
SENSITIVE RESOURCES AND OPEN SPACE SYSTEM



GOALS

A community-wide open space system that:

- Preserves sensitive resources, including plant and animal habitats and wildlife linkages;
- Preserves natural drainage systems;
- Protects the public health and safety by restricting development in areas subject to flooding or high fire risk;
- Provides opportunities for outdoor recreation;
- Guides the form of development by defining boundaries for urban expansion;
- Provides linkages in the regional open space system of interconnected canyons and hillsides.

INTRODUCTION

Because of the largely developed nature of the community, most of the remaining sensitive resources in Mira Mesa lie within the five major canyon systems that form the core of the open space system: Los Peñasquitos, Lopez, Carroll, Rattlesnake and Soledad canyons.

Most of Los Peñasquitos and Lopez canyons are in City ownership, comprising Los Peñasquitos Canyon Preserve. Portions of Soledad Canyon have been acquired by the City. However, most of this canyon is still in private ownership. Carroll Canyon, from I-805 east to Carroll Road, has been placed in non-building area easements through the development review process, preventing development in the most sensitive areas. East of Carroll Road, Carroll Canyon remains in private ownership as it passes through El Camino Memorial Park and the Fenton and Calmat extraction facilities. Rattlesnake Canyon is also in private ownership through El Camino Memorial Park and the Fenton property.

Development of private property that contains sensitive resources is regulated by the Resource Protection Ordinance (RPO). An RPO is designed to protect sensitive native biological species and their habitats, steep hillsides, 100-year floodplains, wetlands, and prehistoric and historic sites. Certain properties in Mira Mesa are exempt from the requirements of RPO. Among these are the sand and gravel operations in Carroll Canyon and undeveloped parcels in the Calle Cristobal Assessment District.

The Hillside Review (HR) Overlay zone also regulates the development of slopes of 25 percent or greater. In addition, state and federal agencies such as the U.S. Fish and Wildlife Service, the Army Corps of Engineers, the U.S. Environmental Protection Agency and the California Department of Fish and Game have jurisdiction over development in floodplains, wetlands and habitats for threatened or endangered species.

Sensitive Biological Resources

Mira Mesa's sensitive biological resources consist of the following native plant communities and habitat types. General locations of these resources are shown on **Figure 5** (an analysis of site-specific sensitive resources is required by the RPO prior to development). All of these resources require special attention due to their uniqueness, rarity, specialized biological function, high degree of diversity or provision of habitat for species that qualify for listing under the Endangered Species Act.

