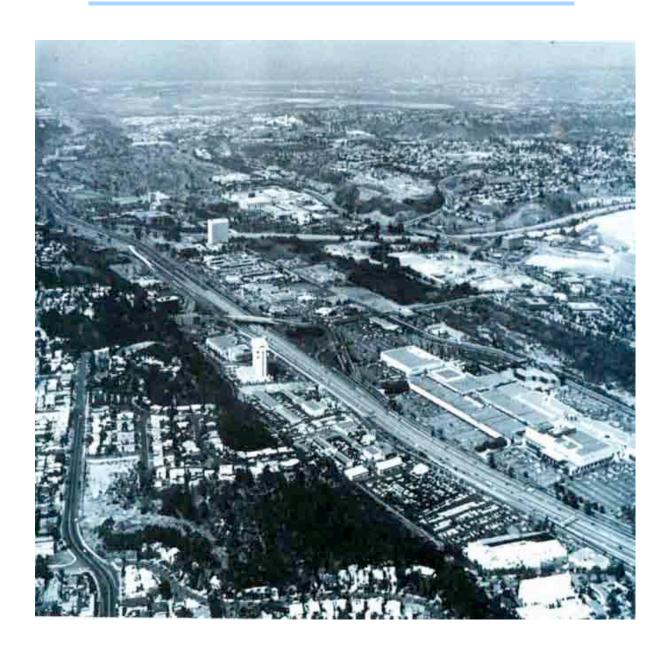
# MISSION VALLEY



**COMMUNITY PLAN** 

# MISSION VALLEY

### **COMMUNITY PLAN**

Prepared by
The City of San Diego
with the assistance of
The Mission Valley Unified Planning Committee



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### MISSION VALLEY COMMUNITY PLAN AMENDMENTS

The following amendments have been incorporated into this February 2005 posting of this Plan:

Amendment	Date Approved by Planning Commission	Resolution Number	Date Adopted by City Council	Resolution Number
Mission Valley Community Plan approved	January 24, 1985	5576	June 25, 1985	R-263536
EIR Certified EQD No. 84-0194	_	_	June 25, 1985	R-263535
Hazard Center II	January 9, 1986	_	April 8, 1986	R-265413
Frazee Rd/Camino Del Este	July 10, 1986	_	October 13, 1987	R-269479
MV Calmat	June 7, 1990	0710-PC	September 11, 1990	R-276503
Water Reclamation Facilities	February 4, 1991	_	February 15, 1991	R-277366
MV Plan and PDO	January 23, 1992	_	April 21, 1992	R-279807
SDB-MBM III	_	_	October 6, 1992	R-280832
Park in the Valley IV	_	_	May 4, 1993	R-281917
Rio Vista West	November 18, 1993	_	December 7, 1993	R-283175
Hazard Center Phase 2	January 6, 1994	2055-PC	February 8, 1994	R-283390
Homestead Village	July 25, 1996	_	September 10, 1996	R-287814
MV West	May 29, 1997	2513-PC	July 15, 1997	R-288970
Mission City	March 19, 1998	_	April 21, 1998	R-289995
Rio Vista West VIII (repealed 4/13/99)	October 30, 1997	2571-PC	February 2, 1999	R-291254
Rio Vista West VIII	_	_	April 13, 1999	R-291480
Presidio View	August 10, 2000	3013-PC	October 24, 2000	R-294065
Mission Valley Heights	November 21, 2002	3329-PC	February 18, 2003	R-297655
A-1 Self Storage	September 16, 2004	_	January 25, 2005	_

#### LETTER OF TRANSMITTAL - MISSION VALLEY

#### June 25, 1985

The Honorable Mayor and City Council City of San Diego, California

#### Honorable Mayor and City Council:

I am pleased to present to you the accompanying Mission Valley Community Plan. This Plan represents a comprehensive guide for the enhancement and future development of the Mission Valley Community through the year 2000. The plan was prepared by the City Planning Department. The community plan evaluated eight alternatives covering a range of development strategies, from the "no development" alternative to an alternative permitting highly intensive development throughout the valley. The alternative selected as the plan is one of moderate growth, where the development intensity is measured by the ability of the surface street system to carry the traffic. This base development intensity is to be increased as additional transportation opportunities become available. An important feature of the plan's transportation element is the establishment of a light rail transit corridor located in a manner that provides maximum access throughout the valley. The Metropolitan Transit Development Board, and the City Planning Development staffs worked together to develop the preferred alignment through the valley.

This community plan also includes a proposal for the creation of a linear park along the San Diego River. This proposal is complemented by a wetlands management plan for wetland preservation, restoration and enhancement. The wetlands management plan was developed with the cooperation of the California Department of Fish and Game and the United States Fish and Wildlife Service, and is designed to be responsive to the Army Corps of Engineers permit standards. An Urban Design Element incorporating development guidelines for development along the river and on the valley's hillsides is also included in the plan.

In closing, the Planning Department wishes to give special recognition to the Mission Valley Unified Community Planning Committee and the citizens who worked with City staff in the development of this plan. Their input has made this plan a better document.

Finally, I wish to thank Councilman Ed Struiksma, the elected representative of District 5. Without his interest and effort many of the key elements of this plan, such as the light rail transit proposal, urban design element and transportation recommendations, would not have been resolved as clearly. Implementation of this plan will owe much to his efforts on behalf of the City and the Mission Valley Community.

Jack Van Cleave

#### **DEDICATION**

Long time residents of the county can remember when Mission Valley was virtually virgin territory, with a few scattered dairies and farms, and where once in a decade a storm would flood the valley from rim to rim. In the 1950s, the Town and Country Hotel's first unit was opened and in 1958 the City Council approved the rezoning and construction of the Mission Valley Center shopping mall. That action, coupled with the freeway construction that followed, changed the face of the valley completely and forever. From the early part of the century until today, Mission Valley development has been a citywide concern. Prediction of doom has dominated the community's attitude towards this part of the City.

In 1974, urbanologists Kevin Lynch and Donald Appleyard cited the valley as a supreme example of bad planning in their "Temporary Paradise?" study of San Diego. Their observations:

"The most dramatic loss was the conversion of historic Mission Valley in the 1950s into a chaos of highways, parking lots and scattered commercial buildings ...the city should erect an historic monument to that tragic event. It struck a double blow; one directed at the landscape and (second) at the economy of the Center City ...Mission Valley is the second downtown of the region and its future appears gloomy ...Mission Valley is a landscape disaster, yet few disasters are beyond all repair. It is only that repair demands money, time, and effort."

Kevin Lynch and Donald Appleyard "Temporary Paradise?" 1974

John Nolen, the landscape architect who wrote the City's first master plan in 1908, dreamed of a parkway through the valley with development set back from the mesa rim to afford vistas to the ocean. In 1926, he returned to issue a warning, which still holds meaning for Mission Valley 60 years later:

"The failure to regulate growth has resulted in many parts of the city, in an unfavorable, and in some cases, unsightly distribution of building development ... Without doubt, San Diego should be a more distinctive city in its physical development. Its topography, its climate, its purposes are all different from the average American city. Not to be distinctive is an advantage lost, and some things in San Diego cannot now be changed. The question is what can be done to recover lost ground and lead the city toward a more distinctive San Diego in the future?"

John Nolen "A Comprehensive Plan in San Diego" 1926

The following plan is the product of hard work of citizens and planners which spans the period of 60 years. As such, this plan is seen as a tribute to all the planning directors the City of San Diego has had; they all envisioned a development plan for Mission Valley, and as such, these individuals contributed with their ideas and efforts to this Plan.

This Mission Valley Community Plan is therefore dedicated to:

Mr. Glen Rick - City Planning Director from 1931 to 1955

Mr. Harry Haelsig - City Planning Director from 1955 to 1964

Mr. James Fairman - City Planning Director from 1964 to 1968

Mr. James Goff - City Planning Director from 1968 to 1979



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## Table of Contents

#### INTRODUCTION

Background	
Planning Program	
History of Development	
Planning History	9
Existing Setting and Regional Context	
Plan Summary	15
Plan Development Issues	
Goals and Objectives	
Environmental Context	
Plan Alternatives	
Recommended Alternative	
Environmental Impact Conclusions and Recommendations	
PLAN ELEMENTS	
Land Use	39
Residential	39
Commercial	46
Industrial	53
Transportation	69
Street System	
Public Transit	84
Parking and Goods Delivery	92
Bikeways	
Pedestrian Circulation	101
Open Space	109
San Diego River	111
Hillsides	121
Parks and Recreation	
Open Space Linkage System	129
Development Intensity	133
Community Facilities	141
Community Services	141
Public Utilities	146
Public Facilities	147
Conservation	153
Air Quality	
Noise	
Water Quality and Conservation	154
Land	
Habitat	
Energy	154

Cultural and Heritage Resources	161
Historic Sites	161
Churches	161
Landmarks	161
Other Institutions	163
Urban Design	167
Design Protection Areas	
Transportation Corridors	
Energy and Conservation Considerations	
Implementation	
Public Facilities Financing	
Schools	
Transportation Improvements Phasing	
Legislative Implementation	
Lint of Figures	
List of Figures	
Figure 1. Location Map	2
Figure 2. Adjacent Communities	4
Figure 3. Population Characteristics (1980)	40
Figure 4. Existing Zoning	43
Figure 5. Land Use.	
Figure 10. Specific Plan/Multiple Use Areas	64
Figure 11. Existing Traffic Flow	73
Figure 12. Proposed Roads	
Figure 13. Horizon Year Recommended Street Classification	
Figure 14. Future Traffic Flow	
Figure 15. Streets Forecasted to Operate Above Desirable Maximum ADT	
Figure 16. Proposed Street Name Changes	
Figure 17. Proposed Light Rail Transit with Shuttle Service	
Figure 18. 1984 Transit Passenger Flow Map	
Figure 19. Existing Transit Routes	
Figure 20. Consolidated Parking Areas	
Figure 21. Bikeways	
Figure 22. Pedestrian Circulation System	
Figure 23. San Diego River Drainage Basin	
Figure 24. San Diego River	
Figure 25. Hillsides	
Figure 26. Development Intensity Districts	
Figure 27. Community Facilities	
Figure 28. Schools	
Figure 29. Cultural Resources—Landmarks	
Figure 30. Urban Design—San Diego River	
Figure 31. Urban Design—Hillsides	
Figure 32. Urban Design—Landmarks and Community Entrances	180

## List of Tables

Table 1. Mission Valley Community Plan Alternative Issues	22		
Table 2. Mission Valley – Existing Zoning	42		
Table 3. Mission Valley Vehicle Generation Rates by Land Use			
Table 4. Development Intensity Districts			
Table 5. Enrollment and Capacity Statistics for Schools			
List of Appendices			
Appendix A. Mission Valley Transportation	207		
Appendix B. Implementation Program			
Appendix C. Mission Valley Traffic Forecast			
Appendix D. Recommendations for Water Conservation and Water Reclamation	233		
Appendix E. Recommendations for Flood Damage Prevention	237		
Appendix F. Acceptable Plant Species for Mission Valley	241		
Appendix G. San Diego River Wetlands Management Plan			
Appendix H. Concept 8 Planning Committee Alternative			

# Introduction Section

- Background
- Plan Summary
- Environmental Context



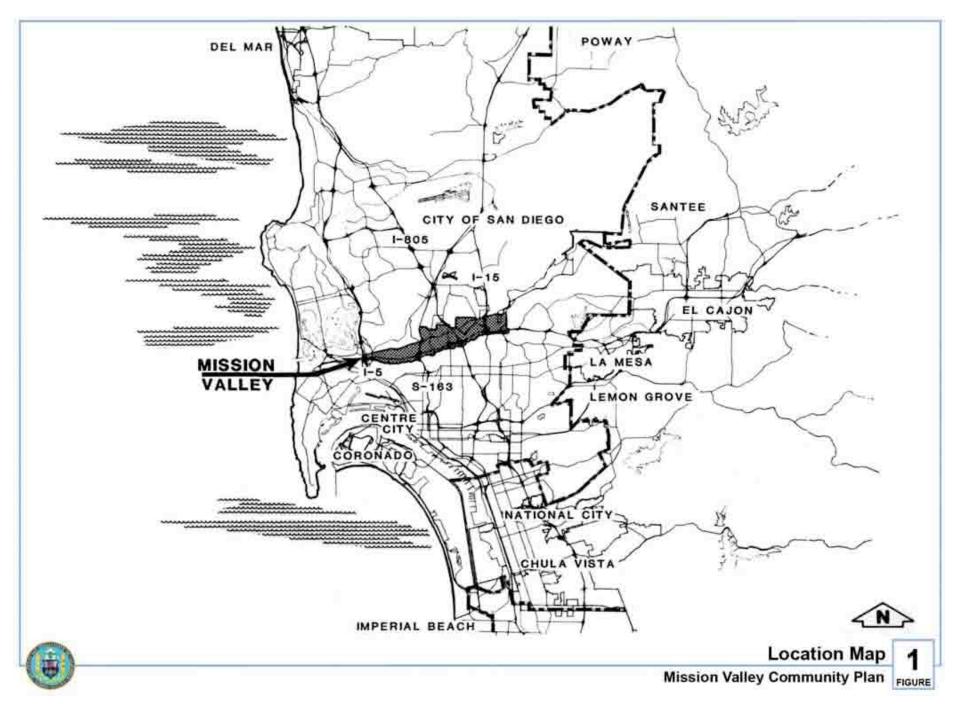
#### **BACKGROUND**

The Mission Valley planning area comprises approximately 2,418 net acres and is located near the geographic center of the City of San Diego. It is bounded on the west by Interstate 5 (I-5), on the north by Friars Road west of State Route 163 (SR-163) and by the northern slopes of the valley east of SR-163, on the east by the eastern bank of the San Diego River, and on the south by approximately the 150-foot elevation contour line. The Planning Department estimated that 7,253 people resided in 4,834 housing units in Mission Valley as of January 1984. The Mission Valley Community Plan (Plan) is based upon a projection of 24,558 people residing in 15,159 housing units as of the horizon year of the Plan. (This population projection is based on a household size of 1.62 persons per dwelling unit.) Attainment of these population levels depends upon the economic conditions in this community, relative to regional economic conditions.

#### PLANNING PROGRAM

The Mission Valley Community Plan and Environmental Impact Report are the result of a planning program authorized by the San Diego City Council on October 22, 1977, by Resolution No. 219488. The Mission Valley Unified Planning Committee, the officially recognized citizen planning organization, has met regularly with Planning Department staff, and other City staff on an as needed basis, to assist in the preparation of this Plan.

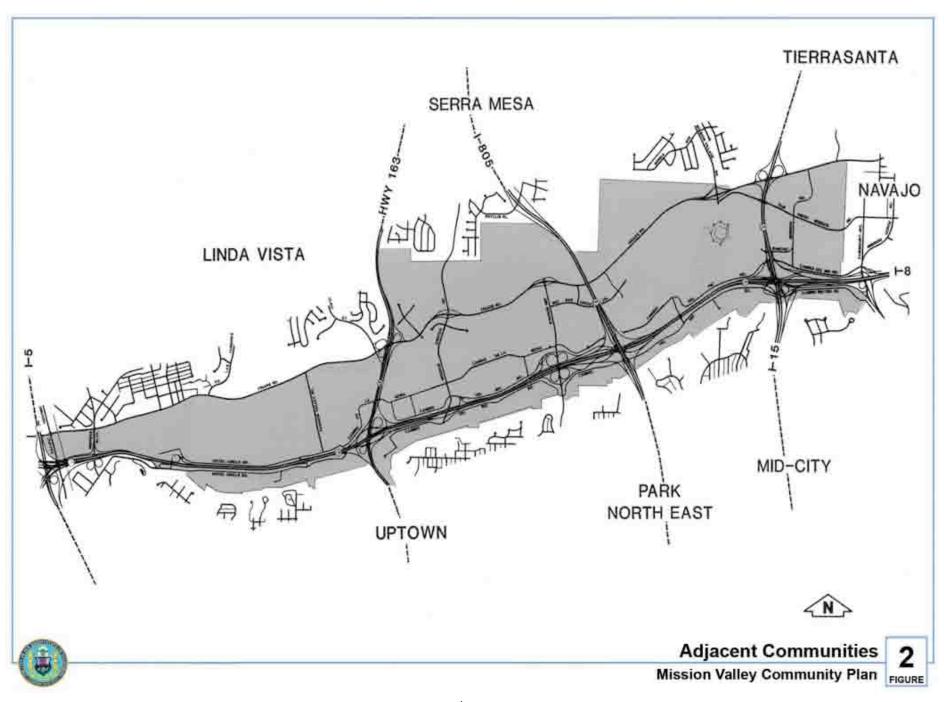
The purpose of the Plan is to provide recommendations to guide development in Mission Valley through the horizon year. The horizon year is defined as attaining the Plan's maximum occupancy capacity, which is based upon land use, development intensity, circulation and public facilities. It is anticipated that the horizon year will be reached sometime after the year 2000. A series of goals and objectives established by the community and consistent with citywide policies are included. Once the Plan is adopted by the City Council, any amendments, additions, or deletions will require that the Planning Commission and City Council follow the same public hearing procedures as were required in the initial adoption. While it sets forth proposals for implementation, the Plan does not establish new regulations or legislation, nor does it rezone property. Controls over zoning, subdivisions, transportation, building construction and other development must be enacted separately as part of the implementation program. The adoption of the Plan will concurrently amend the Progress Guide and General Plan (General Plan) for the City of San Diego but will require rescission of the existing East Mission Valley Area Plan. The Serra Mesa Community Plan will be amended by deleting those areas of the plan area lying south of the Linda Vista Community Plan, will be amended by deleting those areas of the plan lying south of the northerly slopes of Mission Valley and incorporating them into the Mission Valley Community Plan. The Linda Vista Community Plan will be amended through the incorporation of language pertaining to that area of the community plan lying immediately north of Friars Road and which is dependent upon the Mission Valley circulation system. This area is part of the Mission Valley traffic forecast and the incorporated language will indicate that this area will be subject to the implementing zoning legislation of the Mission Valley Community Plan. Future development based on the new Plan shall be undertaken in complete conformance with all appropriate Council Policies and City Ordinances.



The relationship of this Plan with Planning programs and development patterns in surrounding areas was considered during its preparation. This process included coordination with the adopted Serra Mesa Community Plan, Navajo Community Plan, Uptown Community Plan, Mission Bay Master Plan, Park North-East Community Plan, and the revisions to the Tierrasanta Community Plan, Mid-City Community Plan, and Linda Vista Community Plan. Proposals by the San Diego Association of Governments (SANDAG) and those contained in the adopted San Diego County General Plan were also evaluated. Two comprehensive transportation-planning programs were completed during preparation of this Plan. These are an Interstate 8 (I-8) Transportation System Management (TSM) Study, prepared by SANDAG, and a Transportation Plan for the San Diego Metropolitan Area, prepared by the San Diego Metropolitan Transit Development Board (MTDB).

This Plan should not be considered as a static document. It is intended to provide guidance for the orderly growth of the Mission Valley community. In order to respond to unanticipated changes in environmental, social, or economic conditions, the Plan must be continually monitored and amended when necessary to remain relevant to community and City needs. Once adopted, two additional steps will follow: *implementation* and *review*. The implementation is the process of putting Plan policies and recommendations into effect. Review refers to the process of monitoring the community and recommending changes to the Plan as conditions in the community change. Guidelines for implementation are provided in the Plan, but the actual work must be based on a cooperative effort of private citizens, City officials and other agencies. It is contemplated that the Mission Valley Unified Planning Committee and other private citizen organizations will provide the continuity needed for a sustained, effective implementation program.

Although this Plan is intended to be a development guide for the next 15 to 20 years, circumstances may arise requiring a plan reviewer update. Community conditions and the legislative framework must be continually monitored to ensure that the Plan remains timely. Considerable technical information was generated in the preparation of the Plan. This material is contained in files at the Planning Department and in the Environmental Impact Report (EIR), prepared by the Environmental Quality Division of the Planning Department, which evaluates the environmental effects of each of the eight alternative plan concepts presented. The EIR Conclusions and Recommendations for the Plan are included in this Plan document.



#### HISTORY OF DEVELOPMENT

Mission Valley is part of the floodplain of the San Diego River, historically a major source of fresh water in the San Diego Metropolitan Area. This water supply has attracted people to the valley since prehistoric times. Archaeological findings include remains of Cosoy, an ancient Kumeyaay Indian village, located near the base of Preside Hill. The Spaniards located the original Mission San Diego de Alcala near this Indian village site in 1769. As the missionaries and Indian converts developed an agricultural economy, they moved the Mission further inland to its present location in the Valley in 1774. The Valley was named for the presence and influence of this Mission. By 1816, Padre Dam was built and a tile and masonry flume was constructed to convey water directly from the river impoundment to the agricultural lands located near the Mission. Agricultural activities, especially livestock raising, dairying and field cultivation, continued as significant land uses in Mission Valley until the 1960s.

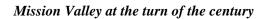
The arrival of the Mormon Battalion in 1847 signaled the beginning of Anglo-American settlement in Mission Valley. Although little new development occurred in the Valley proper during the 19<sup>th</sup> Century, several nearby settlements were founded in the 1880s. These include Grantville, located just east of the Valley north of Mission Gorge Road, and Silver Terrace (Linda Vista) overlooking west Mission Valley.

Sand and gravel extraction was introduced into the area about 1913, and began in earnest about 1923. Primary sources were the sands along the San Diego River and Murphy Canyon, and the conglomerate rocks in adjacent Serra Mesa. The industry flourished as development spread northward. Although material is no longer being extracted from the San Diego River, extensive activity continues north of Friars Road in Murphy Canyon.

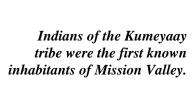
Mission Valley has played a key role in local and regional transportation since prehistoric times. Trails that apparently date back to the Kumeyaay Indians include Cañada de la Soledad (Murphy Canyon Road), Mission Trail (Friars Road), Poor Man's Grade (Murray Canyon) and Father Junipero Serra Trail (Mission Gorge Road).

Major urban development has occurred in Mission Valley since 1958, primarily as a result of improvements in the regional highway network. The construction of U.S. 80 (later I-8) provided an impetus for commercial development in Mission Valley, and for the rapid displacement of the agricultural economy. This process accelerated when U.S. Highway 395 (now SR-163), and Interstate 805 (I-805) were completed, the latter in 1971.

The first major urban development was the Mission Valley Shopping Center, approved in 1958. During the late 1950s and throughout the 1960s, Hotel Circle became an important commercial-recreation and visitor-oriented area. Other significant projects include San Diego Jack Murphy Stadium, completed in 1967 and Fashion Valley Shopping Center, built in 1969. During the early 1970s, the religious order of the Poor Sisters of Nazareth sold much of the land surrounding Mission San Diego de Alcala. This knoll eventually developed as a multiple dwelling neighborhood, the largest residential area in Mission Valley.







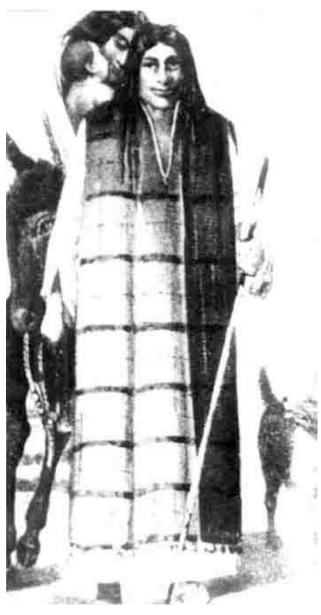


Photo of Mission San Diego de Alcala taken in the early 1900s





Remaining structure of the old mission dam built in the 1700s to provide water for irrigation

Mission Valley had become a satellite urban center of San Diego.

Throughout the history of Mission Valley, the San Diego River has been a primary attraction, first as a source of fresh water and later as a scenic recreational asset. The river has had an interesting history in relation to its impact on human use of the floodplain. During the agricultural period (1769 to 1958), drought was as much of a concern as flood. The subsequent period of rapid urbanization from 1958 to 1977 was characterized by very low annual rainfalls. Although the flood potential had been documented in detailed historical accounts from the 1920s and 1940s (a concrete flood channel was approved in 1965 but never constructed), much of the post-1958 development occurred on the floodplain. In 1978, 1979, and 1980, however, three consecutive rainy seasons brought flooding which resulted in property damage. The continuing threat of flooding will have an impact on the future development of Mission Valley.



#### PLANNING HISTORY

This section summarizes planning programs carried out in Mission Valley by the City of San Diego from 1960 to date. Some of these planning programs did not get adopted by the City Council.

#### 1. Mission Valley Plan (1960)

The Mission Valley Plan (November 1960) was the first planning effort in the Mission Valley community. Background information was supplied by previous studies prepared in 1955 and 1958. This proposed plan recommended that: 1) industrial expansion be limited to "those extractive industries east of Cabrillo Freeway (SR-163) and north of the river"; 2) commercial expansion be focused on tourist-related recreational uses; 3) office and professional uses remain secondary (up to 25 percent of the total floor area of a building) due to the problems of limited freeway access, unsuitability of existing and proposed streets for public transit, potential heavy peak-hour traffic and congestion associated with office buildings; and, 4) medium- to high-density residential development be encouraged as desirable "because of the relatively low rate of traffic generation and living amenities which are offered there," and the compatibility with the pattern of tourist-oriented development. No official action was taken to adopt the proposed plan.

#### 2. East Mission Valley Area Plan (1963)

This plan was developed in 1962-63 in the hope that a long-range land use plan could be adopted by the City to guide future development. The study was requested by the Planning Commission in response to a communication from property owners in the area. It included the area east of (then proposed) I-805 to Fairmount Avenue. This plan recommended that:

1) light industrial uses be located in the area between the proposed flood channel and U.S. 80 (I-8); 2) natural resource extraction activities continue north of the river; 3) low-density residential (one unit per acre) uses be permitted in limited portions of the south slopes; and, 4) residential-professional land usage, rather than strip commercial, be located along the south side of U.S. 80 because of the low employee density ratio, low peak-hour traffic generation, and integration of residential use with administrative and professional office uses. This plan was adopted by the City Council on April 11, 1963.

#### 3. Revised East Mission Valley Area Plan (1968)

A review and revision of the previously adopted plan was necessary due to proposed changes in the alignment and interchange configuration of I-805 and the Escondido Freeway (Ward Road - Murphy Canyon Road), the reduction in width and the realignment of the San Diego River Flood Channel, possible annexations and the construction of the San Diego Stadium and connecting highways. The planning area was revised to include the area between Friars Road and the top of the bluffs on the north side of the Valley. The recommendations of the revised plan differed from the previous plan in the following ways: 1) light industrial uses were proposed for both sides of Friars Road between I-805 and the Stadium; 2) commercial-recreational uses were proposed for the land surrounding the Stadium and the northern slopes were designated for low-density residential,

encouraging the use of planned unit developments, and medium-density residential was proposed north and south of the river channel east of Rancho Mission Road; 4) commercial-offices replaced the residential-professional office use south of I-8; and 5) a concrete-lined flood channel with an overall width of about 300 feet was first

#### 4. West Mission Valley Report (1971)

proposed.

In November 1968, the City Council designated the West Mission Valley Planning Committee as the citizen representative group that would assist in preparation of the West Mission Valley Community Plan. This report provided resource material to be used by the Committee in developing such a plan. The report assumed that future development would follow (then) existing trends in order to perform a travel forecast. It was concluded that future traffic volumes (359,609 trips excluding through trips) would be greater than could be accommodated in existing or proposed street systems. The report indicated that a future plan would have to consider three possible alternative solutions to this problem: 1) modifying the existing roadway system; 2) reducing the intensity of land use; and, 3) developing and supplementing the existing circulation system with another mode of transportation. The community established the following objectives for the development of the West Mission Valley area plan: 1) (provide flexibility in the location of land use; 2) develop qualitative standards for each type of land use; 3) create an urban center in a park-like setting; and, 4) preserve the hillsides and existing open quality of the Valley. This report outlined a planned district concept (with qualitative standards for each type of land use) as an approach to guide the planning and development of Mission Valley.

In October 1977, the City Council determined that a single plan for the entire Mission Valley area would be appropriate and directed planning staff to focus their efforts in that direction. The proposed Mission Valley Community Plan is a response to that direction.

#### **EXISTING SETTING AND REGIONAL CONTEXT**

Mission Valley was formed through the erosive action of the San Diego River upon the coastal mesa region. Mission Valley separates two mesas—the northern Linda Vista Terrace and the southern San Diego Terrace. The geology of these mesas consists of tertiary marine sediments made up of conglomerates and tuffaceous sandstones, generally overlain with Quaternary terrace deposits of sands, gravels and boulders. The Valley floor is composed of alluvial clays, sands, gravel and boulders. The topography of the Valley is that of a wide, flat floodplain surrounded by steep slopes and mesas to the north and south. The Valley gently slopes from about 600 feet above mean sea level on the eastern end of the community, to sea level at the western end. The San Diego River is the lowest point of the drainage basin.

Mission Valley is identified in the General Plan as an urbanized community. It is primarily a business community with much of its developable land devoted to commercial and office uses. Most development has occurred on the north and south sides of the Valley, along Friars Road and I-8. The central area of the Valley contains the San Diego River which is zoned FW (Floodway) due to the flooding potential, restricting development in areas of inundation. The southern slopes are still primarily in a natural state, while the northern slopes have been excavated for sand and gravel extraction.

Mission Valley is located at nearly the geographic center of the City of San Diego. The Valley is the crossroads for the regional freeway system, enjoying access from I-5, I-8, I-15, I-805 and SR-163. It has been a regional center since it first began to urbanize. It is a major employment center, with retail sales, office buildings, and newspaper publishing. It is also a visitor center with a large number of hotels and freeway accessibility to tourist attractions (Mission Bay, Sea World, Balboa Park). A regional entertainment center, it has movie theaters, restaurants, golf courses and the San Diego Jack Murphy Stadium. With its two regional shopping centers, Mission Valley is also the major regional retail center in the San Diego area at this time.

The Valley has fulfilled a regional role in almost all its development. Only recently has Mission Valley seen itself as a distinct community. The addition of residential development will alter the character of the Valley, giving it a more balanced regional/local character.



Cloverleaf with dairy on left side looking west from Madison Street, November 1954



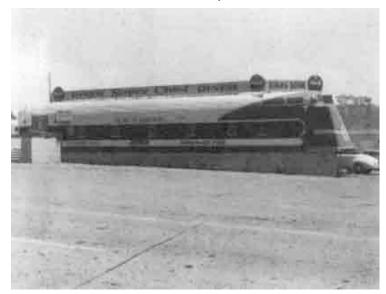
Ferrari Dairy, east of Texas Street, December 1954



Mission Valley Country Club Golf Tournament, January 1955



American Sand Company, just north of Twain and Powers Streets, December 1954



Friars Road just west of Highway 163, January 1955



#### PLAN SUMMARY

The Plan is based on a realistic land use proposal. Specific plans with a multiple land use emphasis are proposed for large undeveloped tracts of land along Friars Road. The transportation plan has been developed based primarily upon land use assumptions provided by the property owners. The limitations on the permitted intensity of development have been based on the capacity of the surface street system. The **Transportation Element** has an additional dimension; it permits increases in intensity (bonuses) when commitments are made for public transit systems (regional light rail transit and an intra-Valley transit system).

The **Open Space Element** is the key, not only to open space recommendations, but also to urban design recommendations as well. The **Urban Design Element** focuses on the river, hillsides, and transportation corridors. The open space element discusses development criteria for the flood control facility, hillsides, and park and recreation areas.

The San Diego River Wetlands Management Plan, contained in **Appendix G**, is an integral part of the implementation of the San Diego River element. The Wetlands Plan provides a framework for integrating the protection of wetlands with land development, transportation facilities and flood control.

The **Implementation Element** envisions the development of new zoning legislation to address development intensity, urban design guidelines and multiple uses. Bonus provisions for intensifying permitted development upon the implementation of a public transit system are also included, A table identifying responsibilities for the development of public facilities within the community is included as part of the Implementation Element.

#### PLAN DEVELOPMENT ISSUES

#### 1. Traffic Circulation

The present transportation system has inadequate capacity. As currently developed, it will be unable to handle future local circulation and regional transportation needs. The Plan, in conjunction with the SANDAG-Caltrans Interstate 8 Corridor Study, proposes major structural and operational transportation improvements, including: a) encouraging the completion of the regional freeway system; b) closing gaps and remedying other deficiencies in the local (non-freeway) street system; c) reducing the effects of flooding on the transportation network; d) mitigating congestion by providing incentives for the use of modes of transportation other than the automobile; and e) instituting operational improvements (for example, ramp meters) within the I-8 corridor (both within and adjacent to the Mission Valley community).

#### 2. Form and Intensity of Development

Development to date in Mission Valley has been occurring in a largely unplanned fashion. There has been little coordination to ensure compatibility of contiguous developments. The issue of form and intensity of future development has been addressed in the Plan

through the establishment of: a) development intensities related to the planned transportation network, designated activity centers and river-related open spaces; b) design guidelines to shape development adjacent to the river and north and south rim hillsides; c) encouragement of multiple use complexes which offer environments for living, working, shopping and related activities; and d) design guidelines for streets and other public rights-of-way, placing a new emphasis on the environmental quality of pedestrian-oriented spaces.

#### 3. Flood Protection

Flooding of the San Diego River has become a major problem in Mission Valley since urbanization became prevalent in the floodplain area. This issue has been addressed in terms of: a) protection of lives and property; b) the use of land adjacent to flood control facilities; c) environmental constraints of wetland preservation and mitigation; d) equitable financing and maintenance of flood control facilities; and e) aesthetic appearance.

#### 4. Public Facilities and Services

The Mission Valley community contains major regional facilities for entertainment, recreation, shopping, dining and lodging. Yet, facilities of a local or neighborhood nature serving the resident population are nearly nonexistent. Residents must rely upon other communities for "neighborhood" facilities to fulfill their daily needs, including schools, parks, libraries, emergency medical services and a post office. This situation has become an issue in Mission Valley. The provision of "neighborhood" services should help reduce the number and length of automobile trips within and through the Valley and otherwise enhance the livability of the community.

#### 5. Physical Environment

The physical environment of Mission Valley continues to play a significant role in planning for the community's future. This is true with respect to constraints as well as opportunities. The potential for flooding, and liquefaction during earthquakes affects much of the Valley and must be considered when planning for any new development. Portions of the natural environment still exist, and if managed properly could provide opportunities for creating an urban center of high environmental quality. The San Diego River floodway should become a scenic resource with which projects can be integrated. Other environmental assets are the hillsides which provide the green backdrop on the Valley's south side. Proposals contained within this Plan provide development standards to assure a measure of protection for the natural assets of Mission Valley.

#### 6. Economic Impacts

The public facilities required to provide the level of service desired in the community (roads, transit, flood protection, etc.) need to be financed primarily by the property owners and developers in the Valley, since they will receive the direct benefits of such

improvements. Additionally, as the flood control facility is constructed in the San Diego River corridor, it is anticipated that new areas (formerly prone to flooding) will become available for development, offsetting some of the initial costs of the facility.

#### 7. Regional Impacts

Existing development, extensive freeway access and a location near the geographic center of the urban San Diego region, make Mission Valley a major activity center. The predominant land use in the Valley is commercial, including retail, recreational, and office development. The Plan proposes to encourage this activity in combination with other uses. It is expected that Mission Valley will continue to expand as the regional commercial center, complementing the other two other regional activity centers: Center City (government/ financial center); and University City (educational/high technology center).

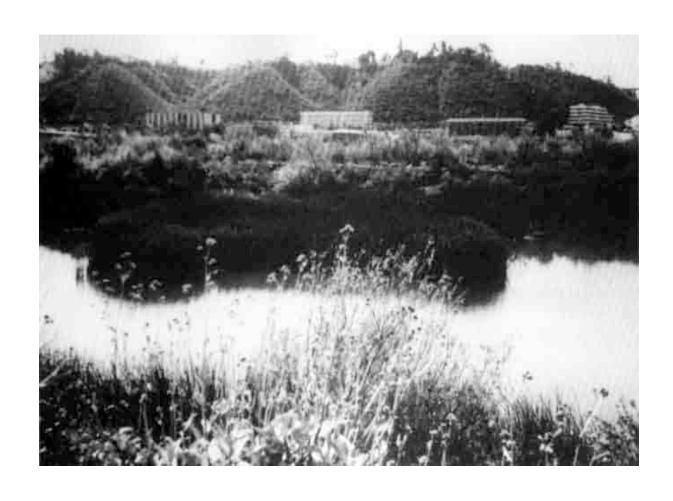
#### **GOALS AND OBJECTIVES**

#### **Overall Goal**

To provide a Plan for Mission Valley which allows for its continued development as a quality regional urban center in the City of San Diego while recognizing and respecting environmental constraints and traffic needs, and encouraging the Valley's development as a community.

#### **Overall Objectives**

- Encourage high quality urban development in the Valley which will provide a healthy environment and offer occupational and residential opportunities for all citizens.
- Provide protection of life and property from flooding by the San Diego River.
- Provide a framework for the conservation of important wetland/riparian habitats balanced with expanded urban development.
- Facilitate transportation through and within the Valley while establishing and maintaining an adequate transportation network.
- Provide public facilities and services that will attend to the needs of the community and the region.
- Provide guidelines that will result in urban design which will be in keeping with the natural features of the land and establish community identity, coherence and a sense of place.



#### **ENVIRONMENTAL CONTEXT**

#### PLAN ALTERNATIVES

Although an infinite number of plan alternatives could be formulated and evaluated, the following eight alternatives offer a comprehensive variety, satisfying the objectives of the California Environmental Quality Act (CEQA) and illustrating feasible approaches to community planning options in Mission Valley in terms of land use classification and development intensity. The selected alternatives are briefly summarized and then followed with more detailed descriptions. The alternatives are:

- 1. No Mission Valley Community Plan (The "No Plan" Alternative).
- 2. Limited Development (No Comprehensive Flood Protection Program).
- 3. Intensive Development.
- 4. Moderate Development Commercial Office Emphasis.
- 5. Moderate Development Integrated Use Emphasis.
- 6. Moderate Development Residential Emphasis.
- 7. Development to SANDAG Series V Projection Levels.
- 8. Planning Committee Alternative: Multiple Use Integrated Use Emphasis.

TABLE 1
MISSION VALLEY COMMUNITY PLAN ALTERNATIVES ISSUES

Plan Alternatives	Flood Protection	Transportation/ Transit	Land Use	Development Intensity
Concept 1	Existing FW, FPF Zones	Surface street improvements on project-by-project basis to be financed by developers as part of project approval. Transit-buses.	Continuation of existing uses.	That permitted by existing zoning.
Concept 2	Apply FW Zone where FPF Zone now exists prohibiting all new structural development within the floodplain.	No significant improvements to existing surface street system.	Continuation of existing uses, addition of non-structural uses such as agriculture, grazing, campgrounds	Only low-intensity uses permitted. Capacity of existing streets determines extent of development.
Concept 3	Concrete channel	Major improvements to freeways and surface street system. Transit: LRT line, shuttle buses, trams, and bikeways.	Continuation of existing uses.	High-intensity, high- rise development.
Concept 4	Natural appearing, soft-bottom floodway with 100-year flood capacity in a natural setting.	Improvements to street system. Transit: improved bus system, bikeways, and intra-Valley tram.	Emphasis on new commercial-office development which includes other commercial and/or residential uses.	Moderate levels of development.
Concept 5	Natural appearing, soft-bottom floodway in natural setting, accommodating recreational uses, habitat-conservation, flood control.	Improvements to street system. Transit: LRT, improved bus system, bikeways, and intra- Valley tram.	Emphasis on multi-use which includes commercial-retail, recreation, office, residential.	Moderate levels of development.
Concept 6	Natural appearing, soft-bottom floodway approx. 700'-800' wide to carry 111,000 cfs in park-like setting.	Improvements to street system. Increased number of small local streets.	Emphasis on new residential development with support services.	Moderate levels of development.
Concept 7	Existing FW, FPF Zones	Surface street improvements on project-by-project basis to be financed by developers as part of project approval. Transit-buses.	Continuation of existing uses.	That permitted by existing zoning.
Concept 8	Natural-appearing soft-bottom floodway with optional augmentation by means of a supplemental diversion facility with the capacity to contain the 100-year flood.	Improvements to street system. Transit: improved bus system, bikeways and intra-Valley tram.	Emphasis on multi-use which includes commercial, recreation, office or residential.	As permitted by existing zoning or proposed CA2 Zone and other ordinances in plan implementation, CA-2 Zone permits FAR of 2.0. (1,400 trips per acre-office & hotel development. 2,500 trips per acre for retail development.)

#### **CONCEPT 1: NO MISSION VALLEY COMMUNITY PLAN**

This "No Plan" concept assumes: a) retention of existing general and area plans, including the General Plan and the East Mission Valley Area Plan; b) continuation of current trends of development; c) continuation of current zoning classifications and other land use controls; d) minimal street improvements; and e) no flood control facility.

Following the construction of the San Diego Jack Murphy Stadium, Hotel Circle visitor facilities, and the two regional shopping centers, four major categories of land uses have located in the Valley. These are office, commercial-recreation, retail and multiple dwelling residential uses. These uses are designated in a general fashion by the General Plan. The sand and gravel extraction operations located between Mission Center Road and the Stadium are shown for natural resource extraction. The East Mission Valley Area Plan (a development plan) covers Mission Valley east of I-805. A major departure from that plan is the concentration of multiple dwelling units around the Mission San Diego de Alcala. Much of that area was designated for commercial-recreation use in the East Mission Valley Area Plan. The office, commercial-recreation and retail areas are not single-purpose use types. Recently, office uses have been interspersed among the visitor facilities located along Hotel Circle. Although offices prevail along Camino del Rio South, a random mixture of freestanding retail uses currently exists between SR-163 and Texas Street.

The zoning pattern throughout the Valley strongly reflects the random mix of land uses. Pockets of CR, CO, CA and R-3 zoning resulted from the absence of an adopted community plan containing specific guidelines. This is especially true in the Hotel Circle South and Camino del Rio South areas. This trend toward "undefined mixed uses" or "any use" is likely to continue if remaining vacant land and redevelopable areas urbanize without the guidelines of a community plan.

The surface street system also will remain fragmented and disjointed unless a comprehensive effort is utilized to finance completion of an internal street system. Although the City can require local street widenings for individual projects, those projects could develop a "piecemeal" fashion, resulting in traffic flow difficulties. There would also be little effort to balance the heavily automobile-oriented transportation system with buses and other modes of public transit.

The approach to flood protection in use today is land use regulation by zoning. The FW Zone defines the extent of the 100-year frequency flood (based upon 36,000 cubic feet per second). This zone is the basis for the "open space" designation along the San Diego River by the General Plan. Land uses permitted by the FW Zone are limited to non-structural uses unaffected by flooding. No structural flood control facilities are planned under Concept 1. The U.S. Army Corps of Engineers has withdrawn its participation in a flood channel for Mission Valley, based upon their 1975 cost-benefit analysis. Efforts to implement short-term solutions (i.e., pilot channels to handle low flows) have met with limited success to date. Some property damage occurred in three past consecutive rainy seasons (1978, 1979, 1980) and is likely to occur again in the future under the "No Plan" Alternative.

In summary, existing plans covering Mission Valley do not provide a comprehensive set of policies for future land use, transportation and flood protection. Equally important is the lack of a comprehensive implementation program, including financing, to provide needed improvements.

#### **CONCEPT 2: LIMITED DEVELOPMENT**

This "Limited Development" concept assumes that no new structural development will occur in any areas subject to flooding, including both FW (Floodway) and FPF (Floodplain Fringe) zoned property, and will limit development located outside the flood-prone areas. Of the 1,982 net acres of land in Mission Valley, about 432 acres are contained in the FW Zone and about 900 acres in the FPF Overlay Zone as of October 1980. This means that about 1,332 acres (67 percent of Mission Valley) are subject to flooding and therefore, could be excluded from new structural development under Concept 2. As indicated, the City now provides flood protection by application of the FW and FPF zones. The FW Zone precludes any structural development. The FPF Overlay Zone permits structural development, but requires that measures such as diking, filling or special development techniques be undertaken to mitigate potential flood damage. Concept 2 proposes to replace the FPF Overlay Zone with FW zoning. Concept 2 also limits new development outside the floodplain areas. In addition to potential flooding, the traffic carrying capacity of the existing road system would be a major factor used to limit and direct new development.

In terms of land use, Concept 2 would result in no new development in the two-thirds of the Valley subject to flooding, and only limited development elsewhere. Some relatively low-intensity uses that could remain include sand and gravel extraction and golf courses. Some possible new uses within the flood-prone area could include campgrounds, miniature golf courses, truck crops, livestock grazing and other non-structural uses. The overall impression would be a wide, partially developed greenbelt extending the length of Mission Valley. Outside of individual flood protection projects for existing development, no major expenditures of public or private funds would be anticipated for flood protection. No significant improvements to the transportation system would occur under the Limited Development concept. There would be little incentive by private development to provide needed street connections or even widenings because few new projects could be built.

#### **CONCEPT 3: INTENSIVE DEVELOPMENT**

This "Intensive Development" concept assumes that urbanization would occur to the greatest extent possible. This high degree of development intensity would require: a) a light rail transit (LRT) system supplemented by feeder lines and tramways; b) extensive freeway and surface street improvements; and c) a concrete channel to control floodwaters along the entire length of Mission Valley.

The land use pattern could change dramatically from its current relatively open character to one dominated by intensive high-rise development. Open space would be virtually eliminated, especially along the San Diego River. New developments possible under Concept 3 include a major hotel/convention complex located west of San Diego de Alcala and on the

golf courses north of the San Diego River and major hotel and office complexes elsewhere. This approach to development would be like that under the "No Plan" Alternative except that provision of a concrete channel for flood protection and an upgraded transportation network would encourage development on a highly intensive scale. Traffic (trip generation) under Concept 3 would be so extreme that development of a public transit system would be mandatory for Mission Valley. The MTDB has under study the alignment for a "transit corridor" extending from Center City northward to Escondido along I-15. Concept 3 proposes that an LRT line be extended through the Valley to the Stadium. This proposed east-west line could connect with future lines serving the La Mesa/El Cajon area. The LRT system would be supplemented with a coordinated internal public transit network consisting of shuttle buses, trams, bikeways and other alternative transportation modes. Additionally, some street improvements might still be required.

#### CONCEPT 4: MODERATE DEVELOPMENT - COMMERCIAL OFFICE EMPHASIS

This "Moderate Development - Commercial Office Emphasis" concept assumes the following: a) a planned multiple use approach to development; b) an emphasis on commercial/office uses; c) a balanced transportation system, and d) a natural appearing, soft-bottomed floodway approach to flood protection to contain a 100-year flood under the year 2000 conditions.

A "Multiple Use Option" approach (employed in Concepts 4, 5 and 6) is intended to permit greater flexibility in project design than is possible through strict application of conventional zoning regulations. It permits developers to combine land uses in such a way that community and individual project "self-containment" can be achieved. "Self-containment" means that all support facilities and services associated with a project are located either within the project or within a short walking distance. Examples include banks, restaurants, health facilities and food markets. "Self-containment" should reduce the number of intra-Valley automobile trips, resulting in fuel conservation, decreased air pollution and less traffic.

Concept 4 encourages development of an urban community with an emphasis on commercial office projects, with little land devoted to new housing. The pattern of a mix of land uses has already been established; there are no residentially oriented support facilities (schools, parks, libraries, for example), and there has been high economic demand for new office and retail space. This concept requires a considerably upgraded road system supplemented by a greatly improved bus service, bikeway system, and possibly, an internal tram or "people mover" line. Although a light rail transit line is not part of Concept 4, one could ultimately be of great benefit to Mission Valley.

Also embodied in this concept is a different approach to flood protection in Mission Valley. This is the "natural appearing soft-bottomed flood-way," derived from the "grass-lined swale" recommended by the U.S. Army Corp of Engineers in the 1975 San Diego River-Mission Valley Flood Control Task Force Report and the supplementary design memorandum. This approach consists of a major flood control facility to contain the year 2000 100-year frequency flood (based upon 49,000 cubic feet per second) and a low-flow or "pilot channel" design to handle the year 2000 ten-year frequency flood (4,600 cfs). The

overall appearance of this flood protection system would be that of a river in a greenbelt setting with water in the low-flow channel on a year-round basis. Creation of this flood control facility within the river corridor area would make more land available for development than is presently the case. Indeed, the riverbank areas could be designed to accommodate a variety of outdoor recreational uses compatible with habitat preservation.

## CONCEPT 5: MODERATE DEVELOPMENT - INTEGRATED USE EMPHASIS (Recommended Alternative)

The "Moderate Development - Integrated Use Emphasis" concept includes: a) an emphasis on an integration of commercial-retail, commercial-recreation, office and residential uses; b) encouragement of residential development in order to complement the commercial and office development presently occurring in Mission Valley; c) the addition of resident-oriented community facilities and services; d) a comprehensive transportation system with an emphasis on achieving a viable internal circulation network; and e) a natural appearing soft-bottomed floodway solution to flood protection in order to contain a 100-year flood under the year 2000 conditions.

Concept 5 is an attempt to complement existing and future commercial office development with an appropriate amount of residential development. In order to provide residents with the opportunity to live close to employment, shopping and recreational opportunities, a comprehensive integrated use development approach is necessary.

Mission Valley is characterized by an abundance of regionally oriented shopping, office and recreational facilities, but lacks resident-oriented support facilities despite considerable residential growth. It is felt that a residential growth, as provided by this concept, would justify providing such local support facilities as supermarkets, and other neighborhood retail and service facilities, medical clinics, etc.

A balanced transportation system is an essential ingredient of Concept 5 with an emphasis on achieving a viable internal circulation network. This concept requires a significantly upgraded surface street system in order to reduce, or eliminate entirely, current reliance upon use of the freeway system to travel within the Valley. Public transit improvements would include higher levels of express and urban route bus services as well as the addition of an intra-Valley shuttle bus system. A light rail transit (LRT) line is an important part of Concept 5. The future extension of an LRT line from Center City through Mission Valley to the stadium (and possibly north along I-15 to the city of Escondido) could reduce dependence upon the automobile and reduce traffic congestion and parking problems in the Valley. Public transit modes would also be supplemented by an extensive walkway and bikeway system linking many of the Valley's major activity centers.

Concept 5 embodies the "natural appearing soft-bottomed floodway" previously described in Concept 4. Continued urbanization in the San Diego River Basin is expected to increase runoff rates through at least the year 2000. The U.S. Army Corps of Engineers estimates that the 100-year frequency flood will increase in magnitude from 36,000 cubic feet per second (cfs) in 1975 to approximately 49,000 cfs by the year 2000. Concept 5 recommends that the 100-year flood control facility be designed and constructed to the year 2000 standard of 49,000 cfs in order to provide flood protection for the Valley.

The overall appearance of this flood protection system would be similar to that of a river greenbelt with water year-round in the low-flow (year 2000, ten-year flood) channel and preservation or revegetation of much of the extensive riparian/wetland habitat. Development of this facility would make more land available for structural development. Indeed, the river corridor itself could conceivably be designed to accommodate a variety of active outdoor recreation uses, which would complement the abutting land uses and provide multi-purpose uses of flood protection, critical habitat conservation and recreational facilities for the community and region.

#### CONCEPT 6: MODERATE DEVELOPMENT - RESIDENTIAL EMPHASIS

This "Moderate Development - Residential Emphasis" concept is the third plan option which is based on a "multiple use" approach to development. However, Concept 6 differs from Concepts 4 and 5 in several important respects. These include: a) a heavy emphasis on new residential projects; b) a full complement of community facilities and services to support this new residential development; c) less extensive transportation improvements; and d) a natural-appearing soft-bottomed floodway to handle the year 2000 Standard Project Flood.

The major objective of Concept 6 is to build a substantial amount of new housing in Mission Valley, catering to families and senior citizens at all income levels as well as to the young adult market. A variety of housing types, including townhouses, garden apartments and high-rise structures would be encouraged. In addition, development of modular housing could provide affordable units for low- and moderate-income households. A residential community would require substantial new support facilities and services if the goal of "self-containment" (as discussed previously in Concept 4) is to be achieved. These would include:

a) neighborhood shopping centers with full line supermarkets; b) schools; c) libraries;
d) public parks and recreational facilities; and e) health care facilities. These services are presently provided in areas adjacent to the Mission Valley community.

Maximum protection from floods is another major objective under Concept 6, due to the anticipated large number of residential dwellers. In addition, flood facilities should be aesthetically pleasing in appearance. To achieve both objectives, Concept 6 proposes a natural appearing soft-bottomed floodway large enough to accommodate the Standard Project Flood. The standard project flood (SPF) represents the flood that would result from the most severe combination of meteorological and hydrologic conditions considered reasonably characteristic of the region. It normally is larger than any past-recorded flood in the area, and can be expected to be exceeded very infrequently. In 1975, it was calculated to be 95,000 cfs. It would average about 700-800 feet in width and would have approximately twice the handling capacity of the year 2000 "100-year" floodway. Although more land would be placed within the SPF floodway than the 100-year floodway, the Floodplain Fringe (FPF) Overlay Zone could be eliminated from Mission Valley.

The configuration and cost of transportation improvements for Concept 6 would be substantially different from those proposed under Concepts 3, 4 and 5. The size and number of major street facilities needed would be proposed under Concepts 3, 4 and 5. The size and number of major street facilities needed would be reduced substantially due to the generally

lower traffic generation rate of residential development (as compared to that generated by office or retail uses). However, it is probable that there would be more local streets providing access to housing units than would be the case under the commercial office alternative. Still, the overall cost of providing adequate transportation should be lower under Concept 6 than under Concepts 3, 4 and 5. As in Concepts 3 and 5, an LRT line through the Valley would be beneficial, especially if combined with improvements in bus service or the addition of an intra-Valley transit system. However, an internal transit system would not be needed as immediately in a residential community as compared to a commercially oriented one, but it would be equally desirable.

## **CONCEPT 7: SANDAG SERIES V DEVELOPMENT FORECASTS (1978-2000)**

The SANDAG Development Forecast is based primarily on the continuation of existing development patterns in Mission Valley. It assumes that current zoning will remain the same and that most of the developable vacant land will be used for multi-unit residential construction. It does not address the existence of or need for a flood protection facility. It also assumes that the surface street system remains the same, with only normal maintenance, but no substantial additions or deletions.

The SANDAG Forecast identifies four types of land use activity: 1) residential; 2) basic or exportable commercial and industrial; 3) non-basic or local service and commercial; and 4) vacant. Residential development would be located primarily in the western end of the Valley. The acreage used for residential purposes would expand 61 percent, an increase from 126 to 327 acres. This translates to a 54 percent increase in the total number of housing units. The forecast also estimates a 55 percent increase in the number of multifamily units (from 2196 to 4919). The increase, however, is based on an R-2 density (a maximum of 14 dwelling units per acre). This would result in a projected residential population of 9,716.

Basic or exportable commercial and industrial activity includes any enterprise in which the goods or services produced are to be used or sold outside of the region. This aspect of the economic base in Mission Valley will change very little. The acreage used for this type of commercial activity is expected to increase from 106 to 110 acres, or slightly less than one percent.

Local economic activities include commercial-office and retail uses which serve the region. These kinds of activities are expected to expand to 25 percent in terms of area (from 509 to 674 acres), and 36 percent in terms of employment (from 11,767 to 17,709 employees). The majority of the growth, both employment and acreage, is forecast to occur in the western portion or the Valley.

In essence, the SANDAG Forecast is a reflection of the anticipated changes in housing unit and employment figures for the year 2000, based upon existing zoning and past trends. The effects of such growth are discussed in the "No Plan" concept. The same basic assumptions hold true.

## CONCEPT 8: PLANNING COMMITTEE ALTERNATIVE MULTIPLE USE - INTEGRATED USE EMPHASIS

(This alternative was prepared by the Mission Valley Unified Planning Committee. The alternative is included as submitted by the Planning Committee. For additional detailed information see **Appendix H**.)

#### **Overall Goal**

To provide a community plan for Mission Valley which allows for its continued development (through market initiative) as a quality regional urban center in the City of San Diego while recognizing environmental concerns, the Valley's traffic needs and encouraging the Valley's development as a community.

The "Planning Committee Alternative - Integrated Use Emphasis" concept includes: a) a multiple use approach to development; b) an emphasis on an integration of commercial-retail, commercial-recreation, office and residential uses; c) encouragement of residential development in order to complement the commercial and office development presently prevalent in Mission Valley; d) the addition of resident-oriented community facilities and services; e) a comprehensive transportation system with an emphasis on achieving a viable internal circulation network; and, f) a natural appearing, soft-bottomed flood-way solution to flood protection, with optional augmentation by means of a supplemental diversion facility in order to contain a 100-year flood.

This concept assumes the following: a) all developable and redevelopable property is to be designated "multiple use" unless the property owner elects to retain the existing zoning applicable to the property; b) existing CA, CO, and CR zoning remain on developed properties at the option of the property owners; c) all future development intensity is regulated by a maximum floor area ratio of two.

A balanced transportation system is an essential ingredient of Concept 8 with an emphasis on achieving a viable internal circulation network. Public transit modes would be supplemented by an extensive walkway and bikeway system linking many of the Valley's major activity centers. This concept also requires a significantly upgraded surface street system in order to reduce, or eliminate entirely, current reliance upon use of the freeway system to travel within the Valley. Although an LRT line is not an integral part of Concept 8 at this time, one could ultimately be of significant benefit to Mission Valley. The future extension of an LRT line from Center City through Mission Valley to the stadium (and possibly north along I-15 to the city of Escondido) could reduce dependence upon the automobile and reduce traffic congestion and parking problems in the Valley.

The open space element is the key, not only to open space recommendations, but urban design recommendations as well. Urban design focuses on the river, hillsides, and transportation corridors. The **Open Space Element** discusses development criteria for the flood control facility, hillsides and park and recreation areas.

Implementation envisions the development of new zoning legislation to address development intensity and multiple use. A financing plan that envisions the establishment of assessment districts to provide funds for the development of public facilities within the community is included as part of the implementation plan.

#### RECOMMENDED ALTERNATIVE

Concept 5, the "Moderate Development - Integrated Use Emphasis" alternative, represents the recommended approach in achieving the Goals and Objectives established for Mission Valley. Concepts 1, 7 and 8 were discarded, as they would not result in a coherent, well-designed community. Likewise, Concept 2 was rejected, because it would be unrealistic to bring development to a virtual standstill in Mission Valley. Concept 3 was also rejected because such a high intensity of development would be detrimental to the physical environment and quality of life. Concept 6 was eliminated because of the cost of providing major residential support facilities and a standard project flood control facility and the lack of demand for such a development pattern. Concepts 4 and 5 were similar in terms of community goals. It was felt that concept 5 was more responsive to the private market constraints and opportunities than was Concept 4. Under Concept 5, the emphasis is on moderate levels of development which includes an integration of commercial-office, retail, recreation, and residential uses with improvements to the circulation and public transit systems, a natural appearing floodway, and limits to development intensity.

#### ENVIRONMENTAL IMPACT CONCLUSIONS AND RECOMMENDATIONS

#### **CONCLUSIONS**

Implementation of either the Planning Department's community plan alternative for Mission Valley (Concept 5) or the Mission Valley Unified Planning Committee's alternative (Concept 8) would create an urban environment very different from today's conditions. Mission Valley of 1984 contains about 5.1 million gross square feet of commercial office space, and all land uses generate about 0.3 million Average Daily Trips (ADT). Concept 5 could lead to creation of 17.2 million gross square feet of office space, with traffic doubling to 0.6 million ADT. Development under Concept 8 could result in 65.7 million square feet of office use, with ten times more traffic (3.4 million ADT) than is present today. (It is important to note that development under the existing General Plan and East Mission Valley Community Plan would permit about twice as much intensity as Concept 5: 1.3 million ADT vs. 0.6 million ADT.)

Either concept would lead to significant environmental impacts. Mitigation measures can reduce the significance of many impacts associated with Concept 5. The intensity permitted by Concept 8 would create unmanageable and extreme environmental conditions. The following paragraphs explain in greater detail the impacts of the two community plan alternatives.

#### Traffic

Traffic forecasts show that traffic volumes generated by the land use intensity under Concept 5 can be accommodated on Mission Valley's proposed horizon year circulation system with congestion in some areas of the Valley during peak periods. In order to accommodate the traffic generated by the level of development proposed under Concept 5, the traffic forecast assumes that several regional highways will be completed (e.g., State Route 52), State Route 56 (SR-56), and State Route 125 (SR-125), and that development will be limited to the intensity designated in Concept 5. Nonetheless, SANDAG's Draft 1983 Regional Transportation Plan projects heavy congestion would exist on I-5, I-8, I-805 and on SR-163 within Mission Valley.

The intensity of development allowed by Concept 8 could not be accommodated by any feasible street system. Only three miles of streets would function above a Level of Service of "F"; 39 miles of the Valley's total of 42 would be at LOS "F" (system failure). Interstate 8 and SR-163 would carry twice as much traffic as the most congested freeway in California; Friars Road would carry six times as much traffic as the most congested freeway in California. Communities to the north and south of Mission Valley would be very negatively impacted. For example, Texas Street in Park Northeast would carry as much traffic as I-8 does today. Such volumes are clearly impossible to accommodate, and the freeways would be unable to perform their role as regional traffic arteries.

## **Air Quality**

Because development under Concept 5 would cause congestion on several roadways, direct air quality impacts would result. The elevated pollutant levels associated with poor traffic flow might delay but would likely not prevent attainment of federal ambient air quality standards. The level of intensity and emissions associated with Concept 8 would preclude the region from achieving the air quality standards. In addition, the extreme congestion created by Concept 8 would produce elevated carbon monoxide levels throughout the Valley, creating a direct threat to public health.

## **Biological Resources**

Further development of Mission Valley will result in additional confinement and channelization of the San Diego River. In recognition of this, the Plan (both concepts) includes a Wetlands Management Plan which is intended to improve habitat value and recreational opportunities along the river as flood-control improvements are made. While the Plan incorporates extensive requirements for enhancement and revegetation of the river corridor, it will be difficult to fully offset the loss of biological resources as development proceeds. The ultimate river corridor will be much narrower, and will be far more segmented by roadway and trolley crossings. Future development will provide greater access to the river, but with a minimal buffer. The improvements provided in the river corridor will probably be aesthetically successful, but extraordinary revegetation and maintenance efforts will be necessary to restore the river's biological value.

## Visual Quality/Urban Design

Both alternative plan concepts contain an urban design element which, if implemented, could improve the visual character of Mission Valley. However, without a mechanism to ensure implementation of the design guidelines, continued chaotic development is possible. Adoption of a requirement that all new projects be subject to the planned development (Planned Commercial Development, Planned Residential Development) or specific plan process would substantially reduce the possibility of new development blocking views of the south slopes of the valley, restricting views and access to the San Diego River, obstructing visual access to community landmarks, or creating disharmony in building scale relationships.

#### **Public Facilities**

Both Concept 5 and Concept 8 would result in traffic congestion which would affect the ability of fire and police vehicles to respond to calls.

