# II. Development Considerations

## A. ENVIRONMENTAL CONSIDERATIONS

Geology and Soils/Topography. A geological survey of the proposed site was conducted in January 1979 by Woodward-Clyde Consultants. The primary geologic hazards which might affect the subject property are liquefaction and ground-shaking. There is a relatively high potential for liquefaction because of the granular nature of the subsoils. Significant movements along any of the local fault zones or along the Elsinore fault could subject the site to liquefaction. Because of the potential for liquefaction and settlement, additional geotechnical studies are required for each site before development occurs. These studies are required by the Subdivision Map Act and the Land Development Ordinance.

The elevation of the site ranges from approximately 75 feet Mean Sea Level (MSL) in the mortheast portion to approximately 20 feet (MSL) near the western boundary. The site is generally flat. Sand and gravel extraction operations have modified the area to include some ponds and spoil piles.

The average groundwater elevation at Interstate 805 is 30 to 34 feet (Plan Datum) and decreases in the westerly direction until it reaches a level of approximately 18 to 20 feet near State Highway 163. Measurements taken at different times of the year reveal that significant fluctuation in groundwater levels can occur depending on the amount of rainfall.

Hydrology. Flooding in Mission Valley is a major concern. The current means of flood protection in the valley are the Floodway and Floodplain Fringe Overlay zones, which were adopted in 1973 and applied to Mission Valley as an interim flood control measure in 1977.

A number of hydrological studies have been undertaken for the San Diego River, which are described in the document entitled Alternate Floodway Development Plan. The 100-year peak flood flow (which can be expected to occur once every 100 years on the average) was estimated by the United States Army Corps of Engineers to be 36,000 cubic feet per second (c.f.s.) in 1975. This is the basis for current floodway zoning within the valley. However, the continued urbanization of the drainage basin is expected to increase the peak flow of a 100-year flood to 49,000 c.f.s. This is the basis of design for the proposed realigned floodway.

The number of acres now flooded by the 100-year storm event would be reduced so that approximately 30 acres would become developable property within the Specific Plan area. An additional 12.5 acres outside of the Specific Plan area would also be gained for development by removal of the FW Zone.

Biological Resources. The native habitats in the project area include primarily riparian woodland (37 acres), freshwater marsh (14.24 acres), pond aquatic (9.53 acres) and "disturbed floodplain" (145.6 acres). The most valuable resource here is the wetland/riparian habitat covering approximately 61 acres. The riparian vegetation consists primarily of black willow with some Fremont cottonwoods; this vegetation is most dense east of Stadium Way and between SR-163 and Mission Center Road. Because of the mixture of plant associations and open water, the Specific Plan area could potentially support many wildlife species.

Construction of the project would disturb approximately 37 acres of the existing 61 acres of riparian/wetland habitat. The greatest disturbance would occur west of Stadium Way. However, the floodway would be revegetated so that there would ultimately be at least a 100% replacement of the riparian woodland, freshwater marsh and pond aquatic (open water) habitats.

Water Quality. A water quality analysis was conducted by Orville Ball (1978, 1979). The San Diego River is in a highly eutrophic condition, is highly turbid and generally can be considered to have poor water quality. Significant, short term impacts during construction are expected, particularly increased siltation and turbidity and a decrease in dissolved oxygen. Low oxygen levels could result in extensive fish mortalities. Long-term impacts could include increased siltation and the introduction of petrochemical and heavy metals from pavement runoff.

Cultural Resources. An archaeological survey was conducted by WESTEC Services (1978). There are no known archaeological or historical resources within the Specific 'Plan area.

Noise. The primary sources of noise in the Specific Plan area are streets and freeways. Preliminary calculations indicate that future noise levels from some streets will exceed General Plan standards for noise levels, particularly in residential areas.

Air Quality. An estimate of the site's air quality shows that pollutant levels exceeded federal and state standards for at least 159 days out of the year (1981). The project does not propose land use intensities consistent with the land use assumptions of the Regional Air Quality Strategy. Mitigation measures proposed include traffic flow improvements, the provision of a bicycle and pedestrian network and the reservation of land for a future transit system.

