4.10 Aesthetics

4.10.1 Existing Conditions

4.10.1.1 Project Area Aesthetics

The Project Area is situated in the eastern portion of the City of San Diego, primarily in the Navajo Community Plan area but also includes portions in the Tierrasanta Community and the College Area Community Plan areas. The City of San Diego has adopted Community Plans for each of these areas that provide guidelines related to land use and development. New development needs to be consistent with the appropriate Community Plan guidelines and policies related to aesthetics. The portion of the Project Area located within the College Area Community Plan Area is not an area identified in the Community Plan as an area requiring special consideration for aesthetics.

The Project Area is generally urban in character. The open space areas included within the Project Area include the San Diego River and the surrounding native habitat. Portions of the Project Area have public views to the San Diego River and Mission Trails Regional Park. Neighborhoods within the community planning areas are walkable and residential uses are generally within walking distance to schools or shopping areas. The existing development within the Project Area includes commercial office, industrial-related structures, public and institutional facilities, parks, open space, and vacant land.

The Project Area is located in a valley, generally bounded to the east, west and south by relatively flat developed land and to the north and portions of the east by hillsides and canyons that help to frame the community area and define the pattern of development within the neighborhoods. The San Diego River has historically shaped the overall nature of the area's topography. The river currently traverses Mission Trails Regional Park and Mission Gorge, and runs along Mission Gorge Road in the northern portion of the Project Area, flowing from northeast to southwest. The portion of the river located in the northeast section of the Navajo community has been significantly altered as a result of an ongoing sand and gravel extraction operation. Much of the area in and around the river has already been mined and is currently being used for industrial and contractor storage and operation uses. A mix of retail, industrial and industrial office park uses have been developed along the portion of the river that forms portions of the northern and western boundary of the Project Area.

A. Navajo Community Flan

The Navajo community is characterized by a wide variety of natural features including flat mesas, steep canyons, and rolling hills. The most prominent feature in the Project Area is the San Diego River and Mission Trails Regional Park. Elevations within the community range from a low of around 100 feet above sea level at the westerly edge of Mission Gorge to 1,591 feet at the peak of Cowles Mountain, the highest point in the City of San Diego. Several streets and other public areas offer framed public views of panoramic aesthetic features such as the open space areas to the north of the community or to Lake Murray and it's surrounding native habitats.

The Navajo Community contains a diverse land use development pattern with a majority of the area maintaining low to medium residential densities, while the commercial and industrial uses are focused along the main traffic corridors of Mission Gorge Road and Navajo Road.

The Navajo Community Plan's goals and recommendations, which directly apply to the aesthetics of the Project Area, include the following:

- Grading and landscaping standards should be improved. Hillside cuts, in particular, must be better controlled to preserve the natural topography;
- Enhance and maintain the aesthetic qualities of the San Diego River corridor as part of the open space system;
- The rear elevations of buildings which face the San Diego River or are visible from the street should be as well-detailed and visually interesting as the front elevations;
- Buildings developed adjacent to the river should be set back 150 feet from the river to avoid glare and shading impacts to the habitat;
- Continue the ongoing efforts to revitalize the commercial areas along Mission Gorge Road, establish
 one or more Business Improvement District;
- Site design should provide adequate visual buffers surrounding uses, such as with the use of landscaping or grade separation;
- Develop commercial areas which have desirably distinctive qualities in their design, appearance and operation;
- Improve the appearance of the existing strip commercial development on Mission Gorge Road between Interstate 8 and Zion Avenue by reducing signs, improving landscaping and architectural design, providing consistent building setbacks and providing adequate off-street parking;
- The removal of off-premise signs and the consolidation of multiple on-premise signs should be
 pursued during project reviews in an effort to reduce sign clutter and enhance the visual
 appearance of Mission Gorge Road;
- Ensure that industrial appearance and effects of industrial uses are compatible with the character of
 the surrounding residential and commercial areas and the sensitive resources of the San Diego River;
 and,
- Development along Mission Gorge Road shall comply with the regulations included in the Community Plan Implementation Overlay Zone (CPIOZ).

B. Tierrasanta Community Plan

The Tierrasanta Community is generally a low density residential community. The presence of commercial areas are designated only where necessary to support the residential community, and the presence of industrial activity is limited to a small, isolated site. The plan seeks to capitalize on the open spaces of the cayonlands interspersed throughout the community as well as the expansive open space resource of the

nearby Mission Trails Regional Park. The San Diego River runs along the majority of the Tierrasanta Community Plan's southern planning boundary and is primarily considered in two ways: flood control and recreation.

The Tierrasanta Community plan's goals and recommendations, which directly apply to the aesthetics of the Project Area, include the following:

- Future development of areas that abut the Mission Trials Regional Park should be sensitive to it, as proposed within the Urban Design Element of the Tierrasanta Community Plan; and,
- To protect assets of Mission Trails Regional Park from degradation by surrounding development.

4.10.1.2 Light and Glare

The Project Area is urbanized and substantial light and glare is produced by existing development. The Project Area currently consists of commercial, office, industrial development, public institutions, vacant land, and open space. Existing levels of light and glare are that of an urban, developed community and neighborhoods with daytime glare from building windows, automobile windshields, and paved surfaces. Nighttime light from billboards, commercial signage, buildings, automobile headlights and parking lot/security lighting also exist throughout the Project Area.

4.10.2 Impact Threshold

For the purposes of this EIR, the proposed project will have a significant aesthetic impact if it will:

- Block a view through a designated view corridor as shown in an adopted community plan, or the General Plan;
- Cause a substantial view blockage of a public resource (such as ocean) that is considered significant by the applicable community plan;
- Exceed the allowed height or bulk regulations, and this excess causes unnecessary view blockage;
- Have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view blockage;
- Significantly alter natural landform features;
- Introduce development that is incompatible with surrounding land uses and community character;
 or
- Substantially increase light and glare affecting surrounding properties.

4.10.3 Impact

4.10.3.1 Project Area Aesthetics

Implementation of the proposed Redevelopment Project will result in redevelopment of existing parcels and new development within the Project Area. Future redevelopment activities will need to be consistent

with the applicable Community Plans and the approval process for activities covered by the pertinent Community Plan.

Specific development proposals for the Project Area are unknown; however, any future development activities within the Project Area could potentially impact public views or scenic vistas from public areas, primarily with respect to the San Diego River.

As redevelopment activities proceed within the Project Area, each individual development proposal will need to comply with the development standards of the City of San Diego Land Development Code and the adopted design guidelines of the community or neighborhood in which it is located. Development activities that occur in the Project Area will be reviewed by the City for compliance with the Navajo and Tierrasanta Community Plan goals and objectives regarding aesthetics. Implementation of mitigation measure A1 would reduce the potential impact to a level less than significant.

Implementation of the proposed project is anticipated to result in the replacement of older undesirable development with new development that would be in compliance with the goals, objectives, and recommendations contained in the applicable Community Plans. This is anticipated to protect the existing desirable aesthetics within the Project Area and eliminate the undesirable conditions of the buildings and landscape in the Project Area.

The existing topography of the Project Area is relatively flat. There are no significant natural landforms located within the Project Area, although significant natural landforms are located adjacent to the Project Area including Mission Trails Regional Park. Because future redevelopment will be required to comply with the City's development standards related to landform including design, preservation of public views, and compatibility with surrounding land uses, the project will not significantly alter natural landform features and no significant impact associated with landform will occur.

4.10.3.2 Light and Glare

As redevelopment occurs in the Project Area, the potential for light and glare will increase on a localized basis. Additional lighting sources may be introduced into new areas, and redevelopment has the potential to increase the overall affect of nighttime lighting within and adjacent to the Project Area. Additionally, glare from building surfaces would increase if future redevelopment proposals within the Project Area include the construction of buildings with greater reflective surfaces.

Because the Project Area is generally urban, proposed redevelopment activities are not anticipated to result in a significant increase in light and glare in the area. The future redevelopment is required to comply with current City development standards, which address lighting standards and compatibility of lighting with surrounding land uses. The impact associated with an increase in light and glare is considered less than significant.

4.10.4 Significance of Impact

Future redevelopment activities within the Project Area may result in significant aesthetic impacts.

4.10.5 Mitigation Measures

- As redevelopment activities proceed within the Project Area, each individual development proposal shall be reviewed by the Agency and City to comply with the development standards of the City of San Diego Land Development Code and the adopted design guidelines of the Community Plans. Specific redevelopment projects shall incorporate appropriate design details and principals consistent with the Navajo and Tierrasanta Community Plans, including:
 - The rear elevations of buildings which face the San Diego River or are visible from the street should be as well-detailed and visually interesting as the front elevations;
 - Buildings developed adjacent to the river should be set back from the river to avoid glare and shading impacts to the habitat;
 - Improve the appearance of the existing strip commercial development on Mission Gorge Road between Interstate 8 and Zion Avenue by reducing signs, improving landscaping and architectural design, providing consistent building setbacks and providing adequate offstreet parking;
 - Site design should provide adequate visual buffers surrounding uses, such as with the use of landscaping or grade separation;
 - Develop commercial areas which have desirably distinctive qualities in their design, appearance and operation;
 - Ensure that industrial appearance and effects of industrial uses are compatible with the character of the surrounding residential and commercial areas and the sensitive resources of the San Diego River;
 - Development along Mission Gorge Road shall comply with the regulations included in the Community Plan Implementation Overlay Zone (CPIOZ); and,
 - Future development of areas within the Tierrasanta Community that abut the Mission Trials regional Park should be sensitive to it, as proposed within the Urban Design Element of the Tierrasanta Community Plan.

4.10.6 Conclusion

Implementation of Mitigation Measure A1 will reduce the potential aesthetic impact as a result of future redevelopment activities within the Project Area to a level less than significant.

4 - Env	rironmental	Impact	Analysis
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4.10 - Aesthetics

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4.11 Water Quality/Hydrology

4.11.1 Existing Conditions

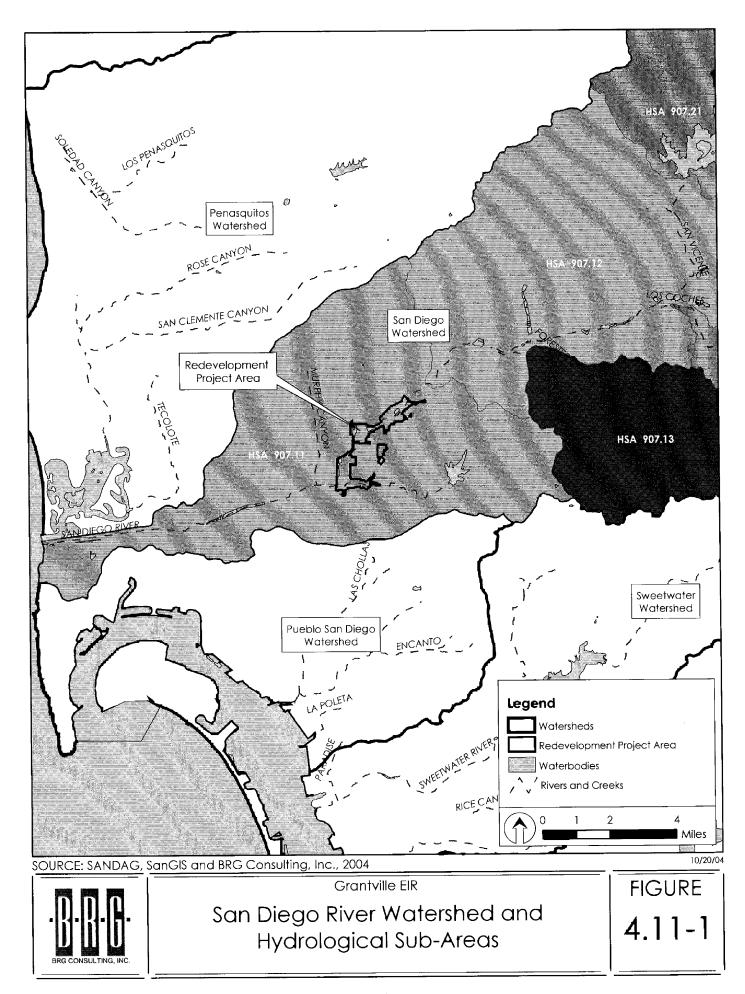
4.11.1.1 Hydrologic Setting

The Project Area is located with the San Diego Regional Water Quality Control Board (RWQCB) Basin. The Basin contains 11 major drainage basins which encompass most of San Diego County, parts of southwestern Riverside County and southwestern Orange County. The San Diego Hydrologic Region is over three million acres in size and generally drains westerly toward the Pacific Ocean. The Project Area is located in the Mission San Diego Hydrologic Subarea of the Lower San Diego Hydrologic Area, within the San Diego River Hydrologic Unit (HU). With a land area of approximately 440 square miles, the San Diego River HU is the second largest HU in San Diego County. It also has the highest population (~475,000) of the County's watersheds and contains portions of the cities of San Diego, El Cajon, La Mesa, Poway, and Santee and several unincorporated communities (Figure 4.11-1).