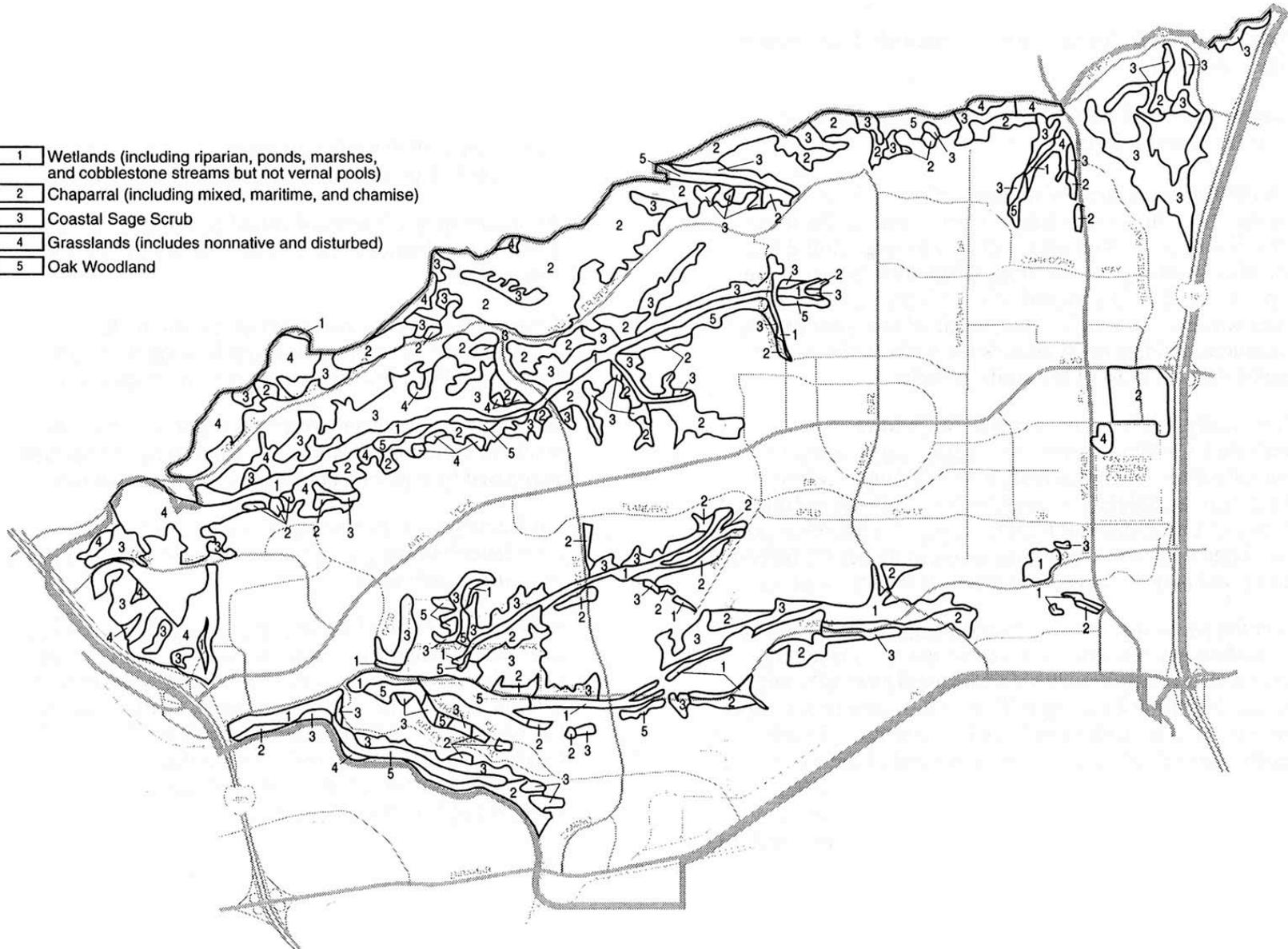
Coastal Sage Scrub

A low growing, open, very fragrant plant community that is home to the California Gnatcatcher—a small bird that is a candidate for federal and state listing as an endangered species—as well as other rare and threatened species.

Maritime Chaparral (also known as Coastal Mixed Chaparral)

Maritime Chaparral is a tall, dark green brushland with thick vegetation including scrub oak. It is valuable as a wildlife food source and cover.

- 1 Wetlands (including riparian, ponds, marshes, and cobblestone streams but not vernal pools)
- 2 Chaparral (including mixed, maritime, and chamise)
- 3 Coastal Sage Scrub
- 4 Grasslands (includes nonnative and disturbed)
- 5 Oak Woodland



Native Plant Communities and Habitat Types

Mira Mesa Community Plan

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FIGURE



Riparian Woodland

Considered wetlands, these woodlands are critical to wildlife movement and survival. They provide food, water, cover and nesting areas for wildlife. They also control erosion and sedimentation.

Oak Woodland

An uncommon, extremely slow growing plant community.

Grasslands (both native and non-native)

Important foraging areas for birds of prey.

Vernal Pools

A rare and unique wetland habitat that occurs during the spring in the shallow depressions on flat mesa tops. Vernal pools support a highly specialized floral and faunal community that develops when rains collect in the depressions. The impervious soils, or hard pans, that exist in areas where vernal pools occur, produce very poor drainage conditions and this often permits the water in the pools to persist through most of the spring months.

Historically, many of the vernal pools in Mira Mesa contained San Diego mesa mint (*Pogogyne abramsii*), a federally listed endangered plant, and/or button celery (*Eryngium artisulatum* ss. *parishi*), a state listed endangered plant and a candidate for federal listing. Several other plants associated with vernal pools are also candidates for federal listing and may be found within the pools in Mira Mesa.

