Open Space

OPEN SPACE

Open space is perceived as one of the tools for protecting San Diego's quality of life. It supports the conservation and enhancement of San Diego's existing communities and seeks to aid in the creation of new communities which strive to retain and enhance natural amenities.

The citywide open space system is based upon the natural features of the San Diego coastal plain. It capitalizes on the drainage systems, particularly the river valleys and adjoining steep hillsides which interrupt the coastal plain and link the ocean with the coastal mountain range.

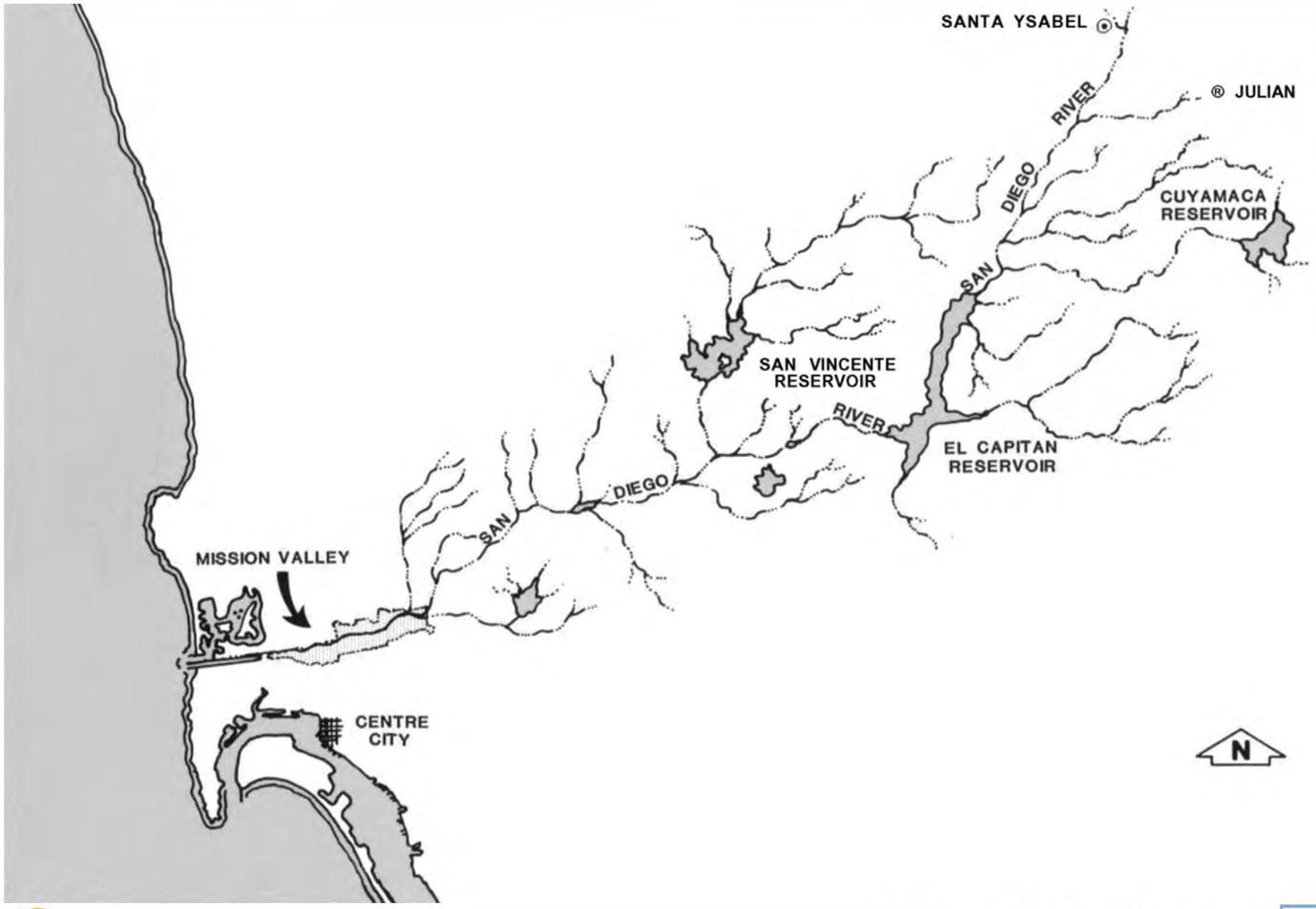
Because the drainage systems contain alluvial soils and ground water they often support lush stands of vegetation and as such, are important assets in establishing the natural amenity or quality of life for San Diego. San Diego's many canyons and valleys are not only scenic but are often particularly suitable for use as natural parks.

The limited use of drainage systems for intensive urban development often provides an opportunity to use them as natural relief from urbanization in already built up areas. Similarly, canyon and hillside open spaces give form to urbanization and can enhance neighborhood environments.

In reviewing the land characteristics of the coastal plain it is apparent that open space may also function to protect the public health, safety, and general welfare. For this reason, steep areas of unstable soil and floodplains may be restricted to reduce development intensities that are consistent with open space objectives.

As a major floodplain, Mission Valley is an important element of the citywide open space system. Additionally, open space in the Valley serves a dual function of recreation and flood control. Given the topography in Mission Valley, the open space, and in particular, the river will affect all aspects of future development in the community including land use, transportation (configuration of surface streets), and urban design.

In Mission Valley, open space includes those areas which form a greenbelt around and through the community. The San Diego River is the most prominent open space element; the hillsides which form the North and south boundaries of the community are also a natural feature. Finally, parks and recreation areas are the third component of Mission Valley's open space element.



San Diego River Drainage Basin

Mission Valley Community Plan

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FIGURE

SAN DIEGO RIVER

The San Diego River begins in the Laguna Mountains, northeast of the town of Santa Ysabel, just beyond the northern boundary of the Cleveland National Forest. It winds down through the mountains toward the southwest, through the El Capitan Dam and the cities of Lakeside and Santee. It traverses the Mission Trails Regional Park through Mission Gorge. When it reaches Mission Valley, near the Mission San Diego de Alcala, the river veers sharply westward and continues through the Mission Valley community planning area, and includes that portion of the San Diego River between Morena Boulevard on the west and Friars Road at Fairmount Avenue on the east.

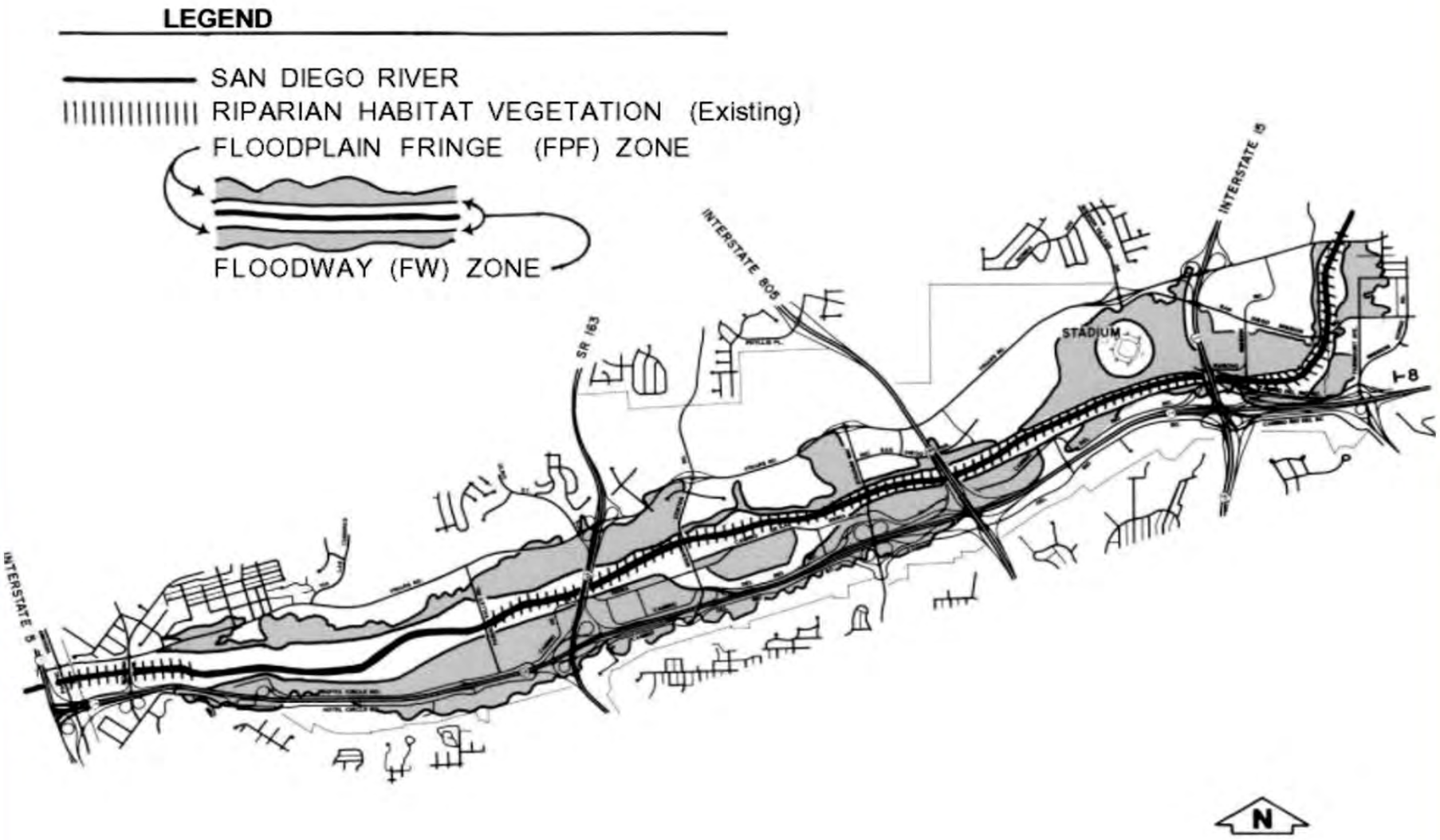
The San Diego River is the major factor responsible for the existing topography in this area, creating Mission Gorge and the flat floodplain now called Mission Valley. It was the primary source of fresh water for the early San Diego settlements. In urban Mission Valley, the river has the potential for open space, recreational uses and aesthetic appeal.

The Mission Valley portion of the San Diego River is the major component of a freshwater wetland system complete with a variety of established riparian habitats. Habitat types within the project area include freshwater marsh, open water, riparian woodland and ruderal or disturbed area. These habitats are currently underutilized by wildlife due to long-term physical disturbance within the area, human disturbance, closed marsh habitats, intrusion of giant reeds and the lack of adjoining or complementing native scrub habitats. Freshwater marsh, open water and riparian woodland are rare habitats in the San Diego area and are potentially significant wildlife resources.

The three major types of existing plant communities are riparian woodland, freshwater marsh and pond aquatic. Riparian woodland is generally linear in character and closely follows the margins of permanent rivers, streams and pond areas. It is composed of semi-aquatic trees and herbs that are often dense enough to resemble a forest. Within the planning area, the predominant species are the willows, with a moderate number of Fremont cottonwoods. The woodland habitat is very dense just east of the I-805 Bridge and also just east of SR-163. It is also well developed north of Camino de la Reina at Mission Center Road. The large area just east of Qualcomm Stadium Way and south of the river is actually a successional riparian woodland composed of mule fat, small willows, cottonwood and tamarisk.