The Project Area generally drains to the west, toward the San Diego River, the primary hydrologic feature within the Project Area. The San Diego River bisects the northwestern portion of Subarea B and generally defines the western boundary of Subareas A and B of the Project Area as it flows from southwest through the western portion of the Navajo Community to Mission Valley. The San Diego River originated in the mountains northwest of the historic town of Julian and runs southwestward through an unincorporated, largely uninhabited area of San Diego County before entering El Capitan Reservoir. Downstream of El Capitan Reservoir, the river flows westward through the Cities of Santee and San Diego and past Famosa Slough to the San Diego River Estuary. The river discharges into the Pacific Ocean just south of the jettled entrance of Mission Bay in the community of Ocean Beach. Through most of the Project Area, the San Diego River is channelized. Primary tributaries to the San Diego River include Boulder Creek, Cedar Creek, Conejos Creek, Chocolate Creek, Los Coches Creek, San Vicente Creek, and Forester Creek.

Another significant drainage feature of the Project Area is Alvarado Canyon Creek, which begins at the outfall of Lake Murray. Alvarado Canyon Creek generally parallels Interstate 8 as it flows westward to its confluence with the San Diego River. Alvarado Canyon Creek traverses through the southern portion of Subarea A. Navajo Canyon also drains to Alvarado Canyon Creek. Navajo Canyon is southeast of Subarea C. Currently, the majority of Alvarado Canyon Creek is channelized and the confluence with Navajo Canyon is tenuous due to the highway infrastructure and urban development. Alvarado Canyon Creek drains into the San Diego River in the southwestern portion of Subarea A.

Hydrology within the San Diego River Watershed is currently monitored on a continuous basis through the long-term flow monitoring stations maintained by the United States Geologic Service (USGS), the ALERT system operated by the County Department of Public Works, and a group of other hydrologic and meteorological monitoring stations administered by various local and federal agencies (Baseline Assessment, San Diego River Watershed Management Plan, August 2004). Approximately 85 percent of the total surface water flow occurs from December to May, in response to winter storms that originate in the



Pacific Northwest. Annual rainfall within the San Diego River HU ranges from about 10 inches (25 cm) at the coast to approximately 40 inches (102 cm) in the Cuyamaca Mountains.

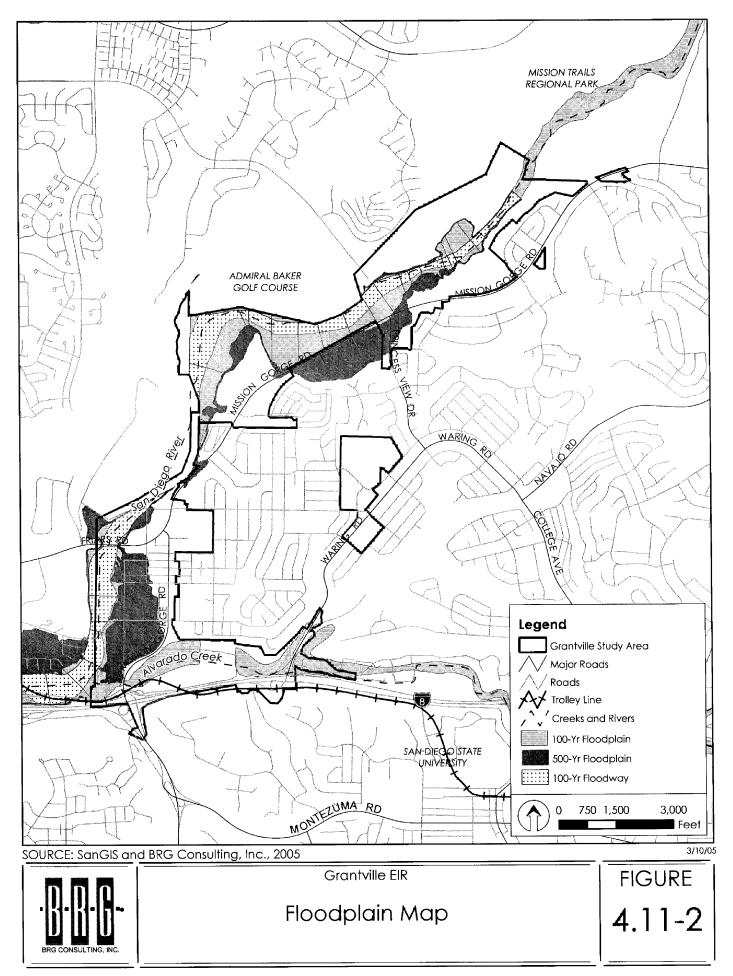
4.11.1.2 Flooding

Portions of the Project Area are subject to flooding as identified by the Federal Emergency Management Agency (FEMA) maps during rain events. This is attributable to the fact that portions of the Project Area are located within the floodplain, the growth within the San Diego River Watershed (SDRW) that has increased, and inadequate drainage/flooding infrastructure. As depicted on Figure 4.11-2, the southeastern portion of Subarea A is located within the 100-year floodplain of Alvarado Canyon Creek. Portions of the western side of Subarea A are within the 100-year floodplain and floodway of the San Diego River. The northwestern and northern portions of Subarea B are within the 100-year floodplain and floodway of the San Diego River.

The primary flood control measures serving the SDRW include El Capitan Reservoir, San Vicente Reservoir, and the channelized sections of the San Diego River at the estuary, Mission Valley, and Lakeside. The reservoirs have historically functioned effectively in reducing peak flood flows along the lower San Diego River. For example, during the 1980 flood, El Capitan Reservoir absorbed the entire peak flow, while San Vincente Reservoir reduced the peak flow by approximately 50 percent. However, the existing levels of protection afforded by the flood control channel sections may be inadequate in the intensively urbanized Mission Valley area under a 100-year flood. The flood-carrying capacity of the channel at this section may become even less adequate under burned conditions after wildfires such as the 2003 Cedar Fire (Baseline Assessment, San Diego River Watershed Management Plan, August 2004).

The Baseline Assessment, San Diego River Watershed Management Plan, provides the following recommendations to improve short-term flood protection:

- Restore, improve, and maintain drainage system capacities through vegetation clearing and sediment removal;
- Improve flood early warning systems;
- Install, restore, improve, and maintain erosion control and water retention structures, particularly in areas determined to be at high risk of flooding;
- Provide public information (e.g., signage and mailings) on flood hazards, particularly in areas determined to be at high risk to flooding; and
- Adopt guidelines to encourage the "daylighting" of underground culverts as well as the removal of concrete/riprap channel lining as appropriate to improve water quality while maintaining and/or improving the existing level of flood protection.



4.11.1.3 Existing Water Quality

A. San Diego Regional Water Quality Control Board Basin Plan

Each of the nine regional boards in California is required to adopt a Basin Plan. Basin Plans designate the beneficial uses for all surface and groundwaters in the San Diego Region.

B. Beneficial Uses

Beneficial uses of groundwater and surface water have been established for each water body within the San Diego Basin. According to the RWQCB Basin Plan:

Beneficial uses are defined as the uses of water necessary for the survival or well being of man, plants and wildlife. The uses of water serve to promote the tangible and intangible economic, social and environmental goals of mankind.

Examples include the drinking, swimming, industrial, and agricultural water supply, and the support of fresh and saline aquatic habitats. According to the Basin Plan, beneficial uses have been designated for specific coastal water bodies, inland surface waters, and groundwater.

In 1972, the State Water Quality Control Board (SWQCB) adopted a uniform list and description of beneficial uses to be applied throughout all hydrological basins of the State. Water bodies that have beneficial uses that may be affected by activity in the Project Area are the San Diego River and Alvarado Canyon Creek. Designated beneficial uses for the San Diego River and Alvarado Canyon Creek, include:

- Agricultural supply (AGR);
- Industrial service supply (IND);
- Contact and non-contact water recreation (REC1 and REC2);
- Warm freshwater habitat (WARM);
- Cold freshwater habitat (COLD);
- Wildlife habitat (WILD); and
- Rare, threatened, or endangered species (RARE).

Alvarado Canyon Creek is not assigned the beneficial use of RARE. Designated beneficial uses for the mouth of the San Diego River include REC1, REC2, commercial and sport fishing (COMM), estuarine habitat (EST), WILD, RARE, marine habitat (MAR), and migration of aquatic organisms (MIGR).

The following are definitions of the applicable beneficial uses.

Agricultural Supply (AGR) – Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Industrial Service Supply (IND) – Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

Industrial Process Supply (PROC) – Includes uses of water for industrial activities that depend primarily on water quality.

Municipal and Domestic Supply (MUN) – Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Contact Water Recreation (REC 1) – Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural springs.

Non-contact Water Recreation (REC 2) – Includes the uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Warm Freshwater Habitat (WARM) – Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Wildlife Habitat (WILD) – Includes uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Commercial and Sport Fishing (COMM) – Includes the uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

Estuarine Habitat (EST) – Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Rare, Threatened, or Endangered Species (RARE) – Includes uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Marine Habitat (MAR) – Includes uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

Migration of Aquatic Organisms (MIGR) – Includes uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.

Cold Freshwater Habitat (COLD) – Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

C. Water Quality Objectives

Like the designation of beneficial uses, the designation of water quality objectives must satisfy all of the applicable requirements of the California Water Code, Division 7 (Porter-Cologne Act) and the Clean Water Act. California Water Code, Section 13241 provides that each Regional Water Quality Control Board shall establish water quality objectives for the waters of the state (i.e., ground and surface waters) which, in the Regional Board's judgment, are necessary for the reasonable protection of beneficial uses and for the prevention of nuisance. The Clean Water Act Section 303 requires that the State adopt water quality objectives (called water quality criteria) for surface waters. The Water Quality Control Plan for the San Diego Basin identifies a wide range of water quality objectives.

D. 303(d) List of Impaired Water Bodies

The RWQCBs identify water quality objectives in order to protect the designated beneficial uses of the water bodies. Section 303(d) of the federal Clean Water Act (CWA, 33 USC 1250, et seq, at 1313(d)), requires States to identify waters that do not meet water quality standards after applying certain required technology-based effluent limits. Waters that do not meet the water quality standards are referred to as "impaired" water bodies. States are required to compile this information in a list and submit the list to the United States Environmental Protection Agency (USEPA) for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of the listing process, states are required to prioritize water/watersheds for future development of total maximum daily load (TMDL). The TMDL establishes the allowable pollutant loadings or other quantifiable parameters for a water body and provides the basis for the State to establish water quality based controls. The purpose of TMDLs is to ensure that beneficial uses of the water body are restored and that the water quality objectives are achieved.

On July 25, 2003 USEPA gave final approval to California's 2002 Section 303(d) List of Water Quality Limited Segments. The lower portion of the San Diego River (12 miles) is currently identified on the Section 303(d) list for fecal coliform (6 miles), low dissolved oxygen, phosphorus, and total dissolved solids. The RWQCB has determined that developing TMDLs for these contaminants is a lower priority for this watershed than in other watersheds.

E. City of San Diego Draft River Park Master Plan

Origins of the River Park Master Plan date back to 1975 and Kevin Lynch's Temporary Paradise, A look at the Special Landscape of the San Diego Region. More recently, The San Diego River Park Foundation was formed in 2001 to coordinate the efforts of the many community groups and other organizations dedicated to the San Diego River, and to working towards developing the River Park Master Plan. The next step was to develop the San Diego River Park Conceptual Plan, which outlines the broad goals and objectives for the San Diego River Park. The six organizations with the most involvement in the Plan are: San Diego River Park Foundation, San Diego River Coalition, San Diego River Park Alliance, San Diego River Conservancy, Select Committee on Parks and River Restoration, and the San Diego Watershed Workgroup.

Over the last fifty years, commercial, residential and industrial uses have expanded around the San Diego River. Mining operations and urban development have changed the character and physical course of the San Diego River. The Draft San Diego River Master Plan seeks to change this condition and enhance the relationship between the river and nearby land uses.

The Plan identifies the following seven principles as the vision and guiding ideas for future design and implementation of the Plan.