Over the past ten years, substantial vernal pool acreage in Mira Mesa has been lost to development. As a result, the acreage that remains is considered a highly valuable and extremely sensitive resource. There are several undeveloped areas in the community that have historically supported vernal pool habitat. Unfortunately, several of these areas have received little or no protection from disturbance. Consequently, the pools that remain may have been degraded. Site-specific surveys are required to determine the type of species present in any remaining pools.

The following vernal pools sites have been identified in the community plan update process:

1. The City owns a 19-acre vernal pool preserve on Lopez Ridge, adjacent to Calle Cristobal, and Caltrans owns a six-acre preserve to the north of the City site.
2. Approximately 2.2 acres of vernal pool habitat have been preserved and fenced at the western terminus of New Salem Street.
3. Several vernal pools have been identified on the Winterwood Community Park site (see the **Park and Recreation Facilities Element** for further discussion).
4. A 19-acre site has been preserved and fenced near the southern terminus of Parkdale Avenue. The site has been purchased by a private developer as a mitigation site.

5. An eight-acre site on Arjons Drive near Carroll Canyon has been fenced as mitigation for development of an adjacent industrial subdivision.
6. A five-acre site north of Sandburg Elementary School has historically supported vernal pool habitat, but in recent years the habitat has been severely degraded by human activity. The site has a potential for restoration because it has not been graded and subsurface soil conditions still exist that will support vernal pool habitat if protected from further disturbance (see the **Residential Land Use Element** for further discussion).

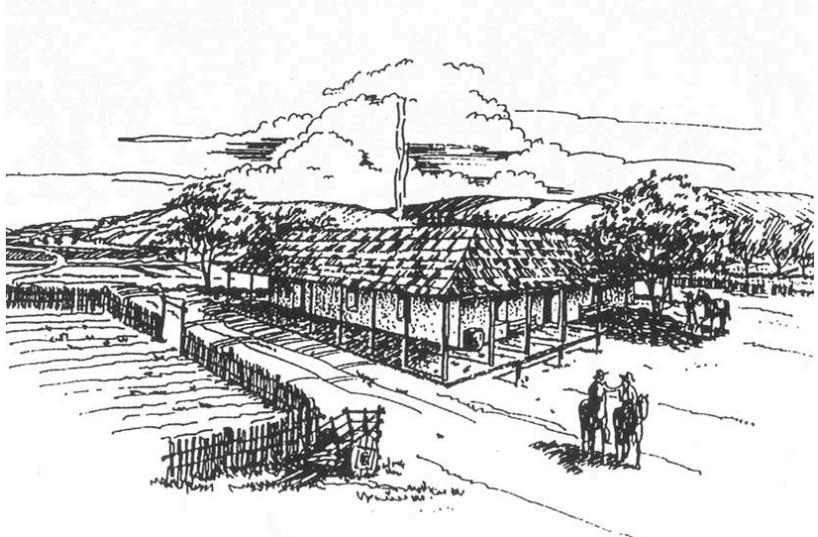
The U.S. Army Corps of Engineers has jurisdiction over vernal pools. Therefore, any proposed impacts to vernal pools are subject to federal jurisdiction and require the property owners to obtain a Section 404 (Clean Water Act) permit from the Corps before development. If endangered species are present, a consultation with the U.S. Fish and Wildlife Service is required prior to the issuance of the permit. A Section 404 permit can only be issued if the Fish and Wildlife Service determines that the project would not impact critical habitat, or that no feasible alternative to the project exists and biological impacts are fully mitigated.

Wildlife Corridors

While not technically a resource, wildlife movement corridors are an important element of viable habitat. When these corridors are severed by development or roads, habitats are fragmented. This isolation affects some species more than others, but can result in declining wildlife populations. It is, therefore, important to identify the location of active or potential corridors and to maintain suitable connections between open space.

Cultural Resources

Archaeological investigations of Mira Mesa began at least as early as the 1920s when Malcolm Rogers of the San Diego Museum of Man recorded a site just north of Carroll Canyon Road. Additional sites in the area were recorded in the 1960s.



Many portions of the area have been investigated in conjunction with the Environmental Impact

Report process. Numerous sites have been discovered in western Mira Mesa that comprise a broad spectrum of cultural activities. San Dieguito, La Jollan and Kumeyaay Indian artifacts have been found.

