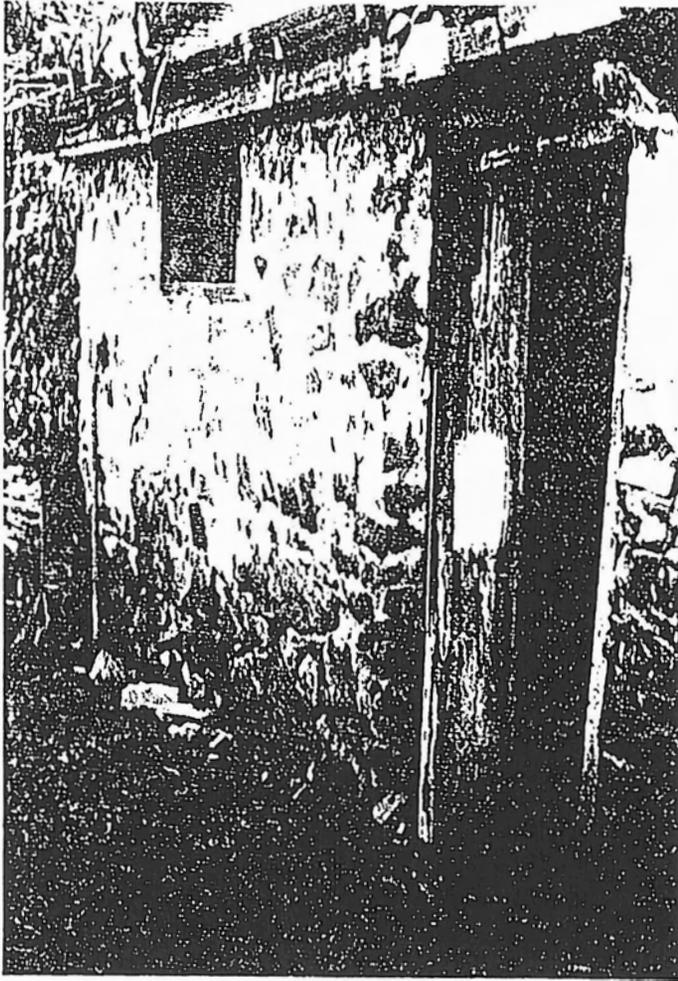
The primary goal of the Preserve is preservation and protection of its resources. High priority should be given to programs and improvements that reduce negative user impacts on the environment. These range from erosion control measures and

relocation of existing trails that pass through sensitive areas, to physical and operational steps to improve the enforcement of Preserve rules and regulations. Another important step for resource preservation is research and interpretive program development.

The secondary goal of public access and enjoyment is partially served by existing facilities. Construction of additional facilities is largely determined by the availability of funds and by the scheduling of development activity and infrastructure improvements around the Preserve. Road construction is particularly important to this schedule in providing means of access. In the case of Black Mountain Road, improvements are planned to be phased in with the adjacent developments and constructed by the developer. A Facilities Benefit Assessment for completion of the south end of the road has been set up by the adjacent private property owners.

County and City Programs

1. General Funds: Due to competing priorities, the City and County general funds available as sources for development of Los Peñasquitos Preserve are very modest.



The spring house near the Jotinson-Taylor Adobe.

2. Transient Occupancy Tax: Both the City and County levy a tax on hotel and motel bills within their jurisdictions to enhance the quality of life and promote San Diego in order to attract tourism. Revenues are typically used for museums, parks, and cultural facilities.
3. Environmental Growth Fund: This City fund provides support to the operations of resource base parks and open space capital projects.
4. Matching Funds: This City program can provide funding for unique public benefit projects in the Preserve.

Grants and Endowment Support

1. Several private individuals and/or organizations offer potential for funding or program support.



A rocky pool along Penasquitos Creek.

As indicated in the Implementation discussion, private developers will bear the responsibility for construction of certain Preserve facilities, including the staging area at the west end. Developer cooperation should also be encouraged in providing access trails, with appropriate signage, from adjacent residential and industrial sites as these sites are constructed. Such a practice will help reduce construction costs for the City and County. Cost reductions may also be possible by utilizing labor from the California Conservation Corps and other low cost labor sources, or by aggressively seeking volunteer labor or donations of materials from private organizations or members of the community.

Improvements will be developed as funds become available.

Funding and Support Capabilities

The following is a partial list of short and long-term revenue sources that are or may be available for funding Preserve development and acquisition. Some of the budgeted funds are tentative while others may be shifted to other priorities in future years.

Federal Programs

1. **Land and Water Conservation Fund:** This grant program administered through the State Parks and Recreation Department provides funds for the acquisition or development of outdoor recreation areas and facilities. Although the program provides 50 percent matching funds, the public agency must provide 100 percent front-end financing.
2. **National Recreation Trails Act:** This state-administered program provides grants for recreational trails, with emphasis on trails which link people in heavily urbanized areas with open space.

State Programs

1. **Environmental License Plate Fund:** This grant, derived from the sale of license plates, can be used to acquire, preserve, and restore natural areas and wildlife habitats.

2. **California Conservation Corps:** Program provides a labor force for use on public projects that will conserve or enhance natural resources. Criteria for evaluating proposals include type of project, potential for attracting community support, provisions of training and educational opportunities and capability of the public agency to maintain the project after construction. The public agency must supply tools and technical supervision. The County used CCC labor for constructing trail improvements, signage, fencing, and erosion control around Penasquitos Ranch.
3. **Resource Enhancement Program:** This program, managed by the State Coastal Conservancy, provides up to 100 percent funding for acquisition or development projects which enhance degraded natural areas in the coastal zone.
4. **Cooperation Projects with Local Government Grants** ranging from \$10,000 to \$500,000 are offered by the Wildlife Conservation Board for projects which acquire or preserve wildlife habitats. Acquired land is then conveyed to the Department of Fish and Game for management.
5. **Habitat Conservation Fund:** This program, with an annual allocation of two million dollars statewide, finances projects related to habitat preservation including trails, wetlands and riparian acquisition and development, and acquisition of deer and lion habitat. A 50% non-state match is required.
6. **State Bond Act Funding:** Future bond acts may provide funds for acquisition and development at the park. These may be competitive or per capita funds.