7.0 CUMULATIVE IMPACTS

The California Environmental Quality Act requires the discussion of the cumulative impacts, growth-inducing impacts, and long-term impacts of proposed projects. The following sections address these issues as they relate to implementation of the City of Moreno Valley General Plan.

7.1 Cumulative Impacts

The California Environmental Quality Act Guidelines define cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." The Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present, and reasonably foreseeable future projects (Section 15335). The Guidelines allow for the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

- List Method - A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.

- Regional Growth Projections Method - A summary of projects contained in an adopted general plan or related planning document or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (Section 15130).

The Moreno Valley General Plan establishes policy to guide future development within the City and implementation is long-term in nature. The Regional Growth Projections Method is appropriate methodology in evaluating cumulative impacts because it provides general growth projections for the region and considers long-term growth. However, the pending general plan amendments described in *Section 3.0 Project Description* are also assumed in the cumulative analysis.

Regional Growth Projections

The Southern California Association of Governments (SCAG) estimates regional growth for the Riverside County area for the purposes of planning and public policy development. The most recent set of growth projections are provided in the *2004 Regional Transportation Plan (RTP) Growth Forecast*, an extensive analysis of the regional economic and demographic conditions. The *2001 RTP Growth Forecast*

provides estimates and forecasts of employment, population, and housing for the period between 2000 and 2030. According to SCAG projections (**Table 7-1**), the population of Moreno Valley is expected to increase by about 96,000 persons or approximately 67 percent between 2000 and 2030 to approximately 238,703 persons. The population of Riverside County is projected to increase by 1.29 million persons or approximately 70 percent between 2000 and 2030 to approximately 3,143,468 persons. The number of households is estimated to increase approximately 69 percent in Moreno Valley and 121 percent in Riverside County in the 2000 to 2030 period.

TABLE 7-1
PROJECTIONS FOR MORENO VALLEY
AND RIVERSIDE COUNTY, 2000 AND 2030

	Total Population		Households	
	2000	**2030**	**2000**	**2030**
City of Moreno Valley	142,655	238,703	39,264	71,619
Riverside County	1,850,231	3,143468	509,311	1,127,780

Source: SCAG, 2004 RTP Growth Forecast.

The following is a discussion of the cumulative impacts of the proposed General Plan. Implementation of the mitigation measures identified in the previous sections of this EIR will reduce the cumulative impact of the project to the extent feasible. In many cases, the mitigation measures result in reducing the project's cumulative impact to a less than significant level. For other impacts, the implementation of the identified mitigation measures will not avoid a significant cumulative impact. The following section also identifies those significant, unavoidable cumulative impacts that will not be reduced to a less than significant level by implementation of the identified mitigation measures.

Land Use and Planning

Development under any of the three General Plan alternatives will occur according to the recommended distribution and intensity identified in the Land Use Element. Future development will comply with adopted land use standards, policies, and ordinances and will be compatible with land uses in surrounding areas. The proposed General Plan will not result in any land uses or circulation routes that would physically divide established communities either within the City or in Riverside County. In addition, the General Plan contains policies and implementation programs intended to ensure that development is compatible with existing regional development plans. Therefore, implementation of any of the proposed General Plan alternatives will not contribute to a significant cumulative land use impact.

Traffic/Circulation

The combined effect of the City's proposed land use and transportation polices would reduce traffic volumes on most freeway and major arterial facilities within the City of Moreno Valley. In addition, pursuant to Section 15130(a)(3) of the CEQA Guidelines, a

project's contribution is less than cumulatively significant if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The City already has in place the Transportation Uniform Mitigation Fee Program (TUMF) and the Development Impact Fee Program (DIF), discussed in Section 5.2. The purpose of these fees is to establish a fair share contribution for new development in order to facilitate build-out of the planned circulation systems. Therefore, implementation of any of the three proposed General Plan alternatives would not contribute to a significant cumulative traffic impact in the region.

