

6.0 ANALYSIS OF LONG-TERM EFFECTS

The California Environmental Quality Act (CEQA) requires the discussion of the cumulative impacts, growth-inducing impacts, and long-term impacts (irreversible environmental changes) of proposed projects. The following sections address these issues as they relate to implementation of the Project.

Cumulative Impacts

The CEQA Guidelines (Section 15355) define a cumulative impact as “an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.” The Guidelines further state that “an EIR should not discuss impacts which do not result in part from the evaluated project.”

Section 15130(a) of the CEQA Guidelines requires a discussion of cumulative impacts of a project “when the project’s incremental effect is cumulatively considerable.” Cumulatively considerable, as defined by Section 15065(c), “means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

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 Project, and in particular the General Plan, establishes policy to guide future development within the Planning Area and implementation is long-term in nature. Therefore, the Regional Growth Projections Method is an appropriate methodology for evaluating cumulative impacts as it provides general growth projections for the region and considers long-term growth. **Table 6-1**, below, shows SCAG population and housing projections for the City of Riverside (a subarea of the Planning Area) and the Western Riverside County Council of Governments (WRCOG) region (which encompasses all lands within Riverside County west of the San Jacinto Mountains and including San Geronio Pass cities east to Beaumont). **Figure 6-1** shows a map of the WRCOG region.

Table 6-A Population and Housing Projections				
Geography	Total Population		Housing	
	<i>Year 2000</i>	<i>Buildout(2025)</i>	<i>Year 2000</i>	<i>Buildout (2025)</i>
Riverside	256,352	353,397	82,452	121,149
WRCOG	1,205,301	2,230,185	385,947	776,168

Source: SCAG, 2004.

Geographic Scope of Cumulative Impact Analysis

Except where noted, the Western Riverside Council of Governments (WRCOG) generally defines the geographic scope of the cumulative analysis. In the following discussion, the WRCOG area is referred to as “the region.” This area was chosen because it allows analysis of the impacts of the Project in combination with other nearby jurisdictions to determine the cumulative impacts of regional growth. It also permits consideration of the Project’s place in regional planning mechanisms established by WRCOG, such as the Transportation Uniform Mitigation Fee, and air quality and recycling programs.

Cumulative Impacts

The following is a discussion of the cumulative impacts of the proposed Project. Implementation of the mitigation measures identified in the previous sections of this EIR help to reduce the cumulative impact of the project to the extent feasible. In many cases, implementation of mitigation measures identified in the analytical sections of this EIR (and summarized in Section 2.0, Executive Summary) will reduce the potential cumulative impact to a less than significant level. In other words, the project’s contribution to cumulatively significant impacts will not be considerable.

For impacts to air quality, agricultural lands, water quality, dam inundation, noise, parks, and transportation, however, adherence to and implementation of General Plan policies, mitigation measures, and other Project features will substantially lessen but will not completely avoid significant cumulative impacts. In other words, the Project’s contribution to cumulatively significant air quality, agricultural lands, water quality, dam inundation, noise, parks, and transportation, impacts remain considerable as summarized below.

Aesthetics

Aesthetics issues that can result from implementation of a City’s General Plan are typically confined to that City’s boundaries. However, in some cases, development within a city may result in aesthetic impacts outside of a city. For example, development of a prominent hillside or a ridgeline within a city may impact views of that hillside or ridgeline from a scenic highway, public place, or private residence located outside of that city. This would be an example of a cumulative aesthetics impact. Another example of a cumulative aesthetic impact would be a substantial increase in light pollution that could directly affect an observatory.

The Citywide Design and Sign Guidelines limit impacts to aesthetic resources by reducing interruptions of scenic vistas, maintaining and enhancing scenic resources and visual character, and reducing light and glare in the Planning Area. The General Plan also includes policies (Section 5.1 – Aesthetics) that will reduce the project’s contribution to cumulative aesthetic impacts related to scenic vistas and light and glare.

As one means of limiting visual impacts on prominent hillside areas, the General Plan sets forth the Hillside Residential designation to limit development of these ecologically and visually sensitive areas. Complementing the General Plan, Article V of the proposed Zoning Code (Base Zones and Related Use and Development Provisions) maintains the Residential Conservation Zone (RC) to protect prominent ridges and hillsides, slopes, arroyos, ravines and canyons, and other areas with high visibility or unique topographic conditions from adverse development practices, whether they are within the Hillside Residential General Plan designation or not. The RC Zone protects aesthetic views by, among other things, limiting the intensity of development, by limiting building heights to one story, maximizing retention of aesthetic features, and requiring approval and oversight of the Design Review Staff according to specific design criteria (Existing Zoning Code, § 19.09 and Proposed Zoning Code, § 19.100).