- Reclaim the valley as a Common
- Reorient development toward the river
- Improve hydrologic function
- Unify fragmented lands
- Emphasize a continuum of experience
- Reveal the valley history
- Balance people, water and wildlife

The following recommendations from the Plan are specific to hydrology and water quality.

- Augment flows to the river
- Remove/circumvent obstacles that impede flow
- Remove invasive vegetation species
- Encourage the growth of appropriate riparian vegetation
- Re-contour the channel to encourage meander and braiding
- Expand the floodplain
- Adopt programs to reduce/remove non-point source loads of pollutants

The Plan identifies segments of the San Diego River (i.e., Plateau, the Gorge, Upper Mission Valley, the Confluence, Lower Mission Valley, and the Estuary). The San Diego River traverses the two community planning areas (Navajo and Tierrasanta) that are included in the Project Area. In terms of the Plan, the segments of the San Diego River that fall within the Project Area are the Upper Mission Valley and the Confluence.

The Upper Mission Valley segment extends from the Friars Road Bridge to the west boundary of Mission Trails Regional Park. The Upper Mission Valley is characterized by three hydrologic conditions: 1) the gravel extraction mine bordering Mission Trails Regional Park has channelized the river and disrupted habitat continuity through and across the mine site; 2) the river corridor through the mine site is infested with exotic plant species; and, 3) the river channel is interrupted by a series of ponds that obstruct the natural

sediment transport processes of the stream. The Plan provides the following recommendations for the Upper Mission Valley:

- Establish a 500-foot minimum open space corridor through the Superior Mine redevelopment area.
- Acquire land for park and open space.
- Improve interface between Admiral Baker Golf Course and the river.
- Explore opportunities to improve water quality and river pattern.
- Create sites at waystations to interpret the history of the valley settlement and the Old Mission Dam flume.

The Confluence segment is the area between Interstate 15 and Friars Road Bridge. This segment is partially enclosed by the steep wall of the knob topped by Mission San Diego de Alcala. Encroaching development on the east and Interstate 8 on the south further emphasize the sense of enclosure. The river corridor is also constrained by a series of old gravel mine ponds below the Friars Road Bridge: these ponds impede the normal hydrologic activities of the river system. In this area, extensive exotic vegetation infestation is present both in the ponds and in the river. The Plan provides the following recommendations applicable to hydrology and water quality for the Confluence area:

- Create a connection with Alvarado Canyon and on to Collwood and Navajo Canyons.
- Acquire land or establish easements.
- Establish a minimum 300-foot wide-open space corridor.
- Separate stream channel from ponds, additional land is necessary.
- Coordination with the Grantville Redevelopment Study presents the potential opportunity for the San
 Diego River Park to positively influence redevelopment as well as to benefit from new activities along
 the river corridor.

F. Baseline Assessment, San Diego River Watershed Management Plan

The lower San Diego River Watershed, which encompasses the Project Area has generally poor surface water quality. Typical contaminants include elevated levels of biological indicators, total dissolved solids, pH, pesticides, metals, petroleum, and trash. These contaminants are often the result of:

- Increased impervious surfaces causing increased runoff and pollutant loading and poor natural pollutant assimilation.
- Alteration of river morphology and natural pollutant assimilation and buffering zones.
- Increased input of nutrients and pesticides from landscaped areas.
- Increased input of trash and other floatables.
- Local groundwater contamination from spills and leaks of hazardous materials.
- Accidental discharges of raw sewage.

- Increased erosion and siltation as a result of construction and other activities/practices.
- Increased TDS as a result of poor irrigation practices and imported water use.
- Stream modifications by aggregate mining with associated adverse changes in hydrology and habitat loss.

As contained in this Management Plan, the RWQCB recommended management measures include the following:

- Increased oversight of section 401 Water Quality applications by the RWQCB to minimize
 hydromodification of the streams that lead to decreased water quality and the loss of beneficial
 uses.
- Removal of existing hydromodifications where feasible.
- The RWQCB should encourage continued improved compliance with all stormwater permits.
- Development of alternative site use design and construction techniques.
- Increase the number of stationary, permanent monitoring stations in the San Diego Management Area.
- Pursue acquisition of technology that provides real-time data collection.

G. Ground Water Quality

Soils along the San Diego River are porous, and surface water moves freely between ground and surface water. As a result, the water surface of standing water within the San Diego River channel represents the groundwater table. The largest aquifer near the Project Area is in Mission Valley. The Mission Valley aquifer covers approximately 11 square miles along the San Diego River and storage capacity is estimated at 40,000 acre feet of water. Within the San Diego River Watershed, groundwater quality is good. Due to the porous nature of the aquifer, recharge through streamflow infiltration is rapid, and significant interchange between surface flows and groundwater flow occurs. Designated beneficial uses for ground waters within the SDRW include MUN, AGR, IND, and PROC. Within the Lower San Diego HA, groundwater beneficial uses do not apply west of the easterly boundary of the I-5 right-of-way.

4.11.1.4 Water Quality Regulations

A. City of San Diego Municipal Code

Within the City of San Diego, existing land uses, new development, and redevelopment are required to comply with the City of San Diego Municipal Code. Related to hydrology and water quality, the following codes are applicable:

Chapter 4, Article 3, Division 3 – Stormwater Management and Discharge Control. The purposes of this Division are to further ensure the health, safety and general welfare of the citizens of the City of San Diego by controlling Non-Storm Water Discharges to the Storm Water Conveyance System by

eliminating discharges to the Storm Water Conveyance System from spills, dumping, or disposal of materials other than Storm Water and by reducing Pollutants in urban Storm Water discharges to the maximum extent practicable.

Chapter 14, Article 2, Division 1 – Grading Regulations. The purpose of these regulations is to address slope stability, protection of property, erosion control, water quality, and landform preservation and to protect the public health, safety, and welfare of persons, property, and the environment.

Chapter 14, Article 2, Division 2 – Storm Water Runoff and Drainage Regulations. The purpose of this division is to regulate the development of, and impacts to, drainage facilities, to limit water quality impacts from development, to minimize hazards due to flooding while minimizing the need for construction of flood control facilities, to minimize the impacts to environmentally sensitive lands, to implement the provisions of federal and state regulations, and to protect the public health, safety, and welfare.

Chapter 14, Article 2, Division 4 – Landscape Regulations. The purpose of these regulations is to minimize the erosion of slopes and disturbed lands through revegetation; to conserve energy by the provision of shade trees over streets, sidewalks, parking areas, and other paving; to conserve water through low-water-using plantings and irrigation design; to reduce the risk of fire through site design and the management of flammable vegetation; and to improve the appearance of the built environment by increasing the quality and quantity of landscaping visible from public rights-of-way, private streets, and adjacent properties, with emphasis on landscaping as viewed from public rights-of-way.

Chapter 14, Article 3, Division 1 – Environmentally Sensitive Lands Regulations. The purpose of these regulations is to protect, preserve and, where damaged, restore the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. These regulations are intended to assure that development, including, but not limited to coastal development in the Coastal Overlay Zone, occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area, encourages a sensitive form of development, retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline, and reduces hazards due to flooding in specific areas while minimizing the need for construction of flood control facilities.

B. Regulation/Legal Basis for Authority

The principal federal and state laws pertaining to the regulation of water quality are known respectively, as the 1972 Federal Water Pollution Control Act (also known as the Clean Water Act and Division 7 of the 1969 California Water Code (also known as the Porter-Cologne Water Quality Control Act). The laws are similar in many ways. The fundamental purpose of both laws is to protect the beneficial uses of water. An important distinction between the two is that the Porter-Cologne Water Quality Control addresses both ground and surface waters while the Clean Water Act addresses surface water only. The San Diego Regional Water Quality Control Board (RWQCB) has developed policies, rules, and procedures, and has been granted the authority to implement and enforce the laws and regulations requiring the control of water quality.

The Clean Water Act (CWA) also established the National Pollutant Discharge Elimination System (NPDES), which requires permits for discharges of pollutants from certain point sources into waters of the United States. The CWA allows the EPA to delegate NPDES permitting authority to states with approved environmental regulatory programs. California is one of the delegated states. The NPDES permits relative to this project are the General Construction Stormwater Permit and the regional General Municipal Stromwater Permit.

C. General Municipal Stormwater Permit

The RWQCB has adopted an area-wide Municipal Stormwater Permit, Order No. 2001-01, NPDES No. CAS0108758, "Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Stormwater Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County and the San Diego Unified Port District." Under an area-wide Municipal Stormwater Permit, municipalities are ultimately held responsible for everything in their stormwater conveyance systems, including industrial and construction stormwater runoff. Order No. 2001-01 presents guideline requirements for the control of pollutants resulting from stormwater and urban runoff from all areas named in NPDES Permit No. CAS0108758. RWQCB specifically requires Co-permittees to:

Inventory existing stormwater pollution control programs, illicit discharge detection programs, monitoring programs and data, stormwater conveyance system maps, land use maps, and existing laws, ordinances, and codes giving the dischargers the authority to implement and enforce stormwater management programs in their areas of jurisdiction and where necessary, promulgate the authority to carry out all functions of the stormwater management programs.

The municipal stormwater permit requires Co-permitees to utilize planning procedures including a master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. This new permit addresses controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed. With respect to land use planning for new development and redevelopment, at a minimum, each Co-permitee shall assess its general plan, modify development project approval processes, revise environmental review processes, and conduct education efforts focused on new development and redevelopment to minimize the short and long-term impacts on receiving water quality.

D. General Construction Stromwater Permit

Pursuant to Section 402(p)(4), EPA promulgated regulations for NPDES permit applications for stormwater discharges. On November 16, 1990, the EPA published final regulations that establish stormwater to waters of the United States from construction projects that encompass one (1) or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. State Water Resources Control Board (SWRCB) Order No. 99-08, NPDES General Permit No. CAS2000002," General Permit for Stromwater Discharges Associated with Construction Activity", is the active General stormwater construction activity permit for the State of California and RWQCB.

This permit was modified and reissued on August 19,1999 based on a court challenge the San Francisco, Santa Monica, San Diego, and Orange Coast BayKeepers groups. The Court issued a judgment and directed the SWRCB to modify the provisions of the General Permit to, among others, require permitees to implement specific sampling and analytical procedures to determine whether Best Management Practices (BMPs) implemented on the construction site are: 1) preventing further impairment by sediment in storm waters discharged directly into waters listed as impaired for sediment or silt; and 2) preventing other pollutants, that are known or should be known by permitees to occur on construction sites and that are not visually detectable in stormwater discharges, from causing or contributing to exceedences for water quality objectives. Based on the Court's direction, the two areas of the permit that were modified were the Stormwater Pollution Prevention Plan (SWPPP) and the Monitoring Program and Reporting Requirements portions of the permit.

Specific conditions of the NPDES permit that may directly affect the planning and design requirements of future redevelopment projects are:

- Development and implementation of stormwater and receiving water-monitoring programs to evaluate discharges of pollutants from stormawater conveyance systems to waters of the United States.
- Development and implementation of an illicit connection/illegal discharge detection program to identify and eliminate non-stormwater discharges to stormwater conveyance systems.
- To maximum extent practicable, develop and implement BMPs to control discharges of pollutants to Waters of the United States.
- Implementation of an annual analysis of the effectiveness of the overall stormwater pollution control management program.

In order to be in compliance with the Permit, all projects involving one acre or more of soil disturbance will require a General Construction Stormwater Permit, which must include the following:

- Notices of Intent (NOIs) Certification to be signed by owner of the construction site.
- Stormwater Pollution Prevention Plans (SWPPPs). Required elements of SWPPP include: 1) Site description addressing the elements and characteristics specific to the site; 2) Description of BMPs for erosion and sediment controls; 3) BMPs for construction waste handling and disposal; (4) Implementation of approved local plans; (5) Proposed post-construction controls, including description of local post-construction erosion and sediment control requirements; (6) Non-storm water management; (7) Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge into water bodies listed on the 303 (d) list of impaired water bodies; and 8) For all construction activity, identify a sampling and analysis strategy and sampling schedule for pollutants which are not visually detectable in stormwater discharges, which are known to occur on the construction site, and which could cause or contribute to an exceedance of water quality objectives in receiving waters.

Monitoring Program and Reporting Requirements – Including inspection of prevention measures record keeping and annual certification of compliance, due July 1, 1993, and each July 1st thereafter. Dischargers of stormwater associated with construction activity that directly enters a water body listed on the 303 (d) list of impaired water bodies shall conduct a sampling and analysis program for the pollutants (sedimentation/siltation or turbidity) causing the impairment. Discharges that flow through tributaries that are not listed on the 303(d) list of impaired water bodies or that flow into Municipal Separate Storm Sewer Systems (MS4) are not subject to these sampling and analysis requirements.