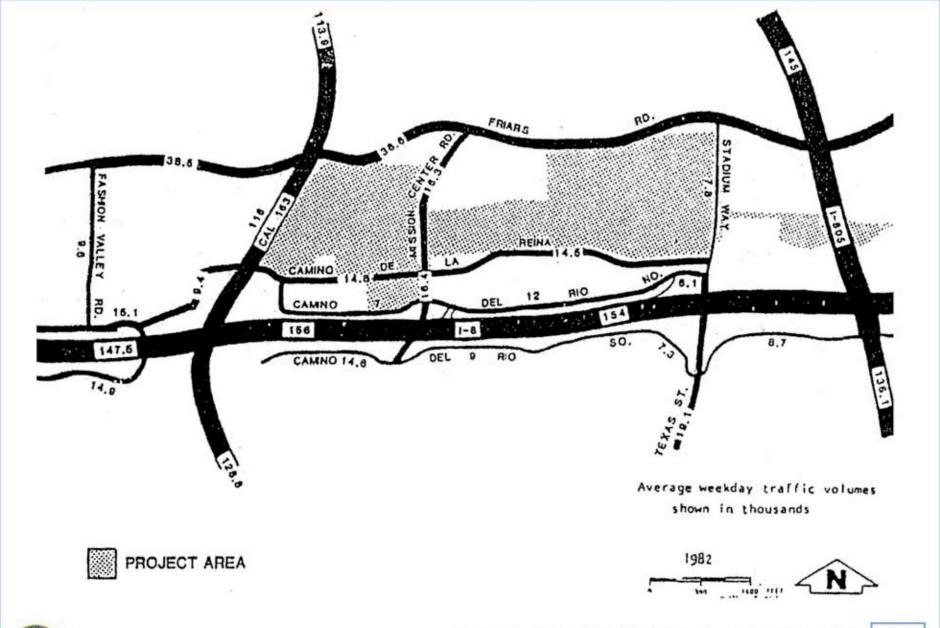
## B. PUBLIC FACILITIES CONSIDERATIONS

### Transportation

Traffic Circulation. The existing traffic circulation network, including current (1982) average daily traffic, is illustrated in Figure 5. Mission Valley is served by two primary east-west routes - Interstate 8 and Friars Road. Both routes serve the Fashion Valley and Mission Valley Shopping Centers and the San Diego Stadium and also carry a significant amount of commuter traffic. Interstate 8 also acts as an east-west distributor to traffic between various north-south freeways in the region. There are only two north-south surface streets in the Specific Plan area connecting Interstate 8 and Friars Road; these are Stadium Way and Mission Center Road. Flooding of the San Diego River now results in closure of these roads following each significant rainfall.

Planned roadway improvements should eventually reduce congestion in Mission Valley. The San Diego Association of Governments (SANDAG) completed a study of the I-8 corridor and made several recommendations for traffic flow improvements. These recommendations include ramp metering, traffic signal coordination, transit service improvements and arterial transit priority treatments. CALTRANS has several I-8 improvement projects in progress or planned. CALTRANS also plans to extend State Route 52 easterly from Interstate 805. SR-52 may ultimately connect to SR-125, which will be an extension of State Highway 94 from I-8 north to SR-56. In addition, CALTRANS and The City of San Diego have planned roadway projects external to Mission Valley which should provide alternate travel routes to Friars Road and Interstate 8.

The local and regional transportation improvements necessary to implement the proposed project are addressed in Section VI, Public Facilities and Services.





**Existing Traffic Network and Volumes** 

5 FIGURE Public Transportation. Bus service to Mission Valley is provided by the San Diego Transit Corporation. There are seven existing bus routes serving Mission Valley, which are illustrated on Figure 6. A Light Rail Transit (LRT) alignment through Mission Valley has been adopted by the Metropolitan Transit Development Board (MTDB). This funded project is scheduled to begin construction by the fall of. 1994 and be operational by late 1997. The adopted alignment is illustrated in Figure 7.

<u>Pedestrian Circulation</u>. The Specific Plan area currently only has pedestrian sidewalks adjacent to a few public streets and within retail shopping areas. Mission Valley in general does not accommodate pedestrian traffic well, which is due in part to I-8 and the regional nature of development in the area.

