

CHAPTER 20

POPULATION AND HOUSING / SECONDARY EFFECTS OF GROWTH

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This section describes the existing and projected demographics in the vicinity of the project area and analyzes the proposed project’s potential impacts on population, employment, and housing. The section then discusses the potential for growth inducement and assesses the secondary effects of growth. Finally, the section discusses environmental justice issues. Demographic data presented in this section are primarily based on the SCAG 2004 forecasts. These forecasts utilize the 2000 census data.

ENVIRONMENTAL SETTING

Population

The County is comprised of 88 cities and has a population of 9,519,338. Approximately one million of these people live in unincorporated areas, which constitutes roughly 65 percent of the County land area.¹

Like much of the northern County area, Antelope Valley communities have experienced rapid growth over the last several years. Antelope Valley consists of 1,200 square miles and extends from Gorman to the San Bernardino County line. It includes the cities of Lancaster and Palmdale, as well as portions of unincorporated northern County area. Currently, growth rates in Antelope Valley exceed countywide growth rates. Much of the recent growth is attributed to the availability of open space and affordable housing in the area.² The current population estimate of the valley, based on the 2000 census data, is 353,000.

The Palmdale assessment area is located in the High Desert region of the County, approximately 60 miles north of downtown Los Angeles. The City of Palmdale is one of two incorporated cities in the Antelope Valley. As a gateway to the Antelope Valley, the City of

Palmdale has experienced significant growth over the past 25 years.

Figure 20-1 shows the location of census tracts in the Palmdale area. The estimated population for the City of Palmdale in 2000 was 116,670, while the estimated 2000 population for the three census tracts that include all unincorporated areas of the Initial Study Area was 14,137. SCAG forecasts show that the population will continue to grow in Antelope Valley and the surrounding regions and that the growth will be sustained through the next two decades. Table 20-1 shows the projected Antelope Valley and Palmdale population trends. As with the rest of the region, the City of Palmdale has grown rapidly in the last decade and is considered among the fastest growing communities in Southern California. The population in the city increased by 462 percent from 1980 (12,250) to 1990 (68,840).³

**Table 20-1
Antelope Valley Population Trends**

	2000	2010 (projected)	2020 (projected)
Antelope Valley	353,000	503,000	713,000
City of Palmdale	116,670	176,506	259,712
Census Tracts 9002, 9100, 9101 (includes the Initial Study Area)	14,137	21,876	29,159

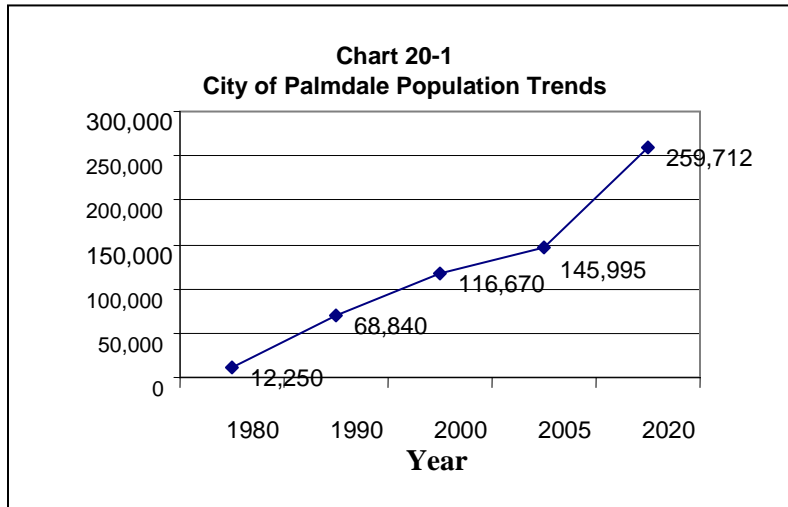
Source: 2000 Census; SCAG 2004.

Like much of the surrounding area, this growth is attributed to the availability of affordable housing in the city. SCAG population forecasts for the city show that the population is expected to more than double in the next 20 years, from 116,670 in 2000 to 259,712 by the year 2020. Chart 20-1 shows the City of Palmdale population trends.

¹ SCAG 2004; City of Palmdale General Plan, Housing Element, 1993.