Industrial land uses are required to comply with the General Industrial Stormwater Permit. The permit lists the general descriptions of industrial facilities that would need to obtain a permit. The permit also identifies three categories of dischargers that would not need a permit if the facility type meets certain criteria identified in the permit. For example, facilities that fall into "category 10" (light industrial uses) are not subject to the general industrial permit if the facility can meet certain minimum conditions.

Stormwater dischargers associated with industrial activity must comply with Sections 301 and 402 CWA. The U.S. EPA published (November 16, 1990) final regulations that establish application requirements for stormwater permits. The regulation requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal stormwater sewers must be regulated by an NPDES permit. The regulations authorize States to issue general permits or individual permits to regulate stormwater discharges. The SWRCB issued a statewide General Industrial Stormwater permit, Water Quality Order No. 97-03-DWQ, NPDES, General Permit No. CAS000001" Waste Discharge Requirements for Discharges Associated with Industrial Activities Excluding Construction Activities", on November 19,1991. The monitoring requirements of the permit were amended September 17, 1992. Generally, the permit requires facility operators to:

- Eliminate unauthorized non-stormwater discharges;
- Develop and implement a stormwater pollution prevention plan (SWPPP); and,
- Perform monitoring of stormwater discharges and authorize non-stormwater discharges.

4.11.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Cause a substantial increase in impervious surfaces and associated increased runoff;
- Cause a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Conflict with the City of San Diego's Stormwater Standards;

4.11.3 Impact

4.11.3.1 Hydrology/Drainage

Redevelopment activities will occur over a 20-30 year period, and will be consistent with the land uses allowed in the Navajo and Tierrasanta Community Plans. Redevelopment within the Project Area has the potential to increase the rate or amount of surface runoff. There are many factors that can affect whether development of a project would result in a significant impact to hydrology/drainage including the location of a specific activity, the type of use proposed, and whether or not the proposed uses would result in changes to existing drainage patterns and conditions.

On a broad perspective, redevelopment activities are not expected to significantly alter the existing drainage pattern of the Project Area or surrounding area. This is because most of the Project Area is developed, and projects are not anticipated to require extraordinary amounts of grading or alternation of topography that could affect the hydrologic function of the San Diego River and Alvarado Canyon Creek. The Project Area will drain in essentially the same manner as it currently drains (i.e., east to west via the San Diego River and Alvarado Canyon Creek and then to San Diego Bay). In some cases, redevelopment activities are expected to improve deficient or adverse drainage conditions associated with the San Diego River and Alvarado Canyon Creek, as guided by the San Diego River Park Master Plan and San Diego River Watershed Management Plan.

However, on a more localized basis, there is the potential that specific redevelopment activities may require grading or alteration of the topography that could affect the hydrologic function of the parcel in which the project is located, altering localized drainage patterns and runoff. This issue is considered a significant impact. Mitigation Measure HD1 will reduce this impact to a level less than significant. Mitigation Measure HD1 requires that prior to approval of a specific development plan within the Project Area, a detailed hydrology study shall be prepared for each specific development that addresses the onsite and offsite hydrological and drainage characteristics of each proposed development project. For development projects located within or adjacent to the 100-year floodplain, additional consideration shall be given to the design of the project. An appropriate drainage control plan that controls runoff and drainage in a manner acceptable to City Engineering Standards for the specific project shall be implemented. The drainage control plan shall be implemented in accordance with the recommendations of the hydrology study and shall address on-site and off-site drainage requirements to ensure on-site runoff will not adversely affect off-site areas or alter the existing drainage pattern of the site or off-site areas. The drainage study shall incorporate the recommendations of the San Diego River Park Master Plan and the San Diego River Watershed Management Plan relative to hydrology/drainage to the maximum extent practicable.

4.11.3.2 Flooding

As identified on Figure 4.11-2, portions of Subareas A and B are located within the 100-year floodplain and floodway as identified by the Federal Emergency Management Agency (FEMA) maps. Redevelopment activity in these areas has the potential to impede or redirect flood flows and each redevelopment project

will need to be evaluated to ensure they do not adversely impact flooding. This issue is considered a significant impact. Implementation of Mitigation Measure HD1 will reduce this significant impact to a level less than significant.

As identified in Mitigation Measure HD1, for development projects located within or adjacent to the 100-year floodplain, additional consideration in the hydrology study and site specific drainage plan shall be given to the design of the project so as not to place structures within the 100-year floodplain that may redirect flood flows. In addition, the hydrology and drainage studies shall incorporate the recommendations of the San Diego River Park Master Plan and the San Diego River Watershed Management Plan relative to flooding to the maximum extent practicable.

4.11.3.3 Water Quality – Short-Term

The proposed project will result in the redevelopment of existing land uses over a 20 to 30 year period. Redevelopment would be required to comply with current (and/or future) water quality regulations regarding on-site construction related runoff.

Grading requirements of future projects could potentially alter existing drainage patterns, causing erosion or siltation on a particular site or in the area on a short-term basis during construction. This issue is magnified for development projects located near the San Diego River and Alvarado Canyon Creek. As such, future redevelopment activities have the potential to result in a violation of water quality standards through sedimentation/siltation or emissions from construction related activities of the local surface waters and groundwaters. This issue is considered a significant impact. Implementation of Mitigation Measure WQ1 will reduce this impact to a level less than significant. Mitigation Measure WQ1 requires that erosion, siltation, and emission of construction related pollutants shall be controlled through compliance with the City of San Diego Municipal Code, General Construction Stormwater Permit (Order No. 99-08, NPDES CAS000002) and the General Municipal Stormwater Permit (Order No. 2001-01, NPDES CAS0108758). Under the General Construction Stormwater Permit, the following components are required, a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and a Monitoring Program and Reporting Requirements. Required elements of SWPPP include:

- Site description addressing the elements and characteristics specific to the site;
- Description of Best Management Practices (BMPs) for erosion and sediment controls;
- BMPs for construction waste handling and disposal;
- Implementation of approved local plans;
- Proposed post-construction controls, including description of local post-construction erosion and sediment control requirements;
- Non-storm water management;
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharges into water bodies listed on the 303 (d) list of impaired water bodies; and

For all construction activity, identify a sampling and analysis strategy and sampling schedule for
pollutants which are not visually detectable in stormwater discharges, which are known to occur on
the construction site, and which could cause or contribute to an exceedance of water quality
objectives in receiving waters.

Some of the BMPs that shall be used during construction for compliance with the City of San Diego Municipal Code, General Construction Stormwater Permit, and General Municipal Stormwater Permit include, but are not limited to:

- Silt fence, fiber rolls, or gravel bag berms
- Street Sweeping
- Strom drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseed, soil binders, or straw mulch

4.11.3.4 Water Quality – Long Term Impacts

The majority of existing land uses within the Project Area were developed prior to the current surface and groundwater quality regulations and non-compliance with the current regulations may have contributed to the San Diego River's listing on the 303(d) list of impaired waters.

Future point and non-point source runoff associated with redevelopment activity will be controlled through compliance with the City of San Diego Municipal Code, General Municipal Stormwater Permit (Order No. 2001-01, NPDES NO. CAS0108858), and the General Industrial Stormwater Permit (Order No. 97-03-DWQ, NPDES NO. CAS000001). Redevelopment activity compliance with the NPDES permits and City of San Diego Municipal Code requirements are anticipated to reduce the level of fecal coliform, low dissolved oxygen, phosphorus, and total dissolved solids in the River. In addition, implementation of the recommendations contained in the San Diego River Park Master Plan and San Diego River Watershed Management Plan will serve to reduce the level of pollutants in the San Diego River. Also, per federal, state and local regulations, future development activity will be required to remove/clean-up existing hazards/hazardous materials (e.g., underground storage tanks) prior to development. Removing/cleaning-up hazards/hazardous materials from the Project Area will also reduce the amount of pollutant runoff that enters the San Diego River Watershed.

Over the next 20 to 30 years, future redevelopment activity (including new infrastructure such as roadways) will replace existing land uses that do not comply with water quality control requirements with land uses that should include all water quality measures identified in current and future applicable water quality control programs. However, given the current status of the San Diego River on the 303(d) list of impaired waters and the potential for future non-compliance with the water quality regulations, this issue is considered a significant impact. Implementation of Mitigation Measure WQ2 will reduce this impact to a

level less than significant. Mitigation Measure WQ2 requires all future redevelopment projects to obtain compliance approval with the City of San Diego Municipal Code, General Municipal Stormwater Permit (Order No. 2001-01, NPDES NO. CAS0108858), and the General Industrial Stormwater Permit (Order No. 97-03-DWQ, NPDES NO. CAS000001). Future redevelopment projects should also take into consideration to the maximum extent practicable the recommendations contained in the San Diego River Park Master Plan and the San Diego River Watershed Management Plan. Components of future redevelopment project design that will help achieve compliance with these long-term water quality regulations shall include, but are not limited to:

- Infiltrations basins
- Retention/detention basins
- Biofilters
- Structural controls

4.11.4 Significance Of Impact

4.11.4.1 Hydrology/Drainage

Redevelopment activities in the Project Area may require grading or alteration of the topography that could affect the hydrologic function of these drainages, altering localized drainage patterns and runoff. This issue is considered a significant impact.

4.11.4.2 Flooding

Redevelopment activity in these areas has the potential to impede or redirect flood flows and each redevelopment project will need to be evaluated to ensure they do not adversely impact flooding. This issue is considered a significant impact.

4.11.4.3 Water Quality – Short-Term

Future redevelopment activities have the potential to result in a violation of water quality standards through sedimentation/siltation or emissions from construction related activities of the local surface waters and groundwaters. This issue is considered a significant impact.

4.11.4.4 Water Quality – Long-Term

Given the current status of the San Diego River on the 303(d) list of impaired waters and the potential for future non-compliance with the water quality regulations, this issue is considered a significant impact.

4.11.5 Mitigation Measures

4.11.5.1 Hydrology/Drainage/Flooding

HD1 A detailed hydrology study shall be prepared for each specific development that addresses the onsite and offsite hydrological and drainage characteristics of each proposed development

project. For development projects located within or adjacent to the 100-year floodplain, additional consideration shall be given to the design of the project. An appropriate drainage control plan that controls runoff and drainage in a manner acceptable to City Engineering Standards for the specific project shall be implemented. The drainage control plan shall be implemented in accordance with the recommendations of the hydrology study and shall address on-site and off-site drainage requirements to ensure on-site runoff will not adversely affect off-site areas or alter the existing drainage pattern of the site or off-site areas. The drainage study shall incorporate the recommendations of the San Diego River Park Master Plan the San Diego River Watershed Management Plan relative to hydrology/drainage and flooding to the maximum extent practicable.

4.11.5.2 Water Quality

Prior to commencement of construction activities for future redevelopment activities, in compliance approval documentation with the City of San Diego Municipal Code, General Construction Stormwater Permit (Order No. 99-08, NPDES CAS000002) and the General Municipal Stormwater Permit (Order No. 2001-01, NPDES CAS0108758) shall be obtained. Under the General Construction Stormwater Permit, the following components are required, a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and a Monitoring Program and Reporting Requirements. Required elements of SWPPP include:

- Site description addressing the elements and characteristics specific to the site;
- Description of Best Management Practices (BMPs) for erosion and sediment controls;
- BMPs for construction waste handling and disposal;
- Implementation of approved local plans;
- Proposed post-construction controls, including description of local post-construction erosion and sediment control requirements;
- Non-storm water management;
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge into water bodies listed on the 303 (d) list of impaired water bodies; and,
- For all construction activity, identify a sampling and analysis strategy and sampling schedule
 for pollutants which are not visually detectable in stormwater discharges, which are known
 to occur on the construction site, and which could cause or contribute to an exceedance of
 water quality objectives in receiving waters.

Some of the BMPs that shall be used during construction for compliance with the City of San Diego Municipal Code, General Construction Stormwater Permit, and General Municipal Stormwater Permit include, but are not limited to:

- Silt fence, fiber rolls, or gravel bag berms
- Street Sweeping
- Strom drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseed, soil binders, or straw mulch

MQ2 All future redevelopment projects shall obtain compliance approval with the City of San Diego Municipal Code, General Municipal Stormwater Permit (Order No. 2001-01, NPDES NO. CAS0108858), and the General Industrial Stormwater Permit (Order No. 97-03-DWQ, NPDES NO. CAS000001). Future redevelopment project design shall also take into consideration to the maximum extent practicable the recommendations contained in the San Diego River Park Master Plan and the San Diego River Watershed Management Plan. Components of future redevelopment project design that will help achieve compliance with these long-term water quality regulations include, but are not limited to:

- Infiltrations basins
- Retention/detention basins
- Biofilters
- Structural controls

4.11.6 Conclusion

Implementation of Mitigation Measure HD1 will reduce the hydrology/drainage and flooding impacts to a level less than significant. Implementation of Mitigation Measure WQ1 will reduce the short-term water quality impact to a level less than significant. Implementation of Mitigation Measure WQ2 will reduce the long-term water quality impact to a level less than significant.