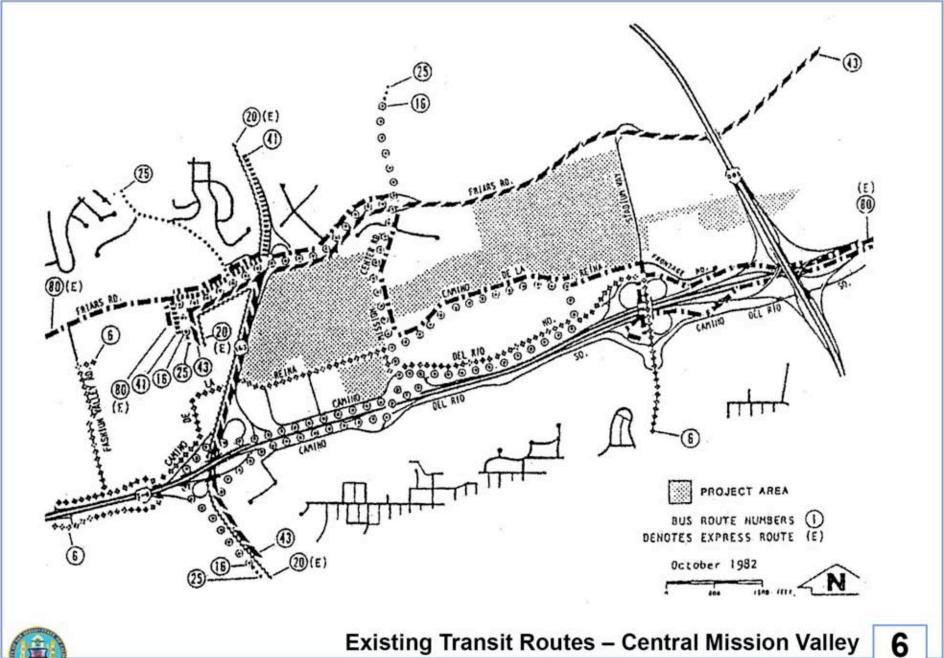
Parks and Recreation. There are no public parks currently located within the Specific Plan area. There are three regional parks surrounding the Specific Plan area: Presidio Park, located in Old Town at the western end of Mission Valley; Mission Bay Park, also located just west of Mission Valley; and Mission Trails Regional Park, located northeast of Mission Valley.

The greenbelt formed by the San Diego River corridor provides both physical and visual relief from the existing urban development. It currently provides limited recreational opportunities in the form of fishing and small boating.

San Diego Jack Murphy Stadium is located to the east of the Specific Plan area and provides a facility for spectator activities such as concerts, football, baseball, soccer and other sporting events.

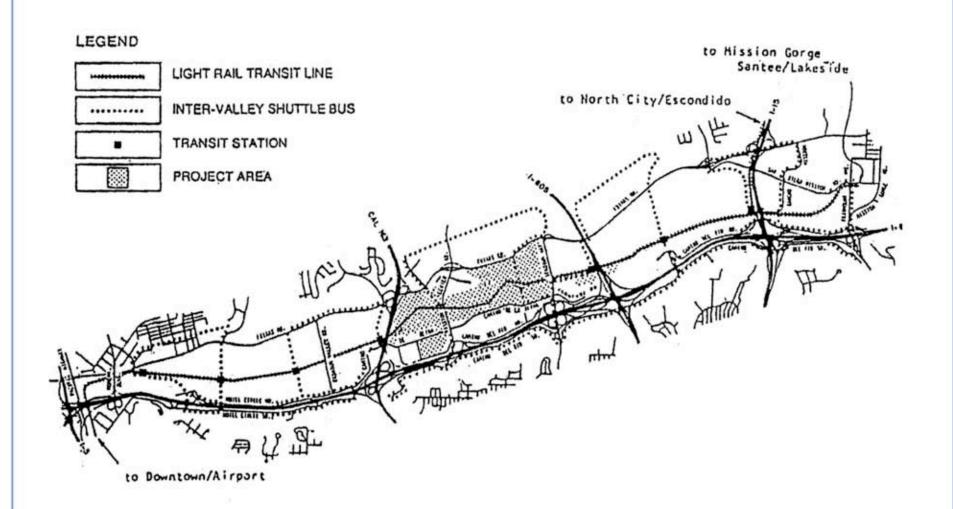
The YMCA (Young Men's Christian Association) facility is located to the west of the Specific Plan area and provides both indoor and outdoor recreational opportunities. A private health club is located to the east of the Specific Plan area and provides indoor recreational facilities.