Freshwater marsh is an aquatic community of immersed plants found where the water is at or just above the surface on the shallow margins of open water habitats. In Mission Valley it is composed primarily of cattail and bulrush. This habitat suffers sporadic adverse impacts by flooding, especially in the narrow channel areas between Qualcomm Stadium Way and Mission Center Road, but it is very resilient and can reestablish itself within a few years. The most extensive areas of marsh habitat are located east of Qualcomm Stadium Way and immediately west of Mission Center Road.

Pond aquatic habitats are found in slow moving portions of the river or ponded areas. Within the planning area, species found in this habitat include water fern, duckweed, water hyacinth, water plantain and ditch grass.



San Diego River
Mission Valley Community Plan
24 FIGURE

The San Diego River through Mission Valley is a significant aesthetic and economic asset to the community. It provides visual and physical relief from the intensifying urbanization in the Valley. As a linear green space, the river corridor unifies the community, accentuating the natural setting of the Valley. As the Valley continues to develop as a major urban center, the need for accessible open space will increase. The river corridor also provides new opportunities for recreational uses. As the flooding is controlled (through the creation and construction of a flood control facility), the presence of the river should also add to the value of property adjacent to it. The river corridor has the potential to become a regional attraction, drawing residents and visitors to the area. This will, in turn, draw money into the area and provide greater demand for visitor-oriented services. The unique setting of the river and wetland habitats also adds to the value of property in the area. The addition of a flood control facility may make more land available for development. Existing development, however, has essentially ignored the river, choosing instead to orient away from it.

The current means of flood protection in Mission Valley are the Floodway (FW) and Floodplain Fringe Overlay (FPF) zones which were adopted in 1973 and applied to Mission Valley in 1977. These zones are based upon the U.S. Army Corps of Engineers' determination in 1973 that the 100-year flood would have a peak discharge of 36,000 cubic feet per second (cfs). The zones were applied as an interim flood control measure to protect Mission Valley development until a permanent flood control facility could be designed, funded, and constructed, The FW zone represents the area of inundation during the 100-year flood, given existing development and topography. In a subsequent study (1975), the Corps revised their peak discharge estimate to 49,000 cfs to coincide with the year 2000, 100-year flood level. Therefore, any flood facility should now be designed to carry a minimum of 49,000 cfs in order to meet the Corps' and the City Engineer's standards. When a facility is designed which meets all hydraulic, environmental and design criteria to the satisfaction of the City Council, then the limits of the FW zone may be decreased, potentially increasing the area of developable land in the Valley. The flood control facility includes the portion of the river corridor in which floodwaters will be contained and includes riparian habitat areas. The river corridor includes the area within the 100-year floodway and its surrounding environs, buffer areas and all land that connects visually and functionally with the river open space.

The San Diego River Natural Resource Wetlands Management Plan (**Appendix G**) is an integral part of implementing the San Diego River element of the Plan. The City of San Diego has undertaken this management program to help coordinate various private and public interests concerned with riparian/wetlands habitat protection, safe flood passage and continued urban development. With technical assistance from the U.S. Fish and Wildlife Service, California Department of Fish and Game, and Caltrans, the Natural Resource Wetlands Management Plan establishes specific biological design criteria to be coordinated with development and the hydraulic confinement criteria of the existing Open Space – Floodplain (OF-1-1) Zone. The intent is that any development project in conjunction with a projected 100-year flood control facility be so designed that a wetlands habitat system at least equal in quality to that presently existing is preserved, enhanced or created continuously along the San Diego River. By approving a comprehensive plan specifying the future identity of the river channel now, development expectations can be clarified, and the granting of permits for projects which are in conformance with the plan can be facilitated. Under the present system, incremental portions of the river are disrupted, and piecemeal compensation

projects may fail to assure a unified and functional wetland habitat. In order to create and maintain a viable wildlife corridor within the floodway proper, it is necessary to protect the native habitat areas from excessive human disturbance. The degradation of both the native habitats and their use by wildlife can occur through either noise, visual or direct physical disturbance. These same forms of disturbance can also degrade the aesthetic value of the river corridor for human use. For these reasons, buffers should be provided and activities should be restricted along and within the floodway.

Physically, the buffer along the San Diego River is defined as the area between the edge of the 100-year floodway and adjacent development. A substantial buffer, planted with native species of coastal sage scrub and native trees, is needed to protect the river's habitat and to create greater edge and diversity.

It is the desire of the community that the San Diego River area be landscaped and beautiful, with flood protection to be accomplished in such a way so as to look natural and provide recreational facilities for the public. The purpose of this element is to provide objectives and guidelines that will facilitate the development of the San Diego River as a natural, functional component of the Mission Valley community.

OBJECTIVES

- Protect existing and future development from flood hazard.

- Preserve and maintain the wetlands and riparian habitat areas along both sides of the river.

- Enhance and maintain the aesthetic and recreational qualities of the river corridor as part of an open space system.

PROPOSALS

- Provide criteria to enable property owners to design, construct and maintain a flood control facility for the length of the San Diego River within the community planning area.

- Utilize design principles to enhance visual and physical access to the river.

- Develop and implement a flood control facility maintenance program in conformance with the Natural Resource Wetlands Management Plan to identify cost responsibilities and to facilitate permit review and issuance. In the absence of a regional maintenance program, maintenance programs should be developed for all projects proposed along the river.

- Develop guidelines for compatible uses adjacent to the river.

DEVELOPMENT GUIDELINES

- Any flood control facility designed and constructed in Mission Valley must meet the following hydraulic, environmental, design, maintenance and financing criteria:

1. Hydraulic Criteria

a. The facility should be capable of containing the year 2000, 100-year flood of 49,000 cfs as determined by the U.S. Army Corps of Engineers and the City Engineer and as updated thereafter in order to provide public safety and protect public and private investment.

b. The facility should be designed using coefficient of friction values commensurate with expected future habitat growth and erosion protection. The design of the floodway should ensure that existing or enhanced riparian and wetland vegetation can be achieved concurrent with necessary hydraulic parameters.

c. All north-south roads crossing the flood control facility should be improved or constructed to be passable during a minimum year 2000 ten-year flood and should act as energy dissipaters for floods of greater volumes. The impacts of an energy dissipater effect must be taken into account when designing the carrying capacity of the flood management facility.

d. Any given segment of the facility should deliver and receive water at velocities equal to the existing exit and entry velocities.

2. Environmental Criteria

a. The facility shall be unlined and soft-bottomed with sloping, vegetated sides.

b. Dikes, embankments, etc., should be vegetated or otherwise protected against erosion. Riprap may be used in limited areas where scouring is likely to occur during high velocity flows of water.

c. The width of the facility should vary from bank to bank according to the environmental setting and hydraulic criteria.

d. The design and construction of the flood control facility within the river corridor should implement the Wetlands Management Plan, replacing any habitat areas that are disturbed or eliminated by the facility itself or its construction, and enhancing and preserving any remaining areas. A biological mitigation program should be developed for all projects impacting native wetland/riparian vegetation. Such a program should ensure that each native habitat type (open water, marsh, riparian woodland) would not be quantitatively reduced and that any revegetation would result in a qualitative improvement to the affected vegetation.

e. A phasing plan for construction of any flood control facility should be developed so as to allow any newly created biological community to become established before the next is disrupted.

f. A maintenance plan should be established to insure the future quality and preservation of wetland and riparian habitat areas.

3. **Design Criteria**

   a. Any flood control facility should be designed to complement the linear greenbelt along both sides of the river. Indigenous types of vegetation should be allowed to grow within the facility and along the edges (refer to landscaping appendix, **Appendix F**). The sides of the facility should reproduce natural slopes, and where riprap or man-made materials are exposed, they should be sculptured in a manner to enhance the overall setting, or covered with soil and revegetated. The design of the floodway should ensure that the biological program could be achieved concurrent with the necessary hydraulic parameters.

   b. Pedestrian and/or bicycle paths should be included as part of the design of the facility. They may be placed within the flood facility or on an embankment, and therefore subject to periodic flooding, as long as the carrying capacity of the facility is not impaired, and if they do not conflict with the recommendations of the Natural Resources Wetlands Management Plan and this element.

   c. Buffer areas should be located along the entire length of both sides of the river and at no location should private development intrude into the floodway proper. Buffer areas should meet the following criteria:

      (1) The average width of the buffer within each project area should not be less than 20 feet.

      (2) Buffer areas should be widest adjacent to the most sensitive habitat areas.

      (3) Buffer areas should be planted with a combination of native trees and shrubs, particularly riparian woodland and coastal sage scrub species. The buffer should provide a woodland overstory, but a more open and maintained understory could be established in some locations to provide views and a more traditionally landscaped appearance (**Appendix F**).

4. **Maintenance Criteria**

   a. A maintenance program for the flood control facility should be developed in conformance with the guidelines provided by the Wetland Management Plan, and should include the following:

      (1) Identification of wetland/riparian habitat areas that should be preserved and those that can be restored or replaced.

      (2) A determination of maintenance responsibilities for the long-term rehabilitation, enhancement and protection of wetland/riparian resources.

      (3) The establishment of a Valley-wide maintenance program to eliminate the need for the issuance of individual clearing/dredging permits from the various state and federal resource agencies.

   b. Maintenance of the flood control facility should include maintenance of the biological resources, the floodway's hydraulic efficiency, and the river corridor's aesthetic quality.

   c. Maintenance should be privately funded.

5. Financing Criteria

a. An assessment district or some other means of private financing should be formed to provide funding for construction and maintenance of the flood control facility. The financing program should:

(1) Include all owners of property that would be directly affected by, or benefit from, a flood control facility in Mission Valley.

(2) Exempt and/or credit any group or individual property owner that develops, funds, constructs and maintains the flood control facility themselves.

- Land uses compatible with the river and the goals of the Wetlands Management Plan should be implemented as part of any development project adjacent to the river. All riverfront projects should implement the concept of habitat preservation, a flood facility, and a linear park of a quality comparable to or better than those included in the First San Diego River Improvement Project (FSDRIP), which has been approved by the City Council.

1. Any facilities located within the 100-year floodway should be compatible with the primary use of the floodway as a natural open space system and should not reduce the quantity or quality of the native habitat areas. Compatible land uses would consist primarily of passive recreational uses including, but not limited to:

a. Fitness stations for joggers.

b. Fishing platforms.

c. Viewing or rest areas.

d.Pedestrian and bicycle paths (placed near the floodway edge).

2. Land uses within the buffer area may include:

a. Light rail transit corridor.

b. Pedestrian and bicycle paths.

c. Passive recreational uses.

3. Compatible land uses adjacent to the river corridor may include commercial or active recreational uses such as:

a. Outdoor cafes.

b. Art or craft sales.

c. Plant nurseries.

d. Hotels or motels.

e. Restaurants.

f. Volleyball and tennis courts.

g. Softball fields (grass).

h. Golf courses or putting greens.

- Planned commercial/residential developments (PCD/PRD) located adjacent to the river corridor should use the river corridor area immediately adjacent to the flood control facility to fulfill their open space or landscaped area requirements.