#### RECOMMEND MITIGATION MEASURE

The planning concepts and objectives presented in Concept 5 can only be achieved if new regulatory controls are available to ensure implementation of the Plan's guidelines. Satisfactory mitigation of traffic, air quality, biological, urban design impacts and public

facilities can occur only if discretionary approval is required for new development. Several parcels could be redeveloped under existing C, CA, or CO zoning without regard to the Plan's recommendations. To ensure that mitigation measures are implemented, it is recommended that a regulatory system be adopted which requires that all new development in the Valley be processed through planned development permits or similar discretionary approvals.

Unless this (or an equivalent) mitigation measure is adopted, project approval will require the decision maker to make specific and substantiated findings which state that: a) the recommended mitigation measure is infeasible; and b) these impacts have been found acceptable because of specific overriding considerations.

Note: The above discussion of the governmental impacts of this Plan is an excerpt from the Environmental Impact Report. The complete Environmental Impact Report (EQD No. 840194), as prepared by the Environmental Quality Division of the Planning Department, is on file in the Environmental Quality Division and is available for public review.

# Plan Elements Section

- Land Use
- Transportation
- Open Space
- Development Intensity
- Community Facilities
- Conservation
- Cultural and Heritage Resources
- Urban Design
- Implementation



## **LAND USE**

The major components of existing land use in Mission Valley are commercial, residential and industrial. Commercial activities are the primary land use, encompassing 634.14 acres or approximately 26 percent of the area. Residential uses currently occupy about eight percent of the Valley, while industrial activities (excluding the extractive areas) utilize 26.4 percent.

The proposed land use for certain large, vacant or redevelopable areas is multiple use, in keeping with the recommended plan alternative of "Moderate Development - Integrated Use" to be achieved through the use of Planned Commercial Development (PCD) permits or Specific Plans. Multiple use in Mission Valley will contain various combinations of commercial and residential uses.

#### RESIDENTIAL

In January 1984, 196.8 acres (8.13% of the land area) in the Mission Valley community planning area were devoted to residential land uses. At that time there were 4,834 housing units in Mission Valley. The few remaining single-family dwellings are scattered along Camino del Rio South between Texas Street and Fairmount Avenue, and along Hotel Circle South. These remaining single-family dwellings are among the last vestiges of the rural environment of the Valley, present since the early 1900s.

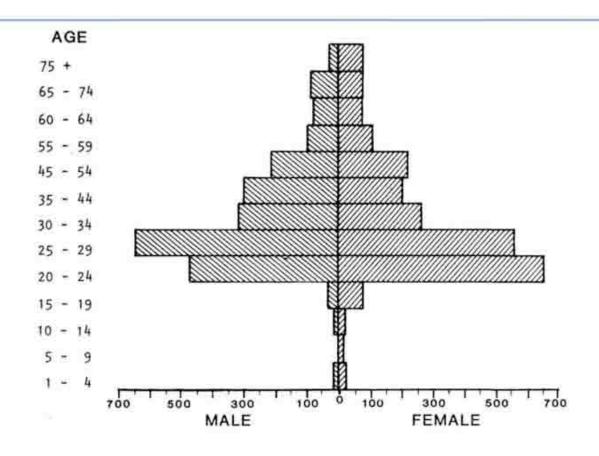
Recent residential development in the Valley has been primarily multiple unit structures. The largest concentration of these complexes is in the vicinity of the Mission San Diego de Alcala (east of I-15), with the next largest grouping near Mission Valley. According to the Community Analysis Profile for the Mission Valley Community Plan area, there were in January 1984, 7,253 residents in Mission Valley. For new residential developments, vehicle trips generation rates decrease as the density of the development increases. This factor can affect the overall intensity of development in the Valley.

SANDAG Series V Population Forecast estimates a 54% increase in the total number of housing units in the Valley by the year 2000. This would result in a projected residential population of 9,716. However, currently approved projects and rezonings, and the nature of projected development indicate that a more realistic projection would be approximately 6,900 units or 11,200 residents. This discrepancy is due primarily to SANDAG's assumption that new residential development will have a maximum density of 14 units per acre. In fact, proposed residential projects will be developing at densities of up to 73 units per acre.

The Plan (Concept 5) projects a planning area horizon year residential capacity of 15,159 dwelling units or 24,558 residents based upon the 1984 occupancy ratio of 1.62 residents per dwelling unit.

#### **OBJECTIVES**

- Provide a variety of housing types and densities within the community.
- Encourage development which combines and integrates residential uses with commercial and service uses.



AGE	G	ROUP
75	+	
60		74
45	-	59
30	-	44
20	-	29
1	÷	19
TO	TA	L

*	of PEOPLE
	162
	430
	731
	1163
	2390
	246
	5122

%	of	POPUL	ATION
		3.2	
		8.4	
		14.3	
		22.7	
		46.6	
		4.9	



Population Characteristics (1980)

Mission Valley Community Plan FIGURE

#### **PROPOSALS**

- Encourage imaginative land development techniques and varied building site layouts.
- Provide amenities for residents such as recreation, shopping, employment and cultural opportunities within or adjacent to residential development.
- Encourage the design of residential areas so as to prevent the encroachment of incompatible uses and minimize conflicts (such as excessive traffic noise) with more intensive non-residential uses located nearby.

## **DEVELOPMENT GUIDELINES**

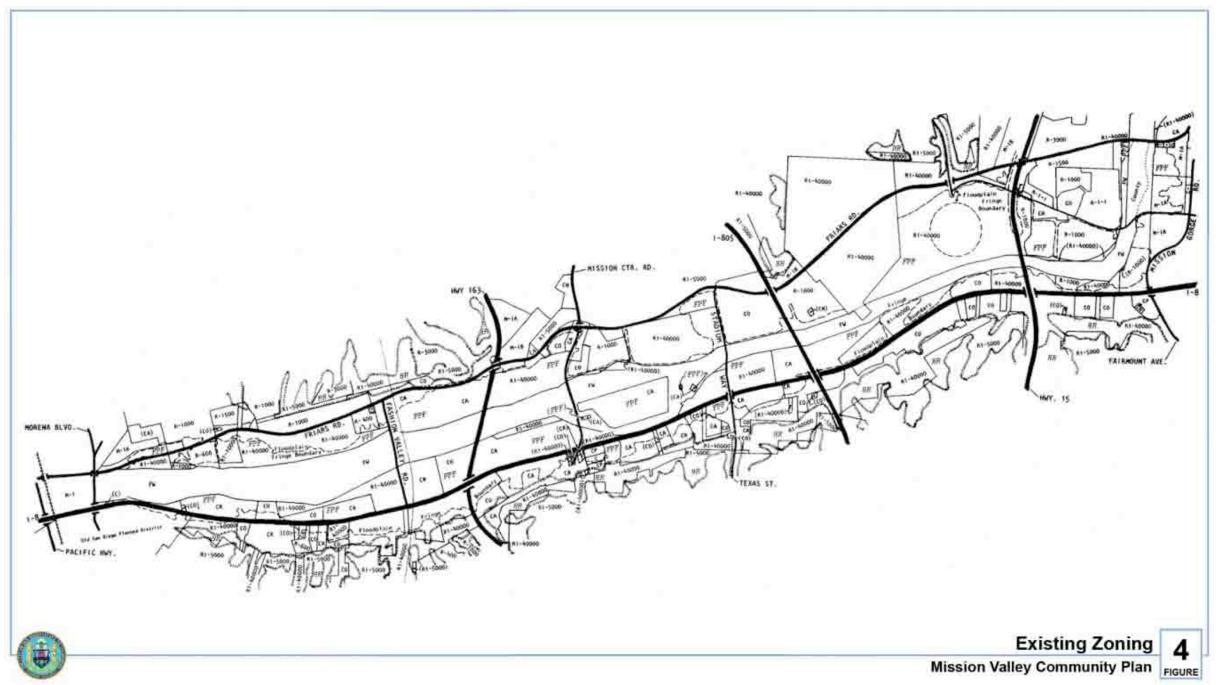
Residential development should be in the form of generally self-contained areas. The following proposals are intended to achieve this concept:

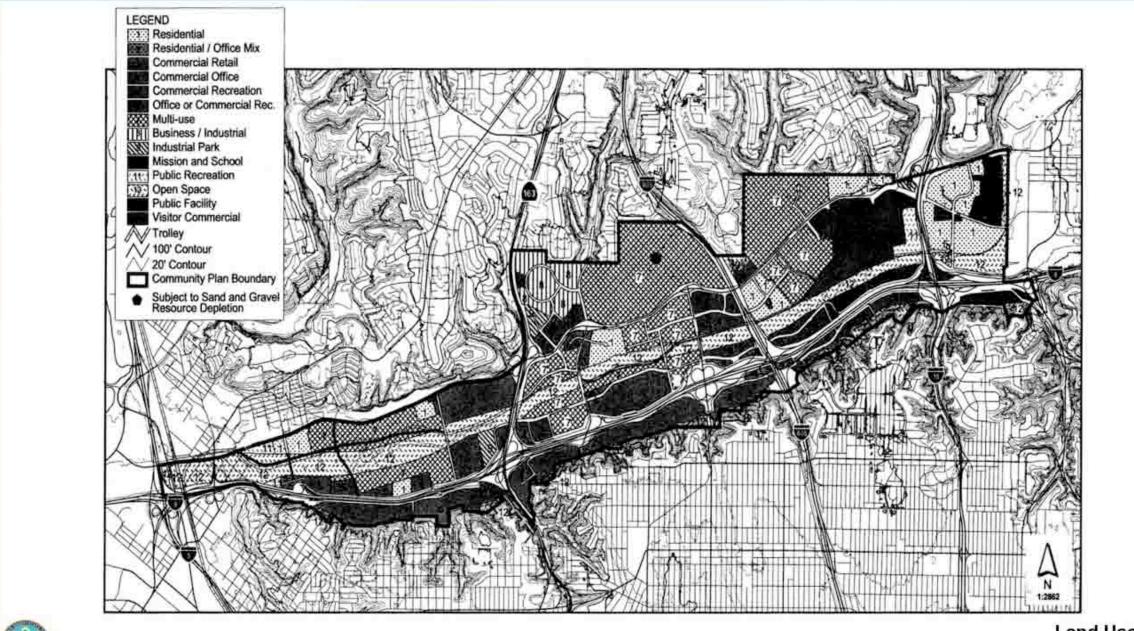
- 1. Provide amenities intended primarily for use by residents. These amenities should include:
  - a. Leisure activity areas.
  - b. Active recreational facilities.
  - c. Child care centers.
  - d. Neighborhood and convenience shopping and medical and other similar professional office complexes.
  - e. Cultural/educational opportunities.
  - f. Community facilities and services.
- 2. Design internal pedestrian and bicycle circulation paths to reduce dependency on the automobile and minimize conflicts among pedestrian, bicycle and automobile traffic.
- 3. Employ the Planned Development (PRD/PCD) approach to residential and/or commercial development to encourage a mix of housing types and densities, integration of commercial uses, and flexibility in site arrangement. Residential use will be allowed to occur without the use of PRD/PCD permits up to a maximum density of 14 dwelling units to the acre. However, higher densities of up to 73 dwelling units may be obtained through the Planned Development approach. This approach will ensure residents that higher density development will provide open space and recreational facilities.

TABLE 2
MISSION VALLEY – EXISTING ZONING\*

Zone		Acres	Percent of Area
Residential/Single			
R1-40000		752.77	31.34
R1-10000		11.97	0.50
R1-5000		244.43	10.18
	Subtotal	1009.17	42.02
Residential/Multiple			
R-1500		32.09	1.34
R-1000		154.43	6.43
R-600		18.15	0.76
R-400		8.22	0.34
	Subtotal	212.89	8.87
Commercial			
СР		5.13	0.21
CR		132.84	5.53
CO		189.41	7.89
CN		16.78	0.70
CA		240.46	10.01
С		2.12	0.09
	Subtotal	586.74	24.43
Industrial			
M-1B		97.71	4.07
M-1A		10.47	0.44
M-1		22.77	0.95
	Subtotal	130.95	5.46
Miscellaneous			
A-1-1		40.10	1.67
FW		421.84	17.56
	Subtotal	461.94	19.23
	Total	2401.69	100.00

<sup>\*</sup> July 1984 (Excludes Public Right-of-way)





Land Use

Mission Valley Community Plan FIGURE

- 4. Discourage visitor-oriented uses from locating within predominantly residential areas to minimize conflicts between residents and tourists. These include:
  - a. Lodging facilities.
  - b. Outdoor amusements.
  - c. Theaters.
  - d. Other uses that tend to draw traffic from outside the community.
- 5. Encourage a wide variety of housing types and styles. Although detached single-family dwellings are probably not feasible, there are still many options available. These include:
  - a. Attached single-family dwelling (row or townhouses).
  - b. Low-rise garden multiple-dwelling structures.
  - c. Mid- and high-rise multiple-dwelling structures.
- 6. Relate residential development to other elements physically and architecturally. Important considerations should include compatibility, livability and attractiveness.
- 7. Encourage driveways serving residential units to take access from private streets.
  - a. Relate residential development to the traffic circulation system.
  - b. Encourage access to residential complexes from local or private streets.
  - c. Discourage direct access to residential units from:
    - (1) Collector streets.
    - (2) Major streets.
    - (3) Primary arterial streets.
- 8. Encourage mid- and high-rise multiple dwelling structures where:
  - a. They are compatible with surrounding development.
  - b. They are conveniently situated with regard to shopping and other amenities.
  - c. They are located within walking distance of transit lines.
  - d. There is adequate street capacity to handle traffic generated by such development.
- 9. Provide low- and moderate-cost housing.

- 10. Encourage housing designed for the elderly, especially in areas where residents daily needs can be easily met, particularly with easy access to public transit and public and community facilities.
- 11. Encourage close, easy access between residences and daily shopping facilities.
- 12. Encourage use of the citywide Low-Income Housing Bonus which provides a 25 percent increase in the permitted residential densities if the development includes a percentage of low-income units.
- 13. Permit medium- to medium-high density residential developments (up to 73 units per acre) in conjunction with commercial facilities, through the utilization of PRD/PCD permits.

#### **COMMERCIAL**

Although Mission Valley is noted for its commercial facilities, these uses currently comprise only about 26 percent of its land area. Commercial uses in the Valley can be categorized as commercial-retail, commercial-recreation and commercial-office. The western portion of the Valley (from Morena Boulevard to Fashion Valley Road) is predominantly used for commercial-recreation, the central section (between Fashion Valley Road and I-805) has a commercial-retail emphasis, and the primary use in the eastern section (between I-805 and I-15) is commercial-office.

The Plan (Concept 5) provides for the development of approximately 17 million square feet of office development, 4.3 million square feet of retail floor area and 9,800 hotel rooms. This level of commercial development is expected to generate an employment base of approximately 50,000 employees which is a 230 percent increase above the most recent employment figure of 15,000 (SANDAG, 1980).

This Plan also provides for self-storage facilities in appropriate commercial areas as support facilities for commercial and residential development. There are very limited opportunities in industrial areas of the community for these facilities, which are in growing demand due to the continuing development of higher density residential projects with their limited storage space. Providing these facilities within the Valley rather than at a more distant industrial location reduces the amount of travel required of local residents and businesses to patronize them. These facilities can be compatible with surrounding commercial development with the appropriate design, location and operational considerations.

#### **Commercial-Retail**

Retail uses can further be divided into regional, freestanding and neighborhood/convenience. Generally, the larger the retail center, the fewer daily vehicle trips are generated by that land use. This can result in greater intensity of new retail developments depending upon the overall transportation impacts.

## Regional Retail

The most intensive commercial activity in Mission Valley Center is contained in the two regional shopping centers—Mission Valley Center and Fashion Valley Center. The Mission Valley Shopping Center currently contains 88 establishments, including such major retailers as the May Company, Montgomery Ward, Bullock's, Walker Scott and J.J. Newberry. An expansion of the shopping center recently added a Saks Fifth Avenue store and other small retail shops. The total land area for the Mission Valley Center and Mission Valley Center West is 77 acres, with about 1,219,000 square feet of useable retail space. Additional retail floor area of approximately 300,000 square feet is proposed for this shopping center as part of the First San Diego River Improvement Project Specific Plan.

The Fashion Valley Shopping Center contains 80 establishments (January 1981), including The Broadway, Buffum's, Robinson's, J.C. Penney and F.W. Woolworth. The total land area for Fashion Valley Center is about 76 acres, with about 1,345,000 square feet of useable retail space. Fashion Valley Center has recently completed an expansion that added Neiman-Marcus and Nordstrom Department stores and other smaller stores. This expansion added about 341,000 square feet of retail space to the original center.

## Freestanding Retail

Freestanding retail uses are establishments that generally tend to locate outside of shopping centers, and often comprise "strip" commercial developments along heavily traveled streets. Example of freestanding retail uses in Mission Valley include automobile service stations, restaurants, automobile sales showrooms and furniture stores, all of which encourage or demand the use of the automobile as their only means of accessibility and, by their very nature, discourage or preclude pedestrian access. The existing freestanding retail areas are located west of Mission Center Road along Camino del Rio North, and along Camino del Rio South between SR-163 and Texas Street.

## Neighborhood/Convenience Retail

Neighborhood/convenience retail shopping centers provide for the day-to-day needs of residents. They are typically located within or adjacent to residential neighborhoods. The only convenience shopping facility within Mission Valley is Rancho Mission Plaza, located at the intersection of San Diego Mission Road and Rancho Mission Road. This three-acre center contains several establishments that could be considered neighborhood/convenience businesses. Although there is a convenience food store, delicatessen and restaurant, there is no full line supermarket characteristic of a neighborhood shopping center. Residents of Mission Valley must travel to Grantville, Serra Mesa, Linda Vista or other communities for groceries and other daily needs. However, it is anticipated that future residential development, increases in the number of retail and office employees and the needs of residents in adjoining communities (i.e., those residential developments, existing and proposed, along the north side of Friars Road in the Linda Vista and Serra Mesa communities) will create the necessary demand for neighborhood convenience centers complete with supermarkets. These centers, when designed and developed, should be integrated with residential and other supportive development in order to encourage pedestrian patronage and reduce dependence upon vehicles for access.

#### **Commercial-Recreation**

Commercial-recreational uses include lodging facilities (hotels and motels), recreational facilities (health clubs, tennis and racquetball courts) and entertainment facilities (theaters and convention centers). Each of these uses generates different rates of average daily vehicle trips, which can be a determining factor in the permitted intensity of any new development.

## **Lodging Facilities**

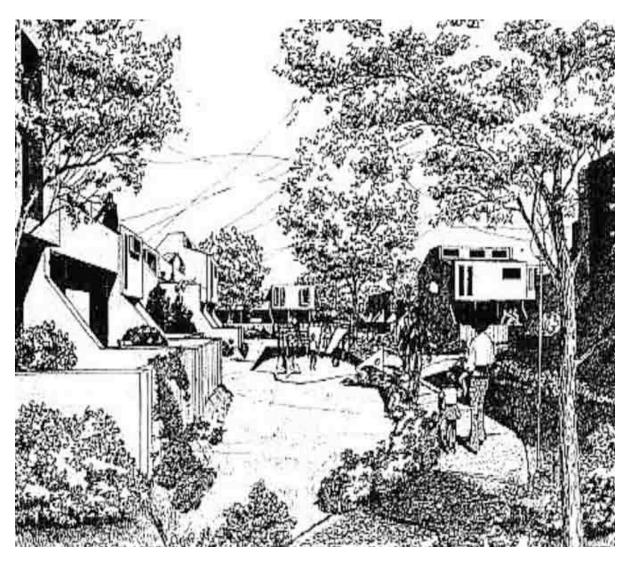
There are generally two types of lodging facilities In the Valley—low "intensity" resort motels and high "intensity" urban hotels. Low-intensity motels typically have a "room density" of 15 to 30 rooms per net acre, are one or two stories high, and have spacious, open grounds. High-intensity urban hotels are characterized by room densities generally of 30 to 65 rooms or more per net acre, are three or more stories high, and have limited open ground. Currently, most lodging facilities are located along Hotel Circle, west of SR-163, however, a number of hotels are proposed, approved, and/or permitted by existing zoning in other areas of the community. At present, there are 3,864 rooms in 17 establishments.

## **Recreational Facilities**

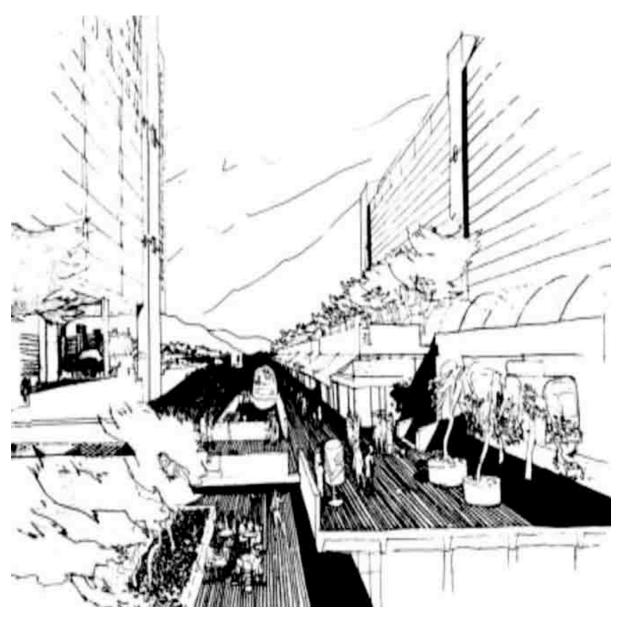
Outdoor recreational uses include the golf courses and athletic fields The Stardust (206 acres) and River Valley golf courses (33 acres), are the predominant existing land uses in the western portion of the Valley. Athletic fields, leased from the City and Stadium Authority, comprise approximately 13 acres. Indoor recreational facilities include two major health and tennis clubs. These are generally located in the western portion of the Valley; however, one health club and racquetball court is located on Rancho Mission Road, at the eastern end of the Valley.

#### **Entertainment Facilities**

Entertainment uses located in the Valley include motion picture theaters, bars and restaurants, and the privately operated convention facility. Currently, four motion picture theaters are located in Mission Valley. Numerous bars and restaurants are located in the Valley, many of which feature live entertainment. These restaurants attract customers from the region as well as nearby hotels and motels. The convention facility located in the Town and Country Hotel complex is used as a concert hall in addition to its regular function.



Suggested character of Residential development in Mission Valley



Suggested character of Commercial development at Urban Nodes within the Valley

#### **Commercial-Visitor**

## Business–Serving Hotels

The commercial-visitor category is primarily intended to provide for establishments catering to the lodging, shopping, or dining needs of visitors/travelers. The permitted uses within the commercial-visitor category are defined in Section 101.0426.1 of the Municipal Code. There currently is only one site located within the Plan which is designated as commercial-visitor, Lots 15 and 16 of the Mission Valley Heights Specific Plan.

This site consists of a limited-service hotel built within Mission Valley Heights Industrial/Business Park. Limited-service hotels are typically built within industrial/business parks to serve the corporate/business traveler, are two stories high, have a room density of 40 to 42 rooms per net acre, and are "limited" in that they do not provide pools/spas, restaurants, or meeting/conference facilities. The limited service hotel is assessed a vehicle trip generation rate of 5 ADTs/room.

#### **Commercial-Office**

The commercial-office category generally includes the following: multi-tenant office buildings; single purpose office-administrative facilities; professional-medical buildings; and financial institutions. There are major office clusters located on Hotel Circle North, at the interchanges of I-8 and SR-163, and I-8 and Texas Street, and at the Mission Center-Friars Road interchange. The rest are scattered along Camino del Rio South east of Texas Street and have recently become the predominant new use along Camino del Rio North, east of I-805. Most of the office-administrative developments consist of low-rise complexes.

The area along Camino del Rio South, although designated for commercial-office development also provides an opportunity for residential development as an alternative land use through the provisions of PCD/PRD permits.

Currently, there are approximately 4,000,000 square feet of office space in Mission Valley with additional amounts of square footage approved by rezonings and PCD permits. For purposes of transportation planning related to land use, office uses have been further categorized as: large commercial (over 100,000 square feet of gross floor area); small commercial (less than 100,000 square feet of gross floor area); governmental; and medical. Each of the categories generates different rates of average daily vehicle trips, which will affect the permitted intensity of development.

#### **OBJECTIVES**

- Encourage multi-use development in which commercial uses are combined or integrated with other uses.
- Maintain Mission Valley as a regional retail center.
- Provide a full range of retail uses.

- Encourage visitor-oriented commercial development.
- Encourage continuation of existing and development of new commercial-recreational uses, particularly along the San Diego River.
- Encourage new commercial development which relates (physically and visually) to existing adjacent development.
- Provide support facilities for commercial and residential uses, including storage space.

#### **PROPOSALS**

- Provide neighborhood/convenience commercial facilities near, or as part of, residential developments.
- Utilize planned developments to combine different commercial uses together with other uses.
- Encourage commercial-office development which includes personal services for employees such as cafeterias, barbers, dry cleaners, etc.
- Encourage commercial-recreational uses and other related uses (restaurants, sports facilities and equipment, specialty shops, etc.) to locate adjacent to the river.
- Allow self-storage facilities in appropriate commercial areas and under limited conditions, as described under Development Guidelines.

#### **DEVELOPMENT GUIDELINES**

- Provide parking garages as an integral part of new development utilizing existing ground level spaces for retail activity. These parking garages should be adjacent to public streets.
- Locate neighborhood/convenience uses toward the center of residential areas to promote pedestrian and/or bicycle access and therefore reduce reliance on the automobile.
- Connect various developments (new and existing) by transit, pedestrian, and bicycle routes to discourage intra-Valley auto traffic.
- Provide commercial-retail development in areas that are pedestrian-oriented and have pedestrian linkages to other pedestrian activity areas. Retail-oriented parking facilities should be located in close proximity the developments.
- Provide for self-storage facilities with a planned development permit under the following conditions:
  - The site should be north of Friars Road or south of I-8.

- The site should be isolated from areas of high pedestrian activity, and otherwise located where it will not functionally or visually disrupt other uses, such as remnant or isolated parcels.
- There should not be a proliferation of this use in commercial areas.
- The maximum usable area of the site should be two acres.
- The development should be consistent with its surroundings and be similar in appearance to other permitted used in the zone, such as office, hotel, or retail.
- Loading areas should be internal to the structure.
- No outside storage should be permitted.
- Hours of operation should be limited.
- Businesses should not be permitted to operate within the storage spaces.
- Encourage multiple uses on the site, such as retail on the front or upper floors.
- The development should be consistent with all other recommendations of this Plan.
- This use when in commercially designated areas requires a planned development permit.

#### INDUSTRIAL

Industrial land uses in the Valley include a pipeline tank farm, a newspaper publishing facility, industrially zoned areas north of Friars Road, and small group of industrial and distributional uses located near the Mission San Diego de Alcala.

The San Diego Pipeline Company owns a high-pressure underground pipeline that brings liquid fuels from Norwalk, California to the petroleum tank farm located at Friars Road and I-15. Most of this facility lies north of Friars Road, in the Serra Mesa community planning area.

The San Diego Union Tribune plant, located at the northwest quadrant of I-8 and SR-163, is a combined administrative and industrial distribution facility. In terms of strict land use classification, a newspaper plant is industrial. However, it may be permitted in any zone if a Conditional Use Permit (CUP) is granted by the City Council.

There are two areas north of Friars Road zoned for industrial development. One area is immediately east of I-805. The second area, Mission Valley Heights Specific Plan Area, lies between Mission Center Road and SR-163. A portion of this area has already developed in commercial-office; a portion has been approved for a "limited service" hotel serving the surrounding industrial business park uses, while other portions have been approved for industrial park.

The cluster of industrial, distributional, and "heavy" commercial uses located at San Diego Mission and Rancho Roads has diminished in recent years. Remaining are a water bottling plant and a precision valve manufacturer.

#### Sand and Gravel

Sand and gravel operations and related activities occupy about 596 acres, including 240 acres undergoing annexation. Three firms are operating sand and gravel extraction facilities in Mission Valley at this time: Fenton, Conrock and Hazard.

The first Fenton operation covers about 240 acres located just west of the San Diego Jack Murphy stadium. It is operating under City CUP No. 82-0014. Upon annexation, the development of this property will be determined through a specific plan. Any specific plan adopted will comply with the objectives, proposals, and development guidelines included in this Plan. The second Fenton operation covers about 55 acres located in the vicinity of Mission Center Road and Friars Road. It is operating under CUP No. 82-0005.

The Conrock operation covers about 256 acres, located in the vicinity of Friars Road and Stadium Way. It is operating under City CUP No. 5073 (as amended and extended) and City CUP No. 82-0315. A portion of the operation south of Friars Road will be eventually developed under the provisions of the First San Diego River Improvement Project Specific Plan.

The Hazard operation is located on the southeast quadrant of SR-163 and Friars Road. City CUP 174 PC regulates this 49-acre property. Unlike Fenton and Conrock, Hazard is primarily engaged in construction contracting and the storage and sale of sand and gravel and unit masonry products.

Mission Valley contains three types of aggregate deposits: lower San Diego River alluvial material, predominantly sand; Stadium conglomerates, which yield almost exclusively coarse aggregate before crushing; and metavolcanics which must be crushed in order to be used as aggregate material. Of the total resources, the conglomerates are the most abundant. Of 6,545 million tons of total resources, 177 million tons are acceptable grades of sand and 6,368 million-tons are acceptable grades of gravel. A calculated 152 million tons of aggregate resources lay within the non-urbanized areas of Mission Valley ("Mineral Land Classification of the Western San Diego County Production Consumption Region," California Division of Mines and Geology, 1981).

#### **OBJECTIVES**

- Continue sand and gravel operations in the community until depletion is reached.
- Require and enforce land reclamation which is consistent with municipal, state and federal guidelines during and following termination of extraction activity for subsequent reuse.

#### **PROPOSALS**

- Retain and maintain those industrial uses which will be compatible with the commercial and residential development of the Valley.
- Allow existing sand and gravel operations and related activities to continue until depletion
  of aggregate resources is reached. This can be achieved by renewing, and when necessary,
  amending existing permits. The existing review procedure should ensure compliance with
  all conditions.

#### RE-USE DEVELOPMENT PROPOSALS

- 1. Relationship to Existing Development
  - All development should be oriented away from the mesa.
  - New development should be a logical extension of existing land use.
  - Support facilities needed for new development should be provided within the new development or in adjacent lowlands. No additional burden should be placed on existing schools, parks and local shopping facilities on the mesa.
  - Streets serving new development should be connected to the road network, and not to major streets serving residential areas on the mesa.

#### 2. Environmental Problems

- Environmentally sensitive issues should be addressed in each precise development plan.
  These should include but not be limited to the following: air quality; flood hazards;
  high quality habitats and adjacent open space systems; hillside preservation and
  conservation; carrying capacity of the local street system and the impact of Jack
  Murphy San Diego Stadium.
- Ideally, depletion or termination of mining operations should be reached in any given extraction area before re-use begins. If this proves infeasible, new development should be sufficiently buffered from continued mining operations to meet existing noise and air pollution standards; present no danger to public health, safety and welfare; and minimize environmental conflicts.
- The use of Planned Developments and Specific Plans should be encouraged to assure the highest quality of development and sensitive treatment of the environment.



Suggested character of Industrial/Business Park development

#### 3. Land Use Guidelines

• When land within an existing sand and gravel extraction area is proposed for urban development, multiple land uses should be considered and processed consistent with the land use and development guidelines of the Multiple Use Development Option of this Plan.

## 4. Implementation Guidelines

- New development should be logical and cohesive, not piecemeal or fragmented.
- If two or more entities are operating in a given extraction area, they should coordinate their activities to assure logical, cohesive development and minimize environmental conflicts.
- In recognition of the large areas involved, changing economic conditions, and the extensive time frames necessary for complete re-use, Specific Plans for parcels of ten or more acres and Planned Developments for parcels of less than ten acres should be utilized to process development plans. Development plans should include specific land use allocations, development intensities (floor area square footage for office and retail uses, number of guest rooms for hotels, and number of dwelling units for residential development), complete street networks, and, if applicable, phasing programs.

#### DEVELOPMENT GUIDELINES

- Apply appropriate land reclamation measures to all sand and gravel operations. These reclamation measures should begin before the termination of extractive activities. Ensure compliance with the State Surface Mining and Reclamation Act of 1975, City ordinances, and all subsequent legislation concerned with the reclamation and rehabilitation of mined land. This will be achieved by requiring the approval of a reclamation plan for all natural resource operations: The following criteria are proposed to guide the evaluation of such reclamation plans:
  - a. Contour finished slopes so they blend into the surrounding terrain.
  - b. Control erosion caused by storm runoff and other water sources.
  - c. Plant and seed recontoured slopes with local native-drought resistant trees, shrubs and grasses. If possible, the planting pattern should be in keeping with the native growth on adjacent unmined lands or with that of other hillside areas within the valley.
  - d. Create water areas wherever possible to further enhance the greenbelt flood control concept. This will enhance the unique setting of the floodplain area and will help to replace riparian habitat areas, lost elsewhere in the Valley.
- Develop feasible land use conversion plans in the form of specific plans for the reuse of terminated sand and gravel operations and related lands. Because these lands which are presently undergoing extraction are significant in terms of acreage, it is anticipated that they may develop under the multiple use development option.

## MULTIPLE USE DEVELOPMENT OPTION

A "multi-use development" means a relatively large-scale real estate project characterized by:

- Two or more significant revenue-producing uses (such as retail, office, residential (either as rentals or condominiums), hotel/motel, and/or recreation—which, in well-planned projects, are financially supportive of the other uses.
- Significant functional and physical integration of project components including uninterrupted pedestrian connections, if available, to adjacent developments.
- Development in conformance with a coherent plan (which frequently stipulates the type and scale of uses, permitted densities and related items), and
- Public transit opportunities and commitments.

This definition clearly differentiates multi-use developments from other forms of land use and also identifies "common denominator" characteristics of multi-use projects with a minimum number of criteria.

These two or more uses should be significant (e.g., retail should be more than site-serving convenience facilities) and revenue-producing (e.g., to amortize cost over time and provide a reasonable return. In most multi-use projects, revenue-producing uses consist of retail, office, residential, and/or transient (hotel/motel) facilities. Two or more revenue-producing uses in the project usually imply large-scale development.

Another defining characteristic of multi-use development is a significant physical and functional integration of project components. All project components; should be interconnected by pedestrian ways, although (physically) this integration can take many forms:

- vertical mixing of project components into a single structure, often occupying only one parcel.
- Careful positioning of key project components around centrally located focal points (e.g., a shopping gallery or hotel containing a large central court).
- Interconnection of project components through an elaborate pedestrian circulation network (e.g., subterranean concourses, walkways and plazas at grade and aerial bridges between buildings, or
- Extensive use of escalators, elevators, moving sidewalks, bridges and other mechanical or structural means of facilitating horizontal and vertical movement by pedestrians.
- Permanent pedestrian linkages to public transit systems.

Whatever their form, "coherent" plans for multi-use development typically set forth at a minimum the types and scale of land uses, permitted densities, and those areas on the site where different kinds of development are to occur. Plans for projects entailing substantial public improvements should specify respective responsibilities and financial obligations (e.g., for provision of on-site and off-site improvements) on the part of public and private sectors. These documents guide—and in the case of some projects, govern—development as to scale, timing, type, and density of buildings and relationships among project components, open space and public improvements on the site. This distinguishes such projects from unplanned mixing of uses often resulting from the separate, unrelated actions of several different developers. In Mission Valley, multi-use projects (in the form of specific plans) are proposed for the majority of the large undeveloped parcels and redevelopable areas.

There are four significant revenue-producing land uses in Mission Valley. They are:
1) Commercially-Retail; 2) Commercial-Office; 3) Commercial-Recreation; 4) Residential.
These four revenue-producing uses in a single project create a "multi-use" development and are usually found in a large-scale project.

Multi-use projects may also include separate structures on separate parcels of land providing that the creation of parcels and designation of uses is the result of a plan approved for the entire designated project and it meets the basic criteria for a multi-use project.

Multi-use is an option for developers. It may be applied for through a PCD Permit or through a Specific Plan. In general, the Specific Plan should be used for projects of ten or more acres. This may vary, however, and should be determined on a case-by-case basis. An application for a multi-use project should include:

- Location, scale, size, and proposed use of all buildings.
- A schematic plan of pedestrian areas (plazas, courtyards, etc.) and interconnecting usable paths.
- Vehicular access plan including streets, parking, goods delivery and linkages to the public circulation system (freeways and major surface streets).
- A landscaping plan to tie the various uses together.
- A financing and maintenance plan for any and all public facilities or improvements.
- Linkages to the public transit system.
- Other land use controls as may be required to conform to the urban design guidelines included in the **Urban Design Element** of this Plan.

This multi-use option is intended to encourage comprehensive developments which will minimize the need for an over reliance on automobile access and emphasize pedestrian orientation and proximity to public transit. Density bonuses may be given to such developments if they can incorporate some of the bonus provisions included in the **Development Intensity Element**. Additional development intensity based upon increased traffic generation may be permitted if it can be shown that: 1) the additional traffic generation can be accommodated; or 2) additional improvements can be made to the circulation/transportation system which will accommodate the increase in traffic generation.

#### **OBJECTIVE**

• Provide new development and redevelopment which integrates various land uses into coordinated multi-use projects.

## **PROPOSALS**

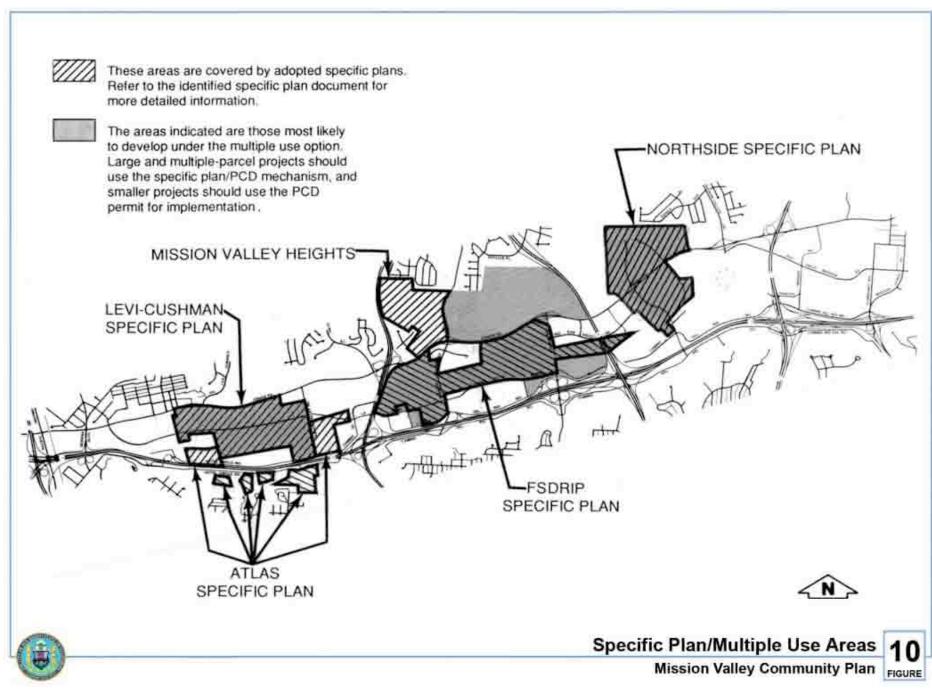
- Include a variety of revenue-producing uses in each large-scale multi-use project.
- Ensure functional and physical integration of the various uses within the multi-use project and between adjacent uses or projects.
- Combine uses within a multi-use project to create a 24-hour cycle of activity.

Figure 6
Removed by
City Council
April 21, 1992

Figure 7
Removed by
City Council
April 21, 1992

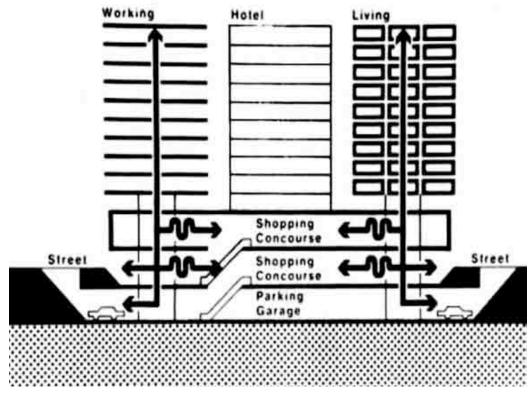
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Figure 9
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April 21, 1992



## **DEVELOPMENT GUIDELINES**

- Multi-use development projects should include all of the following design elements:
  - a. Separate vehicular access and delivery loading zones.
  - b. People-oriented spaces.
  - c. Compatibility with adjacent development.
  - d. Uninterrupted pedestrian connections.
- Encourage activity on a 24-hour basis within a development project by including one or more of the following types of uses in addition to office and retail:
  - a. Restaurants.
  - b. Theatres.
  - c. Hotels.
  - d. Residences.
- Multi-use development projects should be processed and evaluated through the use of PCD permits and/or Specific Plans.



Conceptual design for a mixed use or highly integrated multiple use development



# TRANSPORTATION

Mission Valley is experiencing, to a varying degree, all the classical problems associated with communities located adjacent to the urban core of most major U.S. cities. These problems include physical separation of various community elements by new freeway and transportation corridors, non-development of forms of transportation other than private automobile, and the continual upgrading of the supporting local surface street system. In any community the movement of people and goods is one of the most important considerations in the planning process and vital to the survival and continued prosperity of the individual community. Ideally, transportation systems should be well balanced between the individual needs of the various users and the necessary support of public transit convenience that will offer a wide choice of options to the traveling public within that particular community. The transportation system must offer residents and/or employees the maximum opportunity of transportation choices to fulfill their individual needs and provide a dynamic system for the growth of the community.

A major goal of the Plan is the provision of a surface street system, carefully coordinated with the regional freeway system, which is adequate to meet the total future needs of Mission Valley. A major problem facing the existing transportation system is its lack of any uniformity. Many streets are under-designed and route an excessive number of cars on streets that were never intended for such volumes. In addition, there seems to be an inordinate amount of out of direction travel. The streets in the community vary in width, sometimes from block to block. The chief reason for this varying design in street standards and sometimes what appears to be confused routing of traffic is more a result of the manner in which Mission Valley developed than any oversight by responsible parties. Today communities are usually developed by an individual firm or a group of developers working together using an overall plan for the area. Under these circumstances, careful attention is given to insure all requirements are fulfilled by the public and private sectors.

In the past there has been no overall development plan for the public and private sectors to follow in Mission Valley. Several of the largest parcels are currently in uses such as sand and gravel extraction. Other major parcels in areas along the San Diego River cannot be redeveloped at the present time. Development intensities and land uses together with the accompanying public improvements necessary for development could not be fully ascertained prior to the current community planning program. Therefore, the transportation system for Mission Valley falls far short of the ideal in several aspects. This element will examine the existing street system, parking problems, proposed public transit expansion in the Valley, bicycle routes, pedestrian walkways, and will end with a discussion of the extension of the light rail transit line through the Valley.

#### STREET SYSTEM

The street system in the Mission Valley community is characterized by five functional classifications: freeways; primary arterials; major streets; collector streets and local streets. Freeways may have four or more lanes with full controlled access and grade separation at interchanges. Their primary function is to carry high volumes of traffic at high speeds between different communities and cities. Primary arterials within the City of San Diego are usually four to six lanes wide with severely limited access. They are designed for through traffic generally linking several communities and usually have signals at major intersections. Major streets are also four to six lanes wide, and although they are designed primarily for through traffic, again linking communities, they generally provide some access to abutting property; much more than would be provided by a primary arterial. The collector streets are typically two to four lanes wide. Their function is to collect trips from the various adjacent properties and bring them to either major or primary arterial streets for longer trip purposes. They provide for continuity with local streets. The last category is the local street system whose primary function is to serve adjacent properties and provide links to collector streets.

It is very difficult to do an evaluation of the existing surface street system in the Mission Valley community. The primary arterial in the Valley (portions of Friars Road) functions smoothly most of the time because there are few intersections and minimal driveway access. On the other hand, the major streets in the area are not built to major street standards at this time and are experiencing congestion, especially during the peak-hour periods. This congestion is both a function of incomplete or undersigned major streets, and the congestion on the freeways during peak hours causing backup onto the surface street system.

In addition, Mission Valley has several unique traffic generators that tend to overburden the surface street system during certain periods of the day or year. These include San Diego Jack Murphy Stadium (overloads Friars Road) and Mission Valley and Fashion Valley Shopping Centers (to put excessive amounts of traffic onto the adjacent surface street system during peak shopping periods). The San Diego Jack Murphy Stadium is expected to generate even more traffic in the future as a result of seating capacity increases and as more events are scheduled and the attendance at events increases. In addition, the traffic on Friars Road is expected to increase from the present 33,000 to 75,000 vehicles daily if and when full development adjacent to the stadium occurs. A separate special study of stadium access and egress will be necessary, including the possibility of additional grade separated facilities, to accommodate future traffic. As the Valley continues to grow, the existing substandard surface street system will be continually called upon to handle greater and greater traffic demands. The existing street volumes (1983) are indicated on the **Traffic Flow Map** (**Figure 11**).

Although Mission Valley is readily accessible by freeway, travel to specific points within the community by means of the surface street system can be extremely difficult during the peak hours. Several factors contribute to the traffic congestion problem in Mission Valley. These factors include:

### 1. Rapid Growth of Commercial Development

The freeway has greatly influenced commercial development in Mission Valley. The five freeways that serve the Valley are I-5, I-8 and I-15 together with SR-163. Construction of these freeways has dramatically increased accessibility to the Valley from all parts of the San Diego region.

### 2. Increased Freeway Access

Better freeway access to the Valley coupled with the rapid growth of attractors within Mission Valley has far exceeded the expansion of the supporting surface street system. This lack of an up-to-date surface street system has caused congestion during peak hours in the Valley. In the morning and noon peak hours, the congestion occurs on the freeways as workers living in other communities commute to jobs in the Valley, while in the evening the surface street system backs up. The evening congestion is due to the backup of cars waiting to get on the freeways, plus motorists coming into the Valley to frequent the restaurants, bars, shops and theaters after work.

# 3. Gaps in the Surface Street System

These gaps exist for a variety of reasons. In some cases they exist because off-site improvements were not required from existing development. In addition, major sections of the Valley, as pointed out earlier, are undeveloped or are in extractive uses and therefore, normal road improvements have not been required. Gaps result in out of directional travel.

These problems, together with the reduction of public funding at the federal and state level, have resulted in an undue proportion of region-wide traffic passing through Mission Valley. Completion of 52 and 125 should help redirect some of this regional throughtraffic.

#### 4. Flooded Streets

These are a potential seasonal problem. The streets usually affected during heavy storms include Fashion Valley Road, Mission Center Road, Stadium Way, Camino de la Reina, San Diego Mission Road and the private Avenida Del Rio.

#### **Accidents**

The City of San Diego maintains current accident rates for all primary arterial, major, and collector streets within the City as well as high accident intersections. These rates are generally based on accidents per million vehicle miles including intersections. This rate is determined using the number of accidents that occur on any given street, the volume of traffic that particular street carries, and the distance between intersections. Only one street segment in Mission Valley has had an accident rate that exceeded the citywide accident rate by more than 100 percent; that was Friars Road between Ulric Street and Mission Center Road. Only two intersections in Mission Valley are ranked in the top 50 on the citywide list of problem intersections. The sixth ranked intersection is 40th Street (future I-15) at Camino del Rio South while Camino del Rio South at Texas ranked 38th. Both of these intersections are currently being rebuilt by Caltrans as part of a freeway improvement program. Even with the proposed

improvements some facilities will experience congestion during peak periods. In many cases this is because existing development precludes improving existing streets as much as would be desirable. At other locations, topography or interchange spacing limits what can be done to improve capacity.

Congestion is anticipated on Friars Road, (Fashion Valley Road to Mission Center Road, and Mission Village Drive to Mission Gorge Road), Hotel Circle North (near Fashion Valley Road), Hotel Circle South (east of the Hotel Circle ramps), Camino del Rio South (west of Mission Center Road and near the I-15 interchange), and Mission Center Road (south of Camino de la Reina).

## **Transportation Design Criteria and Environmental Criteria**

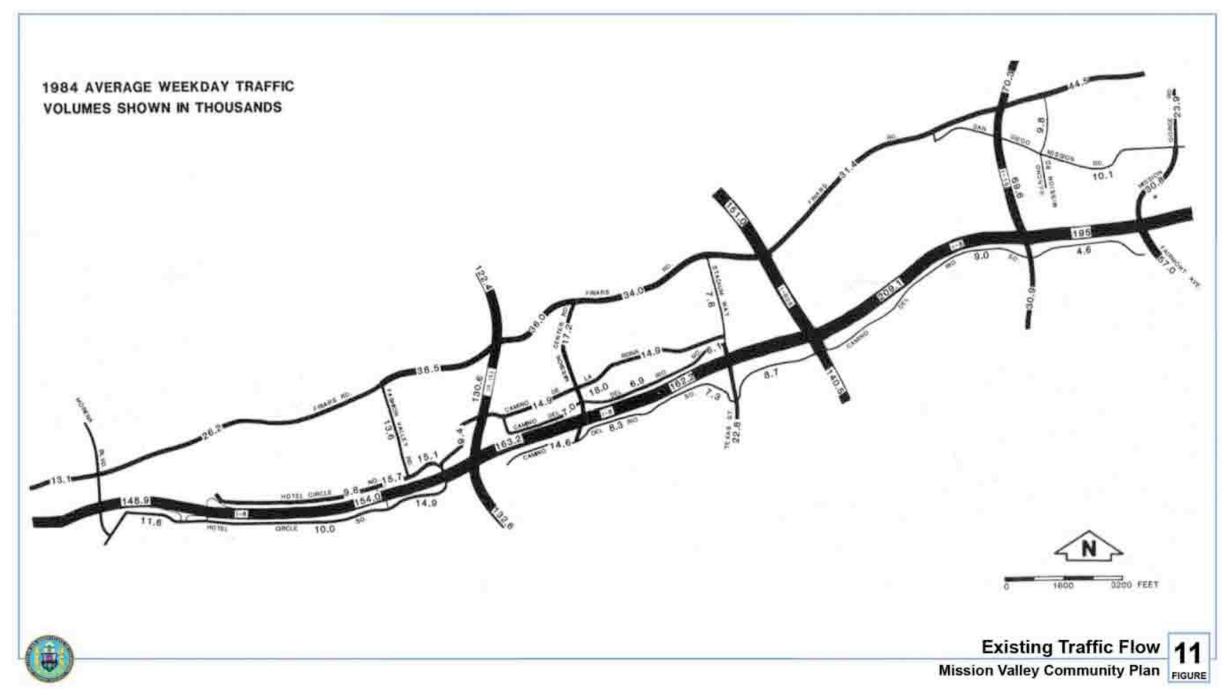
The design of a balanced transportation system, which implements the planning principles underlying the development of Mission Valley, requires re-evaluating present transportation practices. The assumption is that better control over land use, along with implementation and provision of economic and social balance within the community, make new approaches possible to traditional problems of trip generation, distribution and route assignment. This allows better integration of the transportation facility design with other land use elements of the community.

The design of the transportation system is conceptualized in two ways: first, as a flow of people and goods linking specific centers of activity; and second, as a physical structure-occupying horizontal and vertical space. In dealing with the flow of people and goods between centers of activity, analysis of basic trip behavior and travel motivation is required. Preliminary analysis of the Mission Valley community therefore, begins by examining travel behavior at the household and workplace level. The distribution of trips was considered over all subsystem networks simultaneously. This was accomplished by estimating the trip distribution, trip length, travel time, and distribution patterns, and were developed to reflect expected home base travel behavior within the Mission Valley community.

Non-home based or workplace trips were distributed based on activity center characteristics, service areas, and urban goods (products and services) flow requirements. In addition, special attention was given to the assignment of trips with the unique trip generators of Mission Valley such as the regional retail centers and the stadium.

The physical shape of transportation facilities should complement the adjoining communities. The use of standardized rigid physical design concepts should be avoided short of demonstrable safety or hazard problems.

In an attempt to create a balance between development intensities, the vehicular traffic they generate and the capacity of the street network within Mission Valley, two land use plans were used to forecast future vehicle trips. They differ only in the assumed development of several parcels of city-owned land adjacent to San Diego Jack Murphy Stadium. Portions of the stadium were analyzed for potential future vehicle trips. They differ only in the assumed development of several parcels of City-owned land adjacent to San Diego Jack Stadium. Portions of the stadium were analyzed for potential future development as commercial-office and retail uses.



The traffic forecast for the horizon year (buildout) development in Mission Valley was based on several regional land use and network assumptions. The San Diego Association of Governments (SANDAG) Series V, Year 2000 Land Use projections were assumed for the area outside of Mission Valley. In the regional street and highway network it was assumed that State Route 52 (SR-52) would be completed east to State Route 67 (SR-67). Construction of I-15 would be finished north of I-8, as would I-15 between I-8 and I-5, and SR-125 between I-8 and SR-56 in Poway. In addition, an access road from University Hospital to Hotel Circle South was assumed in Bachman Canyon. Testing the stadium development did not change any of the recommendations for street classifications shown on the proposed future street system. New streets and improved facilities are indicated on the **Recommended Street Classification Map** (**Figure 13**). Despite these improvements, some areas of the Valley will experience congestion during peak periods. The projected level of congestion is considered acceptable near freeway interchanges in partially built communities like Mission Valley.

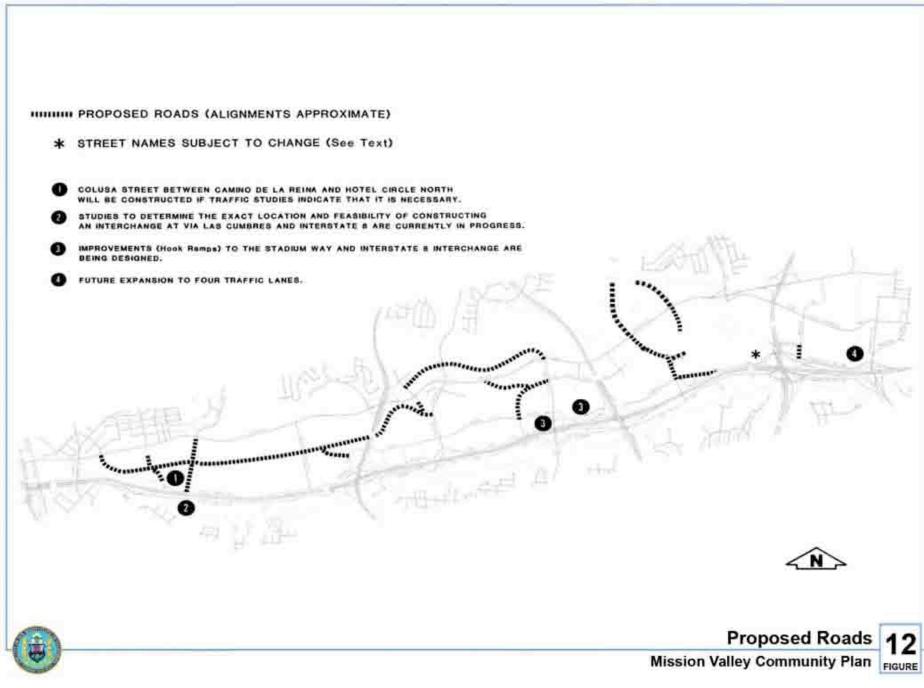
Some roadways north of Friars Road will need to be developed as part of the Mission Valley transportation system. These roads will be located in those areas between SR-163 and I-15, which are currently involved in sand and gravel extraction. The roads will be implemented at the time of each individual area's proposed change of land use from sand and gravel extraction to urban development, once resource depletion has occurred.

### **OBJECTIVE**

• To facilitate transportation into, throughout and out of the Valley while seeking to establish and maintain a balanced transportation system.

### **PROPOSALS**

- Close gaps and correct other deficiencies in the surface street system.
- Reduce the effects of floods on the transportation network.
- Encourage the use of the surface street system for intra-Valley trips.
- Provide adequate access to developable and redevelopable parcels.
- Encourage the rapid completion of the total freeway system for which will provide relief to the Mission Valley circulation system.
- Reduce conflicts between vehicles, bicycles and pedestrians.
- Improve traffic control techniques used during events at San Diego Jack Murphy Stadium.
- Establish alternative methods of transporting capacity stadium crowds, especially now that the seating capacity of San Diego Jack Murphy Stadium has been expanded.



#### DEVELOPMENT GUIDELINES

## **Regional Highways**

- Complete SR-52 and SR-125 to provide an alternate route from East San Diego County to North San Diego County, and from Southeast San Diego County to Downtown San Diego (relieving SR-94), and to points north (relieving I-8).
- Expedite construction of I-15 from Friars Road to SR-52 and its interchange with SR-163.

### **Primary Arterials**

• Any intersections with access to Friars Road from SR-163 to Mission Gorge Road should be restricted to right-turn in and out only. The intersection at Frazee Road, at Santo Road, and at Dos Pueblos Drive may require prohibition of left-turn ingress and egress when volumes exceed City Street Design Standards on Friars Road. Milly Way should be a four-lane primary arterial between Rio San Diego Drive and Camino del Rio North (future Camino de la Reina). Ultimately, Friars Road between the northbound ramps of SR-163 and Mission Center Road must be widened to eight lanes.

## **Major Streets**

- Camino de la Reina Camino del Rio North should be a four-lane major street over its entirety from Napa Street/Friars Road on the west to Fairmount Avenue on the east. Existing sections west of Mission Center Road, west of Stadium Way, and east of Milly Way should be improved to major street standards.
- Frazee Road needs to be four lanes south of Friars.
- Friars Road needs to be restriped as a six-lane major street from Colusa Street to Fashion Valley Road to accommodate the forecasted horizon year volume.
- Milly Way should be constructed as a six-lane major street north of Rio San Diego Drive.
- Rio San Diego Drive should be constructed as a four-lane major street from Rio Vista Avenue to Rio Bonito Way.
- Stadium Way will need to be six lanes south of Friars Road and four lanes when extended north of Friars Road. Public streets of adequate capacity to connect Stadium Way and Mission Center Road with I-805 at Phyllis Place will be needed when urban development occurs north of Friars Road between Mission Center Road and I-805. Provision of these streets will not be considered until the sand and gravel operation has ceased and resource depletion has occurred. Additionally, the exact alignment will be determined by detailed engineering studies, by agreement between the City and the property owner at the time urban development takes place on these parcels.
- Mission Center Road will need to be a six-lane major street from Camino del Rio North to Friars Road.

- Depending upon the intensity of current and future development projects and upon the results of traffic studies pertaining to those projects, it may become necessary to extend Colusa Street as either a four-lane collector street or four-lane major street from Camino de la Reina to Hotel Circle North.
- Via las Cumbres should be constructed as a four-lane major street between Friars Road and a new I-8 interchange with Hotel Circle North and South to the east of the existing Hotel Circle North and South to the east of the existing Hotel Circle North overpass at I-8.
- A four-lane street will be needed north of the San Diego River connecting Mission Center road to either Fashion Valley Road or Camino de la Reina (south of Fashion Valley Shopping Center). It should be a major street between Mission Center Road and Frazee Road.

### **Collector Streets**

- Hotel Circle South and the undercrossing to Hotel Circle North should be widened to a
  four-lane collector street between Camino de la Reina and the eastbound I-8 ramps and
  between the Hotel Circle North overpass and the Taylor Street/I-8 interchange eastbound
  ramps. The section of Hotel Circle South between these two segments should be three
  lanes with a transition to a fourth lane at intersections. Parking should be prohibited on
  both sides of the street.
- Hotel Circle North should be three lanes west of the westbound I-8 ramps and four lanes to the east. All three lane segments should transition to four lanes at intersections. Parking should be prohibited on both sides of the street.
- The existing sections of Camino de la Reina (to be renamed) between Hotel Circle North and the private street, Avenida del Rio, should be widened to a four-lane major facility.
- Rio Bonito Way will need four lanes between Friars Road and Rio San Diego. Only right turns in and out will be allowed at the "T" intersection with Friars Road.
- Camino del Rio South should be widened to four lanes with a minimum of 58 curb-to-curb between Mission Center and Fairmont Avenue.
- Rio San Diego Drive should be a four-lane collector from Rio Bonito Way to Milly Way, and from Rio Vista Avenue to "A" in the Rio Vista West development.
- Camino del Este should be a four-lane collector street between Rio San Diego Drive and Camino de la Reina.
- Street "A", located in the Rio Vista West development, should provide a connection between Friars Road and Rio San Diego Drive. It should be a two-lane collector along its entire length.
- The north-south line on Rio Vista Avenue should be a two-lane collector providing vehicular access between Rio San Diego Drive and the Trolley Plaza within the Rio Vista West Development.

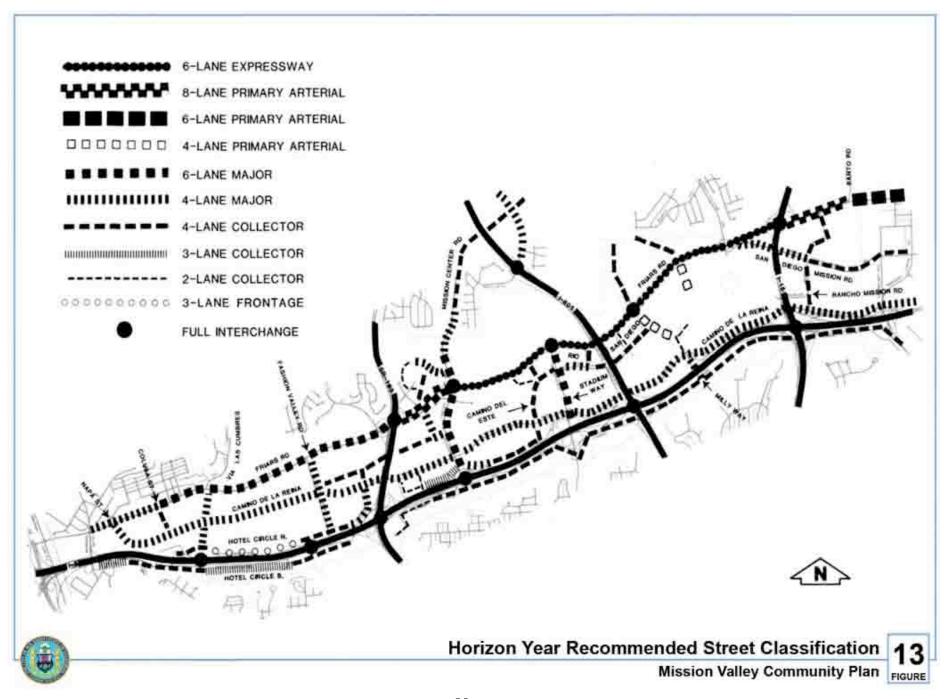
- Colusa Street should be constructed as a four-lane collector street between Friars Road
  and Camino de la Reina. Depending upon the intensity of current and future development
  projects and upon results of traffic studies pertaining to these projects, it may be necessary
  to construct Colusa Street as a four-lane major street between Friars Road and Camino de
  la Reina.
- Rancho Mission Road should be extended as a four-lane collector south across the San Diego River to Camino de la Reina. Although forecast for more than 10,000 ADT, present development limits widening the street to major street standards.
- A four-lane collector street will be needed north of the river between Frazee Road and either Fashion Valley Road or Camino de la Reina.
- A collector street will be needed between Rio San Diego Drive and the existing Friars Road underpass (located between Mission Center Road and Stadium Way).
- An access road to the stadium parking lot from Milly Way should be constructed to alleviate congestion during Stadium events and from future development on City-owned land.