In addition to prehistoric cultural resources, Mira Mesa also contains, or is in proximity to, sites dating from the Mexican Period (1822-1848) on into the 1900s. The best known historical site is the Ruiz-Alvarado adobe located in Los Peñasquitos Canyon just outside the community boundary. This structure was built by Captain Francisco Maria Ruiz around 1823-1825. He was the recipient of the first private land grant in Alta California, Rancho de Los Peñasquitos. The ranch, comprising approximately 8,486 acres, was granted to him by Luis Antonio Arguello, the first governor of Alta California, in 1823. The old adobe, considered by some to be the oldest standing structure in California, was reduced to rubble during the heavy rains of 1978 due to neglect. The ruins are still highly important as a cultural resource site and efforts have been undertaken to preserve what remains.

POLICIES

1. Open Space Preservation

- a. Sensitive resource areas of community-wide and regional significance shall be preserved as open space.
- b. Discretionary review (a PRO, PCD or PID) shall be required for any proposed development in or adjacent to designated open space to ensure the application of the Policies and Proposals of this Plan:



2. Trails

- a. Public access in areas of environmentally sensitive habitats shall be limited to low-intensity recreational, scientific or educational use. Access shall be controlled or confined to designated trails or paths.
- b. Trails or other recreational activities planned for resource areas shall be designed to avoid damaging impacts to the resources. No access shall be approved that would result in significant disruption of habitat.

3. Wildlife Corridors

Construction or improvements of roadways in sensitive habitat or designated wildlife corridors shall be designed to impact the least amount of sensitive area feasible. Bridges, elevated causeways or other mechanisms determined to be appropriate for the safe passage of wildlife by the Planning Director shall be used in place of culverts and fill in order to maintain wildlife crossings and open space connections. Impacts to wildlife crossings shall also be

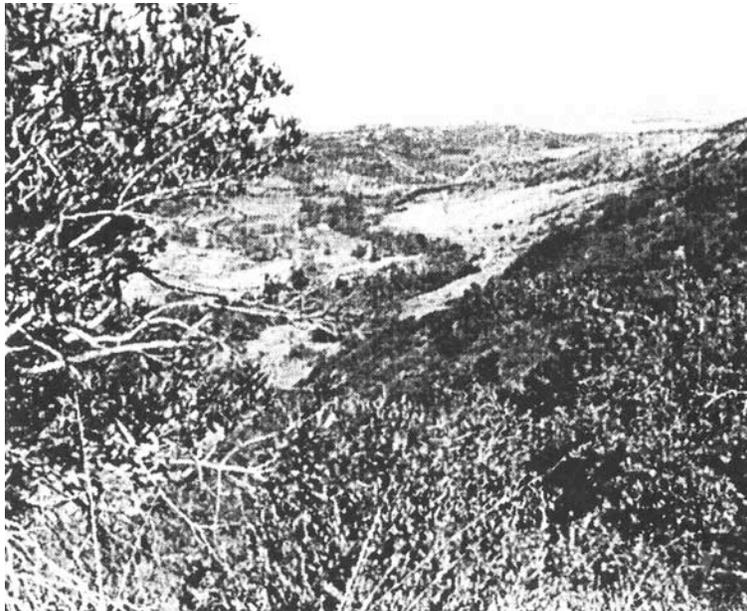


considered in the determination of design speeds for new or realigned roadways. This is especially important for Carroll Canyon Road and Camino Santa Fe—the two remaining major roads to be built in Mira Mesa that will require crossing floodplains and sensitive habitat area—but also for lower classification local roads that will provide interior circulation for development projects.