- The river corridor adjacent to the flood control facility should include adequate space provisions for the following:

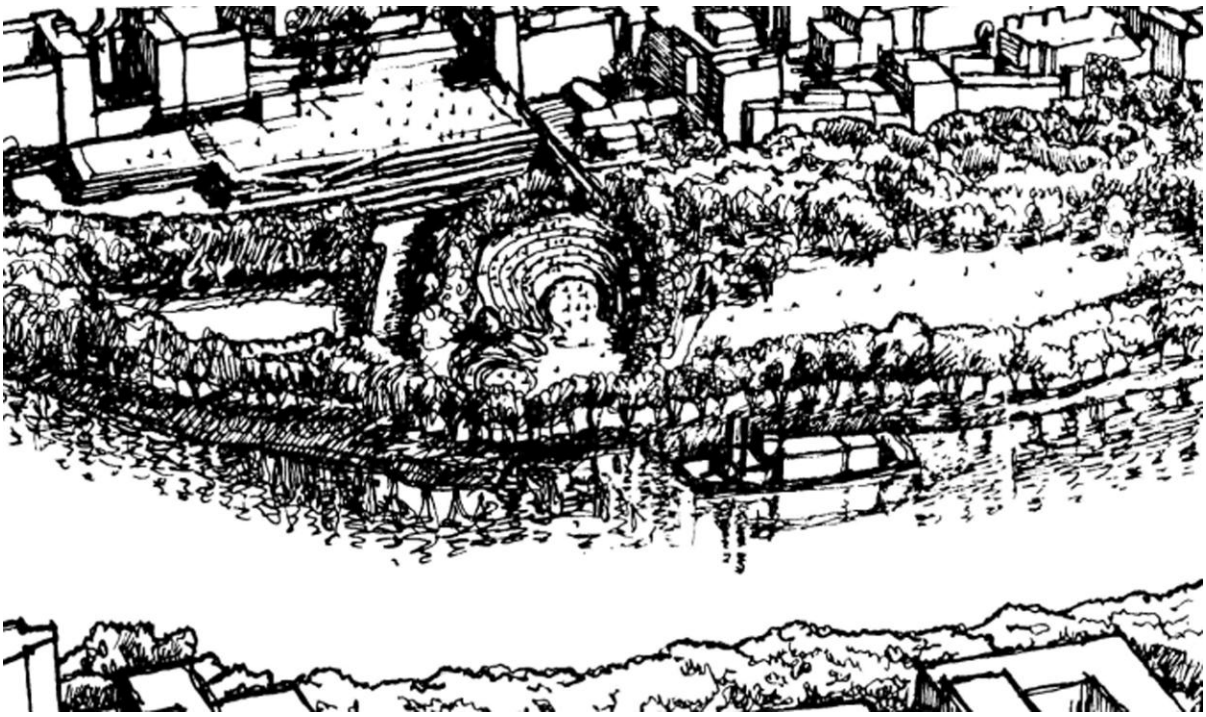
  a. A buffer area with an average width of not less than 20 feet between the wetland habitat area and adjacent urban development.

  b. An east-west extension of Camino de la Reina as a four-lane major street between Napa Street and Fairmount Avenue, passable during a year 2000 100-year flood in the area between Fashion Valley Road and SR-163. The road may have to be situated below the 100-year flood level due to existing urban development. Under no circumstances, however, should that portion of the road be inundated by any flood less than the ten-year flood level.

  c. A light rail transit (LRT) line right-of-way along the river, above the year 2000, 100-year flood level. The LRT line should extend from the intersections of Friars Road and Moreno Boulevard, eastward to the San Diego Jack Murphy Stadium. The precise widths of the LRT right-of-way and the station locations will be determined by future engineering studies. However, it is anticipated that, at the very minimum, the right-of-way widths will be 22 feet or greater and the stadium location widths will be typically 34 feet. The LRT alignment is expected to be on the north side of the river except that a segment between SR-163 and Stadium Way is expected to be on the south side of the river. Additional environmental review will be necessary where there are intrusions into the wetlands habitat. In any such instances, appropriate mitigation will be required, including the widening of buffer areas.

- Individual development projects located along the river corridor should be processed as specific plans or as planned developments and reviewed with adjacent (previously adopted) projects in mind in order to insure the connection of roads, transit alignment, walkways and bikeways.

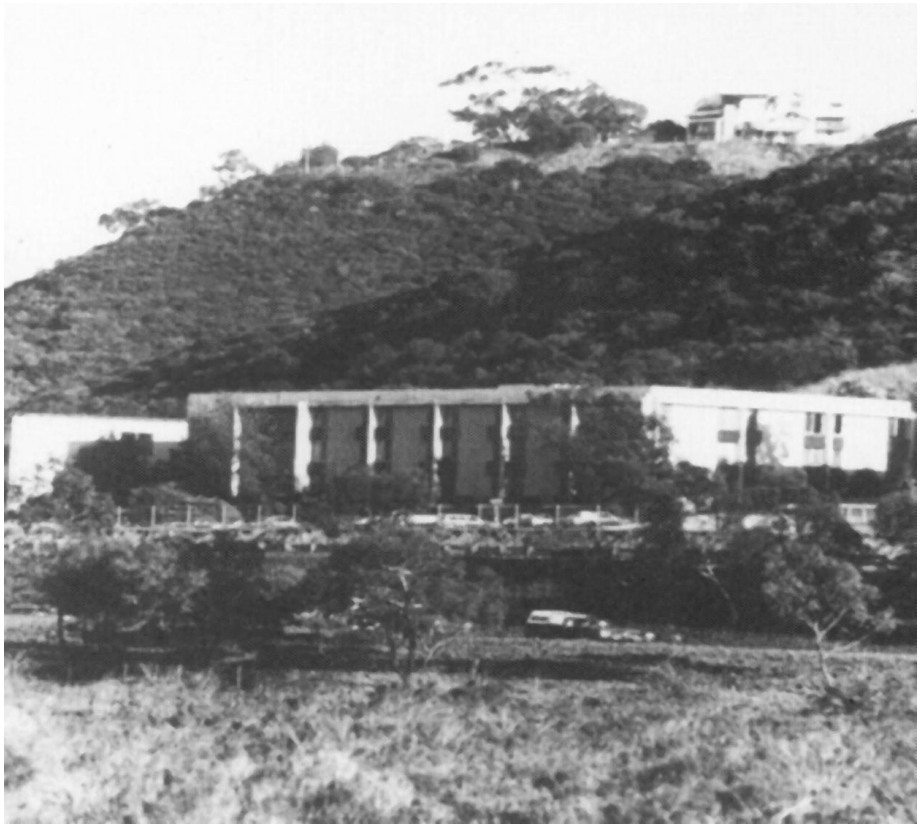
Note: See **Appendix E** for Department of Water Resources recommendations for flood damage prevention.



Conceptual design and development along the San Diego River through Mission Valley

Height limits of 40 to 65 feet should be established in the area south of I-8 to maintain visibility to adjacent natural hillsides.

Hillside development encroachment should be low-density in character.



HILLSIDES

Hillsides are geological features on the landscape whose slope and soils are in a balance with vegetation, underlying geology and the amount of precipitation. Maintaining this equilibrium reduces the danger to public health and safety posed by unstable hillsides. Development affects this equilibrium. Disturbance of hillsides can result in the loss of slope and soil stability, increased run-off and intensified erosion; it can also destroy a community's aesthetic resources. The southern slopes of Mission Valley mark the community's boundary and provide an attractive and distinctive setting.

The open space areas shown in the General Plan are predominantly comprised of steep hillsides and small, undeveloped canyons. The southern slopes of Mission Valley are identified as part of that open space system. The major portions of the slopes are currently zoned for low-density residential development, and are further regulated as Environmentally Sensitive Lands, the Hillside Review Overlay Zone. As demand for land increases, these hillsides are more likely to face development pressure. Due to the impact hillside development can have on the community's health and safety, and on land, water, economic and visual resources, it is apparent that if they are developed it must be in a manner compatible with hillside ecology. Whereas the southern slopes have been maintained in close to their natural state, the northern hillsides have been extensively modified and disturbed by extraction and building activities. Development oriented toward the Valley and accessed by roads from the Valley floor should not extend above the 150-foot elevation contour.

OBJECTIVE

- Preserve as open space those hillsides characterized by steep slopes or geological instability in order to control urban form, insure public safety, provide aesthetic enjoyment and protect biological resources.

PROPOSALS

- Designate the hillsides and canyons which have any of the following characteristics as open space in the community:

  a. Contain rare or endangered species of vegetation or animal life.

  b. Contain unstable soils.

  c. Contain the primary course of a natural drainage pattern.

  d. Located above the 150-foot elevation contour.

- Permit only low-intensity developments to occur on remaining hillsides exceeding 25 percent slope within the HR Zone located below the 150-foot elevation contour.

- Open Space easements should be required for those lots or portions of lots in the HR Zone.

The north facing hillsides in the West Mission Valley area

- Lot splits should not be permitted on hillsides exceeding 25 percent slope except to separate that portion of a lot exceeding 25 percent slope from that portion not exceeding 25 percent slope for purposes of obtaining open space easements.

- Development intensity should not be determined based upon land located exceeding 25 percent slope.

- Encourage the use of Planned Developments to cluster development and retain as much open space area as possible.

- Preserve the linear greenbelt and natural form of the southern hillsides.

- Rehabilitate the northern hillsides and incorporate them into future development.

DEVELOPMENT GUIDELINES

- Grading required to accommodate any new development should disturb only minimally the natural terrain. This can be achieved by:

  a. Contouring as naturally as possible to maintain the overall landform.

  b. Blending graded features into remaining natural terrain.

  c. Replanting with native, drought-resistant plants to restore natural appearance and prevent erosion.

  d. Adapting buildings and parking areas to the natural terrain (i.e., tucking into hillsides, utilizing small pad areas, utilizing compatible site design).

- Development constructed on natural hillsides should preserve and enhance the beauty of the landscape by encouraging the maximum retention of natural topographic features such as drainage swales, streams, slopes, ridgelines, rock outcroppings, vistas, natural plant formations and trees.