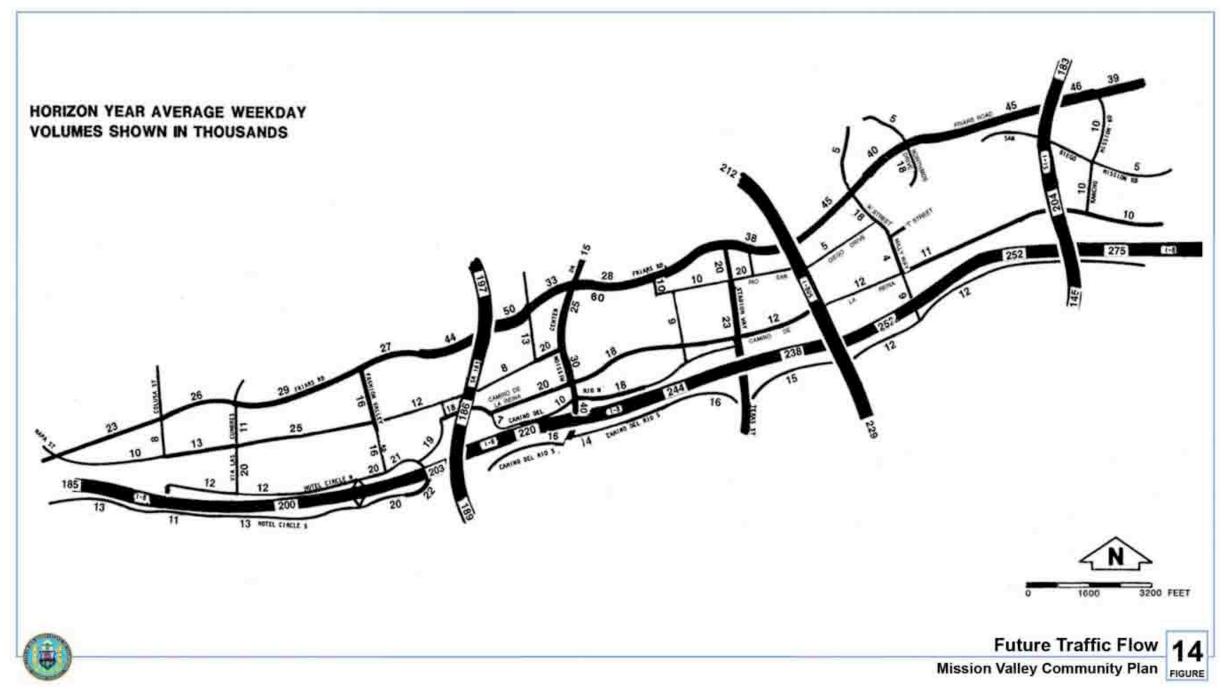
## **Interchanges**

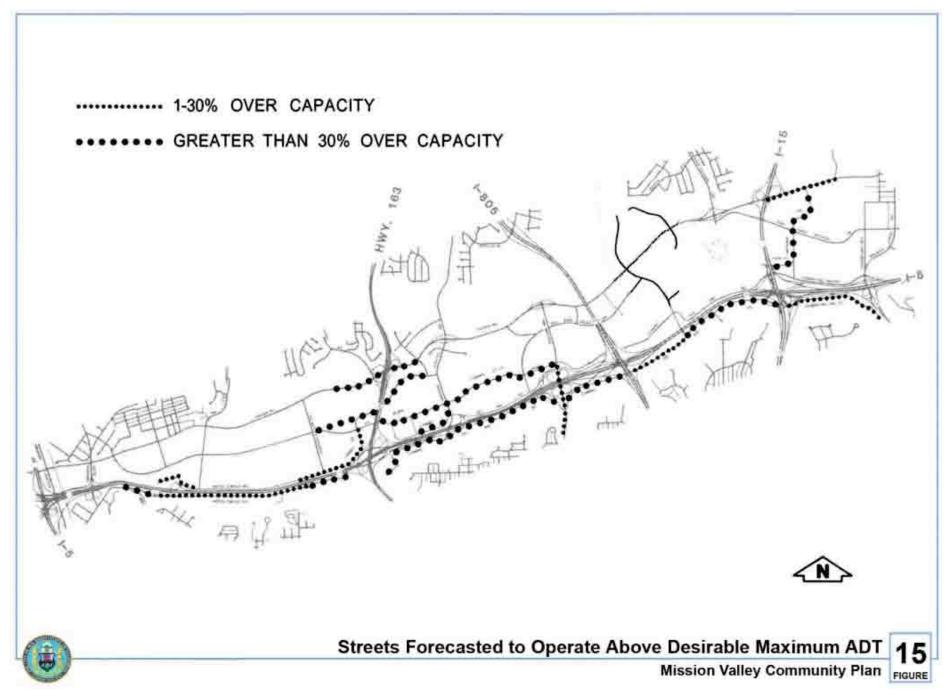
- The SR-163 and Friars Road interchange will need a new southbound to westbound ramp to remove these turns from the traffic signal at Friars Road and Ulric Street. The existing signal for the eastbound to the northbound movement will have to be moved eastward to create more left-turn storage space or else be replaced by either a loop-ramp in the southeast quadrant or a fly-over. The median on the Friars Road bridge over SR-163 needs to be narrowed to allow striping for three westbound through lanes and a westbound auxiliary lane between the ramps in the northwest and northeast quadrants. The SR-163 northbound off-ramp to eastbound Friars Road needs to be improved by widening to allow an additional eastbound lane and possible signalization to prevent weaving problems. The ramp should also continue to allow free movement into a separate eastbound lane.
- Hotel Circle and the I-8 interchange will need to be improved where the ramps intersect Hotel Circle North and Hotel Circle South, which will require additional right-of-way along the north side of Hotel Circle North, east of the ramps.
- Texas Street/Stadium Way and I-8 interchange: Provide new westbound on- and off-ramps at Camino del Rio North, east of Stadium Way; and new on- and off-ramps of Camino de la Reina west of Stadium Way. Eliminate the existing signalized intersection and off-ramp directly north of the Stadium overpass.
- Construct a new interchange at Hotel Circle North and South and the southerly extension of via las Cumbres, which will require the realignment of Hotel Circle North and Hotel Circle South.
- The Presidio interchange at I-8 should be modified by closing the eastbound off-ramp (Note: Depending upon the intensity of current and future development projects and upon the results of traffic studies pertaining to those projects, it may become necessary to

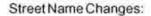
modify the existing interchange through the widening of the bridge and other improvements).

- Modify the diamond-interchange at Friars Road and Stadium Way by widening to six lanes under the overpass and widening the Friars Road on- and off-ramps.
- A diamond interchange should be constructed at Friars Road and Milly Way.
- Improvements to the auxiliary lanes (by Caltrans) will be needed to reduce the present weaving problems on eastbound and westbound I-8 between the existing Hotel Circle ramps and SR-163.
- Improvements to the auxiliary lanes (by Caltrans) to the I-8/SR-163 interchange involve the widening of the I-8 eastbound off-ramp to northbound SR-163 and the widening of the auxiliary lanes on northbound SR-163 north of I-8.









 The existing section of Camino de la Reina between Hotel Circle North and Avenida del Rio should be renamed Hotel Circle North.

 The existing and proposed section of Camino del Rio North between Stadium Way and Fairmount Avenue should be renamed Camino de la Reina.



change to CAMINO DE LA REINA

Section of Camino de la Reina change to HOTEL CIRCLE N.





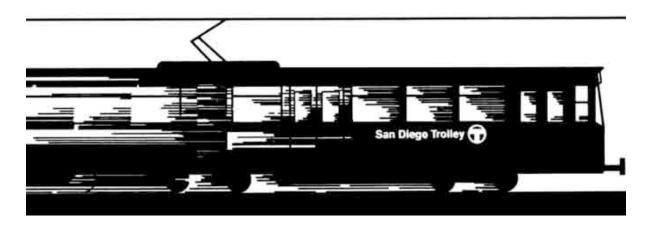
Proposed Street Name Changes

Mission Valley Community Plan

16 FIGURE

# **PUBLIC TRANSIT**

The long-term development of Mission Valley as a vital regional employment and residential community may be severely impacted by total reliance on the automobile. In order to accommodate projected development it is essential that public transit corridors and stations be provided. Use of public transit (alternative transportation systems), specifically an LRT line, could go a long way in preserving the vitality of Mission Valley. With proper studies and the determination of the transportation impacts the LRT and other transit systems will have on the surface street system, it may be possible to grant some limited development intensity increases. Mission Valley development, already severely limited by the vehicular transportation system, could be offered new development opportunities. Through cooperation among the various private interests, and working together with government, a new transportation system could be developed that would ensure the long term viability of Mission Valley as a major transportation hub of the San Diego region.



## **Light Rail Transit**

An essential element of the long-range transportation solution for Mission Valley is the extension of the regional LRT system. The LRT provides an alternative method of moving commuters through the Valley. An extension could include a line running from downtown, through the Valley to the vicinity of the Stadium with future extensions to the east county area and north to Escondido (via I-15). Preliminary studies indicate that ridership in the Valley would be relatively high. The LRT corridor may also provide opportunities for higher intensity of development as described in the **Development Intensity Element**.

The LRT should be incorporated along an east-west alignment with an exclusive right-of-way, separated as much as possible from cross-traffic. The MTDB on May 3, 1984, adopted a preferred LRT alignment through Mission Valley. The alignment is located south of Friars Road and north of the river corridor except for a segment between SR-163 and Stadium Way which is located to the south of the river corridor. This alignment provides the greatest potential access (based upon a 1,000-foot radius or "walking-distance") and, as much of the property is undeveloped, the best possibility for securing the necessary right-of-way. The precise alignment is subject to further study and development project proposals or subdivision approvals. The final alignment of the LRT, as ultimately constructed, is subject

to precise engineering studies and additional environmental studies by MTDB to determine any mitigation necessary resulting from any possible encroachments into wetland habitat areas. It is anticipated that the ultimate alignment of the LRT will preclude encroachment into wetland habitat areas to the maximum extent possible. Since the preferred alignment as adopted by MTDB is incorporated in this Plan document it will not be necessary to process a Plan amendment pertaining to the ultimate alignment of the LRT.

Transit stations or shops should be located at approximately one-half mile intervals along the LRT route. Station locations should be coordinated with bus routes and stops. Preferred locations are those at or near crossroads and at major activity centers. Activity centers include the major retail centers, large office buildings or complexes, and high-density residential areas.

## **Public Bus System**

Mission Valley currently functions as a major destination and transfer point for bus routes serving the San Diego region. In November 1980, the Fashion Valley Transit Station opened in the Fashion Valley Shopping Center. This passenger boarding and transfer facility serves over 4,000 transit riders per day. 77 percent have an origin or destination at Fashion Valley; the remaining 23 percent are connecting with trips to and from either another point in Mission Valley or outside the community.

Since January 1980, San Diego Transit (SDT) has had an informal agreement with the management of both Fashion Valley and Mission Valley Shopping Centers to allow commuters to park there. Currently this has only appealed to a small number of commuters. If it becomes a major park-and-ride Center these agreements maybe reviewed by the Fashion Valley and Mission Valley Shopping Centers to avoid interference with customer parking. Currently, commuters wishing to park in these areas must contact security and park in specially designated areas. No specific number of spaces are set aside for this particular use. The park-and-ride is not advertised or promoted by SDT but is allowed to occur on a limited informal basis.

Bus service provided to Mission Valley by SDT appears excellent in terms of the amount of route coverage and headways (time between buses) provided. However, since the Valley is itself an urban center with many regional attractions, the transit system utilization system is comparatively poor. At present, there are seven bus routes serving Mission Valley. They include: Route 80 - Pacific Beach to San Diego State via Mission Beach, Fashion Valley and Mission Valley Shopping Centers; Route 43 - Downtown San Diego and Allied Gardens via Fashion Valley Shopping Center, Mission San Diego De Alcala and Grantville; Route 6 - North Park to Point Loma via Mission Valley and Fashion Valley, Hotel Circle and Old Town; Route 20 - Downtown San Diego to Rancho Bernardino via Fashion Valley; Route 47 serves Fashion Valley via Genesee; Route 16 - College Grove Shopping Center to Mission Village via Lemon Grove, Market Street, Downtown, Fashion Valley and Mission Valley Shopping Centers, and Route 25 - Downtown San Diego to Clairemont via Mission Valley.

San Diego Transit also operates shuttle bus service for football and baseball games at the stadium; based upon the 1981 seasons, SDT carried approximately five percent of the overall gate attendance. This compares to approximately two percent of all the trips in the region. In addition, private charter bus lines transport a portion of the overall gate attendance to the football and basketball games. Since the stadium parking area can accommodate 300 buses, a significant portion of the gate attendance can be potentially transported by both SDT and private charter bus lines. A much higher transit ridership could be achieved with more buses and a higher level of service. This would, however, require additional parking area to be reserved for the exclusive use of buses.

The number of Transit routes coming into the Valley is relatively significant. The routes have been designed to mix trips throughout the region and to provide accessibility within Mission Valley. They serve the major destination points and transfer facilities. Express routes serve both the north-south and east-west freeway corridors while local routes connect to neighborhoods on all sides of the Valley. San Diego Transit believes that additional routes, additional stops and modification of the routes for Mission Valley could substantially increase ridership within the Valley area. By providing a more complete bus system in the Valley, trips to the offices located on the south side of I-8 or office buildings east of Mission Valley Shopping Center could greatly increase transit ridership in the Valley. Public transit as a solution to some of the Valley's traffic problems can only be achieved with improved bus access, reduction of traffic congestion to reduce delays, safe pedestrian access to stops, and an increased number and size of red curb bus stop zones.

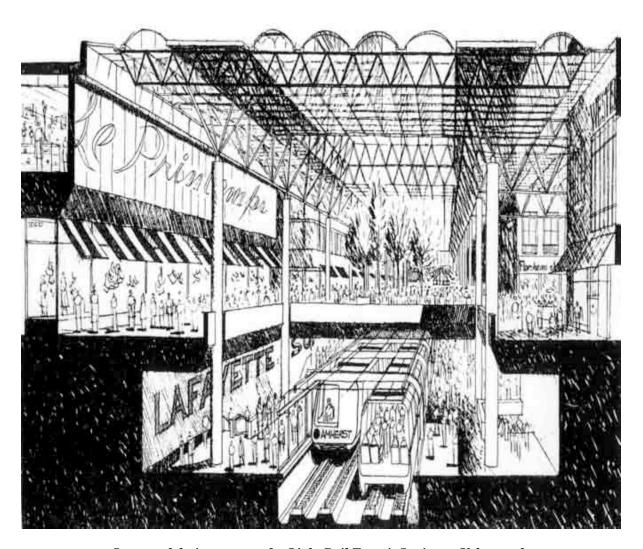
## Intra-Valley "People Mover" System

A "people mover" system generally handles trip distribution within compact areas. These systems usually collect trips from major transportation systems (freeways, streets, transit terminals) and distribute them within a community such as Mission Valley. The use of such a system in the Valley could help alleviate congestion on the surface street system. Since the configuration of the Valley precludes the compactness of development necessary to foster strong pedestrian movement patterns, the existence of "people mover" or private intra-Valley transit system becomes a viable substitute for short distance vehicle use and, as a result, removes trips from the surface street system. The substitute is particularly desirable for the movement of shoppers between retail centers, and the movement of workers, clients, and visitors between offices, restaurants, and entertainment or recreation attractions.

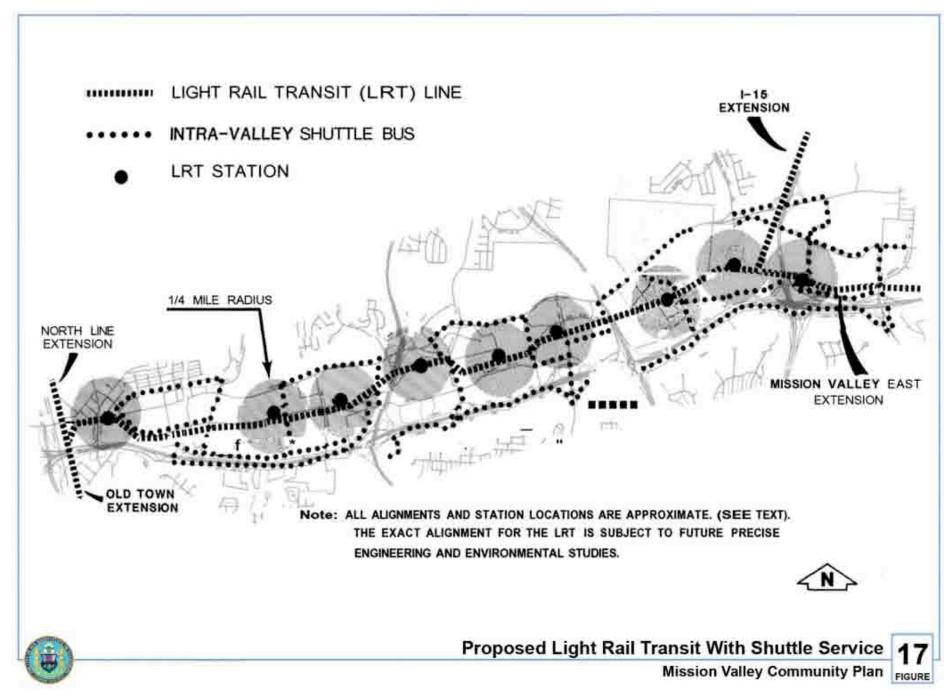
The initial system in the Valley could consist of buses utilizing the surface street system to connect the various activity centers. This may eventually be replaced by a more sophisticated system (perhaps even an elevated guide-way) as part of major new development projects in the Valley. The establishment of such a system should be initiated by property owners in the Valley, and administered through the formulation of a transit authority. The routes would be determined some time in the future. **Figure 16** indicates how such a system might interface with the LRT.

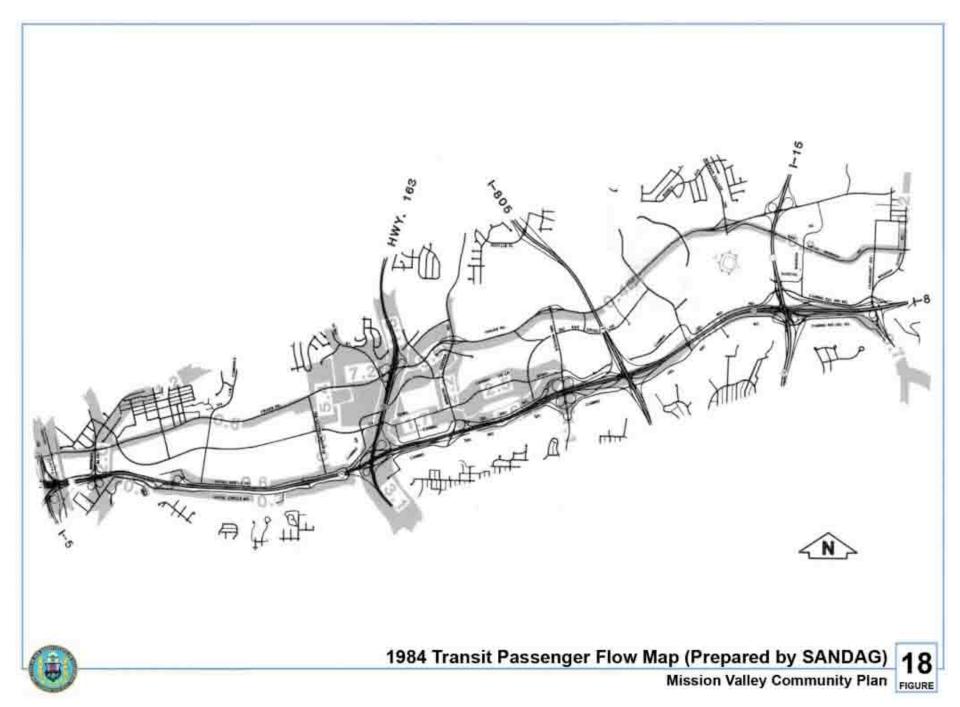
# **OBJECTIVES**

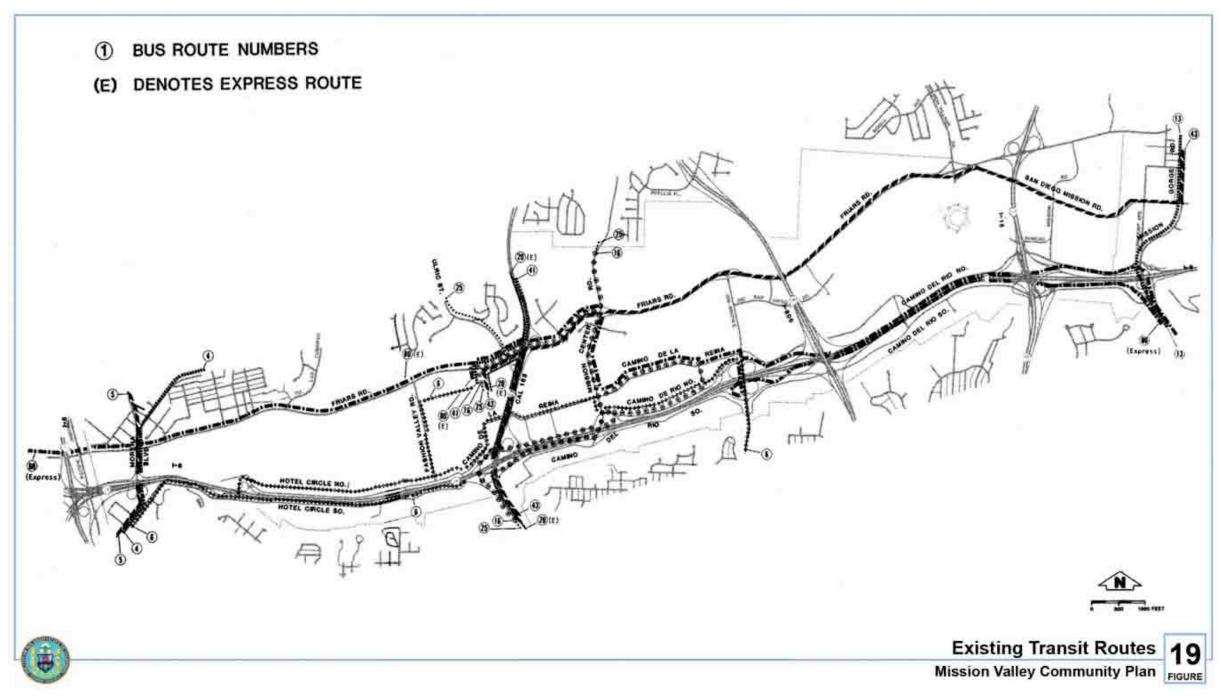
- Encourage the use of public transit modes to reduce dependency on the automobile.
- Provide opportunities for individual property owners to achieve a higher use of their property through support of more efficient transportation modes.
- Provide financing for public transportation facilities through both public and private sources including the use of assessment districts.
- Provide mitigation for traffic generation impacts through the provision and/or financing of public transportation facilities on a project-by-project basis.



Suggested design concept for Light Rail Transit Station at Urban node







#### **PROPOSALS**

- Improve responsiveness of the City's bus system to Valley needs.
- Encourage private bus, taxicab and shuttle services to supplement the public system.
- Encourage a higher level of public transit service to the stadium during scheduled events.
- Extend the LRT line from downtown to Mission Valley and ultimately to Escondido via the I-15 corridor and to the East County via the I-8 corridor.
- Establish methods of financing and phasing public transit improvements.

### **DEVELOPMENT GUIDELINES**

- Implement all means of reducing dependency on the automobile. In addition to public transit, bicycles, and new pedestrian facilities, private development should be encouraged to participate in the following modes of transportation and Transportation Systems Management Program (TSMP) techniques:
  - a. Van-pooling
  - b. Car-pooling
  - c. Park-and-ride (public and private)
  - d. Bicycle park-bus ride (public and private)
  - e. Piggyback bicycle-bus transportation
  - f. Jitney Service
  - g. Taxis
  - h. Employer subsidies of transit passes for employees
  - i. Ridesharing
  - j. Flextime (staggered work hours)
  - k. Preferential parking programs
  - 1. Any other current TSMP techniques which are available and may be applicable at the time of project review
- Achieve greater public transit responsiveness to Valley needs by:
  - a. Encouraging SDT and MTDB to study the possibility of locating additional bus destination transfer facilities in Mission Valley.

- b. Encouraging property owners to establish a shuttle bus or intra-Valley "people mover" system (administered through a transit authority) to serve major facilities in Mission Valley. The new routes should link the offices on the south side of I-8 with proposed residential areas north of Friars Road, and new residential developments with commercial areas. In addition, an intra-Valley shuttle should connect with the regional transit points in the Mission Valley/Fashion Valley shopping centers.
- Encourage greater public use of the transit system to events at San Diego Jack Murphy Stadium by:
  - a. Establishing more pickup points in heavily congested areas outside Mission Valley, preferably "park-and-ride" locations.
  - b. Setting parking fees high enough to encourage people to car-pool or use buses.
  - c. Developing faster ingress and egress routes and policies for buses.
  - d. Providing greater numbers of buses which leave at various times from several locations.
- Implement the Transit Route Plan developed by the MTDB.
- Eliminate on street parking at key destinations within the community to provide safe bus turnout and stop areas and design transit related improvements into those streets which are designated as transit routes.
- Provide transit stops which are:
  - a. Integrated into buildings, pedestrian areas, or urban plazas.
  - b. Sheltered from sun, wind and rain.
  - c. Highly visible to pedestrians and riders through signage, color, selection and structural design.
  - d. Located at major activity centers.
  - e. Carefully integrated into the street design through additional rights-of-way requirements, special transit shelter design, landscaping, security lighting, ornamental paving and other appropriate design techniques.

### PARKING AND GOODS DELIVERY

On a project basis, parking supply and demand are often not well matched, leading to some local parking problems.

Three large parking lots exist in Mission Valley. Two of these are free—Fashion Valley Shopping Center (5,552 spaces) and Mission Valley Shopping Center (6,681 spaces). San Diego Jack Murphy Stadium has approximately 17,000 pay spaces. Usually, this supply of spaces is under-used. These lots are full only a few days a year—during the holiday season at the shopping centers, and during event sellouts at the San Diego Jack Murphy Stadium.

The demand for on-street parking spaces illustrates that the deficiencies are found at or near major office complexes, restaurants, automobile dealerships and in residential areas. Additionally, the tendency to develop parking spaces in a piecemeal fashion (dividing the areas on the basis of ownership) often results in adjacent parking areas in which one lot is full or overcrowded while the other lot is nearly empty. Comprehensive development of parking areas would result in greater efficiency and use.

A recent trend of increased employee density may require re-evaluation of parking requirements, especially for office employee parking. It is apparent that the crowding of employees into smaller spaces is occurring. Inflation in construction, land acquisition and leasing costs, is a major contributing factor to this trend.

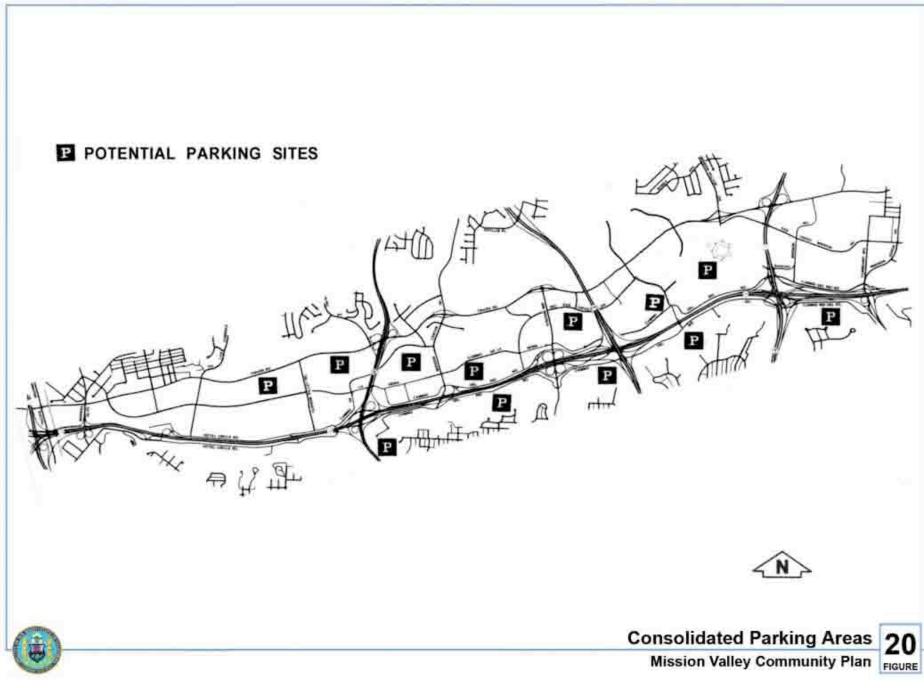
A direct result of inflation is the increase in the number of fee parking facilities, the policy of charging for parking helps defray the considerable cost of providing parking spaces. However, people will seek free on-street parking to avoid parking fees. This accounts, in part, for the existing on-street parking demand in the vicinity of pay parking facilities.

A possible solution to this problem is to create special parking districts. Certain areas within the community could establish parking reservoirs to be used by a number of businesses or buildings and be served by a mode of public transit. Possible locations for these consolidated or shared parking areas are shown on **Figure 20**. Shared or consolidated parking may provide an economical alternative to individually provided on-site parking, particularly on small parcels or those with floodway or hillside review zoning.

Goods delivery is a necessary and indispensable function in Mission Valley and, as such, is an integral factor in the circulation system. Delivery vehicles are generally trucks and vans. Conflicts between these vehicles and through traffic occur when such vehicles park on the streets during deliveries, blocking one or more traffic lanes.

## **OBJECTIVES**

- Provide adequate off-street parking for all new development in Mission Valley.
- Coordinate and combine parking areas and goods delivery to provide a more efficient use
  of land area.



#### **PROPOSALS**

- Discourage on-street curbside parking.
- Minimize conflicts between driveways and traffic flow.
- Encourage more efficient use of existing parking facilities, including the San Diego Jack Murphy Stadium parking lot.
- Provide a goods delivery system which doesn't conflict with other elements of the circulation system.
- Provide adequate, well-designed off-street parking facilities.

#### DEVELOPMENT GUIDELINES

## **Off-Street Parking**

- Provide attractively designed parking structures or underground facilities to reduce the
  area of a site which must be devoted to parking. Auto-oriented uses such as service
  stations and drive-thru facilities should be integrated into the design of the parking
  facilities.
- Driveways should not be permitted along primary arterials and major streets where lower classification streets are available to provide adequate access. If driveways along major streets cannot be avoided, then design parking facilities to minimize the number of driveways needed. Private access roads may be used for combined parking areas.
- Design parking facilities to ensure proper access and specify if for use by residents, employees, customers, visitors, goods deliveries or the handicapped.
- Modify the off-street parking requirements contained in the zoning regulations by developing comprehensive zoning regulations tailored specifically to the Mission Valley community. Parking requirements should apply and be enforced throughout the entire planning area. Exclude on-street parking from consideration for meeting these parking requirements.
- Provide landscaping in parking areas in the form of mature trees and screening hedges and shrubs. Use native, or drought-resistant plants, and compatible vegetation along the river. Parking area landscaping should consist of large canopied trees and parking area edges should be mounded and be landscaped with shrubbery.
- Provide for safe and convenient pedestrian movement both within and to and from parking areas. Pedestrian ways should be incorporated into the design of parking areas so as to provide pedestrian passage through parking areas to pedestrian destinations (buildings, streets, etc.)

- Design parking facilities to be adequate for both initial development and future expansion
  of land uses in terms of size and intensity. For example, initial parking facilities could be
  surface lots capable of eventually accommodating parking structures. Surface lots could
  also reserve land for future development and provide multi-purpose parking areas and
  urban plazas through the use of decorative paving, kiosks, and other pedestrian and visual
  amenities.
- Encourage efficient use of parking resources through development of a comprehensive Valley-wide parking program to include:
  - 1. Off-site parking facilities to efficiently accommodate parking overflows in nearby areas.
  - 2. Sharing of parking facilities by various non-competing users.
  - 3. Staggering user hours.
  - 4. Providing parking districts by identifying parking facilities that can serve several business activities in the same area.

### **On-Street Parking**

- Eliminate on-street parking along primary arterial streets and newly constructed major streets.
- Widen streets where necessary, to accommodate the needed number of traffic lanes based on transportation needs forecasts for Mission Valley.
- Provide acceleration and deceleration lanes, turning pockets and bus lanes, if necessary.
   Paint curb areas red to reduce curb parking at intersections and along existing major streets and collector streets where on-street parking is currently allowed.

# **Goods Delivery**

- Discourage the use of public rights-of-way for the loading and unloading of goods by providing adequate delivery areas.
- Provide off-street loading and unloading bays where possible for new commercial and recreational developments. Recommended standards require at least one 12-foot by 40-foot bay per 40,000 square feet of any fraction thereof of net usable floor area. Incorporate these requirements into the appropriate zoning regulations.

## **BIKEWAYS**

Bikeways are classified into three general categories based on the degree or extent of their improvements, as follows:

# **Bicycle Path**

A completely separate right-of-way for the exclusive use of bicycles. (Class I)

## **Bicycle Lane**

A restricted right-of-way located on the paved road surface the traffic lane nearest the curb, and identified by special signs, lane stripping, and other pavement markings. (Class II)

# **Bicycle Route**

A shared right-of-way designated by signs only, with bicycle traffic sharing the roadway with pedestrian and motor vehicles. (Class III)

Mission Valley contains a major segment of the citywide bikeway system. This regional bikeway, to be built in three phases, will extend from Quivira Way (Mission Bay) to I-15. Other proposed bikeways would connect Mission Valley with Hillcrest and Mission Hills.



Existing bikeway route in Mission Valley

## **OBJECTIVES**

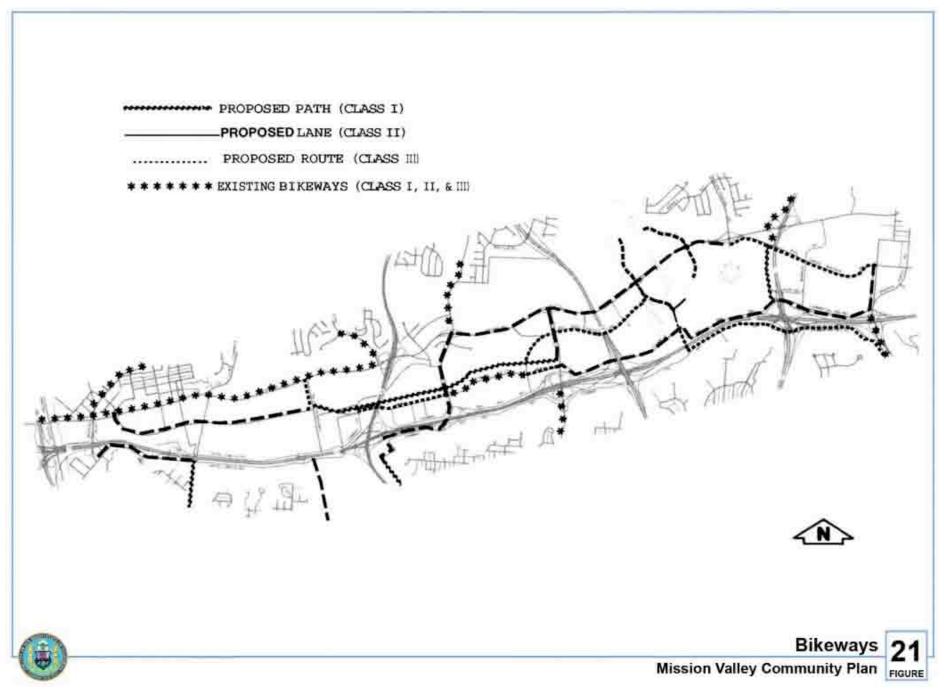
- Create an intra-community bikeway system which would provide access to the various land use developments within the Valley, and connect to the regional system.
- Encourage bicycle use in the Valley.

### **PROPOSALS**

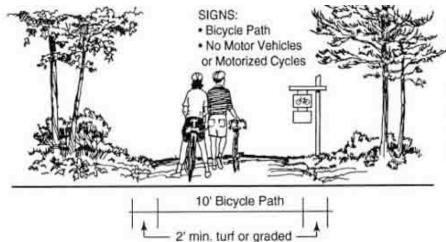
- Designate a community bikeway system as shown on **Figure 21**.
- Complete key elements of the regional bikeway system and connect it to adjacent communities.

### **DEVELOPMENT GUIDELINES**

- Design bikeways to meet the minimum standards included in the current Caltrans Highway Design Manual and in the current City of San Diego Council Policy 600-4.
- Provide secure bicycle parking at activity areas, including transit stops, commercial areas and sports/recreational facilities.
- Provide lockers, shower and changing facilities at major developments in order to encourage the use of bicycles and bikeways by employees.
- Install bicycle sensitive signal detectors at signalized intersections along commuter routes.
- Utilize assessment districts and conditions placed on development permits to provide, among other improvements, bikeways.



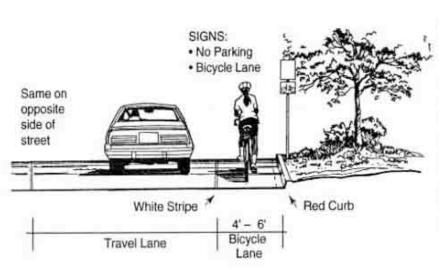
### BIKEWAY DESIGN SPECIFICATIONS



# CLASS I (Typical location open space)

## Bicycle Path: A completely ser

A completely separate right-of-way for the exclusive use of non-motorized vehicles.

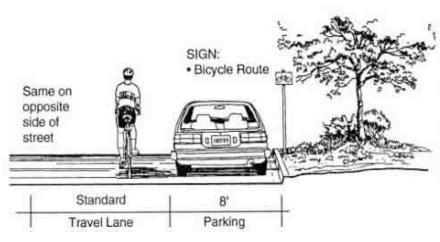


## CLASS II

(Typical location major street)

# Bicycle Lane:

A restricted right-of-way located on the paved road surface alongside the traffic lane nearest the curb, and identified by special signs, land striping, and other pavement markings.



# CLASS III

(Typical location neighborhood street)

# Bicycle Route:

A shared right-of-way designated by signs only, with bicycle traffic sharing the roadway with motor vehicles.

#### PEDESTRIAN CIRCULATION

Throughout its urban history, Mission Valley has developed with a strong automobile orientation. Pedestrian activity has been actively discouraged everywhere outside of the central malls at the two regional shopping centers. Such basic pedestrian amenities as sidewalks and crosswalks are found in only a few locations (usually within a residential development) and do not lead anywhere. There has in the past, been little or no effort to encourage or provide for this significant mode of transportation. As Mission Valley continues to develop as a major urban center, pedestrian circulation will become an increasingly important aspect of the overall circulation system for the community.

Walking is a form of transportation that must be provided for, especially in neighborhoods for short trips to local commercial and public facilities and in business areas where many shoppers congregate. Sidewalks, malls and similar spaces provide not only for pedestrian movement but also for childrens' play, socializing among residents, window-shopping, and sitting and watching. Congestion occurs on sidewalks in high activity areas, just as it does on streets. The inadequacy of pedestrian space creates inconveniences for those trying to pass through and those shopping or stopping to talk or look or rest.

A pedestrian circulation system for Mission Valley should be designed with the following characteristics as basic criteria:

## 1. Continuity

The pedestrian circulation system should achieve continuity by the incorporation of plazas, courts, and interior arcades connecting all pedestrian activities of major significance, the pedestrian system should also connect smoothly with other transportation components, thus providing a continuity in pedestrian scale between changing modes of movements. Visually, the pedestrian system can provide a sense of unity among adjoining buildings and strategically placed skyways can form effective gateways into development projects.

#### 2. Convenience

A functional system should be convenient for the pedestrian (i.e., easy to find and use with a minimum of circulation level changes).

### 3. Safety

The pedestrian system, as designed and defined herein, is intended as a safe system of people movement kept apart from vehicular traffic.

#### 4. Comfort

The entire system should be well lighted, spacious, and well maintained. The design should be orderly and the pedestrian needs emphasized in terms of walkways, furnishings and aesthetics.

#### 5. Entertainment

Surprises, happenings, and exhibits can all be part of the total experience for people walking through the pedestrian circulation system. Arcades may contain retail shops, banks, brokerage offices, art galleries, information booths, kiosks, and special places for newsstands, vendors, and flower stalls. The courts can become exciting places for both children and adults to gather, eat or watch other people passing by.



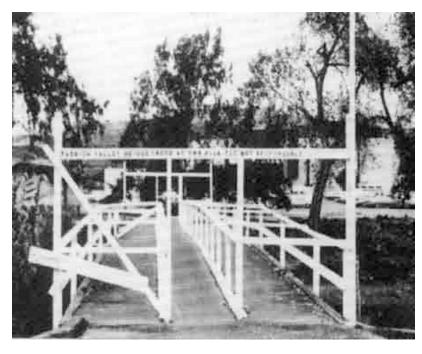
Encourage pedways to avoid pedestrian/automobile circulation conflicts.

In many high-activity areas the sidewalks are narrower than required for pedestrians. Where pedestrian traffic is high and through vehicular traffic is light or can be moved to alternate routes or reduced by transit improvements, some street space should be converted into wider sidewalks, landscaped strips and sitting areas. Through traffic should be discouraged or eliminated to avoid conflicts which inconvenience drivers and pedestrians alike and which may increase accidents. In a high-density residential area with little open space, wider sidewalks and small plazas should be created to provide more usable space as well as to discourage through traffic.

Pedestrian walkways should be sharply delineated from traffic areas and set apart where possible to provide a separate circulation system. Separation should include landscaping and other barriers, and walkways should pass through the interiors of blocks wherever practical. Walkways that cross streets should have pavement markings and good sight distances for motorists and pedestrians.

Driveways across sidewalks should be kept to a practical minimum, with control maintained over the number and width of curb cuts. Barriers should be installed along parking lots to avoid encroachments on sidewalks, with adequate sidewalks, with adequate sight distances maintained at driveways. Truck loading should occur on private property rather than in roadways or on sidewalks, and sidewalk freight elevators should be discouraged.

Where streets are designed for high volumes or relatively high-speed vehicular traffic, adequate provision must be made for safe and convenient pedestrian crossings with bridge structures or tunnels if necessary. This is especially important in higher density residential areas. Wide streets should have adequately timed lights and median strips or islands at intersections to allow safe crossings. If grade separation of pedestrian and vehicular movement is necessary; the roadway



should be depressed to maintain continuity of pedestrian paths wherever possible. If a change in pedestrian level is required, ramps, escalators or elevators are usually preferable to stairs.

In order to reduce the hazards of traffic at night, and provide security from crime and other dangers, public areas should have adequate lighting. Although the need for lighting is general, special attention should be given to crosswalks, transit stops and to pathways in open space and around buildings. Care should be taken to shield the glare of any such lighting from residential properties.

Large integrated developments are expected to accommodate the pedestrian by providing passage through the interior or possibly creating another level of pedestrian activities separated from the street grade. Activities, attractive street furnishing, and public space are expected to become part of the pedestrian experiences.

## **OBJECTIVE**

• Improve the visual quality as well as the physical efficiency of the existing and future pedestrian circulation system.

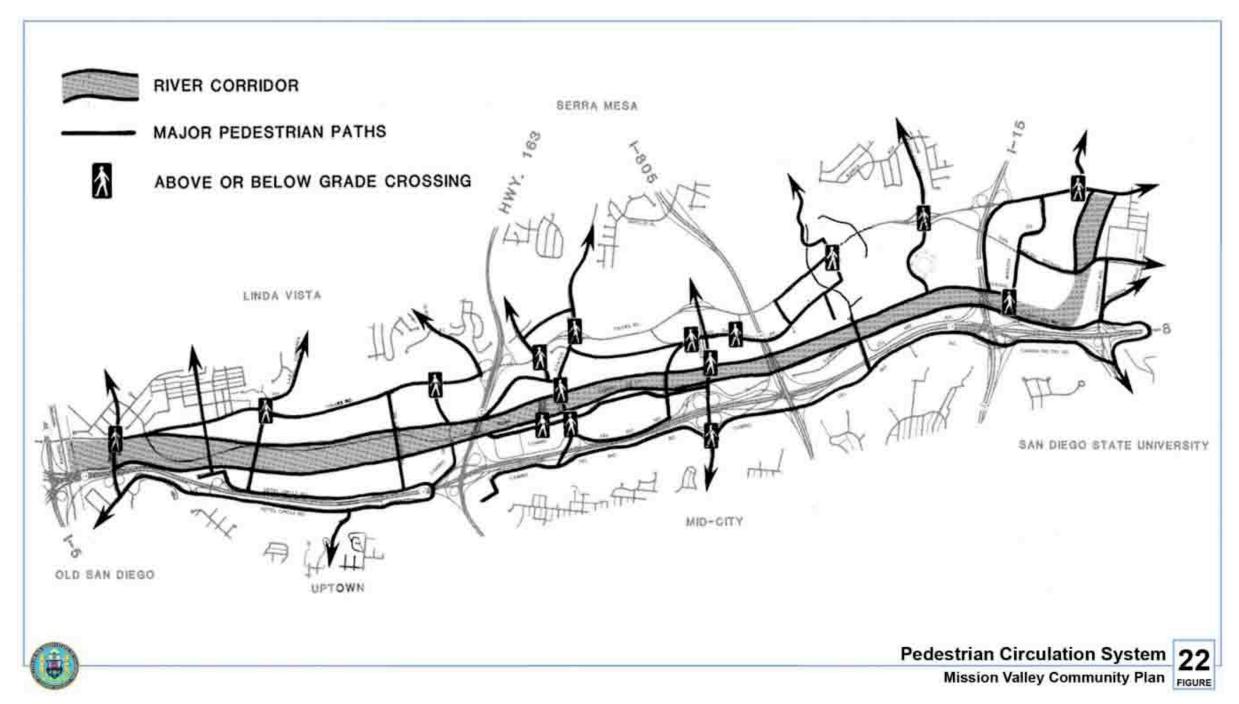
#### **PROPOSALS**

- Ensure convenient and safe pedestrian crossings.
- Provide adequate light in public areas.
- Provide a continuous pedestrian circulation system (east-west and north-south) to connect
  activity centers, residential development, and to provide access to adjacent communities
  with grade separations if necessary for pedestrian safety.

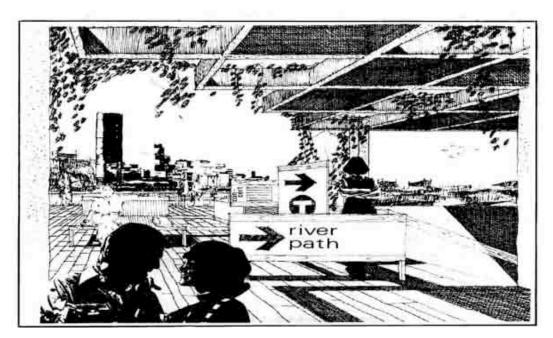
- Design walkways and parking facilities to minimize danger to pedestrians.
- Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high.

### **DEVELOPMENT GUIDELINES**

- Pedestrian and/or bikeway access should be provided along the length of the river as
  generally shown on Figure 22. The pedestrian and bikeway access should be placed in the
  buffer areas and in the floodway according to the criteria provided in the San Diego River
  Element, with lookouts developed at strategic areas along the river bends to afford views
  of the habitat areas.
- All pedestrian walks should have a minimum width of ten feet in order to encourage pedestrian use and related activities (i.e., vendors). In areas of high development intensity, widths of 15 feet to 20 feet or greater should be considered with the use of landscaping to buffer the pedestrian from the automobile.
- Separated pedestrian areas should be provided within the improved right-of-way on the
  major street crossings of the river. Other river crossings may be considered for pedestrian
  access only as part of the nature trail network. River crossings may be provided as long as
  they are found to be consistent with the necessary protection and habitat enhancement
  measures and can be adequately maintained.
- Urban plazas and project recreational areas for the commercial, residential, hotel and office development should have direct links to both the river and the public streets parallel to the river, re; Friars Road and Camino de la Reina.
- Landscaped pedestrian sidewalks should be provided along all public streets to encourage pedestrian activity and expedite pedestrian access. Trees should be located adjacent to the curb to provide pedestrian scale and separation from vehicular activity without reducing normal sidewalk area. Tall, canopied trees are preferable to other trees.
- Projects should front on the public street and provide identifiable pedestrian access from the street into the project, even in areas where parking lots are located between the street and the buildings.
  - Pedestrian crossings should be identified through special paving design or materials. In the event that mid-block pedestrian crossings are provided, they should be designed in accordance with applicable standards of safety and design.
- Areas of high pedestrian activity, which need to be linked above-ground (through the development of platform or bridge structures) or below-ground (through tunnels). These bridges or tunnels should connect high pedestrian activity areas and should be located in such a way as to link pedestrian areas as directly as possible. As an alternative, where feasible, roadbeds may be elevated or depressed to facilitate pedestrian crossings.



- Large development projects (PCDs or Specific Plans) should provide not only internal pedestrian circulation, but should ensure continuity community-wide by connecting the internal system with adjacent projects and the community-wide pedestrian system.
- Handicapped access must be provided to all areas of pedestrian activity, parking areas, buildings, pedestrian linkages and the community-wide pedestrian system.



Pedestrian access to the San Diego River Open Space and recreational system is of special importance.



# **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.

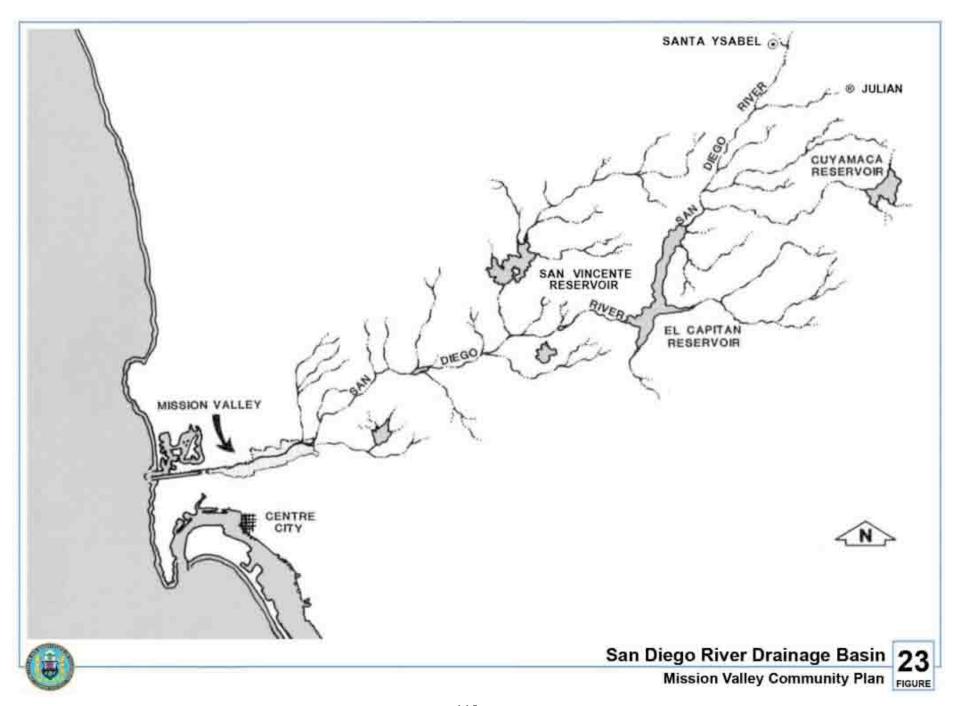
Because the drainage systems contain alluvial soils and ground water they often support lush stands of vegetation and as such, are important assets in establishing the natural amenity or quality of life for San Diego. San Diego's many canyons and valleys are not only scenic but are often particularly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

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.

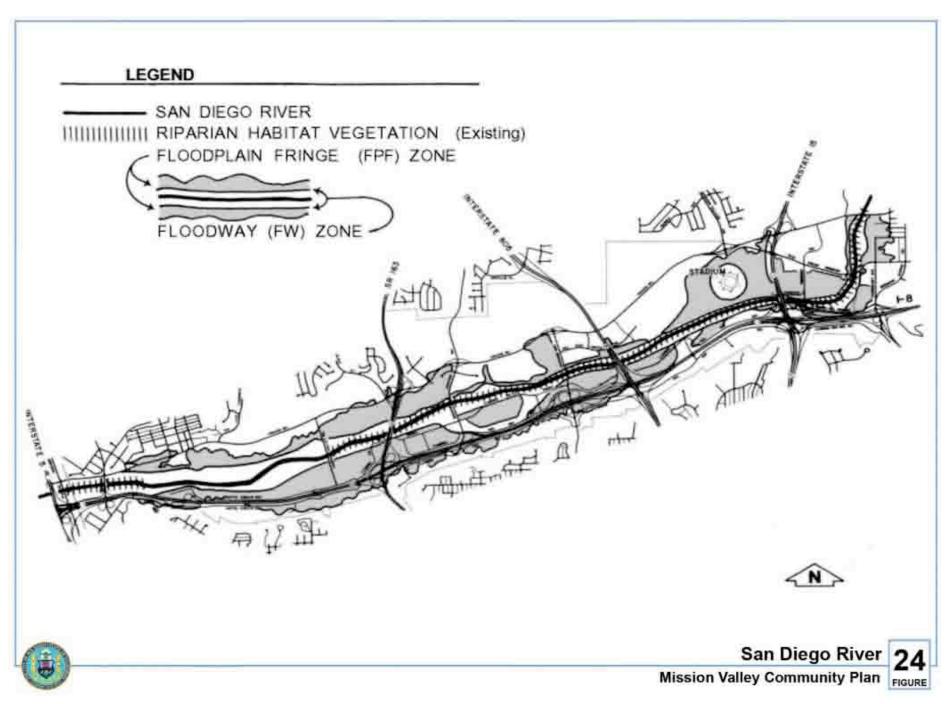
The San Diego River is the major factor responsible for the existing topography in this area, creating Mission Gorge and the flat floodplain now called Mission Valley. It was the primary source of fresh water for the early San Diego settlements. In urban Mission Valley, the river has the potential for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



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

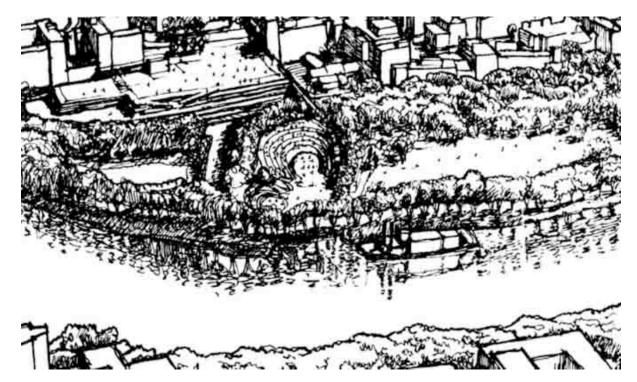
- a. A maintenance program for the flood control facility should be developed in conformance with the guidelines provided by the Wetland Management Plan, and should include the following:
  - (1) Identification of wetland/riparian habitat areas that should be preserved and those that can be restored 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 tenyear 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.

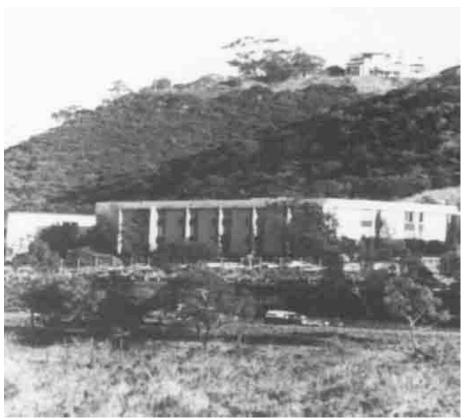


Conceptual design and development along the San Diego River through Mission Valley



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.

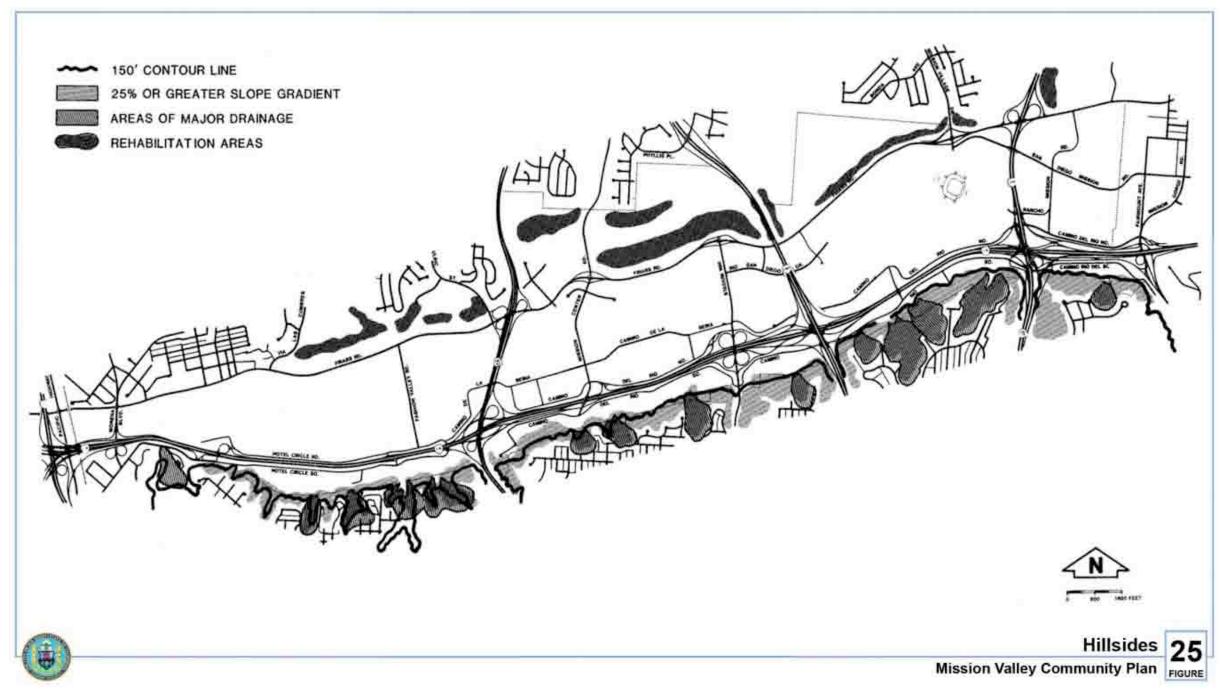


The north facing hillsides in the West Mission Valley area

- 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.



- 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 complement and supplement the public recreational system.
- Neighborhood parks should be provided within, and as 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 neighborhood park in the vicinity of the YMCA development in the western
  portion of the Valley. This park development must comply with requirements of the
  wetlands management plan. Primary consideration for park development, including
  playing fields, should be given to the City property south of the YMCA currently being
  used by the Presidio Little League, known as Sefton Field.
- 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

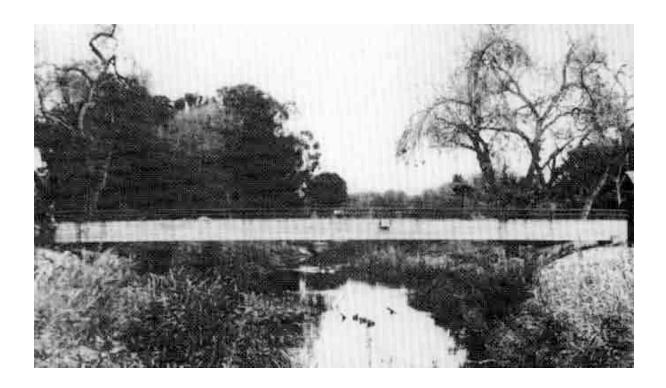
The three previously discussed sub-elements (San Diego River, Hillsides, Parks and Recreation) provide important components of the Open Space Element. However, it is equally important that a relationship be established between these sub-elements. This relationship can be established through the open 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.

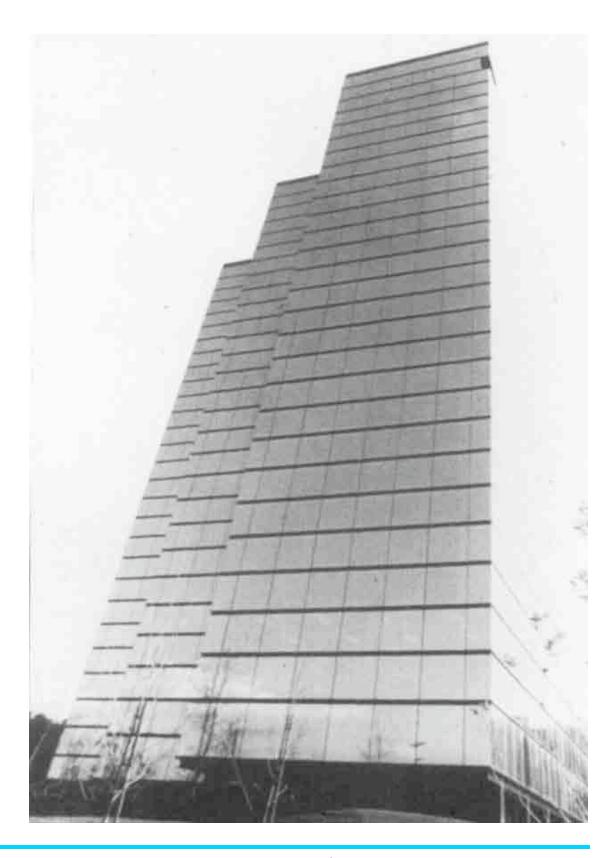
### **PROPOSALS**

- 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

<sup>\*</sup>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.