4. **Resource Management**

- a. No rare, threatened, endangered or candidate species, species of concern or those that qualify for federal or state listing shall be disturbed without all necessary City, state and/or federal permit approvals.
- b. No filling, clearing, grubbing or other disturbance of biologically sensitive habitat shall be permitted without all necessary City, state and federal permit approvals and completion of mitigation requirements.
- c. No encroachment shall be permitted into wetlands, including vernal pools. Encroachment into native grasslands, Coastal Sage Scrub and Maritime Chaparral shall be consistent with the RPO. Purchase, creation or enhancement of replacement habitat area shall be required at ratios determined by the RPO or state and federal agencies, as appropriate. In areas of native vegetation that are connected to an open space system, the City shall require that as much native vegetation as possible is preserved as open space.
- d. Habitat area purchased as an open space preserve, as natural open space or open space mitigation should be located adjacent to existing open space or in areas that will ensure viable open space connections.
- e. Sensitive habitat area that is degraded or disturbed by development activity or other human impacts (such as non-permitted grading, clearing or grubbing activity or four-wheel drive activity) shall be restored or enhanced with the appropriate native plant community. This is critically important when the disturbed area is adjacent to other biologically sensitive habitats. Manufactured slopes and graded areas adjacent to sensitive habitat shall be revegetated with the appropriate native plant community, as much as is feasible considering the City's brush management regulations.
- f. Exotic or invasive plant species shall not be planted within or adjacent to existing sensitive habitats.
- g. For all areas that are to be preserved as habitat area, resource management and monitoring plans shall be developed, consistent with the City of San Diego's Mitigation Monitoring and Reporting Program.
- h. Riparian areas:
 - 1) Riparian areas within Los Peñasquitos Canyon Preserve.
 - a) Riparian areas within Los Peñasquitos Canyon Preserve shall be preserved in their natural state with a buffer of adjoining upland habitat having a minimum width of 100 feet. The buffer shall start at the outside edge of the defined riparian habitat, or at the outside edge of the 100-year Federal Emergency Management Agency (FEMA) floodplain, whichever is wider or outermost.

- b) Applicants for coastal development permits for projects located in the watershed of Los Peñasquitos Lagoon shall, in addition to meeting all other requirements of this local coastal program, enter into an agreement with the City of San Diego and the state Coastal Conservancy as a condition of development approval to pay a Los Peñasquitos watershed restoration and enhancement fee to the Los Peñasquitos Lagoon Fund for restoration of Los Peñasquitos Lagoon and its watershed.
- 2) All other riparian areas should be preserved in their natural state with a buffer of adjoining upland habitat having a minimum width of 100 feet. The buffer shall start at the outside edge of the defined riparian habitat, or at the outside edge of the 100-year FEMA floodplain, whichever is wider or outermost.
 - 3) Development adjacent to riparian areas shall be designed to avoid erosion, sedimentation and other potentially damaging impacts (such as pollution from urban runoff) which would degrade the quality of the resources in the area (including wildlife habitat, vegetation, water quality or quantity and visual quality).
- i. Vernal Pools: The remaining vernal pool habitat in the community shall be preserved and shall be protected from vehicular or other human-caused damage, encroachment in their watershed areas and urban runoff.
 - j. Oak Woodlands: No loss of natural stands of oaks or oak woodland habitat shall be permitted nor shall grading or other disturbance be permitted within the oak woodland habitat area. Oaks are susceptible to an often fatal fungus resulting from changes in hydrology; therefore, no changes shall be made to the watershed/drainage area of oak woodlands that could affect the surface or subsurface hydrology and no irrigation shall be permitted within 200 feet of the trunk of an oak tree.
 - k. Coastal Sage Scrub: Coastal Sage Scrub shall be protected from grading or impacts from development. Encroachment into this habitat type, or mitigation for any impacts upon it, shall comply with the ROP and the U.S. Fish & Wildlife Service recommendations. If these overlap, the policy that requires the higher degree of protection will take precedence.



1. Maritime Chaparral: Maritime Chaparral shall be protected from impacts due to adjacent development, including grading and brush management, that may cause damage or degradation to the habitat qualities of this resource.
- m. Grasslands: Grasslands that serve as raptor foraging areas or are physically linked to other sensitive habitat shall be preserved in, or restored to, their natural state.

PROPOSALS

1. Open Space Preservation

Preserve the floodplain and adjacent slopes of the five major canyon systems that traverse the community—Los Peñasquitos Canyon, Lopez Canyon, Carroll Canyon, Rattlesnake Canyon and Soledad Canyon, and the remaining vernal pool sites (as shown generally on **Figure 6**)—in a natural state as open space.