Although sources of light and glare will increase within the Planning Area, the Zoning Code provides protections to reduce light and glare with hoods/shields. The Citywide Design and Sign Guidelines include direction that light sources are shielded to confine light spread within site boundaries and illumination for security purposes is adequate but not excessive. The southern sphere area (the largest undeveloped portion of the Planning Area) has Agricultural/Rural Residential, Agriculture, or Open Space and Habitat designations. These designations will not allow heavily lighted urban uses. A portion of this area is located within the Mount Palomar Observatory Policy Area. New sources of light, both inside the Mount Palomar Policy Area and other areas of the Project, from street lights, commercial parking lots, parks, office buildings, residential security lighting and industrial areas all will contribute to light and glare and affect the nighttime sky. County Ordinance No. 655 is designed to address impacts to the night sky that could limit operations at the observatory. Mitigation measure **MM Aes 1** is in line with this County ordinance and will reduce this impact to less than significant levels by requiring all development which introduces light sources, or modifications to existing light sources, to have shielding devices or other light pollution limiting characteristics such as hoods or lumen restrictions. Additionally, General Plan Policy **OS 2.5** was created to review the feasibility of creating a City “nighttime sky” ordinance to reduce light pollution further. Therefore, because the City will mitigate new sources of light within the Planning Area, and the largest undeveloped portion of the planning area is designated for uses that will produce little or no new sources of light and glare, the City will not contribute a considerable level of new light and glare.

In all, the Project’s contribution to cumulative aesthetics impacts is **less than significant**.

Agricultural Resources

Cumulative losses to agriculture are considered by the State Department of Conservation to be an environmental impact of regional and statewide importance. The General Plan, Zoning Code and Subdivision Code have incorporated the provisions of Proposition R and Measure C, as well as General Plan policies which encourage continued agricultural uses. Although both the General Plan and the Zoning Code retain land classifications for agricultural use and no land previously designated for agricultural has been redesignated for another use, impacts to Williamson Act Contract land and the conversion of agriculture to non-agricultural uses remain significant project-specific environmental impacts because non-agricultural uses would be permitted in areas containing farmland.

The Southern California region is experiencing rapid loss of farmland, reduction in land under Williamson Act Contracts, and agriculture in general, an impact to which the Project will contribute. In terms of dollar value, agriculture is today the largest industry in Riverside County, providing employment for a significant portion of the County's population. Agricultural production in Riverside county includes, among others, citrus, tree and vine crops, nursery, and livestock. According to the Riverside County Agricultural Crop and Livestock Report, for every dollar received by farmers in Riverside County, the financial impact to the region is 3 times that amount. With crop valuations that have hovered around \$100,000,000 over the last ten years, it represents an economic benefit to the County. Currently, agriculture faces continuing pressure from urbanization, foreign competition, and rising production costs. Despite these pressures, those areas which remain in agricultural production represent a significant open space and economic resource for the County. As values of differing crops vary significantly, it is the loss of agricultural land that is the appropriate measure of whether the cumulatively significant environmental impacts related to agriculture are occurring.

In 1990, Riverside County had a total of 343,072 acres of harvested crops. In 2002, the total acres had dropped to 241,294 and by 2005 to 223,848 harvested acres. This represents a loss of 119,224 acres in 15 years (35 percent) with 14 percent of that loss (17,446 acres) occurring within the last four years (2002 through 2005). The Agricultural Commissioner's Office also reports these statistics for regions of the county, including the Riverside/Corona District, within which the project is located. For the same 2002 to 2005 timeframe, the Riverside/Corona District went from 21,600 harvested acres to 14,340 harvested acres; a reduction of 34 percent. This shows that the development pressure faced in the western end of the county where City of Riverside is located is more rapid than in the county as a whole.

The economic viability of agricultural operations in the Riverside Sphere of Influence and southern California has declined in recent years. Increasing prices of land, higher water and labor costs, increased environmental regulations, higher property taxes, competition from other parts of the state, and growing urbanization have all worked together to put considerable pressure on farming as an economically viable use. The City recognizes Farmland as a finite and unique resource. Once the Farmland within the Project is converted to other uses, that farmland is effectively eliminated. Further, due to the declining economic viability of agriculture, preservation of agriculture in isolated preserves will not mitigate that impact.

In 2007, the Riverside campus of the University of California (UCR) consisted of about eleven hundred acres roughly bisected by the SR- 60/I-215 Freeway, with the main campus and majority of student and faculty housing east of the freeway. Historically, University-owned land west of the freeway has been devoted to agricultural research uses, including many acres of cultivated plants. UCR's Long-Range Development Plan calls for approximately 125 acres of Prime Farmland to be converted to non-agricultural uses to serve significant anticipated growth of the University enrollment. An Environmental Impact Report (EIR) has been prepared by the University for UCR's Long Range Development Plan and this impact was found to be significant and unavoidable.