² Antelope Valley Areawide Plan.

³ City of Palmdale General Plan, Housing Element, 1993.



Source: 2000 Census, City of Palmdale General Plan, SCAG 2004.

Employment

In 1999, according to the Antelope Valley Board of Trade, the Antelope Valley labor force was estimated at 125,610. Approximately 66 percent of these individuals worked within Antelope Valley, while 33 percent commuted to jobs outside of the valley. The single largest employer in Antelope Valley in 1994 was EAFB, which employed 15,367 individuals. Table 20-2 shows Antelope Valley employment by sector. Table 20-3 shows SCAG employment projections.

**Table 20-2
Antelope Valley Employment by Sector**

SECTOR	EMPLOYMENT (May 1999)
Agriculture	1,000
Construction	4,542
Finance, Insurance, and Real Estate	5,900
Government	14,700
Manufacturing	20,952
Mining	1,050
Services	34,005
Transportation, Communications, and Utilities	5,140
Wholesale and Retail Trade	23,528
Commuters	49,104
TOTAL	159,921

Source: Antelope Valley Board of Trade Business Outlook, 2000.

**Table 20-3
Palmdale Employment Projections**

JOBS	2000	2020 (projected)
Palmdale	45,116	69,113
Unincorporated Study Area	16,888	23,932

Source: SCAG 2004 Regional Transportation Plan.

The aerospace industry continues to provide a substantial number of jobs in the Antelope Valley. In addition, manufacturing companies, mining, agricultural jobs, retail, and service industries continue to increase.⁴

Housing

Household Stock and Prices

Since the mid-1980s, the total number of single and multi-family units has increased considerably in the Antelope Valley. A variety of factors, including the availability of lower priced homes, has contributed to this substantial increase in total residential units.

In 1980, there were approximately 4,658 housing units in the City of Palmdale. Between 1980 and 1990, Palmdale’s housing stock increased by approximately 747 percent, to 24,439 units. Between 1990 and 2000,

⁴ Antelope Valley 2004 Demographic and Economic Study.

the number of housing units increased 76 percent compared to 11.5 percent for the County as a whole. This increase in housing units is anticipated to continue through 2020. Table 20-4 and Chart 20-2 show historic household trends for the City of Palmdale.

**Table 20-4
Housing Trends for the City of Palmdale**

TOTAL HOUSING UNITS	1980	1990	2000	2020 (projected)
Palmdale	4,658	24,439	37,136	74,197*

Source: City of Palmdale General Plan, 2000 Census.

* ESA projection based on SCAG 2004

Housing in Palmdale has traditionally been single family, with some gradual increases in the amount of multi-family units built. During the 1990s only 877 of the 15,029 housing units constructed were multi-family units. In 2000, 76 percent of the housing units in Palmdale were single family detached homes, compared to 49 percent countywide. Figure 9-1 identifies locations of homes in the Initial Study Area.

Vacancy Rates

Vacancy rates for the City of Palmdale have tended to be higher than the County of Los Angeles as a whole, indicating a weak housing market. In 1990, the vacancy rate for both renters and owners was 10.3 percent. In 2000, the vacancy rate dropped slightly to 7.6 percent while the County rate was 4.2 percent. Typically, growing communities such as Palmdale tend to have higher vacancy rates as housing supply stays slightly ahead of actual growth. Palmdale also has a higher home ownership rate with 71 percent of its units being owner occupied, compared to 48 percent countywide.⁵

Population Characteristics

As of 2000, 50 percent of the population of Palmdale was between the ages of 5 and 34. The median age was 28.2 years, which represents virtually no change from

the 1990 figure of 28.0. According to the 2000 census, the population was proportioned as follows: 41 percent White (non-Hispanic), 38 percent Hispanic, 15 percent African American, 4 percent Asian, and 1 percent American Indian and Alaskan Native.