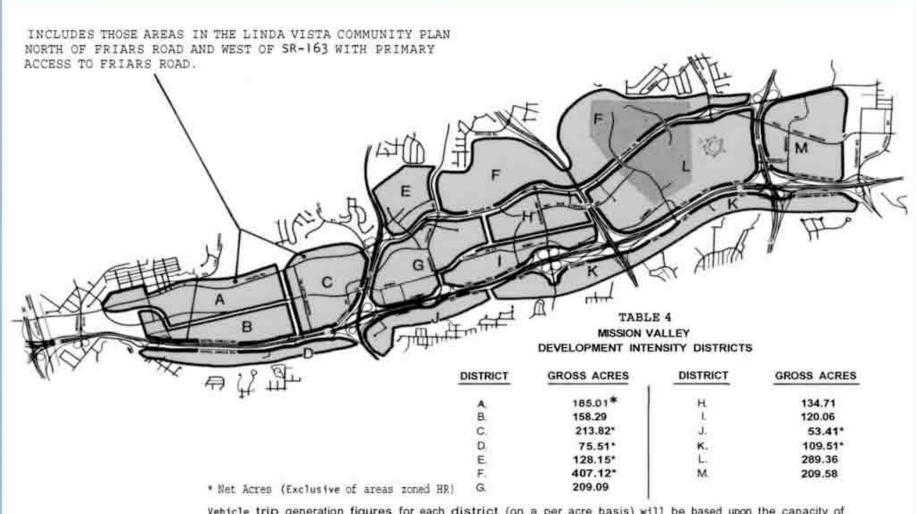
The permitted land uses in Mission Valley are: (1) commercial development with subcategories of office, hotel/commercial recreation and retail services; (2) residential development; (3) industrial development; and, (4) multiple use development, which is a combination of the first two categories. These 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.



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.





Development Intensity Districts 26

Mission Valley Community Plan

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 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.

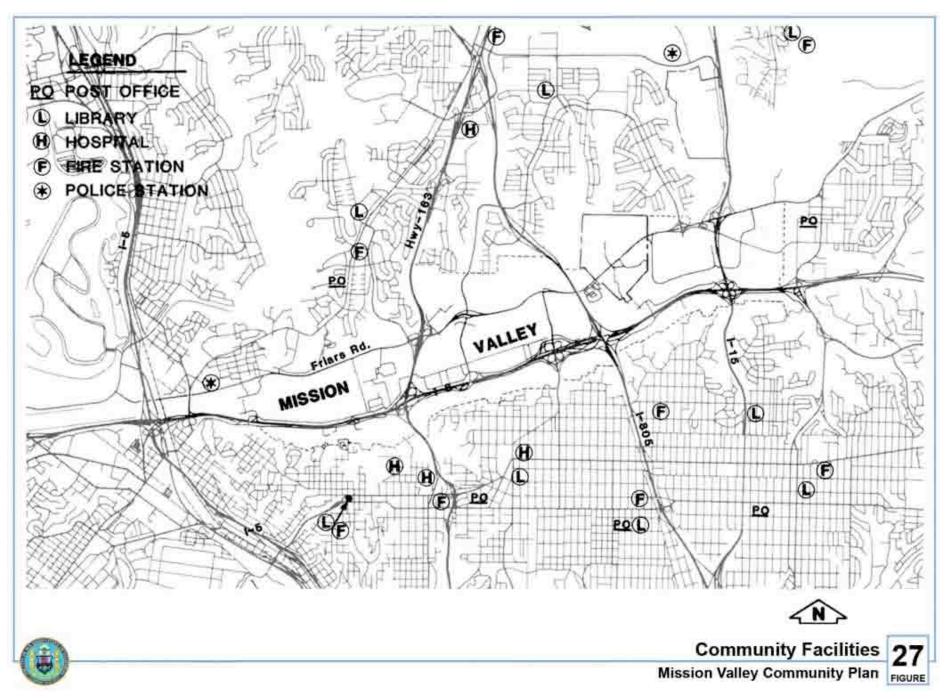
## **Universities and Community Colleges**

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 of 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 9<sup>th</sup> 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



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.

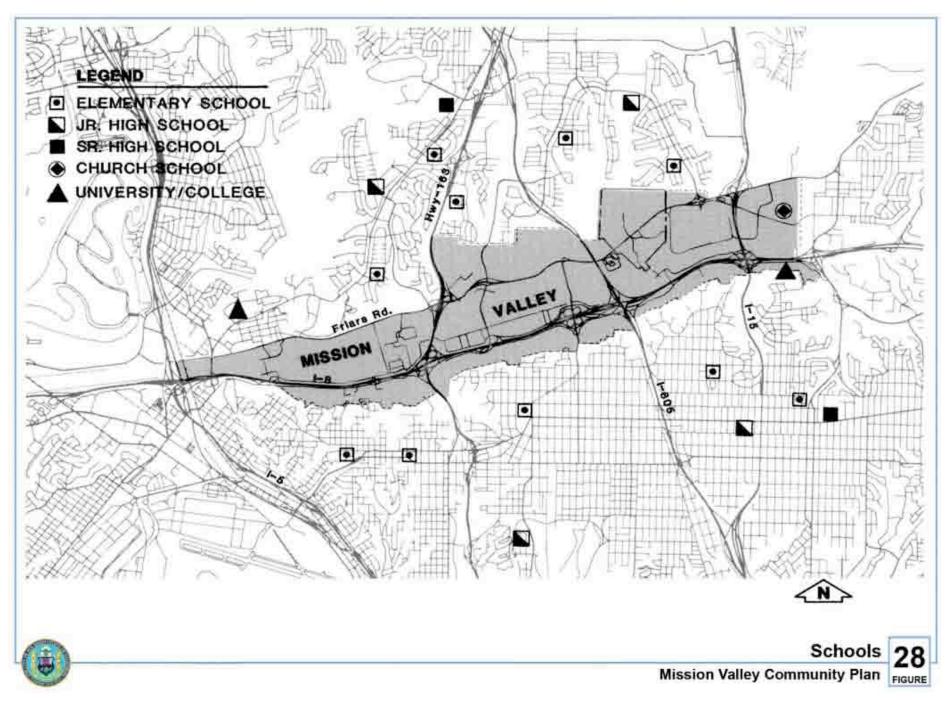


TABLE 5
ENROLLMENT AND CAPACITY STATISTICS FOR SCHOOLS
LOCATED IN COMMUNITIES BORDERING MISSION VALLEY

	October 1982	October 1983	<b>Current Capacity</b>
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 "temporary" 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 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.



# **CULTURAL AND HERITAGE RESOURCES**

Cultural and heritage resources include archaeological and historic sites, landmarks, and "semipublic" cultural facilities.

#### HISTORIC SITES

The only designated historic site in Mission Valley is the Mission San Diego de Alcala (City Historical Site No. 113). It is also listed in the National Register of Historic Places, as well as being a designated National Historic Landmark, and a California Registered Landmark. The Mission is located on the north side of San Diego Mission Road between I-15 and Fairmount Avenue, on a part of the Nazareth School complex. The Mission was the first established in upper (Alta) California. It was founded by the Franciscan Order under the direction of Father Junipero Serra in the late 1770s. The mission is also named a "Minor Basilica"—a designation of historical prominence in Catholic Church history. It is one of three such designated sites in California.

## **CHURCHES**

There are three churches in Mission Valley. The Mission San Diego de Alcala is located adjacent to the Nazareth complex. Two other churches are located on Camino del Rio South. These are the First United Methodist Church of San Diego, located just west of Texas Street; and the Church of Religious Science Center of San Diego, located near National University.

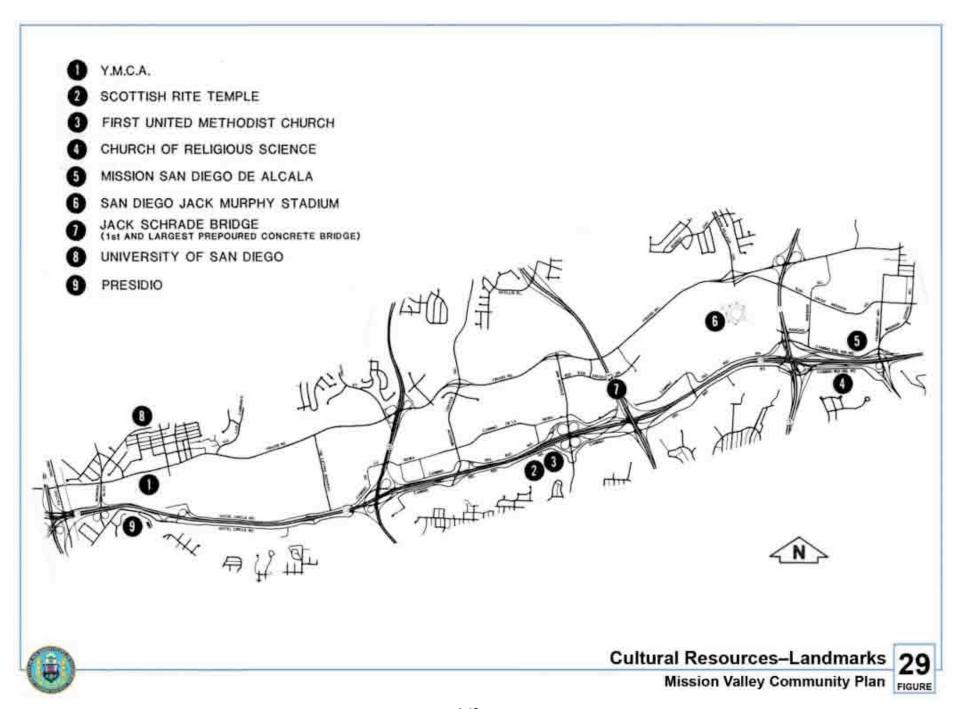
While the Mission San Diego de Alcala continues to serve as a parish church it is perhaps more significant in the land use context as a heritage resource. It has been designated as a historic site by national, state and local authorities, and probably generates more traffic and visitor trips from its significance as a historic site and structure than from its strictly religious nature as a place of worship.

All three churches are "commuter" facilities as they serve a wide region rather than a specific neighborhood or community. The two churches located on Camino del Rio South cause few parking problems, as they are located in a commercial area. A residential neighborhood has developed around the Mission; on-street parking, especially on Sundays, may occasionally cause some problems for residents.

The Mission San Diego de Alcala is also a cultural focal point for East Mission Valley. Public involvement includes a community theater, festivals and facilities for archaeological-historical research.

## **LANDMARKS**

San Diego Jack Murphy Stadium is probably the most distinct landmark in Mission Valley. Its award-winning design and regional importance as a professional sports facility have also made it a community landmark. It dominates the view from almost any vantage point in the eastern portion of the Valley.



The Jack Schrade Bridge (I-805 overpass) is also a prominent landmark in the Valley, particularly from I-8 and Camino del Rio South. It is named after the California legislator instrumental in obtaining the funds for its construction. The bridge was the first of its kind to be constructed entirely out of preformed concrete.

The University of San Diego is a visual landmark located at the western end of the Valley in the Linda Vista community. It is situated to the north of Linda Vista Road on a 106-acre site. The most striking element of the University, as a landmark, is the distinctive tower and blue dome of the Spanish Renaissance-style Immaculata Church building.

The Serra Museum located in Presidio Park is also a visual landmark located at the western end of the valley in the Old San Diego community. It is situated above Hotel Circle South (Taylor Street) and I-8 and its white adobe Spanish Mission Style architecture is readily visible throughout a significant portion of the valley.

## **OTHER INSTITUTIONS**

The Scottish Rite Memorial Temple, located on Camino del Rio South, is the only fraternal facility in Mission Valley. Its large hall is frequently leased out for exhibitions, ethnic festivals and other cultural activities.

The Young Mens' Christian Association (YMCA) has a new facility located on Friars Road, just east of Napa Street. The new YMCA will serve as a community activity center for West Mission Valley, because its facilities (such as a gymnasium, arts and crafts rooms, meeting rooms and outdoor play facilities) are designed to appeal to youth and adults alike.

#### **OBJECTIVES**

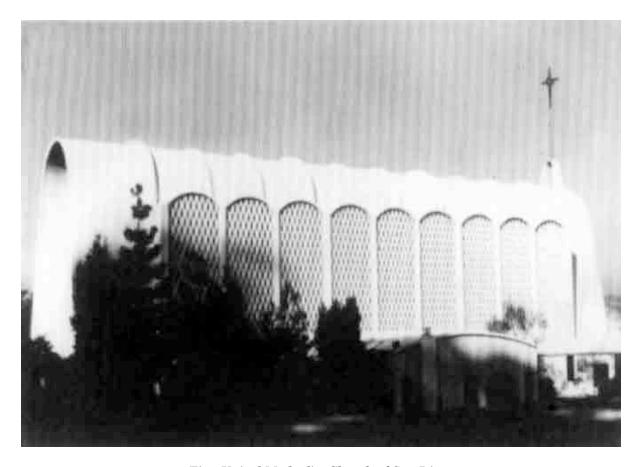
- Encourage cultural resources to locate in Mission Valley.
- Identify and preserve any archaeological or historic sites.

## **PROPOSALS**

- Conduct archaeological and paleontological surveys, when warranted, for projects requiring a discretionary permit.
- Should a site worthy of preservation be found, institute appropriate measures for its protection or for the salvage of the artifacts.
- Encourage location of neighborhood-oriented religious facilities in residential areas, and regional-oriented religious facilities outside of residential areas.
- Retain the Nazareth complex (orphanage, parochial school, retirement home) as an appropriate use for its location.
- Maintain view corridors to identified community landmarks as a means of establishing the

uniqueness and maintaining the visual qualities of the community and as a means of providing orientation within the valley. This can be accomplished, in part, through the use of Specific Plans and Planned Development permits.

• Review of historic sites, and archeological resources, geological and paleontological resources and geologic hazards should be included as part of project review.



First United Methodist Church of San Diego



# URBAN DESIGN

Urban design in Mission Valley is a process of identifying the form and function of the community and recommending guidelines for future development which will enhance that form and function, and tie the various components of the community together. There are two functional categories which will require special design considerations: 1) design protection areas (river, hillsides, landmarks); and 2) transportation corridors (freeways, streets, light rail transit). These categories are analyzed from a Valley-wide perspective.

## **DESIGN PROTECTION AREAS**

# San Diego River

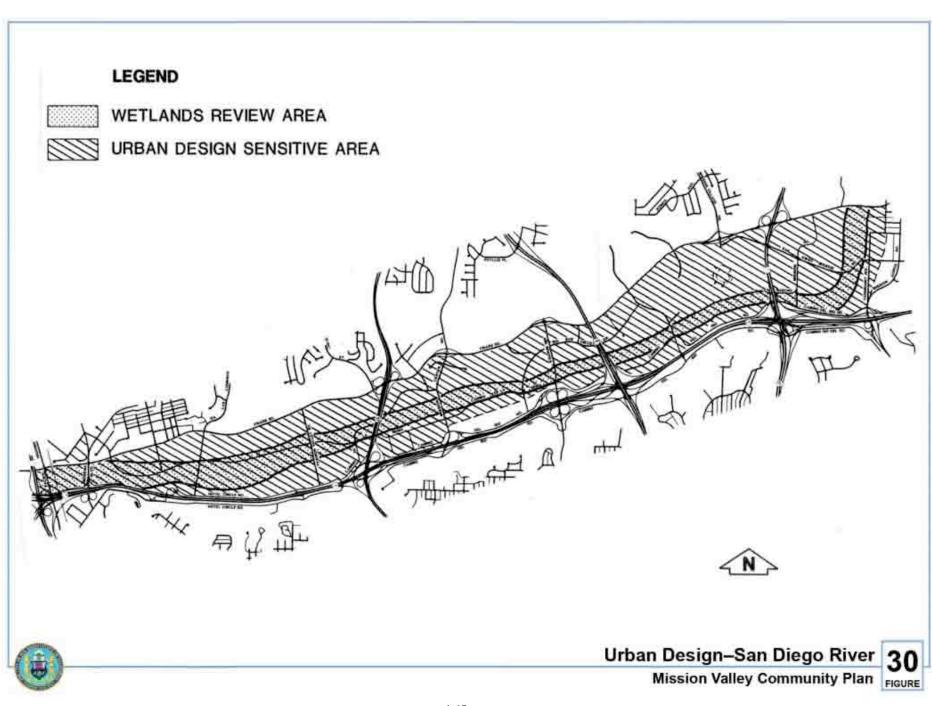
The river is the natural ribbon which ties the community together. It serves as a community identifying characteristic and as an aesthetic resource, providing a natural and pleasant setting for a variety of uses. The river is a key component of design in Mission Valley. It contributes to the linear quality of the community.

The areas immediately adjacent to the river corridor will require sensitive design treatment in order to relate development on either side of the river to each other, and to tie together developments up or downstream. To promote the river as the focus of activity, development (new and existing) should orient toward the river. Visual access (views) should also be maintained from public roads and other development.

Development projects could be designed with appropriate scale relationships between buildings and the adjacent open space features. The buildings should terrace or step down to the river corridor area. Parking and entrances should be located along access roads, leaving pedestrian areas and landscaping along the river. Setback requirements should be sufficient to provide a gradual transition between open space and development.

Visual and physical access to the river corridor are equally important design issues. Buildings should be sited so as to provide and/or maintain views of the river from public roads, the freeways, the mesas on either side of the community, and to maintain views across the river. Pedestrian access should also be encouraged along the river corridor. It can be in the form of paths, rest areas, jogging trails, or observation areas. Transit lines should run parallel to the river. They may be located within the buffer area, but should be separated from the river by some vegetation.

Because of the complexity of the river corridor issues, the development guidelines are divided into the following major categories: Flood Protection, Wetland Natural Habitat Conservation and Enhancement, Buffer Areas, Passive Recreation Areas, Open Space, View Enhancement, and Architectural Massing Considerations.



#### **DESIGN GUIDELINES**

#### **Flood Protection**

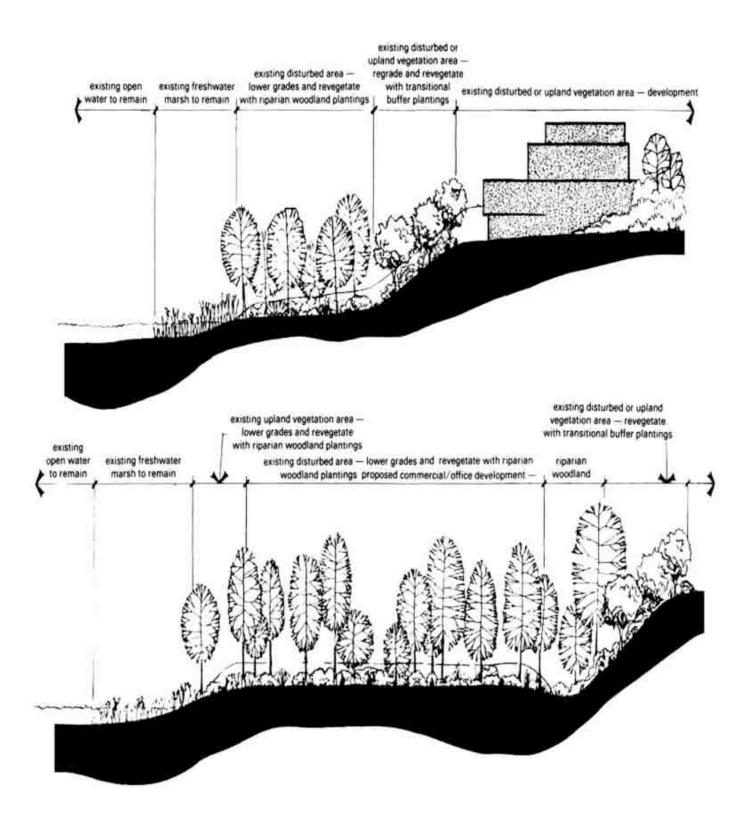
- The 100-year floodway zone protection should be maintained within the valley. The existing floodway zone line should be updated to carry the 100-year 49,000 cfs flood projected by the Army Corps of Engineers based on the river basin's buildout.
- Opportunities for modifying and realigning the existing floodway zone through construction of a man-made channel may be considered, as long as the channel is designed to carry the projected 100-year 49,000 cfs flood in a natural appearing facility. Additionally, this new facility will be required to implement the policies of the Wetlands Management Plan (**Appendix G**) and the urban design guidelines for riverfront development included in this section of the Plan. The new facility will be required to maintain a constant water flow velocity and provide erosion protection throughout its length.
- If modifications to the existing floodway zone are proposed on a project-by-project basis, the new project will be required to maintain existing safe water velocities and property values for adjacent properties.

#### **Wetlands Natural Habitat Conservation and Enhancement**

- The floodway should be designed as a natural appearing waterway with rehabilitation, revegetation and/or preservation of native wetland habitats. Open water, freshwater marsh areas, riparian woodlands, buffer areas and passive recreation areas should be designed in concert so as to form a complete open space system along the river.
- Natural environmental features should be preserved and recreated within the floodway proper and should be incorporated as much as possible in areas beyond the floodway boundary to maintain and enhance the habitat and aesthetic values of the river.
- When rehabilitation and recreation of the floodway-wetlands habitat is considered, open waters may become more extensive because of groundwater sources, although the water level will fluctuate with the seasons. Freshwater marsh vegetation will occur adjacent to and within water areas. Riparian woodlands should generally be located on the floodway slopes and on islands that may be created within the floodway. Woodland canopies should extend beyond the floodway into the private development area. A continuous revegetation corridor should be developed along both sides of the river. (For information on revegetation materials see **Appendix G**.)

## **Buffer Areas**

- Buffer areas are to be located along the entire length on both sides of the river. Private development shall not intrude into the floodway.
- The average width of the buffer for the entire length of the river area shall not be less than 20 feet. Maximum buffer widths should be at least 50 feet. A minimum buffer of ten feet should be assured.



- Buffer areas should be widest adjacent to the most sensitive habitat areas.
- Buffer areas should be planted with a combination of native trees, primarily riparian woodlands species and native shrubs of the coastal sage scrub community (**Appendix G**).
- Land uses within the buffer areas should include only the LRT Corridor, bikeway and pedestrian lanes and other passive recreation uses. LRT encroachments into buffer areas should take place in the wider sections of the buffer.

#### **Passive Recreation Areas**

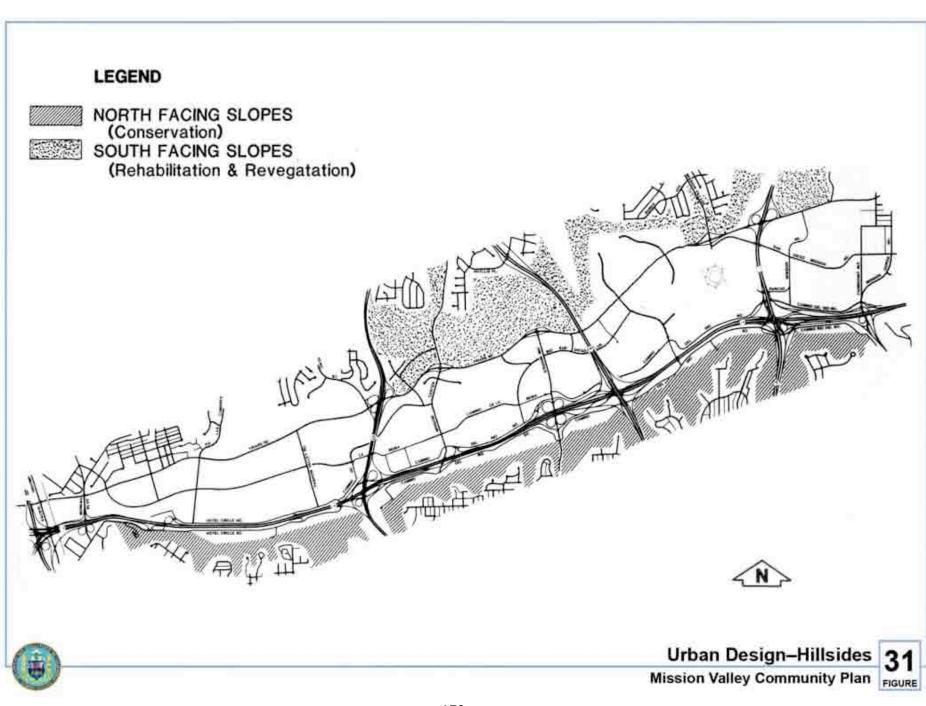
- Passive recreation facilities should be provided along the floodway, including picnic areas, benches, viewing areas, pedestrian and bicycle lanes, and other recreational activities such as a par course (exercise stations). These activities may take place within the 100-year floodway only in those areas where they avoid contact with the more sensitive wildlife habitat areas.
- Active recreation areas that may be developed within a project should be located away from the river and buffer areas, but should be visually and/or physically linked to the river corridor's passive recreation facilities.

# **Open Space**

- The river corridor is the dominant open space feature of the Mission Valley community, and is an important part of the San Diego River and the citywide open space systems. As such, it should be accessible to the public.
- Areas outside the river channel and riparian corridor should be landscaped and linked to the river corridor. The landscaping should be consistent with the native species in the river (see **Appendix G**).
- Private project recreational and urban plazas should be linked visually and/or physically to the river corridor in order to integrate them into the area-wide open space system.
- Public roadways directly linking the river to other portions of the community should be landscaped with trees native to the rivers and valley's ecosystem. Riparian woodland type of trees or drought-resistant and fast growing species should be used (see **Appendix G**).

# **View Enhancement**

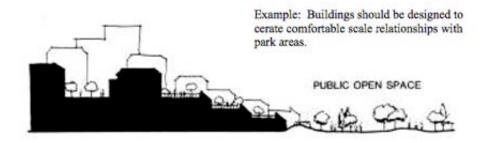
View considerations in relation to the river corridor are of two types. First: ground level views from public areas such as roads. These views primarily affect the siting of buildings. Second: aerial views from the hillsides into the river area and from public areas such as parks and roads in surrounding communities. These view considerations primarily affect the desired height and bulk of buildings. The following guidelines are designed to address the view quality issues:

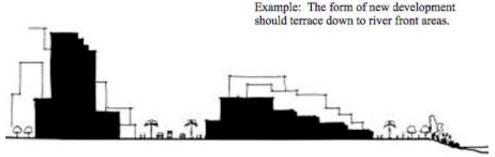


- Generally, ground level view corridors into the river corridor should be provided from public streets. This will require spacing between buildings and development of landscaped areas in relation to river view corridors.
- Curving streets provide special view qualities and are desirable when establishing view corridors. All development should be set back from these view corridors and landscaped see-through areas should be provided.
- To allow see-through at pedestrian levels, landscaping materials should include patterned paving and tall-canopied trees.
- In order to provide visual openings and pedestrian scale along the river, buildings or portions of the buildings nearest the river should be of lower profiles with building heights increasing as distances from the river increase. High-rise structures should be kept back from the river.
- Because of the view impacts of large low-rise buildings as seen from above, roof areas should be carefully designed to enclose mechanical equipment. Projects should also consider the development of roof forms and the use of roof materials that will have positive visual impacts by providing color and pattern. Strong consideration should be given to the use of roofs for recreation, such as terraces and landscaped parklike areas, in conjunction with project recreational activities or commercial activities such as restaurants.
- Private development should be designed with thought given to the creation of landmarks, which provide focal points and better visual orientation. Landmark qualities can be established through the development of vertical building elements, such as towers, and other special building forms, such as "campaniles," domes or other similar structural forms. These architectural forms are particularly applicable to urban centers in commercial developments which are the focal points of activity in the community.

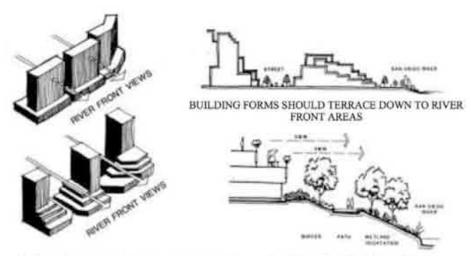
## **Architectural Massing**

- Development should orient towards the river.
- Development should be designed with appropriate scale relationships between buildings and adjacent open space features.
- Buildings should terrace or step down to the river corridor area.
- Parking areas and automobile access into development should be located along non-river frontage access roads, with wide pedestrian areas and landscaping located along the river.
- Building setback requirements should be sufficient in depth to provide a gradual transition between open space and development. Tall buildings will require larger setbacks than shorter buildings.





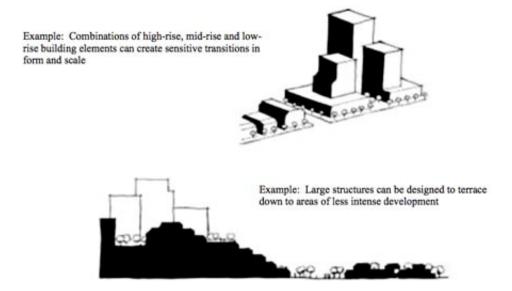
Development projects should be designed with appropriate scale relationships between buildings and adjacent open space features.



Example: Large developmental projects can be sensitively designed to avoid forming a "wall of development" that restricts views from surrounding areas. This is particularly important when considering development nearer to the rivers

VIEWSHEDS ACROSS THE RIVER SHOULD BE MAINTAINED OR ENHANCED

As development proceeds, existing views of the natural environment should be preserved and enhanced and new views should be created. The objective is not to provide panoramic views but to create urban views that are derived from relationships between the built environment and natural features of the area.

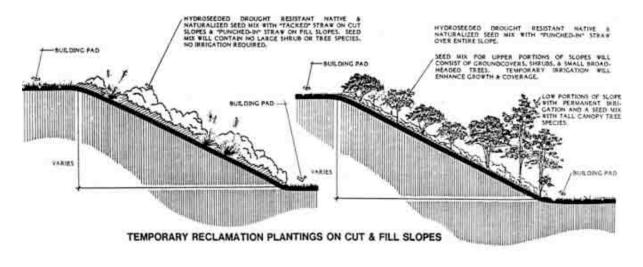


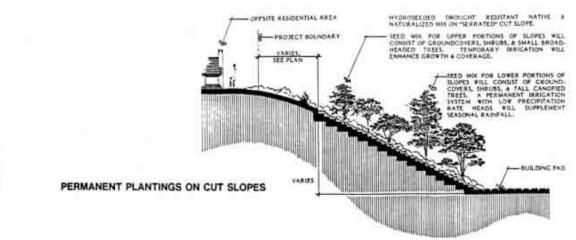
Design structures to create transitions in form and scale between large buildings and adjacent smaller buildings or areas of less intense development.

- Buildings should be sited so as to provide and/or maintain views of the river from public roads, the freeways, and the mesas on both sides of the valley, while maintaining views across the river.
- Building materials and design should enhance the aesthetic and biological value of the river. Reflective materials should not be used in the areas immediately adjacent to the floodway.
- Outdoor lighting in projects adjacent to the river corridor should be "directed" rather than "general" and should not illuminate native habitat areas except as required for public safety.
- Large development projects should be sensitively designed to avoid forming a wall of development that restricts views from surrounding areas. This may be accomplished by requiring greater setbacks for upper floors.

#### Hillsides

The hillsides (or valley walls) define the edges of the community. They also contribute to the form and linear quality of the Valley. The southern slopes are a continuous green edge, providing both relief from the urban development, and a buffer separating the floor of the valley and the mesa communities above. The shape of the slopes also provides design constraints for development at the base, either as a backdrop or a basis for the creation of compatible forms. The northern slopes on the other hand need to be re-contoured and rehabilitated. Design guidelines have been developed separately for the south and north slopes.





## **DESIGN GUIDELINES**

# **South Slopes**

- The existing natural slopes should be preserved. Development should use the slopes as a backdrop and as a guide to building form. By clustering, contouring and terracing structures into the site, the form of the slopes can be preserved.
- Development should be clustered in portions of the slope that have already been disturbed or that are sparsely vegetated, in order to maintain a greater portion of the area in its natural state.
- All hillside areas left in natural state should be maintained in a dedicated open space easement.
- Automobile access should be carefully designed to provide the minimum possible disruption of the hillside. When necessary to avoid excessive grading, automobile access should be located adjacent to street access and separated from the habitable building sections. The linkages from the street to the building should be made through pedestrian ways, bikeways, etc., which may be easier to incorporate into a hillside condition.
- All hillside graded areas should be revegetated with native local flora (see **Appendix F**).

# **North Slopes**

- Regraded areas should maintain a slope ratio of 2:1. Grading should be sculptured in an effort to recreate natural slopes and contours.
- Slope areas should be seeded with native local vegetation (see **Appendix F**).
- Development should occur at the base of the slope in order to leave the slope area to mirror the greenbelt effect of the southern hillsides.
- When development occurs beyond the base of the hillsides, in the terraces formed by the recreated grading, the development profile should be very low.
- Buildings and parking areas should be adapted to the terrain. This includes the terracing of buildings either up or down a slope. In addition to providing views and terraced outdoor "deck" areas, the visual impact on the slopes is minimized.
- Variable slope gradients are encouraged in reconstructed slope areas.
- In general, sharp angular forms should be rounded and smoothed to blend with the natural terrain.
- During construction, measures shall be taken to control runoff from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms or lines of straw bales are a few of the techniques that should be considered.
- Grading shall be phased so that prompt revegetation or construction can control erosion. Only those areas which will later be resurfaced, landscaped or built on, should be disturbed. Resurfacing of parking lots and roadways should take place as soon as possible and not wait until the completion of construction.
- Graded slopes shall be promptly revegetated with groundcover or a combination of groundcover, shrubs and trees. Hydro-seeding may substitute for container plantings. Groundcovers should have moderate to high erosion control qualities (see **Appendix F**).

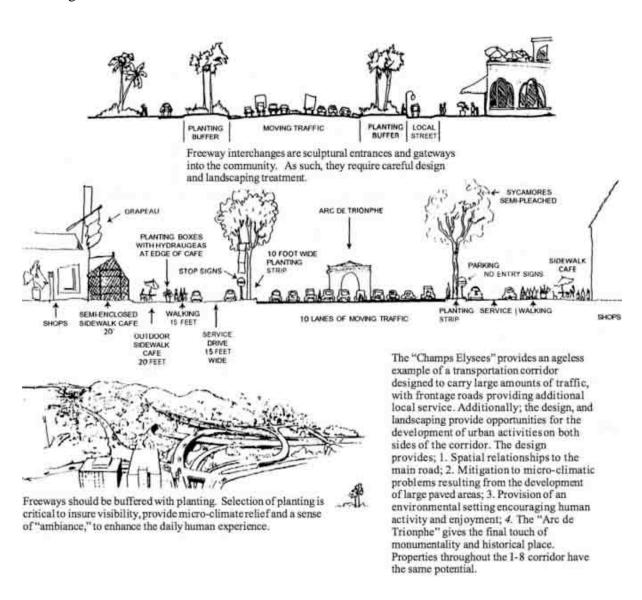
## Landmarks

Community landmarks such as the Presidio (Serra Museum), Mission San Diego de Alcala, San Diego Jack Murphy Stadium, and the Jack Schrade Bridge (I-805) establish areas that require special design considerations. These landmarks provide a community identity and, as such, they should remain highly visible.

## **DESIGN GUIDELINES**

• New development located nearby should complement the landmarks, and should be sited so as not to hide them from view. Special development considerations should be established within the landmark view sensitive areas of the Plan.

- Development near the Mission should be low in scale and complementary to the Spanish period architecture.
- Development near the Jack Schrade Bridge should use the bridge to frame the project, perhaps even incorporating some of its form into the design of new buildings
- Development surrounding the San Diego stadium should maintain view corridors and landscaped areas to enhance the views into this major civic and architectural landmark.
- The gateways, or entrances into the community are another type of landmark. Being
  crisscrossed by regional freeways, Mission Valley has many of them. Each should provide
  a clear view into, as well as through the community. New development located at these
  entrances will also become community landmarks, and should be designed with that
  thought in mind.



#### TRANSPORTATION CORRIDORS

Transportation corridors, particularly in Mission Valley, are not only functional, but they contribute to the overall character of the community. In the Valley, they also function as a major user of land. As such, it is important that they make a positive contribution to this linear community. These corridors include freeways, major roads, local streets, and transit lines. Pedestrian walkways are also included as a transportation corridor with special design needs.

## **Freeways**

The typical engineering function of the freeway is to transport vehicles on a regional basis. They are designed to perform this function. In Mission Valley the freeways are not only a major component of the community's transportation system, but they are also a key physical feature. As such, a careful design treatment of the freeway corridors will contribute positively to the overall visual character of the community.

## **DESIGN GUIDELINES**

- Freeways should be buffered from adjacent frontage roads by landscaping. Landscaping not only provides visual relief but also helps reduce the effect of some of the heat and noise generated by the freeway traffic.
- Landscaping along the north-south freeway corridors (SR-163, I-805, I-15) should be designed to enhance the hillsides that frame these freeways as they enter the valley. Such landscaping will help to define the freeways as view corridors and entrance/gateways into the community.
- The freeways themselves are massive structures. At several points in the valley, these structures are elevated, providing useable space underneath (163, I-805, I-15). These spaces maybe used for transit stops, or pedestrian areas, park space, and public art areas, provided noise levels are compatible with such activities. The freeway structures themselves provide sculptural forms that can be complemented with park like landscaping underneath.
- Interstate 8 is eligible for designation as a State Scenic Highway and future consideration should be given to designating it as a State Scenic Highway.
- Specific plans should incorporate comprehensive sign programs as part of their development guidelines.
- Signage for adjacent developments should be compatible and not attempt to "out shout" each other.
- Signage should be designed to complement the architectural design of buildings and developments.

# LEGEND COMMUNITY ENTRANCES LANDMARK/VIEW SENSITIVE AREAS PRESIDO UNIVERSITY OF SAN DIEGO JACK SCHRADE BRIDGE SAN DIEGO-JACK MURPHY STADIUM MISSION SAN DIEGO DE ALCALA



Urban Design-Landmarks and Community Entrances 32

Mission Valley Community Plan FIGURE

# **Major Roads**

The function of major roads is to transport vehicles throughout the community. In Mission Valley, they connect the distant sections of the community and the various uses. Large-scale developments take access directly from these major roads. The major roads provide an important urban design element connecting individual projects. This aspect requires careful design consideration

#### **DESIGN GUIDELINES**

- Street trees should be provided along major streets. Trees should be long-lived (60 years) deep-rooted, evergreen, require little maintenance and be structurally strong, insect and disease resistant and require little pruning (see **Appendix F**).
- Street trees should be planted in the sidewalk between the parking or traffic lane and the pedestrian walk area, to provide greater pedestrian safety, and better delineate pedestrian spaces along the street.
- To allow visibility at pedestrian levels, landscaping materials should include tall trees with canopy areas, rather than short bushy trees.
- In the interest of maintaining sight distances and public safety, trees shall be planted no closer than 25 feet from the beginning of curb returns at intersections; ten feet from street lights; ten feet from fire hydrants; and, ten feet from driveways.
- Pedestrian sidewalks along major streets should have at least an eight-foot clear corridor.
   In areas of high intensity commercial development this clear sidewalk should be increased to a minimum of ten feet.
- Landscaped medians are highly desirable along major east-west streets, and their development should be encouraged. The landscaped material should be primarily tallcanopied trees and low maintenance ground cover.
- Major and collector street design should include space and design for transit stops (bus, LRT, taxis).
- Collector streets should receive the same design considerations as major streets.

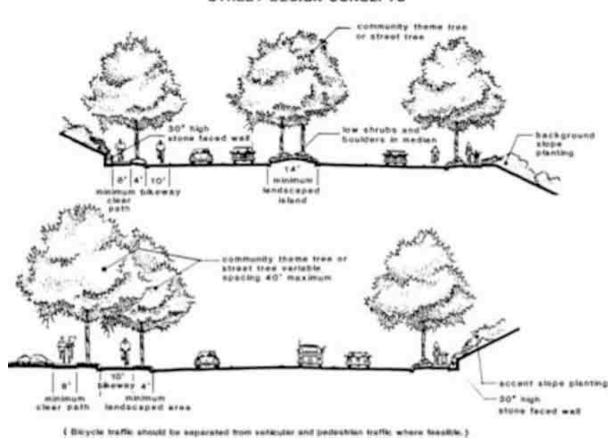
#### **Local Streets**

The function of a local street is to carry vehicles for short trips at relatively slow speeds and to facilitate the movement of pedestrians. These streets are relatively narrow, and provide access to residential developments and small commercial centers.

## **DESIGN GUIDELINES**

- Pedestrian sidewalks along local streets should have at least a six-foot clear path corridor. In areas of higher intensity residential development (exceeding 30 dwelling units/acre) the pedestrian clear path should be at least eight feet wide.
- On local streets near the San Diego River open space area, street trees should be compatible with the native vegetation along the river corridor (see **Appendix G**).

#### STREET DESIGN CONCEPTS



- To allow visibility at pedestrian levels, landscaping materials should include tall trees with canopy areas, rather than short and bushy trees.
- Street tree species on local streets should vary from project to project, to allow some identification with each project and neighborhood. Flowering trees are desirable since they help provide greater identity (see **Appendix F**).
- Local street design should also include such features as benches, public telephones and drinking fountains.
- Commercial development located along local streets should orient toward the street. Commercial uses should occupy the ground floor areas fronting on the street. Street frontage ground floor commercial uses are particularly important.

## **Parking Areas**

Parking areas are typically closely related to the street system. They provide the first impression and identification of a project, when a client, resident or employee first arrives. Therefore it is important that first impressions be pleasant and provide much needed identification. The following guidelines should be considered to assure high quality design in parking areas.



PARKING AREAS ADJACENT TO STREETS SHOULD BE SCREENED



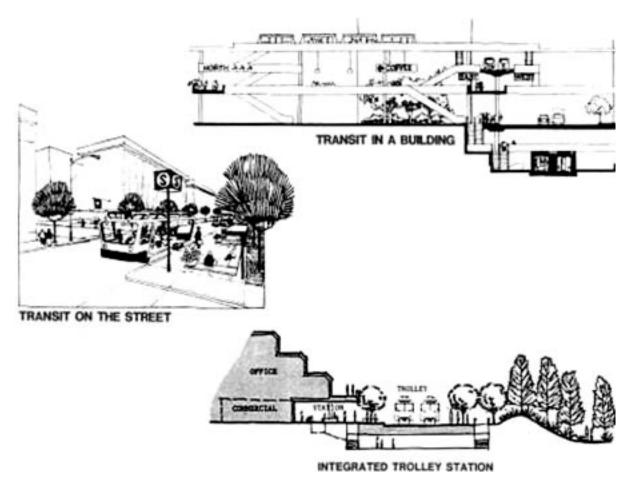
BROAD HEADED TREES SHOULD BE UTILIZED IN PARKING AREAS.



PARKING STRUCTURES SHOULD BE SCREENED FROM STREET VIEWS WHERE POSSIBLE. PLANT MATERIAL COULD ALSO BE USED TO CREATE INTEREST.

## **DESIGN GUIDELINES**

- Trees and other plants should be dominant elements of major entries into projects, particularly those entries into parking areas.
- Round headed, rather than upright trees should be utilized in parking areas.
- Parking lot trees should have a mature height and spread of at least 30 feet. They should also be long-lived (60 years), clean, require little maintenance, and be structurally strong, insect and disease-resistant, and require little pruning.
- A minimum ten percent of the parking lot area should be landscaped. Landscaping areas should be distributed between the periphery and interior landscaping islands and be designed to break up large paved areas. Landscaping islands should be a minimum ten feet wide.
- Parking lot landscaping should include primarily ground cover and tall-canopied trees, instead of bushes or short bushy trees,
- To screen parking lots and structures from the street, large dense shrubs may be massed at the edge of the parking area. Trees and shrubs can be combined with earth berms to screen adjacent parking areas.



- Turf areas should be minimized except where recreation areas are required. Turf for strict visual reasons (except at major entries) should be minimized because of the high water use and maintenance costs.
- Instead of extensive parking lot landscaping, development proposals may want to utilize the option of using patterned paving. If a parking lot is designed with patterned paving, interior-landscaping requirements may be reduced, based on the requirements of individual projects.

# **Light Rail Transit**

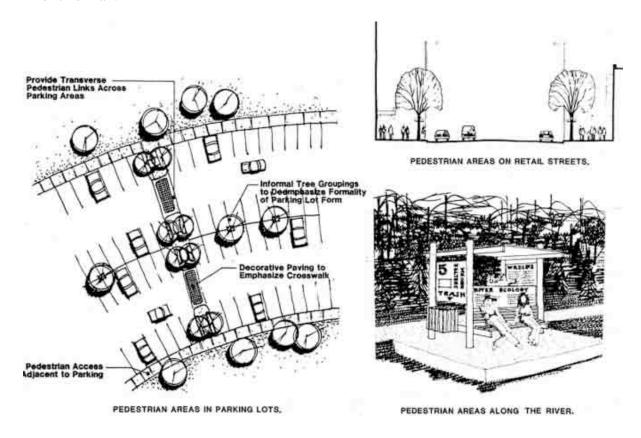
The proposed LRT system will function as an important link in the regional transit system. At the same time, it will be critical to coordinate its alignment, design, and linkage with other Mission Valley transit facilities and future development patterns, if the system is to meet subregional or community-wide needs within the valley.

## **DESIGN GUIDELINES**

• LRT stops should be located to maximize access from more intensely developed areas, and to optimize connections with other transit services. Transit stops should be pedestrian oriented. In order to provide the design orientation, transit stops should include shelters,

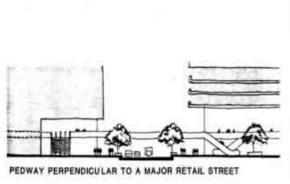
canopies, and patterned sidewalks, information kiosks, benches, and other pedestrianoriented amenities. LRT stops located within building developments are highly desirable. Development proposals should consider such location in terms of their public spaces, access, zoning and adjacent land uses.

- Instances of LRT encroachment into the wetland buffer areas should be minimized. Where, because of previous development, it is necessary to have such an encroachment, and the landscaped buffer area is reduced, an increased landscaped buffer should be provided in other areas along the corridor as compensation.
- Where previous development requires that the LRT encroach into the wetlands, wetland
  replacement or enhancement will be required consistent with the conceptual requirements
  of the environmental agencies in charge, and the Wetlands Management Plan Element
  of this Plan.



#### **Pedestrian Areas**

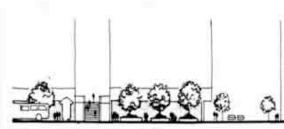
Pedestrian areas are an important and previously ignored aspect of design in Mission Valley. The only significant existing pedestrian areas are enclosed within the two major shopping centers. Everywhere else, the pedestrian is discouraged. The various developments are connected only by roads without sidewalks or anything of interest to the pedestrian. Pedestrian areas can be a route from one destination to another or a destination in itself.









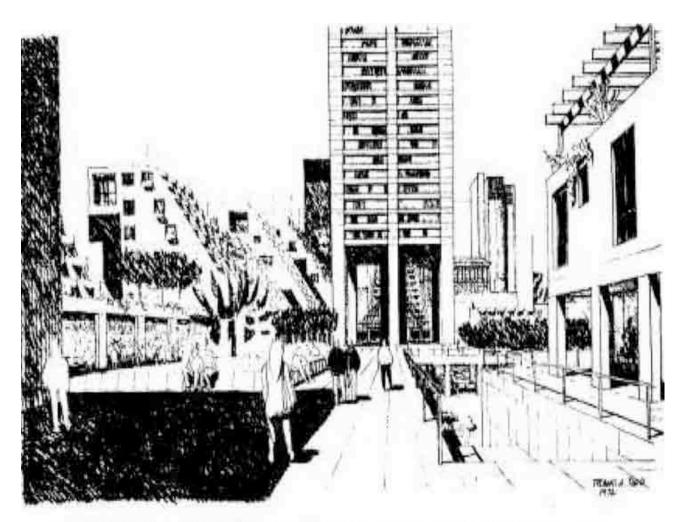


However, pedestrian areas provide expanded opportunities for local access and circulation needs within the community. The function of pedestrian areas or walkways is to provide a safe route for foot travel and access to gathering places and recreational facilities. Typical areas of design concern for pedestrian activities are sidewalks, open space walkways, malls, recreational centers, plazas, bridges, overpasses and skyways.

## **DESIGN GUIDELINES**

- Pedestrian areas should include safe routes between developments, preferably separated from vehicular traffic. They should provide interest to the walker so as to promote their use. Interest can be created by paving materials, undulating slopes, landscaping, retail uses, public events (concerts, sidewalk sales, other gatherings, etc.), selling of food (cafes or vendors), and public art such as urban sculpture. Pedestrian areas should also include sitting areas and adequate lighting. Along the river corridor, pedestrian areas might also include observation areas and walks with exhibits featuring wetland habitat descriptions.
- All pedestrian walks should have a minimum width of six feet in order to encourage pedestrian use. In areas of higher development intensity, widths of ten feet to 20 feet should be considered. Pedestrian sidewalk width guidelines are incorporated in the street design section of this section.

- Pedestrian crossings of streets or parking lots should be identified through special paving and design materials. This technique should be used to provide access pedestrian areas across low volume and low speed streets.
- Pedestrian bridges should be provided to connect high activity areas across high speed, high volume streets. Their location should be designed to provide the most direct pedestrian access possible. Bridge access should not be hidden from view of pedestrian centers of activity.
- Pedestrian bridge design should incorporate handicapped access. The span and structure should also be treated simply and sculpturally, since it provides a gateway effect to the street, or the space below.
- Pedestrian tunnels may be developed under special conditions as alternatives to bridges. Where this is the case, the tunnel should be well illuminated, and include commercial and other people gathering activities to provide better personal security.
- Pedestrian areas should incorporate patterned paving to give them more visual prominence, human scale, and beauty.
- Pedestrian connections between buildings at elevations higher than the second or third floors of buildings may be highly desirable to provide greater building activity resulting from the connections and the greater land use mixtures. These connectors are known as skyways and they provide a pedestrian network that provides safe and efficient means of foot travel within high-intensity areas and urban areas. Skyways are typically enclosed, although they can also be open.
- Skyways should not angle up or down from one building to another when internal floorlevel adjustments can be made.
  - Skyways should provide transparent areas, glass, or be non-enclosed for security and for pedestrian orientation.
- Skyway and pedestrian bridge widths should allow for adequate passage of pedestrians at peak travel hours. A common width now in use is 12 to 15 feet minimum.
- Continuous indirect lighting should be incorporated into skyways and bridges as well as interior building pathways to supplement natural light sources and to increase security.
- Skyway and bridge building materials should be selected for ease of maintenance and replacement.
- Skyway and bridge directional signage is an important, aspect of skyway and bridge design. There should be directional signage coordination for skyways and bridges throughout the valley.
- Private project recreational and/or urban plazas should be linked visually and/or physically
  to the open space corridor, in order to integrate them into the area wide-open space
  system.



APPROPRIATE BUILDING BULK AND ORIENTATION CREATES BETTER SUN EXPOSURE FOR PEDESTRIAN ACTIVITY AREAS, IN A MIXED USE PROJECT.

## **ENERGY AND CONSERVATION CONSIDERATIONS**

The need for proper energy planning and conservation has become readily apparent in recent years. Shortages in traditional energy sources, as well as loss of non-renewable sources, coupled with spiraling prices make it important that steps be taken to control and conserve the amount of energy expended on both local and national levels. Energy planning and conservation issues are expected to become even more important in the future. Therefore, it is important that issues relative to these subjects be identified.

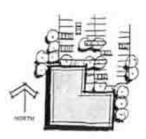
The design guidelines address building circulation, fenestration, color, treatment of roofs, building location relative to public plaza spaces, application to mechanical equipment, multiple use opportunities for the designs of mechanical equipment, and desirable landscaping types.

#### Solar Access

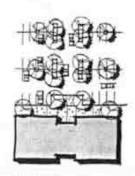
## **DESIGN GUIDELINES:**

- Building location and height should be carefully considered in relation to public spaces.
   Plazas and other public spaces should not be totally kept in shadows, and should be protected from excessive wind conditions.
- Buildings should orient the majority of their glass areas to the south, and deciduous trees should be located on that southern facade. This allows sun to warn the building in winter, when it is highly desirable, while providing shade in the warmer summer months.
- Building facades should incorporate overhangs to shade direct sun and reduce heat gain.
- Roof surfaces should be constructed of highly reflective material to reduce solar roof loads, unless a passive heat system is employed.
- Sloped roof surfaces ideally should be located facing the south, and at an angle that can accommodate later retrofitting for solar energy.
- Building colors should be carefully considered in order to minimize heat transfer into building structures.
- Building facades should incorporate overhangs or canopies to shade direct sun and reduce heat gain.
- In commercial buildings, nearly 50 percent of the energy is used for lighting purposes. Approximately 33 percent of the total building energy is consumed by environmental comfort systems. Natural daylight should be used as a conservation technique.
- Buildings should not solely depend on mechanical systems for ventilation. Building design should encourage natural ventilation.
- To reduce solar reflection on buildings, parking areas with large paved surfaces should be located to the east and north of adjacent buildings.
- Evergreen trees should be placed on the west side of buildings to provide protection from prevailing winds.
- The installation of active solar hot water and solar heating systems should be considered for buildings. Rooftop solar energy collectors should be designed as an integral part of the building form. The roof slopes necessary for the energy collector are important and possible determinants of architectural shapes. If rooftop solar energy collectors are to be utilized by a building complex subsequent to original building construction, an appropriate add-on design that integrates the collectors into the building form should be required.

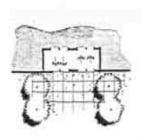
# SOLAR DESIGN CONCEPTS



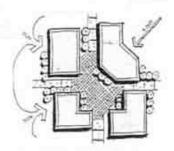
LARGE PARKING AREAS SHOULD BE LOCATED EAST & NORTH OF ADJACENT STRUCTURES TO REDUCE SQUAR REFLECTION



INCORPORATE DECIDUOUS TREES INTO PLANTING PLANS NEAR BUILDINGS & LARGE PAYED AREAS



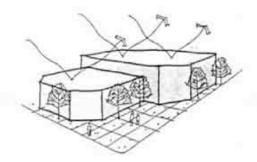
IER UTILIZING VESTIBULES AT ENTRYWAYS TO REDUCE HEAT OR COLD INFILTRATION.



WHERE PLAZAS ARE UTILIZED, BUILDINGS OF APPROPRIATE HEIGHT SHOULD BE CLUSTERED TO PROVIDE PROTECTION FROM SUN AND WIND.



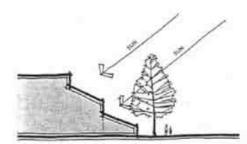
BUILDINGS SHOULD BE DESIGNED TO ENCOURAGE NATURAL VENTILATION



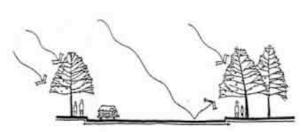
HOOF SURFACES SHOULD BE CONSTRUCTED OF HIGHLY REFLECTIVE MAYERIAL TO REDUCE SOLAR ROOF LOADS. UNLESS A PASSIVE HEAT SYSTEM IS EMPLOYED.



BUILDING FACADES SHOULD INCORPORATE OVERHANGE TO SHADE DIRECT SUN & REDUCE HEAT GAIN.



DRIENT THE MAJORITY OF GLASS AREAS ON BUILDINGS TO THE BOUTH & LOCATE DECIDIOLIS TREES ADJACENT.



MINIMIZE STREET & PARKING SURFACES FOR SOLAR REFLECTION & HEAT RADIATION CONTROL

#### **Water Conservation**

## **DESIGN GUIDELINES**

- Buildings should be designed with mechanisms that will reduce water consumption. The
  following water saving devices should be considered: Low flow plumbing fixtures; cycle
  adjustment machines; pressure regulators to maintain water pressure to desirable
  conservation levels; hot water pipe insulation; and, automatic sprinkler systems.
- Water should be conserved by using low maintenance drought tolerant plant material, and the use of inert landscape materials (rocks, gravel, ornamental paving) and sculptured forms.
- Drip irrigation systems should be encouraged.
- Reclaimed water use should be encouraged, particularly for large master planned projects.
- Mechanical equipment in buildings should either be buffered and hidden from view, or should be sculptural. For example; cooling towers, when necessary, could be designed as fountains.
- **Appendix D** provides specific recommendations for water conservation.

#### NOISE CONSIDERATIONS

Because of the Valley's elongated shape, its intensive freeway system and projects may be subjected to noise levels in excess of City standards. Design guidelines are necessary to guide development to meet the noise standards desirable for development in the Valley.

## DESIGN GUIDELINES

- Landscaped earthen berms should be constructed to reduce noise effects. Earthen berms of the same height as a wall are as effective in reducing noise, but have greater design appeal and appearance when fully landscaped. Other effective methods are building setbacks, or elevation differences.
- Non-sensitive land uses, such as garages, parking lots, or recreational areas should be sited adjacent to major noise producing roadways and freeways.

## STREET GRAPHICS

Mission Valley is a developing urban community and this **Urban Design Element** is intended to provide a full range of development guidelines which are intended to result in an aesthetically pleasing community. One important aspect of urban design that is often ignored is that of street graphics.

Street graphics is a rather broad term which, for the purposes of this document, is intended to encompass both public and private signing and to establish a basis upon which a comprehensive signage program can be developed for Mission Valley.

## **DESIGN GUIDELINES**

- A special sign district should be developed for Mission Valley.
- Signs should perform the function of providing directions and information to both the motorist and the pedestrian.
- A unique public signage design program should be developed. This would include street identification signs and directional signs.
- High-rise buildings should be identified by symbols and graphic designs rather than by full building width lettering.
- Signage should be designed to complement the architectural design of buildings and developments.





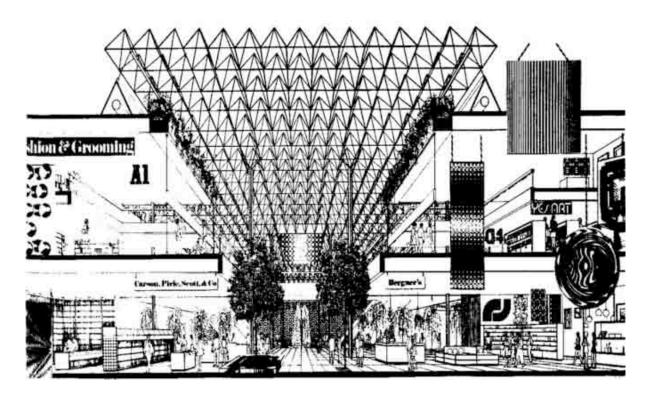
- Specific plans should incorporate comprehensive sign programs as part of their development guidelines.
- Signage for adjacent developments should be compatible and not attempt to "out shout" each other.

## WATER RECLAMATION PLANT

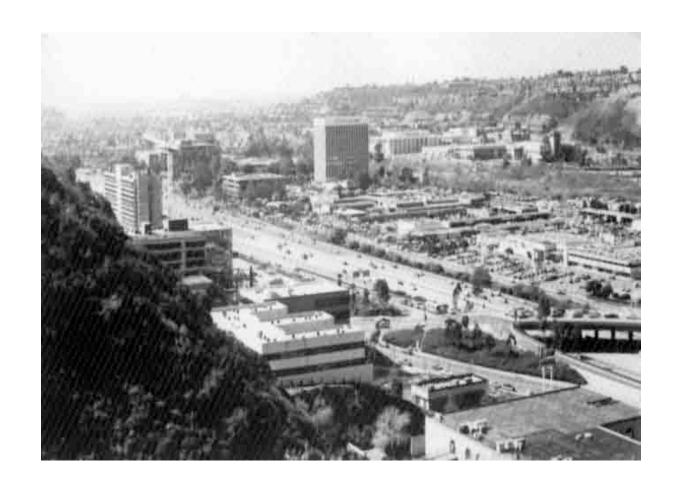
The following design guidelines should be applied to the Mission Valley Water Reclamation Plant.

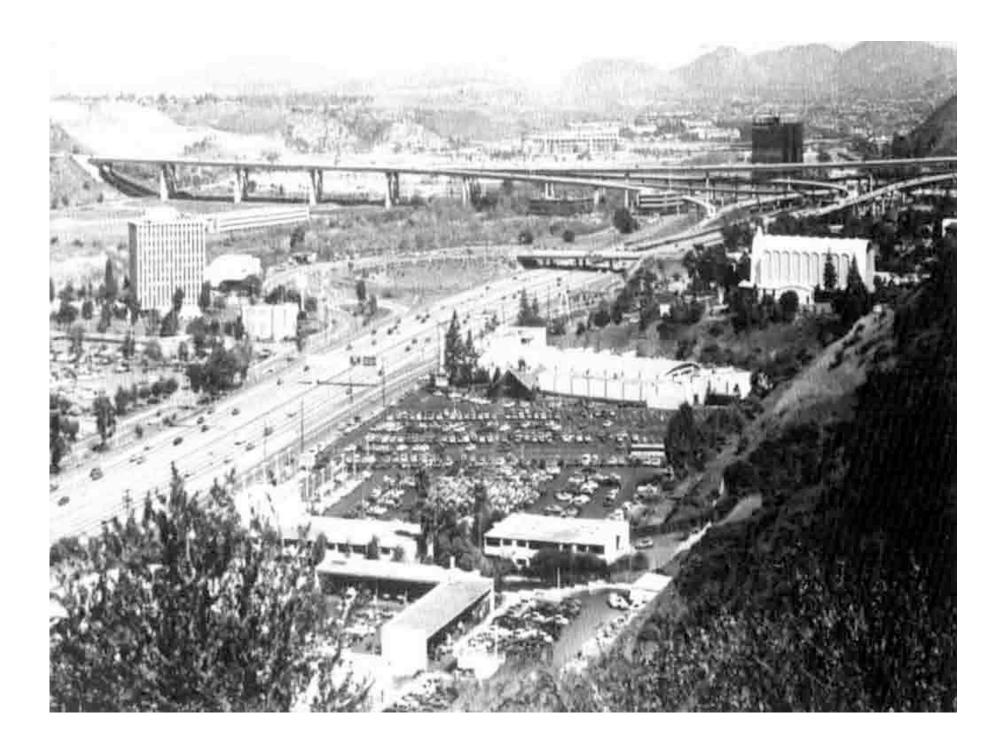
- Buildings should be designed to present an attractive facade, blend in with the surrounding commercial area and not appear extravagant or too different.
- The use of reflective glass should be minimized.
- Machinery, ventilating facilities and other equipment should be screened as much as possible.
- Site layout and roof treatments should be sensitively designed to present a positive view from above.

- Screening, in the form of fences or walls, should be used to screen plant facilities from adjacent areas. Chain-link fencing should not be used.
- Extensive landscaping should be provided on-site. Landscaping requirements of the
  Mission Valley Community Plan, the Mission Valley Planned District Ordinance and the
  citywide Landscape Technical Manual should be used in designing a landscape plan for
  the site.
- Along Camino del Rio North, provide an eight-foot parkway with a ten-foot noncontiguous sidewalk. Street trees in conformance with the Plan should provided in the parkway.
- Odors emanating from the site should be minimized.
- Lighting should be directed on-site. No lighting should be cast in the direction of the San Diego River.
- Realignment of Camino del Rio North should stay out of the 100-year FW boundary.



Signage should be designed to complement the architectural design of buildings.





# **IMPLEMENTATION**

The Plan sets forth proposals to guide the short-term and long-range development of the Mission Valley community. While some of the proposals outlined in this Plan are generalizations, others are, in effect, specific actions. The Plan is comprehensive in that it includes all-important aspects of the community. However, several issues and solutions to problems have been left unanswered in this report because of the need for subsequent studies which must be undertaken before more specific recommendations can be made. This section of the Plan lists steps necessary to put the Plan into effect. Specific implementation mechanisms and responsibilities will be determined following the Plan's review by all City Departments.