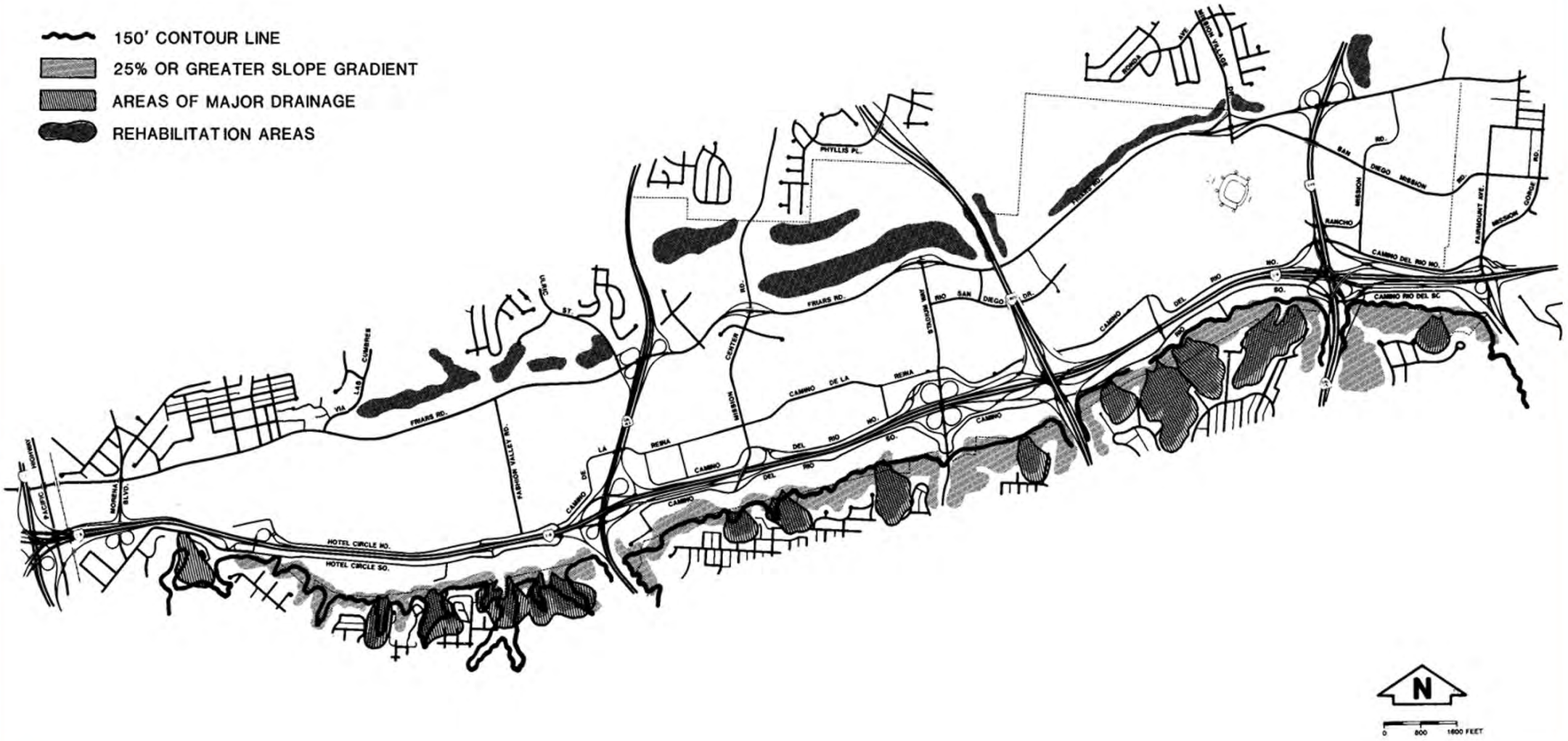
  a. Orient new development along natural drainage courses that can provide natural amenity for the project, provided drainage is not impeded.

  b. Use pedestrian bridges and walkways to link various elements of developments separated by drainage courses or subsidiary canyons or gullies.

- Design roads serving hillside and canyon developments carefully and sensitively.

  a. Roads serving residential development near the upper ridge of the south rim of the Valley should be cul-de-sacs or loops extending from existing upland streets. These extensions should be "single loaded" (with structures on one side only) and of minimum width.

  b. Roads serving Valley development (office, educational, commercial-recreation, commercial-retail) at the base of the hillsides should consist of short side streets branching off Camino Del Rio South or Hotel Circle South. These side streets should provide primary access to projects in preference to collector streets.



Hillsides

Mission Valley Community Plan

25 FIGURE

c. Access roads should not intrude into the designated open space areas.

- Access roads should follow the natural topography, whenever possible, to minimize cutting and grading. Where roads have to cross the natural gradient, bridges should be used rather than fill in order to maintain the natural drainage patterns.

- Wherever possible, preserve and incorporate mature trees and other established vegetation into the overall project design.

- Improve the appearance of the understructures of buildings and parking areas visible from below by:

  a. Providing sensitive site and structural design.

  b. Incorporating structures into the existing hillsides.

  c. Use appropriate screening materials (including landscaping).

- Large-scale development (commercial, office, or commercial-recreation) at the base of the slopes should not cut or grade, nor extend above the 150-foot elevation contour on the southern slopes.

- As part of the implementation process, height limits and site design regulations should be formulated in order to prevent the obscuring of views of the natural hillsides.

- All that portion of the Plan area located south of I-8 should be incorporated into a South Mission Valley Height Limitation Zone, which establishes a height limitation for a new or altered building of 40 to 65 feet.

- The hillsides should provide a clear area of demarcation between the Plan area and the communities on the mesas above Mission Valley.

- Development at the base of the slopes should utilize the following design principles:

  a. Emphasize a horizontal rather than a vertical orientation for building shape.

  b. Step back each successive floor of the structure to follow the natural line of the slope.

  c. Set the rear of the structure into the slope to help blend the structure into the site.

  d. Utilize building materials and colors that are of earth tones, particularly dark hues.

  e. Utilize landscape materials compatible with the natural hillside vegetation.

  f. Design roof areas to minimize disruption of views from the crest of the hillsides. Sloped or landscaped roofs and enclosed mechanical equipment can help to achieve this effect.

A primary recreational opportunity in Mission Valley is the golf course.

Presidio Park provides passive recreational opportunities in the adjacent community of Old Town.

PARKS AND RECREATION

Mission Valley is primarily an urbanized commercial center. As such, there are no public parks currently located within the community. Two resource-based parks border the community and are readily accessible by automobile and bicycle. These are Presidio Park, located in Old San Diego at the western end of the Valley, and Mission Bay Park, also located just west of the Valley. A third resource-based park, Mission Trails Regional Park, is located northeast of the Valley, accessible through Mission Gorge.

The City of San Diego leases out land for two recreational facilities. One is Sefton Little League Field, located at 2505 Hotel Circle Place. The other is the outdoor sports facility abutting the Qualcomm Stadium parking lot. The latter facility is made available to other sports organizations.

The greenbelt formed by the San Diego River corridor provides both visual and physical relief from the existing urban development.

The major concentrations of residential development in the community are located at the western and eastern ends of the Valley. A YMCA (Young Mens' Christian Association) facility at the western end of the Valley on Friars Road (developed on leased City-owned land) provides both indoor and outdoor recreational opportunities in a park-like setting along the river. A private health club provides indoor recreational facilities at the eastern end of the Valley, on Rancho Mission Road near the river. Another private health club provides similar facilities in the western end of the valley, on Hotel Circle South. The need for active and passive recreational opportunities will increase as residential development increases in the Valley.

The projected residential population indicates a need for active recreational park facilities in addition to what is currently provided by the YMCA, Sefton Little League Field and the bicycle and pedestrian paths proposed along the river. Each residential project developer in the community shall be responsible for the provision of private recreational facilities (neighborhood parks) in accordance with the standards of the General Plan for the use of the project residents and their guests. These facilities may include any of an extensive inventory of facilities including tennis courts, pools, Jacuzzi, picnic/barbecue areas, and lawns and landscaped areas. This will permit flexible development of recreational facilities and activity centers in keeping with the needs and interests of various groups in different areas. This concept applies to all residential unit developers within the community planning area to ensure that each resident has adequate recreational facilities. The provision and maintenance of these private recreational facilities should be assured through deed restriction on each individual dwelling unit, Conditions, Covenants, and Restrictions (CC&R) agreement, or other similar means.

Two park-like facilities will be provided on City-owned land in Mission Valley. One site will be located in the vicinity of San Diego Jack Murphy Stadium. The other will be located in the western area in the vicinity of the existing YMCA. A pedestrian connection will be available between the two facilities through the open space linkage system to be established along the river corridor.

OBJECTIVE

- Provide adequate park and recreation areas for the use of Mission Valley residents in accordance with the General Plan.

PROPOSALS

- Utilize the San Diego River corridor for passive recreation.

- Coordinate with private recreational facilities and commercial interests so that the private facilities compliment and supplement the public recreational system.

- Neighborhood parks should be provided within, and as a part of, new residential projects.

- Provide a community park in the vicinity of San Diego Jack Murphy Qualcomm Stadium. Because of the potential expense of land purchase at this site, it will be necessary to find means of financing the facility with other than the standard park fee program, which in its present form cannot guarantee the minimum funding for such a facility. It should be developed as an active park, oriented to organized sports.

- Provide a public neighborhood park facility within the Quarry Falls Specific Plan area. This park may include active and/or passive park elements, such as athletic courts, a fitness courts, children's playgrounds, a grassy amphitheater, picnic areas with tables and barbecues, and conveniently located sitting areas. A simple interpretive signage system that reflects a historical connection to the San Diego River is recommended to aid in visitor enjoyment of the park

- Expand the existing sports facility abutting the stadium parking lot.

- Utilize a variety of methods to finance the development of a community park in the vicinity of the San Diego Jack Murphy Stadium. The specific financing method should be established in conjunction with the land use implementation ordinance and public facilities implementation package to follow the approval of this plan. Methods to assess as part of this implementation program include: increase in park fees, incorporation into a Valley-wide public facilities assessment district, establishment of a separate park improvements assessment district, incorporation into a facility benefit financing program (FBA), financing as a condition of approval of any San Diego Jack Murphy Stadium reuse program; and/or other means found feasible during the implementation studies.

- Utilize a variety of methods to finance the development of a neighborhood park in the western area of the San Diego River floodway in conjunction with YMCA improvements. A joint use facility should be pursued at this site. Such facility would provide additional playground area at the YMCA site. The YMCA should manage and maintain the site as part of a joint use program. Improvements on this facility are minimal and could probably be funded through a combination of existing community park funds, the YMCA, assessment districts, (FBA), and any other method identified during the implement-studies of this Plan..

- An agreement should be reached between the San Diego City School District and the developers of residential projects regarding the provision of private funds for school facilities and for access to existing facilities. If considered necessary by the school district, it should be a condition of approval of future subdivision maps. Access could mean the provision of transportation to schools on the part of individual residential development projects.

- Maximize the use of school facilities by encouraging use of the recreational facilities, sports fields, libraries and meeting rooms for a variety of activities by the community at large.

DEVELOPMENT GUIDELINES

- Combine appropriate passive recreational use of wildlife and/or wetland conservation areas and water resources.

- Develop a continuous pedestrian walkway and bikeway along the river in accordance with the guidelines of the Wetlands.

- Develop all park and recreational facilities in accordance with the guidelines included in the General Plan.

- Provide the necessary neighborhood park facilities through private development.

OPEN SPACE LINKAGE SYSTEM

The three previously discussed sub-elements (San Diego River, Hillsides, Parks and Recreation) provide important components of the Open Space Element. However, it is equally important that a relationship be established between these sub-elements. This relationship can be established through the open space linkage system, which is a summation of the other sub-elements. In essence, the San Diego River, the hillsides and the public and private recreational facilities create a physical and visual open space element and the open space linkage system binds them together.

OBJECTIVE

- Link the various sub-elements of the San Diego system into a visually and physically cohesive unit.