According to information compiled by EAFB, as of September 2000, 28 percent of the population of the Antelope Valley as a whole was between the ages of 35 and 54. The majority of the population, over 30 percent, was between the ages of 0 and 17.⁶ According to statistics listed on the EAFB website, as of 2000, the population of the entire Antelope Valley was proportioned racially as follows: 73.2 percent White, 15.2 percent Hispanic, 7.2 percent African American, and 4.7 percent Other.⁷

Income

In 2000, the median household income in Palmdale (\$46,941) was slightly above the County median (\$42,189). Household income varied greatly among the three census tracts that include the unincorporated portions of the Initial Study Area as shown in Table 20-5.

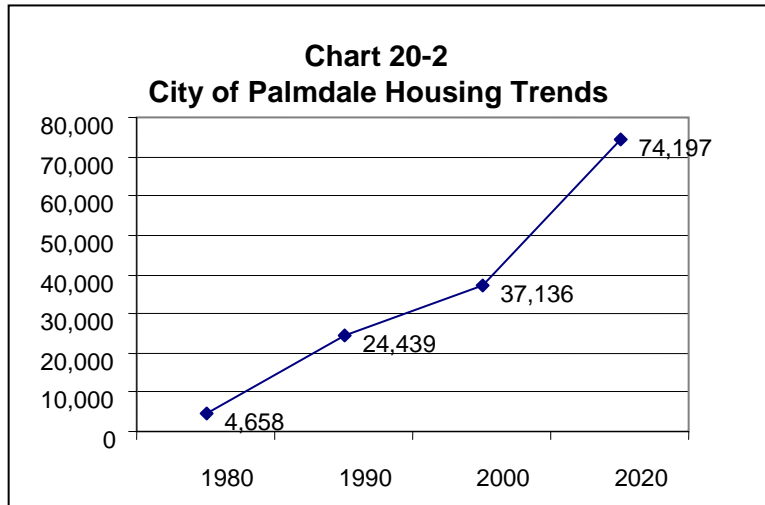
The City of Palmdale also had a slightly smaller percentage of families below the poverty line in 1999 (12.9 percent) as compared to the County (14.4 percent). When combined, the three census tracts that encompass the Initial Study Area had a slightly higher percentage of families with income levels below the poverty line (19 percent).⁸

⁵ U.S. Census Bureau, Summary File 1 and Summary File 3.

⁶ EAFB website (<http://afftc.edwards.af.mil/>).

⁷ Public Affairs, Air Force Flight Test Center, Antelope Valley Demographics. Accessed August 8, 2001. http://careers.edwards.af.mil/docs_html/community/community_demo.html.

⁸ U.S. Census Bureau, Summary File 3 (SF3).



Source: City of Palmdale General Plan, 2000 Census
 * ESA projection based on SCAG 2004

**Table 20-5
 Household Income and Poverty Status by Census Tract**

TRACT NUMBER	POPULATION	MEDIAN INCOME (\$)	PERCENT BELOW POVERTY LEVEL
9002	1,438	39,861	23%
9100	10,968	41,678	19%
9101	1,450	26,905	21%
Los Angeles County	9,519,338	42,189	18%

Source: 2000 Census Summary File 3.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

According to the CEQA Guidelines, a proposed project would have a significant effect on population and housing if it would:

- Induce substantial population growth in an area, either directly (for example, proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere;

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere;
- Contribute to the secondary effects of growth; and
- Affect minority or low income populations disproportionately.

Impact 20-1: The project could result in displacement of housing and individuals.

The proposed project would include upgrading treatment facilities to produce tertiary-treated wastewater effluent. These upgrades would be constructed within the current PWRP facilities located at 30th Street East. No new land is required to accommodate the treatment upgrades. The PWRP site currently is zoned for public facilities. The area is

mostly undeveloped and does not contain any residences. No individuals or housing would be displaced as a result of constructing the proposed wastewater treatment facilities.

There are no residences or sensitive receptors such as schools or churches in Storage Reservoir Area No. 1, and therefore no housing or people would be displaced for the construction of the reservoirs in this area. There is one residence in Storage Reservoir Area No. 2. Therefore, it is possible that construction of the reservoir in this area could displace this residence. There are no residences or other sensitive receptors in Storage Reservoir Area No. 3.

There is one residence in Agricultural Study Area No. 6. There are twelve residences within Agricultural Study Area No. 5. Acquisition of these areas could result in the removal of the residences and in the displacement of individuals in order to construct the proposed storage reservoirs and the agricultural use areas. Displacement of up to ten residences within the rural community would not be considered a substantial number of people under the CEQA significance threshold. Furthermore, District No. 20 will implement the following mitigation measures as part of the project.