## PUBLIC FACILITIES FINANCING

Several major public facilities will have to be constructed in order to realize Mission Valley's development intensity potential. These facilities include a 100-year capacity flood control facility, major new surface streets, freeway interchange improvements, and public utilities (sewer, water, etc.) and will include a future regional light rail transit line with an intra-Valley transit or "people mover." In addition, consideration should also be given to improving bus service provided by San Diego Transit through the use of assessment district funding. San Diego Transit can provide a necessary feeder service to the LRT and can ultimately increase the level of service currently available in the Valley by providing more routes and more frequent service. Since there will be direct benefits accruing to individual properties (public and private) within the Valley from the development of these facilities, it is incumbent upon these properties to assume the costs of these improvements, much in the same manner as newly developing communities finance their public facilities (based on the General Plan and City Council policies).

It may be advisable to establish an overall Improvements Assessment District or numerous smaller districts to ensure that the improvements are built and adequately financed, since the costs of the facilities will be paid by property owners (both private and public). The assessment district(s) will include all properties which would benefit from the improvements, participating being on a pro rata share of benefit received. The assessment district(s) will be based on specific projects in order to best determine benefit. If several projects propose public improvements which can be constructed concurrently, then the various assessments may be combined in a single district.

In lieu of providing improvements via a single or multiple assessment district(s), property owners may opt to use the following alternative methods of financing needed improvements:

- 1. Development agreements (a contract between the City and the property owners outlining the improvements and financial responsibility for their construction and maintenance pursuant to the State Government Code or other forms of contractual agreements).
- 2. Private agreements among property owners.
- 3. Districts in arrears (establishment of an assessment district or issuance of a bond after the improvements have been constructed in order to recover the costs).

- 4. Cost recovery (a fee is charged to the users of the improvements to recover the costs of construction).
- 5 Subdivision agreements and conditions.
- 6. Cash.
- 7. Other methods acceptable to The City of San Diego.

Additionally, properties that provide improvements, consistent with the assessment district standards, as part of development projects would be credited with a value commensurate with their assessments. Recent projects in which developers have already provided or contributed toward the completion of the necessary facilities are to be given credit for those specific improvements. In addition, as an assessment option, physical improvements, financial or land contributions for improvements, or development of public facilities such as parks and libraries in lieu of direct payment of assessments may be considered. The magnitude of the future public facilities required in Mission Valley strongly suggests that the landowners and responsible government agencies work closely together to minimize cost and ensure their timely installation.

## **SCHOOLS**

The General Plan includes two primary goals (or the provision of public schools. These goals are: 1) the provision of a public school system that enables all students to realize their highest potentials, and 2) to actively pursue the implementation of the balanced community concept, thereby causing integrated schools through integrated residential neighborhoods.

The City of San Diego through Council Policy 600-10 requires that schools as well as other public facilities be available concurrent with need in the development. In addition, City Council Policy 600-22 requires basic information of the school districts pertaining to school availability and the impact on schools by proposed rezoning changes and new housing developments. To implement the City of San Diego Council policies, enrollment capacities for each school are updated on an annual basis. Under the City's policies, developers are responsible for the cost of incremental facilities required to house students expected to reside in the proposed development.

Although the Plan area is in an urbanized area and does not require a letter of school availability according to Council Policy 600-22, the school districts must supply school data pertinent to the proposed development. The Mission Valley community is unique in that it is lacking any public schools within its boundaries. This fact and the geographic features of the Valley itself could make adjacent schools more difficult to access. For these reasons, the distances of the existing schools from the proposed residential development and the availability of schools in general are of concern.

The issues of school availability and access are provided for in this plan, thereby meeting the goals of the General Plan and Council Policies 600-10 and 600-22. The developers of residential projects should reach an agreement with the school district on the provision of school facilities or access to these facilities, as considered necessary by the school district. Submittal of agreements to the City should be made a condition of approval for future development plans or Subdivision Maps.

#### TRANSPORTATION IMPROVEMENTS PHASING

The Mission Valley traffic forecasts have identified the ultimate improvements to the transportation network that will be needed in the Valley. Each of these improvements have been phased, based upon the amount of development that occurs in different areas of Mission Valley. As development proceeds in these various areas, street and ramp improvements will be required at certain stages before any additional final maps and/or rezonings will be approved.

Equivalent Dwelling Units (EDU) have been selected to translate different type of development into a common denominator. The EDU factor for each type of land use in Mission Valley is listed in **Appendix A**. In order to monitor the EDU's in Mission Valley, the Valley was divided into twelve sectors, basically along the San Diego River and the north-south freeways (see **Figure A-1**, **Appendix Section**). These sectors were grouped together according to which street or ramp improvements will be required because of development in those areas (**Table A-2** and **Figure A-2**, **Appendix Section**). **Table A-2** indicates the maximum amount of EDU's that can be developed within a group of sectors before certain street improvements are necessary. These EDU totals exclude any projects that are underway or have approved tentative or final maps. If a new project replaces an existing land use, only the difference in EDU's between the new and old use should be counted in monitoring total EDU's. Notice that some of the groups have several levels of development that require different road improvements.

Group A from **Table A-2** includes five street improvements which would be required in the immediate future if all of the approved tentative maps in Mission Valley follow through to completed projects. Existing tentative maps which become final maps should be monitored so the improvements in Group A can be implemented at the appropriate time.

This phasing plan for Mission Valley's street improvements is not time-specific, but rather based on land development. The phasing plan is meant to be used as a general guide so that adequate street facilities are in place as development progresses. If various areas of the Valley build out before others do, then the phasing plan should be reassessed to accommodate unforeseen imbalances.

#### LEGISLATIVE IMPLEMENTATION

• Concurrent plan amendments to the Linda Vista Community Plan and the Serra Mesa Community Plan. The Linda Vista Community will be amended to provide for development intensity regulations along the north side of Friars Road for those parcels of land which have primary access to Friars Road and depend upon the Mission Valley circulation system. The Serra Mesa Community Plan will be amended to delete the sand and gravel extraction areas on the north side of Friars Road and other related areas on the north side of Friars Road from the Community Plan. These areas will be incorporated into the Mission Valley Community Plan.

Zoning legislation in the form of a Development Intensity District ordinance will be formulated which will regulate the intensity of new development and redevelopment by establishing relationships with traffic generation factors.

Transfer of Development Rights legislation will be formulated and implemented as part of the Development Intensity District legislation program.

- Interim zoning legislation can be established for the time period between community plan adoption and adoption of plan implementation legislation.
- A San Diego River Design District will be established which will guide development and redevelopment of properties adjacent to the river. Critical aspects of this district will be relationships between development and the wetlands .habitat, the LRT, the flood facility, open space and urban design.
- A Hillside Conservation and Rehabilitation District will be developed and utilized to
  protect the hillsides and to upgrade those portions of the hillsides which have been
  damaged.
- A South Mission Valley Height Limitation Ordinance will be formulated to establish height limits of 40 to 65 feet for developments located south of I-8.
- Multiple Use Areas Review Procedures will be formulated to assist property-owners, developers, and City staff in processing and reviewing multiple-use development projects in multiple-use designated areas.
- Establishment of Specific Plan and Development Agreement policies and procedures will be undertaken in order to assist landowners, developers and City Staff in processing and reviewing specific plans and development agreements.
- Special Sign District legislation will be formulated and implemented in order to blend signing and street graphics into the overall urban design goals for the community.



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# Appendices Section

- Appendix A. Mission Valley Transportation
- Appendix B. Implementation Program
- Appendix C. Mission Valley Traffic Forecast
- Appendix D. Department of Water Resources
  Recommendations for Water Conservation and
  Water Reclamation
- Appendix E. Department of Water Resources Recommendations for Flood Damage Prevention
- Appendix F. Acceptable Plant Species for Mission Valley
- Appendix G. San Diego River Wetlands Management Plan
- Appendix H. Mission Valley Unified Planning Committee
  Plan and Implementation Alternative.
  Proposed CA-2 Zoning Ordinance (Concept 8)

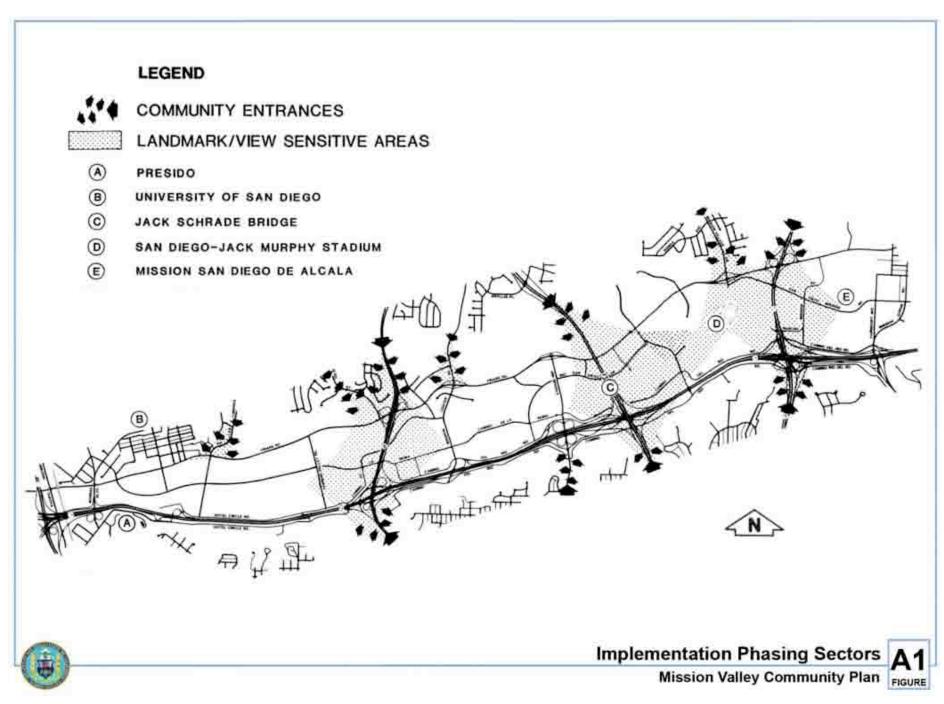


# APPENDIX A

# MISSION VALLEY TRANSPORTATION

TABLE A-1
MISSION VALLEY EQUIVALENT DWELLING UNIT (EDU) FACTORS

LAND USE	EDU
Single-family residential (du)	1.00
Multi-family, under 30 du/acre	0.80
Multi-family, 30 or more du/acre	0.60
Large Commercial Office (1,000 sq. ft.)	1.60
Small Commercial Office (1,000 sq. ft.)	2.00
Small Industry (1,000 sq. ft.)	1.40
Large Industry (1,000 sq. ft.)	0.80
Small Industry/Business Park (1,000 sq. ft.)	1.80
Neighborhood Commercial Center (1,000 sq. ft.)	15.00
Community Commercial Center (1,000 sq. ft.)	7.00
Small Regional Commercial Center (1,000 sq. ft.)	6.00
Large Regional Commercial Center (1,000 sq. ft.)	3.00
Freestanding Retail (1,000 sq. ft.)	4.00
Quality Restaurant (1,000 sq. ft.)	10.00
Sit-down Restaurant (1,000 sq. ft.)	37.00
Fast Food Restaurant (1,000 sq. ft.)	77.00
Theatre (seat)	0.04
Government Office (1,000 sq. ft.)	4.00
Medical Office (1,000 sq. ft.)	9.00
4-year College Student	0.28
Savings and Loan (1,000 sq. ft.)	7.40
Bank (1,000 sq. ft.)	20.00
Hotel/Motel (room)	1.00
Health Club (1,000 sq. ft.)	4.50



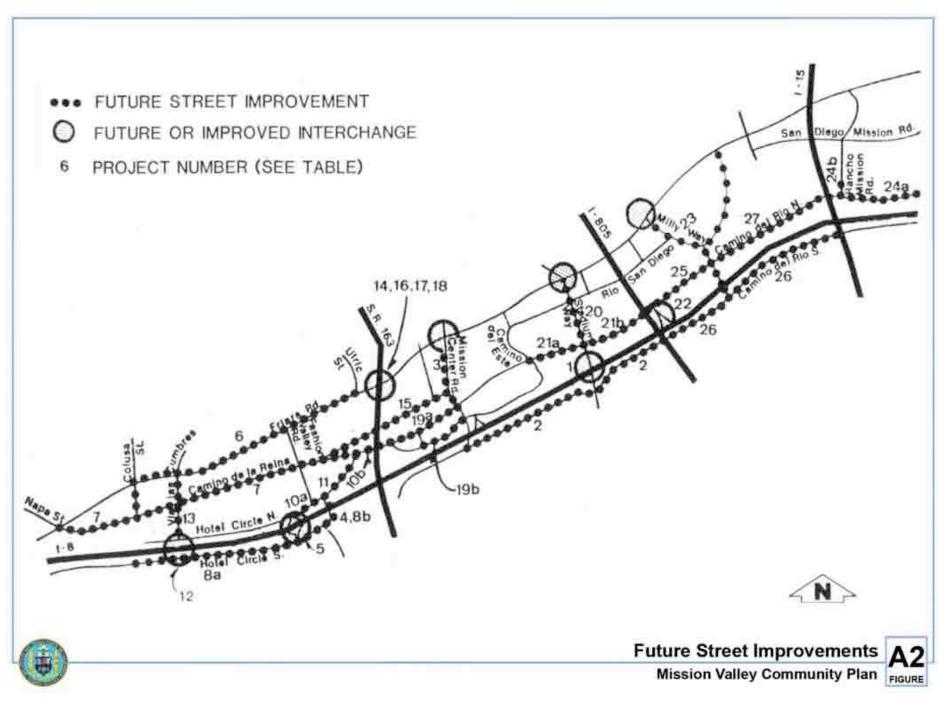


TABLE A-2
MISSION VALLEY PHASING OF TRANSPORTATION IMPROVEMENTS

EDU	GROUP	SECTOR	PROJECT	LOCATION	IMPROVEMENT
	A		2	Camino del Rio So.	Widen to four lanes, Mission Center Rd. to I-805
	A		3	Mission Center Rd.	Widen to six lanes, Friars Rd. to Camino del Rio No. Includes improving interchange ramps at the Friars Rd. interchange.
	A		4	Hotel Circle So.	Restripe to three lanes and prohibit parking from the eastbound Hotel Circle interchange ramps to Camino de la Reina.
	A		5	Hotel Circle/I-8 ramps	Provide increased intersection capacity and signalization at both the eastbound and westbound ramps.
400	В	1	6	Friars Road	Restripe for six lanes, Colusa Street to Ulric St.
1,500	В	1	7	Camino de la Reina	Construct as a four-lane major between Napa Street and Fashion Valley Road.
200	С	3	8A	Hotel Circle So.	Remove parking and restripe for three lanes between the I-8/Presidio overcrossing and the eastbound Hotel Circle Ramps.
200	С	3	8B	Hotel Circle So.	Widen to four lanes between eastbound Hotel Circle ramps and Camino de la Reina.
400	С	3	9	Hotel Circle So.	Widen to four lanes between eastbound Presidio ramps and the I-8/Presidio overcrossing.
200	D	4	10A	Hotel Circle No.	Widen to four lanes between westbound I-8 ramps and Camino de la Reina.
3,000	E	1, 3	12	Via las Cumbres interchange	Construct when Via las Cumbres is connected or when listed EDUs are developed. (Approximately 75% of buildout in these sectors.)
1,500	F	1-4	13	Via las Cumbres	Construct between Friars Road and Hotel Circle North.
7,500	F	1-4	16	SR-163 and Friars Rd.	Construct new southboundwestbound off-ramp.
500	G	1, 2, 4-7	14	SR-163 and Friars Rd.	Add dual lefts for eastbound- northbound on-ramps; widen north leg of intersection to accept two turning lanes.

TABLE A-2
MISSION VALLEY PHASING OF TRANSPORTATION IMPROVEMENTS (cont.)

EDU	GROUP	SECTOR	PROJECT	LOCATION	IMPROVEMENT
12,000	G	1, 2, 4-7	15	Hazard Center Rd.	Improve to a four-lane major street along north side of river between Fashion Valley Road and Mission Center Road.
4,700	G	1, 2, 4-7	17	SR-163 and Friars Rd.	Cut back median on bridge to allow three westbound lanes through signal for northbound on-ramps; approximately 85% of buildout in these sectors.
18,000	G	1, 2, 4-7	18	SR-163 and Friars Rd.	Move northbound on-ramps eastward or replace with a loop or flyover; approximately 95% build-out in these sectors.
400	Н	5, 7	19A	Camino de la Reina	Widen to four-lane major, SR-163 to Mission Center Road.
400	Н	5, 7	19B	Camino del Rio No.	Restripe for three lanes, Camino del Arroyo Mission Center Road.
200	I	6, 8	20	Stadium Way	Widen to six lanes between Friars Road and Camino del Rio North; improve interchange for all moves at Friars Road.
500	J	8	21A	Camino de la Reina	Widen to four lanes, Camino del Este to Stadium Way.
500	J	8	21B	Camino del Rio No	Widen to four lanes, Stadium Way to I-805.
500	K	6, 8, 11	22	Westbound I-8 ramps to/from Camino del Rio No.	Construct in the vicinity of I-805.
1,000	L	9-12	23	Milly Way	Construct between Friars Rd. and Camino del Rio No.; build interchange at Friars Rd.
3,000	L	9-12	24A	Camino del Rio No.	Widen to four lanes between I-15 and Fairmount Ave.
3.000	L	9-12	24B	Rancho Mission Rd.	Extend south across San Diego River to Camino del Rio No.
800	M	11	25	Camino del Rio No.	Widen to four lanes, I-805 to Milly Way.
300	N	11, 12	26	Camino del Rio No.	Widen to four lanes, I-805 to I-15.
700	N	11, 12	27	Camino del Rio No.	Widen to four lanes, Milly Way to I-15.

<sup>\*</sup>Total cumulative EDUs in sector(s) indicated that are not contained in tentative or final maps approved prior to 5/3/82.



# APPENDIX B

# IMPLEMENTATION PROGRAM

TABLE B-1
IMPLEMENTATION CHART

		CI	ГҮ		LOCAL AGENCY				PRIVATE	
Projec	ets	Zoning Legislation	Rezonings	C.I.P.	Transportation (MTDB/SDT)	State	Federal	Streets	Floods	Condition Subdivision Permit
Circul	ation									
1.	Texas Interchange					X	X			
2.	Camino del Rio So. (Mission Center Rd. to I-805)							X		
3.	Mission Center Rd. (Friars Rd. to Camino del Rio No.)							X		X
4.	Hotel Circle So.							X		
5.	Hotel Circle/l-8 Ramps									
6.	Friars Road			X						
7.	Camino de la Reina (Napa to Fashion Valley Rd.)							X		X
8A.	Hotel Circle So.			X						
8B.	Hotel Circle So.							X		
9.	Hotel Circle So.							X		
10A.	Hotel Circle So.							X		
10B.	Camino de la Reina (Fashion Valley Rd. to SR-163)							X		
11.	Camino de la Reina (widen/existing)							X		
12.	Presidio Interchange							X		
13.	Colusa St. or Via las Cumbres							X		
14.	SR-163 and Friars Rd.							X		
15.	New St. (between Fashion Valley Rd. and Mission Center Rd.							X		X
16.	SR-163 and Friars Rd.							X		
17.	SR-163 and Friars Rd.							X		

# TABLE B-1 IMPLEMENTATION CHART (cont.)

		CI'.	ГҮ		LOCAL A	GENC	C <b>Y</b>		PRIV	ATE
Projec	ets	Zoning Legislation	Rezonings	C.I.P.	Transportation (MTDB/SDT)	State	Federal	Streets	Floods	Condition Subdivision Permit
18.	SR-163 and Friars Rd.							X		
19A.	Camino de la Reina (SR-163 to Mission Center Rd.)							X		X
19B.	Camino del Rio No. (Camino del Arroyo to Mission Center Rd.)			X						
20.	Stadium Way									X
21A.	Camino de la Reina (Camino del Este to Stadium Way)								X	X
21B.	Camino del Rio No. (Stadium Way to I-805)									X
22.	Westbound I-8 Ramps to/from Camino del Rio No. (I-805 area)							X		
23.	Milly Way (Friars Rd. to Camino del Rio No.)							X		X
24A.	Camino del Rio No. (I-15 to Fairmount Ave.)					X	X			
24B.	Rancho Mission Rd. (extend to Camino del Rio No.)					X	X			
25.	Camino del Rio No. (I-805) to Milly Way)							X		
26.	Camino del Rio So. (I-805 to I-15)							X		
27.	Camino del Rio No. (Milly Way to I-15) *See Phasing Chart for detailed explanations of all items.							X		
Develo	opment Intensity									
1.	Implementing Legislation	X								
2.	Formulation of Development Intensity Districts	X								

# TABLE B-1 IMPLEMENTATION CHART (cont.)

	CI	TY		LOCAL A	GENC	<b>Y</b>		PRIV	ATE
Projects	Zoning Legislation Rezonings		Trans- portation (MTDB/ C.I.P. SDT) State Fed			Federal	Federal Streets Floods	Condition Subdivision Permit	
<ol> <li>Application of         Implementing             Legislation and             Development Intensity             Districts     </li> </ol>		X							
San Diego River									
1. Flood Control Facility								X	
2. Wetlands Maintenance Programs	X				X	X			
Hillsides									
<ol> <li>Development Regulations</li> </ol>	X	X							
Parking and Goods Delivery									
<ol> <li>Establish parking regulations</li> </ol>	X								
<ol><li>Establish delivery area regulations</li></ol>	X								
Public Transit									
<ol> <li>Establish new intra- Valley bus routes</li> </ol>				X					
2. Establish intra-Valley "People-Mover" System				X					
Establish LRT line through Valley				X					
4. Establish Bikeway System			X						
Community Facilties									
1. Fire Station			X				X		
2. Water and Sewer			X						X



# APPENDIX C

# MISSION VALLEY TRAFFIC FORECAST

TABLE C
LAND USE CHANGES – JUNE 20, 1983\*

		INTENSITY						
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83			
149	Single-Family Residential Condominiums Apartments	1,213 D.U. 53 D.U. 53 D.U.	1,213 D.U. 53 D.U. 53 D.U.	1,213 D.U. 53 D.U. 53 D.U.	1,213 D.U. 53 D.U. 53 D.U.			
150	Single-Family Residential Condominiums Apartments Neighborhood Shopping Ctr. Freestanding Retail Small Commercial Office Government Office Service Station Savings and Loan Small Industrial Church Jr. High School Elementary School Park	567 D.U. 283 D.U. 284 D.U. 14,693 sq. ft. 49,140 sq. ft. 18,650 sq. ft. 7,050 sq. ft. 3 pumps 6,536 sq. ft. 11,800 sq. ft. 1 280 Students 175 Students 6.68 Acres	567 D.U. 283 D.U. 284 D.U. 14,693 sq. ft. 49,140 sq. ft. 18,650 sq. ft. 7,050 sq. ft. 3 pumps 6,536 sq. ft. 11,800 sq. ft. 1 280 Students 175 Students 6.68 Acres	567 D.U. 283 D.U. 284 D.U. 14,693 sq. ft. 49,140 sq. ft. 18,650 sq. ft. 7,050 sq. ft. 3 pumps 6,536 sq. ft. 11,800 sq. ft. 1 280 Students 175 Students 6.68 Acres	567 D.U. 283 D.U. 284 D.U. 14,693 sq. ft. 49,140 sq. ft. 18,650 sq. ft. 7,050 sq. ft. 3 pumps 6,536 sq. ft. 11,800 sq. ft. 1 280 Students 175 Students 6.68 Acres			
151	Single-Family Residential Condominiums Apartments Church Convalescent Hospital	550 D.U. 275 D.U. 275 D.U. 1 Acre 2,408 Beds	550 D.U. 275 D.U. 275 D.U. 1 Acre 2,408 Beds	550 D.U. 275 D.U. 275 D.U. 1 Acre 2,408 Beds	550 D.U. 275 D.U. 275 D.U. 1 Acre 2,408 Beds			
165	Single-Family Residential Condominiums Apartments	695 D.U. 762 D.U. 762 D.U.	695 D.U. 762 D.U. 762 D.U.	695 D.U. 762 D.U. 762 D.U.	695 D.U. 762 D.U. 762 D.U.			
166	Single-Family Residential Condominiums Apartments Freestanding Retail	395 D.U. 1,142 D.U. 1,142 D.U. 6,000 sq. ft.	395 D.U. 1,142 D.U. 1,142 D.U. 6,000 sq. ft.	395 D.U. 1,142 D.U. 1,142 D.U. 6,000 sq. ft.	395 D.U. 1,142 D.U. 1,142 D.U. 6,000 sq. ft.			
167	Single-Family Residential Condominiums Apartments Neighborhood Shopping Ctr. Freestanding Retail Small Commercial Office Small Industrial Church High School	303 D.U. 592 D.U. 593 D.U. 7,201 sq. ft. 61,308 sq. ft. 33,582 sq. ft. 22,545 sq. ft. 4	303 D.U. 592 D.U. 593 D.U. 7,201 sq. ft. 61,308 sq. ft. 33,582 sq. ft. 22,545 sq. ft. 4 500 students	303 D.U. 592 D.U. 593 D.U. 7,201 sq. ft. 61,308 sq. ft. 33,582 sq. ft. 22,545 sq. ft. 4 500 students	303 D.U. 592 D.U. 593 D.U. 7,201 sq. ft. 61,308 sq. ft. 33,582 sq. ft. 22,545 sq. ft. 4 500 students			

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

		INTENSITY						
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83			
177	Single-Family Residential Condominiums Apartments	1,067 D.U. 297 D.U. 297 D.U.	1,067 D.U. 297 D.U. 297 D.U.	1,067 D.U. 297 D.U. 297 D.U.	1,067 D.U. 297 D.U. 297 D.U.			
178	Single-Family Residential Condominiums Apartments	1,513 D.U. 158 D.U. 159 D.U.	1,513 D.U. 158 D.U. 159 D.U.	1,513 D.U. 158 D.U. 159 D.U.	1,513 D.U. 158 D.U. 159 D.U.			
254	Small Commercial Office Freestanding Retail Neighborhood Shopping Ctr. Large Industrial Service Station Sit-down Restaurant Condominiums Apartments High School Single-Family Residential Fast-Food Restaurant Medical Office Government Office Church 4-Year College (U.S.D.) High School (Twain Cont.)	152,800 sq. ft. 108,638 sq. ft. 16,503 sq. ft. 239,000 sq. ft. 6 Pumps 7,600 sq. ft. 1,000 D.U. 1,930 D.U. 1,300 Students 910 D.U. 1,050 sq. ft. 2,825 sq. ft. 48,123 sq. ft. 6 5,200 Students 450 Students	152,800 sq. ft. 108,638 sq. ft. 16,503 sq. ft. 239,000 sq. ft. 6 Pumps 7,600 sq. ft. 1,000 D.U. 1,930 D.U. 1,300 Students 910 D.U. 1,050 sq. ft. 2,825 sq. ft. 48,123 sq. ft. 6 5,200 Students 450 Students	152,800 sq. ft. 108,638 sq. ft. 16,503 sq. ft. 239,000 sq. ft. 6 Pumps 7,600 sq. ft. 1,000 D.U. 1,930 D.U. 1,300 Students 910 D.U. 1,050 sq. ft. 2,825 sq. ft. 48,123 sq. ft. 6 5,200 Students 450 Students	152,800 sq. ft. 108,638 sq. ft. 16,503 sq. ft. 239,000 sq. ft. 6 Pumps 7,600 sq. ft. 1,000 D.U. 1,930 D.U. 1,300 Students 910 D.U. 1,050 sq. ft. 2,825 sq. ft. 48,123 sq. ft. 6 5,200 Students 450 Students			
260	Apartments Condominiums	1,023 D.U.	 1,023 D.U.	 1,023 D.U.	 1,023 D.U.			
262	Small Industrial Small Commercial Office Service Station Health Club (Y.M.C.A.) Government Office (Police)	80,000 sq. ft. — 6 Pumps 24,715 sq. ft. 16,000 sq. ft.	66,875 sq. ft. 80,000 sq. ft. ————————————————————————————————————	66,875 sq. ft. 80,000 sq. ft. ————————————————————————————————————	66,875 sq. ft. 80,000 sq. ft. — 24,715 sq. ft. 16,000 sq. ft.			
263	Freestanding Retail Hotel/Motel	140,542 sq. ft. 1,170 Rooms	140,542 sq. ft. 1,170 Rooms	121,990 sq. ft. 1,170 Rooms	121,990 sq. ft. 1,170 Rooms			
264	Small Commercial Office Hotel/Motel Apartments Single-Family Residential Service Station Quality Restaurant Sit-Down Restaurant	160,420 sq. ft. 1,091 Rooms 255 D.U. 3 D.U. 4 Pumps 18,000 sq. ft. 5,000 sq. ft.	176,550 sq. ft. 1,091 Rooms 255 D.U. 3 D.U. 4 Pumps 18,000 sq. ft.	176,550 sq. ft. 1,091 Rooms 255 D.U. 3 D.U. 4 Pumps 18,000 sq. ft.	176,550 sq. ft. 1,091 Rooms 255 D.U. 3 D.U. 4 Pumps 18,000 sq. ft.			
266	Single-Family Residential Condominiums Apartments	814 D.U. 302 D.U. 303 D.U.	814 D.U. 302 D.U. 303 D.U.	814 D.U. 302 D.U. 303 D.U.	814 D.U. 302 D.U. 303 D.U.			

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

		INTENSITY						
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83			
267	Single-Family	1,568 D.U.	1,568 D.U.	1,568 D.U.	1,568 D.U.			
	Condominiums	271 D.U.	271 D.U.	271 D.U.	271 D.U.			
	Apartments	272 D.U.	272 D.U.	272 D.U.	272 D.U.			
	Neighborhood Shopping Ctr.	18,465 sq. ft.	18,465 sq. ft.	18,465 sq. ft.	18,465 sq. ft.			
	Small Industrial	63,836 sq. ft.	63,836 sq. ft.	63,836 sq. ft.	63,836 sq. ft.			
	Church	1.74 Acres	1.74 Acres	1.74 Acres	1.74 Acres			
	Elementary School	887 Students	887 Students	887 Students	887 Students			
	Park	115.6 Acres	115.6 Acres	115.6 Acres	115.6 Acres			
270	Single-Family Residential	791 D.U.	791 D.U.	791 D.U.	791 D.U.			
	Condominiums	41 D.U.	41 D.U.	41 D.U.	41 D.U.			
	Apartments	41 D.U.	41 D.U.	41 D.U.	41 D.U.			
	Neighborhood Shopping Ctr.	42,318 sq. ft.	42,318 sq. ft.	42,318 sq. ft.	42,318 sq. ft.			
	Elementary School	421 Students	421 Students	421 Students	421 Students			
	Park	9.4 Acres	9.4 Acres	9.4 Acres	9.4 Acres			
	Church	1.15 Acres	1.15 Acres	1.15 Acres	1.15 Acres			
271	Single-Family Residential	233 D.U.	233 D.U.	233 D.U.	233 D.U.			
	Condominiums	88 D.U.	88 D.U.	88 D.U.	88 D.U.			
	Apartments	88 D.U.	88 D.U.	88 D.U.	88 D.U.			
	Neighborhood Shopping Ctr.	5,824 sq. ft.	5,824 sq. ft.	5,824 sq. ft.	5,824 sq. ft.			
	Small Industrial	14,247 sq. ft.	14,247 sq. ft.	14,247 sq. ft.	14,247 sq. ft.			
	Church	1.98 Acres	1.98 Acres	1.98 Acres	1.98 Acres			
	Park	24 Acres	24 Acres	24 Acres	24 Acres			
272	Large Commercial Office	238,750 sq. ft.	477,500 sq. ft.	467,280 sq. ft.	250,000 sq. ft			
	Small Commercial Office	238,750 sq. ft.	_					
	Freestanding Retail	80,000 sq. ft.	80,000 sq. ft.	78,290 sq. ft.	247,000 sq. ft			
	Hotel/Motel	285 Rooms	285 Rooms	280 Rooms				
	Apartments	250 D.U.	250 D.U.	245 D.U.	300 D.U.			
	Health Club	_	5,000 sq. ft.	4,890 sq. ft.	<del></del>			
273	Large Commercial Office	465,000 sq. ft.	930,000 sq. ft.	930,000 sq. ft.	930,000 sq. ft			
	Small Commercial Office	465,000 sq. ft.	_	_	_			
274	Stadium	51,000 Seats	_	_	_			
	Small Industrial	12,000 sq. ft.	12,000 sq. ft.	12,000 sq. ft.	12,000 sq. ft.			
	Small Commercial Office	379,190 sq. ft.	48,006 sq. ft.	48,006 sq. ft.	48,006 sq. ft.			
	Large Commercial Office	379,190 sq. ft.	530,866 sq. ft.	530,866 sq. ft.	530,866 sq. ft			
275	Quality Restaurant	15,000 sq. ft.	15,000 sq. ft.	15,000 sq. ft.	15,000 sq. ft.			
	Small Commercial Office	7,100 sq. ft.	7,100 sq. ft.	7,100 sq. ft.	7,100 sq. ft.			
	Apartments	40 D.U.	40 D.U.	40 D.U.	40 D.U.			
	Hotel/Motel	550 Rooms	550 Rooms	550 Rooms	550 Rooms			
276	Small Commercial Office	118,500 sq. ft.	82,922 sq. ft.	82,922 sq. ft.	82,922 sq. ft.			
	Skateboard Park	3.97 Acres	_	_	_			
	Quality Restaurant	20,000 sq. ft.	20,000 sq. ft.	20,000 sq. ft.	20,000 sq. ft.			
	Large Commercial Office	118,500 sq. ft.	160,00 sq. ft.	160,00 sq. ft.	160,00 sq. ft.			

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

		INTENSITY						
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83			
277	Small Commercial Office	191,980 sq. ft.	282,098 sq. ft.	282,098 sq. ft.	321,598 sq. ft.			
	Government Office (CHP)	11,500 sq. ft.	11,500 sq. ft.	11,500 sq. ft.	11,500 sq. ft.			
	Freestanding Retail	14,450 sq. ft.	18,050 sq. ft	18,050 sq. ft	18,050 sq. ft			
282	Condominiums	798 D.U.	798 D.U.	798 D.U.	798 D.U.			
	Health Club	_	16,000 sq. ft	16,000 sq. ft	16,000 sq. ft			
322	Single-Family Residential	3,220 D.U.	3,220 D.U.	3,220 D.U.	3,220 D.U.			
	Gov't Office (Fire Station)	77,091 sq. ft.	77,091 sq. ft.	77,091 sq. ft.	77,091 sq. ft.			
	Large Industrial	542,455 sq. ft.	542,455 sq. ft.	542,455 sq. ft.	542,455 sq. ft.			
	Elementary School	3,500 Students	3,500 Students	3,500 Students	3,500 Students			
	Park	493 Acres	493 Acres	493 Acres	493 Acres			
	Community Shopping Ctr.	163,372 sq. ft.	163,372 sq. ft.	163,372 sq. ft.	163,372 sq. ft.			
380	Small Commercial Office	50,000 sq. ft.	50,000 sq. ft.	50,000 sq. ft.	50,000 sq. ft.			
	Hotel/Motel	144 Rooms	274 Rooms	274 Rooms	280 Rooms			
	Sit-down Restaurant	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.			
381	Small Commercial Office*	24,000 sq. ft.	_					
	Free Standing Retail	5,950 sq. ft.	5,950 sq. ft.	5,950 sq. ft.	5,950 sq. ft.			
	Fast-Food Restaurant	1,575 sq. ft.	1,575 sq. ft.	1,575 sq. ft.	1,575 sq. ft.			
	Apartments	1,219 D.U.	1,219 D.U.	1,219 D.U.	1,219 D.U.			
	Condominiums*	1,000 D.U.	112 D.U.	112 D.U.	112 D.U.			
	Single-Family Residential	1,038 D.U.	1,038 D.U.	1,038 D.U.	1,038 D.U.			
	Service Station	14 Pumps	14 Pumps	14 Pumps	14 Pumps			
	Church	4 Acres	4 Acres	4 Acres	4 Acres			
	Elementary School	980 Students	980 Students	980 Students	980 Students			
	High School	400 Students	400 Students	400 Students	400 Students			
	Government Office	77,930 sq. ft	77,930 sq. ft	77,930 sq. ft	77,930 sq. ft			
382	Large Regional Shop. Ctr.	1,427,427 sq. ft.	1,427,427 sq. ft.	1,427,427 sq. ft.	1,427,427 sq. ft.			
383	Hotel/Motel	1,262 Rooms	1,262 Rooms	1,225 Rooms	1,225 Rooms			
	Quality Restaurant	16,424 sq. ft.	21,624 sq. ft.	21,624 sq. ft.	21,624 sq. ft.			
	Service Station	2 Pumps	2 Pumps	2 Pumps	2 Pumps			
384	Large Commercial Office	277,665 sq. ft.	242,000 sq. ft.	242,000 sq. ft.	242,000 sq. ft.			
	Small Commercial Office	125,472 sq. ft.	90,990 sq. ft.	90,990 sq. ft.	90,990 sq. ft.			
385	Small Commercial Office	190,000 sq. ft.	174,162 sq. ft.	174,162 sq. ft.	174,162 sq. ft.			
	Quality Restaurant	15,000 sq. ft.	14,200 sq. ft.	14,200 sq. ft.	14,200 sq. ft.			
	Apartments	343 D.U.	343 D.U.	343 D.U.	343 D.U.			
	Service Station	6 Pumps	6 Pumps	6 Pumps	6 Pumps			
	Night Club	_	9,500 sq. ft.	9,500 sq. ft.	9,500 sq. ft.			
386	Large Regional Shop. Ctr	1,460,000 sq. ft.	1,460,000 sq. ft.	1,460,000 sq. ft.	1,460,000 sq. ft.			
387	Large Commercial Office	133,690 sq. ft.	133,690 sq. ft.	133,690 sq. ft.	133,690 sq. ft.			
	Small Commercial Office	133,690 sq. ft.		_ ^	_ ^			
	Hotel/Motel	300 Rooms	300 Rooms	290 Rooms	500 Rooms			
	Sit-Down Restaurant	10,000 sq. ft.	10,000 sq. ft.	9,600 sq. ft.	11,000 sq. ft.			

<sup>\*</sup>All or part of these land uses have been transferred to new Zones 441 and 442 for all forecasts run after 1/1/82.

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

		INTENSITY						
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83			
388	Large Commercial Office	200,450 sq. ft.	146,000 sq. ft.	146,000 sq. ft.	146,000 sq. ft.			
	Small Commercial Office	200,450 sq. ft.	616,319 sq. ft.	616,319 sq. ft.	616,319 sq. ft.			
	Quality Restaurant	12,275 sq. ft.	22,905 sq. ft.	22,905 sq. ft.	22,905 sq. ft.			
	Single-Family Residential	6 D.U.	_					
	Neighborhood Shopping Ctr.	50,000 sq. ft.	46,000 sq. ft.	46,000 sq. ft.				
	Sit-down Restaurant	6,000 sq. ft.		_	_			
389	Large Commercial Office	153,080 sq. ft.	614,160 sq. ft.	614,160 sq. ft.	614,160 sq. ft.			
	Small Commercial Office	153,080 sq. ft.		_	_			
	Hotel/Motel	300 Rooms	_	_				
	Quality Restaurant	7,200 sq. ft.	_	_				
	Drive-Up Bank Tellers		_	_	4 units			
390	Condominiums	1,007 D.U.	1,007 D.U.	1,007 D.U.	1,007 D.U.			
391	Small Commercial Office	86,124 sq. ft.	86,124 sq. ft.	86,124 sq. ft.	86,124 sq. ft.			
	Freestanding retail	77,625 sq. ft.	77,625 sq. ft.	77,625 sq. ft.	77,625 sq. ft.			
	Neighborhood Shopping Ctr.	3,200 sq. ft.	3,200 sq. ft.	3,200 sq. ft.	3,200 sq. ft.			
	Large Industrial	193,443 sq. ft.	193,443 sq. ft.	193,443 sq. ft.	193,443 sq. ft			
	Sit-down Restaurant	5,908 sq. ft.	5,908 sq. ft.	5,908 sq. ft.	5,908 sq. ft.			
	Fast-food Restaurant	2,332 sq. ft.	2,332 sq. ft.	2,332 sq. ft.	2,332 sq. ft.			
	Condominiums	2 D.U.	2 D.U.	2 D.U.	2 D.U.			
	Single-Family Residential	1 D.U.	1 D.U.	1 D.U.	1 D.U.			
	Service Station	14 Pumps	14 Pumps	14 Pumps	14 Pumps			
	Medical Office	12,850 sq. ft.	12,850 sq. ft.	12,850 sq. ft.	12,850 sq. ft.			
	Car Dealer	14,200 sq. ft.	14,200 sq. ft.	14,200 sq. ft.	14,200 sq. ft.			
392	Large Commercial Office	210,970 sq. ft.	210,970 sq. ft.	210,970 sq. ft.	210,970 sq. ft			
	Small Commercial Office	105,150 sq. ft.	105,150 sq. ft.	105,150 sq. ft.	105,150 sq. ft			
	Car Dealer	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.			
	Freestanding Retail	55,488 sq. ft.	55,488 sq. ft.	55,488 sq. ft.	55,488 sq. ft.			
	Large Industrial	309,586 sq. ft	309,586 sq. ft	309,586 sq. ft	309,586 sq. ft			
	Sit-down Restaurant	567 sq. ft.	567 sq. ft.	567 sq. ft.	567 sq. ft.			
	Fast-food Restaurant	5,076 sq. ft.	5,076 sq. ft.	5,076 sq. ft.	5,076 sq. ft.			
	Condominiums	8 D.U.	8 D.U.	8 D.U.	8 D.U.			
	Single-Family Residential	9 D.U.	9 D.U.	9 D.U.	9 D.U.			
	Savings & Loan	6,400 sq. ft.	6,400 sq. ft.	6,400 sq. ft.	6,400 sq. ft.			
	Service Station	18 Pumps	18 Pumps	18 Pumps	18 Pumps			
393	Small Commercial Office	116,250 sq. ft.	116,250 sq. ft.	116,250 sq. ft.	116,250 sq. ft			
	Condominiums	145 D.U.	145 D.U.	145 D.U.	145 D.U.			
	Church	1.03 Acres	1.03 Acres	1.03 Acres	1.03 Acres			
	Convalescent Hospital	48 Beds	48 Beds	48 Beds	48 Beds			
	4-Year College	5,400 Students	5,400 Students	5,400 Students	5,400 Students			
394	Small Commercial Office	_	176,045 sq. ft.	76,045 sq. ft.	76,045 sq. ft.			
	Large Commercial Office	264,827 sq. ft.	163,000 sq. ft.	163,000 sq. ft.	163,000 sq. ft			
395	Small Commercial Office	467,182 sq. ft.	127,225 sq. ft.	127,225 sq. ft.	127,225 sq. ft			
	Large Commercial Office	467,182 sq. ft.	807,139 sq. ft.	807,139 sq. ft.	807,139 sq. ft			

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

			INTENS	ITY	
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83
396	Small Commercial Office Hotel/Motel Quality Restaurant Service Station Large Commercial Office	98,000 sq. ft. 886 Rooms 11,470 sq. ft. 6 Pumps	— 650 Rooms 11,470 sq. ft. 6 Pumps 240,770 sq. ft.	— 650 Rooms 11,470 sq. ft. 6 Pumps 240,770 sq. ft.	— 650 Rooms 11,470 sq. ft. 6 Pumps 240,770 sq. ft.
397	Small Commercial Office Small Commercial Office	226,152 sq. ft. 225,152 sq. ft.	452,304 sq. ft.	452,304 sq. ft.	452,304 sq. ft.
398	Large Commercial Office Small Commercial Office	149,975 sq. ft. 149,975 sq. ft.	299,950 sq. ft. —	299,950 sq. ft.	299,950 sq. ft. —
399	Community Shopping Ctr.	181,728 sq. ft.	181,728 sq. ft.	181,728 sq. ft.	181,728 sq. ft.
400	Large Community Office Small Commercial Office Hotel/Motel Service Station Theater	146,150 sq. ft. 146,150 sq. ft. 217 Rooms 4 Pumps 919 Seats	108,626 sq. ft. 235,100 sq. ft. 217 Rooms 4 Pumps 919 Seats	108,626 sq. ft. 221,900 sq. ft. 217 Rooms 4 Pumps 919 Seats	108,626 sq. ft. 221,900 sq. ft. 217 Rooms 4 Pumps 919 Seats
401	Hotel/Motel Health Club Service Station Small Commercial Office	449 Rooms 62,500 sq. ft. 4 Pumps 2,000 sq. ft.	449 Rooms 62,500 sq. ft. 4 Pumps 2,000 sq. ft.	449 Rooms 62,500 sq. ft. 4 Pumps 2,000 sq. ft.	449 Rooms 62,500 sq. ft. 4 Pumps 2,000 sq. ft.
402	Small Commercial Office Condominiums Savings & Loan Service Station	12,738 sq. ft. 243 D.U. 21,375 sq. ft. 4 Pumps	57,185 sq. ft. 243 D.U. 21,375 sq. ft. 4 Pumps	57,185 sq. ft. 243 D.U. 21,375 sq. ft. 4 Pumps	57,185 sq. ft. 243 D.U. 21,375 sq. ft. 4 Pumps
403	Newspaper Publisher	529,260 sq. ft.	529,260 sq. ft.	529,260 sq. ft.	529,260 sq. ft.
404	Small Commercial Office	77,640 sq. ft.	77,640 sq. ft.	77,640 sq. ft.	77,640 sq. ft.
405	Quality Restaurant Hotel/Motel Small Commercial Office Parking Garage – Hospital	15,000 sq. ft. 918 Rooms 62,000 sq. ft.	15,000 sq. ft. 918 rooms 62,000 sq. ft. 5,000 Trips/day	15,000 sq. ft. 918 rooms 62,000 sq. ft. 5,000 Trips/day	15,000 sq. ft. 918 rooms 62,000 sq. ft. 5,000 Trips/day
406	Health Club Condominiums (30 du/ac) Hotel/Motel Condominiums (30 du/ac)	5,000 sq. ft. 120 D.U. 300 Rooms	5,000 sq. ft. 120 D.U. 300 Rooms	5,000 sq. ft. 120 D.U. 300 Rooms	5,000 sq. ft. 120 D.U. 300 Rooms
407 (Opt. A)	Office Tower	400,000 sq. ft.	400,000 sq. ft.	400,000 sq. ft.	400,000 sq. ft.
407 (Opt. B)	Retail Center	192,000 sq. ft.	192,000 sq. ft.	192,000 sq. ft.	192,000 sq. ft.
408	Hotel Small Commercial Office Quality Restaurant Sit-down Restaurant Fast-food Restaurant	200 Rooms 51,180 sq. ft. 46,639 sq. ft. 17,760 sq. ft. 2,500 sq. ft.	400 Rooms 84,085 sq. ft. 30,354 sq. ft. 47,226 sq. ft.	400 Rooms 84,085 sq. ft. 30,354 sq. ft. 47,226 sq. ft.	400 Rooms 84,085 sq. ft. 30,354 sq. ft. 47,226 sq. ft.
	Service Station	4 Pumps	4 Pumps	4 Pumps	4 Pumps

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

Zone	Land Use	INTENSITY				
		Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83	
409	Large Commercial Office	100,000 sq. ft.	100,000 sq. ft.	_	150,000 sq. ft.	
	Small Commercial Office	85,721 sq. ft.	121,184 sq. ft.	214,984 sq. ft.	121,284 sq. ft.	
	Freestanding Retail	7,200 sq. ft.	7,200 sq. ft.	7,200 sq. ft.	7,200 sq. ft.	
	Service Station	4 Pumps	4 Pumps	4 Pumps	4 Pumps	
	Savings and Loan	_	10,721 sq. ft.	10,721 sq. ft.	10,721 sq. ft.	
410	Small Commercial Office	150,000 sq. ft.	_	_	_	
	Large Commercial Office		138,000 sq. ft.	132,820 sq. ft.	250,000 sq. ft	
	Freestanding Retail	150,000 sq. ft.	150,000 sq. ft.	145,470 sq. ft.	29,400 sq. ft.	
	Hotel/Motel	300 Rooms	300 Rooms	290 Rooms	300 Rooms	
	Savings and Loan		12,000 sq. ft.	12,000 sq. ft.	12,000 sq. ft.	
	Music Pavilion (Theater)	4,000 Seats	4,000 Seats	3,850 Seats		
	Theater	2,000 Seats	2,000 Seats	1,925 Seats		
	Large Regional Commercial	<u> </u>	_	_	150,000 sq. ft	
411	Small Commercial Office	50,000 sq. ft.	50,000 sq. ft.	46,075 sq. ft.	_	
	Neighborhood Shopping Ctr.	20,000 sq. ft.	20,000 sq. ft.	18,430 sq. ft.		
	Apartments	300 D.U.	400 D.U.	400 D.U.	400 D.U.	
	Condominiums	250 D.U.	250 D.U.	230 D.U.	220 D.U.	
412	Large Commercial Office	140,000 sq. ft.	280,000 sq. ft.	280,000 sq. ft.	522,000 sq. ft	
	Small Commercial Office	140,000 sq. ft.	_	_	_	
	Condominiums	<u> </u>	_	_	370 D.U.	
413	Large Commercial Office	140,000 sq. ft.	280,000 sq. ft.	280,000 sq. ft.	522,000 sq. ft	
	Small Commercial Office	140,000 sq. ft.	_	_	_	
	Hotel/Motel	_	_	_	370 D.U.	
414	Small Commercial Office	80,000 sq. ft.	80,000 sq. ft.	80,000 sq. ft.		
	Condominiums	250 D.U.	250 D.U.	250 D.U.	300 D.U.	
415	Large Commercial Office	_	100,000 sq. ft.	100,000 sq. ft.	100,000 sq. ft	
	Small Commercial Office	100,000 sq. ft.	_	_	_	
	Freestanding Retail	4,000 sq. ft.	4,000 sq. ft.	4,000 sq. ft.	4,000 sq. ft.	
	Savings & Loan	10,000 sq. ft.	10,000 sq. ft.	10,000 sq. ft.	10,000 sq. ft.	
	Theater	825 Seats	825 Seats	825 Seats	825 Seats	
	Service Station	6 Pumps	6 Pumps	6 Pumps	6 Pumps	
416	Small Commercial Office	144,500 sq. ft.	159,955 sq. ft.	159,955 sq. ft.	159,955 sq. ft	
	Church	6.91 Acres	6.91 Acres	6.91 Acres	6.91 Acres	
	Scottish Rite Temple	48,825 sq. ft.	48,825 sq. ft.	48,825 sq. ft.	48,825 sq. ft.	
	(Convention Facility)					
	Sit-down Restaurant	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.	6,000 sq. ft.	
417	Freestanding Retail	127,600 sq. ft.	127,600 sq. ft.	117,575 sq. ft.		
	Large Commercial Office		_	_	428,000 sq. ft	
418	Freestanding Retail	119,300 sq. ft.	119,300 sq. ft.	109,950 sq. ft.	_	
	Research & Development	_	_	_	41,000 sq. ft.	
	Small Commercial Office	_		_	99,400 sq. ft.	

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

	Land Use	INTENSITY				
Zone		Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as of 6/20/83	
419	Large Commercial Office Small Commercial Office Theater Sit-down Restaurant Health Club	232,080 sq. ft. 232,080 sq. ft. 1,500 Seats	464,160 sq. ft. 116,160 sq. ft. 1,500 Seats 8,000 sq. ft. 20,000 sq. ft.	464,160 sq. ft. 116,160 sq. ft. 1,500 Seats 8,000 sq. ft. 20,000 sq. ft.	464,160 sq. ft. 206,160 sq. ft. 1,500 Seats	
420	Condominiums	570 D.U.	570 D.U.	525 D.U.	525 D.U.	
421	Neighborhood Shopping Ctr. Condominiums Small Commercial Office	10,000 sq. ft. 290 D.U. 58,080 sq. ft.	10,000 sq. ft. 290 D.U. 58,080 sq. ft.	9,215 sq. ft. 265 D.U. 53,520 sq. ft.	9,215 sq. ft. 270 D.U. 53,695 sq. ft.	
422	Convalescent Hospital Elementary School Mission San Diego de Alcala	123 Beds 380 Students 1	123 Beds 380 Students 1	123 Beds 380 Students 1	123 Beds 380 Students q	
424	Large Commercial Office Small Commercial Office Small Reg. Shop. Ctr Hotel/Motel	— 170,000 sq. ft. 306,000 sq. ft. 786 Rooms	170,000 sq. ft. — 306,000 sq. ft. 786 Rooms	160,340 sq. ft. — 288,620 sq. ft. 786 Rooms	160,340 sq. ft. — 288,620 sq. ft. 786 Rooms	
425	Large Commercial Office Small Commercial Office Mini Warehouses Service Station Small Industry Small Ind./Bus. Park Community Com'l. Shop. Str. Sit-down Restaurant	1,141,500 sq. ft. 1,141,500 sq. ft. — — — — — —	1,660,000 sq. ft.  — 69,010 sq. ft. 10 Pumps 320,00 sq. ft. 150,000 sq. ft. 75,000 sq. ft. 8,800 sq. ft.	1,609,750 sq. ft.  —  69,010 sq. ft.  10 Pumps  320,000 sq. ft.  150,000 sq. ft.  75,000 sq. ft.  8,800 sq. ft.	1,609,750 sq. ft.	
426	Large Commercial Office Small Commercial Office Condominiums	250,000 sq. ft. 250,000 sq. ft. 4,688 D.U.	500,000 sq. ft. — 4,688 D.U.	470,890 sq. ft. — 4,415 D.U.	470,890 sq. ft. — 4,415 D.U.	
427	Apartments	1,563 D.U.	1,563 D.U.	1,440 D.U.	1,445 D.U.	
428	Large Commercial Office Small Commercial Office	110,700 sq. ft. 110,700 sq. ft.	221, 400 sq. ft.	221,400 sq. ft.	221,400 sq. ft.	
429	Apartments Condominiums	737 D.U.	— 737 D.U.	— 737 D.U.	— 737 D.U.	
430	Large Commercial Office Small Commercial Office	329,421 sq. ft. 329,421 sq. ft.	181,300 sq. ft.	167,050 sq. ft.	167,050 sq. ft. —	
431	Large Commercial Office Small Commercial Office Sit-down Restaurant Health Club Fast-food Restaurant Freestanding Retail Hotel/Motel	130,000 sq. ft. 122,500 sq. ft. 8,700 sq. ft. 20,000 sq. ft. 2,500 sq. ft. 55,000 sq. ft. 200 Rooms	147,000 sq. ft. 124,500 sq. ft. 8,700 sq. ft. 22,360 sq. ft. 2,313 sq. ft. 55,000 sq. ft. 200 Rooms	147,000 sq. ft. 124,500 sq. ft. 8,700 sq. ft. 22,360 sq. ft. 2,313 sq. ft. 55,000 sq. ft. 200 Rooms	147,000 sq. ft. 124,500 sq. ft. 8,700 sq. ft. 22,360 sq. ft. 2,313 sq. ft. 55,000 sq. ft. 200 Rooms	

TABLE C
LAND USE CHANGES – JUNE 20, 1983\* (cont.)

		INTENSITY				
Zone	Land Use	Previous Forecast 8/81	Corrected Totals and Small to Large Office Change	Totals (2/9/82) with Stadium Development	Updated Land Use as os 6/20/83	
432	Small Commercial Office Quality Restaurant Sit-down Restaurant	78,440 sq. ft. 14,600 sq. ft. 5,991 sq. ft.	100,449 sq. ft. — 5,991 sq. ft.	100,449 sq. ft. — 5,991 sq. ft.	100,449 sq. ft. — 5,991 sq. ft.	
433	Small Commercial Office Large Commercial Office Freestanding Retail	180,000 sq. ft. — 150,000 sq. ft.	180,000 sq. ft. 150,000 sq. ft.	179,330 sq. ft. 149,440 sq. ft.	455,000 sq. ft. 20,000 sq. ft.	
434	Freestanding Retail Condominiums Large Commercial Office	105,000 sq. ft. 300 D.U. —	105,000 sq. ft. 300 D.U. —	96,760 sq. ft. 275 D.U. —	— 810 D.U. 180,000 sq. ft.	
435	Large Commercial Office Small Commercial Office Large Regional Commercial	110,000 sq. ft. 110,000 sq. ft.	220,000 sq. ft. —	220,000 sq. ft. —	220,000 sq. ft. — 150,000 sq. ft.	
436	Condominiums	516 D.U.	516 D.U.	516 D.U.	516 D.U.	
437	(With Stadium Dev.) Small Commercial Office Large Commercial Office	233,046 sq. ft. 233,046 sq. ft.	— 326,264 sq. ft.	— 326,264 sq. ft.	— 326,264 sq. ft.	
438	Small Commercial Office Large Commercial Office	25,973 sq. ft. 93,027 sq. ft.	121,000 sq. ft.	121,000 sq. ft.	121,000 sq. ft.	
439	Small Commercial Office Neighborhood Shop. Ctr.	50,740 sq. ft. 29,768 sq. ft.	50,740 sq. ft. 29,768 sq. ft.	50,740 sq. ft. 29,768 sq. ft.	50,740 sq. ft. 29,768 sq. ft.	
440	Large Commercial Office Small Commercial Office	105,000 sq. ft. 105,000 sq. ft.	210,000 sq. ft.	210,000 sq. ft.	210,000 sq. ft.	
441*	Small Commercial Office	_	109,200 sq. ft.	109,200 sq. ft.	109,200 sq. ft.	
442*	Condominiums Neighborhood Shop. Ctr.	_ _	888 D.U. 18,480 sq. ft.	888 D.U. 18,480 sq. ft.	888 D.U. 18,480 sq. ft.	
443**	Small Commercial Office Large Commercial Office	359,588 sq. ft. 359,588 sq. ft.	 215,752 sq. ft. ***	— 198,492 sq. ft.	— 198,492 sq. ft.	
444**	Small Commercial Office Large Commercial Office	204,297 sq. ft. 204,297 sq. ft.	— 286,016 sq. ft. ***	 263,135 sq. ft.	— 263,1—sq. ft.	
445**	Condominiums	106 D.U.	74 D.U.	68 D.U.	68 D.U.	

<sup>\*</sup> These two zones are new and were originally part of Zone 381.

<sup>\*\*</sup> These three zones were previously #441-443. They are added only when the proposed stadium development is included in a forecast.

<sup>\*\*\*</sup> These totals represent a change to all large commercial office and then a lowering of the land use to achieve a trip per acre rate equal to the surrounding land uses, approximately 400 trips/acre.



# APPENDIX D

# DEPARTMENT OF WATER RESOURCES RECOMMENDATIONS FOR WATER CONSERVATION AND WATER RECLAMATION

To reduce water demand, the following water conservation measures should be implemented.

# **REQUIRED BY LAW:**

- 1. Low flush toilets (see Section 17921.3 of the Health and Safety Code).
- 2. Low-flow showers and faucets (California Administrative Code, Title 24, Part 6, Article 1, T20-1406F).
- 3. Insulation of hot water recirculating systems (California Energy Commission regulations).

#### RECOMMENDATIONS TO BE IMPLEMENTED WHERE APPLICABLE:

#### **Interior:**

- 1. <u>Supply line pressure</u>: recommended water pressure greater than 50 pounds per square inch (psi) be reduced to 50 psi or less by means of a pressure-reducing valve.
- 2. Flush valve operated water closets: recommend 3 gallons per flush.
- 3. Drinking fountains: recommend equipped with self-closing valves.
- 4. <u>Pipe insulation</u>: recommend all hot water lines in dwelling be insulated to provide hot water faster with less water waste and to keep hot pipes from heating cold water pipes.
- 5. <u>Hotel rooms</u>: recommend posting conservative reminders in rooms and rest rooms. \* Recommend thermostatically-controlled mixing valve for bath/shower.
- 6. <u>Laundry facilities</u>: recommend use of water-conserving models of washers.
- 7. <u>Restaurants</u>: recommend use of water-conserving models of dishwashers or retrofitting spray emitters.

"The Department of Water Resources or local water district may aid in developing these materials.

#### Exterior:

- 1. Landscaped with low water-consuming plants wherever feasible.
- 2. Minimize use of lawn by limiting it to lawn dependent uses, such as playing fields.

- 3. Use mulch extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.
- 4. Preserve and protect existing trees and shrubs. Established plants are often adapted to low water conditions and their use saves water needed to establish replacement vegetation.
- 5. Install efficient irrigation systems which minimize runoff and evaporation and maximize the water which will reach the plant roots. Drip irrigation, soil moisture sensors and automatic irrigation systems are a few methods of increasing irrigation efficiency.
- 6. Use pervious paving material whenever feasible to reduce surface water runoff and aid in ground water recharge.
- 7. Grading of slopes should minimize surface water runoff.
- 8. Investigate the feasibility of utilizing reclaimed wastewater, stored rainwater, or household grey water for irrigation.
- 9. Encourage cluster development which can reduce the amount of land being converted to urban use. This will reduce the amount of impervious paving created and thereby aid in ground water recharge.
- 10. Preserve existing natural drainage areas and encourage the incorporation of natural drainage systems in new developments. This would aid in ground water recharge.
- 11. Flood plains and aquifer recharge areas which are the best sites for ground water recharge should be preserved as open space.



# **APPENDIX E**

# DEPARTMENT OF WATER RESOURCES RECOMMENDATIONS FOR FLOOD DAMAGE PREVENTION

In flood-prone areas, flood damage prevention measures required to protect a proposed development should be based on the following guidelines:

- 1. All building structures should be protected against a 100-year flood.
  - It is the State's policy to conserve water. Any potential loss to groundwater should be mitigated.
- 2. In those areas not covered by a Floor Insurance Rate Map or a Flood Boundary and Floodway Map, issued by the Federal Emergency Management Agency, the 100-year flood elevation and boundary should be shown on the Environmental Impact Report.
- 3. At least one route of ingress and egress to the development should be available during a 100-year flood.
- 4. The slope and foundation designs for all structures should be based on detailed soils and engineering studies, especially for all hillside developments.
- 5. Revegetation of the slopes should be done as soon as possible.
- 6. The potential damage to the proposed development by mudflow should be assessed and mitigated as required.
- 7. Grading should be limited to dry months to minimize problems associated with sediment transport during construction.



# **APPENDIX F**

#### ACCEPTABLE PLANT SPECIES FOR MISSION VALLEY

<u>Riparian Deciduous Trees</u> <u>Evergreen Upright Street Trees (cont.)</u>

Platanus racemosa

Populus fremontii

Magnolia grandiflora

Prunus caroliniana

Slope Trees Tristania conferta

Acacia baileyana
A. cyclopsis

Colori

A. cyclopsis

Aesculus californica

Callistemon citrinus

Casuarina spp.