To prevent indirect impacts to agricultural areas, the Project includes policies that will retain, protect, and encourage agricultural use. General Plan policies listed in Section 5.2, Agricultural Resources, of this EIR require the City to evaluate the preservation and protection of agricultural land through assistance programs, development of agricultural zones, transfer of development rights and leases to UCR, development of suitable buffers around agricultural uses to prevent incompatible land uses adjacent to agricultural uses, and water subsidies. Even if all such actions and programs were in place today, development pressure in western Riverside County is causing agricultural land to be used for providing homes and businesses at a rate of 8.5 percent annually. No feasible mitigation measures are available to further lessen direct or indirect adverse impacts beyond the policies listed in Section 5.2. Therefore, because the Project will contribute cumulatively to the loss of agricultural land through conversion to non-agricultural uses with other jurisdictions in the region, **the Project's cumulative environmental impacts to agricultural resources are significant.**

Air Quality

The portion of the Basin within which the City is located is designated as a non-attainment area for ozone, PM-10 and PM-2.5 under State standards, and as a non-attainment area for ozone, carbon monoxide, PM-10, and PM-2.5 under Federal standards.

In evaluating the cumulative effects of the Project, Section 21100(e) of CEQA states that "previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis." Additionally, the SCAQMD recommends assessing projects' cumulative impacts by utilizing the same significance criteria as those used by the project. In addressing cumulative effects for air quality, the AQMP utilizes approved general plans and, therefore, is the most appropriate document to use to evaluate cumulative impacts of the subject project. This is because the AQMP evaluated air quality emissions for the entire Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the Planning Area, into compliance with all Federal and State air quality standards. The Maximum and Maximum w/PRD projections are included and evaluated in the air quality analysis for comparison, but, although theoretically possible, that level of development is not reasonably foreseeable due in part to proposed development projects having to comply with roadway level of service standards, City codes (Zoning Code Chapter 19.780.040) and regulations, and site constraints such as topography. As discussed above, the General Plan is

consistent with the underlying land use assumptions in the AQMP, and is therefore not in conflict with the AQMP.

As discussed in Section 5.3, Air Quality, the proposed Project is consistent with the SCAQMP at Typical built-out levels. However, the discussion below identifies areas where standards will be substantially exceeded, resulting in cumulative impacts.

SCAQMD has set recommended thresholds (**Table 5.3-B**) for construction-related emissions. Emissions higher than those suggested by the SCAQMD thresholds are significant on a project-specific basis and when combined with the short-term emissions from all of the other projects within the Basin can also be considered a significant cumulative impact.

As shown in **Table 5.3-K** and **Table 5.3-L**, long-term daily emissions associated with General Plan build-out in 2025 will substantially exceed daily thresholds for all criteria pollutants even though emissions of NO_x and CO decrease in all three scenarios in both summer and winter and ROG and NO₂ decrease in the Typical and Maximum scenarios in both summer and winter. These decreases in emissions which SCAQMD has built into its models are primarily due to anticipated improvements to automotive fuels, and cleaner burning engines that reduce vehicle exhaust emissions. High concentrations of various constituents may result in impacts to human health. The following health risks are associated with high concentrations of all the criteria pollutants: restricted oxygen absorption in the blood stream; coughing, altered respiratory responsiveness and pulmonary functions, and increased respiratory illness in children; reduced lung function in healthy people as well as increased sensitivity in people with preexisting respiratory illness; lung damage and interference with the body's ability to clear its respiratory tract; shortness of breath and wheezing and, with long-term exposure, exacerbate existing cardiovascular disease and respiratory illnesses. Although long-term emissions are expected to decrease by 2025, all criteria pollutants remain above the SCAQMD thresholds which represent a significant cumulative impact.

According to the General Plan Traffic Report, build-out of the General Plan at Typical densities is expected to increase traffic by approximately 50 percent. Since the transportation sector is responsible for approximately 41 percent of California's GHG emissions, the impact to GHG production is considerable. Energy use resulting from development allowed under the General Plan may also contribute to cumulatively considerable GHG emissions. The programs listed in the Local Programs section under Related Regulations and policies located in the Related General Plan Policies portion of Section 5.3 will help reduce vehicle trips and increase energy efficiency throughout the Planning Area. Examples include the Residential Shade Tree Program and the Community Energy Efficient Program which help increase energy efficiency and reduce fossil fuel consumption. Policies like AQ-1.7 continue to promote planned residential development and infill housing, which reduces vehicle trips. The MASP is designed to concentrate development around public transportation. In addition, this General is built on Smart Growth principles. By carefully integrating land use with transportation, both the number and duration of trips can be significantly reduced. By encouraging a mixture of compatible and synergistic land uses, the interaction between residential, commercial and employment uses will be strengthened, resulting in a reduced dependency on automobiles. Other benefits include

decreased urban sprawl, improved air quality, increased use of transit and better conservation of land resources.