PROPOSALS

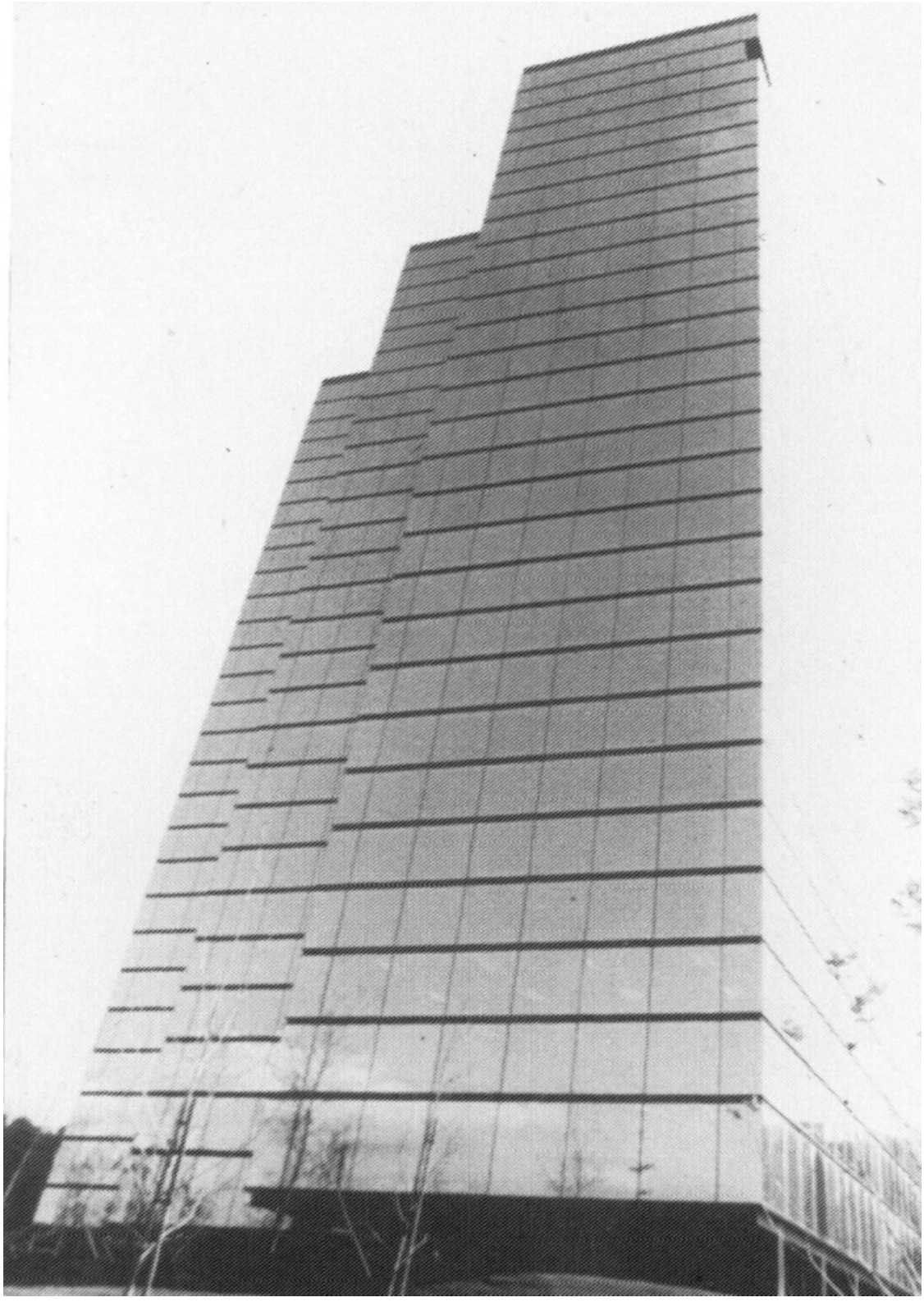
- Utilize the San Diego River corridor as the focal “point” or spine of the open space linkage system.

- Provide visual access to the San Diego River and the hillsides in order to preserve a sense of openness in the valley.

- Provide physical linkages in the form of pedestrian paths and bikeways between the recreational facilities of new and existing developments and the San Diego River corridor.

DEVELOPMENT GUIDELINES

- Utilize specific plans and planned developments to ensure that opportunities for physical linkages to the open space system are realized.
- Utilize malls, pedestrian paths, bikeways, and landscaped streets as integral parts of the open space linkage system.



Development Intensity

DEVELOPMENT INTENSITY

The purpose of this element is to establish guidelines for intensity of development in Mission Valley. The basis for regulating the intensity of development is the finite traffic capacity on the projected circulation system (freeways and surface streets). This capacity was determined by a series of traffic forecast studies which established the maximum feasible vehicular capacity for every freeway, street, intersection and interchange in Mission Valley.

The proposed development intensities are the levels at which the future acceptable amount of building square footage or number of dwelling units will be determined for any given parcel. A given number of trips are assigned to each increment of floor area for each land use. This formula is applied to the various uses listed in the Mission Valley Vehicle Generation Rates by Land Use Table (**Table 3**).

Development Intensity Districts are proposed to ensure compatibility between the street carrying capacity and the maximum development intensity that can be increased along a "high accessibility corridor" represented by the development and implementation of a future public transit system in the form of a light rail system (LRT) and possibly an intra-Valley "people mover" system.

Methodology for the Establishment of Development Intensity Districts

The traffic forecast studies, through the use of a computer assignment model, have provided a distribution of average daily vehicle trips throughout the Valley. The Valley was divided into a series of smaller areas called traffic analysis zones. The current traffic forecast study establishes the maximum number of vehicle trips that can be generated by development (existing or new) within each traffic analysis "zone," without overburdening the circulation system. Within each "zone" the available trips are distributed equitably on an acre-by-acre basis. Trips will be assigned on a gross acre basis throughout the Valley north of I-8 except for those areas in the Hillside Review (HR) Overlay Zone for which trips will be calculated on a net acre basis in a manner identical to those hillsides south of I-8. This permits the use of acreage within the FW Zone for the determination of trip generation allowances. However, development would not be permitted within the FW Zone or within any future flood management facility to the extent that it would hinder the 100-year, 49,000 cfs flood. For that portion of Mission Valley south of I-8, trips will be assigned on a net acreage basis.

TABLE 3
MISSION VALLEY VEHICLE GENERATION RATES BY LAND USE*

Residential	Rate	Commercial	Rate
Single-Family House	10 trips/unit	Gas Station	130 trips/pump
Multifamily (under 30 units/acre)	8 trips/unit	Hotel/Motel	10 trips/room
Multifamily (30 or more units/acre)	6 trips/unit	Automobile Dealer	58 trips/1,000 sq.ft.
		Health Club	45 trips/1,000 sq.ft.
		Savings & Loan	74 trips/1,000 sq.ft.
Offices		Rental Storage	3 trips/1,000 sq.ft.
Commercial Office (under 100,000 sq. ft.)	20 trips/1,000 sq.ft.		
Commercial Office (100,000 or more sq. ft.)	16 trips/1,000 sq.ft.	Industry	
Medical Office	90 trips/1,000 sq.ft.		
Government Office	40 trips/1,000 sq.ft.	Small Industry	14 trips/1,000 sq.ft.
		Large Industry	8 trips/1,000 sq.ft.
		Small Industrial/Business Park	18 trips/1,000 sq.ft.
Commercial			
Neighborhood Shopping Center	120 trips/1,000 sq.ft.		
Community Shopping Center	70 trips/1,000 sq.ft.		
Regional Shopping Center (over 1,250,000 sq.ft.)	30 trips/1,000 sq.ft.	Newspaper Publisher	25 trips/1,000 sq.ft.
(1,000,000-1,250,000 sq.ft.)	35 trips/1,000 sq.ft	Church	60 trips/acre or 300 trips/each church
(500,000-1,000,000 sq.ft.)	38 trips/1.000 sq.ft.		
(225,000-500,000 sq.ft.)	60 trips/1.000 sq.ft.	Convention Facility	78 trips/1,000 sq.ft
Freestanding Retail/Strip Commercial	40 trips/1,000 sq.ft.	Convalescent Hospital	3 trips/bed
Quality Restaurant (Low Turnover)	100 trips/1,000 sq.ft.	Park	5 trips/acre
Sit-Down Restaurant (Medium Turnover)	370 trips/1,000 sq.ft.	Four-year College	2.8 trips/student
Fast-Food Restaurant (High Turnover)	770 trips/1,000 sq.ft.	High School	1.5 trips/student
Theatre	4 trips/seat	Jr. High School	1.0 trips/student
		Elementary School	1.4 trips/student

*Current rates as of April 1984

Hillsides which are in the Hillside Review (HR) Overlay Zone will be excluded from being a determinant of the trip generation allowance and such determinations will be based upon non-HR or net acres. This approach would place development emphasis on the flatter and more developable areas and not on the hillsides. Wherever possible, individual "zones" are combined into Development Intensity Districts for purposes of establishing the upper limits of development intensity for various types of land uses. Development Intensity Districts are created by combining those "zones" whose trips will impact the same streets, intersections, and interchanges. Access is the critical factor for the delineation and establishment of Development Intensity Districts (districts) which regulate the development intensity for the permitted land uses in each district. The methodology also allows existing low-intensity development the opportunity of preserving its potential trip/intensity allocation for future development or redevelopment.

The permitted land uses in Mission Valley are: (1) commercial development with sub-categories of office, hotel/commercial recreation and retail services; (2) residential development; (3) industrial development; and, (4) multiple use development, which is a combination of the first two categories. These categories are specifically described in the **Land Use Element** of this Plan. The trip generation figures resulting from these uses are provided on **Table 3**. These figures are used in the traffic forecast study, and are updated regularly based on continuing studies and data gathering, thus they are utilized here only for purposes of illustration, and are subject to change during implementation. Based on the above information the Valley is divided into Development Intensity Districts as shown on the **Figure 26**. The acreage within each district is also shown on **Figure 26**.

DEVELOPMENT INTENSITY BONUS

The Metropolitan Transit Development Board (MTDB) is considering Mission Valley as a segment (I-5 to I-15) of the regional light rail transit (LRT) north line which will originate in Center City and terminate, ultimately, in Escondido. In addition, the feasibility of a private "people-mover" or intra-Valley transit system is recommended for future specific study. The purpose of the public transit (rail) transportation recommendations in Mission Valley are to provide the public with an alternative to the automobile. This could relieve pressure on the freeways and surface streets and provide for development intensity bonuses within affected Development Intensity Districts.

Development intensity bonuses would be granted once the transit system is approved, funded, engineered, rights-of-way acquired (if necessary), and construction dates established. The magnitude of the bonuses will be determined once MTDB is able to undertake and complete the studies necessary to make such determinations.

If there are to be development intensity bonuses resulting from the provision of rail transit systems in Mission Valley, these bonuses would, of necessity, be reflective of significant changes in commuter transportation modes. This change from private vehicles to rail transit would be most significant during the 12-hour period (the daytime period) between 6:30 a.m. and 6:30 p.m. which contains the three daily "rush hours" of morning (7:00 a.m.-10:00 a.m.), lunch hour (12:00 noon-1:30 p.m.) and evening (4:00 p.m.-6:30 p.m.). The daytime period would be most affected by an increased use of public transit which would put a significant percentage of commuters and intra-Valley personal trips on rails and off the streets.

INCLUDES THOSE AREAS IN THE LINDA VISTA COMMUNITY PLAN NORTH OF FRIARS ROAD AND WEST OF SR-163 WITH PRIMARY ACCESS TO FRIARS ROAD.