Air Quality

The South Coast Air Basin has some of the worst air quality problems in the nation. Despite implementing many strict controls, the basin still fails to meet state and federal air quality standards for four of the criteria pollutants including ozone, nitrogen dioxide (NO_2), carbon monoxide (CO), and fine particulate matter (PM_{10}). Because the state and federal standards are not achieved, the basin is considered a "non-attainment" area for those pollutants. In accordance with federal Clean Air Act requirements, the State of California must submit a State Implementation Plan (SIP) to demonstrate how non-attainment areas will meet a number of federal health-based standards by specific deadlines. To bring the South Coast Air Basin in compliance with the SIP, the South Coast Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) adopted a revised Air Quality Management Plan (AQMP).

The development forecasted for the region will generate increased emissions levels from transportation and stationary sources. As described in *Section 5.3*, Alternative 1 is anticipated to generate over 57,838 pounds per day of PM_{10}, 26,196 pounds per day of ROG, 11,738 pounds per day of NO_X, and 116,908 pounds per day of CO. Similarly, Alternative 2 is anticipated to generate over 52,535 pounds per day of PM_{10}, 26,776 pounds per day of ROG, 10,814 pounds per day of NO_X, and 107,699 pounds per day of CO. Additionally, implementation of Alternative 3 would generate over 52,535 pounds per day of PM_{10}, 26,776 pounds per day of ROG, 10,814 pounds per day of NO_x, and 107,699 pounds per day of CO. Potential cumulative air quality impacts will be partially reduced by implementation and achievement of emissions levels identified in the Air Quality Management Plan (AQMP), County of Riverside General Plan, and General Plans of local jurisdictions. However, combined emissions from Moreno Valley and surrounding areas in the South Coast Air Basin are expected to continue to exceed state and federal standards for the foreseeable future. Therefore, cumulative impact to air quality is significant and unavoidable.

Noise

Anticipated regional development will increase traffic volumes and associated noise levels in the region. High noise levels already occur along many of the region's transportation corridors and implementation of any of the three proposed General Plan alternatives will generate additional vehicular traffic that would result in an incremental

increase in noise levels along these corridors. However, the incremental impact of the project is so small it would make only a negligible contribution to the cumulative impact with the region. Therefore, implementation of any of the three proposed General Plan alternatives would not contribute to a significant cumulative noise impact in the region.

Hazards and Hazardous Materials

As future development occurs within the City and the surrounding region, the population and activity level will rise and the number of people exposed to hazards related to the transport of hazardous materials will increase. However, the incremental impact of the project is so small it would make only a negligible contribution to the cumulative impact with the region. Enforcement of federal, state, county, and local hazardous material regulations will reduce public health hazards to a level less than significant. Other types of hazards would not compound or increase in combination with past, present or future projects. Therefore, implementation of any of the three proposed General Plan alternatives will not contribute to a significant cumulative hazards impact.

Geology and Soils

Future development in the region will increase the number of people exposed to seismic and geologic hazards. Erosion rates will be accelerated by earthwork for new construction. Such impacts are site specific and do not compound or increase in combination with past, present or future projects. Moreover, impacts related to these geologic conditions can be mitigated by implementation and enforcement of the local grading ordinance, standard structural regulations adopted and enforced by the City, and public safety policies and programs adopted by other jurisdictions. Geotechnical studies will be required for any future development projects to identify constraints and develop engineering parameters at a project-specific level. Therefore, implementation of any of the three proposed General Plan alternatives would not contribute to a significant cumulative impact associated with geology and soils.

Hydrology and Water Quality

The Santa Ana Regional Water Quality Control Board Basin Plan (Basin Plan) establishes water quality standards for all the ground and surface waters of the region. As development proceeds in the region, the total amount of pollutants entering downstream rivers and water bodies will increase. Cumulative impacts can be mitigated by implementing Best Management Practices in accordance with the National Pollutant Discharge Elimination Stormwater Permit. In accordance with Section 15064(i)(3) of the CEQA Guidelines, the projects' incremental contribution to the drainage system and water quality impacts is not cumulatively considerable because the project must comply with the joint NPDES permit from the Regional Water Quality Control Board, which includes specific requirements to substantially reduce the problem. Flood control and infrastructure maintenance needs can be met by the application of standard engineering practices. Therefore, implementation of any of the three proposed General Plan

alternatives would not contribute to a significant cumulative impact on hydrology/water quality.