4.12 Population and Housing

4.12.1 Existing Conditions

4.12.1.1 Population

A. San Diego County

San Diego County had an estimated 1990 population of 2,498,016. The population grew approximately 12.6 percent from 1990 to 2000. Table 4.12-1 depicts the population growth that occurred between 1990 and 2000 throughout San Diego County.

As depicted in Table 4.12-1, the Central Major Statistical Area (MSA), which includes the Grantville Redevelopment Area, had the highest population in the County in 1990 and the second highest population in 2000. However, the Central MSA experienced only a 3.8 percent increase in population between 1990 and 2000. This represents the lowest percent increase in population during the ten-year period among the seven MSAs. According to the San Diego Association of Governments (SANDAG), the current (2004) population in San Diego County is 3,017,204, that is a seven percent population increase between 2000 and 2004.

TABLE 4.12-1 San Diego County 1990 and 2000 Population

Major Statistical Area (MSA)	1990	2000	Numeric Change 1990-2000	Percent Change
Central	595,720	619,133	23,413	3.8
North City	569,992	658,877	88,885	13.5
South Suburban	261,694	307,469	45,775	14.12
East Suburban	429,291	462,663	33,372	7.2
North County West	310,194	364,157	53,963	14.8
North County East	312,477	380,430	65,953	17.3
East County	18,648	21,104	2,456	11.6
Region	2,498,016	2,813,833	315,817	11.2

U.S. Census Bureau. 1990 and 2000.

B. City of San Diego

According to the U.S. Census Bureau, in 1990 the total population for the City of San Diego was 1,110,549. In 2000, the City's population was estimated to be 1,223,400. During the ten-year period, the City's population grew by approximately 112,851 persons, which represents a ten percent increase in total population within the City. According to SANDAG, the current (2004) population in the City is 1,294,032, that is a six percent population increase between 2000 and 2004.

C. Community Plan Areas

The Project Area includes the Navajo, Tierrasanta, and College Area Community Plan areas. Only a very small portion of the Project Area lies within the College Area Community Plan areas and the portions of the Project Area located within Tierrasanta is-are designated as sand and gravel, and open space. In 2000, the Navajo Community Plan area had an existing population of approximately 47,335, while the population of the Tierrasanta Community Plan Area was 30,430. According to SANDAG, the 2004 population estimate for the Navajo Community Plan area is 49,260 and the 2004 population estimate for the Tierrasanta Community Plan Area is 31,933. This represents a four percent population increase between 2000 and 2004 in the Navajo Community Plan area and a five percent population increase between 2000 and 2004 in the Tierrasanta Community Plan area.

D. Redevelopment Project Area

Within the Navajo and Tierrasanta Community Plan portions of the Project Area, no population is present because there are no housing units located within the Project Area. The Project Area does not contribute to the total population within the City.

5.12.1.2 Housing

A. San Diego County

San Diego County had an estimated number of housing units of 946,240 in 1990. Between 1990 and 2000 the number of housing units increased by 8.9 percent to an estimated 1,039,149 housing units. Table 4.12-2 depicts the increase in the number of housing units between 1990 and 2000 throughout San Diego County. As depicted in Table 4.12-2, the Central MSA had the second highest number of housing units in both 1990 and 2000; however, the Central MSA experienced an increase of only 2.6 percent between those years. This represents the lowest percent increase in the number of housing units during the ten-year period among the seven MSAs within the region. According to SANDAG, the current (2004) housing estimate is 1,045,812 housing units, which is a five percent increase in the number of housing from 2000 to 2004.

TABLE 4.12-2 San Diego County 1990 and 2000 Housing Units

Major Statistical Area (MSA)	1990	2000	Numeric Change 1990-2000	Percent Change 1990-2000
Central	219,389	225,305	5,916	2.6
North City	234,167	269,099	34,932	13.0
South Suburban	86,251	97,098	10,847	11.2
East Suburban	160,533	170,370	9,837	5.8
North County West	116,942	134,488	17,546	13.0
North County East	118,951	131,101	12,150	9.3
East County	10,007	11,688	1,681	14.4
Total	946,240	1,039,149	92,909	8.9

Source: SANDAG, Info, San Diego Region Population and Housing Estimates, January 1, 2000.

B. City of San Diego

According to U.S. Census Bureau data, in 2000 the total number of housing units within the City of San Diego was 450,691. In 1990, the estimated number of housing units was 406,096. During the ten year period, 44,595 housing units were added to the City's housing stock. This represents an increase of approximately 11 percent in the total number of housing units. According to SANDAG, the current (2004) estimate of housing units is 469,154, which represents a four percent increase between 2000 and 2004.

C. Community Plan Areas

The Project Area includes both the Navajo and Tierrasanta Community Plan areas. Only a very small portion of the Project Area lies within the College Community Plan area. In 2000, 19,914 housing units were located in the Navajo Community Plan area and 10,635 housing units were located in the Tierrasanta Community Plan Area. According to SANDAG, the 2004 estimate for the number of housing units in the Navajo Community Plan area is 20,128 and the 2004 estimate for the number of housing units in the Tierrasanta Community Plan Area is 10,985. This represents a two percent increase between 2000 and 2004 in the Navajo Community Plan area and a 4 percent increase between 2000 and 2004 in the Tierrasanta Community Plan area.

D. Redevelopment Project Area

There are no housing units located within the Project Area. However, housing units are located in the surrounding area of the Navajo and Tierrasanta Community Plan areas.

4.12.2 Impact Threshold

For the purposes of this EIR, a significant impact to population and housing will occur if the proposed redevelopment project will:

- Induce substantial growth or concentration of population;
- Displace large numbers of persons; or
- Create substantial demand for additional housing.

4.12.3 Impact

4.12.3.1 Population

The Redevelopment Plan does not propose to change any land use designation within the Project Area. Therefore, the project would not generate an increase in population beyond the increase that could occur if the parcels designated for multi-family residential uses were redeveloped from their existing park and hotel uses to residential (a total of 48 single-family and 86-multi-family units could be constructed under this scenario). The project would not result in the displacement of a large number of persons. Therefore, the project would not result in a significant impact related to population within the County, City, Community Plan Areas, or Project Area and no mitigation measure is required.

4.12.3.2 Housing

The Redevelopment Plan does not propose additional housing in the Project Area. Redevelopment consistent with the Navajo Community Plan would allow for approximately 48 single-family and 86 multifamily residential units. This would only occur if the existing uses of these parcels (park, hotel) are redeveloped with residential uses. Development of these planned housing units within the Project Area would be less than one percent of the existing number of housing units within the Navajo Community Plan Area. Therefore, implementation of the proposed Redevelopment Plan would not induce substantial housing growth or concentration of population.

As provided by CRL Section 33334.2(a), no less than 20 percent of all tax increment revenue allocated to the Agency will be used for the purpose of increasing, improving, or preserving the community/neighborhood's supply of low and moderate income housing outside of the Redevelopment Area. This provides the community/neighborhood resources to maintain the low and moderate housing stock and assists residents with homeownership. Therefore, implementation of the proposed Redevelopment Plan would not require the displacement of population or housing.

The City recognizes that some residential land speculators may view approval of the Redevelopment Plan as an opportunity to develop residential land uses within the Project Area, especially during favorable economic conditions. Should residential projects be proposed on land that is not currently planned or zoned for residential development, an amendment to the Navajo Community Plan and approval of a zone change would be required. Therefore, because the project does not involve any redesignation of land uses, implementation of the proposed Redevelopment Plan would not induce substantial housing growth or concentration of population.

4.12.4 Significance of Impact

No impact associated with population and housing is anticipated.

4.12.5 Mitigation Measures

No mitigation measure is proposed, as no significant population and housing impact has been identified.

4.12.6 Conclusion

No significant population and housing impact is anticipated.

4.13 Public Services and Utilities

4.13.1 Schools

4.13.1.1 Existing Conditions

The San Diego Unified School District (SDUSD) provides public educational facilities to the Project Area. Schools serving the Project Area and surrounding community consist of one high school, one middle school, and three elementary schools. Table 4.13-1 depicts the current enrollment, capacity, and enrollment trend at each of the five schools. The enrollment level of the five schools is currently below their current enrollment capacity. Currently, there are no residential dwelling units located within the Project Area and no school services are being used by the Project Area.

TABLE 4.13-1
Current School Enrollment and Capacity

School -	Current Enrollme	nt Current Capac	ity :: Future Enrollment (trend)
Foster (K-5)	518	575	Falling
Marvin (K-5)	383	471	Falling
Dailard (K-5)	516	529	Stable/slight drop
Lewis (6-8)	1153	1200	Stable/rising
Henry (9-12)	2477	2506	Stable/rising

Source: San Diego Unified School District, 2004.

4.13.1.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project:

 Generates more students than the SDUSD Schools identified above could accommodate, necessitating the development of new schools, or physically altered facilities, the construction of which may cause significant environmental impacts.

4.13.1.3 Impact

The proposed project is the adoption and implementation of a Redevelopment Plan. At this time there is no specific development proposed. Implementation of the Redevelopment Plan will involve development of projects throughout the Project Area over the life of the Redevelopment Plan (20 to 30 years). Consistent with the Community Plan land use designations, most redevelopment in the Project Area is anticipated to be commercial, and industrial. The Community Plan does allow a small amount of single family (48 dwelling units) and multi-family (86 dwelling units) residential development within the Project Area; however, the existing uses of these parcels would have to be redeveloped with residential in order for this to occur. Table 4.13-2 estimates the number of students that would be generated by redevelopment consistent with the Community Plan land uses, (134 dwelling units). Based on student generation factors, 65 school aged children would be generated. As indicated in Table 4.13-1, the five existing schools serving the Project Area have additional enrollment capacity for 158 elementary, 47 middle school and 29 high school students. Based on the current and future enrollment capacity of the existing schools and given

that only 65 school aged children would be generated once all of the dwelling units are developed, approval of the Redevelopment Plan and redevelopment of the existing parcels currently designated for residential uses would not generate enough students to necessitate the development of new schools or the physical alteration of existing schools that could result in significant environmental impacts. The additional students generated could be accommodated by existing school facilities. This issue is not considered significant.

TABLE 4.13-2
Educational Facilities Demand

Residential Dwelling Unit	Number of New Units	Student Generation Factor	Students Generated by the Project
Single Family	48	0.78	37
Multi-Family	86	0.32	28
ĭotal			65

Source: San Diego City Schools, 2004.

4.13.1.4 Significance of Impact

No impact associated with schools is anticipated.

4.13.1.5 Mitigation Measures

No mitigation measure is proposed, as no significant schools impact has been identified.

4.13.1.6 Conclusion

No significant schools impact is anticipated.

4.13.2 Gas and Electric

4.13.2.1 Existing Conditions

San Diego Gas and Electric Company (SDG&E) provides gas and electricity service to the Project Area. Energy that is provided throughout California, including to the Project Area is generated by numerous power plants that are located within and outside the State. Electricity and natural gas is supplied via the electric grid and transmission lines. Table 4.13-3 identifies monthly instantaneous peak demand for electricity in the State between 2000 and 2003, based on various assumptions of weather conditions and economic and demographic growth in a California Independent System Operator (CAISO) Control Area, which comprises the bulk of California's transmission system. The State of California has experienced energy shortages during the past years, with peak demand approaching or reaching daily load supply. During a power outage, rolling, or rotating blackouts may be ordered that affect entire grids.

To promote the safe and reliable maintenance and operation of utility facilities, the California Public Utilities Commission (CPUC) has mandated specific clearance requirements between utility facilities and surrounding objects or construction activities.

TABLE 4.13-3
Historical Monthly Instantaneous Peak Demand (MW)
Caiso Control Area

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
2000	32,744	32,394	32,552	33,911	39,808	43,630	45,245	45,2494	43,740	35,712	33,338	34,115
2001	32,623	30,683	29,778	31,770	37,808	39,762	41,192	41,419	37,993	38,805	32,138	33,347
2002	33,488	31,854	31,033	31,460	38,165	38,750	42,441	40,803	41,358	35,269	31,770	32,307
2003	30,549	29,872	31,194	31,583	39,577	40,187	42,689	42,560	41,467	36,522	31,659	33,140

Source: CAISO, 2004 Summer Assessment, California Independent Operating System, April 16, 2004.