Mitigation Measures

Mitigation Measure 20-1: All legal tenants/residents shall be relocated to residential dwelling units that are appropriate for the size of the family and in conformance with the housing quality standards set forth in the California Relocation Assistance and Real Property Acquisition Guidelines, CCR, Title 25, Chapter 6, Subchapter 1.

Mitigation Measure 20-2: No persons of low or moderate income shall be displaced unless and until there is a comparable replacement housing unit available and ready for occupancy by such displaced persons or families at rents comparable to those at the time of their displacement.

Significance After Mitigation

Less than significant.

Impact 20-2: The proposed project could cause disproportionate impacts to minority or low income populations.

Although CEQA does not specifically require that the effects of a project be evaluated with respect to environmental justice, the “CEQA-Plus” procedures outlined in the SRF financing guidelines include compliance with Executive Order 12898, which requires an environmental justice assessment.

The proposed project calls for the acquisition of a significant amount of land that could displace existing residences in certain areas. Also, the construction and daily operational effects of the PWRP would be experienced mostly by the existing population in the immediate vicinity of the facility. As such, these areas would experience effects of the project that other residences of the Antelope Valley would not experience. The types of effects include visual aesthetics, construction traffic, air quality, noise, housing, and land use.

The local residences would not benefit directly from the project since they are not within the service area and are currently not connected to the sanitary sewer system. All local residences utilize individual septic systems. Several residences located in the City of Palmdale and unincorporated areas would be relatively close to the proposed storage reservoirs, depending on where they are sited.

The project area is sparsely populated and it is expected that relatively few residences would need to be relocated. The need for the additional land has been well established. District No. 20 has identified sites for the proposed treatment and agricultural facilities to minimize the number of residences that may be displaced. The proposed treatment facilities would be placed within the existing plant property where there

currently are no nearby residences. The proposed agricultural facilities would be east of PWRP, where there are scattered residences, some of which could be displaced.

Table 20-6 shows the racial and ethnic composition of the three census tracts in which the Initial Study Area is located. The three census tract areas are substantially larger than the proposed project area reflecting the low density of population in the area. Figure 20-1 shows the census tract boundaries.

District No. 20 has conducted an extensive program alternatives analysis to minimize the impacts of the facility locations for this project (see Chapter 7.0 of this document). Based on the 2000 census data, tract 9101, located on the eastern portion of the proposed Agricultural Study Areas Nos. 5 and No. 6, contains a higher minority population and has a lower median income. Tract 9101 comprises approximately 60 percent of Agricultural Study Area No. 6. The total population in that tract is approximately 1,450. Agricultural Area No. 5 is within Census Tract 9002, which includes the entire area from Avenue M to the border of EAFB with a total population of 1,438. The impacted areas under each alternative would consist of only a few residences rather than the entire population of these areas. In addition, as previously mentioned, the whole of the tract would not be affected under any of the alternatives. The project areas have been chosen based on the proximity of available land that would

minimize impacts to the residential communities in the Palmdale area.

Mitigation Measure

No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

Impact 20-3: The proposed project would indirectly cause secondary effects of growth.

Growth Inducement

The CEQA Guidelines (Section 15126(D)) require that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this definition are public works projects, which would remove obstacles to population growth. It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can either directly or indirectly induce growth. Direct growth inducement would result if a project involved construction of new housing. Indirect growth

**Table 20-6
Race/Ethnicity by Census Tract**

GEOGRAPHY	WHITE (Not Hispanic)	HISPANIC	BLACK	OTHER
Tract 9002	69%	24%	0%	7%
Tract 9100	47%	39%	11%	3%
Tract 9101	20%	77%	0%	6%
Antelope Valley	73%	15%	7%	5%
Los Angeles County	31%	45%	10%	14%

Source: 2000 Census Summary File 3, http://careers.edwards.af.mil/docs/html/community/community_demo.html.

inducement would occur if a project would increase infrastructure, utility service areas, or job opportunities in an area. Similarly, a project would have an indirect growth inducement effect if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service.