Schools. Mission Valley as a whole is served by eight elementary schools, five junior high schools and four senior high schools in communities bordering Mission Valley. School locations are illustrated in Figure 8. The current enrollments and capacities for schools adjacent to Mission Valley are summarized in Table 1. The Specific Plan area is served by Jones and Juarez Elementary schools, Taft Junior High School and Kearny High School. These schools are all operating below capacity.





**Existing Transit Routes – Central Mission Valley** 





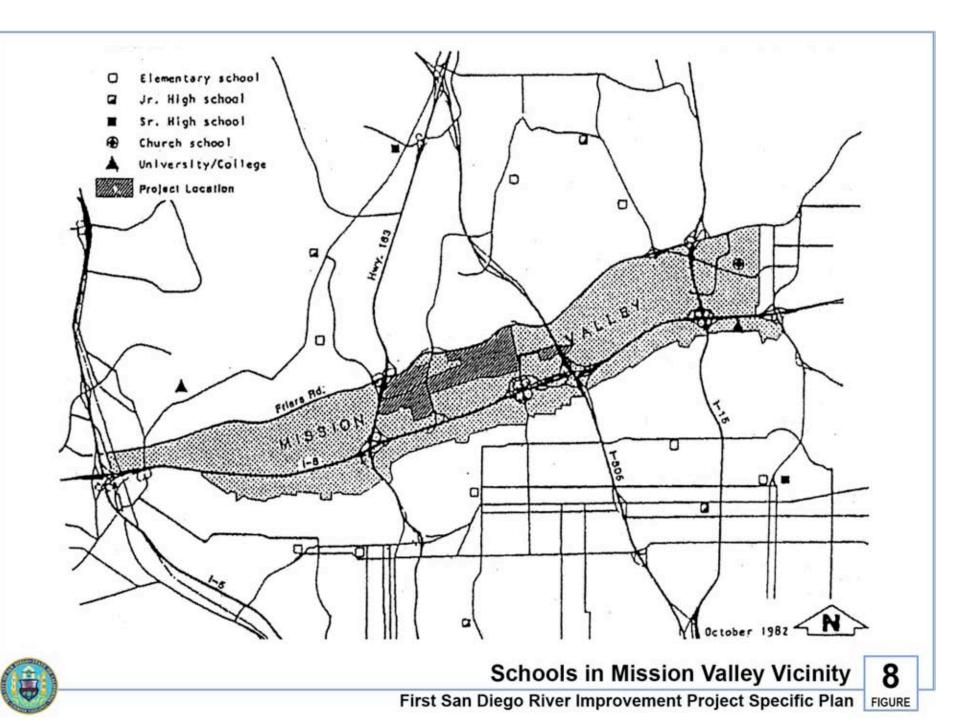


TABLE :

FOR SCHOOLS LOCATED IN COMMUNITIES BONDERING MISSION VALLEY.

Elementary Schools	Oct. '91	School Year Capacity
	882	806
Adding	813	820
birney	1 4 5	685
Carson	27.0	300
Florence	462	528
FEBRATIN	878	099
OF BUILD	2 5	520
Cones	250	306
757000		SE
Junior High/Middle Schools		
200	1041	1043
Nontroll of the China	738	919
200000000000000000000000000000000000000	1184	1260
200000000000000000000000000000000000000	51.9	782
Wilson	1719	1851
Senior High Schools		
22.00	1524	1744
LTIDII	2013	1950
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1263	1423
San Diego	1636	1636

. Source, Bruce Silva, City of San Diego School District, March 11, 1992.

A private parochial school, the Nazareth School, is located at Mission San Diego de Alcala.

Although no universities or community colleges are located or planned to be located within the Specific Plan area, National University, University of San Diego, San Diego State University, San Diego Community College, San Diego Mesa College and Grossmont College are located within close proximity.