In particular, three separate mixed use land use designations are being established as part of this General Plan update. These designations have been concentrated along the major transportation corridors and in key in-fill locations. This will encourage residents to live, work and shop in the same area, thus reducing their need to own or use private automobiles. It also encourages other forms of transportation, including walking, bicycling and transit. Transit will be a particularly viable option for reducing vehicle trips since the Riverside Transit Authority is proposing a Bus Rapid Transit route along the Magnolia Avenue corridor. Opportunities also exist for transit oriented development at the two Metrolink stations, with transit links to the Magnolia Avenue corridor, further reducing vehicle trips. While programs and policies like those outlined above will substantially lessen GHG emissions, reductions cannot be precisely quantified; therefore, this EIR assumes that emissions will remain cumulatively considerable.

In accordance with CEQA, impacts that are less than significant individually, but cumulatively considerable, may be significant. Cumulative emissions resulting from build-out in 2025 will contribute criteria pollutants and global warming gases to the Basin. **Therefore, implementation of the General Plan will result in a cumulatively significant net increase of criteria pollutants.**

Biological Resources

As described in Section 5.9 – Land Use and Planning and in detail in Section 5.4 – Biological Resources, the Project is consistent with and will facilitate implementation of protections provided in the Western Riverside County Multi-species Habitat Conservation Plan (MSHCP) and the Stephen's Kangaroo Rat (SKR) Habitat Conservation Plan (HCP). Species and habitats not covered under these plans are covered under other State and Federal laws which, when enforced through CEQA (including mitigation measures, herein) and NEPA, will be protected. There are no direct project specific impacts as a result of adoption of the General Plan; therefore, no impacts exist at a programmatic level. Additional General Plan policies and City Codes & Ordinances also serve to protect habitat and require development proposals to comply with all State, Federal and Local regulations related to wildlife and habitat protection. For example, Section 17.28.020 of the City's Grading Code prohibits development within specified arroyos. The General Plan Land Use and Urban Design, and Open Space and Conservation Elements include numerous objectives and policies designed to reduce impacts to biological resources over the long-term. Additionally, the Project will not impede implementation of the provisions of the Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, and the El Sobrante Landfill HCP. **Implementation of General Plan policies and provisions of the MSHCP and SKR HCP will ensure that the Project's cumulative impacts to biological resources will be less than significant. Additionally, MM Bio 1 will further reduce impacts by addressing impacts to species not covered by the MSHCP.**

Cultural Resources

Future development resulting from the Project could result in potentially significant impacts to historic, archaeological, and paleontological resources. In addition, future development could result in disturbance of previously unknown human remains. Preserving the City's rich array of cultural and historic resources is the primary goal of the City's Historic Preservation Element. Implementation of General Plan policies and mitigation measures included in Section 5.5 – Cultural Resources of this EIR will reduce Project impacts to less than significant levels.

Impacts to a particular historic resource are not usually cumulative in nature; however, cumulative impacts to paleontological and Native American resources, including human remains, could be cumulative if no documentation, consultation, or preservation were being implemented throughout the region. Since all local jurisdictions, including Riverside, are subject to local, State and Federal laws, including CEQA, and consultation is required with local Native American tribes and the state Native American Heritage Commission, cumulative impacts to such resources should not occur. **Utilizing the site development permit process and the CEQA process for individual projects, consultation requirements of SB 18 for General Plan Amendments and Specific Plans, along with implementing the General Plan's objectives and policies, and mitigation measures identified in this EIR, potential cumulative impacts to cultural resources will be reduced to a less than significant level.**

Geology/Soils

Geologic hazards are localized by nature, as they are related to the soils and geologic character of a particular site. Cumulative impacts could occur related to an earthquake, if the magnitude of the quake and location of the fault(s) traversed the region. Impacts due to seismic activity would be cumulative if State and local building and development codes and regulations were not being implemented throughout the region. Pursuant to City and State Building Code requirements, all new development will be required to incorporate appropriate design and construction measures to guard against groundshaking hazards. Further, all projects and structures will be constructed in compliance with existing seismic safety regulations of the California Uniform Building Code, which requires the use of site-specific engineering and construction standards identified for each class of seismic hazard. In addition, Riverside requires geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. Proposals and projects for development or redevelopment which do not provide for mitigation of seismic or geologic hazards to the satisfaction of responsible agencies will not be approved. Cumulative impacts related to wind and stormwater erosion were addressed in the Air Quality and Hydrology sections, respectively. **Since all local jurisdictions in the region, are subject to local, State and Federal laws, including CEQA, cumulative impacts related to seismic safety are less than significant.**