2. Open Space Restoration

Restore Carroll Canyon Creek to function as a linear open space park, between El Camino Memorial Park and Black Mountain Road, as sand and gravel extraction in Carroll Canyon is phased out. General restoration requirements are addressed in the **Carroll Canyon Master Plan Element** of this Plan. Specific restoration plans will be required through the master plan development process.

3. Trails

Provide a system of pathways or trails throughout Mira Mesa's open space canyons to increase access to open space and provide alternate means of reaching recreational facilities. General locations of proposed trails in Los Peñasquitos, Lopez, Carroll and Rattlesnake canyons are shown on **Figure 7**. Specific locations will be reviewed by the Resource Management Section of the Planning Department during the project review process. The Plan will defer specific trail locations in Peñasquitos Canyon Preserve to the joint City and County Master Plan for the Preserve.

4. Wildlife Corridors

Preserve and maintain the wildlife connections as shown generally on **Figure 8** in a natural state. Specific linkages necessary for the long-term viability of the resource areas being joined, or for the wildlife using the connections, will be determined through the project review process. The wildlife crossing shown across Camino Santa Fe at Rattlesnake Canyon shall be a bridge, elevated causeway or other method determined to be appropriate for the safe passage of wildlife by the Planning Director.

5. Resource Management: Los Peñasquitos and Lopez Canyons

- a. Protect the Lopez Ridge Vernal Pool area from human impacts while maintaining ecological functioning. This area should be fenced, with no trespassing permitted except to allow for organized ecological tours. Signs should be installed that describe the resource and explain why the area is being protected.

- b. Restore all graded and disturbed areas adjacent to Camino Santa Fe at the Lopez Canyon crossing, to the original plant community of the area as the nearby properties develop.
- c. Monitor wildlife corridors to ensure that they are free of obstructions that could reduce their viability as wildlife crossings. Corrective action should be taken as necessary to ensure that they are operating effectively.

6. Resource Management: Carroll, Rattlesnake and Soledad Canyons

(Resource management proposals for Carroll Canyon between El Camino Memorial Park and Black Mountain Road are addressed in the **Carroll Canyon Master Plan Element**.)

