

4.0 CUMULATIVE IMPACTS

4.1 INTRODUCTION

CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts . . .” The following elements are necessary in an adequate discussion of cumulative impacts, as noted in Sections 15130(b) through 15130(e) of the CEQA Guidelines.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other project contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

(1) Either:

(A) A list of relevant past, present and probable future projects, producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections 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.

(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resources being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

(4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

(5) A specific analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects.

(c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

(d) Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in Section 15152(f), in a certified EIR for that plan.

(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided by Section 15183(j).

4.2 CUMULATIVE ANALYSIS IN THIS EIR

Cumulative impacts may be discussed in terms of proposed General Plan impacts, in combination with impacts anticipated for future development (including approved and planned development within the project area and surrounding affected area), and impacts associated with growth within the region. The geographic area for each impact can vary, depending on the nature of the impact, whether it is regional, such as air quality, or local, such as noise. However, except as noted, the geographic area covered by the Western Riverside Council of Governments (western Riverside County) defines the geographic scope of the cumulative analysis. Since the project consists of an update to the General Plan, cumulative impacts are largely evaluated based upon criteria described in Section 15130(b) (1) (B) cited above. The cumulative analysis also addresses the regional growth and population projections included in the SCAG Regional Comprehensive Plan and Guide and the SCAG Regional Transportation Plan.

Quantification can be difficult for cumulative impacts, as it requires speculative estimates of impacts including, but not limited to the following: the geographic diversity of impacts (impacts of future development may affect different areas); variations in time of impacts; and data for buildout projections may change following subsequent approvals. However, every attempt has been made herein to make sound qualitative judgments of the combined effects of, and relationship between, land uses and potential impacts.

This PEIR assesses the overall environmental effects of the proposed project at a program level of detail. This PEIR evaluates the overall (cumulative) effects of development in accordance with the land use designations, land use assumptions, and all goals, policies and implementing measures contained in the proposed General Plan Update. Therefore, the cumulative environmental analysis considers project impacts in combination with regional impacts, where

applicable, that could be expected as other cities and unincorporated areas within the southwest Riverside County subregion develop pursuant to adopted regional and/or local General Plans.

4.3 ASSESSMENT OF CUMULATIVE IMPACTS

4.3.1 AESTHETICS

ANALYSIS

Development will be completed in accordance with the Proposed Land Use Plan (**Figure 2.0-4**) and the impacts of this development on various public vantage points and viewsheds are analyzed in Section 3.3 of this PEIR. Future developments within the City and the SOI will be required to comply with GPU goals, policies and implementation programs to ensure that impacts on visual quality from public viewsheds and vantage points are minimized. The GPU Aesthetics Policies 10.1-10.6, 11.1-11.3, and 12.1-12.3 protect views and specify design requirements for new development to minimize visual impacts. The Resource Protection and Preservation Chapter, Open Space Section, Policies 3.1, 3.2 and 3.4 maximizes the City's MSHCP conservation areas, ensures that passive and active open space uses are incorporated into development areas and preserves the City's visual character in the surrounding hillsides. These policies ensure that the City will implement the MSCHP and preserve valuable open space, which thereby preserves the visual character of open space in the City.

Policies 11.2 and 11.3 of the Resource Protection and Preservation Chapter, Aesthetics Section, preserves the City's visual character, in particular the surrounding hillsides, which topographically define the lake region. In addition, the following policies regarding design requirements ensure maintenance of the visual quality of planned development: Policies 10.1, 10.2, 10.3, 11.1 and 12.3 require design and landscaping for new development and redevelopment, including architectural and streetscape, in order to preserve the City's visual character. The policies of the GPU protect the citywide visual character from potentially significant impacts of buildout of the GPU. The character of the Historic District will be protected through the Historic District Plan and the other district plans and the proposed Downtown Master Plan. In addition, the goals, policies and implementation programs related to Goal 8 and Goal 9 of Resource Protection and Preservation Chapter, Historic Preservation (see Section 3.2 of this PEIR) states that the City shall encourage the preservation of identified historic landmarks and refurbishment of any dilapidated structures that would promote the City's visual character. These policies serve to protect any recognized landmark within the City. With adherence to these goals and policies cumulative effects of future development on visual character and visual quality from public vantage points and viewsheds would be less than significant.