A 69 kilovolt (kV) Substation serves the Project Area. Electricity is distributed from this substation throughout the Project Area via overhead and underground distribution lines. According to SDG&E, existing services are adequate to meet the existing needs of the Project Area.

Natural gas is distributed throughout the Project Area via underground lines, typically located within public right-of-ways, functioning as a backbone system to service individual parcels. According to SDG&E, the system is considered adequate to meet the existing needs of the Project Area.

4.13.2.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered transmission facilities, the need for new or physically altered transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service;
- Result in a substantial increase in demand upon existing sources of energy; or,
- Require the development of new energy sources.

4.13.2.3 Impact

Table 4.13-4 depicts the seasonal instantaneous peak load forecast for years 2004 through 2008 for the CAISO control area. The table shows that in 2008, seasonal peak electrical loads are anticipated to range from a low of 35,000 megawatts (MW) in late winter to a high of 47,978 MW in the summer.

Redevelopment consistent with the Community Plan land uses is anticipated to result in an increase in development intensity that may increase energy usage within the Project Area. The level of increase is dependent on the type of uses that are being replaced, their intensity of development, and whether or not those uses are replaced with modern, state of the art building materials and energy efficient heating and cooling systems. As energy conservation technology becomes more cost efficient and other incentives, such as expedited permit review is offered by local jurisdictions, developers are more likely to design and develop energy efficient projects. The City of San Diego has adopted a Sustainable Building Policy (900-14)

TABLE 4.13-4
Seasonal Instantaneous Peak Electrical Load Forecast (MW)
ISO Control Area Capacity Forecast, 2004 – 2008

	Summer 2004	Winter 2004-2005	Summer 2005	Winter 2005-2006	Summer 2008	Winter 2008- 2007	Summer 2007	Winter 2007-1- 2008	Summer 2008	Winter 2008 2009
Forecasted	44,380	33,179	45,253	33,906	46,144	34,649	47,052	35,408	47,978	36,184
Peak										
Demand										

Source: CAISO, Five Year Assessment (2004-2008), California Independent Operating System, October 10, 2003.

that provides an expedited ministerial and discretionary permitting process for private development projects that meet certain criteria associated with the U.S. Green Building Council, Leadership in Energy and Environmental Design (LEED). Future redevelopment projects are likely to design their commercial and industrial (which constitute the majority of redevelopment) projects according to LEED criteria in order to qualify for expedited ministerial and discretionary permit approval. Commercial and industrial redevelopment projects would need to design their project to provide 30% of its projected total energy use utilizing renewable energy resources (e.g., photovoltaic, wind and fuel cells), City of San Diego Council Policy, 900-14, May 20, 2003. Projected usage of electricity and natural gas usage based on redevelopment of the Project Area consistent with Community Plan land uses is provided in Tables 4.13-5 and 4.13-6, respectively.

Without definition of specific redevelopment projects, it is not possible to anticipate the exact level and location (i.e., which electrical circuits increase in load would occur on) of electrical power usage. As depicted in Table 4.13-5, the net increase in electrical power usage based on redevelopment of the Project Area is 673,814 kilowatt hours per month. As depicted in Table 4.13-6, the net increase in natural gas usage based on redevelopment of the Project Area is estimated to be 686,069.5 cubic feet per month.

According to SDG&E, existing gas and electric infrastructure (i.e., electric and gas distribution and transmission lines, substations, and power plants) located within or adjacent to the Project Area would provide adequate service to proposed redevelopment activities. As such, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered transmission facilities. Any increases in electrical load would require only routine adjustments to the network of distribution lines, such as adding new lines or upgrading existing distribution lines. These system changes/improvements will occur as redevelopment activities are proposed within the Project Area. The physical impact to the environment would be in the form of short-term noise and air quality, and potentially hydrological/water quality, geotechnical, cultural, biological, and paleontological resources. Implementation of mitigation measures described in other sections of this document with respect to these issues would mitigate the potential impact of these minor improvements to a level less than significant.

TABLE 4.13-5 Projected Monthly Electrical Power Usage

Land Use Type	Usage Factor (kw/h month/ du/ksf)	increase (du/ksi)	Projected Increase in Electrical Power Usage (kwh/month)
Redevelopment Plan Area			
Single Family Residential	5,700 du	48 du	273,600
Multi-Family Residential	3,940 du	86 du	338,840
Commercial	20 ksf	303 ksf	6,060
Industrial	9 ksf	6,146 ksf	55,314
Office	N/A	N/A	N/A
Schools	N/A	N/A	N/A
Parks	N/A	N/A	N/A
Open Space	N/A	N/A	N/A
Recreation	N/A	N/A	N/A
Public Services*	N/A	N/A	N/A
Hospitals	N/A	N/A	N/A
Sand and Gravel	N/A	N/A	N/A
Transportation	N/A	N/A	N/A
GRAND TOTAL		134 du/6,449 ksf	673,814

Notes:

du = dwelling units, sf = square feet, ksf = thousand square feet

* Libraries are included under the public services.

N/A: Redevelopment consistent with the Community Plan is not anticipated to increase the intensity of this land use type.

South Coast Air Quality Management District and BRG Consulting, Inc. Source:

TABLE 4.13-6 Projected Daily Natural Gas Usage

Land Use Type	Usage Factor (cf month/ du or kff)	Increase (du/ksl)	Projected Increase In Natural Gas Usage (cf/month)
Redevelopment Plan Area			
Single Family Residential	6,665.0 du	48 du	319,920
Multi-Family Residential	4,011.5 du	86 du	344,989
Commercial	2.9 ksf	303 ksf	878.7
Industria!	3.3 ksf	6,146 ksf	20,281.8
Office	N/A	N/A	N/A
Schools	N/A	N/A	N/A
Parks	N/A	N/A	N/A
Open Space	N/A	N/A	N/A
Recreation	N/A	N/A	N/A
Public Services*	N/A	N/A	N/A
Hospitals	N/A	N/A	N/A
Sand and Gravel	N/A	N/A	N/A
Transportation	N/A	N/A	N/A
GRAND TOTAL			686,069.5

Notes:

cf = cubic feet, du = dwelling units, sf = square feet, ksf = thousand square feet
* Libraries are included under the public services.

N/A: Redevelopment consistent with the Community Plan is not anticipated to increase the intensity of this land use type.

Source: South Coast Air Quality Management District and BRG Consulting, Inc.

The proposed redevelopment activities will not result in the use of a substantial amount of fuel, a substantial increase in demand upon existing sources of energy, or the development of new energy sources. The proposed redevelopment activities will result in redevelopment activities occurring over a 20 to 30-year period and demand increase will occur incrementally over that period of time. Redevelopment activities will create energy demands typical of urban development. The impact to gas and electric services resulting from implementation of the proposed redevelopment activities will be less than significant.

4.13.2.4 Significance of Impact

No impact associated with gas and electricity is anticipated.

4.13.2.5 Mitigation Measures

No mitigation measure is proposed, as no significant gas or electric impact has been identified.

4.13.2.6 Conclusion

No significant gas and electric impact is anticipated.

4.13.3 Water

4.13.3.1 Existing Conditions

San Diego's primary water resources include the Colorado River and the California Aqueduct system. Water supply from these sources is imported by the San Diego County Water Authority (SDCWA). Four major aqueducts channel water from the north into a series of reservoirs and local treatment plants in the San Diego area. Water is distributed locally by various public and private agencies.

According to the City of San Diego Water and Sewer Design Guidelines, standard water demand rates for residential uses are 150 gallons per capita/day; 5,000 gallons/day per net acre for commercial, office, schools, public services and hospitals; 6,250 gallons/day per net acre for industrial uses; and 4,000 gallons/day per net acre for parks, open space and recreation. Table 4.13-7 depicts existing and projected water demand for the Project Area based on SANGIS existing and planned land use data. As depicted in Table 4.13-7, water demand within the Project Area will increase by approximately 254.1 thousand gallons per day from the existing demand.

4.13.3.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Result in the need for the physical alteration or expansion of existing water facilities or the need for new water facilities, in which the alteration, expansion, or construction could cause a significant environmental impact; or
- Require new or expanded water entitlements.

TABLE 4.13-7
Existing and Projected Daily Water Use

		Population/Acreage		Water Demand (1000s gal/day)		
Land Use	Water Use Factor	Existing	Projected	Existing Use	Projected— Use	Change From Existing
Redevelopment P	lan Area		relation sett			
Single Family Residential	150 (gcd)	0	117 pop.	0	17.55	+17.55
Multi-Family Residential	150 (gcd)	0	210 pop.	0	31.5	+31.5
Industrial	6,250 (gad)	258.6 ac.	399.6 ac.	1,616.25	2,497.5	+881.25
Commercial	5,000 (gad)	125.68 ac.	132.6 ac.	628.4	663	+34.6
Office	5,000 (gad)	21.26 ac.	17.38 ac.	106.3	86.9	-19.4
Schools	5,000 (gad)	24.90 ac.	24.90 ac.	124.5	124.5	0
Parks	4,000 (gad)	68.92 ac.	49.92 ac.	275.68	199.68	-76.0
Open Space	4,000 (gad)	69.02 ac.	69.02 ac.	276.08	276.08	0
Recreation	4,000 (gad)	18.89 ac.	20.89 ac	75.56	83.56	+8.0
Public Services*	5,000 (gad)	13.31 ac.	14.89 ac.	66.55	74.45	+7.9
Hospitals	5,000 (gad)	32.98 ac.	32.98 ac.	164.9	164.9	0
Sand and Gravel	6,250 (gad)	200.38 ac.	99.38 ac.	1,252.4	621.1	-631.3
Transportation	N/A	N/A	N/A	N/A	N/A	N/A
GRAND TOTAL				4,586.62	4,840.72	+254.1

Notes: gcd = gallons/capita/day; gad = gallons/net acre/day; pop = population; ac = acres

Libraries are included under Public Services.

N/A: Redevelopment consistent with the Community Plan is not anticipated to increase this land use type.

Source: Generation Factors obtained from City of San Diego Water Utilities Department Water and Sewer Design Guidelines.

4.13.3.3 Impact

Implementation of the proposed redevelopment project is anticipated to intensify the level of development within the Project Area. With projected redevelopment consistent with Community Plan land uses, the population could increase by approximately 327 people and non-residential square footage within the Project Area will increase by approximately 27.62 acres. Therefore, as depicted in Table 4.13-7, water demand within the Project Area will increase to approximately 4,840.72 thousand gallons per day, an increase of 254.1 thousand gallons per day. The proposed project will result in an increase in water demand, but the change in water demand is not considered a significant impact as the increase in water demand will occur over an extended period of time (20 to 30 years) and the demand created by this project will not result in the need for the physical alteration of extension of water facilities which could cause a significant environmental impact. The Project Area can be served by existing and planned water infrastructure. However, some system changes/improvements may be necessary as redevelopment activities are proposed within the Project Area. The physical impact to the environment would be in the form of short-term noise and air quality, and potentially hydrological/water quality, geotechnical, cultural, biological, and paleontological resources. Implementation of mitigation measures described in other sections of this document with respect to these issues would mitigate the potential impact of these more minor water infrastructure improvements to a level less than significant.

4.13.3.4 Significance of Impact

No impact associated with water is anticipated.

4.13.3.5 Mitigation Measures

No mitigation measure is proposed, as no significant water impact has been identified.

4.13.3.6 Conclusion

No significant water impact is anticipated.

4.13.4 Sewer Facilities

4.13.4.1 Existing Conditions

Wastewater generated within the Project Area is collected by sewer lines owned and operated by the City of San Diego Metropolitan Wastewater Department. Wastewater from the Project Area is diverted to the Point Loma Wastewater Treatment Plant (PLWTP) via the San Diego Metropolitan Sewer System. The PLWTP provides advanced primary treatment for the City of San Diego and the treated water is discharged into the Pacific Ocean through a 4.5-mile long pipeline outfall. The plant processes an average of 180 million gallons per day (mgpd) of wastewater generated by approximately 2.2 million San Diego residents in a 450 square mile service area. The plant has a treatment capacity of 240 mgpd.

The City of San Diego received a waiver from requirements by the Clean Water Act (CWA) in 1995 to upgrade the level of treatment to Secondary Treatment. The Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB) granted this waiver when they agreed through the combination of industrial source control, Advanced Primary Treatment of wastewater, a deep ocean outfall and comprehensive monitoring, that the PLWTP fully protects the ocean. The City of San Diego received a renewal of the CWA Permit in September 2002.