Ceratonia siliqua

Colorful Deciduous Round Headed Trees

Aesculus californica

Albizia julibrissin

Bauhinia variegata

Brachychiton acerifolium

Hetermoles arbutifolia Calodendron capense

Lyonothamnus floribundus 'Asplenifolius' Chorisia speciosa

Melaleuca styphelioides Jacaranda acutifolia

Melia azedarach

Melia azedarach

Olea europaea

Pinus eldarica

Pinus halepensis

Sacaranda acutriona

Koelreuteria paniculata

Lagerstroemia indica

Parkinsonia aculeta

Pistacia chinensis

Prunus caroliniana Pyrus kawakamii Prunus lyonii Tipuana tipu

Rhus lancea

<u>Major Street Theme Trees</u>

<u>Ceratonia siliqua</u>

Eucalyptus (selected species) Cinnamomum camphora

Cupaniopsis anacardioides
Large Scale Canopy Trees

Fiscus retusa

Catalpa speciosa Quercus ilex
Eucaluptus (selected species) Tipuana tipu
Fraxinus velutina Ulmus parviflora

Platanus racemosa Umbellularia californica

**Evergreen Upright Street Trees Small Evergreen Round Headed Street Trees** 

Brachychiton populneu Arbutus menziesii
Callistemon viminalis Callistemon citrinus
Cedrus deodara Eriobotyra japonica
Cedrus libani Ficus rubiginosa

Geijera parviflora

**Evergreen Upright Street Trees**Brachychiton populneus

Leptospermum laevigatum
Ligustrum lucidum

Callistemon viminalis

Cedrus deodara

Maytenus boaria

Melaleuca linarifolia

Cedrus libani Olea europaea

**Small Evergreen Round Headed Street** 

Trees (cont.)

Rhus lancea

Schinus terebinthifolius

**Potential Shrubs** 

Abelia grandiflora Agapanthus africanus Agave americana

Aloe spp. Artemesia spp.

Artriplex semibaccata

Baccaris piluaris 'consanguinea'

Callistemon citrinus

Cassia spp.

Ceanothus (all species)
Cistus corbariensis
Cistus purpureus
Coleonema pulchrum
Cordyline australis
Correa pulchella

Cotoneaster glaucophylla Dendromecon harfordii Dendromecon rigida Dodonaea viscosa Echium fastuosum Elaeagnus angustifolia Elaeagnus multiflora Elaegnus pungens Eriogonum arborescens Pyracantha species

Raphiolepis indica 'rosea'

Rhus ovata Ribes speciosum Ribes viburnifolium Robinia hispida

Rosmarinus officinalis

Salvia greggii
Salvia leucantha
Salvia leucophylla
Senecio cineraria
Sophora spp.
Tamarix spp.
Teucrium fruticans

Trichostema lanatum

**Potential Shrubs (cont.)** 

Viburnum spp. Xylosma congestum Yucca glauca

Eriogonum giganteum Erythrina bidwillii Feijoa sellowiana

Fremontodendron 'California Glory'

Fremento mexicanum

Hakea laurina Hakea sauveolens

Hebe spp.

Heteromeles arbutifolia

Juniperus spp. Lantana spp.

Leptosperum laevigatum Leucophyllum frutescens

Ligustrum spp. Lonicera spp. Mahonia aquifolium

Melaeuca spp.
Myrtus communis
Nandina domestica
Nerium oleander
Ochna serrulata
Myrsine africana
Phormium tenax
Phototinia fraseri
P. serrulata

Pittosporum tobira

Pittosporum phillyraeoides Pittosporum crassifolium

Plumbago capensis (or P. auriculata)

Prunus Carolina
P. lusitanica
Punica granatum
Pyracantha species

Raphiolepsis indica 'rosea

Rhus ovata Ribes speciosum Ribes viburnifolium Robinia hispida

Rosmarinus officinalis

Salvia greggii Salvia leucantha

# **Potential Shrubs (cont.)**

Salvia leucophylla Senecio cineraria Sophoro spp. Tamarix spp. Teucrium fruticans Trichostema lanatum Viburnum spp.

Xylosma congestum

Yucca glauca

# **Potential Vines**

Bougainvillea Campis spp. Clematis armandii Ficus pumila

Lonicera sempervirens Solanum jasminoides Tecomaria capensis Vitus vinifera Wisteria spp.

# **Potential Ground Covers**

Achillea tomentosa
Ajuga reptans
Arctoslaphylos uva - ursi
Arctotheca calendula
Artriplex semibaccata
Baccaris pilularis
var. prostrata
Baccharis pilularis
cv. 'Twin Peaks'

Carrisa grandflora

# **Potential Ground Covers (cont.)**

cv. 'Green Carpet' Ceanothus prostratus Cistus 'descaso Hybrid' Delosperma 'Alba'

Drosanthemum floubundum

Fragaria chiloensis
Gazania uniflorao
Hedera canariensis
Hypericum calycinum
Lampranthus aurantiacus
Lampranthus filicaulis
Lampranthus soectabilis
Lantana montevidensis

Lippia canescens
Lonicera japonica
cv. 'Halliana'
Malephora crocea
Myoporum parvifolium
Parthenocissus tricuspidata
Pelargonium peltatum
Potentilla verna

Rosmarinus officinalis

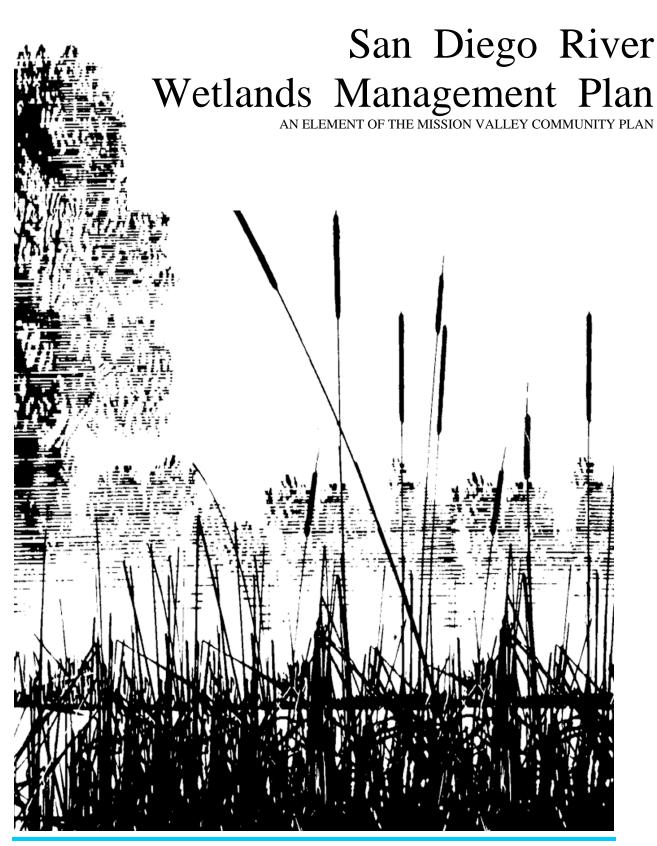
var. prostratus Salvia sonomeusis

Santolina chamaecyparissus

Sedum confusum Senecio serpens Teucrium chamaedrys Thymus serpyllum Verbena peruviana Vinca major

Vinca minor

Note: See Appendix G for acceptable species for Wetland areas



Appendix G

# APPENDIX G

# SAN DIEGO RIVER WETLANDS MANAGEMENT PLAN

Prepared by the Environmental Quality Division of the City of San Diego Planning Department.

# **ACKNOWLEDGEMENTS**

This plan was conceived and developed with the assistance of Jack Fancher, U.S. Fish and Wildlife Service; Mike Mulligan and Harold McKinnie, California Department of Fish and Game; and John Rieger and Mark Moore, Caltrans. Technical assistance was also provided by Dr. Bertin Anderson, Colorado River Research Laboratory; and Harold Wier, Biological Consultant.

# **SUMMARY**

This report serves as management plan for a portion of the San Diego River from I-5 on the west to Friars Road on the east. The Wetlands Management Plan was undertaken to clarify expectations regarding the protection of wetlands associated with the San Diego River in Mission Valley and to facilitate the granting of federal, state and local permits for projects in this area. The wetlands plan is based on the premise that modification of the floodway can and should achieve wetlands protection and restoration by incorporating mutually supportive hydraulic and biologic parameters into land development and design of a flood control channel. The intent is that no net reduction of wetlands habitat will be allowed with the buildout of Mission Valley and that the overall quality of existing habitats will be improved. Biological design criteria and development guidelines described in the plan provide the framework for accomplishing this goal. The plan addresses the techniques for managing individual sections of the river and describes the process for the submittal of land use proposals in the study area.

#### INTRODUCTION

#### **Purpose**

The primary purpose of this plan is to define a means of maintaining and improving the overall quality of the wetlands associated with the San Diego River while allowing for development in Mission Valley. The intent of the plan is to establish a framework for accomplishing this goal by incorporating biological considerations into planning for development and flood management of the river.

By developing a comprehensive plan which specifies the future character of the river corridor, those agencies charged with protection of wildlife resources can avoid the increasing difficulty in justifying approval of individual permit applications. Under the present system, incremental losses of wetlands habitats are occurring. Piecemeal compensation projects cannot assure that a unified and functional wetland habitat will

remain. With the Wetlands Management Plan, a comprehensive approach to wetlands protection can be applied, development expectations can be clarified, and the granting of permits for projects which are in conformance with the plan can be facilitated.

#### **OBJECTIVES**

The objectives of the Wetlands Management Plan are:

- To establish a systematic and comprehensive guide for preserving, improving and reconstructing a continuous and functional natural wetlands corridor along the San Diego River in Mission Valley.
- To clarify a set of common goals and intentions among various governmental agencies and private interests which will allow the orderly completion of appropriate floodplain development, including necessary transportation links and flood protection features.
- To facilitate and expedite processing of the U.S. Army Corps of Engineers 404 Permit and California Department of Fish and Game 1601/1603 Agreement for projects which involve alteration of wetlands and the streambed of the Mission Valley portion of the San Diego River.

# **BACKGROUND**

# **Location and Setting**

The San Diego River is one of six major rivers in San Diego County. As indicated in **Figure 1**, it originates in the Cuyamaca mountains and flows to the southwest and west through the mountains and foothills of the County; then flows to the west, through Mission Valley in the central portion of the City of San Diego before it enters into the Pacific Ocean. The wetlands plan study area encompasses a 5.9-mile reach of the San Diego River, bounded by Friars Road on the east and I-5 on the west. The existing floodway (FW) zone in Mission Valley defines most of the north/south extent of the study area. Existing wetlands and areas not presently developed which are outside of the FW zone boundaries are also included in the study area.

Most of the wetlands plan study area is included in the Mission Valley community planning area. The Mission Valley plan area extends the length of the study area but covers only the western bank from about the point where the river bends northward. The river channel and land adjacent to the northeastern bank is included in the Navajo Community Plan.

# **Baseline Information**

A field survey of the habitats in the study area was conducted by California Department of Transportation (Caltrans) biologists. As part of the survey, vegetation was classified and mapped according to habitat types. All vegetation within and adjacent to the floodway was mapped. Non-wetland areas which would be suitable for conversion to wetlands were

identified. This baseline information formed the foundation for the Wetlands Management Plan. This information was used to establish the limits and characteristics of the existing conditions and identify potential areas for habitat conversion and improvement. It should be noted that the mapping was done on a generalized basis and is not meant to be site-specific. At the project level, a more detailed vegetative map must be prepared based on a biological survey of the project site.

# **Existing Habitats**

The Mission Valley portion of the San Diego River supports three major wetlands-associated plant communities as described herein. These include: 1) open water (pond aquatic), 2) freshwater marsh, and 3) riparian woodland. A fourth wetlands type, transitional wetlands, is also described.

# **Pond Aquatic**

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 ditchgrass.

# Freshwater Marsh

Freshwater marsh is an aquatic community of immersed plants found where the water table is at or just above the surface on the shallow margins of open water habitats. In Mission Valley, it is composed primarily of cattails and bulrush. This habitat is disturbed periodically by flooding, but is located east of Stadium Way and immediately west of Mission Center Road.

# Riparian Woodland

Riparian woodland is generally linear in character and closely follows the margins of permanent rivers, streams and spring-like areas. This woodland is composed of semi-aquatic trees and herbs which are often dense enough to resemble a forest. Within the study area, the riparian canopy consists primarily of willows, with a small number of cottonwoods and sycamores. Riparian woodlands associated with this portion of the San Diego River vary in width to 400 feet.

# <u>Transitional Wetlands</u>

Also present within the study area are vegetative associations typical of floodplains. Floodplain habitats are periodically disturbed due to flooding, and support species which readily occupy disturbed drainage areas. Within the study area, willows are scattered in these areas in addition to a variety of native shrubs and native and nonnative (weedy) herbs. This habitat may be considered transitional between the riparian and marsh habitats and the surrounding uplands.

The term "wetlands" as used in this plan refers to any of the habitat types described above.

# <u>Uplands</u>

The remainder of the vegetation in the study area is considered upland habitat. Uplands are distinguished from wetlands by the absence of saturated soils. Shrub-type vegetation such as broom baccharis dominate the uplands within the study area. Weedy annuals are also present. Vegetation of this type typically invades areas recovering from past disturbance and is successional to the coastal sage scrub and chaparral communities which occupy more natural uplands.

#### **Resource Value**

Due to their ability to support a diversity of wildlife species, wetlands are a valuable resource. Proximity to water, interface between a variety of habitat types, and vertical stratification of foliage are factors which contribute to the richness and productivity of wetlands. While a few wildlife species are restricted entirely to wetlands for all their life requirements, many more are dependent on these habitats for critical life functions such as food, cover or breeding. Numerous other species also make extensive use of these habitats even though they are not dependent upon them. Many wetlands-dependent species are declining in population due to the destruction of these habitats by agricultural and urban development.

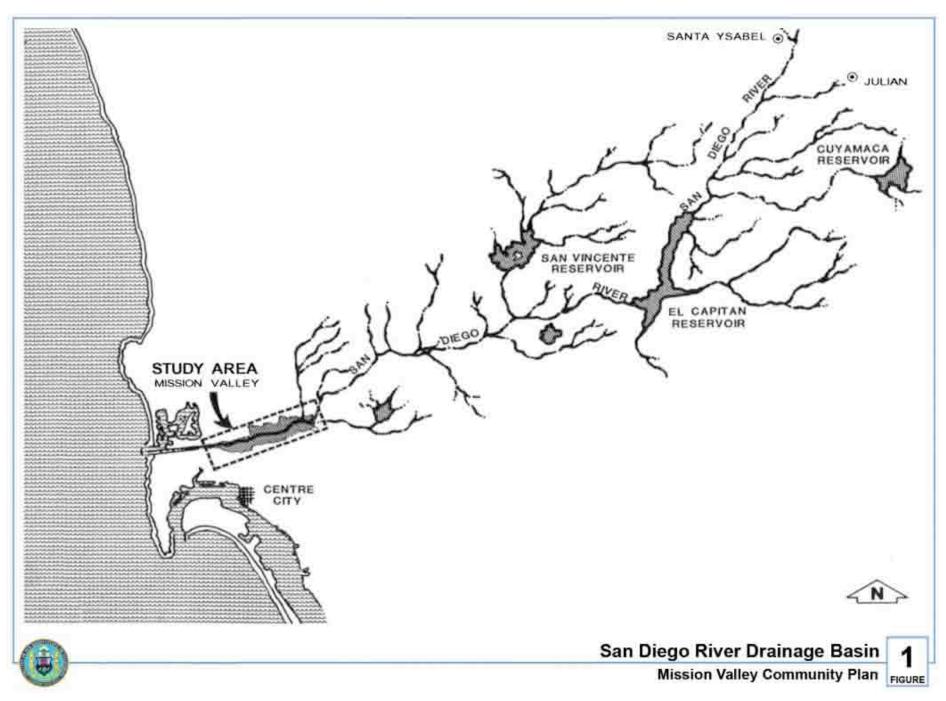
A brief description of the resources of the San Diego River is included in **Appendix A**.

# Floodplain Regulation

Existing flood management in Mission Valley consists of regulatory zoning (Floodway, FW; and Floodplain Fringe, FPF). These zones were based on 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). This zoning was applied in 1977 after much of the existing development had occurred and was intended to serve as an interim measure until a permanent flood-control channel could be developed. The FW zone defines the area which convey a 100-year frequency flood without increasing the water surface more than one foot above the water surface of a 100-year frequency flood without increasing the water surface more than one foot above the water surface of a 100-year frequency flood unconfined within the floodplain.

The purpose of the FW zone is to regulate and control development in the delineated floodways of floodplains. These regulations are intended to protect the public health, safety, and general welfare. Uses permitted in the FW zone are those which will not impede the flow of floodways. Permanent structures are not permitted in the FW zone, however, uses such as parking lots, parks, golf courses and agriculture are permitted.

The FPF is an overlay zone intended to regulate development in that portion of the floodplain lying between the floodway (FM zone) and the outermost boundary of the floodplain. This zone permits all uses allowed in the underlying zone subject to the review and approval by the City Manager.



Insofar as the FW and FPF zones regulate the types of land use appropriate within the floodplain and require project review, they provide protection, albeit minimal, of wetlands. Presently, there is no citywide floodplain management policy which establishes environmental goals for floodplains.

In 1975, the Corps revised their peak discharge estimate to 49,000 cfs to coincide with the year 2000, 100-year flood level. Any future flood-control channel in Mission Valley will have to carry the 49,000 cfs volume. When a channel 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.

# **Statement of the Problem**

Planning in Mission Valley must take into account a variety of land use interests with differing needs and objectives. Among these are:

# **Development Opportunities**

Due to its central location in the City, there is strong pressure for continued urban development in Mission Valley. Development trends are towards high-intensity land uses, such as mixed-use development, offices, and visitor-oriented and retail commercial. To recover developable land and control flooding, there is a demand to confine the existing FW zone by means of channelization (lowering the river bottom with dredging and/or elevating the banks with fill).

# Flood Protection

Since much of the existing development in Mission Valley occurred prior to floodway zoning, buildings and roadways are subject to frequent inundations. Some of this development was originally approved in the expectation that a major flood-control channel would be built along the length of Mission Valley.

The U.S. Army Corps of Engineers studied the possibility of constructing a concrete channel for the San Diego River. In 1976, the Corps reported to the City Council that a federally-sponsored project was not feasible due to the low benefit/cost ratio. The recommended alternative was a floodplain management program.

As a part of that program, the City Council in 1977 applied FW and FPF zoning to Mission Valley. An additional element of the floodplain management program at that time was development and implementation of a pilot channel system for maintenance of the entire floodway. This pilot channel program required funding through an assessment district formed on the basis of benefiting property owners and was never implemented due to lack of support from the property.

In the absence of a comprehensive channel, smaller pilot channels were created in three particularly flood-prone areas including: 1) the vicinity of the Stardust Country Club to Napa

Street; 2) the vicinity of Fashion Valley; and 3) the vicinity of the Stadium. Pilot channel construction involved clearing and grubbing of brush and trees and channel excavation. These pilot channels were intended to reduce flooding problems in the immediate area but not to handle high magnitude floods. A permanent, comprehensively planned flood facility is still sought in Mission Valley.

# **Environmental Protection**

In recognition of the valuable functions of the wetlands and floodplains, a variety of federal and state directives mandate the protection and management of these resources. Of primary concern at the federal level is the Clean Water Act which defines the national programs for hydrologic modification of waters in the United States. Section 404 of the Act provides a specific mechanism for regulating the discharge of dredge and fill materials and authorizes the Corps of Engineers, in conjunction with the Environmental Protection Agency to regulate, through a permit program, these activities. A number of other federal directives also relate to the physical management of floodplains. A list of these directives, along with those of the Clean Water Act, and a brief description of their goals, is contained in **Appendix B**.

At the state level, protection of wetlands is provided by State of California Fish and Game Code Sections 1601-1603, which requires an agreement for proposed river or streambed alterations that may affect fish and wildlife resources. This agreement between the Department of Fish and Game and the party proposing streambed alterations contains measures to protect fish and wildlife resources. Wetlands in the coastal zone are also protected by the California Coastal Act.

In accordance with these federal and state directives, the U.S. Army Corps of Engineers and California Department of Fish and Game exercise permit and agreement authority over projects which involve dredging, filling, or alteration of the San Diego River. These agencies, along with the U.S. Fish and Wildlife Service, are charged with the protection of wetlands in carrying out the state and federal regulations described above.

In the past, mitigation for the loss of some wetlands in Mission Valley was handled on a case-by-case basis. This piecemeal approach to mitigation did not provide the assurance that the overall river system would be protected. Therefore, the federal and state agencies found it increasingly difficult to grant approvals to projects which impact wetlands and advocated a comprehensive planning approach to the situation.

# **Public Recreation**

The San Diego River corridor is an asset to the community as it provides significant aesthetic, educational and recreational opportunities. With the proper implementation of public amenities, the river corridor has the potential to become an improved attraction for residents and tourists.

In the past, these land use interests have been regarded as conflicting uses. It is the intent of this plan to show how these interests can be complementary. Various features of this plan address the manner in which wetlands resource management can be integrated with development, flood protection, and recreation to create a river corridor which serves multiple purposes.

### **Definitions**

The following definitions apply to the terms as used in this document:

# **Buffer**

A buffer is "a designated land or water area along the perimeter of some land use whose own land use is regulated so as to resist, absorb, or otherwise preclude unwanted development or other intrusions into areas beyond the buffer" (U.S.D.A. Forest Service, 1976). In the context of this plan, a buffer is a separation or screening between urban development and the wetlands habitat. The purpose of this buffer is to minimize human and domestic animal encroachment into the wetlands area and to protect wildlife habitat from excessive human disturbance caused by noise, visual or direct disruption associated with development.

# Compensation/Mitigation

Compensation is a form of mitigation taken to offset the loss or disruption of floodway habitat. As used in this plan, compensation can take the form of wetlands conversion or improvement (defined below) to fully restore or rehabilitate degraded habitats and improve the overall quality of wetlands associated with the river. This concept is partially based on the U.S. Fish and Wildlife Service Mitigation Policy which is included as **Appendix C**.

# Conservation

The graphics indicate areas where wetlands should be conserved. In areas designated for conservation, no reduction of wetlands should occur. These areas are not available as mitigation sites since they contain relatively high-quality wetlands. In general, any loss of riparian woodland should be avoided. The only improvement which should be permitted in these areas is a flood-control channel. A flood-control channel must take provisions for incorporating at least an equal amount of wetlands habitat (by habitat type) into channel design.

# Conversion

Refers to the alteration of habitat from uplands to wetlands. This process would involve excavation of suitable non-wetland floodplain land to a level where open water persists or wetland vegetation will thrive and landscaping with appropriate native herbaceous and woody wetland plants.

# **Improvement**

A method of increasing the wildlife value of wetlands that have been degraded by grading, paving, or clearing of native vegetation. Habitat improvement may require excavation and will necessitate landscaping with plants which add to the food and cover value of the wetlands.

# River Channel/River Corridor

This includes the area within a flood-control channel, associated wetland habitat areas, and a buffer between the habitat and urban development. As required by the Mission Valley Community Plan, a flood-control facility or channel must be unlined and soft-bottomed with sloping vegetated sides.

# Wetlands

In general terms, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil or on its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. Wetlands are defined by plants (hydrophytes), soils (hydric soils) and frequency of flooding (Cowardin et al, 1979).

# **CONSTRAINTS AND OPPORTUNITIES**

While the biological value of some of the San Diego River is degraded due to its location in the center of an urbanized area and a history of past disturbances, it nevertheless offers an opportunity to combine community planning with the protection of significant biological resources. The Wetlands Management Plan takes into account the following constraints:

- The extent of past disturbance and confinement of the river precludes the possibility of recreating a truly natural floodway.
- The primary purpose of this Wetlands Management Plan is to protect, preserve and enhance wetlands in the San Diego River. However, since the floodway is within an urban setting and must serve multiple purposes, it cannot serve solely as wildlife habitat.
- Further development will occur within the floodway, restricting the extent of wetlands in some areas.
- Wetlands protection precludes the development of certain types of flood-control channel design (i.e., concrete) and flood-control regimes (unmitigated brushing and clearing of vegetation).
- Wetlands vegetation may create hydrologic problems (flooding) unless it is planned as part of a flood-control system.

Opportunities for enhancing wetlands and creating a valuable community resource are demonstrated by the following:

- Planning for a permanent flood-control system in most of Mission Valley is in the initial stages, therefore floodway habitat protection can be incorporated into flood channel design.
- Comprehensive planning can provide for a continuity of habitat and flood protection measures.

- Areas of degraded habitat exist which can be restored to achieve an overall improvement of the river system. Habitat improvement or conversion can be used as mitigation for any future losses.
- Most wetland habitats are relatively resilient and can become reestablished quickly.
- Increased aesthetics will generally follow habitat quality improvement.

#### PRINCIPLES AND POLICIES

The following principle governs the operation of this Wetlands Management Plan and establishes the requirements for mitigation:

The established FW zone boundary encompasses a sensitive resource area wherein no modifications (grading, paving, removal of vegetation) shall be permitted unless mitigation is accomplished in agreement with this plan.

Comprehensive planning for the river requires mitigation for any loss of existing floodway (wetlands or non-wetlands). While non-wetlands do not share the same habitat value as wetlands, they are nevertheless important to the management effort because they have potential for conversion to wetlands and can be used as compensation for the loss of wetlands in other areas.

This principle shall be carried out according to the following policies and mitigation criteria of this plan:

- Any channelization of the floodway shall plan for biological as well as hydraulic features. A continuous band of wetlands along both sides of the river shall be incorporated into channel design.
- Overall, there shall be no quantitative reduction in wetlands (as defined by vegetation) within the study area. Loss of wetlands can be permitted if it is mitigated in a manner which contributes to the overall qualitative improvement of the river corridor.
- Mitigation shall be appropriate for the quantity and type of vegetation lost and shall consist of habitat conversion or improvement of degraded wetlands. If the impact is to wetlands, there shall be an in-kind replacement or total wetlands and individual habitat types (unless it is demonstrated that the habitat would be improved through alternative replacement). If the impact is to non-wetlands in the FW zone, there shall be out-of-kind compensation through conversion to wetlands.
- Mitigation shall be accomplished concurrent with or in advance of floodway loss.
- The first priority is for a wetlands mitigation to occur within the same segment of the river in which the impact has occurred. Where it can be demonstrated that mitigation is not possible within the same segment, mitigation shall be permitted elsewhere within the study area.

# LAND USE PROPOSALS AFFECTING WETLANDS

The Mission Valley and Navajo community plans include land use proposals in the vicinity of the river which may affect wetlands. Since these projects were accounted for in developing the Wetlands Management Plan, they would be considered consistent with the plan as long as development follows the policies, guidelines and criteria outlined in this plan. These land use proposals are identified below and discussed further in the Section Analysis of this report. Land use proposals which have not been anticipated could be acceptable, but they would require individual review to determine their consistency with the Wetlands Management Plan and effect on the river.

# **Road Improvements**

Planned roadway improvements which would affect wetlands include the construction of:

- Camino de la Reina between Napa Street and SR-163 (see **Figures 4**, **6**, **8**, and **10**);
- Colusa Street river crossing (see **Figure 6**);
- Via las Cumbras river crossing (see **Figure 6**);
- Milly Way river crossing (see **Figure 18**);
- Camino del Rio North between Fairmount Avenue and I-15 (see **Figure 22**);
- Rancho Mission Road river crossing (see **Figure 22**);
- Widening of San Diego Mission Road across the river (see Figures 22 and 24); and
- Widening of the Friars Road bridge over San Diego River (see **Figure 24**).

Additionally, as required by the draft Mission Valley Community Plan, all north-south roads crossing the flood-control channel shall be constructed or improved to be passable during a minimum year 2000, ten-year flood (4,600 cfs). This will require improvement to existing roads as follows:

- Fashion Valley Road (see **Figure 10**);
- San Diego Mission Road (see **Figures 22** and **24**).

It has not been determined at this time precisely who will be responsible for these improvements. However, compensation for wetland impacts will be tied to the responsibility for road construction.

Construction and wetlands compensation for Camino del Rio North between Fairmount Avenue and 1-15, the crossing of Rancho Mission Road, the segment of Camino de la Reina west of Colusa Street, and the widening of the Friars Road bridge would likely be the responsibility of the City. To the extent feasible, compensation for these projects will be provided on site or within the same segment of the river. Where it is not possible to compensate on site, wetlands will be improved or created on City-owned properties in western Mission Valley or near the Stadium.

The other improvements will likely be the responsibility of the developer and/or benefiting property owners, depending on arrangements to be made pending permit review. Compensation for the loss of wetlands resulting from construction of Colusa Street, via las Cumbres, Camino de la Reina east of Colusa Street and Milly Way should entail creation of wetland habitats or improvement of degraded wetlands within or adjacent to the floodway in the same section of the river as the project itself. Every attempt should be made to mitigate for the loss of wetlands due to construction of the major street in the vicinity of Fashion Valley within the same section. A mitigation site elsewhere in the study area should be approved only if it is demonstrated that there is no land available for complete or partial compensation.

# **CITY PROJECTS**

Two major projects on City-owned properties include:

- Aquatic treatment facility. This project site is on 12.5 acres of Water Utilities Department property outside the floodway on the south side of the river between Milly Way and Murphy Canyon Road (see **Figures 17** and **19**). This is a three-year pilot project undertaken to determine design standards for future reclamation facilities. The three-phase project is expected to begin operation in late 1983, and to be completed in 1986. Use of the site beyond that date has not been determined. The site presently supports uplands vegetation, so wetlands would not be directly impacted. This, however, is a potential mitigation site for conversion to wetlands.
- Development of Stadium properties. An economic feasibility study is being conducted by
  the City of San Diego Property Department to determine how the Stadium, as well as
  other properties located between Stadium Way and 1-15, might be developed or
  redeveloped in the future. The City will be responsible for mitigating any impacts to
  wetlands resulting from the Stadium project. Compensation should occur within the same
  river segment.

A capital improvement project, Alvarado Pipeline No. 2 - Phase II, involves the installation of a water pipeline in the proposed Rancho Mission Road and Camino del Rio North alignment. If the pipeline is installed in the road alignment, no mitigation in addition to that required for the road will be needed. If conditions do not allow the pipeline to be placed within the road, then mitigation will be required.

#### PRIVATE DEVELOPMENT PROPOSALS

Within the Wetlands Management Plan area, large undeveloped parcels anticipated for major private development are described below and shown on **Figures 1-6** as indicated.

- 1. The area west of Fashion Valley Road, designated as a Specific Planning Area (Assessor's Parcel Numbers 438-52-6, 7; 436-61-9, 13, 14, 15, 50; 437-24-3, 5, 11). See **Figures 6** and **8**.
- 2. The area on the south side of the river, just east of Stadium Way, designated for office use (Assessor's Parcel Numbers 438-52-6, 7). See **Figure 16**.

- 3. The area on the north side of the river, just east of Stadium Way, designated as a Specific Planning Area (Assessor's Parcel Numbers 433-10-6, 30; 433-23-33). See **Figure 18**.
- 4. The area on the northeast side of the river between San Diego Mission Road and Friars Road, designated for industrial use (Assessor's Parcel Numbers 461-15-10, 11, 12, 13 and 458-30-3, 4, 13). See **Figure 24**.

For these projects, compliance with the Wetlands Management Plan and mitigation of impacts to wetlands will be the responsibility of the developer. Compensation for the elimination of wetlands resulting from development (including any necessary roads) should be provided on site or within the same section of the river. Development proposals for areas outside the floodway should incorporate the criteria for development adjacent to the floodway described in this report.

# PILOT CHANNELS

In the past, 50- to 95-foot-wide pilot channels have been constructed in critical areas of the river, namely: 1) the area from the Starburst Country Club to Napa Street; 2) Fashion Valley Road to SR-163; and 3) south of the Stadium. Previous permits and agreements did not provide for maintenance of these channels. In the absence of a permanent flood-control channel, it may be necessary to reconstruct previously created pilot channels or to construct new ones.

Pilot channel construction of this nature is subject to the requirements of this plan and any elimination of wetlands vegetation shall be mitigated. Once this loss of vegetation has been compensated for, periodic maintenance and clearing within an established pilot channel shall be permitted without a requirement for further mitigation.

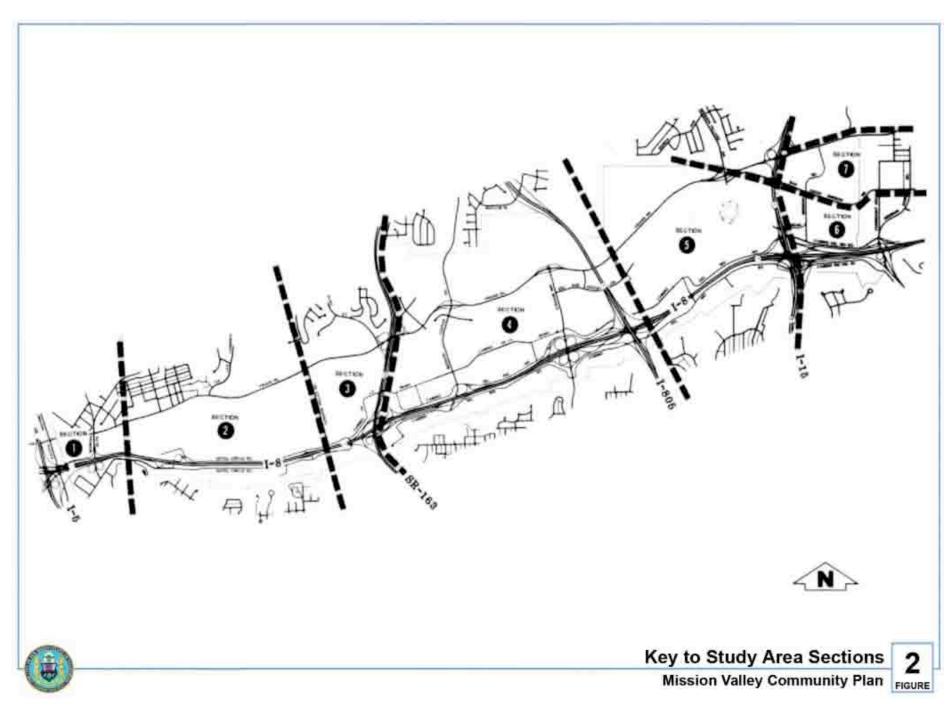
# **SECTION ANALYSIS**

For planning purposes, the river was divided into seven sections (see **Figure 2**). The following is a discussion of how each section should be treated to accommodate the land use proposals discussed in the previous chapter and achieve the objectives of this plan. The section analysis provides a description of existing habitat and development along each section of the river. Opportunities for qualitative improvement of existing habitats are identified.

Existing and projected wetlands (shown on **Figures 3-24**) have been quantified for each section and the overall study area. The acreages for each section are shown on the following pages and the overall acreage is shown in **Table 1**.

TABLE 1 SUMMARY OF WETLANDS ACREAGE

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion
Section 1	40	20	44
Section 2	21	55	87
Section 3	6	1	14
Section 4 (excluding FSDRIP)	20	7	4
Section 5	64	27	27
Section 6	30	3	4
Section 7	24	2	6
Totals	205	115	186



# SECTION 1 - INTERSTATE 5 TO 300 FEET WEST OF HARNEY ROAD

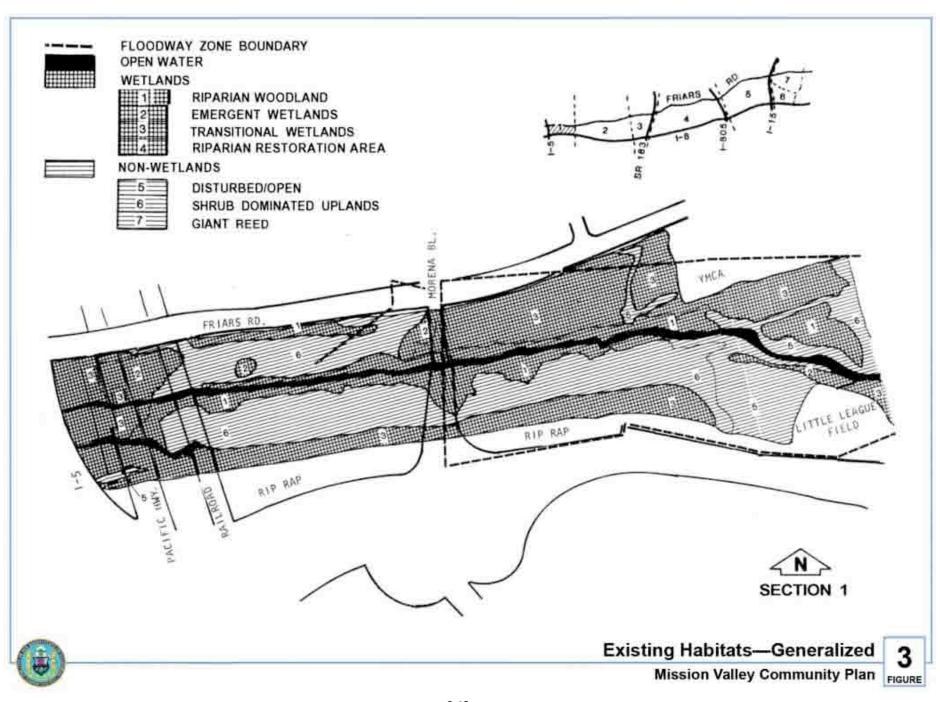
Wetlands occupy the majority of the area within the floodway zone boundaries. The low-flow river channel is quite narrow in this area and is a bordered by a narrow band of mature willow trees on both sides. Stands of willows also occur in other areas. Upland and transitional wetland vegetation occurs along the northern and southern extent of the floodway. Development within the floodway includes the YMCA (with parking lot) and Little League ball fields in the northeast and southeastern portions respectively, and a short segment of Friars Road in the northwest. All of the property in this section is in City ownership.

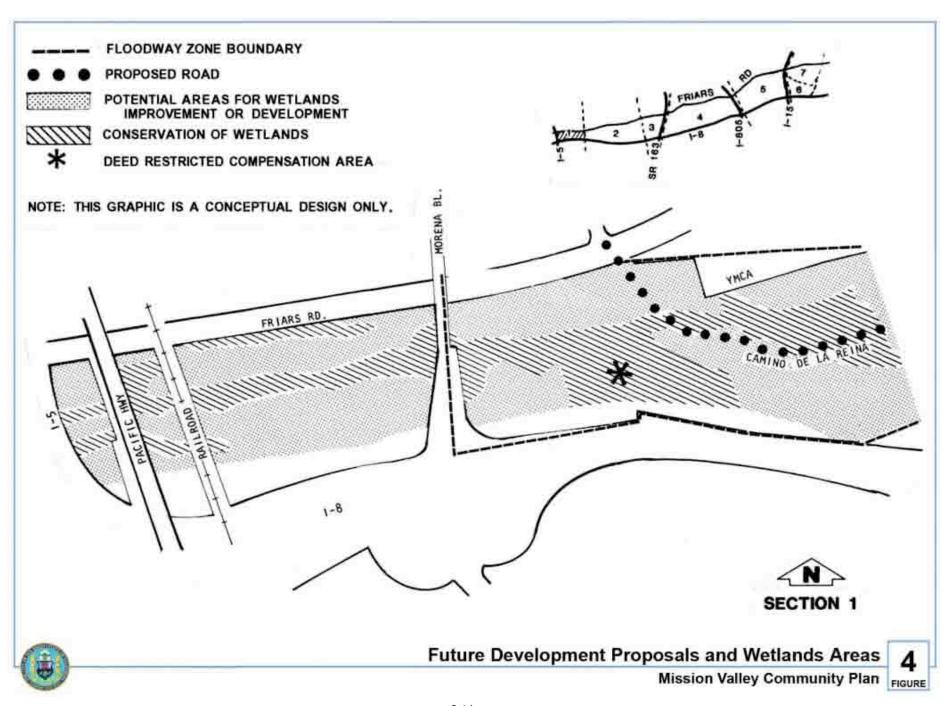
No further reduction of existing habitat other than the planned extension of Camino de la Reina to Friars Road should occur here. Many opportunities exist for improving the quality of wetland habitats. These include 1) the conversion of uplands to wetlands, and 2) improvement of degraded wetland habitats by increasing the quantity and quality of freshwater marsh and riparian woodland, and the amount of open water area. Areas of relatively high-quality wetlands, including the open water channel and woodlands shall not be used for mitigation sites. These areas are designated as conservation areas on **Figure 4**. A compensation site for the loss of wetlands associated with the Camino del Rio North project is also designated as a conservation area. Habitat development and improvement will be accomplished as mitigation for projects which impact wetlands in this and other sections of the plan area. Since this area is in City ownership, it is expected to be used primarily to compensate for City projects.

A pilot channel was created through the eastern portion of this section (south of the YMCA) and the western portion of Section 2 (Stardust Country Club). Any future clearing of vegetation will require mitigation.

TABLE 2
WETLANDS ACREAGE IN SECTION 1

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
<b>Total Wetlands</b>	40	2	44	18
Open Water	3			
Freshwater Marsh	3			
Riparian Woodland	12			
Transitional Wetlands	22			
Non-Wetlands	24			





# SECTION 2 - 300 FEET WEST OF HARNEY ROAD TO FASHION VALLEY ROAD

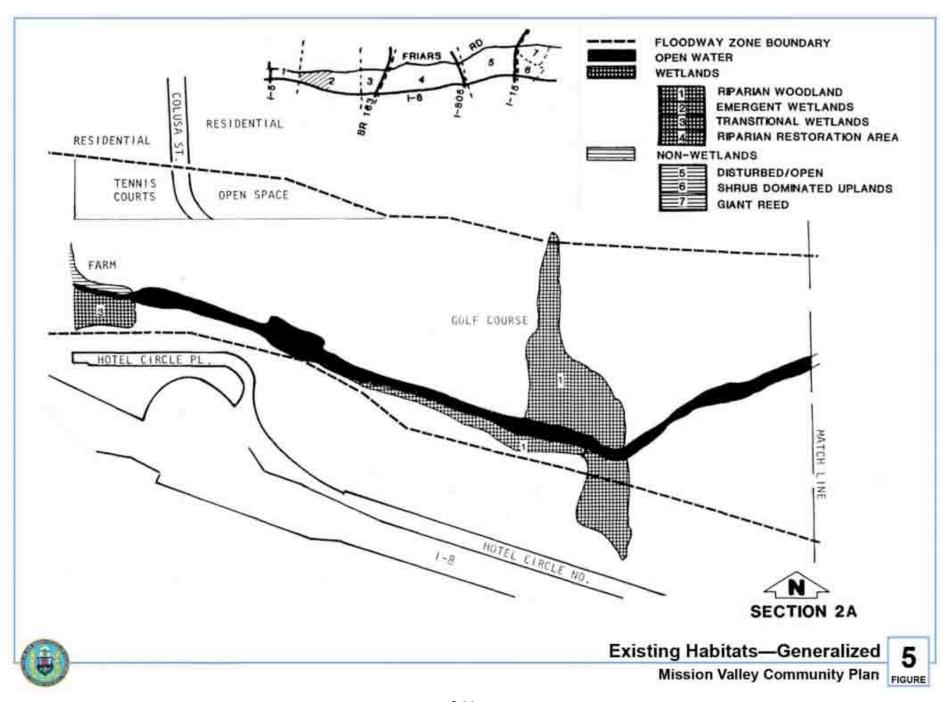
Natural vegetation is extremely limited in this area since a major use of the floodway is for golf courses (River Valley and Stardust). A farm and tennis courts (associated with a residential development and a hotel) also extend into the floodway. The river exists as a narrow channel through the golf courses. Remnant specimens of cottonwood and willow trees exist in isolated pockets: the most extensive occurring on an undeveloped parcel between the Stardust and River Valley golf courses. An area containing transitional wetlands exists outside of the FW zone on this parcel.

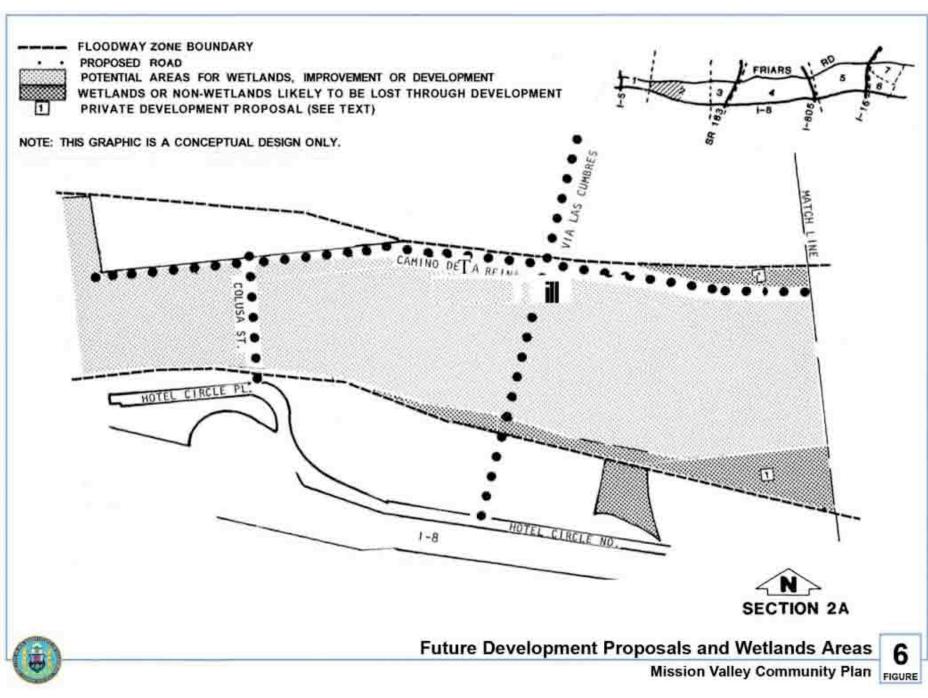
The area north and south of the FW zone is designated as a specific planning area in the draft Mission Valley Community Plan. Some land presently within the floodway (shown as (1) on **Figures 6** and **8**) could be recovered for development if proper flood control and wetlands restoration are accomplished.

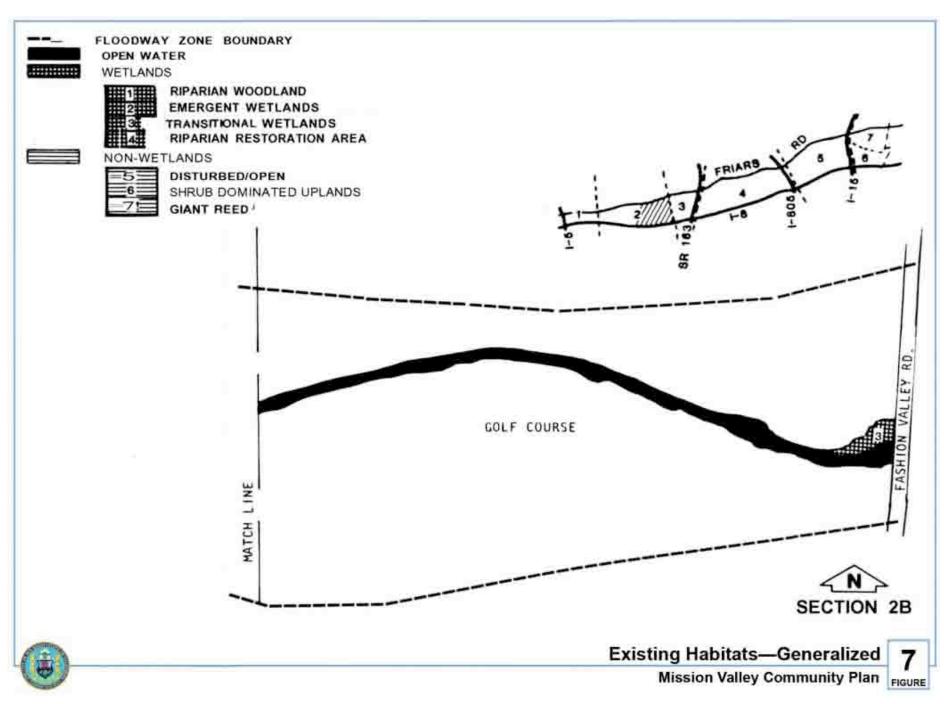
A flood-control channel in this section must be capable of containing a 100-year flood (49,000 cfs) and support a viable wetlands corridor. Wetlands restoration must be incorporated into channel design and include the following habitat types: aquatics with vegetated islands, freshwater marsh, riparian woodland. A channel which meets the biological requirements for the creation of wetlands could be considered compensation for loss of existing riparian woodland and degraded wetlands (golf course) resulting from future development and road construction within the existing floodway. The creation of a biologically valuable river corridor through this section would sufficiently enhance the existing wetlands system to eliminate a need for compensating the loss of FW land on an acre-for-acre basis. Guidelines for the creation of wetlands are discussed under the section titled Guidelines for Habitat Development. Development plans for this area should be consistent with the criteria for development adjacent to the floodway described in this plan.

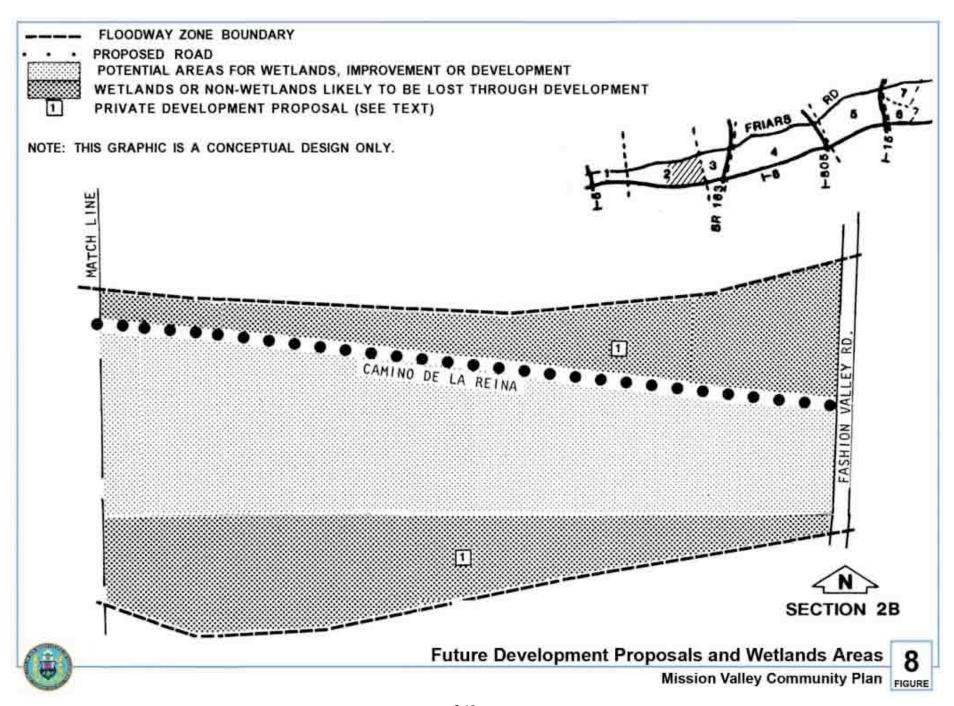
TABLE 3
WETLANDS ACREAGE IN SECTION 2

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
Total Wetlands	21	55	87	0
Open Water	11			
Freshwater Marsh	0			
Riparian Woodland	8			
Transitional Wetlands	2			
Non-Wetlands (Golf Course)	14			









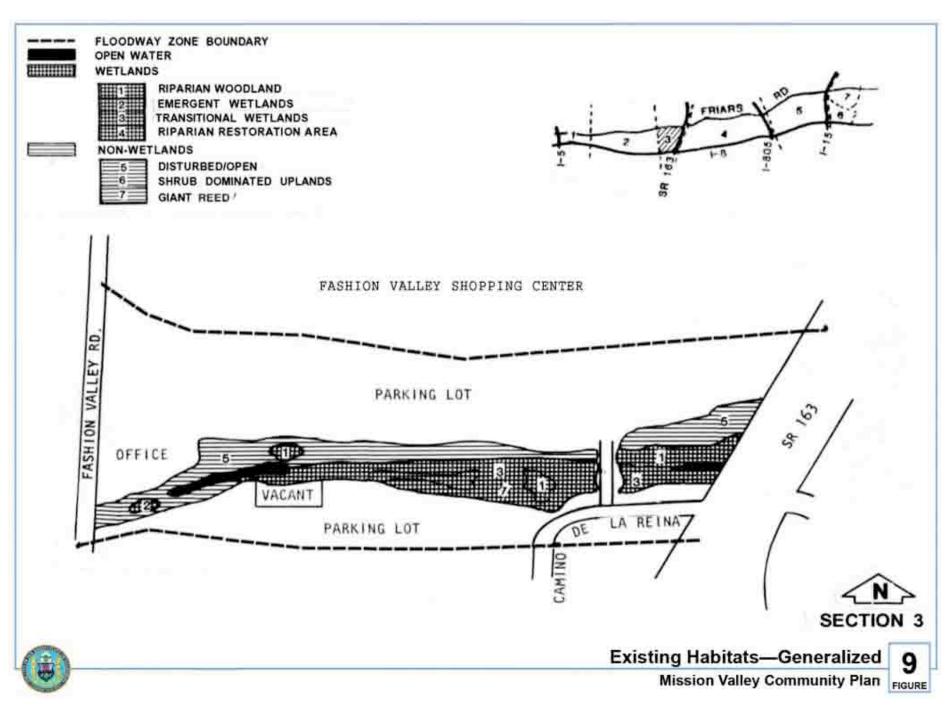
### SECTION 3 – FASHION VALLEY ROAD TO SR-163

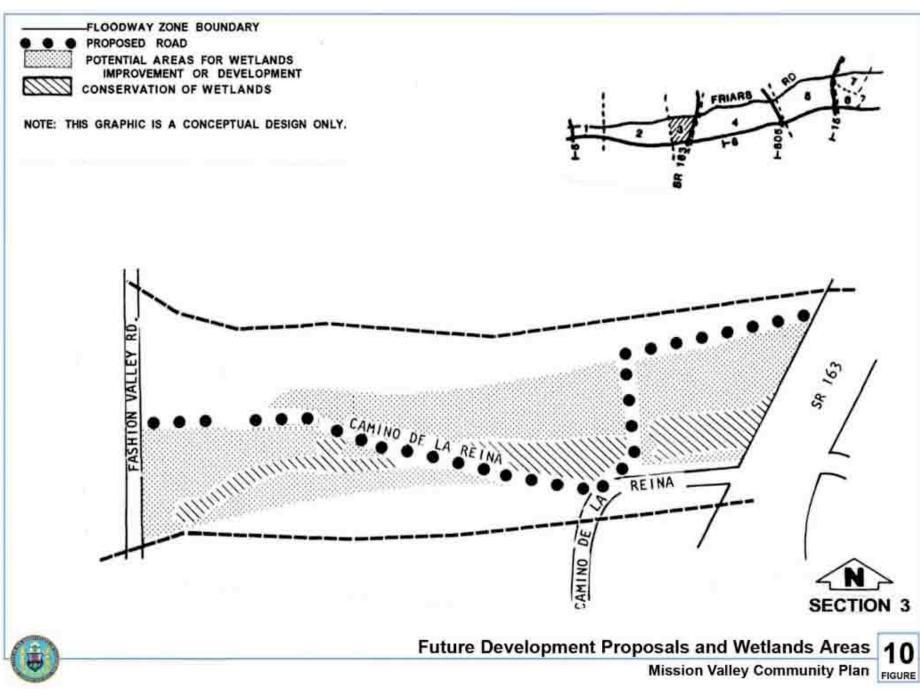
The floodway in this area has largely been developed with parking lots and a temporary office, leaving only a narrow corridor of wetland vegetation. With the exception of a few small stands of riparian woodland and marsh vegetation, this corridor is occupied by disturbed open habitat on the north bank and transitional wetlands on the south bank. A pilot channel varying in width from 70 to 95 feet was created in the eastern portion of this section. Existing vegetation was removed and riparian vegetation was planted approximately 0.5 acre north of the channel between Avenida del Rio and SR-163.

The planned extension of Camino del Rio through this section would further restrict available habitat. To maintain some biologic viability in this section, the corridor should not be narrower than 150 feet. This would allow for maintenance of the pilot channel and retention of wetland habitat on both sides of the channel. Compensation for the loss of wetlands should be provided on site through the conversion of non-wetlands and improvement of existing wetlands. Channel banks should be vegetated with a dense continuous band of cottonwoods, willows and appropriate understory plants. This would provide a riparian corridor connecting upstream and downstream sections of the river. Plantings should be dense so that the woodland also serves as a buffer from excessive human intrusion. Areas designated for conservation, previously restored and high-quality areas, are not available as mitigation sites.

TABLE 4
WETLANDS ACREAGE IN SECTION 3

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
<b>Total Wetlands</b>	6	1	14	6
Open Water	1			
Freshwater Marsh	0			
Riparian Woodland	2			
Transitional Wetlands	3			
Non-Wetlands	5			





# SECTION 4 – SR-163 TO 700 FEET EAST OF INTERSTATE 805 (FIRST SAN DIEGO RIVER IMPROVEMENT PROJECT)

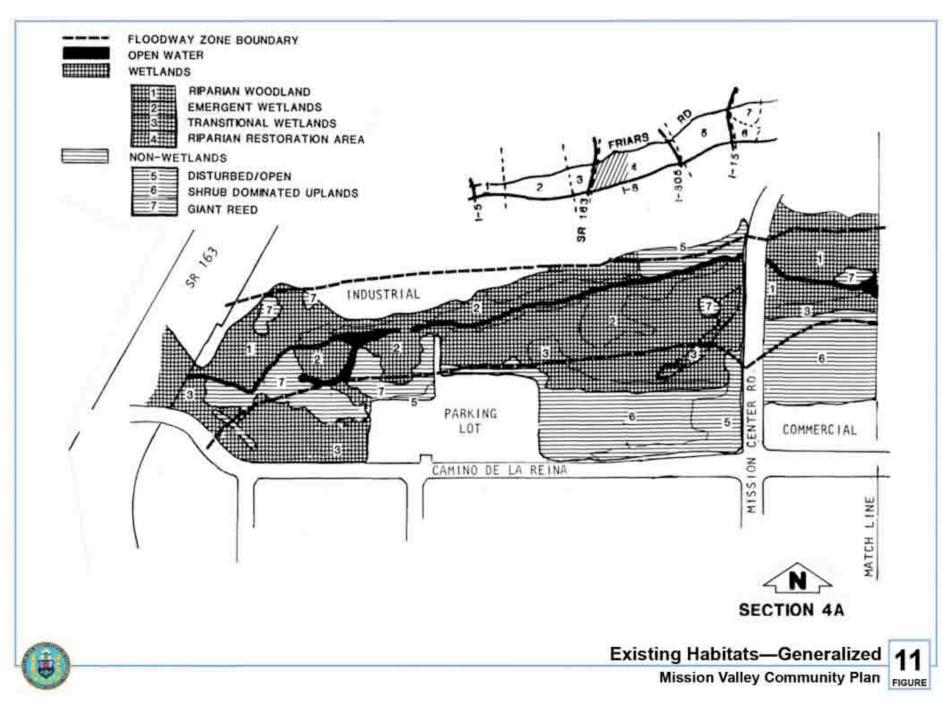
A variety of habitat types presently occupy the floodway. High-quality areas include open water, marsh and mature riparian woodland. Upland and transitional riparian vegetation provide supportive habitat. Natural habitat also occurs outside the floodway on private property on the south bank of the river just east of Stadium Way.

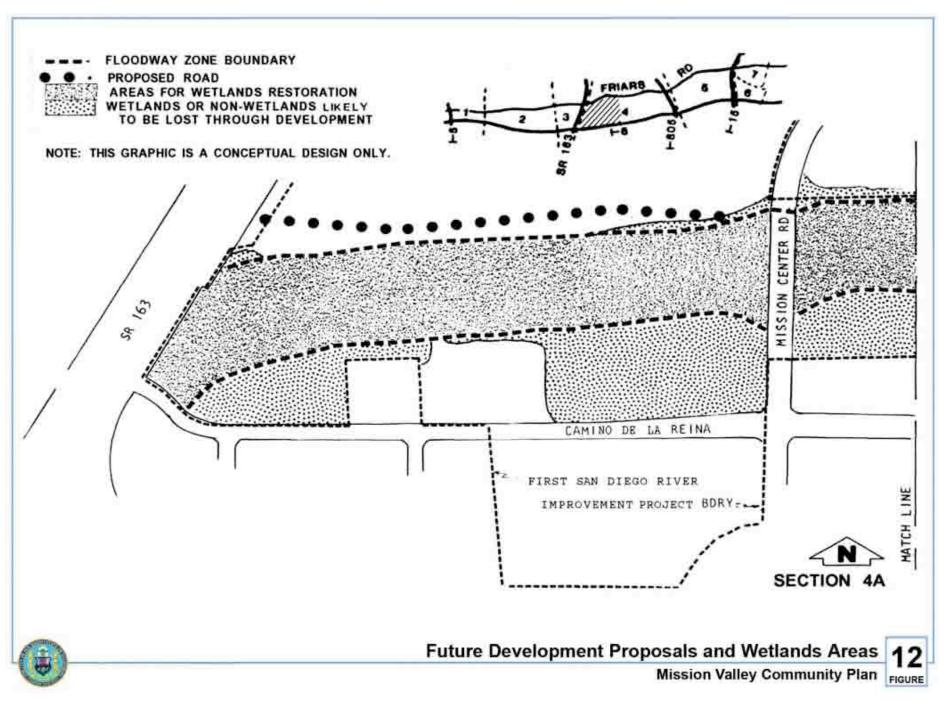
Most of the floodway and the adjacent area is part of the approved First San Diego River Improvement Project. As part of this project, the San Diego River between SR-163 and Stadium Way will be realigned and channelized. The new channel will be revegetated to recreate wetland habitats (aquatics, marsh and riparian woodland). The floodway east of Stadium Way will be retained in its present condition. In exchange for improving the river channel, the project will recover land within the floodway for development.