Hazards and Hazardous Materials

Implementation of General Plan Public Safety Element objectives and policies and mitigation measures included in Section 5.7 – Hazards and Hazardous Materials of this EIR regarding hazardous materials, enforcement of existing practices applicable to businesses that use or

manufacture hazardous materials and wastes, and compliance with existing Federal, State, and local regulations will provide a level of protection to current safety standards. Riverside will also continue to reduce the potential for dangerous fires by concentrating development in previously developed areas within the Planning Area where risk of wildland fire is lower than in urban/wildland interface areas on the urban periphery. Additionally, continued implementation of Zoning Code regulations and General Plan policies will reduce impacts relative to airport hazards to a less than significant level. **Compliance with existing City, State and Federal regulations and mitigation measures identified in this EIR will ensure that no significant cumulative impact will result from a hazard or hazardous materials.**

Hydrology/Water Quality

All individual projects implemented under the General Plan and development in other jurisdictions in the region will be required to comply with applicable Federal, State, and local water quality regulations. During construction, projects over 1 acre will be required to obtain coverage under the State's General Permit for Construction Activities that are administered by the Santa Ana RWQCB. Storm water management measures will be required to be identified and implemented that will effectively control erosion and sedimentation and other construction-related pollutants during construction. Other management measures, such as construction of infiltration/detention basins, will be required to be identified and implemented that will effectively treat pollutants that would be expected for the post-construction land use. Although, the storm water management measures reduce impacts of storm water pollutants and discharges, the NPDES permit and WQMP do not prevent all discharges of storm and non-storm waters. New and existing developments may add small amounts of pollutants to runoff into the Santa Ana River and San Jacinto River (Canyon Lake and Lake Elsinore), which are impaired receiving waters, as identified in Section 5.8, Hydrology and Water Quality. Compliance with the NPDES permits will lessen impacts to the extent feasible; however, **when combined with all other development within these watersheds, cumulative impacts related to exceeding water quality standards or waste discharge requirements related to implementation of the General Plan are considered significant.**

Currently, ninety seven percent of the City's water supply comes from several groundwater basins. Through an adjudicated management process, these basins will maintain safe yield. Therefore, because safe yield will be maintained in the groundwater basins and none of the basins are overdrafted (nor are they projected to become so), other forms of conservation such as recycled water will be developed, and because the project has no direct impacts to groundwater recharge, **the Project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level and both project specific and cumulative impacts are considered less than significant.**

The implementation of the General Plan policies and compliance with the Municipal Code will be sufficient in protecting new housing or structures within a 100-year flood hazard area. Therefore, **impacts of flood hazards to housing or structures under the General Plan will be less than significant.**

Cumulative impacts associated with dam failure would result if more than one dam failed in a catastrophic seismic event. There are nine dams located within the Planning Area. Division 3 of the California Water Code places supervision of non-federal dams the responsibility of the State Division of Safety of Dams (DSOD). The DSOD routinely inspects operating dams to ensure that they are adequately maintained, and to direct the dam owner to correct any deficiencies. Implementation of DSOD recommendations, will mitigate this impact to the degree feasible, but will not completely eliminate the risk of dam failure. No other feasible mitigation measures to reduce this impact to a less than significant degree. Thus, **the potential to expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of one or more dams failing simultaneously remains both project-specific and cumulatively significant and unavoidable.**

Land Use and Planning

Consistent with Southern California Association of Governments (SCAG) goals and policies, the Project proposes a mix of land uses that will improve the jobs-housing ratio, reduce the number and length of work trips, and provide opportunities for additional affordable housing in the region. In addition, the Project contains policies that will ensure new development is compatible with existing regional development plans such as the SCAQMP and SCAG regional plans. SCAG's primary plan to address regional growth is the Regional Comprehensive Plan (RCP). The RCP is built around the [Compass Growth Vision](#) and [2% Strategy](#) adopted by the Regional Council in April 2004. The recommendations made within each chapter are comprised of infrastructure and resource activities consistent with the envisioned growth pattern. Riverside General Plan implements the RCP and Compass Blueprint 2% Strategy through the MASP, BRT, the addition of Smart Growth principles and other policies and programs that deal with mobility, livability, prosperity, and sustainability. Section 5.9, Land Use and Planning, contains the SCAG Policy Consistency Matrix, which demonstrates the Project's consistency with SCAG policies. With proposed mitigation, the Project's only significant land use impact—consistency with local redevelopment plans—will be reduced below a level of significance. Notably, this impact can be considered de minimis in that State Redevelopment Law requires all redevelopment plans to be consistent with the community's adopted General Plan (California Health and Safety Code Section 33331).

The Project's cumulative land use impacts will be less than significant.

Mineral Resources

As of 2004, no active mining operations exist or are permitted within the City or its sphere of influence. Implementation of the Project will not 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. The current land uses in the City's only State-classified MRZ-2 zone are fully compatible with this mineral resource zone according to the City of Riverside Municipal Code. There will be no impact to mineral resources as a result of the Project.

The Project's cumulative mineral resources impacts will be less than significant.