Residential dwelling units are generally considered the primary wastewater generators. Currently, there are no residential dwelling units located within the Project Area; therefore, the standard method of analyzing wastewater generation is not applicable. Although the existing non-residential land uses in the Project Area do generate wastewater during the normal course of business operation.

4.13.4.2 Impact Thresholds

For the purposes of this EIR, a significant impact would occur if the proposed project would:

 Result in the need for the physical alteration or expansion of existing sewer facilities or the need for new sewer facilities, in which the alteration, expansion, or construction could cause a significant environmental impact.

4.13.4.3 Impact

Redevelopment consistent with the Community Plan land uses will result in an increase in development intensity that may generate higher demands on the existing sewer facilities. Based on projected

redevelopment, sewer flows within the Project Area have the potential to increase by approximately 26,160 gallons per day (gpd) associated with residential land uses. The quantity is based on standard effluent generation rate of 80 gallons/capita/day. In addition, non-residential wastewater generation will increase. The increase in generation of wastewater associated with residential (26,160 gpd) and non-residential land use increases would occur over a 20 to 30-year period, and could be met through the provision of public improvements to the sewer facilities within the Project Area. Some improvements to sewer facilities within the Project Area may be needed as redevelopment activities are proposed within the Project Area. The physical impact to the environment would be in the form of short-term noise and air quality, and potentially hydrological/water quality, geotechnical, cultural, biological, and paleontological resources. Implementation of mitigation measures described in other sections of this document with respect to these issues would mitigate the potential impact of these more minor sewer infrastructure improvements to a level less than significant.

4.13.4.4 Significance of Impact

No impact associated with sewer facilities is anticipated.

4.13.4.5 Mitigation Measures

No mitigation measure is proposed, as no significant sewer facilities impact has been identified.

4.13.4.6 Conclusion

No significant sewer facilities impact is anticipated.

4.13.5 Police Services

4.13.5.1 Existing Conditions

Police services for the Project Area are provided by the Eastern Division Police Substation located at 9225 Aero Drive, in the Serra Mesa community of the City of San Diego. The Serra Mesa community is located northwest in relationship to the Project Area. This station houses approximately 127 patrol officers, 15 sergeants, nine detectives, two lieutenants, and one Captain. Additional resources (such as SWAT, canine units, etc.) respond to the Eastern Division, as they are needed. Additional police services for the Project Area are provided by the Police Community Relations Office (also known as the Navajo Storefront) located at 7381 Jackson Drive. This facility is a community outreach facility. This office houses one police officer and one community service officer to provide crime prevention education and information services.

The San Diego Police Department's Operation Support division is responsible for determining the allocation of officers to each Police Division. The number of officers is based on the total number of calls and the type of calls for each division. Current staff allocations assign a minimum of one officer for each of the communities assigned to the Eastern Division, on each watch in a given 24-hour period. On at least one day each week, there is an overlapping squad on each watch, which translates to two squads of officers working during that particular shift. In an emergency situation (or if the Division falls below the minimum

staffing levels), officers from other commands can respond to assist. Officers from other agencies respond to emergencies under existing mutual aid agreements.

The San Diego Police Department has personnel on duty and available to respond to calls for service seven days a week, 24 hours a day. Calls for service are prioritized, with emergency calls getting the highest priority. Calls for service range from level "1 priority," meaning life-threatening/suspicious activity, to a level "4 priority" call related to non life-threatening/suspicious activity. The Citywide average response time is 7 minutes and 3 seconds. The average response time for emergency calls for Eastern Division to the Project Area is 6 minutes and 7 seconds.

According to the police department, currently, there are no plans to construct new police facilities or expand existing facilities within the Project Area or that serve the Project Area. Since no new facilities or expansions are planned within the Project Area, no revenue has been identified for any major police facility expansions or additions. Generally, most new police facilities are funded through Development Impact Fees (DIF) along with other funding, depending upon the project.

4.13.5.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

 Result in the need for the physical alteration or expansion of existing police facilities or the need for new police facilities, in which the alteration, expansion, or construction could cause a significant environmental impact.

4.13.5.3 Impact

The Project Area is expected to experience an increase in population resulting from a net increase of approximately 134 dwelling units, and an associated population increase of approximately 327 within the 20 to 30 year Redevelopment Plan timeframe. The Police Department strives to meet a two officer per thousand resident ratio. Therefore, the addition of 1,000 residents to the Grantville/Allied Gardens communities would require personnel and possible additional police vehicles. The proposed project will only result in an increase population by 327 people over a 20 to 30 year timeframe. Since this incremental increase is below the police threshold of 1,000 residents, no additional officers or police facilities would be required to meet the police protection needs of the Project Area. Furthermore, the proposed project does not propose to change any land use designations for the Project Area and according to the Police Department, it is not anticipated that the proposed project will create a need for the physical alteration or expansion of existing police facilities, in which the alteration, expansion, or construction could cause a significant environmental impact. Therefore, no impact associated with police services is anticipated to occur.

4.13.5.4 Significance of Impact

No impact associated with police services is anticipated.

4.13.5.5 Mitigation Measures

No mitigation measure is proposed, as no significant police services impact has been identified.

4.13.5.6 Conclusion

No significant police services impact is anticipated.

4.13.6 Fire Protection

4.13.6.1 Existing Conditions

The City of San Diego Fire-Rescue Department, Station 34, provides primary fire protection and emergency medical services to the Project Area. Station 34 is located at 6565 Cowles Mountain Boulevard at the cross street of Navajo Road. Station 34 has four firefighters on duty each shift, with a total of twelve firefighters over three divisions. Apparatus consists of one triple combination pumper (Engine 34) and one brush apparatus (Brush Rig 34). Under first alarm conditions or when Station 34 is not available to respond to a fire or medical emergency, there are five Stations that act as secondary stations to provide fire protection and emergency medical services to the Project Area based on their current availability. These five Stations include:

- Station 5, located at 3902 9th Avenue, 92103. Apparatus consists of the Battalion 5, Engine 5, and Truck 5;
- Station 10, located at 4605 62nd Street, 92115. Apparatus consists Battalion 10, Engine 10, Truck 10, Brush Rig 10, and Utility Rig 10;
- Station 17, located at 4206 Chamoune Avenue, 92115. Apparatus consists of Engine 17;
- Station 18, located at 4676 Felton Street, 92116. Apparatus consists of Engine 18 and Brush Rig 18; and,
- Station 31, located at 6002 Camino Rico, 92120. Apparatus consists of Engine 31 and Paramedic Unit 31.

Table 4.13-8 identifies the response times of each Station to a specific intersection within the Project Area. These two intersections were selected by the City Fire-Rescue Department to illustrate the overall response times for the Project Area.

4.13.6.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

 Result in the need for the physical alteration or expansion of existing Fire Department facilities or the need for new Fire Department facilities, in which the alteration, expansion, or construction could cause a significant environmental impact.

TABLE 4.13-8
Fire Station Response Times

	oured A sin Avenue Intersection	Subarea B Mission Garge/Old Cliffs Roads Intersection		
Fire Station	Lesponse Time in minutes	Responding Company	Response Time in minutes	
Station 17	5.0	Station 31	5.0	
Station 31	5.6	Station 17	7.1	
Station 18	5.1	Station 34	9.2	
Station 10	7.1	Station 10	9.1	
Station 5	8.3	Station 5	10.3	

Source: City of San Diego Fire-Rescue Department, 2004.

4.13.6.3 Impact

Implementation of the proposed project will result in an increase in demand for fire protection services within the Project Area over the 20 to 30 year redevelopment timeframe. The increase in demand is attributable to redevelopment activities and associated demand for fire prevention inspections, and applicable code enforcement activities.

Proposed new development within the Project Area will be required to meet current Fire Code requirements, which are generally more rigorous than those under which existing development was approved/constructed. As new development occurs, overall safety of buildings within the Project Area is expected to improve.

In terms of fire department response to fire calls, the National Fire Protection Association 1710 Standard, requires that the initial arrival of the fire department's fire suppression resources should occur within six minutes and/or the initial full alarm assignment within ten minutes. According to the City Fire-Rescue Department, if these guidelines were to be exceeded, there could be the need for a new fire station and equipment. As indicated in Table 4.13-8, Station 5 currently exceeds the National Fire Protection Association 1710 Standard for response to the Mission Gorge/Old Cliffs Roads intersection with a response time of 10.3 minutes. However, with the implementation of the proposed project, response times will stay the same for each of the six stations, and the project does not propose any use that would alter the response time or require new Fire Department facilities.

4.13.6.4 Significance of Impact

No impact associated with fire protection is anticipated.

4.13.6.5 Mitigation Measures

No mitigation measure is proposed, as no significant fire protection impact has been identified.

4.13.6.6 Conclusion

No significant fire protection impact is anticipated.

4.13.7 Solid Waste

4.13.7.1 Existing Conditions

The City of San Diego Environmental Services Department (ESD) provides the following services to the Redevelopment Project Area: resource management, environmental programs, environmental protection, energy conservation, collection services, and refuse disposal. The ESD pursues waste management strategies that emphasize waste reduction and recycling, composting, and environmentally-sound landfill management to meet the City's long-term disposal needs. ESD also ensures that all federal, state, and local mandates relating to waste management are met in an efficient and financially sound manner. In 1989, the State of California mandated (AB 939) that all cities reduce waste disposed in landfills by 25% by 1995 and 50% by the year 2000. To meet this mandate, the ESD has devised a working plan called Plan 2000. Currently, the 25% diversion goal has been met and surpassed; however, ESD has not reached the 50% reduction level.

The ESD is organized into three divisions: Refuse Collection, Refuse Disposal, and Environmental Programs. Refuse Collection provides weekly service to approximately 305,000 homes and businesses throughout the City; Refuse Disposal ensures the safe and efficient disposal of over 1.4 million tons of waste generated annually in the City; and Environmental Programs implements comprehensive recycling, hazardous materials management, code enforcement and support programs.

Relative to development and redevelopment activities, the ESD's policy is that prior to the issuance of any permit, including but not limited to any discretionary action, demolition, grading, or any other construction permit, the City of San Diego Environmental Review Manager (ERM) shall verify that all requirements of a waste management plan have been shown and/or noted on the demolition and/or grading plans. The following are elements that the waste management plan is required to address include:

- Prior to issuance of a demolition permit, the permittee shall be responsible to arrange a preconstruction meeting. This meeting shall be coordinated with Mitigation Monitoring Coordination
 (MMC) to verify that implementation of the waste management plan shall be performed in
 compliance with the plan approved by Land Development review (LDR) and ESD, to ensure that
 impacts to solid waste facilities are mitigated to below a level of significance.
- 2. The plan (construction documents) shall include the following elements for demolition, construction, and occupancy phases of the project as applicable:
 - (a) Tons of waste anticipated to be generated,
 - (b) Material type of waste to be generated,
 - (c) Source separation techniques for waste generated,
 - (d) How material will be reused on-site,
 - (e) Name and location of recycling, reuse, or landfill facilities where waste will be taken if not reused on-site,

- (f) A "buy recycled" program,
- (g) How the project will aim to reduce the generation of construction/demolition debris,
- (h) A plan of how waste reduction and recycling goals will be communicated to subcontractors, and
- (i) A time line for each of the three main phases of the project as stated above.
- 3. The plan shall strive for a goal of 50% waste reduction.
- 4. The plan shall include specific performance measures to be assessed upon the completion of the project to measure success in achieving waste minimization goals. The Permittee shall notify MMC and ESD when:
 - (a) A demolition permit is issued,
 - (b) When demolition begins,
 - (c) The permittee shall arrange for progress inspections, and a final inspection, as specified in the plan and shall contact both MMC and ESD to perform these periodic site visits during demolition and construction to inspect the progress of the project's waste diversion efforts, and
 - (d) When demolition ends.
- 5. Prior to the issuance of a grading permit, the applicant shall receive approval from the ERM that the waste management plan has been prepared, approved, and implemented. Also, prior to the issuance of the grading permit, the applicant shall submit evidence to the ERM that the final Demolition/Construction report has been approved by MMC and ESD. This report shall summarize the results of implementing the above Waste Management Plan elements, including: the actual waste generated and diverted from the project, the waste reduction percentage achieved, and how that goal was achieved, etc.

There are seven active landfills located within the County of San Diego: West Miramar, Sycamore, Otay Annex, Ramona, Borrego Springs, Las Pulgas, and San Onofre. Only the first five accept municipal solid waste. The latter are military owned and operated and only accept military waste. Thus, solid waste from the proposed Project Area would be disposed of within the remaining five landfills. The following information is from the Integrated Waste Management Plan, Draft 2004 Countywide Siting Element.