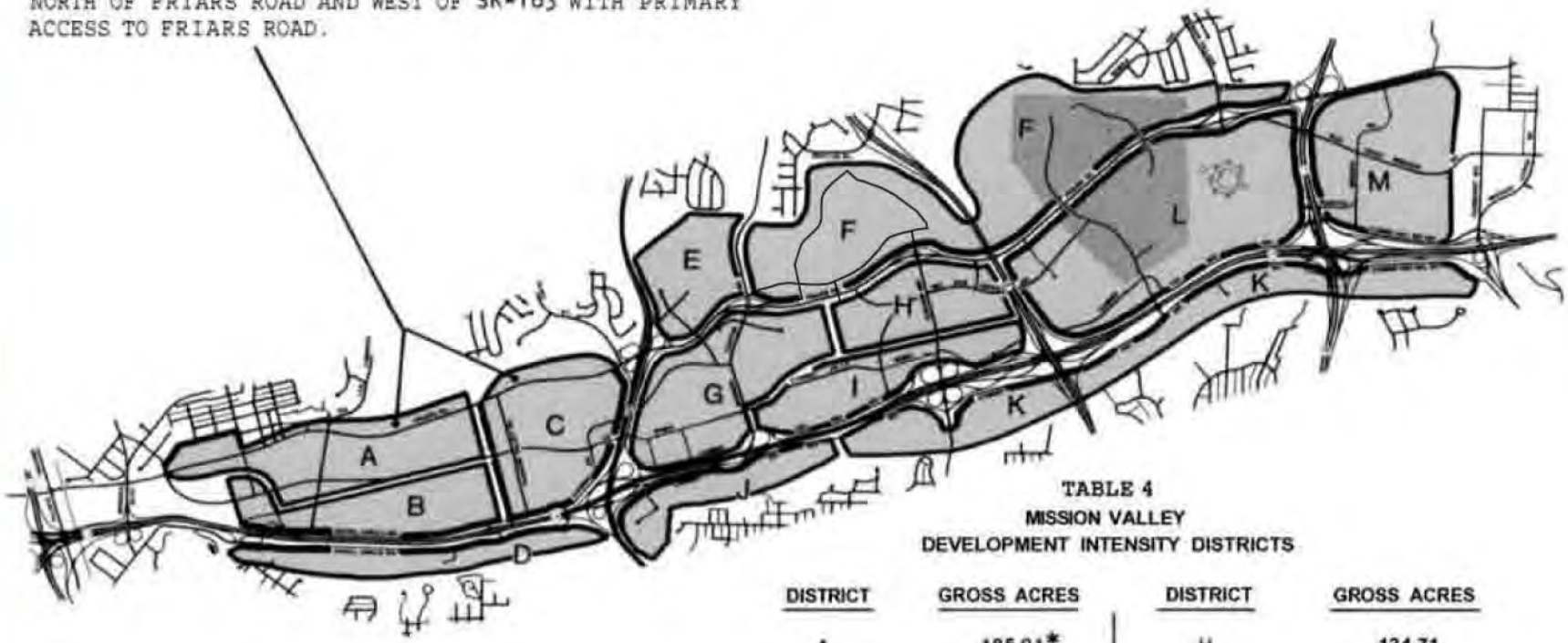


TABLE 4
MISSION VALLEY
DEVELOPMENT INTENSITY DISTRICTS

DISTRICT	GROSS ACRES	DISTRICT	GROSS ACRES
A.	185.01*	H.	134.71
B.	158.29	I.	120.06
C.	213.82*	J.	53.41*
D.	75.51*	K.	109.51*
E.	128.15*	L.	289.36
F.	407.12*	M.	209.58
G.	209.09		

* Net Acres (Exclusive of areas zoned HR)

Vehicle trip generation figures for each district (on a per acre basis) will be based upon the capacity of the street system. Current acceptable trip per acre figures are available in the Planning Department. The number of districts and the size of individual districts are subject to change during the implementation phase.

N

Development Intensity Districts
Mission Valley Community Plan
26 FIGURE

The LRT system's ability to provide additional access without impacting the street circulation system (automobile) would provide the basis for development intensity bonuses within the affected development intensity districts. The areas that will realize the additional development intensity through the use of the bonus system would be those that lie approximately within 1,000-foot radii (walking distance) of the station location, excluding the river corridor.

The percentage of trips absorbed from the surface street system by a —people-mover" system may also provide equivalent development intensity bonuses if further study indicates that an increase in intensity would not have a detrimental impact on the traffic circulation system.

Additionally, the development intensity limits set within each Development Intensity District may be modified for parcels or development proposals where:

1. The portion of the Valley's vehicle circulation system affected by the proposed development is capable of accommodating all of the traffic which would be generated;
2. The proposed land use will generate traffic at a lower rate than the land use originally assumed for the traffic forecast;
3. An approved LRT or other regional public transit system station is located on the affected property or will otherwise serve the proposed development (as determined by adopted MTDB alignment studies);
4. The unique nature of the proposed development justifies a lower traffic generation rate than that assigned by the original traffic forecast used as the basis for this Plan, as demonstrated by a professional transportation study, subject to the approval of the City Engineer;
5. The direct and cumulative traffic impacts associated with the proposed development of the site can be mitigated;
6. The financing and implementation of other transportation measures or systems, which can be shown to reduce traffic impacts on the street and freeway system, is guaranteed by the applicant or property owner, either through provision of 100 percent of the costs involved or formulation of an assessment district.

Any site or proposed development which meets one or more of the preceding criteria may request a higher intensity than that called for in the Plan.

Multiple-use designated parcels shall be subject to project review in order to determine consistency with the land use assignments of the Mission Valley traffic forecast and compliance with the daily vehicle trip generation per acre assignment of the DevelopmentIntensity Districts. Project review shall be in the form of the Planned Development procedure, or, in the case of large projects, the Specific Plan procedure.

A community plan implementation phase should be initiated immediately upon adoption of the Plan. During this phase, legislation based upon concepts set forth in this Development Intensity Element should be formulated, distributed for public review, be the subject of public hearings, and be adopted. This legislation should be viewed as a specialized set of zoning regulations uniquely capable of dealing with, and complementing the growth potential and patterns in Mission Valley.

Since this implementation phase is expected to take a certain period of time between initiation and enactment of the necessary zoning regulations, consideration should be given to the utilization of interim zoning legislation which could be effective either with the adoption of the Plan or as soon thereafter as possible. This interim legislation could take the form of requiring review of all projects in the Valley through the use of Planned Development (PRD/PCD/PID) permits.

OBJECTIVE

- Provide a level of future development intensity that will enhance and maintain a high quality of life in the community.

PROPOSALS

- Formulate innovative land use regulations that will establish development intensities based upon the capacity of the circulation system.

- Establish development intensity districts to implement the land use regulations on development intensity.

- Until such time that the Development Intensity District legislation is implemented, all development projects should be processed under Planned Developments (PRD/PCD/PID) or Specific Plans in order to maintain consistency with the land use intensities established by the traffic forecast.

DEVELOPMENT GUIDELINES

- Utilize the traffic forecast, **Figure 26**, **Table 4** and development project approvals to determine a base intensity for each parcel in the Valley.

- Compare development applications to the standards provided in this element to determine compatibility with community intensity goals.

- Utilize Planned Developments (PRD/PCD/PID) and/or Specific Plans to review and process development projects requesting intensities higher than the base intensities provided by the traffic forecast until adoption and application of Development Intensity District legislation. These projects could require mitigation in the form of additional traffic circulation improvements.

- Utilize Planned Developments and/or Specific Plans to review and process development proposals in the multiple use areas to ensure consistency with the community plan traffic forecast and with the appropriate development intensities permitted by the Development Intensity District legislation.

- Require Transportation Systems Management Programs for projects which are approved for development intensity in excess of that permitted by the traffic forecast and the Development Intensity District legislation.

Community Facilities

COMMUNITY FACILITIES

Community facilities are comprised of both community services, such as schools, police and fire protection, libraries, and emergency medical facilities, and public utilities which include gas, electricity, water and sewer, and petroleum lines. In addition, the San Diego Jack Murphy Stadium is located in Mission Valley and has been classified as a public facility. Other community facilities such as parks and recreation facilities are discussed in the **Open Space Element.**

COMMUNITY SERVICES

SCHOOLS

Mission Valley is served by nine elementary schools, five junior high schools and 14 senior high schools. None of these are located within the Plan area; residents are served by schools in communities bordering Mission Valley. **Table 5** identifies these schools and provides enrollment and capacity information. A private parochial school, the Nazareth School, is located at Mission San Diego de Alcala. Of the 275 students enrolled there in March 1983, 80 reside on campus. These students come from the entire region. Additionally, the Quarry Falls Specific Plan allows for the possible development of a school within Quarry Falls, which may include an elementary, middle or high school.

UNIVERSITIES AND COMMUNITY COLLEGES

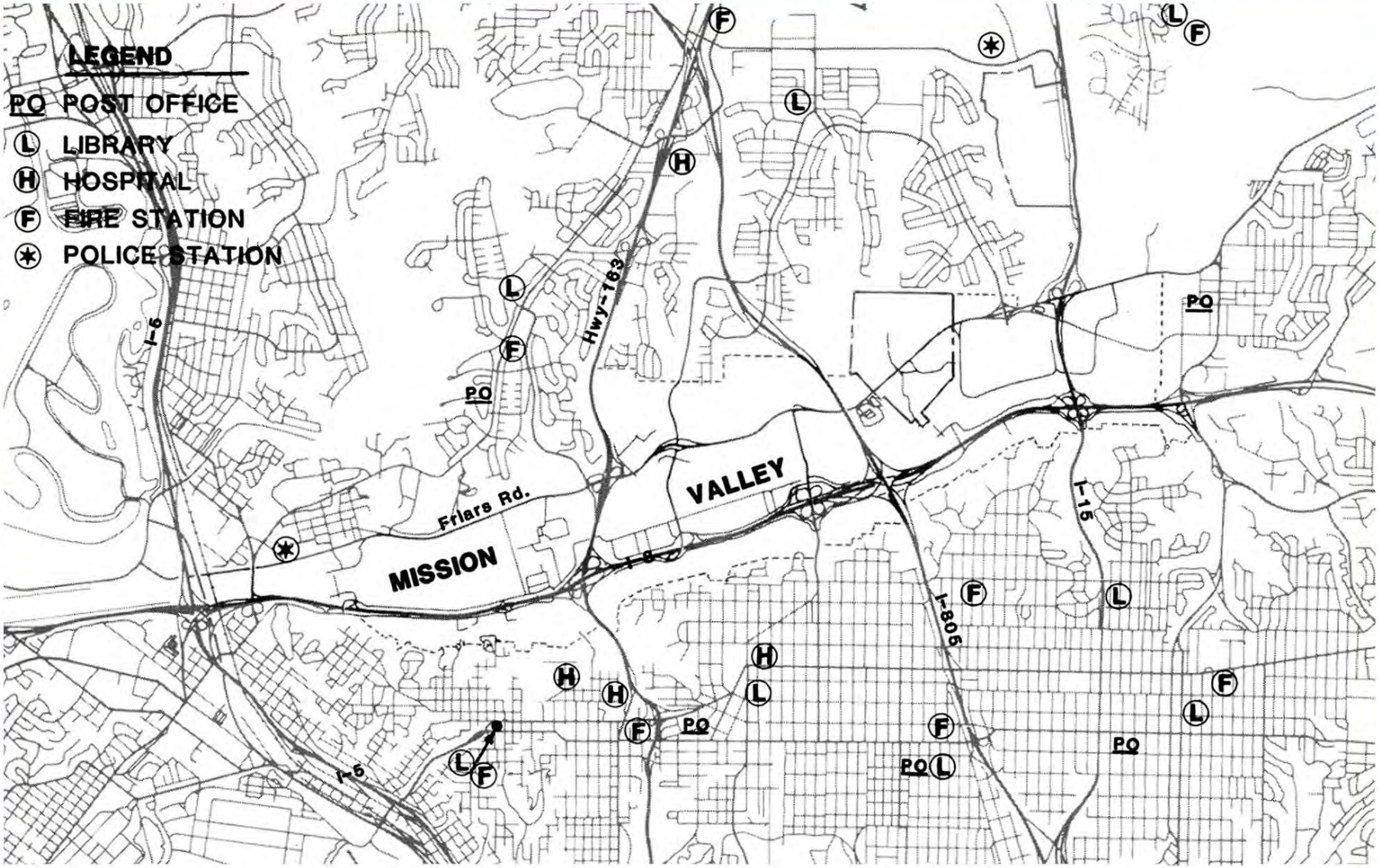
National University is the only university located within the Mission Valley community. It is a private institution which attracts students primarily from the region. The University of San Diego, a private, Catholic university, is located at the western end of the Valley in the Linda Vista community. San Diego State University, located in the State College planning area, is near the eastern border of the Mission Valley community. Each of these two latter universities draws upon the entire region and beyond for enrollment.