Noise

Anticipated development in the Planning Area will generate short-term noise during the construction of individual developments. Additional development in the Planning Area (and, significantly, in the greater region) will increase traffic volumes and associated long-term noise levels. Implementing local noise codes, constructing buildings according to State acoustical standards and proper land use planning will reduce cumulative impacts on residences, schools, hospitals and other noise-sensitive uses.

However, as described in Section 5.11, development pursuant to land use policies could result in an increase in traffic noise along freeways, major arterials, and railways. The analysis in Section 5.11 also accounts for ambient regional traffic growth as a significant factor in raising local noise levels. Noise associated with planned operations for Riverside Municipal Airport, Flabob Airport, and March Air Reserve Base/March Inland Port is also projected to increase. Cumulative noise levels along these transportation corridors will result in the continued exposure of some residential areas to noise levels inconsistent with the City's noise/land use compatibility criteria set forth in Table 5.11-D in Section 5.11.

As for new development, interior noise levels of future residential development projects in these areas will be required to be reduced to at least 45 dBA, consistent with State Title 24 Noise Insulation requirements. However, the extent to which exterior sound levels can be brought within acceptable levels is unclear.

The Project could facilitate development along regional freeways and major arterials where regionally generated traffic is a substantial source of future noise. The EIR has determined that noise/land use compatibility impacts associated with these increased noise levels cannot be mitigated. **The Project would be contributing to this significant and unmitigable cumulative noise impact related to significant increases in ambient noise levels.**

Population and Housing

The population region within which the City of Riverside is located is governed by SCAG. Riverside's General Plan implements SCAG plans and policies to address cumulative impacts. SCAG's primary plan to address regional growth is the Regional Comprehensive Plan (RCP). The RCP is built around the [Compass Growth Vision](#) and [2% Strategy](#) adopted by the Regional Council in April 2004. The recommendations made within each chapter are comprised of infrastructure and resource activities consistent with the envisioned growth pattern.

Riverside General Plan implements the RCP and Compass Blueprint 2% Strategy through the MASP, BRT, and other policies and programs that deal with mobility, livability, prosperity, and sustainability. Section 5.9, Land Use and Planning, contains the SCAG Policy Consistency Matrix, which demonstrates the Project's consistency with SCAG policies.

As described in Section 5.12 – Population and Housing, the Project's population and housing capacity is generally consistent with SCAG's long-range forecasts. In addition, the Project aims to better balance jobs and housing by bringing additional employment opportunities to the

Planning Area. Over the past two decades, the Planning Area has served as somewhat of a bedroom community for Los Angeles and Orange Counties. The Project also emphasizes smart-growth, infill, and revitalization of vacant and under-utilized parcels served by existing infrastructure. Finally, the City’s Land Use and Urban Design Element is required to designate adequate sites to accommodate any future “fair share” of regional housing needs (RHNA).

In all, the Project’s cumulative population and housing impacts will be less than significant due to the Project’s consistency with regional plans for growth, transportation options, and mixed land uses.

Public Services

The geographic scope of cumulative public services impacts is generally limited to the jurisdiction under analysis. However, shortages of certain public services in one jurisdiction may lead to unanticipated demand for public services from nearby service providers.

Future regional growth will result in increased demand for police protection, fire protection and emergency services, schools, libraries and other public facilities. It should be noted that the City has a mutual aid agreement with Riverside County to provide and receive aid whenever asked. Service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand. Although the ability of local service providers to provide specific levels of services varies throughout the region, sound local planning to accommodate future growth, along with the implementation of policies identified in this EIR will reduce potential cumulative impacts associated with the provision of police services, fire prevention and firefighting services, emergency services, libraries, and community centers; these impacts are **not considered cumulatively significant**.

Recreation

The geographic scope of cumulative recreation impacts is generally limited to the jurisdiction under analysis. However, if a community does not provide for adequate recreation opportunities, residents may use parks and recreation facilities in neighboring jurisdictions, which would accelerate deterioration and lead to congestive use of these facilities.

As described in Section 5.14, Recreation, the City currently has a deficit of 381 acres of community and 166 acres of neighborhood developed parkland. If development were to proceed without additional parkland dedication, there will be a deficit of 250 acres of parkland at build-out, even assuming all currently undeveloped parks are developed by Project buildout in 2025 and all new development provides adequate parkland. Where the City will stand in relation to its adopted standards to community and neighborhood parks will depend upon when the additional park development work is complete and the change in Riverside’s population that will occur between General Plan implementation and that future point in time. Without the provision of new park and recreational facilities and centers to serve projected new residents, the population increase anticipated over time has the potential to cause increased demand for existing park and recreation facilities and centers, such that substantial physical deterioration of existing facilities may occur or be accelerated. Implementation of **MM Rec 1 and 2** will reduce impacts from new

development, but does not correct the existing shortage. Compliance with the City Park Development Impact Fees, as adopted January 2007, the Riverside Renaissance SIP, General Plan policies and implementation of the Park and Recreation Master Plan will decrease impacts to existing parks, as well as require that in the future, adequate parks are provided, but it is possible that the required improvements will not be constructed in time to meet demand, so residents may use recreational facilities elsewhere in the region. **Therefore, after mitigation, the project's cumulative impacts will remain significant.**