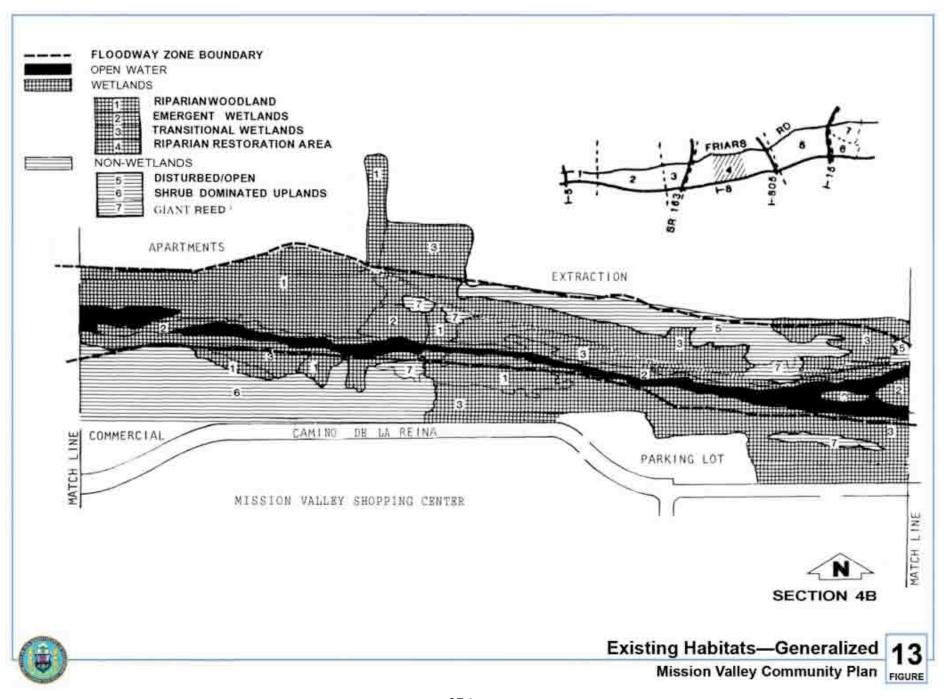
It is anticipated that the approximately 12 acres of existing habitat (transitional wetlands/uplands) just outside the floodway on the south bank of the river east of Stadium Way (shown as (2) on **Figure 16**) will ultimately be removed for future development on that parcel. This site contains transitional wetlands vegetation and is therefore subject to mitigation requirements. Compensation should entail improvement to the habitat adjacent to the floodway. At the time development is proposed, a site-specific evaluation will be required to determine the extent of the impact to wetlands and appropriate mitigation. This and other future projects which propose development outside the floodway will be subject to the requirements as described in the section, **Criteria for Development Adjacent to the Floodway**.

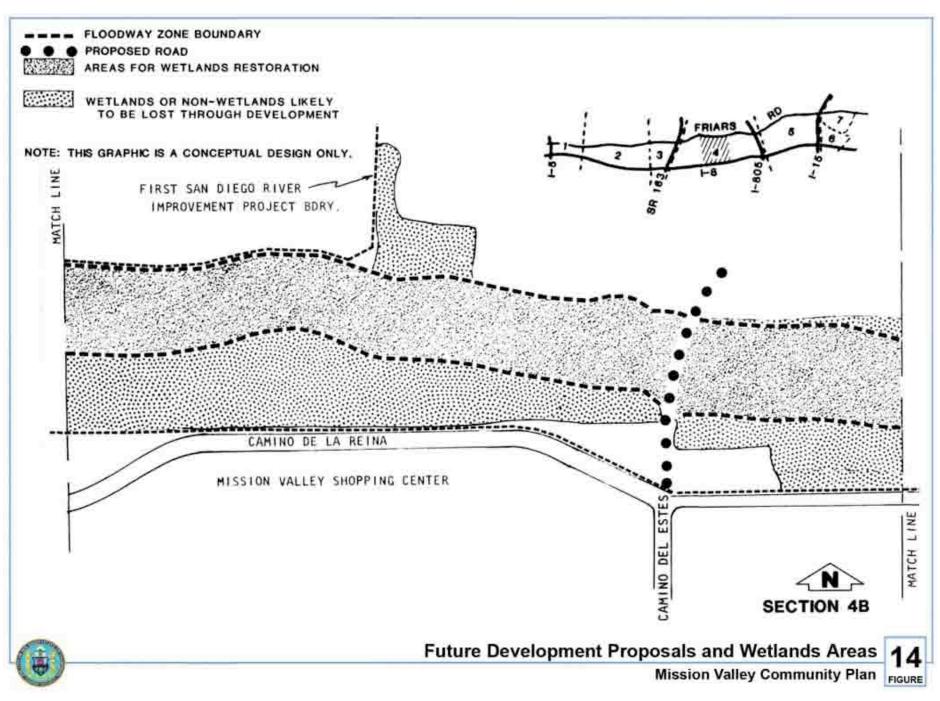
TABLE 5
WETLANDS ACREAGE IN SECTION 4

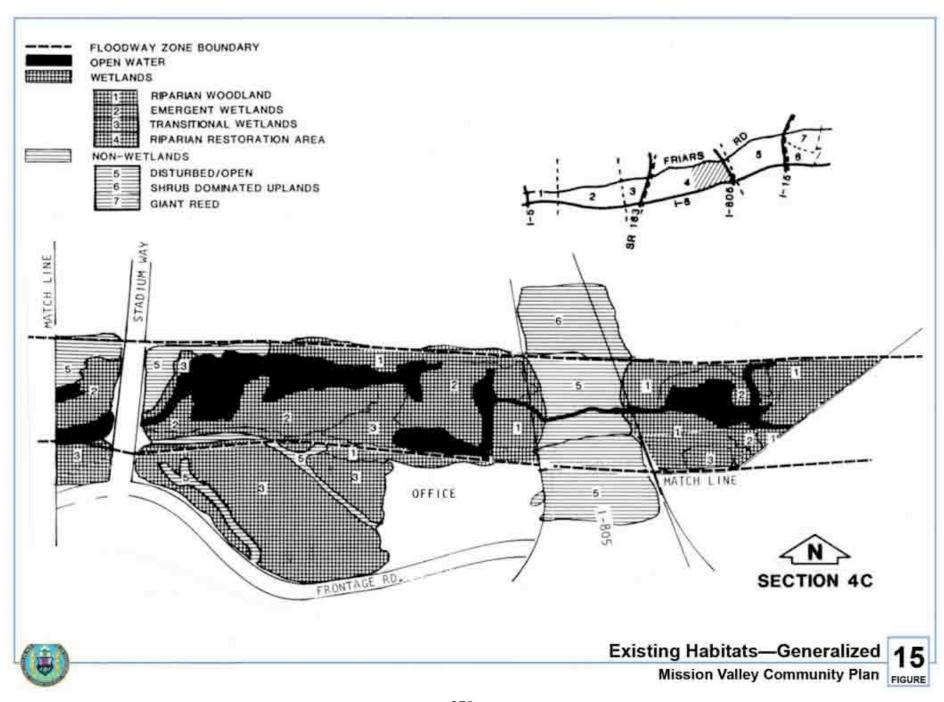
Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
<b>Total Wetlands</b>	20	7	4	10
Open Water	4			
Freshwater Marsh	4			
Riparian Woodland	1			
Transitional Wetlands	11			
Non-Wetlands	1			

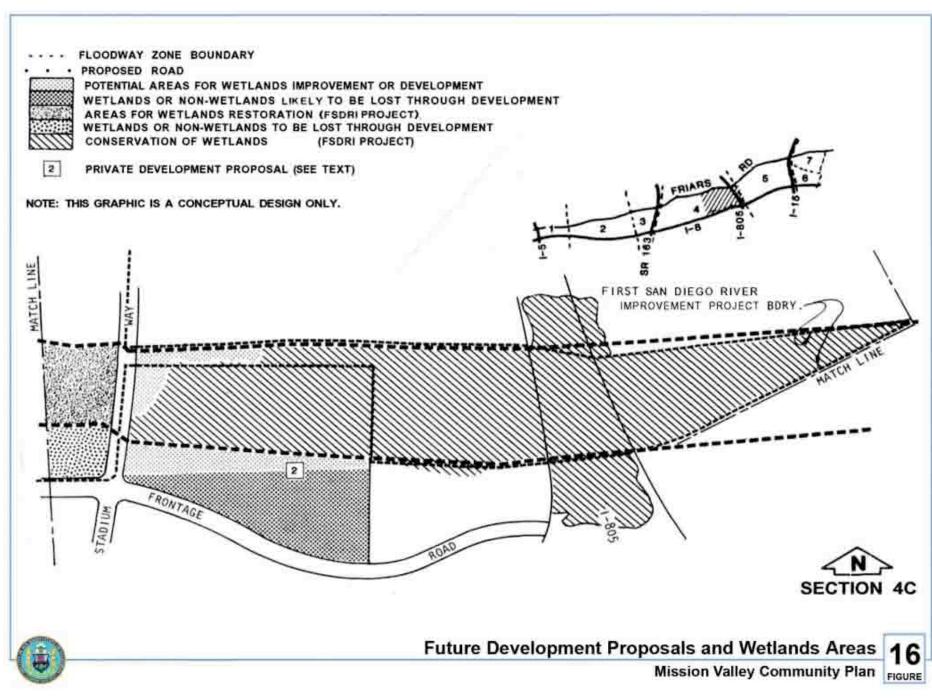












#### SECTION 5 - REMAINDER OF AREA EAST OF I-805 TO I-15

This section of the river is dominated by high-quality habitats including open water, mature riparian woodland, marshes and sandbars. The major portion of the floodway in this section is in City ownership, most of which is owned by the Water Utilities Department. Only a small portion of the floodway is in private ownership.

A compensation area for the Centerside development has been established within the floodway just west of Milly Way. This compensation program involved the conversion of uplands to wetlands and the preservation of riparian woodland.

Preliminary plans for development on the property adjacent to the Stadium (shown as (3) on **Figure 18**) include the retention of wetlands in and adjacent to the floodway. If the extension of Milly Way across the river is a condition of approval for this project, then compensation for the loss of wetlands due to the river crossing will be required as part of the project. Compensation for the loss of wetlands on site or associated with the Milly Way bridge should take the form of conversion of non-wetlands or improvement of low-quality or disturbed wetlands within or adjacent to the floodway on the property.

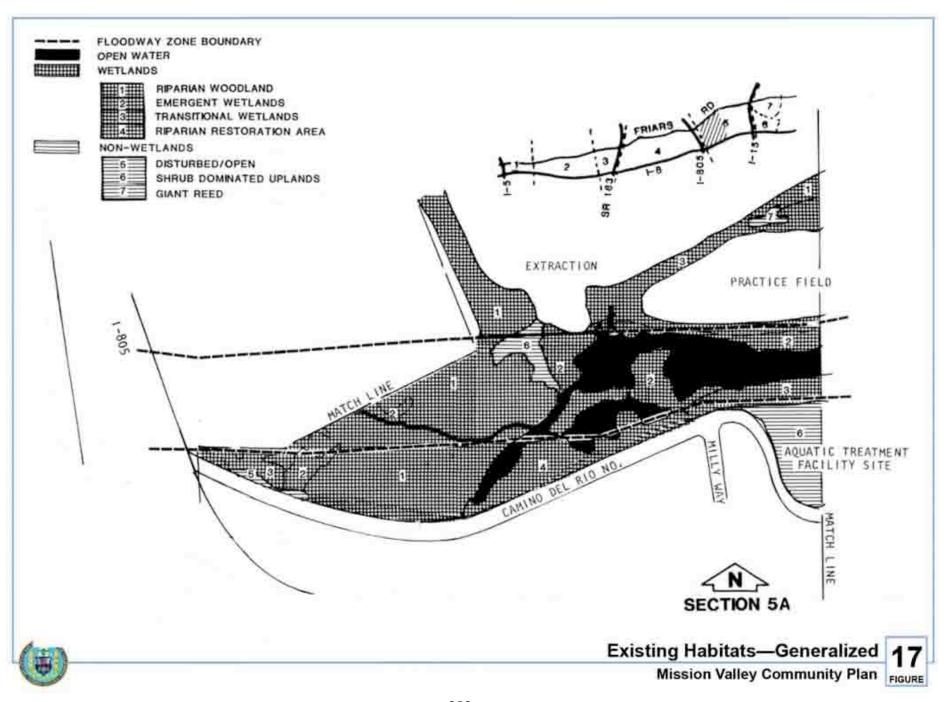
The City Water Utilities Department owns property outside the floodway both east and west of Milly Way. The area west of Milly Way supports mainly mature riparian woodlands. The area east of Milly Way supports transitional wetland vegetation. An experimental water reclamation plant will be constructed on a portion of the utilities property just north of Camino del Rio and south of the Stadium (see **Figures 17** and **19**). This plant is expected to be in operation for three years. Use of this property after the three-year period has not been determined.

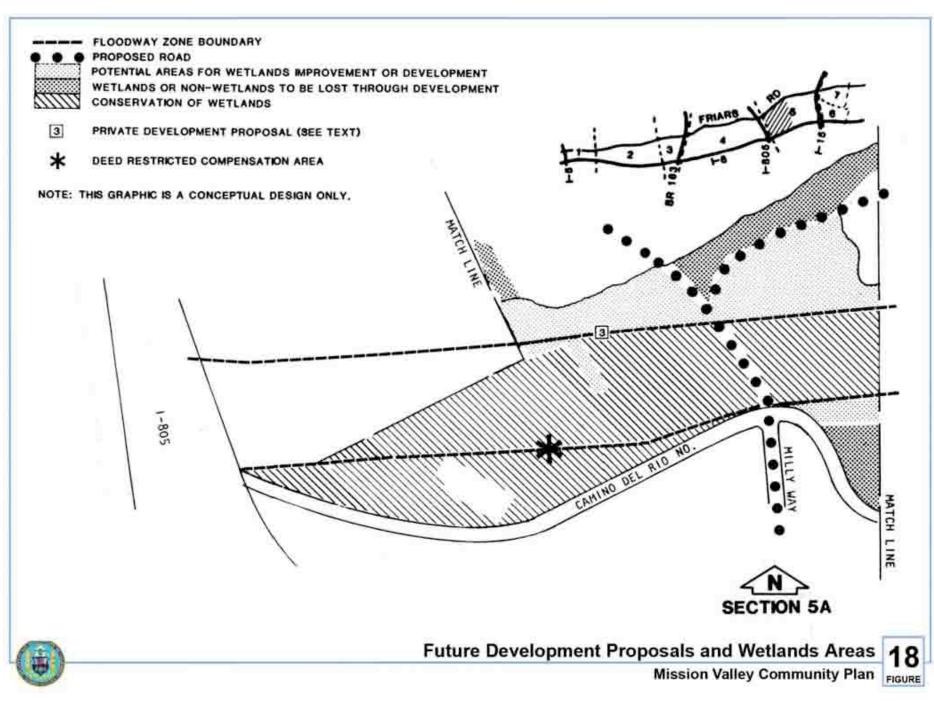
The City is presently considering options for development on City lands, including the Stadium parking lot, in this area. Consideration of wetlands must be a part of any future development plans. The floodway in this section is designated for conservation due to the quality of the existing wetlands. The only improvement which should occur within the floodway is the creation of a flood-control channel. Channel design should replace an equal quantity of wetlands. Wetlands, particularly the mature woodland, should be preserved wherever possible. Opportunities for creating additional wetlands include the recovery and conversion of lands 1) at the water reclamation site; 2) at the southerly end of the stadium parking lot; and 3) the practice field or the undeveloped area east and west of the practice field. First priority will be given to use of water utilities land as mitigation for development of the stadium properties, and second priority to other City projects. As a last priority, the land could be used to compensate for private development if it is demonstrated that the land will not be required for first or second priority projects, and adequate arrangements are made with the Water Utilities Department.

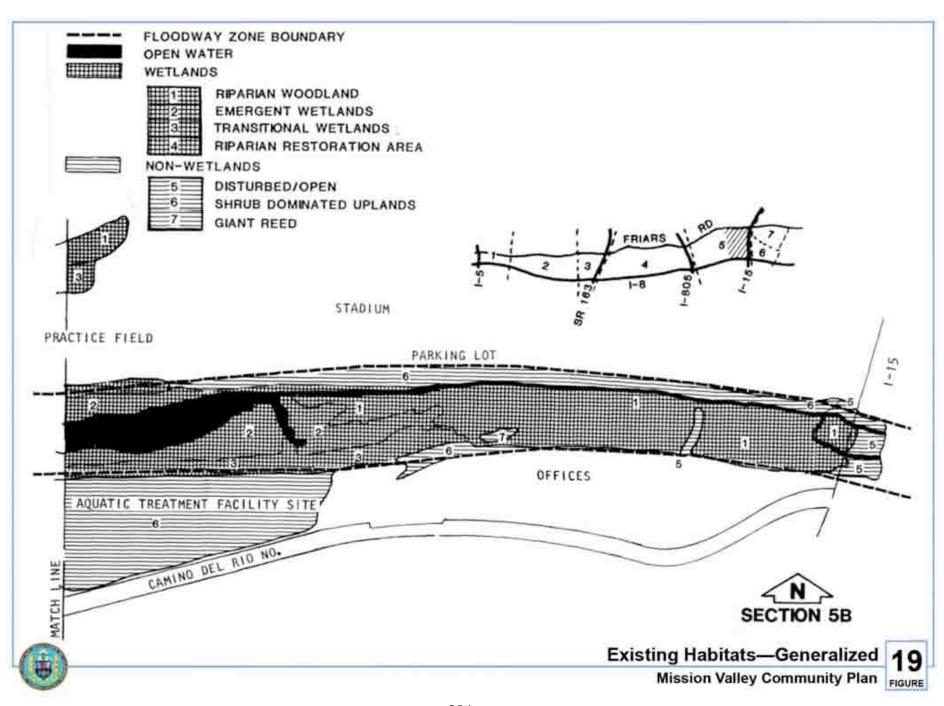
In the past, a 50-foot-long pilot channel was created from I-15 westward to carry storm waters. If future clearing of vegetation is needed in the absence of a permanent flood-control channel, mitigation will be required.

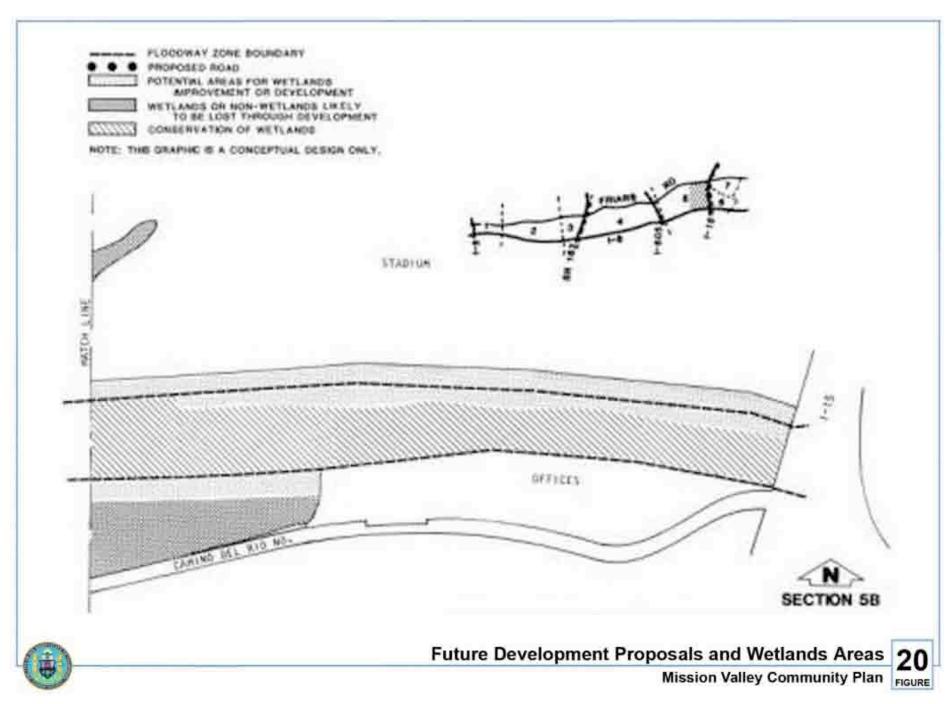
TABLE 6
WETLANDS ACREAGE IN SECTION 5

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
<b>Total Wetlands</b>	64	27	27	35
Open Water	12			
Freshwater Marsh	10			
Riparian Woodland	30			
Transitional Wetlands	9			
Restoration Area	3			
Non-Wetlands	19			









#### SECTION 6 - INTERSTATE 15 TO SAN DIEGO MISSION ROAD

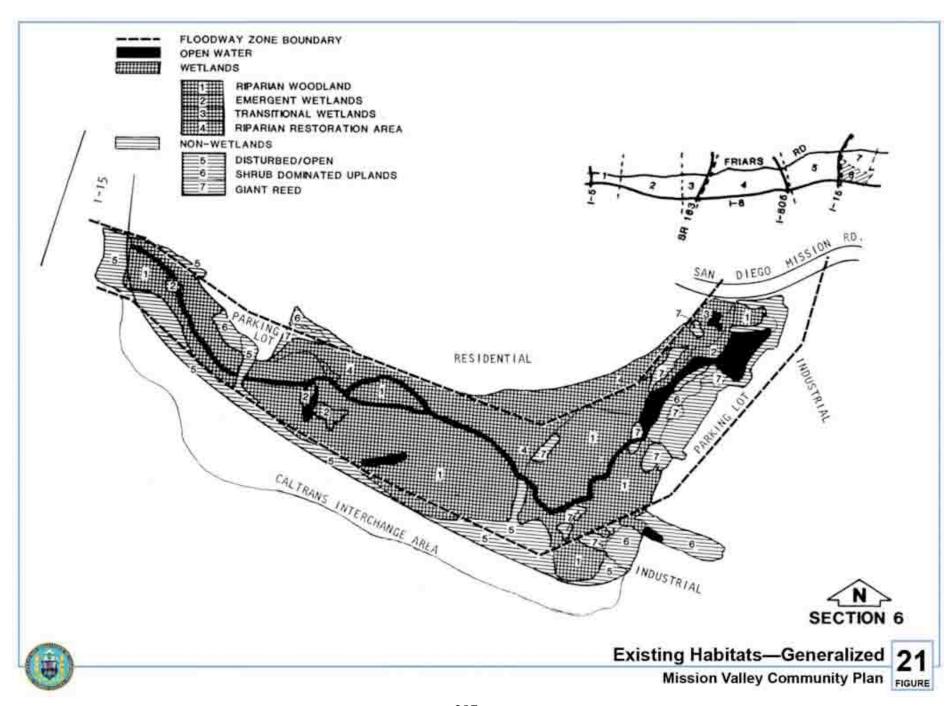
This section of the floodway is characterized by high-quality open water and riparian woodland habitats with disturbed areas on the periphery. Paced parking lots encroach into the floodway in the northwestern and southeastern portion of the section. Caltrans is presently improving the I-8/I-15 Interchange on the south side of the river. To compensate for the loss of wetlands associated with those improvements, Caltrans has converted an upland area on the north side of the river into a wetland restoration area in the north central portion of this section. The revegetation effort in the restoration area emphasized the planting of cottonwood trees with a fewer number of sycamores and willows.

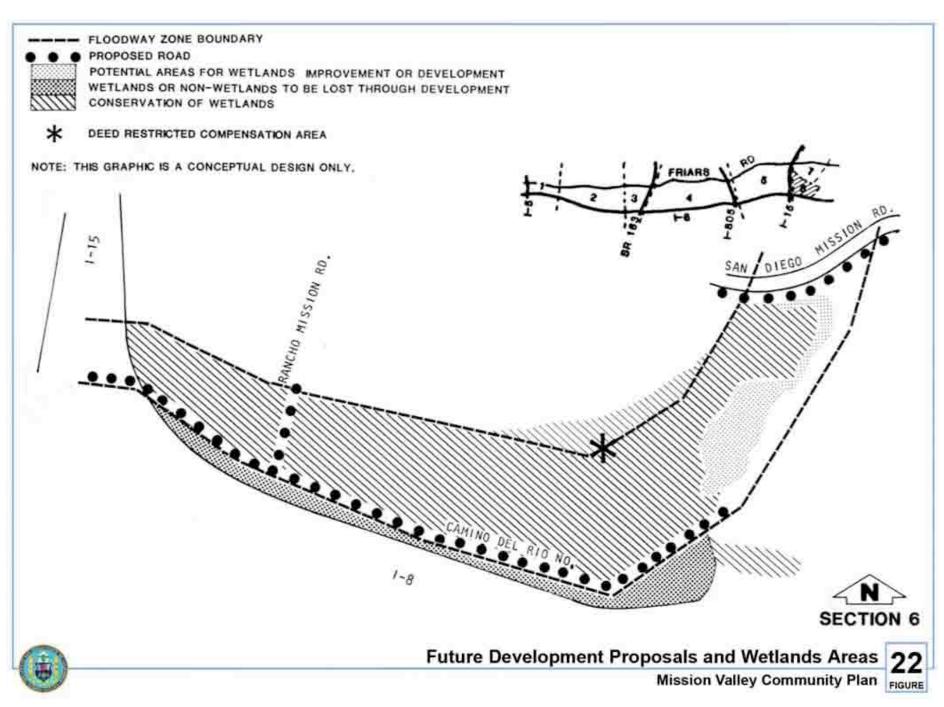
The construction of Camino del Rio North from I-15 to Fairmount Avenue and the Rancho Mission Road bridge are planned improvements in this area and would eliminate wetlands habitat. Off-site compensation for Camino del Rio and the Rancho Mission Road bridge will occur on City-owned land in the western portion of Mission Valley.

The disturbed nonwetlands areas adjacent to the parking lots are potential areas for conversion to wetlands. The remainder of the area contains wetlands of relatively high quality and should be conserved. These areas are not available as mitigation sites.

TABLE 7
WETLANDS ACREAGE IN SECTION 6

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
<b>Total Wetlands</b>	30	3	4	36
Open Water	6			
Freshwater Marsh	1			
Riparian Woodland	17			
Transitional Wetlands	1			
Restoration Area	5			
Non-Wetlands	13			





## SECTION 7 - SAN DIEGO MISSION ROAD TO FRIARS ROAD

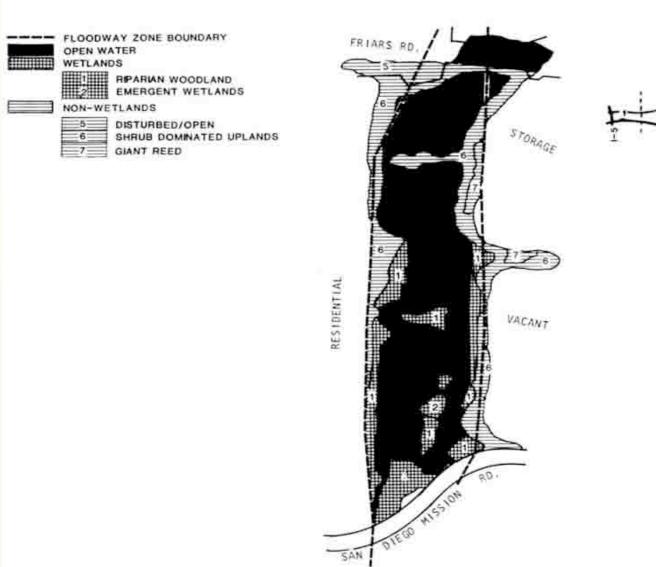
Previous excavation activities here have created high-quality wildlife habitats consisting of open water, riparian woodlands and marsh. This area has the largest expanse of open water relative to cover in the entire study area. Islands and a peninsula are present and provide a fish-foraging area for water birds. Shrub-dominated vegetation borders these habitats. A vacant graded parcel and storage yard are elevated above the floodway on the southeast bank. Steep shrub-covered slopes provide an effective buffer zone on the northwest.

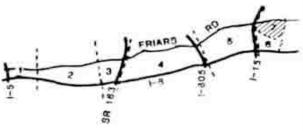
Other than the planned widening of Friars Road and improvements to San Diego Mission Road, no improvements in the floodway are planned. The floodway should be conserved and no reduction in habitat in this area should occur. Opportunities for habitat improvement include the conversion of uplands along the riverbanks to riparian woodland. An emphasis should be placed on planting of cottonwood trees and development of emergent marsh.

The eastern bank of the river is part of the Navajo Community Plan area. This area is undeveloped or developed with low-intensity uses. Any future development including that shown as (4) on **Figure 24**, is subject to the Criteria for Development Adjacent to the Floodway.

TABLE 8
WETLANDS ACREAGE IN SECTION 7

Section	Existing Wetlands	Projected Loss of Floodway	Land Potentially Available for Habitat Improvement or Conversion	Conservation of Wetlands
Total Wetlands	24	2	6	24
Open Water	19			
Freshwater Marsh	1			
Riparian Woodland	4			
Non-Wetlands	8			



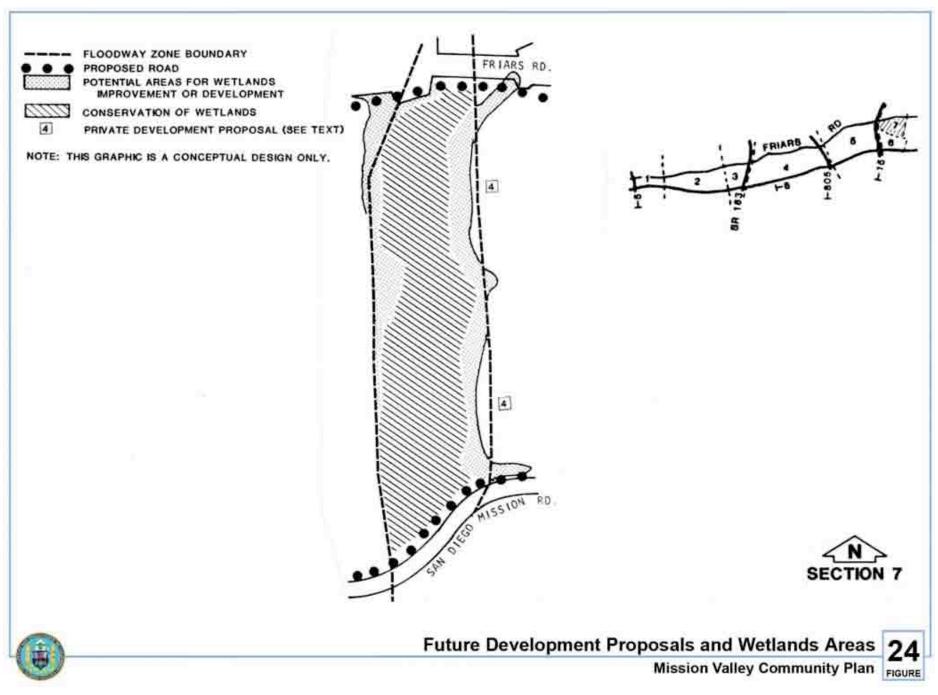






Existing Habitats—Generalized 23

Mission Valley Community Plan FIGURE



#### GUIDELINES FOR HABITAT DEVELOPMENT

This section of the Wetlands Management Plan addresses the techniques for creating wetlands along the river. Contained herein are guidelines and requirements for the creation and improvement of wetland habitats and a description of the extent and types of plantings to be used. **Figure 25** illustrates how wetlands should be incorporated into river channel design. A list of recommended plant species for revegetation is provided in **Appendix D**.

#### **Creation of Wetlands Habitat**

Since wetlands will be an integral part of a flood-control facility, channel design shall incorporate a wetlands corridor composed of the following distribution of habitat types.

Open Water	20-40%
Freshwater Marsh	25-35%
Riparian Woodland	35-45%

Individual segments of the channel should incorporate the same guidelines so that this distribution will be effective Valley-wide.

Islands should be created within the open water area to provide shelter and habitat diversity for wildlife. Islands should cover approximately five to 15% of the length of any particular segment of the river channel. If, for hydraulic reasons, it is not possible to incorporate islands into the floodway, a corresponding quantity of marsh and woodland habitats should be created. Channel design should maximize the retention of existing vegetation, particularly mature woodland. Existing vegetation can be incorporated into the channel banks or islands. Where existing vegetation must be distributed by the establishment of the facility, the channel shall be revegetated to create a wetlands corridor.

Mitigation will be directed to areas of upland habitat or areas where natural wetlands have been degraded or no longer exist. In these areas, wetlands should be developed or restored by the creation of new wetland habitats, which generally follow the distribution outlined above. This distribution can be altered if site-specific evaluation identifies a need for the concentration of a particular habitat type.

## **Biological Requirements**

To maximize the potential wildlife value of the habitat, the following biological requirements must be incorporated into compensation and flood channel proposals.

- Use only appropriate plants native to coastal southern California in revegetation.
- Create vertical and horizontal plant diversity.
- Incorporate both mixed and pure stands of trees.

- Create an irregular rather than straight shoreline or border between habitat types to maximize the amount of edge between habitat types.
- Create wildlife nodes or areas of concentration where vegetation is especially dense and extensive.
- Use specialized plantings to serve as barriers to human access in wildlife nodes or in areas with little or no buffer between the wetlands and development. Specialized plantings would consist of brambly species or those with a thicket-like growth form that would discourage human access.
- Dredging and construction of a floor-channel should not disrupt breeding which occurs from April 1 August 1. Clearing of vegetation should be accomplished prior to April 1. If this is not practicable, there must be a phasing plan that provides for the retention of natural vegetation within the same river section.

## **Description of Habitat Plantings**

A description of the habitat types and composition to be created in revegetating the floodway is provided below.

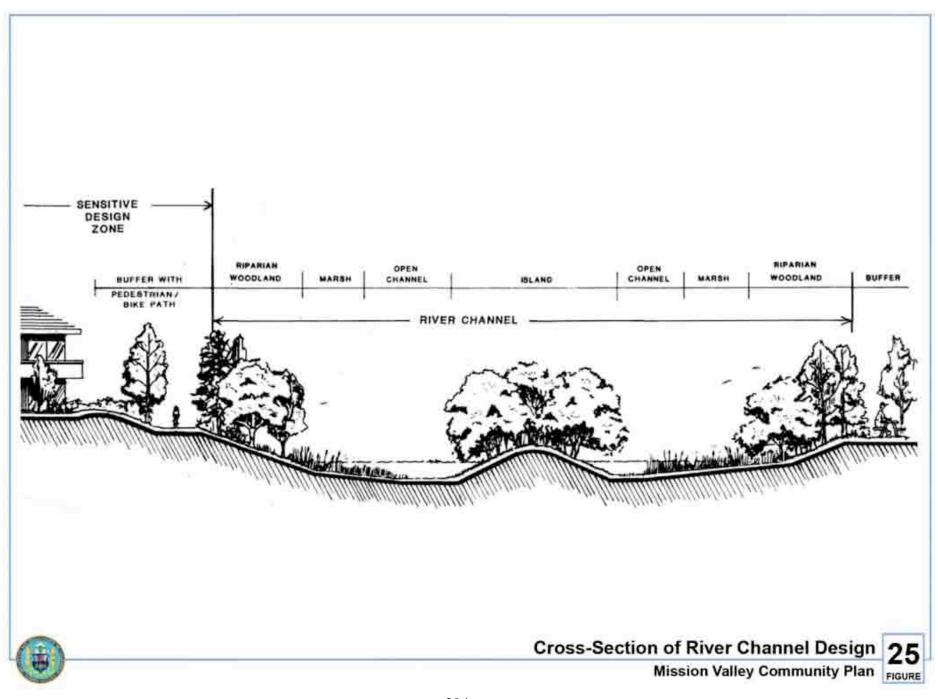
# Riparian Woodland

Riparian woodland should consist of two association types: cottonwood and willow, as defined below.

- The cottonwood association should consist of the following elements in roughly these proportions: cottonwoods, 50 percent; willows (should be at least two species: *Salix gooddingii var variabilis, S. lasiandra, S. laevigata, S. lasiolepis*), 30 percent; Sycamore, five percent; shrubs and herbs, 15 percent.
- The willow association should consist of the following elements in approximately these proportions; willows, 70 percent; cottonwood 15 percent; shrubs and herbs, 15 percent.

Trees should be unevenly spaced with a density of roughly 100 trees per acre. A description of the riparian woodland elements identified above is as follows:

- Cottonwood Fremont cottonwoods should be planted in groves, in association with willows.
- Willow This should be a mix of the willow species listed above and should always include *Salix gooddingii var. variabilis* and be accompanied by the shrub-herb riparian association.
- Western Sycamore Plant in open groves toward the top of the bank.



- Coast Live Oak These trees may occasionally be used in dry, transition areas and on top of banks.
- Shrub-Herb Riparian Association This planting should include flowering and fruiting native shrubs, vines and herbs adapted to coastal floodplain habitats. This association should form the predominant understory for the riparian woodland, and occur in woodland openings. Wild rose (*Rose californica*) and California blackberry (*Rubus ursinus*) should always be included in this plant association.

## Freshwater Marsh

Freshwater marsh vegetation should be allowed to establish naturally near the water's edge river banks, backwater ponds, and surrounding islands.

#### Groundcover

Groundcover should be used to provide food and cover and control erosion in areas where vegetation has been cleared and/or revegetated. Groundcover can be planted by hydroseeding with a mix which includes species of food value, such as doveweed or sweet clover, and does not include nonnative weedy species.

# **Quantitative and Qualitative Mitigation Requirements**

It is a policy of this plan that there shall be no net reduction of wetlands and that mitigation for projects affecting wetlands shall contribute to the overall qualitative improvement of the resource. The following requirements have been designed to ensure that the overall quantity and quality of the wetlands are maintained.

In general, wetlands shall be replaced on an acre-for-acre basis. Individual habitat types shall also be replaced on this basis unless it is determined that an alternative habitat would be of greater value. Loss of FW land containing non-wetlands shall generally be compensated by the creation of wetlands on an acre-for-acre basis. A less than acre-for-acre compensation would be acceptable where wetlands are restored by incorporating a wetlands corridor into a flood control system in an area of the floodway presently devoid of wetlands habitat (i.e., the golf course in Section 2). This reduced mitigation is predicated on the fact that the creation of a wetlands corridor which meets the biological requirements of this plan would significantly contribute to the overall enhancement of the habitat value of the San Diego River wetlands.

Mitigation for the loss of riparian woodland requires special treatment to ensure that the habitat value is offset. Wooded wetlands, especially those dominated by mature trees, are of high habitat value and their reconstruction cannot rapidly or with certainty provide an equivalent value to that destroyed. Therefore, compensation for the loss of woodland must meet additional requirements.

#### These include:

- Revegetation shall be according to state-of-the-art techniques;
- Trees to be planted shall vary in size and include trees of large stature;
- The newly-created woodland shall be of limited accessibility and protected from human disturbance;
- There shall be milestones for identifying deficiencies in the revegetation effort;
- There shall be a means of assuring that corrective action will occur in a timely manner; and
- There shall be a means of assuring the long term preservation of the habitat.

If these requirements cannot be met, compensation for the loss of woodland shall be at a ratio of 2:1 (two acres replaced for each acre lost) or greater to provide an equivalent habitat value.

#### CRITERIA FOR DEVELOPMENT ADJACENT TO THE FLOODWAY

Although development adjacent to the floodway may not directly eliminate natural habitats, it could have indirect effects on wildlife associated with the river. A sensitive zone extending 150 feet from the wetlands corridor requires special consideration to protect the wildlife value of the wetlands corridor. To minimize impacts and protect the wildlife value of the wetlands, the following criteria should be incorporated into development plans within this sensitive zone.

- A buffer area between the wetlands corridor and development is required along the entire length of both sides of the river. The buffer will serve as a biologic feature primarily and as an aesthetic feature secondarily. The biological function of this buffer would be to provide separation and screening of the wildlife habitat from human activity associated with development. It will also provide habitat edge and diversity, as well as additional cover, forage and roosting opportunities. At no particular location shall buildings intrude into the wetlands corridor. The actual width of the buffer may vary depending on the type of development proposed, sensitivity of the habitat to be protected and manner in which the buffer is treated. However, the average width of the buffer shall not be less than 20 feet. This buffer area should be planted with appropriate vegetation native to coastal southern California. Land uses within the buffer areas shall be limited to bikeways, walkways and passive recreation uses described below.
- Public recreation along the river corridor should include only passive uses such as hiking, nature study, viewing, and picnicking. Designated pathways should be located along the outer edges of the wetlands and lead to specified recreation areas. Access to the wetlands in other areas should be discouraged through the use of specialized plantings.
- Buildings should be designed so that the skyline slopes down toward the wetlands. Lowstory buildings should be located closest to the floodway channel with high-rise buildings away from the floodway. This will allow a wider flight path for birds.
- Reflective plate glass should not be used on building facades that face the river. In a wooded setting, reflective plate glass buildings cause high bird mortality.
- Lighting as required for safety must be directed rather than general and should not illuminate habitat areas.

#### **IMPLEMENTATION**

## **Relation to Community Plans**

Planning for the protection of resources associated with the San Diego River is an integral part of the Mission Valley Community Plan. As such, the Wetlands Management Plan is an element of that community plan. The Wetlands Management Plan should be used in conjunction with the other elements of the community plan to guide development along the San Diego River in Mission Valley.

Since the Wetlands Management Plan includes a portion of the Navajo Community Plan area, the plan should also be used to guide development in the Navajo community. Upon adoption of the wetlands plan as part of the Mission Valley Community Plan, the Navajo Community Plan will be amended to incorporate the Wetlands Management Plan.

## **Federal and State Agency Permits and Agreements**

In addition to permits from the City of San Diego, project applicants will be required to obtain a U.S. Army Corps of Engineers 404 Permit and a California Department of Fish and Game 1601/1603 Agreement for projects which involve alteration of wetlands and the streambed of the San Diego River. The Wetlands Management Plan was undertaken, in part, to facilitate and expedite the federal and state permit process. This plan provides the basis for a common understanding among government agencies, including the City of San Diego, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service and California Department of Fish and Game, and private interests, regarding projects affecting wetlands and the manner in which wetlands mitigation is to be accomplished. Representatives of the U.S. Fish and Wildlife Service and the California Department of Fish and Game actively participated in the preparation of this plan to ensure that the mitigation requirements are consistent with the policies of their agencies. Therefore, it is anticipated that projects which have been planned in conformance with the Wetlands Management Plan will meet the requirements of the other agencies, and permit processing can be simplified and the time minimized. This will provide increased certainty to applicants concerned with the protection of wetlands.

Federal and state resource agencies will be notified of all activities relating to the Wetlands Management Plan, including applications for land development and floodway modification proposals. A mitigation plan for individual projects shall also be submitted to these agencies. This will allow resource management agencies an early opportunity to review and comment on these projects. If approval of the mitigation plan is obtained during the City's review process, federal and state permit processing will be greatly expedited.

## **Development Responsibilities**

The Wetlands Management Plan covers two general categories of proposals:

1) channelization of the San Diego River; and 2) development within the floodway which would eliminate existing habitat. Proposals in either of these categories incur a responsibility for mitigation due to their direct or indirect effect on wetlands. It shall be the responsibility

of the applicant to plan, carry out and maintain the mitigation effort. The applicant is also responsible for consulting with the state and federal resource agencies early in the planning process. A list of agencies for consultation is included in **Appendix E**.

## Mitigation Planning

In conjunction with any development plans, the project applicant shall have a biological consultant conduct a site-specific field survey to determine the type and extent of vegetation on the project site and to identify mitigation sites. The field work and consultation must be performed by a qualified biologist with wetlands experience.

The applicant shall submit a revegetation plan, prepared by the biological consultant who may work with the applicant's landscape architect and/or planner, to outline a mitigation proposal. The revegetation plan shall contain a landscape architect and/or planner, to outline a mitigation proposal. The revegetation plan shall contain a landscape plan and address in detail the compensation concept and design criteria, the types and extent of habitats to be developed, plant materials to be used, method of planting, plans for management maintenance and monitoring of the revegetation and treatment of the interface between development and the river corridor. If the plan calls for the replacement of riparian woodland, it shall also demonstrate how the specific mitigation requirements will be met. The revegetation plan shall be reviewed and approved by the City before project approval.

There shall be a binding mechanism to assure that the applicant will carry out and maintain the mitigation effort as planned. This binding mechanism can be in the form of a bond, an agreement as part of an assessment district established to fund a flood-control channel, or other means of assuring that funds will be available to complete the mitigation program.

## Mitigation Implementation

The mitigation program shall be carried out according to the revegetation plan preceding or coincident with project construction. Trees shall be planted in holes which are augured to groundwater level. An irrigation system shall be installed to water plants until they have become established.

# Mitigation Maintenance

The applicant shall be responsible for maintaining the mitigation wetlands for five years from the date the planting has been completed. Two maintenance programs: replacement of vegetation and elimination of undesirable species shall be performed as part of the mitigation effort.

## Replacement of Vegetation

All trees and shrubs which die or are otherwise damaged in the first five years due to flooding, disease, over-rot, under-watering, vandalism, etc., shall be replaced by the applicant. Vegetation shall be monitored on a regular basis and shall be replaced as needed to fulfill the conditions of the revegetation plan.

## Elimination of Undesirable Species

In order for mitigation wetland areas to become successfully established, nonnative plants which compete for light and space, must be controlled. The four most invasive undesirable species that must be removed are giant reed (*Arundo donax*), castor bean (*Ricinus communis*), pampas grass (*Cortaderia ata camensis*), and tamarisk (*Tamarix spp.*). These plants should be removed biannually during the five-year maintenance period. Once removed, the plants should be transported to a landfill for disposal.

The revegetation plan shall include a monitoring program to determine the success of the mitigation program and identify maintenance needs. The mitigation site shall be monitored periodically (at least once a year) to obtain information regarding the species and quantity of plants present and their growth. An annual report of the results of the monitoring effort shall be prepared and submitted to the City. The report shall address plant survival, vegetation cover, the success of establishing designated cover types, and recommended actions necessary to accomplish full mitigation.

# **City Review Procedures**

The City Planning Department will review development proposals to determine conformity with the Wetlands Management Plan Project plans along with the revegetation plan shall be reviewed by the Environmental Quality Division to ensure that the project meets the requirements and objectives of the wetlands plan. In addition, the California Environmental Quality Act (CEQA) process will be used to assess the environmental consequences of development proposals and identify mitigation measures and alternatives to reduce impacts to wetlands.

#### **ACKNOWLEDGEMENTS**

The following individuals also participated in the preparation of this plan through the seven years of plan preparation and development. The Planning Department would like to specially acknowledge their participation and input.

## **City of San Diego Planning Department:**

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Michael Mulligan Harold McKinnie

## **United States Fish and Wildlife Service Department:**

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## **State of California Transportation Department:**

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#### REFERENCES

Cowardin, Lewis M., Virginia Carter, Francis Golet, and Edward La Roe, 1979, Classification of Wetlands and Deepwater Habitats of the United States, Office of Biological Services, Fish and Wildlife Service, December.

Department of the Army, 1980, Fish & Wildlife Program for Sacramento River Bank Protection Project California, First Phase, Sacramento District, Corps of Engineers, Sacramento, California.

Good, R.E., D.F. Whigham and R.L. Simpson, 1978, Freshwater Wetlands: Ecological Processes Management Potential, Academic Press, New York, 378 pages.

Sands, Anne, 1977, **Riparian Forests in California, Their Ecology and Conservation**, University of California, Davis, Institute of Ecology Publication No. 15

Urban Wildlife Research Center, Inc., 1978, **Planning for Wildlife in Cities and Suburbs**, Prepared for Fish and Wildlife Service, Office of Biological Services, January. NTIS No. PB-280, 172.

USDA. Forest Service, 1979, **The Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats, July 16-20, 1979**, Colorado State University, Fort Collins Colorado, General Technical Report RM-65.

USDA, Forest Service, 1979, **Strategies for Protection and Management of Floodplain Wetlands and other Riparian Ecosystems, Proceedings of the Symposium - December 11-13, 1978**, Callaway Gardens, Georgia, General Technical Report WO-12.

USDA, Forest Service, 1977, Importance Preservation and Management of Riparian Habitat: A Symposium, July 9, General Technical Report, RM-43.

USDA Forest Service, 1976, **Wetland Planning Glossary**, General Technical Report, PSW-13. G-69

## **APPENDIX G-A**

#### RESOURCES OF THE SAN DIEGO RIVER

The wetland habitats of the San Diego River are utilized by a wide variety of migratory birds. More than 70 species have been observed and about half those species are dependent upon or prefer wetland habitats. The area is used by waterfowl such as ruddy duck, mallard, scaups, cinnamon teal, pintail; shore and wading birds such as egrets, herons, bitterns, coot, spotted sandpiper, sora, black-necked stilt, gallinule, dowitchers, and killdeer; diving birds such as double-crested cormorant, belted kingfisher, terns, and pied-billed grebe; perching birds such as swallows, black phoebe, ash-throated flycatcher, marsh wren, common yellowthroat, yellowthroat, yellow warbler, goldfinches, redwing blackbird, song sparrow, and Bullock's oriole; and raptors such as red-shouldered hawk, Cooper's hawk, black shouldered kite and barn owl. Birds known or thought to breed in the San Diego River wetlands include: pied-billed grebe, mallard, cinnamon teal, ruddy duck, coot, sora, rough-winged swallow, long-billed marsh wren, yellowthroat and song sparrow. The least Bell's vireo, Vireobe/Hipusillis, which is a candidate for federal threatened or endangered status, has been observed in the Mission Valley reach of the San Diego River as recently as 1978 and willow thicket wetland habitat is considered its principal habitat.

About 28 species of amphibians or reptiles, such as bullfrog, Pacific tree frog, western toad, slender salamander, western pond turtle, soft shell turtle, side blotch lizard, alligator lizard, garter snake, rosy boa and long nose snake are expected to be found in the project vicinity. Small animals as well as other groups have not been inventoried in this reach of the river, but probably include raccoon, opossum, striped skunk, desert cottontail, many rodent species, long-tailed weasel and coyote.

The recreational fishery is apparently sustained by the presence of such species as black and yellow bullhead, channel catfish, green and redear sunfish, largemouth bass and black crappie. Other fish species of value as a forage base for predators would be threadfin shad, golden shiner, fathead minnow and mosquitofish.

Because the Fish and Wildlife Service considers these San Diego riparian wetland habitats to be of high value to public fish and wildlife resources and to be scarce and diminishing in extent (less than one percent of the county's area), they are ranked Resource Category 2, in accordance with the Mitigation Policy. The concomitant Mitigation Goal is: no net loss of inkind habitat value.

Source: Fish and Wildlife Service.

## APPENDIX G-B

# STATED GOALS OF FEDERAL AUTHORITIES BEARING ON PHYSICAL MANAGEMENT FLOODPLAINS

#### Clean Water Act

- Restore and maintain chemical, physical, and biological integrity of the nation's waters. (Sec. 101 (a))
- Eliminate discharge of pollutants into navigable waters by 1985. (Sec. 101 (a) (2))
- Protect and propagate fish, shellfish, and wildlife and provide recreation in and on the water (wherever attainable) by July 1, 1983. (Sec. 101(a)2))
- Adequately control sources of pollutants in each state through area-wide waste treatment management planning. (Sec. 101 (a) (5))
- Prohibit discharge of toxic pollutants in toxic amounts. (Sec. 101(1X3))

## National Flood Insurance Act of 1968 and Federal Disaster Protection Act of 1973

- Ensure availability of flood insurance for residents of flood-prone areas through the means of a federal subsidy.
- Achieve local land use and control measures designed to guide the rational use of the floodplain as a condition for the availability of federally subsidized flood insurance.
- Substitute insurance to eventually replace federal disaster relief for flood occurrences, so that property owners will contribute to their own protection and be more fully indemnified (without having to repay a federal disaster loan) when flood loss occurs.

## Coastal Zone Management Act of 1972

- Preserve, protect, develop, and where possible restore or enhance, the resources of the nation's coastal waters and the adjacent shorelands that are strongly influenced by each other, for this and succeeding generations. (Sec. 303(2))
- Reinforces Section 404 of the Federal Clean Water Act with specific policies for federal construction projects.

## Wetlands Policy: U.S. Environmental Protection Agency

• Preserve the wetland ecosystems and protect them from destruction through waste water or non-point source discharges by treatment facilities, or by other physical, chemical or biological means.

# PRESERVATION OF THE NATION'S WETLANDS DEPARTMENT OF TRANSPORTATION

 Assure protection and preservation of wetlands to the fullest extent practicable during planning, construction and operation of federal transportation facilities, and federally assisted state and local transportation projects.

# Executive Order 11988, "Floodplain Management"

- Requires federal agencies to revise their procedures for considering the impact that their actions may have on potential hazards from flooding.
- Where a practicable alternative exist, agencies should avoid activity in the floodplain.
- Avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and avoid direct or indirect support of floodplain development whenever there is a practicable alternative (for federal activities).

Source: Davis, David G., "Environmental Protection Agency Programs Relating to Riparian Ecosystems," in **Strategies for Protection and Management of Floodplain Wetlands and Other Ecosystems**, Proceedings of the Symposium, Callaway Gardens, Georgia, December 11-13, 1978.

- Encourage and assist the states to exercise their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and aesthetic values as well as needs for economic development. (Sec. 303(b))
- Encourage all federal agencies engaged in programs affecting the coastal zone to cooperate and participate with state and local governments and regional agencies in this effort. (Sec. 303(c))
- Encourage the participation of the public, of federal, state, and local governments and of the regional agencies in the develoment of coastal zone management programs. (Sec. 303 (d))

#### Fish and Wildlife Coordination Act

• Provide that wildlife conservation receives equal consideration and is coordinated with other features of water-resource development programs through the effectual and harmonious planning development, maintenance and coordination of wildlife conservation and rehabilitation (Sec. 661).

## **Flood-Control Act**

Preserve and protect established and potential uses of nation's rivers; provides aid to the
consideration of projects on a basis of comprehensive and coordinated development; and
limit the authorization and construction of navigation works unless they substantively
benefit navigation and can be operated consistently with appropriate and economic use of
the rivers by others.

# **Executive Order 11990, Protection of Wetlands**

• Avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and avoid direct or indirect support of new construction in wetlands whenever there is a practicable alternative (in federal programs).

## APPENDIX G-C

## U.S. FISH AND WILDLIFE SERVICE MITIGATION POLICY

#### I. PURPOSE

This document establishes policy for U.S. Fish and Wildlife Service recommendations on mitigating the adverse impacts of land and water developments on fish, wildlife, their habitats, and uses thereof. It will help to assure consistent and effective recommendations by outlining policy for the levels of mitigation needed and the various methods for accomplishing mitigation. It will allow federal action agencies and private developers to anticipate Service recommendations and plan for mitigation measures early, thus avoiding delays and assuring equal consideration of fish and wildlife resources with other project features and purposes. This policy provides guidance for Service personnel but variations appropriate to individual circumstances are permitted.

This policy supercedes the December 18, 1974, policy statement entitled "Position Paper of the Fish and Wildlife Service Relative to Losses to Fish and Wildlife Habitat Caused by Federally Planned or Constructed Water Resource Developments" and the Service River Basin Studies Manual Release 2.350 entitled "General Bureau Policy on River Basin Studies."

#### II. AUTHORITY

This policy is established in accordance with the following major authorities: (See **Appendix A** for other authorities.)

## Fish and Wildlife Act of 1956 (16 U.S.C. 742(a)-754)

This Act authorizes the development and distribution of fish and wildlife information to the public. Congress and the President, and the development of policies and procedures that are necessary and desirable to carry out the laws relating to fish and wildlife including:

- (1) "... take such steps as may be required for the development, advancement, management, conservation and protection of the fisheries resources;" and
- (2) "... take such steps as may be required for the development, management, advancement, conservation, and protection of wildlife resources through research ... and other means."

# Fish and Wildlife Coordination Act (16 U.S.C. 661-667(e)

This Act authorizes the U.S. Fish and Wildlife Service, National Marine Fisheries Service (NMFS), and state agencies responsible for fish and wildlife resources to investigate all proposed federal undertakings and non-federal actions needing a federal permit or license which impound, divert, deepen, or otherwise control or modify a stream or other body of water and to make mitigation and enhancement recommendations to the involved federal agency. "Recommendations ...shall be as specific as practicable with

respect to features recommended for wildlife conservation and development, lands to be utilized or acquired for such purposes, the results expected, and shall describe the damage to wildlife attributable to the project and the measures proposed for mitigating or compensating for these damages." In addition, the Act requires that wildlife conservation be coordinated with other features of water resource development programs.

Determinations under this authority for specific projects located in estuarine areas constitute compliance with the provisions of the Estuary Protection Act. (See **Appendix A**.)

### Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009)

This Act allows the Secretary of the Interior to make surveys, investigations, and "...prepare a report with recommendations concerning the conservation and development of wildlife resources..." on small watershed projects.

### National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347)

This Act and its implementing regulations (40 CFR Part 1500-1508) requires that the U.S. Fish and Wildlife Service be notified of all major federal actions affecting fish and wildlife resources and their views and recommendations solicited. Upon completion of a draft Environmental Impact Statement, the Service is required to review it and make comments and recommendations, as appropriate. In addition, the Act provides that "the Congress authorizes and directs that, to the fullest extent possible …all agencies of the Federal Government shall …identify and develop methods and procedures …which will ensure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations."

### III. SCOPE

### A. Coverage

This policy applies to all activities of the Service related to the evaluation of impacts of land and water developments and the subsequent recommendations to mitigate those adverse impacts except as specifically excluded below. This includes:

- (1) investigations and recommendations for all actions requiring a federally issued permit or license that would impact waters of the U.S.;
- (2) all major federal actions significantly affecting the quality of the human environment; and
- (3) other federal actions for which the Service has legislative authority or executive direction for involvement including, but not limited to: coal, minerals, and outer continental shelf lease sales or federal approval of state permit programs for the control of discharges of dredged or fill material.

#### **B.** Exclusions

This policy does not apply to threatened or endangered species. The requirements for threatened and endangered species are covered in the Endangered Species Act of 1973 and accompanying regulations at 50 CFR Parts 17, 402, and 424. Under Section 7 of the Endangered Species Act, as amended, all federal agencies shall ensure that activities authorized, funded, or carried out by them are not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Mitigating adverse impacts of a project would not in itself be viewed as satisfactory agency compliance with Section 7. Furthermore, it is clear to the Service that Congress considered the traditional concept of mitigation to be inappropriate for federal activities impacting listed species or their critical habitat.

This policy does not apply to Service recommendations for federal project completed or other projects permitted or licensed prior to enactment of Service authorities (unless indicated otherwise in a specific statute) or specifically exempted by them and not subject to reauthorization or renewal. It also does not apply where mitigation plans have already been agreed to by the Service, except where new activities or changes in current activities would result in new impacts or where new authorities, new scientific information, or developer failure to implement agreed upon recommendations make it necessary. Service personnel involved in land and water development investigations will make a judgment as to the applicability of the policy for mitigation plans under development and not yet agreed upon as of the date of final publication of this policy.

Finally, this policy does not apply to Service recommendations related to the enhancement of fish and wildlife resources. Recommendations for measures which improve fish and wildlife resources beyond that which would exist without the project and which cannot be used to satisfy the appropriate mitigation planning goal should be considered as enhancement measures. The Service strongly supports enhancement of fish and wildlife resources. The Service will recommend that all opportunities for fish and wildlife resource enhancement be thoroughly considered and included in project plans, to the extent practicable.

### IV. DEFINITION OF MITIGATION

The President's Council on Environmental Quality defined the term "mitigation" in the National Environmental Policy Act regulations to include: "(a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments." (40 CFR Part 1508.20 (a-e)).

The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. (See **Appendix B** for definitions of other important terms necessary to understand this policy.)

### V. MITIGATION POLICY OF THE U.S. FISH AND GAME WILDLIFE SERVICE

The overall goals and objectives of the Service are outlined in the Service Management Plan and an accompanying Important Resource Problems document which describes specific fish and wildlife problems of importance for planning purposes. Goals and objectives for Service activities related to land and water development are contained in the Habitat Preservation Program Management Document. The mitigation policy was designed to stand on its own; however, these documents will be consulted by Service personnel to provide the proper perspective for the Service mitigation policy. They are available upon request from the Director, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

### A. General Policy

The mission of the U.S. Fish and Wildlife Service is to:

Provide the federal leadership to conserve, protect and enhance fish and wildlife and their habitats for the continuing benefit of the people.

The goal of Service activities oriented toward land and water development responds to congressional direction that fish and wildlife resource conservation receive equal consideration and be coordinated with other features of federal resource development and regulatory programs through effective and harmonious planning, development, maintenance and coordination of fish and wildlife resource conservation and rehabilitation in the United States, its territories and possessions. The goal is to:

Provide the federal leadership to conserve, protect and enhance fish and wildlife and their habitats and facilitate balanced development of this nation's natural resources by timely and effective provision of fish and wildlife information and recommendations.

Fish and wildlife and their habitats are public resources with clear commercial, recreational, social, and ecological value to the nation. They are conserved and managed for the people by state, federal, and Indian tribal governments. If land or water developments are proposed which may reduce or eliminate the public the public benefits that are provided by such natural resources, then state and federal resource agencies have a responsibility to recommend means and measures to mitigate such losses. Accordingly:

In the interest of serving the public, it is the policy of the U.S. Fish and Wildlife Service to seek to mitigate losses of fish, wildlife, their habitats, and uses thereof from land and water developments.

In administering this policy, the Service will strive to provide information and recommendations that fully support the nation's need for fish and wildlife resource conservation as well as sound economic and social development through balanced multiple uses of the nation's natural resources. The Service will actively seek to facilitate needed development and avoid conflicts and delays through early involvement in land and water development planning activities in advance of proposals for specific projects or during the early planning and design stage of specific projects.

This should include early identification of resource areas containing high and low habitat values for important species and the development of ecological design information that outlines specific practicable means and measures for avoiding or minimizing impacts. The former can be used only by developers to site projects in the least valuable areas. This could possibly lower total project costs to development interests. These actions are part of good planning and are in the best public interest.

The early provision of information to private and public agencies in a form which enables them to avoid or minimize fish and wildlife losses as a part of initial project design is the preferred form of fish and wildlife conservation.

### B. U.S. Fish and Wildlife Service Mitigation Planning Goals by Resource Category

The planning goals and guidelines that follow will be used to guide Service recommendations on mitigation of project impacts. Four resource categories are used to indicate that the level of mitigation recommended will be consistent with the fish and wildlife resource values involved.

The policy covers impacts to fish and wildlife populations, their habitat and the human uses thereof. However, the primary focus in terms of specific guidance is on recommendations related to habitat value losses. In many cases, compensation of habitat value losses should result in replacement of fish and wildlife populations and human uses. But where it does not, the Service will recommend appropriate additional means and measures.

### Resource Category 1

### a. Designation Criteria

Habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion section.

### **b.** Mitigation Goal

No Loss of Existing Habitat Value.

### c. Guideline

The Service will recommend that all losses of existing habitat be prevented as these one-of-a-kind areas cannot be replaced. Insignificant changes that do not result in adverse impacts on habitat value may be acceptable provided they will have no significant cumulative impact.

### Resource Category 2

### a. Designation Criteria

Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section.

### b. Mitigation Goal

No Net Loss of In-Kind Habitat Value.

#### c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or reduce or eliminate them over time. If losses remain likely to occur, then the Service will recommend that those losses be compensated by replacement of the same kind of habitat value so that the total loss of such in-kind habitat value will be eliminated.

Specific ways to achieve this planning goal include:

- (1) physical modification of replacement habitat to convert it to the same type lost;
- (2) restoration or rehabilitation of previously altered habitat;
- (3) increased management of similar replacement habitat so that the in-kind value of the lost habitat is replaced, or
- (4) a combination of these measures.

By replacing habitat value losses with similar habitat values, populations of species associated with the habitat may remain relatively stable in the area over time. This is generally referred to as in-kind replacement.

### **Exceptions**

An exception can be made to this planning goal when:

- (1) different habitats and species available for replacement are determined to be of greater value than those lost, or
- (2) in-kind replacement is not physically or biologically attainable in the ecoregion section.

In either case, replacement involving different habitat kinds may be recommended provided that the total value of the habitat lost is recommended for replacement (see the guideline for Category 3 mitigation below).

### Resource Category 3

### a. Designation Criteria

Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis.

### b. Mitigation Goal

No Net Loss of Habitat Value While Minimizing Loss of In-Kind Habitat Value.