Another level of education of interest to a predominantly adult community is the community college system. There are two campuses of the San Diego Community College District within easy automobile access to Mission Valley. These are San Diego City College and San Diego Mesa College. Grossmont College, located a short distance away, north of the Navajo community. In addition to daytime classes, there are extensive evening school programs with classes frequently offered off-campus.

FIRE AND POLICE PROTECTION

Mission Valley is served by the San Diego City Police and Fire departments. Although there are currently no fire or police stations located within the Valley, there are a total of six fire stations located in the surrounding communities. Station 20, located at Kemper Street and Midway

Drive, serves Mission Valley west of Benicia Street (extended). The area east of Benicia Street to SR-163 is served by Station 23, located at Comstock Street and Linda Vista Road. Station 5, located at 9th and University avenues, responds to calls in the southwestern portion of Mission Valley. Station 18, located at Felton Street and Adams Avenue, also serves the southwestern area. Currently, only 30 percent of Mission Valley meets the Fire



Community Facilities

Mission Valley Community Plan

27 FIGURE

Demand Zone standard of a six-minute response time. As the intensity of development in the Valley increases, so does the need for adequate fire protection. The capital improvement projects budget for the Fiscal Year 1985 provides funding for site acquisition, design, construction, and furnishing of an intermediate class fire station in the vicinity of I-15 and Friars Road (Station 2). This station will provide an improved level of service to the Serra Mesa, Navajo, (Grantville) and Mission Valley areas. There is also a police substation located nearby, in the Linda Vista Community, at Friars Road and Napa Street at the western end of the Valley. In addition to the intermediate class fire station scheduled for construction in the vicinity of I-5 and Friars Road, a future fire station will be needed in the western portion of the valley. The size and location of this future station will be determined by future studies prepared in conjunction with the implementation program of this Plan.

Library Service

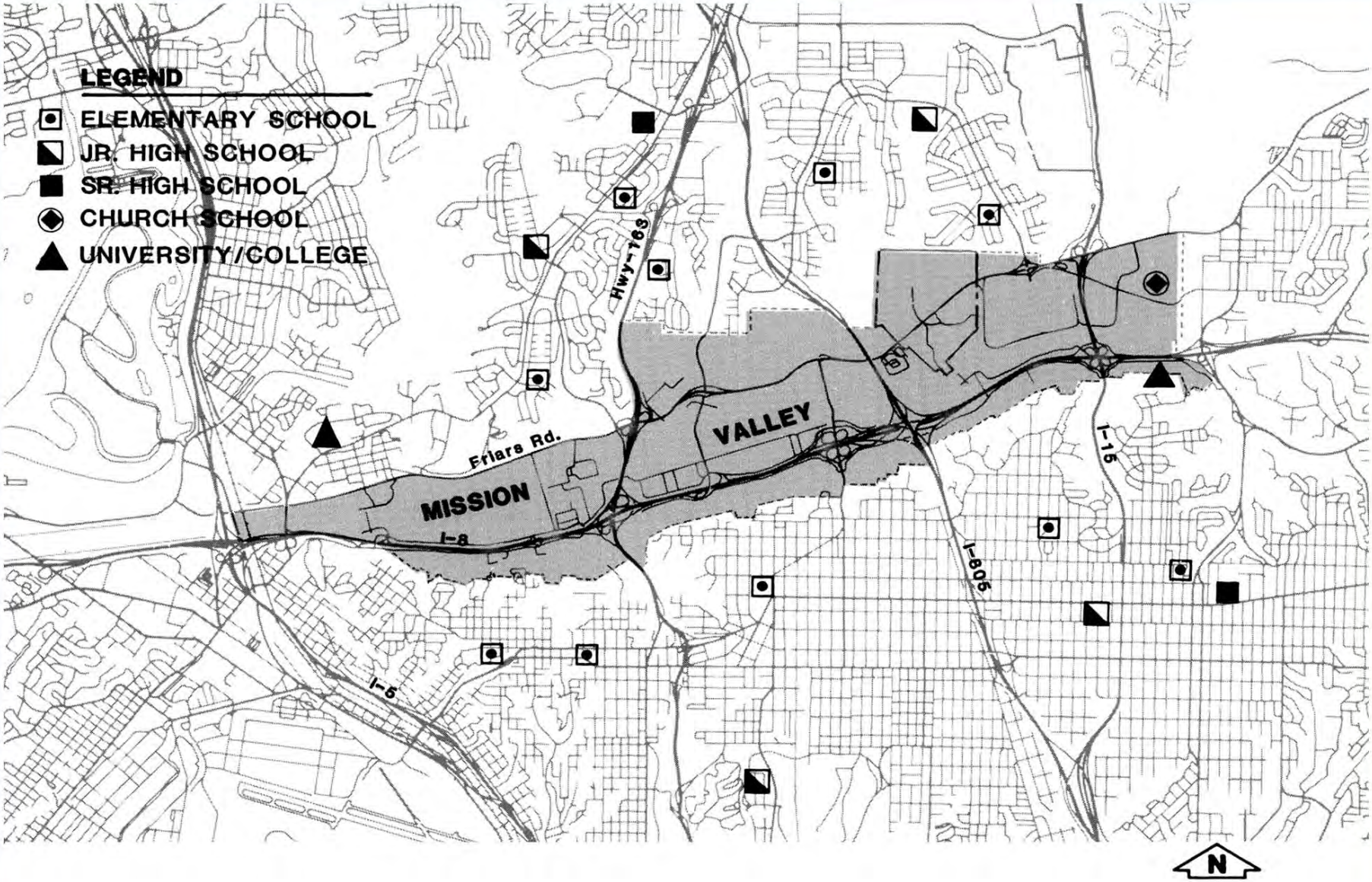
There are ten branch public libraries located in the communities surrounding Mission Valley. Three of these libraries are located north of the Valley in the communities of Tierrasanta, Serra Mesa and Linda Vista. The remainders are located south of the Valley in the Uptown, Park North-East and Mid-City communities. There are currently 5,124 people residing in Mission Valley and a projected population of approximately 11,200. A permanent library facility is recommended when the service area includes at least 20,000 residents.

Postal Service

Most of Mission Valley is served by the main post office located on Midway Drive (Zip Code 92108). The Grantville post office (Zip Code 92120) serves the portion of Mission Valley located east of I-15. The locations of future postal facilities are determined by the federal government, however, a location in the center of the community, close to residential development, would be encouraged by the City.

Emergency Medical

There are four emergency medical facilities which can serve Mission Valley. The Donald N. Sharp Memorial Community Hospital, located in the Serra Mesa community, provides emergency care for nearby communities. Two facilities, Mercy Hospital and the University of California Medical Center, located in the Uptown community planning area, service the entire San Diego Region as well as nearby communities. Direct emergency vehicle access between Mission Valley and the University of California Medical Center will be provided via Bachman Place (a private road) extending south from Hotel Circle South. Hillside Hospital in the Park North-East community can also provide emergency care for Mission Valley.



Schools

Mission Valley Community Plan

28 FIGURE

TABLE 5
ENROLLMENT AND CAPACITY STATISTICS FOR SCHOOLS LOCATED IN COMMUNITIES BORDERING MISSION VALLEY

	October 1982	October 1983	Current Capacity
Elementary Schools			
Adams	829	752	846
Birney	605	594	614
Carson	577	499	720
Fletcher	270	278	282
Florence	264	270	298
Franklin	378	427	388
Grant	538	596	450
Jones	334	310	360
Juarez	199	163	240
Junior High Schools			
Lewis	1,013	957	1,353
Montgomery	995	989	1,321
Roosevelt	1,208	1,171	1,146
Taft	680	617	846
Wilson	1,451	1,095	1,580
Senior High Schools			
Henry	2,800	2,686	3,170
Hoover	1,367	1,872	1,442
Kearny	1,816	1,568	2,239
San Diego	1,361	1,352	1,712

PUBLIC UTILITIES

Gas and Electricity

San Diego Gas and Electric Company provides gas and electric service for all of San Diego. The Mission Switching Substation is a major facility located in the Serra Mesa community planning area.

Water and Sewer

The City of San Diego provides water and sewer service to the Mission Valley community. The Valley is served by the Alvarado Filtration Plant. The Mission Valley-Kearny Mesa trunk sewer system collects all liquid wastes from the Plan area.

Mission Valley contains major trunk sewer lines that serve much of the San Diego metropolitan area. Substantial improvements in the trunk sewer system are needed to serve anticipated growth in Mission Valley and the region. The portion of the 54-inch north trunk line extending east of SR-163 is a ~~"te~~mporary" facility that should be replaced by a minimum 66-inch line between 1985 and 1990. The portion of the north trunk line extending west of SR-163 is considered adequate to the year 2035. However, a parallel line extending westerly from Murray Canyon to connect with the Metropolitan North Interceptor is anticipated to be needed during the life of the Plan. The south trunk line is nearing capacity from approximately Texas Street westward. Relief is expected to be provided by replacing the south trunk line westerly of SR-163 in 1988.

The City of San Diego Water Utilities Department also has two water reclamation projects located in Mission Valley. The first is a reverse-osmosis water purification project which uses water hyacinth plants to convert waste water to a drinkable level. This pilot program is located along the San Diego River on the southwest corner of the Stadium property. The other project is a five-year design study to determine the requirements for building and operating water hyacinth reclamation projects for a given population size. The latter project will provide design standards for future reclamation facilities of this type. Construction of the second project should begin in 1983 on City-owned land on the south side of the river near Milly Way.

Telephone Service

Pacific Telephone provides service to all parts of the community on demand. No major projects are anticipated and service is adequate.

Bulk Petroleum Pipeline

A bulk petroleum pipeline runs south from the San Diego Pipeline Company tank farm through the stadium parking lot to Camino del Rio North, then westerly along I-8 to the I-805 overcrossing. It continues through east-central San Diego to the bulk petroleum station located at San Diego Harbor.

PUBLIC FACILITIES

San Diego Jack Murphy Stadium

Although San Diego Jack Murphy Stadium may be categorized as a commercial-recreational use, it is worthy of separate discussion as a public facility because of its function, uniqueness, size and impact on the Mission Valley.