Transportation/Traffic

Development consistent with Project implementation will facilitate new growth in the Planning Area that will generate additional roadway traffic within the Planning Area and the region. As discussed in Section 5.15, analysis has shown that several Planning Area roadway and freeway linkages and intersections will operate at an unacceptable level of service at Project buildout. In addition, Project implementation will contribute to additional traffic on the regional freeways that traverse the Planning Area. The regional vehicle miles traveled (VMT) with the Project in 2025 is 498,617,328, as shown in Table 5 of the Transportation Study for the 2025 General Plan. Of that, approximately 12,746,672 VMT are attributable to the proposed Project alone assuming these are only the trips and portions of trips on the City/sphere roads in the model. If a trip begins and ends in the City, the full VMT is included. If it begins in Corona and ends in Riverside, only the portion within the City/sphere is included. If a trip began/ended outside the City/sphere, but went through the City/sphere, the portion within the City/sphere is included. Therefore, Project VMT represents approximately 2.6 percent of the regional VMT. The City currently participates in the regional transportation improvement programs, such as the TUMF and Measure A. Adherence to and implementation of project objectives, policies and regional transportation programs, will help ameliorate potential traffic impacts Citywide at a programmatic level. **However, despite Project features designed to reduce traffic volumes and impacts, and the implementation of MM Trans 1, due to the Project's considerable contribution to regional VMT, the Project's contribution to cumulative traffic impacts will remain significant and unavoidable.**

Utilities and Service Systems

Future regional growth will result in increased demand for flood control, water service, sewer service, energy utilities, solid waste services and other community facilities. Service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

With respect to water, sewer, and energy, the proposed Project includes mitigation measures (MM UTL 1, 2 and 3) which cause ongoing review of service needs with respect to capacity. Such reviews can cause significant impacts to be avoided by planning and implementing facilities ahead of identified need. The Sewer Master Plan is currently being reviewed and adopted. This plan identifies the infrastructure necessary to accommodate the anticipated population growth. MM UTL 2 requires the projected facilities to be reviewed against actual population growth and use at key 5- and 10-year intervals throughout the life of the Project. Electricity is being used at a faster rate per household than in the past, according to Riverside

Public Utilities. If, in addition to population growth, electrical use outpaces anticipated supply or transmission facilities, MM UTL 3 requires review every two years to keep pace with demand. Water supply is projected to be adequate for future demand, however if actual demand outpaces supplies anticipated to meet the Project Typical demand, then MM UTL 1 will require the City to address the issue before problems arise. Because most of RPU's water comes from an adjudicated groundwater basin, cumulative impacts will not be allowed to jeopardize the safe yield of the basin. Without such measures significant impacts could occur to one or more utilities before projected deficiencies were identified if population growth or service demand outpaces projections. This could result in cumulative impacts where demand will need to be addressed by other service providers in the region. Although the ability of local service providers to provide specific levels of services varies throughout the region, sound local planning to accommodate future growth, along **with adherence to and implementation of General Plan policies and mitigation measures identified in this EIR will reduce potential cumulative impacts associated with water, sewer and energy utilities and service systems to a less than significant level.**

With respect to solid waste, adherence to and implementation of General Plan policies will substantially lessen solid waste impacts. This analysis indicates that 60% of the existing waste stream is diverted from landfills. It is in the City's current plans to increase that to 65% in the future. Therefore, according to Section 5.16, the current landfills would have sufficient capacity to serve the increased development within the Planning Area under the proposed General Plan; project specific impacts are considered less than significant. The Riverside County Waste Management Department has projected through year 2025 that adequate expansion capacity at the existing landfills is available, as described in Section 5.16, although there are no specific expansion plans in place at this time. For cumulative impact purposes, the City has conservatively assumed that landfill expansion will not keep pace with growth in the region and/or growth within the Planning Area that exceeds Typical levels. Therefore, when combined with all the other jurisdictions which use the same landfills as the City, the cumulative impact on landfills may be **significant and unavoidable.**