Development within the City and SOI in combination with other development in the County would contribute to changes in views to motorists on I-15. With development in the region it is inevitable that views from I-15 will be modified from existing conditions. However, measures discussed above are required by the proposed GPU that must be incorporated into future

development within the City and SOI that would minimize impacts on views from I-15. With adherence to these goals and policies, the contribution of development within the City to County-wide cumulative effects to views from I-15 would be less than significant.

Although sources of light and glare will increase within the project area, the Resource Protection and Preservation Chapter, Aesthetics Section, Policy 12.2 states that the City shall discourage uses or development that entails excessive light and glare visible from private and public viewpoints. Additionally, compliance with Section 17.112.040 and Section 17.148.110 of the City’s Zoning Code require that lighting shall be designed to preclude light shining into the sky above a horizontal plane passing through the luminaire and encourage the use of low pressure sodium lighting in non-residential development. Thus compliance with Policy 12.2 and the zoning code will reduce any potential impacts from light and glare to a less-than-significant level. Light and glare within the area surrounding the project area is controlled by regulatory requirements, including but not limited to Riverside County Ordinance No. 655 (Regulating Light Pollution) and City of Murrieta Development Code Section 16.18.110 (Mount Palomar Lighting Standards), which have the effect of reducing the impact of nighttime lighting in the cumulative area to less-than-significant levels.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measure **MM Aesthetics 1** is required.

LEVEL OF SIGNIFICANCE

Implementation of the proposed project would not result in cumulatively considerable aesthetic impacts.

4.3.2 AIR QUALITY

ANALYSIS

Criteria Pollutants

Additional development under the GPU would contribute to regional growth and increase the emission of criteria pollutants in the South Coast Air Basin (SCAB). Emission sources would increase with additional development. The emission sources from anticipated development by the GPU would include stationary sources, consumer products, and mobile sources. The emissions associated with mobile sources would be attributable to a population increase, causing increased traffic within the City limits and trips originating outside the City limits. Increased traffic, lower average speeds, and increased idling times can lead to an increase in local CO concentrations. As shown in **Table 3.6-2, State and Federal Attainment Designations for Criteria Pollutants in Western Riverside County**, the portion of the SCAB within which the project area is located is designated as a nonattainment area for ozone (O₃), PM₁₀ and PM_{2.5}

under State standards. Under federal standards, the area is designated as a nonattainment area for ozone (O₃), PM₁₀ and PM_{2.5} and serious maintenance for carbon monoxide (CO) under federal standards.

As shown in **Table 3.6-10, General Plan Buildout (2030) Daily Air Pollutant Emissions Estimates**, GPU buildout would drastically exceed project-level emissions thresholds established by the SCAQMD for all criteria pollutants resulting in significant adverse impacts. The goals, policies and implementation programs contained within the proposed GPU, including those listed in **Table 3.6-8, General Plan Air Quality Goals, Policies and Implementation Programs**, and in **Table 3.4-5, District Plan Transportation and Circulation Goals, Policies and Implementation Programs**, include measures that will reduce criteria pollutant emissions, including the reduction of vehicle trips through compatible land use planning, encouragement of alternative transportation methods, and improvement of traffic infrastructure to increase efficiency through coordination with regional and state governments. Future development projects in the City will be evaluated for conformance with the GPU policies related to air quality. These measures include cooperating with regional and state governments to develop mitigation measures region-wide, and reducing air quality emissions from future development.

However, implementation of the GPU policies related to air quality do not ensure that increased traffic and operational emissions associated with buildout of the General Plan would not contribute to future nonattainment of federal and state standards for criteria pollutants. Therefore the impact of buildout of the GPU related to increased air quality emissions is considered to be significant and not fully mitigated.