Wastewater treatment service is one of the primary public services needed to support urban development. District No. 20 provides wastewater collection, treatment, and disposal services to the surrounding area. The proposed project would include expansion of wastewater facilities at the PWRP. In accordance with CEQA, implementation of the proposed project would be indirectly growth inducing. As indicated in the CEQA definition above, growth inducement itself is not necessarily an adverse impact.

The CEQA Guidelines explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant adverse impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of natural habitats, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with the land use plans and growth management plans and policies for the area affected. Local land use plans provide for development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service. A project that would induce “disorderly” growth, in conflict with local land use plans, could indirectly cause additional adverse environmental impacts and impacts to other public services. Thus, to assess whether a growth-inducing project will result in adverse secondary

effects, it is important to assess the degree to which the growth accommodated by a project would or would not be consistent with applicable land use plans.

The population projections used to size the planned expansions at the PWRP are the most recently approved SCAG forecasts. These figures were incorporated into SCAG 2004. SCAG is the regional planning authority for most of Southern California (excluding San Diego County). SCAG’s mission is to promote economic growth, personal well-being, and livable communities for all Southern California residents. SCAG population forecasts are the most widely accepted regional projections prepared in Southern California. SCAG forecasts are used in both the 1993 *City of Palmdale General Plan* and the *County General Plan*.

Population trends for Antelope Valley, and specifically the City of Palmdale, indicate that population and households are anticipated to increase substantially by 2020. This is consistent with the growth and employment trend that has been occurring since the 1980s. Specifically, the population within the Initial Study Area is expected to increase to 1,755 in 2020 and population for the City of Palmdale is expected to increase to 259,712 in 2025. This is consistent with the estimates used for the sizing of the PWRP. Generally, the city’s development has been shaped by existing constraints; Little Rock Wash forms a natural boundary between urban residential development in Palmdale and rural residential uses in unincorporated areas. In addition, the large amount of land owned by LAWA has inhibited development to the east.

The *City of Palmdale General Plan* identifies an adopted SOI that contains approximately 174 square miles. The Planning Area referred to in the general plan extends east to 120th Street East, south to the alignment of Avenue W (Angeles National Forest) to the east of SR-14, and follows an irregular boundary along the Sierra Pelona ridgeline west of the SR-14, north to Avenues M and L, west to 80th Street West south of Ritter Ridge, and 100th Street West north of Portal

Ridge. The sphere of influence is assigned by LAFCO. The existing PWRP service area is generally within the LAFCO-approved sphere of influence for Palmdale. The projected residential, commercial, and industrial growth areas identified in the *City of Palmdale General Plan* are all within the Palmdale sphere of influence.

Federal regulations, 40 CFR, Part 51, Subpart W, require that publicly owned treatment works phase capacity expansion to avoid inducing growth to the extent possible. As such, the PWRP treatment capacity has increased incrementally since its startup in 1959. The proposed project provides for a two-phase expansion over the next 20 years and would be constructed to match actual growth trends.

Local cities and counties have the ultimate responsibility for planning and development. District No. 20 does not have the authority to limit growth, but rather is required to protect public health and the environment. This is accomplished through the prevention of sewage system overflows within District No. 20's service area and the avoidance of discharging untreated sewage.

Secondary Effects of Growth

Growth in and of itself would not be considered a significant impact, but the indirect, secondary effects of growth could be considered significant. The growth-related impacts from the implementation of the proposed project would be indirect because they would result from the additional population accommodated by the project. Transportation, air quality, biological resources, housing, and public service impacts are the focus of growth-related impact analysis. Traffic congestion, air pollution, and increasing demand for the provision of public services such as water supply, solid waste disposal, electricity, and gas are significant secondary impacts of growth. Regional resource agencies have the responsibility of developing strategies to minimize the effects of growth.

Regional Management Plans

The authority to implement mitigation measures that would help to reduce impacts related to increased growth in the Antelope Valley reside with the local jurisdictions that control land use as well as state and federal agencies. To address regionally significant secondary effects of growth, numerous regional planning efforts have been conducted to assess and mitigate adverse impacts. The *1998 Regional Comprehensive Plan and Guide*, prepared by SCAG, combines regional planning efforts into a single focused document.