With respect flood control and drainage facilities, Section 5.8, Hydrology, states that future development consistent with the General Plan will significantly increase the amount of runoff into the existing storm drains. Riverside County Flood Control and Water Conservation District (RCFCWCD) and the City have identified facilities that are currently undersized. Most are located in the older portions of the City such as downtown. RCFCWCD and/or the City have no plans for improvement for these facilities at this time. As result of this, facilities will need to be expanded and/or new facilities will need to be constructed to accommodate both existing and planned development. The City of Riverside has developed a five year Capital Improvement Program (CIP), which includes a Storm Drain Program. This particular program will include improvement projects that eliminate flooding during major storm events. Construction of these improvements will be in coordination with RCFCWCD projects, and in support of public and private development projects. The General Plan policy PF-4.1 reinforces the City's CIP program. Although this CIP addresses current existing undersized drainage issues, it does not address anticipated increase in runoff due to the General Plan implementation. To avoid flooding and/or placing new development within flood areas, the City requires development pads to be elevated above flood levels. Underground storm drains and streets are designed to accommodate the 10-

year storm from curb to curb, while 100-year storms are accommodated within street rights of way. Therefore, even though some older storm drain facilities may be undersized, **cumulative impacts related to exceeding capacity to storm drains are considered less than significant** because flooding of structures will not result.

6.2 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that an EIR discuss growth-inducing impacts 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 will remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

The Project is specifically intended to provide for the orderly development and redevelopment of Riverside, define the limits of such development and act as a mechanism to accommodate and control future development. Projects permitted pursuant to the Land Use Policy Map in Figure 3-3 will accommodate additional housing for all income levels, create a better balance of residential and non-residential uses in the community, promote a more pedestrian friendly environment, and protect natural resources. A major feature of the Project is the introduction of higher density mixed use designations along major transportation corridors. These areas are intended to focus population growth in already urbanized areas, reducing development pressure of the urban edge. Implementation of the Project will result in a more inclusive community, bring new employment opportunities to Riverside, and foster a stable economic base.

Development pursuant to Project policies and regulatory standards projects a typical development scenario of 127,692 dwelling units and 334,838,547 square feet of new non-residential construction over the 20 year horizon of the General Plan within the Planning Area. The increased population and employment associated with proposed General Plan land uses has the potential to induce growth in areas outside of Riverside. However, this potential growth inducement is minimized because: 1) the Typical level of development expected for the Project is generally consistent with SCAG population and housing forecasts (Section 5.12 - Population and Housing); 2) within the last 20 years, Riverside has been, in many respects, a bedroom community of Los Angeles and Orange Counties and the Project aims to better balance jobs and housing by bringing additional employment opportunities to the Planning Area; 3) the Project emphasizes smart-growth, infill and revitalization of vacant and under-utilized parcels served by existing infrastructure; and 4) the City's Land Use and Urban Design Element is required to designate adequate sites to accommodate any future "fair share" of regional housing needs (RHNA). The Max w/PRD development scenario was provided for analytical worst-case scenario purposes. Under that scenario, population could reach 585,926 by 2025. Build-out under that scenario is not reasonably foreseeable, however, because existing development, levels of service requirements, and other restrictions on development would prevent such growth from occurring. Thus, the Typical development scenario is what is likely to occur as a result of this Project.

6.3 Significant Irreversible Environmental Changes

Development consistent with the Project will result in the consumption of non-renewable energy resources which will have an irreversible effect on such resources. In addition, the development consistent with the Project would allow future development of urban uses in areas that are currently vacant, although a key focus of the Project is to direct most development to already urbanized areas. Once developed, reverting to a less urban use or open space is highly unlikely. Development in Riverside according to the Project will also constrain future land use options.

Several irreversible commitments of limited resources will result from implementation of the proposed Project. The resources include, lumber and other related forest products, sand, gravel, concrete, asphalt, petrochemical construction materials, steel, copper, lead, and other metals, agricultural lands and water consumption. Buildout of the General Plan 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 City. The increased energy demands also cause accelerated stratospheric ozone depletion, which refers to the slow destruction of naturally occurring ozone in the stratosphere that protects Earth from the damaging effects of solar ultraviolet radiation. It is unknown at this time to what extent all attempts by the City, state, federal and global agencies will be able to reverse the changes caused by increases in GHG emissions.

6.4 Unavoidable Significant Environmental Impacts

Implementation of the proposed General Plan will result in significant unavoidable project-level and/or cumulative agriculture, air quality, hydrology/water quality, noise, population, recreation, transportation and traffic, and utilities impacts. Adherence to and implementation of General Plan policies and other Project features identified in Section 5.2 – Agriculture, Section 5.3 - Air Quality, Section 5.8 – Hydrology Water Quality, Section 5.11 – Noise, Section 5.12 – Population & Housing, Section 5.14 - Recreation, Section 5.15 – Transportation and Traffic, and Section 5.16 Utilities will substantially lessen the impacts to/from agricultural resources, air quality, hydrology and water quality, noise, transportation and traffic, and utilities; however, these impacts will remain significant and unavoidable.

6.5 Areas of No Significant Impact

The CEQA Guidelines Section 15128 requires a statement indicating the reason that various possible significant effects are determined not to be significant and therefore are not discussed in the EIR. All potential environmental impacts are discussed within the analytical subsections of Section 5.0.

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