Agricultural Resources

As of 2002, Riverside County has a total of 596,369 acres of agricultural land, of which 469,482 acres are considered important farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance). As Riverside County continues to develop, the existing agricultural land will continue to be converted to urban and non-agricultural uses. Future development within the planning area pursuant to the land uses under any of the three proposed General Plan alternatives would result in the eventual development of designated important farmland. Approximately 12,800 acres of land within the planning area is designated as important farmland, which is about 2 percent of the total within Riverside County. The possible conversion of the planning area's important farmland would result in a project-level significant impact. As a result, implementation of any of the three Moreno Valley General Plan alternatives will add to a significant, unavoidable, cumulative impact on agricultural resources within Riverside County.

Biological Resources

The proposed three Land Use Alternatives would increase the likelihood that the native and semi-native vegetation communities will be reduced within the western Riverside County region. Riversidean Sage Scrub and Riversidean Alluvial Fan Scrub have been diminished by past development throughout the region. These past habitat losses coupled with the potential future habitat loss in Moreno Valley would result in cumulatively considerable biological impacts in the MSHCP plan area.

Many Moreno Valley Non-native Grasslands and Field/Croplands support significant wintering raptor populations. Under the proposed project there is potential for losses of this wildlife resource in all of the project sections. Native grasslands have been severely diminished throughout California, increasing the use of Non-native Grasslands by raptors. More recently, Non-native Grasslands have come under increased development pressure, as they frequently occur on relatively level, developable lands. The high value of this resource, coupled with the historic and recent regional losses and potential for large-scale losses under the proposed Land Use Alternatives would result in cumulatively considerable raptor wintering and foraging impacts. Where Non-native Grasslands occur in smaller patches and can be demonstrated to lack significant raptor foraging value their loss would not be individually or cumulatively significant.
Cumulatively considerable impacts to sensitive species within the planning area may also occur and could be cumulatively considerable.

The MSHCP has been designed to compensate for the loss of biological resources throughout western Riverside County, and cumulative impacts to existing biological resources resulting through increased future development have been addressed in the

MSHCP Final EIR/EIS dated June 17, 2003. Therefore, future development projects within the planning area that conform to the MSHCP would not result in cumulatively considerable impacts for those biological resources adequately covered by the MSHCP. Implementation of Mitigation Measures identified in the Biological Resources section would provide for further environmental review to ensure conformance with the MSHCP and future implementing plans/ordinances at the project-specific level.

For resources not covered adequately by the MSHCP, additional mitigation may be necessary. Any impacts to wetlands are cumulatively considerable. Compliance with federal and state regulations (implementation of Mitigation Measures identified in the Biological Resources section) is expected to reduce these impacts to a level below significance or less than cumulatively considerable. Impacts to non-covered sensitive species or resources resulting from the Land Use Alternatives are not expected to be cumulatively considerable.

Cultural Resources

Impacts to cultural resources would not compound or increase in combination with past, present or future projects in the region. Moreover, impacts can be reduced to a less than significant level through retaining historic structures, archaeological, and paleontological resources or mitigating the impact. Mitigation will occur by implementing County and local cultural resource protection policies. Development proposals will be assessed for impacts according to CEQA and site-specific mitigation measures will be required where necessary. Mitigation and/or avoidance of impacts to cultural resources at the project-level will avoid a cumulatively significant impact. As a result, Implementation of any of the three proposed General Plan alternatives would not result in a cumulatively significant impact on cultural resources.

Aesthetics

Development within the planning area and the region would reduce the aesthetic value of these areas, as well as increase the amount of additional light and glare in the region. However, incremental amount of light and glare due to the project is so small it would make a minimal contribution to the cumulative impact in the region. Implementation of none of the General Plan alternatives would result in a cumulatively significant impact on aesthetics impact within the Riverside region. Most areas of the region are not visible from the planning area and the planning area is not visible from most of the region. The surrounding hills are planned for low density or open space uses which means that their aesthetic character should not change substantially.

Population and Housing

While any of the three General Plan alternatives would allow for an increase in the population of the planning area, none would induce a greater rate of growth, nor would it do so in combination with past, present or future projects in the region. As a result,

implementation of any of the three General Plan alternatives would not result in a significant impact to housing and population. Implementation of any of the three proposed General Plan alternatives would not result in the displacement of substantial numbers of existing housing units or persons since the majority of the land designated for future development consists of vacant land, agricultural, or redevelopment of non-residential land. Any displacement that might occur is so incremental that it would make a minimal contribution to any cumulative impact that might occur in the region. Therefore, the implementation of none of the three proposed General Plan alternatives would contribute to a significant cumulative impact on housing and population.