The stadium was constructed in 1967 on its 158-acre site at a cost of $27,500,000. It currently (1984) has a seating capacity of about 60,000. Parking is available for approximately 17,000 private vehicles and 300 buses. The recent expansion (1984) of the stadium's seating capacity and any future expansion of the seating capacity will require, at the very minimum, an increased emphasis on the use of buses and a de-emphasis on private automobiles in order to reduce problems of traffic congestion and poor air quality. Any expansion or addition of commercial activities other than those related to normal stadium events, must comply with the development intensity limitations described in the traffic forecast and the **Development Intensity Element** of' this Plan.

An economic feasibility study is being conducted by the City of San Diego Property Department to determine how City-owned property (the stadium as well as other properties located between Stadium Way and I-15) might be developed or redeveloped in the future. For purposes of this Plan, all publicly-owned properties must be retained for the needed community facilities, until it can be shown that these properties are no longer required. In the event there is a surplus of publicly-owned land after all of the needed community facilities have been provided, the findings and recommendations of this study should be considered, provided they comply with the goals of this Plan and the development intensity and land uses proposed for this area.

OBJECTIVE

- Provide and maintain a high level of service for the full range of community facilities necessary in an urbanized area.

PROPOSALS

- Provide improvements in the level of service of community facilities as residential population and development intensity increase in the Valley.
- Maintain existing facilities, or expand as needed, to keep an adequate level of service.

Schools

- Provide new school facilities or access to existing facilities as considered necessary by the school district.

San Diego Jack Murphy Stadium as seen from the river channel

DEVELOPMENT GUIDELINES

- Construct a new fire station (No. 2) in Mission Valley, located north of I-8 and east of I-805 to improve response time to anticipated development in the community. Land acquisition and design are scheduled in the City's capital improvement budget.

- Enlarge existing trunk sewer lines and water lines in the Valley to handle the capacities anticipated with future development.

- Emphasize crime prevention, community relations and crime-inhibiting design principles in new development in all parts of Mission Valley.

- Before publicly-owned land is used for non-public activity, it should be reviewed and determined to be not necessary for public use.

- An agreement should be reached between the San Diego City School District and the developers of residential projects regarding the provision of private funds for school facilities and for access to existing facilities. If considered necessary by the school district, it should be a condition of approval of future subdivision maps. Access could mean the provision of transportation to schools on the part of individual residential development projects.

- Maximize the use of school facilities should be maximized by encouraging use of the recreational facilities, sports fields, libraries and meeting rooms for a variety of activities by the community at large.

WATER RECLAMATION PLANT

An 18-acre site north of I-8 and east of Mission City Parkway is identified for development with a water reclamation plan. The plant is proposed to operate in conjunction with several other regional reclamation facilities to be constructed for the City's Clean Water Program. The facilities will serve to provide secondary treatment of waste water discharged to the ocean, achieve the maximum amount of water reclamation possible to minimize dependence upon imported water supplies, and accommodate future increases in wastewater flows.

Conservation

CONSERVATION

Conservation and protection of natural resources is becoming an increasingly important aspect of daily life in every community. Air, water, land, and energy are resources which must be conserved and/or protected. Conservation is the planned management, preservation, and wise utilization of natural resources. Its obligation is to prevent the wasteful exploitation or destruction of the community's natural resources and adoption of policies for their preservation, development and wise use.

AIR QUALITY

Probably no single natural resource has such direct and intractable bearing on the public health, safety and welfare as air. Unlike other resources, it permits no substitutes, cannot be imported when local supplies are deteriorated, and allows no reduced-use conservation measures. The management of air resources is dependent on both local and regional activities and controls.

The resource itself is clearly regional, however, the generation of air pollution is local in nature and can be affected by local land use and transportation decisions. Intensity of development, residential densities, the location of major destinations in relation to residential development, the design of streets and highways, and transportation choices available to the populace all help to determine the amount of air pollution in Mission Valley. The geographic pattern of higher mesas partially surrounding the urbanized community helps to hold and concentrate pollution within the local air basin. Mission Valley has this particular geographic pattern, the strong automobile orientation of the community has increased the concentrations of pollutants which tend to collect in the Valley.

NOISE

The freeways crossing and extending the length of the Valley contribute significantly to the noise levels there. Events held in San Diego Jack Murphy Stadium also contribute to noise levels in the eastern section of the community. Currently, only stadium concerts and firework displays have noise related regulations. Each of these events may not exceed a 95 decibel average (measured at the

press level) and must end at a prescribed time. Average noise levels (hourly) for sporting events (football games and motorcycle racing) have been measured at between 93 and 95 decibels. The noise generated by I-15 between Friars Road and I-8 is 76 decibels at 50 feet from the center of the outside lane, based on a daily traffic count of 57,800. Future modification to the stadium should take into consideration additional noise abatement measures. The recent seating expansion project which partially enclosed the southeastern portion should provide some noise attenuation of stadium events.

WATER QUALITY AND CONSERVATION

The use, conservation, supply and distribution of water are critical issues in Mission Valley as they are in all of Southern California. Since almost all urban activity is dependent to some extent on water, it is important that water quality is maintained and the supply of water is properly managed. In Mission Valley, there is another consideration; that of the impact of water on the landscape in the form of surface water features and flooding. A second aspect is the use and preservation of water for recreational or aesthetic purposes, including support of water-based wildlife and plant life.

LAND

Land resources in Mission Valley include soils, hillsides, canyons and the floodplain. Land uses which do not use the available land to its best advantage, or which destroy the topography, detract from the overall appearance of the Valley, deplete its stock of resources, and contribute to erosion and sedimentation.

HABITAT

The riparian and wetland habitats located along the San Diego River are a rare resource in Southern California and, as such, should be conserved. The Wetland Management Plan for the San Diego River discusses the quantity and quality of habitat types in the Valley and provides recommendations for their conservation.

ENERGY

There is general agreement that existing ways of life, urban patterns, transportation facilities, buildings, and equipment all reflect a past when energy was abundant and cheap. Many other countries, with living standards equal to ours, use less than half the energy per capita that is consumed in the United States. Apart from savings in transportation, the next most likely area for improving efficiency is building and development design and land use patterns. It is indisputable that sprawled low-density urban development increases travel distances, street and highway requirements, public utility extensions, and public service costs (fire, police, schools)—all of which translate directly into increased energy use. Grouped structures and higher density development have recognized energy savings. Subdivisions in areas that are hot in summer and cold in winter, or in areas where auto dependence is mandatory, or where cultural and commercial and recreational and employment facilities are lacking, can only result in increased energy use—not only for initial development but also in yearly operation

and in the more nebulous energy costs that traffic congestion, waste water, and public services demand.

In addition to the location of development, its design can contribute to better use of energy. Narrow streets reduce construction energy and materials, and reflected summer heat. Deciduous street trees allow summer shade and winter sun on buildings and streets, and make walking and bicycling more attractive. More extensive walks and bicycle paths reduce auto use. Smaller minimum lot sizes reduce travel, utility and service distances.

Important energy savings can also be realized through energy-conserving site planning and building design techniques and principles. Flexibility in required setbacks allows buildings to be oriented to maximize sun access and wind for natural heating and cooling factors. Designs that consider micro-climates, building efficiency, summer shade and winter exposure of windows, and the energy implications of colors and materials can reduce total energy operating needs by as much as 50 percent.

OBJECTIVES

- Protect and enhance the quality of Mission Valley's air and water resources.
- Conserve the Valley's water, land, and energy resources

PROPOSALS

- Apply and enforce the recommendations of the Regional Air Quality Strategy (RAQS).
- Minimize and avoid adverse noise impacts by planning for the appropriate placement and intensity of land uses relative to noise sources.
- Provide guidelines for the mitigation of noise impacts where incompatible land uses are located in a high noise environment.
- Monitor potential sources of water contamination and take necessary steps to eliminate existing problems and to prevent potential problems.
- Encourage water conservation through development and landscaping guidelines, and the use of recycled water.
- Conserve energy by utilizing alternative energy sources and energy-efficient building and site design principles.

DEVELOPMENT GUIDELINES

- Improve air quality through the reduction of automobile trips by:

  1. Incorporating services for employees into development (restaurant, cleaners, barbers, exercise areas, bike lockers, shower facilities, etc.).

  2. Clustering neighborhood commercial uses near residential developments and providing convenience shopping within walking distance (1/4 mile).

  3. Providing other modes of transportation such as intra-community buses linking activity centers and locating the LRT in most central location in order to provide the maximum amount of accessibility to transit patrons and potential transit patrons.

  4. Developing safe bicycle and pedestrian connections between activity centers by properly designing these facilities with the street system and into other linkage systems.

  5. Encouraging employer subsidization of public transit passes for employees particularly for those projects within 1/4 mile walking distance of public transit stations (LRT) and bus stops.

- Mitigate noise impacts on land uses which are incompatible with the annual community noise equivalent levels, according to General Plan standards, should be mitigated through the following measures:

  1. Screening freeways and other heavily traveled roads through the use of walls and/or berming with landscaping. Where solid walls are necessary, the design of the wall and surrounding land should soften the visual effect of the wall. Landscaping materials and sculptural forms should be incorporated into the design.

  2. Orienting the structures, including the placement of windows, away from roads or noise sources.

  3. Utilizing noise-absorbing building materials in all new construction. Mechanical ventilation should be installed in residential developments to supplement or replace air conditioning where insulation is the chief means of reducing noise. Mechanical systems should be designed to use as little energy as possible, and to provide as many aesthetic elements as possible. For instance, cooling towers can become fountains, stream exhausts can have sculptured expressions, and landscaping can be used for energy and noise protection purposes.

  4. Buffering residential development sufficiently from noise by means of setbacks or elevation differences. Such buffers along freeways or roads could be used for compatible uses, such as pedestrian paths, bikeways, or open space.

- Improve water quality through the following measures:

  1. Practice erosion control techniques when grading or preparing building sites.

  2. Utilize ground cover vegetation when landscaping a development in a drainage area to help control runoff.

  3. Upgrade aging sewer and water lines as part of a capital improvements program in the Valley.

  4. Incorporate sedimentation ponds as part of any flood control or runoff control facility.

- Conserve water through the following measures:

  1. Landscape with native, drought-resistant vegetation.

  2. Use water saving devices in all new development projects.

  3. Utilize water from the water reclamation project for irrigation of landscaping. The City's water reclamation project located south of the stadium is intended as a pilot project which will initially have the capability to reclaim one million gallons of water a day. This water could be utilized to irrigate landscaping or with public and private projects in the vicinity of the reclamation plant.

  4. Use techniques recommended by Department of Water Resources (see **Appendix D**).

- Encourage new development to make the best use of available energy through the following measures:

  1. Clustering buildings in order to use a common heating/cooling source.

  2. Use a north-south orientation to take advantage of passive solar energy and provide the option of installing active solar equipment.

  3. Design the building to allow flow-through ventilation of air from outside, thus reducing mechanical ventilation costs and energy requirements.

  4. Utilize building materials which will act as insulators or conductors, depending on the energy needs.

  5. Use architectural designs, forms, materials and orientations which lend themselves to solar heating and cooling. For example, sloped roofs, if properly oriented and angled, can readily be retrofitted for solar heating. Site location of new buildings should be carefully considered in order to avoid casting shadows on existing buildings so as not to preempt opportunities for solar heating and cooling for those buildings.

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