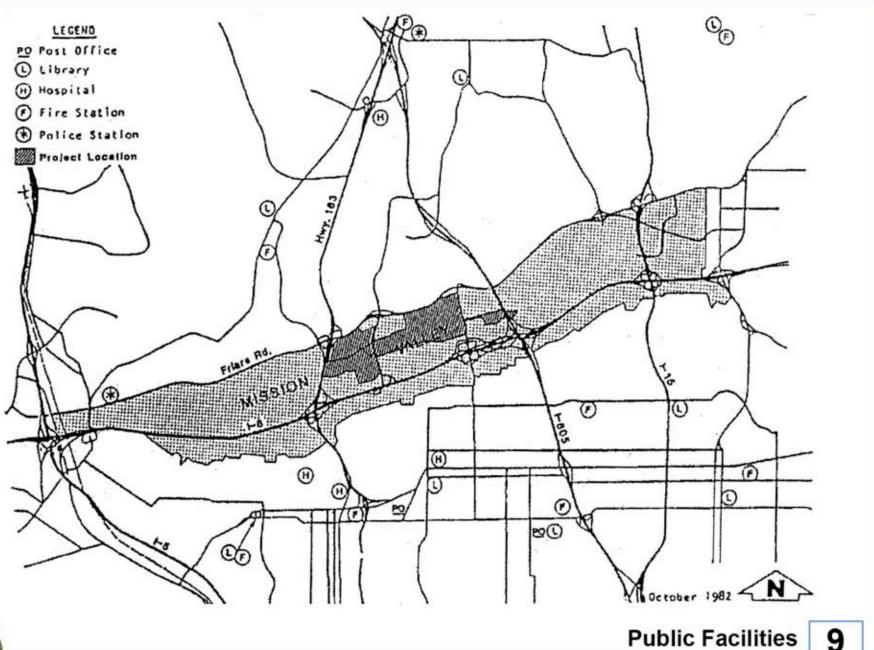
Other Public Facilities. The City of San Diego provides water and sewer service to the project area. Substantial improvements to the Mission Valley-Kearny Mesa trunk sewer system are needed to serve the anticipated growth in the region. Solid waste generated on-site is disposed of at the Miramar North landfill. San Diego Gas and Electric Company and Pacific Telephone provide gas and electric and telephone service. SDG&E will use public and/or private street right-of-way easements to provide gas and electric services to the Specific Plan area.

Police and fire protection is provided to the Specific Plan area by the City of San Diego Police Department Western Division at 5480 Gaines Street and The City of San Diego Fire Department Station 18 at 4676 Felton Street and Station 28 at 3880 Kearny Villa Road.

The Specific Plan area is in close proximity to the following City of San Diego libraries: the Linda Vista Branch at 6950 Linda Vista Road; the Mission Hills Branch at 925 West Washington and the University Heights Branch at 4193 Park Boulevard.

Hospitals in close proximity to the Specific Plan area are Sharp Cabrillo Hospital at 3475 Kenyon, Alvarado Internal Medical Group, Inc., at 6367 Alvarado Court, Mercy Hospital and Medical Center at 4077 Fifth Avenue and University Hospital, UCSD Medical Center, at 225 Dickinson Street.

Public Facilities are illustrated in Figure 9.





### C. SPECIAL DESIGN CONSIDERATIONS

Viewshed Analysis and Natural Features. The Specific Plan area consists primarily of a level valley floor divided by the San Diego River and its associated riparian vegetation. Scenic views of natural features and structures from the valley floor include views of the natural slopes on the south side of the valley, of the mountains to the east in east San Diego County and the I-805 bridge to the east. The hillsides visible on the northern side of the valley have been scarred by sand and gravel extraction, but these slopes will eventually be reclaimed and revegetated.

The primary views from the valley floor are in a north-south direction because views from the Specific Plan site are limited by the relative flatness of the valley, existing development and vegetation. However, views up and down the valley are available from some locations within the Specific Plan area, such as buildings and some public streets. Views into and out of the site are illustrated in Figures 10 and 11.

The valley and the Specific Plan site are highly visible from the mesas and clopes on the north and south sides of the valley. The primary natural features consist of the San Diego River and bordering riparian vegetation. The trees along the river are also visible from many public roads and freeways within Mission Valley. Much of the Specific Plan area beyond the river has been graded or cleared at one time so that the vegetation is disturbed, with native shrubs and a variety of grasses.