Public Services

Future regional growth will result in increased demand for police protection, fire protection and emergency services, schools, libraries, parks and recreation facilities, water services, sewer services, flood control, energy, and solid waste services. Service providers must continue to build or expand facilities to provide acceptable levels of service. The incremental effects of the project are not cumulatively considerable for police, fire, school, library, flood control, park, recreation and sewer facilities. Such facilities serve the immediate area that requires the service. The incremental impacts due to the construction of new water, energy and solid waste facilities are so small that they are not cumulatively considerable. They would make a minimal contribution to any cumulative impact caused by other projects in the region. Therefore, implementation of any of the three proposed General Plan alternatives will not contribute to a significant cumulative public services and utilities impact.

Mineral Resources

No regionally or statewide significant mineral resources are located within the City of Moreno Valley planning area. Implementation of any of the three proposed General Plan alternatives would not result in the loss of availability of a significant mineral resource, and no significant impact to mineral resources would occur. Both the City and the County have adopted SMARA regulations governing the extraction of mineral resources and eventual reclamation of mining operations. Continued implementation of these regulations will allow for the mining of locally-important mineral resources, as identified in the County of Riverside General Plan. As a result, implementation of any of the three proposed General Plan alternatives would not contribute to a significant cumulative mineral resources impact.

7.2 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impact of the proposed project. Growth-inducement includes, "…ways in which the 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 are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

All three General Plan Alternatives provide capacity for residential and non-residential growth. The associated increase in population and employment generating uses allowed under the General Plan has the potential to induce growth in areas outside of the planning area. Population increases would induce commercial development. Employment generated by industrial development would stimulate the development of housing for new employees. The vacant portions of the City have the greatest potential to experience significant growth-inducement as these areas are primarily rural and undeveloped, and future growth in these areas would be influenced by the increases in housing, population and employment generating uses expected in the City. New residential developments in the eastern portion of the City will require the installation of additional infrastructure such as new roadways, water systems, and sewage disposal to serve these areas. Even though the extension of this infrastructure would be confined to the planning area, the additional utilities may also induce growth beyond the boundaries of the planning area. Therefore, implementation of the General Plan could cause a significant growth-inducing impact to areas surrounding the planning area. Section 7.1 of this EIR provides a detailed analysis of the anticipated cumulative impacts expected from growth in the Riverside County region.

7.3 Significant Irreversible Environmental Changes

Development allowed according to any of the three General Plan alternatives will result in the consumption of non-renewable energy resources, which will have an irreversible effect on such resources. All three proposed General Plan alternatives would result in development of urban uses in areas that are currently vacant. Once developed, reverting to a less urban use or open space is highly infeasible. Development in the planning area according to any of the three proposed General Plan alternatives would also constrain future land use options.

Several irreversible commitments of limited resources would result from implementation of any of the three proposed General Plan alternatives. The resources include, but are not limited to the following: lumber and other related forest products; sand, gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead and other metals; and water consumption. Buildout according to any of the three General Plan alternatives represents a long-term commitment to the consumption of fossil fuel oil, natural gas and gasoline. These increased energy demands relate to construction, lighting, heating and cooling of residences, and transportation of people within, to and from the planning area.

7.4 Unavoidable Significant Environmental Impacts

Implementation of any of the three proposed General Plan alternatives will result in the following significant, project level and cumulative unavoidable impacts:

- Air Quality
- Agricultural Resources

7.5 Areas of No Significant Impact

The following areas are analyzed as part of this EIR and were found to have no significant project level or cumulative impact.

- Land Use and Planning
- Population and Housing
- Mineral Resources

Mitigation measures will reduce impacts to less than significant levels with respect to the following environmental effects:

- Traffic
- Noise
- Hazards
- Geology and Soils
- Hydrology and Water Quality
- Biological Resources
- Cultural Resources
- Aesthetics
- Public Services and Utilities

This page intentionally left blank.