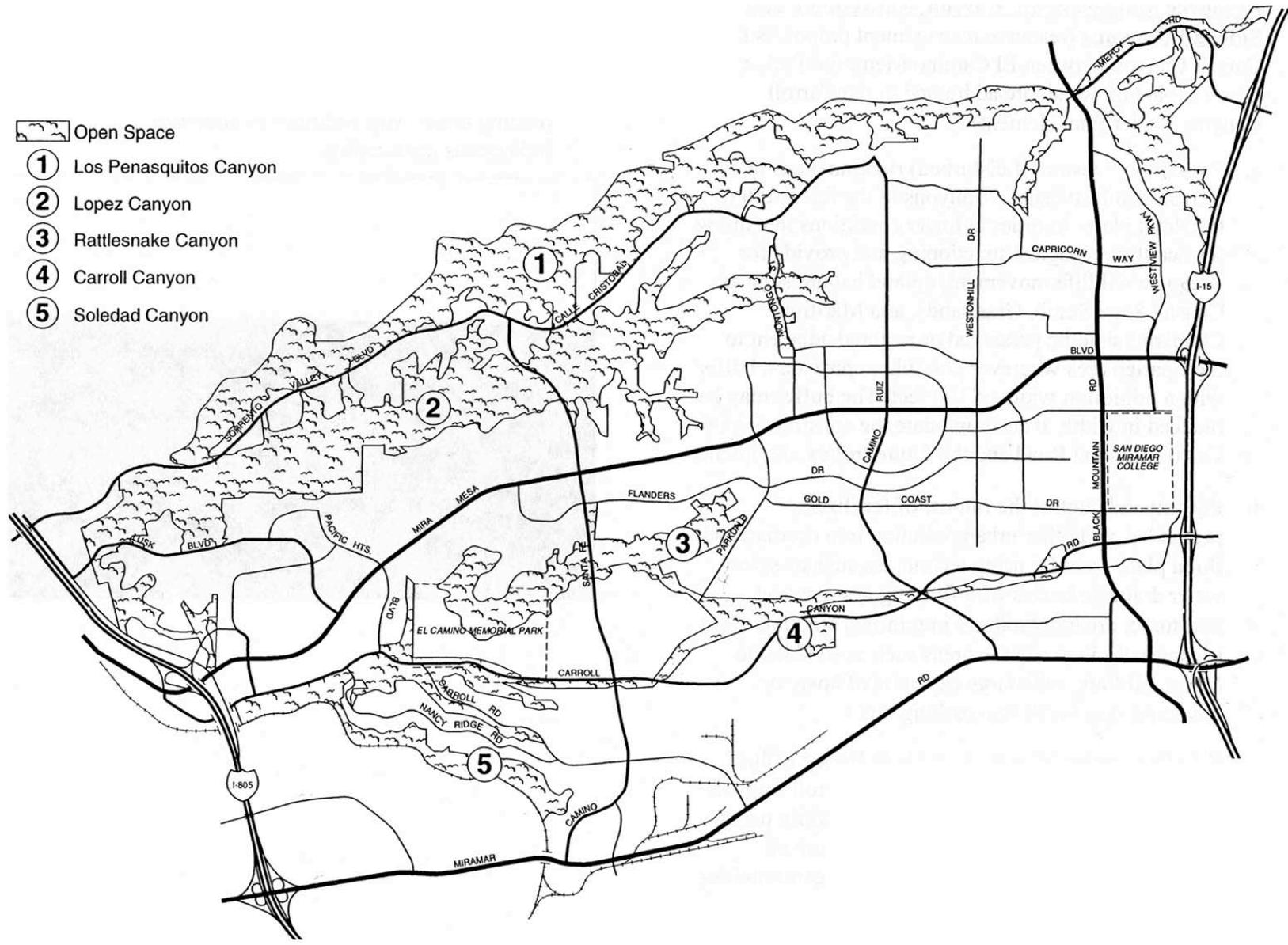
- a. Preserve (or restore if disturbed) riparian areas in Carroll and Rattlesnake Canyons to the full width of the floodplain. In order to foster conditions that allow for healthy ecological functioning and provide for adequate wildlife movement, upland habitat such as Coastal Sage Scrub, Grasslands and Maritime Chaparral shall be preserved or restored adjacent to the riparian area wherever possible to provide a buffer with a minimum width of 100 feet. The buffer may be reduced in width to accommodate the construction of Carroll Canyon Road and the future trolley alignment.
- b. Prevent and control the runoff of fertilizers, pesticides and other urban pollution into riparian and floodplain areas by using techniques such as storm water drainage basins with filtering systems and non-toxic, organic products in minimal amounts. This is especially important in areas such as El Camino Memorial Park, with large expanses of lawn, or industrial areas with vast parking lots.

- c. If further improvements are made to Nancy Ridge Road near the floodplain crossing at Carroll Canyon Road, require a bridge that allows for wildlife passage as well as floodwater flows, and restoration of riparian and other indigenous vegetation communities in areas disturbed by roadwork.



- d. Restore wildlife connections between Soledad Canyon and Rose Canyon wherever possible. In particular, a connection along the railroad tracks needs to be restored, as well as connections through existing industrial parking areas, with additions of adequate indigenous landscaping.