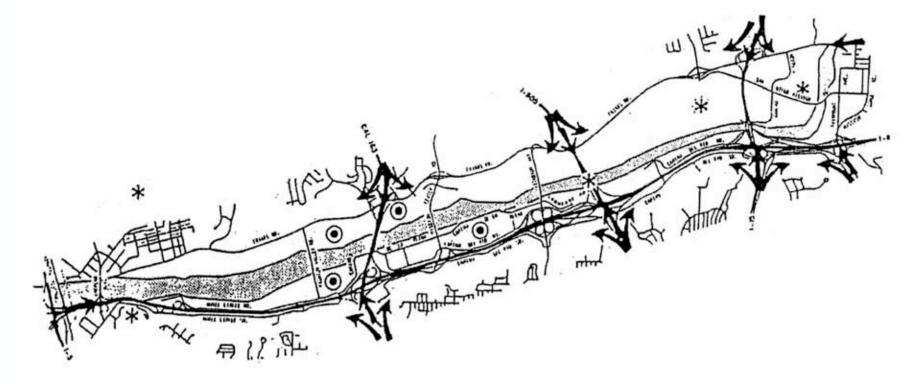
Most of the existing development within this section of the valley, between SR-163 and I-805, consists of low rise commercial development. Taller office buildings occur in the vicinity of the SR-163 and I-8 junction as well as within the Rio Vista East development just west of the I-805 Residential developments are located primarily adjacent to the San Diego River corridor and are generally low rise (less than four stories) structures. Within the Specific Plan area itself, portions of Hazard Center have developed with an office tower and low rise commercial uses including retail, restaurants and theaters. Commercial retail predominates north of Interstate 8 with the Mission Valley West and Mission Valley shopping centers. The Mission Valley and Fashion Valley shopping centers have become strong community nodes. These developments consist of low-rise structures surrounded by expansive parking lots. Scattered restaurants, service facilities, commercial-retail buildings and residential developments are located along Mission Center Road and Camino de la Reina.

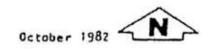


Activity centers

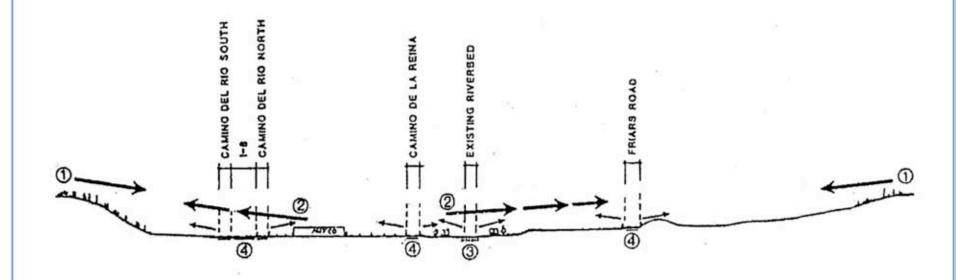
\* Community landmarks

River corridor (FW zone)









- 1 Views into the valley
- (2) Views from valley to natural hillsides and residentially developed mesas
- 3 Views from the river
- 4 Public road



Wetlands Management Plan. The City of San Diego has proposed the Wetlands Management Plan, which is based on the premise that the goals of floodway confinement and on- site wetlands habitat preservation can be achieved with modifications to the floodplain configurations. It is envisioned that such alterations can and should achieve restoration and protection of a viable wetland/riparian resource by incorporating mutually supportive hydrologic and biologic parameters into the floodway design.

The City of San Diego has undertaken this management program to help coordinate various private and public interests concerned with riparian/wetlands habitat protection. With technical assistance from the United States Fish and Wildlife Service, California Department of Fish and Game and Caltrans, the Wetlands Management Plan establishes specific biological design criteria to be coordinated with the hydrologic confinement criteria of the existing Floodway (FW) zone. The intent is that any sections of the projected 100-year flood management facility be so designed that a wetlands habitat system at least equal in overall quality to that presently existing is preserved, enhanced or created continuously along the San Diego River.

Existing Easements and Rights-of-way. A number of traffic corridors and rights-of-way cross or closely parallel the Specific Plan area: Camino de la Reina, Camino del Rio North and Friars Road in the east-west direction; and Mission Center Road, Stadium Way and several other minor cross streets in the north-south direction.

In addition, there are a number of easements for sewer, water, storm drainage, gas, power and telephone installations that cross or are parallel to the more developed areas of the site.

Prevailing Wind Patterns and Blow Sand. Prevailing winds are from the west and north and, therefore, winds tend to come up the valley from the west. Occasional "Santa Ana" conditions bring warm winds from the south and east. The valley landform and the high traffic volumes along Interstate 8 and connecting freeways create a potential for adverse air quality conditions during periods of high traffic congestion.

Blow sand is occasionally observed in the valley because of the ongoing surface mining from the mineral extraction facilities on the northern portion of the Specific Plan area. The mining activities are closely monitored and blow sand is seldom a problem.