#### c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or reduce or eliminate them over time. If losses remain likely to occur, then the Service will recommend that those losses be compensated by replacement of habitat value will be eliminated.

It is preferable, in most cases, to recommend ways to replace such habitat value losses in-kind. However, if the Service Determines that in-kind replacement is not desirable or possible, then other specific ways to achieve this planning goal include:

- (1) substituting different kinds of habitats, or
- (2) increasing management of different replacement habitats so that the value of the lost habitat is replaced.

By replacing habitat value losses with different habitats or increasing management of different habitats, populations of species will be different, depending on the ecological attributes of the replacement habitat. This will result in no net loss of total habitat value, but may result in significant differences in fish and wildlife populations. This is generally referred to as out-of-kind replacement.

### Resource Category 4

### a. Designation Criteria

Habitat to be impacted is of medium to low value for evaluation species.

### **b.** Mitigation Goal

Minimize Loss of Habitat Value.

### c. Guideline

The Service will recommend ways to avoid or minimize losses. If losses are likely to occur, then the Service will recommend ways to immediately rectify them or to reduce or eliminate them over time. If losses remain likely to occur, then the Service may make a recommendation for compensation, depending on the significance of the potential loss.

However, because these areas possess relatively low habitat values, they will likely exhibit the greatest potential for significant habitat value improvements. Service personnel will fully investigate these areas' potential for improvement, since they could be used to mitigate Resource Category 2 and 3 losses.

### C. Mitigation Planning Policies

### 1. State-Federal Partnership

- a. The U.S. Fish and Wildlife Service will fully coordinate activities with those state agencies responsible for fish and wildlife resources, the National Marine Fisheries Service (NMFS) and the Environmental Protection Agency (EPA) related to the investigation of project proposals and development of mitigation recommendations for resources of concern to the state, NMFS or EPA.
- b. Service personnel will place special emphasis on working with State agencies responsible for fish and wildlife resources. NMFS and EPA to develop compatible approaches and to avoid duplication of efforts.

### 2. Resource Category Determinations

- a. The Service will make resource category determinations as part of the mitigation planning process. Such determinations will be made early in the planning process and transmitted to the federal action agency of private developer to aid them in their project planning, to the extent practicable.
- b. Resource Category determinations will be made through consultation and coordination with state agencies responsible for fish and wildlife resources and other federal resource agencies, particularly the NMFS and the EPA, whenever resources of concern to those groups are involved. Where other elements of the public, including development groups, have information that can assist in making such determinations, the Service will welcome such information.
- c. All Resource Category determinations will contain a technical rationale consistent with the designation criteria. The rationale will:
  - (1) outline the reasons why the evaluation species were selected;
  - (2) discuss the value of the habitat to the evaluation species; and
  - (3) discuss and contrast the relative scarcity of the fish and wildlife resources on a national and ecoregion section basis.

- Note: If the State agency responsible for fish and wildlife resources wishes to outline scarcity on a more local basis, U.S. Fish and Wildlife Service personnel should assist in developing such rationale, whenever practicable.
- d. When funding, personnel, and available information make it practicable, specific geographic areas or, alternatively, specific habitat types that comprise a given resource category should be designated in advance of development. Priority for pre-designation will be placed on those areas that are of high value for evaluation species and are subject to development pressure in the near future. Such pre-designations can be used by developers or regulators to determine the least valuable areas for use in project planning and siting considerations.
- e. The following examples should be given special consideration as either Resource Category 1 or 2:
  - (1) Certain habitats within Service-identified Important Resource Problem (IRP) areas. Those IRPs dealing with threatened or endangered species are not covered by this policy. (See **Scope**)
  - (2) Special aquatic and terrestrial sites including legally designated or set-aside areas such as sanctuaries, fish and wildlife management areas, hatcheries, and refuges, and other aquatic sites such as floodplains, wetlands, mudflats, vegetated shallows, coral reefs, riffles and pools, and springs and seeps.

## 3. Impact Assessment Principles

- a. Changes in fish and wildlife productivity or ecosystem structure and function may not result in a biologically adverse impact. The determination as to whether a biological change constitutes an adverse impact for which mitigation should be recommended is the responsibility of the Service and other federal and state resource agencies.
- b. The net biological impact of a development proposal (or alternative) is the difference in predicted biological conditions between the future with the action and the future without the action. If the future without the action cannot be reasonably predicted and documented by the project sponsor, then the Service analysis should be based on biological conditions that would be expected to exist over the planning period due to natural species succession or implementation of approved restoration/improvement plans or conditions which currently exist in the planning area.
- c. Service review of project impacts will consider, whenever practicable:
  - (1) The total long-term biological impact of the project, including any secondary or indirect impacts regardless of location; and
  - (2) any cumulative effects when viewed in the context of existing or anticipated projects.

- d. The habitat evaluation procedures will be used by the Service as a basic tool for evaluating project impacts and as a basis for formulating subsequent recommendations for mitigation subject to the exemptions in the Ecological Services Manual (100 ESM 1). When the habitat evaluation procedures do not apply, then other evaluation systems may be used provided such use conforms with policies provided herein.
- e. In those cases where in-stream flows are an important determinant of habitat value, consideration should be given to the use of the Service's in-stream Flow Incremental Methodology to develop in-stream flow mitigation recommendations, where appropriate.
- f. Where specific impact evaluation methods or mitigation technologies are not available, Service employees shall continue to apply their best professional judgment to develop mitigation recommendations.

## 4. Mitigation Recommendations

- a. The Service may recommend support of projects or other proposals when the following criteria are met:
  - (1) They are ecologically sound;
  - (2) The least environmentally damaging reasonable alternative is selected;
  - (3) Every reasonable effort is made to avoid or minimize damage or loss of fish and wildlife resources and uses;
  - (4) All important recommended means and measures have been adopted with guaranteed implementation to satisfactorily compensate for unavoidable damage or loss consistent with the appropriate mitigation goal; and
  - (5) For wetlands and shallow water habitats, the proposed activity is clearly water-dependent and there is a demonstrated public need.

The Service may recommend the "no project" alternative for those projects or other proposals that do not meet all of the above criteria and where there is likely to be a significant fish and wildlife resource loss.

b. Recommendations will be presented by the Service at the earliest possible stage of project planning to assure maximum consideration. The Service will strive to provide mitigation recommendations that represent the best judgment of the Service, including consideration of cost, on the most effective means and measures of satisfactorily achieving the mitigation planning goal. Such recommendations will be developed in cooperation with the federal action agency or private developer responsible for the project, whenever practicable, and will play heave reliance on cost estimates provided by that federal action agency or private developer.

c. The Service will recommend that the federal action agency include designated funds for all fish and wildlife resource mitigation (including, but not limited to Service investigation costs, initial development costs and continuing operations, maintenance, replacement, and administrative costs) as part of the initial and any alternative project plans and that mitigation funds (as authorized and appropriated by congress for federal projects) be spent concurrently and proportionately with overall project construction and operation funds throughout the life of the project.

Note: Prevention of losses may necessitate expenditure of funds at an earlier stage of project planning. This is acceptable and preferred.

- d. Service mitigation recommendations will be made under an explicit expectation that these means and measures:
  - (1) would be the ultimate responsibility of the appropriate federal action agency implement or enforce; and
  - (2) would provide for a duration of effectiveness for the life of the project plus such additional time required for the adverse effects of an abandoned project to cease to occur.
- e. Land acquisition in fee title for the purpose of compensation will be recommended by the Service only under one or more of the following three conditions:
  - (1) When a change in ownership is necessary to guarantee the future conservation of the fish and wildlife resource consistent with the mitigation goal for the specific project area; or
  - (2) When other means and measures for mitigation (see **Section 5** below) will not compensate habitat losses consistent with the mitigation goal for the specific project area; or
  - (3) When land acquisition in fee title is the most cost-effective means that may partially or completely achieve the mitigation goal for the specific project area.

Service recommendations for fee title land acquisition will seek to identify mitigation lands with marginal economic potential.

f. First priority will be given to recommendations of a mitigation site within the planning area. Second priority will be given to recommendation of a mitigation site in proximity to the planning area within the same ecoregion section. Third priority will be given to recommendation of a mitigation site elsewhere within the same ecoregion section.

- g. Service personnel will fully support a variety of uses on mitigation lands where such uses are compatible with dominant fish and wildlife refuges, are consistent with the provisions of the Refuge Recreation Act and the National Wildlife Refuge Administration Act. However, it may be in the best public interest to recommend limiting certain uses that would significantly decrease habitat value for species of high public interest. In such cases, the Service may recommend against such incompatible uses.
- h. Measures to increase recreation values will not be recommended by Service personnel to compensate for losses of habitat value. Recreation use losses not restored through habitat value mitigation will be addressed through separate and distinct recommended measures to offset those specific losses.
- i. The guidelines contained in this policy do not apply to threatened or endangered species. However, where both habitat and endangered or threatened species impacts are involved, Service personnel shall fully coordinate environment efforts with endangered species efforts to provide timely, consistent, and unified recommendations for resolution of fish and wildlife impacts, to the extent possible. More specifically, environment and endangered species personnel shall coordinate all related activities dealing with investigations of land and water developments. This includes full use of all provisions that can expedite Service achievement of "one-stop shopping," including coordinated early planning involvement, shared permit review activities, consolidated permit reporting, and consolidated flow of pre-project information to developers, consistent with legislative mandates and deadlines.
- j. The Service will place high priority on and continue to develop and implement procedures for reducing delays and conflicts in permit related activities. Such procedures will include, but not be limited to:
  - (1) Joint processing of permits.
  - (2) Resource mapping.
  - (3) Early provision of ecological design information.
  - (4) Involvement in Special Area Management Planning.
- k. The Service will encourage predevelopment compensation actions by federal action agencies which can be used to offset future unavoidable losses for lands or waters not adequately protected by an existing law, policy, or program.

Banking of habitat value for the express purpose of compensation for unavoidable future losses will be considered to be a mitigation measure and not an enhancement measure. Withdrawals from the mitigation "bank" to offset future unavoidable losses will be based on habitat value replacement, not acreage or cost for land purchase and management.

### 5. Mitigation Means and Measures

Mitigation recommendations can include, but are not limited to, the types of actions presented below. These means and measures are presented in the general order and priority in which they should be recommended by Service personnel with the exception of the "no project" alternative. (See **Section 4(a)**).

### a. Avoid the impact

- (1) Design project to avoid damage of loss of fish and wildlife resources including management practices such as timing of activities or structural features such as multiple outlets, passage or avoidance structures and water pollution control facilities.
- (2) Use of nonstructural alternative to proposed project.
- (3) No project.

### b. Minimize the impact

- (1) Include conservation of fish and wildlife as an authorized purpose of federal projects.
- (2) Locate at the least environmentally damaging site.
- (3) Reduce the size of the project.
- (4) Schedule timing and control of initial construction operations and subsequent operation and maintenance to minimize disruption of biological community structure and function.
- (5) Selective tree clearing or other habitat manipulation.
- (6) Control water pollution through best management practices.
- (7) Time and control flow diversions and releases.
- (8) Maintain public access.
- (9) Control public access for recreational or commercial purposes.
- (10) Control domestic livestock use.

### c. Rectify the impact

- (1) Regrade disturbed areas to contours which provide optimal fish and wildlife habitat or approximate original contours.
- (2) Seed, fertilize and treat areas as necessary to restore fish and wildlife resources.
- (3) Plant shrubs and trees and other vegetation to speed recovery.

- (4) Control polluted spoil areas.
- (5) Restock fish and wildlife resources in repaired areas. Fish stocking or introductions will be consistent with the Service Fish Health Policy (January 3, 1978).

### d. Reduce or eliminate the impact over time

- (1) Provide periodic monitoring of mitigation features to assure continuous operation.
- (2) Assure proper training of project personnel in the operations of the facility to preserve existing of restored fish and wildlife resources at project sites.
- (3) Maintain or replace equipment or structures so that future loss of fish and wildlife resources due to equipment or structure failure does not occur.

### e. Compensate for impacts

- (1) Conduct wildlife management activities to increase habitat values of existing areas, with project lands and nearby public lands receiving priority.
- (2) Conduct habitat construction activities to fully restore or rehabilitate previously altered habitat or modify existing habitat suited to evaluation species for the purpose of completely offsetting habitat value losses.
- (3) Build fishery propagation facilities.
- (4) Arrange legislative set-aside or protective designation for public lands.
- (5) Provide buffer zones.
- (6) Lease habitat.
- (7) Acquire wildlife easements.
- (8) Acquire water rights.
- (9) Acquire land in fee title.

### 6. Follow-up

The Service encourages, supports, and will initiate, whenever practicable, post-project evaluations to determine the effectiveness of recommendations in achieving the mitigation planning goal. The Service will initiate additional follow-up studies when funds are provided by the federal action agency.

In those instances where Service personnel determine that federal agencies or private developers have not carried out those agreed upon mitigation means and measures, then the Service will request the responsible federal action agency to initiate corrective action.

### APPENDIX A

# OTHER AUTHORITIES AND DIRECTION FOR SERVICE MITIGATION RECOMMENDATIONS

### Legislative

Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et sq.). The 1977 amendments require the Fish and Wildlife Service "...upon request of the Governor of a State, and without reimbursement, to provide technical assistance to such State in developing a Statewide (water quality planning) program and in implementing such program after its approval." In addition, this Act requires the Service to comment on proposed state permit programs for the control of discharges of dredged or fill material and to comment on all federal permits within 90 days of receipt.

Federal Power Act of 1920. as amended (16 U.S.C. 791 (a), 803, 811). This Act authorizes the Secretary of the Interior to impose conditions on licenses issued for hydroelectric projects within specific withdrawn public lands. The Secretary is given specific authority to prescribe fishways to be constructed, maintained, and operated at the licensee's expense.

Estuary Protection Act (16 U.S.C. 1221-1226). This Act requires the Secretary of the Interior to review all project plans and reports for land and water resource development affecting estuaries and to make recommendations for conservation, protection, and enhancement.

Coastal Zone Management Act of 1972C\6\J.S.C. 1451-1464). This Act requires the Secretary of Commerce to obtain the views of federal agencies affected by the program, including the Department of the Interior, and to ensure that these views have been given adequate consideration before approval of Coastal Zone Management Plans. The Service provides the Department's views about fish and wildlife resources. Pursuant to the Coastal Zone Management Act Amendments of 1980 (Pub. L. 96-464) the Department of Interior provides comments on federal grants to help states protect and preserve coastal areas because of their "...conservational, recreational, ecological or aesthetic values." The 1980 amendments also authorize the Department of Interior to enter into Special Area Management Planning to "...provide for increased specificity in protecting natural resources, reasonable coast dependent economic growth... and improved decision making."

Water Bank Act (16 U.S.C. 1301-1311). This Act requires that the Secretary of Agriculture "...shall consult with the Secretary of Interior and take appropriate measures to ensure that the program carried out... is in harmony with wetlands programs administered by the Secretary of the Interior."

Wild and Scenic Rivers Act (16 U.S.C. 1271-1287). This Act requires the Secretary of the Interior to comment on such proposals. The Fish and Wildlife Service provides the Department's views with regard to fish and wildlife resources.

Geothermal Steam Act of 1970 (30 U.S.C. 1001-1025). This Act requires that the Fish and Wildlife Service recommend to the Secretary those lands that shall not be leased for geothermal development by reason of their status as "...a fish hatchery administered by the Secretary, wildlife refuge, wildlife range, game range, wildlife management area, waterfowl production area, or for lands acquired or reserved for the protection and conservation of fish and wildlife that are threatened with extinction."

Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq. This Act requires the Department of the Interior to regulate surface mining and reclamation at existing and future mining areas. The Fish and Wildlife Service provides the Department with technical assistance regarding fish and wildlife aspects of Department programs on active and abandoned mine lands, including review of state regulatory submissions and mining plans, and comments on mining and reclamation plans.

Outer Continental Shelf Lands Act Amendments of 1978 (43 U.S.C. 1801). This Act requires the Secretary of the Interior to manage an environmentally sound oil and natural gas development program on the outer continental shelf. The Fish and Wildlife Service provides recommendations for the Department regarding potential ecological impacts before leasing in specific areas and contributes to environmental studies undertaken subsequent to leasing.

Mineral Leasing Act of 1920, as amended (30 U.S.C. 185). This Act authorizes the Secretary of the Interior to grant rights-of-way through federal lands for pipelines transporting oil, natural gas, synthetic liquids or gaseous fuels, or any other refined liquid fuel. Prior to granting a right-of-way for a project which may have a significant impact on the environment, the Secretary is required by this Act to request and review the applicant's plan for construction, operation, and rehabilitation of the right-of-way. Also, the Secretary is authorized to issue guidelines and impose stipulations for such projects which shall include, but not be limited to, "...requirements for restoration, revegetation and curtailment or erosion of surface land... requirements designed to control or prevent damage to the environment (including damage to fish and wildlife habitat); and ...requirements to protect the interests of individuals living in the general area of the right-of-way or permit who rely on the fish, wildlife and biotic resources of the area for subsistence purposes."

*Cooperative Unit Act* (16 U.S.C. 753(a)-753(b)). This Act provides for cooperative programs for research and training between the Fish and Wildlife Service, the states and universities.

Airport and Airway Development Act (49 U.S.C. 1716). This Act requires the Secretary of Transportation to "...consult with the Secretary of the Interior with regard to the effect that any project... may have on natural resources including, but not limited to, fish and wildlife, natural, scenic and recreation assets, water and air quality, and other factors affecting the environment..."

Department of Transportation Act (49 U.S.C. 1653(f)). This Act makes it national policy that "...special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites..." and requires that the Secretary of Transportation "...cooperate and consult with the Secretary of the

Interior in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed." The Department of Transportation projects using unprotected lands cannot be approved unless there are no feasible and prudent alternatives to avoid such use and, if none, all possible measures to minimize harm have been considered.

#### Executive

*President's Water Policy Message* (June 6, 1978). This message directs the Secretary of the Interior to promulgate procedures for determination of measures to mitigate losses of fish and wildlife resources.

Water Resources Council's *Final Rules; Principles and Standards for Water and Related Land Resources Planning—Level C* (September 29, 1980). These rules reiterate the importance of participation in the development planning process by interested federal agencies, including the Department of the Interior. This participation includes review, coordination, or consultation required under various legislative and executive authorities. Under these rules, "Consideration is to be given to mitigation (as defined in 40 CFR 1508.20) of the adverse effects of each alternative plan. Appropriate mitigation is to be included where suitable as determined by the agency decision maker. Mitigation measures included are to be planned for at least concurrent and proportionate implementation with other major project features, except where such concurrent and proportionate mitigation is physically impossible. In the latter case, the reasons for deviation from this rule are to be presented in the planning report, and mitigation is to be planned for the earliest possible implementation. Mitigation for fish and wildlife and their habitat is to be planned in coordination with federal and state fish and wildlife agencies in accordance with the Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661-664) (sic)."

Executive Order 11990—Protection of Wetlands (May 24, 1977). This Executive Order requires that each federal agency "...take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for; (1) acquiring, managing and disposing of Federal lands and facilities; and (2) providing federally undertaken, financed or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation and licensing activities." Relevant wetland concerns and values include, but are not limited to, maintenance of natural systems and long-term productivity of existing flora and fauna, habitat diversity, hydrological utility, fish, wildlife, timber and food. Under this Order, a developmental project in a wetland may proceed only if no practicable alternatives can be ascertained and if the proposal... includes all practicable measures to minimize harm to the wetland that may result from its use."

Executive Order 11988—Floodplain Management (May 24, 1977). This Executive Order requires that federal agencies take floor plain management into account when formulating or valuating water or land use plans and that these concerns be reflected in the budgets, procedures, and regulations of the various agencies. This Order allows developmental

activities to proceed in floodplain areas only when the relevant agencies have "...considered alternatives to avoid adverse effects and incompatible development in the floodplains..." or when, in lieu of this, they have "...designed or modified their actions in order to minimize potential harm to or within the floodplain."

Executive Order 11967—Exotic Organisms (May 24, 1977). This Executive Order requires that federal agencies shall restrict, to the extent permitted by law, the introduction of exotic species into the lands or waters which they own, lease, or hold for purposes of administration, and encourage the states, local governments, and private citizens to do the same. This Executive Order also requires federal agencies to restrict, to the extent permitted by law, the importation of exotic species and to restrict the use of federal funds and programs for such importation. The Secretary of the Interior, in consultation with the Secretary of Agriculture, is authorized to develop by rule or regulation a system to standardize and simplify the requirements and procedures appropriate for implementing this Order.

### **National/International Treaties**

Federal Trust Responsibility to Indian Tribes. This responsibility is reflected in the numerous federal treaties with the Indian tribes. These treaties have the force of law. Protection of Indian hunting and fishing rights necessitates conservation of fish and wildlife and their habitat

Convention Between the United States and Japan (September 19, 1974). This treaty endorses the establishment of sanctuaries and fixes preservation and enhancement of migratory bird habitat as a major goal of the signatories.

Convention Between the United States and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environments (November 8, 1978). This Treaty endorses the establishment of sanctuaries, refuges, and protected areas. It mandates reducing or eliminating damage to all migratory birds. Furthermore, it provides for designation of special areas for migratory bird feeding, wintering, feeding and molting, and commits the signatories to "...undertake measures necessary to protect the ecosystems in these areas... against pollution, detrimental alteration and other environmental degradation." Implementing legislation, Pub. L. 95-616, was passed in the United States in 1978.

Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (April 15, 1941). This treaty has several provisions requiring parties to conserve certain wildlife resources and their habitats.

Convention Between the United States and Great Britain (for Canada) for Protection of Migratory Birds (August 1, 1916, as amended January 30, 1979). This treaty provides for a uniform "...system of protection for certain species of birds which migrate between the United States and Canada, in order to assure the preservation of species either harmless or beneficial to man." The Treaty prohibits hunting insectivorous birds, but allows killing of birds under permit when injurious to agriculture. The 1979 amendment allows subsistence hunting of waterfowl outside of the normal hunting season.

### APPENDIX B

### **OTHER DEFINITIONS**

"Compensation," when used in the context of Service mitigation recommendations, means full replacement of project-induced losses to fish and wildlife resources, provided such full replacement has been judged by the Service to be consistent with the appropriate mitigation planning goal.

"Ecoregion" refers to a large biogeographical unit characterized by distinctive biotic and abiotic relationships. An ecoregion may be subclassified into domains, divisions, provinces, and sections. A technical explanation and map is provided in the "Ecoregions of the United States" by Robert G. Bailey, published by the U.S. Forest Service, 1976.

"Ecosystem" means all of the biotic elements (i.e., species, populations and communities) and abiotic elements (i.e., land, air, water, energy) interacting in a given geographical area so that a flow of energy leads to a clearly defined trophic structure, biotic diversity and material cycles. (Eugene P. Odum. 1971. Fundamentals of Ecology)

"Evaluation species" means those fish and wildlife resources in the planning area that are selected for impact analysis. They must currently be present or known to occur in the planning area during at least one stage of their life history except where species not present (1) have been identified in fish and wildlife restoration or improvement plans approved by state or federal resource agencies, or (2) will result from natural species succession over the life of the project. In these cases, the analysis may include such identified species not currently in the planning area.

There are two basic approaches to the selection of evaluation species: (1) selection of species with high public interest, economic value or both; and (2) selection of species to provide a broader ecological perspective of an area. The choice of one approach in lieu of the other may result in a completely different outcome in the analysis of a proposed land or water development. Therefore, the objectives of the study should be clearly defined before species selection is initiated. If the objectives of a study are to base a decision on potential impacts to an entire ecological community, such as a unique wetland, then a more ecologically based approach is desirable. If, however, a land or water use decision is to be based on potential impacts to a public use area, then species selection should favor animals with significant human use values. In actual practice, species should be selected to represent social, economic and broad ecological views because mitigation planning efforts incorporate objectives that have social, economic, and ecological aspects. Species selection always should be approached in a manner that will optimize contributions to the stated objectives of the mitigation planning effort.

 Most land and water development decisions are strongly influenced by the perceived impacts of the proposed action on human use. Since economically or socially important species have clearly defined linkages to human use, they should be included as evaluation species in all appropriate land and water studies. As a guideline, the following types of species should be considered:

- Species that are associated with Important Resource Problems as designated by the Director of the Fish and Wildlife Service (except for threatened or endangered species).
- Other species with monetary and non-monetary benefits to people accruing from consumptive and non-consumptive human uses including, but not limited to, fishing, hunting, bird watching and educational, aesthetic, scientific or subsistence uses.

An analysis based only on those species with directly identifiable economic or social value may not be broad enough to adequately describe all of the ramifications of a land and water use proposal. If it is desirable to increase the ecological perspective of an assessment, the following types of species should be considered:

- Species known to be sensitive to specific land and water use actions. The species selected with this approach serve as "early warning" or indicator species for the affected fish and wildlife community.
- Species that perform a key role in a community because of their role in nutrient cycling or energy flows. These species also serve as indicators for a large segment of the fish and wildlife community, but may be difficult to identify.
- Species that represent groups of species which utilize a common environmental resource (guilds). A representative species is selected from each guild and predicted environmental impacts for the selected species are extended with some degree of confidence to other guild members.

"Federal action agency" means a department, agency or instrumentality of the United States which plans, constructs, operates or maintains a project, or which plans for or approves a permit, lease, or license for projects or manages Federal lands.

"Fish and wildlife resources" means birds, fishes, mammals and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

"Habitat" means the area which provides direct support for a given species, population, or community. It includes all environmental features that comprise an area such as air quality, water quality, vegetation and soil characteristics and water supply (including both surface and groundwater).

"Habitat value" means the suitability of an area to support a given evaluation species.

"Important Resource Problem" means a clearly defined problem with a single important population of a community of similar species in a given geographic area as defined by the Director of the Fish and Wildlife Service.

"In-kind replacement" means providing or managing substitute resources to replace the habitat value of the resources lost, where such substitute resources are physically and biologically the same or closely approximate those lost.

- "Loss" means a change in fish and wildlife resources due to human activities that is considered adverse and;
- (1) reduces the biological value of that habitat for evaluation species;
- (2) reduces population numbers of evaluation species;
- (3) increases population numbers of "nuisance" species;
- (4) reduces the human use of those fish and wildlife resources; or
- (5) disrupts ecosystem structure and function.

Changes that improve the value of existing habitat for evaluation species are not to be considered losses, i.e., burning or selective tree harvesting for wildlife management purposes. In addition, reductions in animal populations for the purpose of harvest or fish and wildlife management will not be considered as losses for the purpose of this policy.

"Minimize" means to reduce to the smallest practicable amount or degree.

"Mitigation banking" means habitat protection or improvement actions taken expressly for the purpose of compensating for unavoidable losses from specific future development actions. It only includes those actions above and beyond those typically taken by congress for protection of fish and wildlife resources.

"Out-of-kind replacement" means providing or managing substitute resources to replace the habitat value of the resources lost, where such substitute resources are physically or biologically different from those lost.

"Planning area" means a geographic space with an identified boundary that includes:

- (1) The area identified in the study's authorizing document;
- (2) The locations of resources included in the study's identified problems and opportunities;
- (3) The locations of alternative plans, often called "project areas;" and
- (4) The locations of resources that would be directly, indirectly, or cumulatively affected by alternative plans, often called the "affected area,"

"*Practicable*" means capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of the pertinent factors, such as environment, cost, or technology.

"Project" means any action, planning or approval process relating to an action that will directly or indirectly affect fish or wildlife resources.

"Replacement" means the substitution of offsetting of fish and wildlife resource losses with

resources considered to be of equivalent biological value. However, resources used for replacement represent loss or modification of another type of habitat value. Replacement actions will result in a loss of habitat acreage and types which will continually diminish the overall national resource base. It should be clearly understood that replacement actions never restore the lost fish and wildlife resource—that is lost forever.

Dated: January 13, 1981.

Cecil Andrus,

Secretary of the Department of the Interior.

(FR Doc. 81 —1895 Filed 1 -22-81; 8:45 am)

# **APPENDIX G-D**

# SUGGESTED PLANT MATERIALS FOR USE IN REVEGETATION

# **Trees for Riparian Woodland**

Common Name	Scientific Name	
Western sycamore	Platanus racemose	
Fremont cottonwood	Populus fremontii	
Coast live oak	Quercus agrifolia	
Black willow	Salix gooddingii*	
Sandbar willow	Salix hindsiana	
Red willow	Salix laevigata*	
Yellow willow	Salix lasiandra*	
Arroyo willow	Salix lasiolepis	
Elderberry	Sambucus mexicana	

# **Shrubs for Riparian Woodland**

Common Name	Scientific Name
California mugwart	Artemisia douglasiana* (s)
Palmer's sagebrush	Artemisia palmeri* (s)
Mulefat	Baccharis glutinosa (s)
Broom Baccharis	Baccharis sarathroides
Bladderpod	Isomeris arborea
Fuchsia-flowered Gooseberry	Ribes speciosum
Wild rose	Rosa californica
California blackberry	Rubus ursinus*
Sandbar willow	Salix hindsiana
Wild grape	Vitis girdiana*

# **Shrubs for Buffer**

Common Name	Scientific Name
Saltbrush	Atriplix lentiformis (s)
Coyote bush	Baccharis pilularis (s) var. consanguinea
Summer holly	Comarostaphylis diversifolia
Wild rye	Elymus condensatus (s)
Goldenbush	Haplopappus squarrosus (s)
Toyon	Heteromeles arbutifolia
Honeysuckle	Lonicera subspicata*
Bushmallow	Rhamnus crocea
Monkeyflower	Malocathamnus fasciculatus (s)
Beard tongue	Mimulus puniceus (s)
Holly-leaved cherry	Penstemon spectabilis (s)
Redberry	Prunus ilicifolia
Lemonadeberry	Quercus dumosa
Sugar bush	Rhus integrifolia
Elderberry	Rhus ovata
Spanish dagger	Sambucus mexicana

# Annuals and Herbaceous Perrenials for Riparian Woodland and Buffer

Camissonia cherianthfolia esp. suffruticosa* Eremocarpus setigerus Eriogonum parvifolium (s)
Eriogonum parvifolium (s)
Eschscholzia californica (s)
Helianthus annuus (s)
Lotos scoparius (s)
Lupinus bicolor (s)
Lupinus succulentus (s)
Nemophila menziesii (s)
Oenothera hookeris (s)
Phacelia tanacetifolia (s)
Plantago insularis (s)
(

### **APPENDIX G-E**

### LIST OF AGENCIES FOR CONSULTATION

# **Department of the Army**

Los Angeles District Corps of Engineers Regulatory Branch P.O. Box 2711 Los Angeles, CA 90053 (213) 688-5606

# **Department of Fish and Game**

245 West Broadway, Suite 350 Long Beach, CA 90802

### U.S. Fish and Wildlife Service

Division of Ecological Services 24000 Avila Road Laguna Niguel, CA 92677 (714) 831-4270

### APPENDIX H

### **CONCEPT 8 – PLANNING COMMITTEE ALTERNATIVE**

### **Concept 8. Planning Committee Alternative: Multiple Use - Integrated Use Emphasis**

(This alternative was prepared by the Mission Valley Unified Planning Committee. The alternative is included as submitted by the Planning Committee. For additional detailed information see **Appendix H**.)

### **Overall Goal**

To provide a community plan for Mission Valley which allows for its continued development (through market initiative) as a quality regional urban center in the City of San Diego while recognizing environmental concerns, the Valley's traffic needs and encouraging the Valley's development as a community.

Concept 8 is based on a realistic, and implementable land use proposal, as determined by the Mission Valley Unified Planning Committee. The land uses were those recommended by the property owners and local development interests. A strong multiple use component is proposed for large undeveloped tracts of land along Friars Road. The transportation plan has been developed based upon these land use assumption.

The open space element is the key, not only to open space recommendations, but urban design recommendations as well. Urban design focuses on the river, hillsides, and transportation corridors. The open space element discusses development criteria for the flood control facility, hillsides and park and recreation areas.

Implementation envisions the developments of new zoning legislation to address development intensity and multiple use. A financing plan that envisions the establishment of assessment districts to provide funds for the development of public facilities within the community is included as part of the implementation plan.

The "Planning Committee Alternative - Integrated Use Emphasis" concept includes: a) a multiple use approach to development; b) an emphasis on an integration of commercial-retail, commercial-recreation, office and residential uses; c) encouragement of residential development in order to complement the commercial and office development presently prevalent in Mission Valley; d) the addition of resident-oriented community facilities and services; e) a comprehensive transportation system with an emphasis on achieving a viable internal circulation network; and, f) a natural appearing, soft-bottomed floodway solution to flood protection, with optional augmentation by means of a supplemental diversion facility in order to contain a 100-year flood.

Concept 8 is an attempt to complement existing and future commercial office development with an appropriate amount of residential development.

This concept assumes the following: a) all developable and redevelopable property is to be designated "multiple use" unless the property owner elects to retain the existing zoning applicable to the property; b) existing CA, CO, and CR zoning remain on developed properties at the option of the property owners; c) all future development intensity is regulated by a maximum floor area ratio of 2.

This development intensity approach is intended to equitably distribute future land use intensification in Mission Valley. The "multiple use" designation permits any of four land uses (office, retail, hotel, residential) either singly or in some combination.

The Concept 8 approach to development intensity would regulate intensity by means of traditional zoning ordinances. The Committee has opted this approach as best adapted to achievement of the plan's goal: a multiple use approach to development with emphasis on an integration of commercial-retail, commercial-recreation, office and residential uses. The multiple use concept will, in itself, be effective in dealing with the Valley's traffic problems by reducing the traffic volumes which could be expected from comparably sized single use developments. Different land uses produce different traffic loads, particularly at peak hours, and multi-use will tend to minimize traffic congestion.

Mission Valley is characterized by an abundance of regionally oriented shopping, office and recreational facilities, but lacks resident-oriented support facilities despite considerable residential growth. It is felt that a moderate amount of residential growth under this concept would justify providing such local support facilities as supermarkets and other neighborhood retail and service facilities, medical clinics, etc.

A balanced transportation system is an essential ingredient of Concept 8 with an emphasis on achieving a viable internal circulation network.

Public transit modes would be supplemented by an extensive walkway and bikeway system linking many of the Valley's major activity centers. This concept also requires a significantly upgraded surface street system in order to reduce, or eliminate entirely, current reliance upon use of the freeway system to travel within the Valley. Although a light rail transit (LRT) line is not an integral part of Concept 8 at this time, one could ultimately be of significant benefit to Mission Valley. The future extension of an LRT line from Centre City through Mission Valley to the stadium (and possibly north along I-15 to the city of Escondido) could reduce dependence upon the automobile and reduce traffic congestion and parking problems in the Valley.

Concept 8 embodies a natural-appearing, soft-bottomed floodway approach to flood protection, with optional augmentation by means of a supplemental diversion facility, with the combined objectives of providing a major flood control facility to contain the 100-year frequency flood in a visually attractive setting, while also making more land available for development than is presently the case.

The overall appearance of this flood protection system would be similar to that of a river greenbelt with water year-round in the low-flood channel and preservation of much of the

existing riparian/wetland habitat. The river corridor itself could be conceivably designed to accommodate a variety of uses which would complement the abutting land uses and provide flood control protection and habitat conservation.

### Concept 8 - Transportation Design Criteria and Environmental Criteria

The design of a balanced transportation system which implements the planning principles underlying the development of Mission Valley requires reevaluating present transportation practices to achieve better integration of the transportation facility design with other land use elements of the community.

For planning purposes, design of the transportation system is conceptualized two ways: first, as a flow of people and goods linking specific centers of activity; and second, as a physical structure occupying horizontal and vertical space. The physical shape of facilities should complement the adjoining communities. The use of standardized rigid physical design concepts should be avoided short of demonstrable safety or hazard problems.

In terms of the regional street and highway network, the plan assumes that SR-52 will be completed east to SR-67; construction of I-15 will be finished north of I-8; and SR-125 will be constructed between I-8 and SR-56 in Poway. New streets and improved facilities are also contemplated, as indicated on the maps included in the plan. Despite these improvements, some areas of the implementing will experience congestion during peak periods. This projected level of congestion is considered acceptable near freeway interchanges.

## **Concept 8 - Public Transit**

The long-term development of Mission Valley as a vital regional employment and residential community may be severely impacted by total reliance on the automobile. In order to accommodate projected development it is essential that public transit corridors and stations be provided. Use of public transit (alternative transportation systems) could go a long way in preserving the vitality of Mission Valley. Through cooperation among the various private interests, and working together with government, a new transportation system could be developed that would ensure the long term viability of Mission Valley as a major hub of the San Diego Region.

### **Concept 8 - Light Rail Transit**

A desirable element of the long-term transportation solution for Mission Valley is the extension of the regional LRT system. The LRT may provide an alternative method of moving commuters through the Valley. An extension could include a line running from downtown, through the Valley to either the east county area (via Mission Gorge/I-8) or north to Escondido (via I-15). Preliminary studies indicate that ridership in the Valley could be relatively high.

### **Concept 8 - Land Use**

### **Objectives**

- Encourage multiple use development in which commercial are combined/integrated with other uses.
- Promote Mission Valley as a regional retail center.
- Provide a full range of retail uses.
- Encourage visitor-oriented commercial development.
- Encourage continuation of existing and development of new commercial-recreation uses, particularly along the San Diego River.
- Encourage good design in new commercial development.

# **Proposals**

- Provide neighborhood/convenience commercial facilities near, or as part of, residential developments.
- Encourage the combining of commercial and other uses.
- Encourage commercial-office development which includes personal services for employees such as cafeterias, barbers, dry cleaners, etc.
- Encourage commercial-recreation uses and other related uses (restaurants, sports facilities and equipment, specialty shops, etc.) to locate adjacent to the river.

### **Development Guidelines**

- Provide parking garages as an integral part of new development utilizing ground level spaces for retail activity.
- Locate neighborhood/convenience uses toward the center of residential areas to promote pedestrian and/or bicycle accessibility.
- Connect various developments (new and existing) by transit, pedestrian and/or bicycle routes to discourage intra-implementing auto traffic.
- Residential development should be in the form of generally self-contained areas. The following proposals are intended to achieve this concept:

- 1. Provide amenities intended primarily for use by residents. These amenities should include:
  - a. Leisure activity areas.
  - b. Active recreational facilities.
  - c. Child care centers.
  - d. Neighborhood and convenience shopping and professional office complexes.
  - e. Cultural/educational opportunities.
  - f. Community facilities and services.
- 2. Design internal circulation paths to reduce dependency on the automobile and minimize conflicts among pedestrian, bicycle and automobile traffic.
- 3. Encourage a mix of housing types and densities, integration of commercial uses and flexibility in site arrangement.
- 4. Discourage visitor-oriented uses from locating within residential areas to minimize conflicts between residents and tourists. These include:
  - a. Lodging facilities.
  - b. Outdoor amusements.
  - c. Theaters.
  - d. Other uses that tend to draw traffic from outside the community.
- Large scale development (commercial, office, or commercial-recreation) at the base of the south slopes should be allowed to extend above the 150-foot elevation contour on the southern slopes.

### **Concept 8 - Parks and Recreation**

The major concentrations of residential development in the community are located at the western and eastern ends of the Valley. A new YMCA (Young Men's Christian Association) facility was recently completed at the western end of the Valley on Friars Road. This facility (developed on leased city-owned land) provides both indoor and outdoor recreational facilities: one, at the eastern end of the Valley, on Rancho Mission Road near the river; and, the second, at the western end of the Valley on Hotel Circle North. The need for active and passive recreational opportunities will increase as residential development increases in the Valley.

The project residential population indicates a need for active recreational parks in addition to what is currently provided by the YMCA and Sefton Little League Field.

### **Objective**

• Provide adequate park and recreation areas on presently owned public real property for the use of Mission Valley residents.

### **Proposals**

- Construct and develop two public parks on the City-owned land: one adjacent to the YMCA in the western portion of the Valley and the other on a parcel bounded by Milly Way on the west, Camino de la Reina on the south and the floodway on the north.
- Utilize the San Diego River corridor for passive recreation.
- Coordinate with private recreational facilities and commercial interests so that the private facilities complement and supplement the public recreational system.
- Expand the existing sports facility abutting the stadium parking lot.

## **Development Guidelines**

- Combine appropriate passive recreational use of wildlife and/or wetland conservation areas and water resources.
- Provide common landscaped open areas in new developments for recreational use by occupants of the developments.
- Use park fees for the two public parks to be built on City property.
- Each park should be as large as feasible with reference to the site available. The park adjacent to the YMCA should consist of open lawn areas and jogging trails. The other park should include open lawn areas, multi-purpose playing fields, jogging trails, slides, swings, bars and restrooms.

### **Concept 8 - Development Intensity**

The purpose of the development intensity element is to provide a method to equitably balance and distribute future land use intensification in Mission Valley.

Mission Valley is an important commercial center for the entire City of San Diego. It is now the City's major retail center, as well as the focus of much of the City's commercial recreation and commercial office development.

In dealing with development intensity, a balance must be achieved between a variety of competing interests. These include the interests of the owners and occupants of presently developed commercial property, residents of the community, property owners with land which will accommodate future development, and the citizens of the entire San Diego community who make use of the regional commercial facilities for business, trade, entertainment and recreation.

Concept 8 addresses such concerns as provision for an adequate transportation system and flood protection along the lower reaches of the San Diego River. Concept 8 envisions that these problems will be met and resolved on a continuing basis through the cooperative efforts of Mission Valley property owners and the responsible governmental agencies. The Planning Committee believe that the resolution of problems such as traffic circulation must be continuing, innovative and concurrent with developmental as contemplated by Concept 8. Responsible planning mandates that the designated problems be resolved to accommodate responsible development, not used as an excuse to curb the right of property owners to utilize their property, now or in the future, in accordance with the Plan's land use element.

The Committee recognizes that totally unlimited development in the Valley would unnecessarily exacerbate the identified problems. Similarly, unreasonable restrictions on development would create stagnation in this major commercial center and place Mission Valley at a competitive disadvantage with other commercial areas of the City.

The Committee is cognizant of the fact that Mission Valley already encounters some disadvantages in competing with other commercially competitive areas within the City of San Diego. As revealed in the community facilities element of the Plan, virtually no public facilities have been provided for Mission Valley, while large commitments of public funds are continually made to downtown redevelopment. No such commitment of redevelopment funds is needed for Mission Valley, but in equity, no unreasonable restrictions should be imposed on commercial development in the community plan area.

The Committee's inquiry as to control the development intensity has led to consider two possible methods. The first of these is a proposal to limit development by means of assigning development rights to parcels or property on the basis of the City's traffic count studies (average daily trips). The Committee has rejected this method because the best evidence available establishes that such studies are not scientific or reliable, are speculative in nature and, if applied, would result in a down-zoning of Mission Valley properties.

The second approach to development intensity would regulate intensity by means of traditional zoning ordinances. The Committee has opted for this approach as best adapted to achievement of the Plan's goal: a multiple use approach to development with emphasis on an integration of commercial retail, commercial recreation, office and residential uses. The multiple use concept will, in itself, be effective in dealing with the Valley's traffic problems by reducing the traffic volumes which could be expected from comparably sized single use development. Different land uses produce different traffic loads, particularly at peak hours, and multi-use will tend to minimize traffic congestion.

The Committee also believes that the implementation ordinance, included in the Plan as Appendix B, strikes an appropriate balance between the regulatory function of planning and the function of the market place in achieving the goal of an integrated multiple use development in Mission Valley.

The Committee's study has reviewed the existing zoning ordinances in force in the City of San Diego which accommodate commercial development and/or impose limitations thereon. In present ordinances, limitations on development intensity are generally achieved through imposition of a floor area ratio, a lot coverage limitation and/or a requirement for specified parking spaces. For instance, in the San Diego downtown area business properties are zoned either C (Commercial) or CBD (Central Business District). The CBD Zone has no floor area requirement, no coverage limitation, no parking requirement and no landscaping requirement. The C Zone has a floor area ratio of two, no coverage limitation on the lot, no parking requirement and no landscaping requirement.

Business properties in Mission Valley are, at the present time, generally found in one of three zones: CA (Commercial Area; area shopping center), CR (Commercial Recreation), or CO (Commercial Office). Other properties now being utilized for business purposes are functioning under variances and/or conditional use permits. The CA and CO zones have a floor area ratio of two, and the CR Zone has a floor area ratio of one. The CA and CO zones applicable to Mission Valley have a coverage limitation of 50 percent for an interior lot and 60 percent for a corner lot. The CR Zone has a 35 percent coverage limitation.

In the CA, CO and CR zones, parking requirements vary from one parking space per 200 square feet of floor space to one parking space per 400 square feet of floor space.

In achieving a balance between the interests of property owners in developing their land and the interests of the community in regulating development intensity, the Committee believes a proper balance will be struck through an implementation ordinance more restrictive than the commercial zoning now applicable to the downtown area, but specifically encouraging the integrated multiple use development for Mission Valley which is the intent of Concept 8.

The Committee proposes that an ordinance be adopted creating a new zone to be known as "Commercial Area 2" (CA2). This zone, which would specifically permit the multiple uses contemplated by Concept 8 would be applied to properties currently in commercial use and properties for which future commercial use is now contemplated, unless the property owner elected to retain the existing zoning applicable to the property. The CA2 Zone would include in one simplified zoning category the areas now zoned CA, CO, and CR, unless the property owner elected to retain the present zoning, as well as those properties in other zones where CA2 zoning is requested by the property owners. At the time a parcel of property is placed in the CA2 Zone, the property owner may, but shall not be required to, indicate one or more of the permitted uses in the zone for which the owner intends to utilize the property.

- 1. The purpose and intent section of the CA2 ordinance includes most of the purposes and intent clauses now found in the CA, CO and CR zoning ordinances.
- 2. Permitted uses are those set forth in the present ordinance establishing the CA, CO, CR, C and CN zones. The purposes include, among other things, various goods retail

goods establishments, hotels and motels, various recreational facilities, private clubs, restaurants, theatres and business and professional offices. Permitted uses in the CA2 Zone also include residential development in accord with the integrated use goal of the community plan.

- 3. The minimum lot dimension in the CA2 Zone is 10,000 square feet, as in the present CA Zone. The ordinance includes the exception currently found in CA, CO and CR zoning ordinances which state: "Any lot which qualifies under the definition of a lot as set forth in this code and which does not comply in all respects with the minimum lot dimensions specified herein may, nevertheless, be used as permitted and otherwise regulated by the provisions applicable to this zone."
- 4. The minimum yard requirement is similar to that in the present CO Zone (Front of 15 feet, etc.).
- 5. The CA2 Zone includes a maximum floor area ratio (FAR) of two, the same as in the present CO and CA zones. By placing all of the potential uses under the same floor area ratio requirement, a multiple use is encouraged, by eliminating an FAR advantage by selection of one form of development as opposed to other approved uses. In determining floor area ratio, a property owner may include in his computations portions of his land adjacent to the development which are included in the FW Zone, the FPF Overlay Zone, or the Hillside Overlay Zone.
- 6. No maximum coverage requirement is included in the CA2 Zone, as adequate limitation is achieved through the imposition of the floor area ratio.
- 7. Regulations for residential development are modified in the CA2 Zone, as opposed in the CA, CO and CR zoning ordinances, to encourage the integrated multiple use contemplated by the community plan.
- 8. Landscaping requirements in the CA2 Zone are comparable to those found in the present CA, CO and CR zoning ordinances.
- 9. Off-street parking requirements in the CA2 Zone shall be those set forth in detail in the proposed CA2 zoning ordinance, included in the following pages. Any portion of a facility devoted to meeting the off-street parking requirements shall not be counted in determining floor area.

The Committee is cognizant that a number of property owners in Mission Valley have parcels not now available for commercial development, but upon which commercial development is contemplated in the future. The Committee has considered the right of property owners to develop their land in future years in accord with the Plan's concepts and requirements, as well as immediate development rights.

As part of the implementation process, zoning within the community plan area must be brought into conformity with Concept 8. **Figure 3** reflects a harmonization of Concept 8's goals with the expressed desires of the Valley's present property owners.

The Committee proposes that as part of the implementation process, a general rezoning of

Mission Valley properties be enacted in accord with the land use designations on **Figure 3** to bring: 1) zoning in Mission Valley into conformity with the Plan; 2) permit property owners to place their properties in the CA2 Zone, whether or not immediate commercial development of the property is contemplated; and, 3) accomplish the rezoning without the necessity for joining the rezone application with a specific indication of the proposed usage (such as a PCD, PRO, or tentative map). A general rezone of Valley properties, in implementation of the Plan, also places all property owners on a plane of equality with regard to zoning, irrespective of the point in time at which commercial development of specific properties is contemplated.

### Objective

• To equitably balance and distribute future land use intensification.

### **Proposals**

- Control of development intensity through traditional zoning concepts and the normal function of the marketplace.
- Adoption of an ordinance providing for a new Commercial Area 2 (CA2) Zone to encourage a pattern of integrated multiple use development in Mission Valley.
- A general rezone of Mission Valley, in implementation of the Plan, to bring zoning into conformity with Concept 8.

### **Concept 8 – Transportation Improvement Phasing**

The Mission Valley traffic forecasts have identified the ultimate improvements to the transportation network that will be needed in the Valley. Each of these improvements has been phased, based upon the amount of development that occurs in different areas of Mission Valley. As development proceeds in these various areas, street and ramp improvements will be required at certain stages.

Equivalent dwelling units (EDU) have been selected to translate different types of development into a common denominator. The EDU factor for each type of land use in Mission Valley is listed in **Table 7**. In order to monitor the EDUs in Mission Valley, the Valley was divided into 12 sectors, basically along the San Diego River and the north-south freeways (Phasing Sector Map). These sectors were grouped together according to which street or ramp improvements will be required because of development of those areas

(**Table 7** and **Figure 28**). Table 7 indicates the maximum amount of EDUs that can be developed within a group of sectors before certain street improvements are necessary.

These EDU totals exclude any projects that are underway or have approved tentative or final maps. If a new project replaces an existing land use, only the differences in EDUs between the new and old use should be counted in monitoring total EDUs. Notice that some of the groups have several levels of development that require different road improvements.

When an EDU threshold is reached which triggers the need for an improvement in a sector, the City should initiate such action as may be required to assure that the cost of the

improvement is apportioned to all properties which will benefit from the improvement, rather than place the entire burden of the improvement on a pending development.

The phasing of transportation improvements by means of EDUs does not constitute a limitation on development by means of a traffic court, but merely provides for the orderly implementation, as needed, of the improvements to the circulation system included in the Plan.

# CONCEPT 8 - MISSION VALLEY UNIFIED PLANNING COMMITTEE - IMPLEMENTATION ALTERNATIVE

### PROPOSED CA2 ZONING ORDINANCE

### Sec. CA2 Zoning Ordinance

### A. PURPOSE AND INTENT

The CA2 Zone is primarily intended to provide for mixed use development with emphasis on an integration of commercial retail, commercial recreation, office and residential uses. The Zone is intended to accommodate all of the following:

- 1. Establishments catering to the lodging, dining and recreational needs of tourists and others, characterized by a diversity of recreational facilities;
- 2. Business and professional offices and certain allied services normally associated with such offices;
- 3. Community and regional shopping centers, which typically serve large areas of the City;
- 4. Residential development to encourage a mixture of residential and commercial uses within the CA2 Zone.
- 5. Shopping areas that provide convenience goods and services for residential neighborhoods.

### **B. PERMITTED USES**

In the CA2 Zone, no building or improvement, or portion thereof shall be erected, constructed, converted, established, altered or enlarged, nor shall any premises be used for one or more of the following purposes:

- 1. Hotels and motels.
- 2. Recreational facilities, including but not limited to:
  - a. Golf courses, including miniature courses and driving ranges.
  - b. Recreation centers.

- c. Swimming pools, gymnasiums and health centers.
- d. Tennis, badminton, volleyball, and similar courts.
- e. Skating rinks.
- f. Bowling lanes.
- g. Riding stables.
- h. Marinas.
- 3. Apartments, condominiums and other residential developments.
- 4. Regional shopping centers.
- 5. Shopping centers designed to provide convenience goods and services for residential neighborhoods.
- 6. Private clubs, lodges and fraternal organizations.
- 7. Restaurants and bars with incidental entertainment and dancing.
- 8. Theaters, including open-air theaters.
- 9. Public utility electric distribution substations, gas regulators and communications equipment buildings developed in accordance with building and landscaping plans approved by the Zoning Administrator.
- 10. Parking lots commercial.
- 11. Public parks, public playgrounds.
- 12. Accessory uses for any of the foregoing permitted including but not limited to the following:
  - Business services customarily catering to hotel and motel guests and apartment occupants. These may include sales of newspapers and magazines, tobacco and packaged liquor; barber and beauty shops; florists and gift shops; agencies for laundering, dry cleaning and pressing; agencies for tickets, travel and car rentals.
- 13. Business and professional office uses. Such uses may include accountants, advertising agencies, architects, attorneys, contractors, doctors, engineers, financial institutions, insurance agencies, medical clinics (no overnight patients), photographers, real estate brokers, securities brokers, surveyors and graphic artists.
- 14. Retailing of goods and dispensing of services from the following establishments:
  - a. Addressing, secretarial and telephone answering services.

- b. Ambulance service.
- c. Antique shops.
- d. Apparel shops.
- e. Automobile and truck sales and rental agencies (usable vehicles only).
- f. Automobile wash establishments.
- g. Automobile paint and repair shops, including body and fender work if entirely within an enclosed building.
- h. Bakeries.
- i. Beauty shops.
- j. Bicycle shops.
- k. Boat Sales agencies.
- 1. Book stores.
- m. Building material stores, provided that any open storage areas are completely enclosed by walls or buildings or a combination thereof; said walls and buildings shall not be less than six feet in height, and provided also there shall be no outdoor storage of merchandise, material, equipment or other goods to a height greater than that of any enclosing wall of building.
- n. Business machine sales display and service.
- o. Confectionaries.
- p. Curtain and drapery shops.
- q. Dairy stores, including drive-in.
- r. Drafting and blueprint service.
- s Dry cleaning establishments (no truck delivery of finished cleaning).
- t. Dry cleaning and laundry agencies and self-service dry cleaning and laundry establishments.
- u. Dry goods stores and pharmacies.
- v. Electronic data processing, tabulating and record keeping services.
- w. Employment agencies.

х.	Equipment and tool rental establishments (no man-ridden equipment).
y.	Feed stores.
z.	Financial institutions.
aa.	Florists.
bb.	Food stores.
cc.	Frozen food lockers.
dd.	Funeral Parlors.
ee.	Furniture stores.
ff.	Hardware stores excluding sale of used building materials, used appliances, and used plumbing supplies.
gg.	Hobby shops.
hh.	Ice delivery stations.
ii.	Jewelry stores.
jj.	Leather goods and luggage shops.
kk.	Liquor stores.
11.	Locksmith shops.
mm.Medical appliance sales.	
nn.	Moving and household storage facilities.
00.	Music stores.
pp.	Newspaper plants.
qq.	Nurseries-plant.
rr.	Office furniture and equipment sales.
ss.	Paint and wallpaper stores.
tt.	Pawn shops.
uu.	Pet shops.
vv.	Photographic equipment, supplies, and film processing stores.

- ww. Photographic studios.
- xx. Post offices.
- yy. Radio and television broadcasting studios.
- zz. Radio, television and home appliance repair shops.
- aaa. Shoe repair shops.
- bbb. Shoe stores.
- ccc. Sporting goods stores.
- ddd. Stationers.
- eee. Studios for teaching of art, drawing and music.
- fff. Tire sale, repair and recapping establishments if entirely within an enclosed building.
- ggg. Trade and business schools.
- hhh. Trailer sales agencies.
- iii. Transportation terminals.
- iii. Travel bureaus.
- kkk. Variety stores.
- 15. Labor unions (no hiring halls) and trade associations.
- 16. Medical, dental, biological and x-ray laboratories.
- 17. Any other use which the Planning Commission may find to be similar in character to the uses, including accessory uses, enumerated in this section and consistent with the purpose and intent of this zone. The adopted resolution embodying such finding shall be filed in the office of the City Clerk.
- 18. Accessory uses for any of the foregoing permitted uses including on-premises signs constructed, fabricated, erected, installed, attached, fastened, placed, positioned, operated and adapted in accordance with the regulations as set forth in Chapter X, Article 1, Division 11, and Chapter IX, Article 5, Division 1 of this code.
- 19. At the time a parcel of property is placed in the CA2 Zone, the property owner may, but shall not be required to, indicate one or more of the permitted uses in the zone for which the owner intends to utilize the property.

### C. SPECIAL REGULATIONS

All accessory uses shall be located in the same building as the permitted use or uses which they serve. There shall be no entrance to any such accessory uses except through a foyer, court, lobby, patio, or other similar area. However, neither of the foregoing regulations shall be applicable to signs or accessory uses exclusively serving outdoor recreational activities.

### D. PROPERTY DEVELOPMENT REGULATIONS

No building or portion thereof shall be erected, constructed, converted, established, altered, enlarged, used, nor shall any premises be used unless the lot or premises and buildings shall comply with the following regulations and standards:

- 1. Minimum Lot Dimension.
  - a. Area 10,000 square feet.
  - b. Street Frontage 50 feet, except that for any lot which fronts principally on a turnaround or on a curving street line having a radius of less than 100 feet, the minimum frontage shall be 30 feet.
  - c. Width 50 feet.
  - d. Exception. Any lot which qualifies under the definition of a lot as set forth in this code and which does not comply in all respects with the minimum lot dimensions specified herein may nevertheless be used as permitted and otherwise regulated by the provisions applicable to this zone.

### 2. Minimum Yards.

- a. Front-15 feet, except that for any portion of a lot which fronts on a turnaround or on a curving street line having a radius of less than 100 feet, the minimum frontage shall be ten feet.
- b. Side.
  - (1) Interior ten feet.
  - (2) Street 15 feet, except that the minimum shall be:
    - (a) Nine feet for any lot having a width of 45 feet but less than 50 feet.
    - (b) Eight feet for any lot having a width of 40 feet but less than 45 feet.
    - (c) Seven feet for any lot having a width of 35 feet but less than 40 feet.

- (d) Six feet for any lot having a width of 30 feet but less than 35 feet.
- (e) Five feet for any lot having a width of less than 30 feet.
- c. Rear 15 feet.
- d. Exceptions to Front Yard and Street Side Yard Regulations. Off-Street Yard Regulations. Off-street parking may be located within the required front and street side yards adjoining the required landscaped strip abutting public streets rights-of-way.

### 3. Maximum Floor Area Ratio

The maximum floor area ratio shall be two.

In determining floor area ratio, a property owner may include in his computations portions of his land adjacent to the development which are included in the FW Zone, the FPF Overlay Zone, or the Hillside Review Overlay Zone.

4. Regulations for Residential Development.

No lot shall be occupied by more than one dwelling unit for each 1,000 square feet of lot area.

All buildings, improvements or portions thereof, erected, constructed, covered, established altered or enlarged in this zone which are designated or intended for living purposes shall observe minimum front, side or rear yards, and floor area ratio set forth in this ordinance.

### 5. Landscaping.

Prior to the use and occupancy of any premises, a strip of land within said premises abutting public street rights-of-way (except for approved ways of egress) shall be suitably landscaped with shrubs, trees, and ornamental ground cover. Said strip shall have a minimum depth of five feet and an area equal in square feet to ten times the length of the property line abutting public street rights-of-way (except for approved ways of ingress and egress). Any portion of said landscaped strip which exceeds 25 feet in depth shall not be included in calculating the required area. Prior to the issuance of any building permits, a complete landscaping plan shall be submitted to the Zoning Administrator for approval; said landscaping plan shall be in substantial conformance with standards and specifications adopted by the Planning Commission as set forth in the document entitled, "Developmental Standards and Operational Standards - Landscaped Strips," on file in the office of the Planning Department. Substantial conformance shall be determined by the Zoning Administrator; said determination shall be subject to appeal in the manner set forth in Chapter X, Article 1, Division 5 of the San Diego Municipal Code.

Landscaping and required watering systems shall be installed prior to the use of the premises. All landscaping material in required landscaped areas shall be permanently maintained in a growing and healthy condition, including trimming, as appropriate to the landscaping material in accordance with the "Developmental Standards and Operational Standards - Landscaped Strips" referred to above.

6. Other applicable property development regulations are contained in Division 6 of this Article.

### E. OFF-STREET PARKING REGULATIONS

- 1. Every premises used for one or more of the permitted uses listed in paragraph "B." above shall be provided with a minimum of off-street parking spaces on the same lot or premises as follows:
  - a. For apartments, multiple dwelling and group dwellings, 1.3 parking spaces for each dwelling unit containing not more than one bedroom, and 1.6 parking spaces for each dwelling unit containing two or more bedrooms.
  - b. For hotels and motels, one parking space for each guest room, and one space for each 500 square feet of gross floor area used for meeting or banquet functions.
  - c. For private clubs and similar establishments, one parking space for each guest room or one parking space for each 400 square feet of gross floor area, whichever is greater.
  - d. For areas used for banquet rooms, dining, dancing, or the serving of drinks, except as provided in E.1.b., one parking space for each 80 square feet of gross floor area.
  - e. For golf courses and golf driving ranges, ten parking spaces for each fairway and one for each range tee.
  - f. For each play or game court (tennis, handball, etc.), one parking space for each player authorized to participate at one time under the rules of the Amateur Athletic Union.
  - g. For gymnasiums and swimming pools, one parking space for each 250 square feet of gross floor area and one parking space for each 35 square feet of water area.
  - h. For bowling lanes, seven parking spaces for each alley.
  - i. For marinas, three parking spaces for each five boat slips.
  - j. For theaters other than drive-in theaters and places of assembly not otherwise provided for in this section, one parking space for each three fixed seats, or one space for each 21 square feet of gross floor area where there are no fixed seats.

- k. For incidental or accessory businesses and office, one parking space for each 400 square feet of gross floor area.
- 1. Parking required under paragraph E.1.e. through E.1.i. above may be reduced by 50 percent if the subject facilities are accessory to a hotel or motel.
- m. For regional shopping centers and shopping centers designed to provide convenience goods and services for residential neighborhoods, one parking space for each 200 feet of gross floor area.
- n. For medical and dental buildings, one parking space for each 250 square feet of gross floor area.
- o. For business and professional office uses, and all other permitted uses not otherwise provided for in the CA2 Zone (except distribution substations and gas regulators) one parking space for each 300 square feet of gross floor area.
- 2. Where ambiguity exists in the application of these off-street parking requirements, or where any use not specified in paragraph "B." above is found to be a permitted use, the off-street parking requirement shall be consistent with that for similar uses in this zone.
- 3. Any portion of a facility devoted to meeting the off-street parking requirement in the CA2 Zone shall not be counted in determining floor area for purposes of computing the floor area ratio specified in paragraph D.3 of this ordinance.
- 4. All off-street parking facilities shall be constructed, operated and maintained in compliance with Division 8 of this Article.

Note: Appendix "H" is provided only for informational purposes. It is an implementation proposal recommended by the Mission Valley Unified Planning Committee as part of its recommended Concept 8. Concept 8 was not approved by the City Council on June 25, 1985, therefore, this information is included for background purposes only.