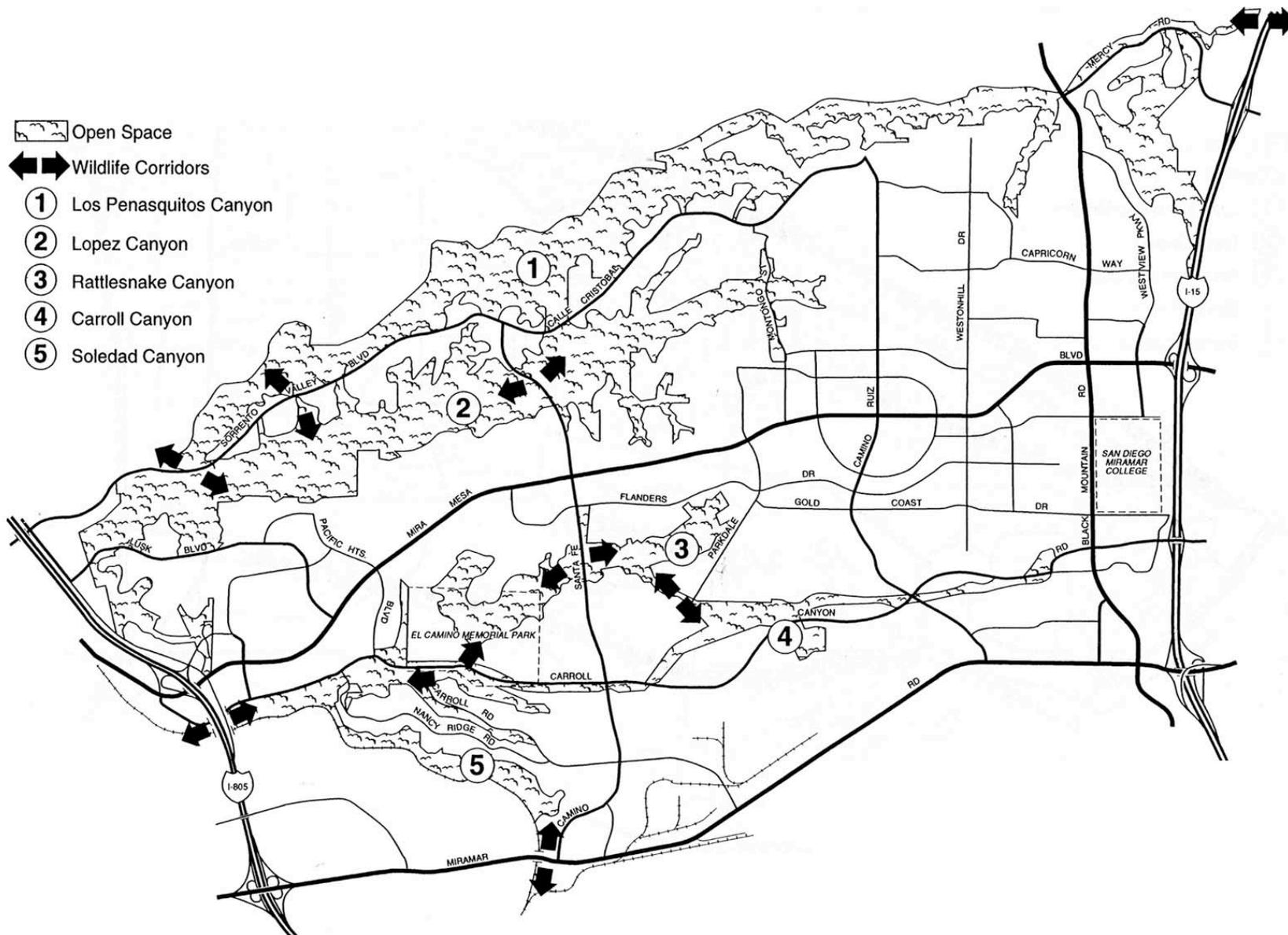
-  Open Space
- ① Los Penasquitos Canyon
- ② Lopez Canyon
- ③ Rattlesnake Canyon
- ④ Carroll Canyon
- ⑤ Soledad Canyon



Designated Open Space System
Mira Mesa Community Plan

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FIGURE





Recommended Wildlife Corridors
Mira Mesa Community Plan

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FIGURE



ACTION PLAN

Implementation Measures	Timing		Responsibility for Implementation	Source of Funding	See for More Detail	
	Adopt With Plan	Within 10 Years				Within 15 Years
Retain A-1-10 zoning on areas designated for open space preservation.		●	●	Planning Department	N/A	Proposal 1
Enforce the HR Overlay Zone and Guidelines, RPO, coastal zone requirements and the design criteria of this Plan during review of discretionary projects.		●	●	Planning Department	N/A	Proposals 1-6
Require provision of a trail system and preservation of wildlife corridors in Carroll Canyon during master plan process.		●	●	Planning Department	N/A	Proposals 3 & 4
Require monitoring of wildlife corridors as a condition of development approval.		●		Planning Department	N/A	Proposal 5C