The West Miramar Landfill, located in the City of San Diego, has a remaining capacity of approximately 13.8 million tons with an estimated closure date of 2011. Additional capacity is contingent upon a possible vertical expansion of the landfill. If pursued, the landfill may extend its capacity to accept waste for an additional three to ten years.

Sycamore Landfill, located in the City of San Diego, has a remaining capacity of approximately 17.2 million tons with an estimated closure date of 2017. The landfill operator is currently seeking an expansion of the landfill that would provide additional capacity extending the closure date to approximately 2035.

Otay Annex Landfill, located in the City of Chula Vista, has a remaining capacity of approximately 31.3 million tons with an estimated closure date of 2027.

Ramona Landfill, located in the unincorporated community of Ramona, has a remaining capacity of approximately 294,550 tons with an estimated closure date of 2006.

Borrego Springs Landfill, located in the unincorporated community of Borrego Springs, has a remaining capacity of approximately 117,600 tons with an estimated closure date of 2040.

Estimated remaining capacities are based on design limits specific to each landfill site. Estimated closure dates are determined by site capacity and the maximum daily permitted rate of disposal specific to each site.

4.13.7.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

Result in the need for the physical alteration or expansion of existing solid waste facilities or the
need for new solid waste facilities, in which the alteration, expansion, or construction could cause
a significant environmental impact.

4.13.7.3 Impact

No specific development is proposed as part of the proposed Redevelopment Plan adoption. Future redevelopment will be required to comply with the City's requirement for preparation of a waste management plan, which will achieve the City's waste minimization goals.

4.13.7.4 Significance of Impact

No impact associated with solid waste is anticipated.

4.13.7.5 Mitigation Measures

No mitigation measure is proposed, as no significant solid waste impact has been identified.

4.13.7.6 Conclusion

No significant solid waste impact is anticipated.

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4.14 Mineral Resources

For the purpose of CEQA analysis, "mineral resources" refers to aggregate resources. Aggregate consists of sand, gravel, and crushed rock.

4.14.1 Existing Conditions

Many valuable minerals are found in the San Diego region, ranging from gold to crushed rock. Production of metals and gemstones and other more glamorous minerals has been limited for many years because of high extraction costs. In terms of both quantity and economic value, sand and gravel and crushed rock are the most valuable mineral resources extracted and processed in the San Diego region.

4.14.1.1 Surface Mining and Reclamation Act (SMARA)

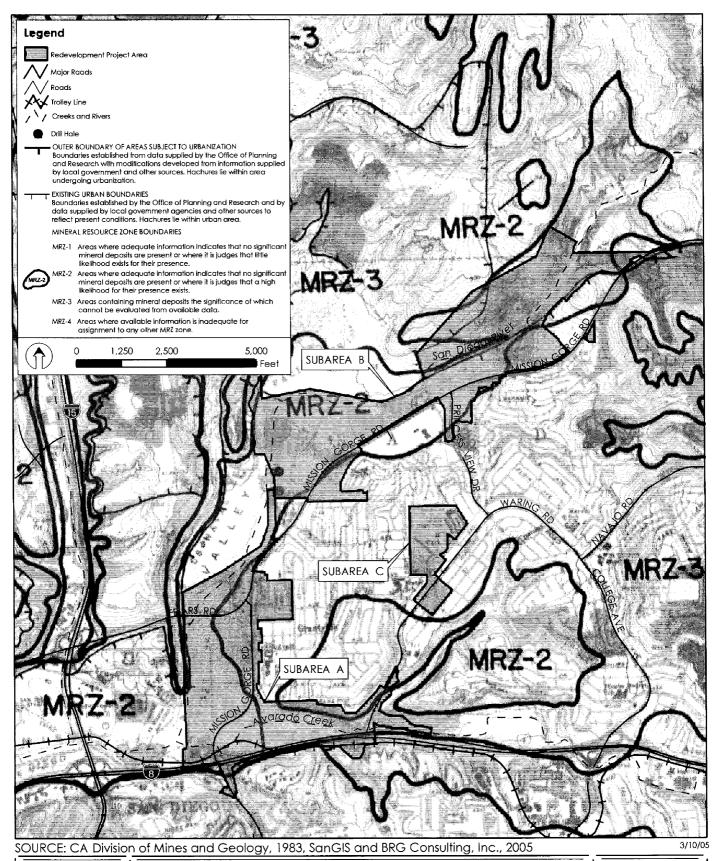
SMARA (1975) mandated that aggregate resources throughout the state be mapped so that local governments could make land use decisions in light of the presence of aggregate resources and the need to preserve access to those resources. One of the primary objectives of SMARA is to protect mineral resources of regional and statewide significance. The California Department of Conservation, Division of Mines and Geology is the state agency responsible for identifying and protecting Mineral Resource Zones (MRZs) per SMARA. The Division of Mines and Geology has prepared Mineral Land Classification Maps for aggregate resources. The Mineral Land Classification Maps designate four different types of resource sensitivities. The four sensitivity types are:

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
- MRZ-3: Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- MRZ-4: Areas where available information is inadequate for assignment of any other MRZ zone.

4.14.1.2 Sand and Gravel Extraction

Within and adjacent to the Project Area, two MRZ-2 boundaries have been mapped by the California Division of Mines and Geology. Figure 4.14-1 depicts the MRZ-2 locations within and adjacent to Subareas A, B, and C. The first MRZ-2 area encompasses portions of Subareas A and C. This area is currently not being used for aggregate extraction. The land use types in this area consist of public services, commercial, industrial, residential, and open space.

The second MRZ-2 area encompasses portions of Subareas A and B and contains a 250-acre sand and gravel-processing facility. The facility operates on both sides of the San Diego River along the northern boundary of the Project Area, generally between Princess View Drive and Margerum Avenue (Figure 4.14-1). The Project Area encompasses approximately 200 acres of the total 250-acre sand and gravel-processing center. The quarry has been in operation since 1927 and is currently operating under a



Grantville EIR

Mineral Resource Zone Boundaries

FIGURE

4.14-1

Conditional Use Permit (CUP). The CUP expires in 2033 and regulates the mining, processing, storage, and sale of natural resource materials. The California Department of Conservation, Division of Mines and Geology also regulates the sand and gravel processing facility. A master reclamation plan for the 250 acres covered within the CUP establishes goals and general guidelines for the reclamation of the project area upon completion of the mining activity. Final reclamation is to be accomplished in phases with the approval of precise reclamation plans (City of San Diego, Navajo Community Plan, 1982).

The remaining portions of the Project Area not within the MRZ-2 boundaries are within the MRZ-3 boundary (see Figure 4.14-1). The MRZ-3 boundary is defined as "Areas containing mineral deposits the significance of which cannot be evaluated from available data."

A. City of San Diego

The City of San Diego Progress Guide and General Plan establishes goals and standards to address future planning decisions related to the extraction and processing of mineral resources. Goals applicable to the existing sand and gravel operations in the Project Area include:

- Protection of major mineral deposits against encroachment by land uses that would make their extraction undesirable or impossible.
- Production of sand and gravel with minimal harm and disturbance to adjacent properties.
- Planned rehabilitation of depleted mineral areas to facilitate desirable reuses compatible with local development objectives.
- Conservation of construction material resources to provide for City's growth and development needs now and in the near and distant future.

B. Navajo Community Plan

The Industrial Element of the Navajo Community Plan addresses objectives and proposals to guide and encourage future policy and development decisions related to the sand and gravel facility located within the Project Area. The following proposal was established to encourage industrial development that is compatible with the residential character of the Navajo community:

Future development of the remaining sand and gravel operation and the previously mined 170 acres should be accomplished under a master planned industrial development (PID) permit process. A master PID will provide an opportunity for comprehensive review of the relationship between proposed development and the ultimate reclamation plan for the San Diego River, coordination of open space and pathways with Mission Trails Regional Park, traffic impacts to Mission Gorge Road and the proposed State Highway 52 interchanges.

C. Tierrasanta Community Plan

The northern half of the existing sand and gravel processing facility, within Subarea B is located in the community of Tierrasanta. The Community Plan contains a discussion of the sand and gravel operation and some goals, objectives and proposals applicable to the sand and gravel operation. In the discussion

section, the Community Plan identifies the existing sand and gravel area as a major mineral resource in the San Diego area. In addition, the Plan states that "While the extraction of these minerals is of economic value, certain characteristics that accompany mineral extraction are often found objectionable. These include noise, dust, and the unattractive appearance of the quarry sites." The goal of the Open Space section is to "Establish an open space system which protects the natural resources, provides for the managed production of resources..." An objective contained in the Community Plan that is applicable to the sand and gravel operation the Community Plan states, "minimize the effect of natural resource extraction on surrounding land uses." Also, related to the sand and gravel operation, the Community Plan states: "Upon termination of the sand and gravel operations, the excavated areas should be rehabilitated and a pathway to Mission Trails park provided. Any other use of the property beyond open space uses will require an amendment to this plan."

D. San Diego River Park Master Plan

In general, the San Diego River Park Master Plan seeks to provide a direction to restore the relationship between the San Diego River and nearby land uses. Relative to the existing sand and gravel extraction operation located within Subarea B of the Project Area, the Plan identifies several key points; 1) ongoing discussions with Superior Mine land owners and developers is essential to finding an appropriate balance between development and open space; 2) potential for the site to redevelop for more intensive use makes time critical to taking action at the planning level. While mining operations are scheduled to continue for another 20 years, potential redevelopment value may reduce this time frame; 3) minimum 500 feet Open Space Corridor is recommended in addition to trail corridor/buffer; and 4) acquisition of 15-20 acre site is recommended for development as a naturalized park with access to the river from Mission Gorge Road.

4.14.2 Impact Threshold

For the purposes of this EIR, a significant impact would occur if the proposed project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or,
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.14.3 Impact

As described in the Environmental Setting, two MRZ-2 boundaries have been mapped by the California Division of Mines and Geology within and adjacent to the Project Area.

The first MRZ-2 area encompasses portions of Subareas A and C; however, this area is not currently used for aggregate extraction and future use of this area for aggregate extraction is unlikely as the area is currently developed with urban uses and is surrounded by uses that constrain the future use of this area due to potential land use compatibility issues. The land use types that currently exist within this portion of the Project Area and the MRZ-2 are public service, commercial, industrial, residential, and open space. Redevelopment of this area consistent with Community Plan land use designations will not result in a loss of availability of known mineral resources that would be considered valuable to the region and residents of

the state, or loss of availability of a locally-important mineral resource recovery site as the resources are not currently being mined and the area is currently developed with various land use types.

The second area designated MRZ-2 is an operational 250-acre sand and gravel-processing facility located within Subarea B of the Project Area (see Figure 4.14-1). The Project Area encompasses approximately 200 acres of the total 250-acre sand and gravel-processing center. Future redevelopment of this area consistent with the Community Plan land use designations will reduce the total land area of the sand and gravel extraction area by approximately 92 acres (50%). Because the sand and gravel extraction area (200 acres within the Project Area) is currently operating under a CUP that does not expire until 2033, it is assumed that the sand and gravel extraction facility will continue to operate under its CUP and through oversight by the California Division of Mines and Geology until completion of mining activity, which would occur either through exhaustion of the resource or at the time of marginal economic return. Sand and gravel operations may also cease due to an accelerated transition created by redevelopment opportunities. Cessation of mining activity is the prerogative of the mining operator and the California Division of Mines and Geology cannot mandate ongoing mining activity at a particular location. At the time in the future when sand and gravel operations are discontinued, as stated above, a master reclamation plan, final reclamation plan, and precise reclamation plans for the mining area will be developed. Future reuse of the sand and gravel area will be consistent with the Navajo and Tierrasanta Community Plan goals, objectives, and proposals.

No significant impact will occur relative to loss of available know mineral resources that would be considered valuable to the region and residents of the state. Redevelopment of this area is consistent with the Navajo and Tierrasanta Community Plans and will not result in a loss of availability of a locally-important mineral resource recovery site delineated on the local general plan.

4.14.4 Significance Of Impact

No significant impact will occur relative to loss of available known mineral resources that would be considered valuable to the region and residents of the state. Redevelopment of this area is consistent with the Navajo and Tierrasanta Community Plans and will not result in a loss of availability of a locally-important mineral resource recovery site delineated on the local general plan.

4.14.5 Mitigation Measures

No mitigation measure is proposed as no significant mineral resources impact has been identified.

4.14.6 Conclusion

No significant mineral resources impact has been identified.

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4.14 - Mineral Resources

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