In April 2004, SCAG certified an EIR for the SCAG 2004. The SCAG 2004 acts as a long-term planning and management tool for the regional transportation system, providing mitigation measures to offset the impacts of growth. The SCAG 2004 updates population, housing, and employment forecasts from those used in the 1996 Regional Comprehensive Plan and Guide. These elements provide a basis for regional conformity review for federal regulations (as promulgated in 40 CFR, Part 51, Subpart W). The SCAG 2004 EIR concludes that implementation of the SCAG 2004 would cause significant unavoidable impacts to population and housing, land use, noise, aesthetics, and biological resources. Beneficial impacts to transportation and air quality were identified, providing some relief from these two major secondary effects of growth.

In addition, the SCAG 2004 proposes a new transportation system (called the Maglev) that would connect the PMD with LAX by rail, thereby reducing air emissions from commuters. Although this project has not yet been approved, the SCAG 2004 acknowledges that implementation of the Maglev would improve future air quality.

The most recent AQMP for the Antelope Valley was updated in 2003 by the SCAQMD. The AQMP analyzes projected air quality impacts and provides mitigation measures to offset those impacts from the

projected growth outlined in the *Southern California Association of Governments 2001 Regional Transportation Plan*. The AQMP is a required part of SCAQMD's compliance with the FCAA. The recently established AVAQMD has yet to complete an AQMP, separate from the SCAQMD, but will in the near future.

The *City of Palmdale General Plan* recognizes the need to reduce urban sprawl for the purpose of decreasing the impacts of growth on biological resources and air quality. The *County General Plan* has proposed targeting growth to reduce long-term effects on biological resources.

The WMP defines a regional strategy for conserving plant and animal species and their habitats and defines an efficient, equitable, and cost-effective process for complying with threatened and endangered species laws. The WMP will provide a mechanism to mitigate impacts of growth on local biological resources at a regional level.

The RWQCB-LR is responsible for the protection of water resources in the Antelope Valley. Growth may adversely affect water quality and beneficial uses of water resources, including the dry washes and groundwater. Encroachment of urban development increases urban runoff that can transport contamination to local *waters of the state*. Furthermore, as growth increases, wastewater treatment demands increase. The RWQCB-LR is responsible for evaluation measures such as the PWRP 2025 Plan and EIR to ensure long-term protection of beneficial uses of local receiving waters, including groundwater. The Water Quality Control Plan (i.e., Basin Plan) provides a regional assessment of biological resources in the Antelope Valley and establishes beneficial uses and water quality objectives for each resource. The beneficial uses of Little Rock and Big Rock Washes and local groundwater are listed in Table 14-1. Through permitting of wastewater treatment discharges and other discharges to *waters of the state*, and through the establishment of the Basin Plan, the RWQCB-LR

provides a regional management mechanism to ensure the long-term protection of water resources. Furthermore, implementation of the PWRP 2025 Plan and EIR with approval from the RWQCB-LR is a major step toward ensuring that growth in the Palmdale area does not adversely affect water resources or cause health impacts.

District No. 20 is entirely within the service area of the AVEK. AVEK is the water wholesaler for the area. The PWD conveys water to customers in the Palmdale area. The Urban Water Management Planning Act of 1983 requires that local water suppliers serving over 3,000 customers prepare an UWMP to assess water demand and available supplies. The City of Palmdale prepared an UWMP that includes measures to meet the future water demand of the city. The UWMP concludes that during dry years, there is currently (year 2000) a deficit of 1,934 afy. This deficit could increase to 13,214 afy by the year 2020.⁹ Water availability could be a limiting factor to growth in the future for the Antelope Valley. Currently, imported water supplies are augmented with groundwater in the region. If the groundwater basin is adjudicated in the future, limits to water extraction could limit growth in the region. Without limits on groundwater production, the increasing growth in the region could continue to adversely impact groundwater through continued overdraft of the groundwater.

Mitigation Measure

Mitigation Measure 20-3: District No. 20 shall phase capacity to accommodate actual growth.

Significance After Mitigation

Significant, unavoidable.

⁹ PWD, UWMP, 2000.