The 2007 AQMP established a program to reduce the SCAB's emissions based on 2004 SCAG population projections. As discussed in Section 3.1 (Land Use and Planning) and Section 3.13 (Population and Housing) of this PEIR, the GPU would accommodate a population increase that surpasses current SCAG projections. The GPU would obstruct implementation of the AQMP by not contributing to its goals of regional reductions of air pollutant emissions in the region, and it would conflict with the AQMP in its inconsistency with AQMP projections for pollutant emissions. Control measures in the AQMP include: promotion of lighter color roofing and road materials; requiring clean fuels, supporting alternative fuels, and reducing petroleum dependency; pursuit of long-term advanced technologies measures; process modifications and improvements; best management practices; and market incentives. However, no mitigation is available that would make the GPU consistent with the AQMP and reduce this impact to a less-than-significant level. This obstruction and conflict are a significant air quality impact that cannot be mitigated through implementation of the air quality-related measures set forth in the GPU.

Other Criteria Air Pollutant Impacts

Other criteria pollutants such as NO_x, NO₂, SO₂, sulfates, lead, and H₂S could increase in concentration with new development under the GPU. Concentrations could increase because of the increase in vehicles and vehicle trips and the potential increase in commercial and industrial

activity. The goals, policies and implementation programs contained within the proposed GPU, including those listed in **Table 3.6-8** and in **Table 3.4-5, District Plan Transportation and Circulation Goals, Policies and Implementation Programs**, include measures that will decrease emissions that could contain criteria pollutants. Such measures include: land use and transportation planning principles, agency cooperation to develop mitigation measures, limiting emissions during construction and conservation practices to decrease emissions overall. While these criteria pollutants are in primary maintenance or attainment (or the status is unclassified) with state or federal standards, the potential to increase concentrations exists with the new development under the GPU.

The policies would reduce the impact of implementation of the GPU in association with the future development process. However, the regional and cumulative impacts on other criteria pollutants concentrations related to conflicts or obstruction of the applicable air quality plan, violation of air quality standards set forth by the SCAQMD AQMP and contributions to a cumulatively considerable net increase of a criteria pollutant in a nonattainment region would be considered significant.

Toxic Air Contaminants (TACs) and Volatile Organic Compounds (VOCs) Impacts

New development under the GPU could result in an increase in emissions sources of TACs and VOCs in residential, commercial, industrial, and public institutional developments. The goals, policies and implementation programs contained within the proposed GPU, including those listed in **Table 3.6-8** and in **Table 3.4-5, District Plan Transportation and Circulation Goals, Policies and Implementation Programs**, include measures to decrease the number of vehicles and trips to reduce emissions, such as diesel particulate matter, decrease construction-related particulate matter emissions, encourage agency participation for air pollution mitigation, and reduce emissions through energy efficiency. The policies would reduce the impact of implementation of the GPU in association with the future development process. However, the regional and cumulative impacts on TAC and VOC concentrations related to conflicts or obstruction of the applicable air quality plan and violation of air quality standards set forth by the SCAQMD AQMP would be considered significant.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Air 1** through **MM Air 6** is required.

LEVEL OF SIGNIFICANCE

The policies set forth in the GPU would decrease impacts regarding construction-related air quality emissions and odors to a level below significance. Impacts of emissions of CO, O₃, particulate matter, other criteria pollutants, TACs, and VOCs, would be alleviated by the

policies set forth in the GPU; however, cumulative impacts would remain significant and unavoidable.

4.3.3 BIOLOGICAL RESOURCES

ANALYSIS

In 2004, the City adopted the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a comprehensive multi-jurisdictional effort that focuses on conservation of 146 species and their associated habitats within western Riverside County. The Plan seeks to conserve biological resources by establishing a network of Conservation Areas (consisting of Core Reserves and Linkages) that would reserve in perpetuity open space to be maintained pursuant to the guidelines and regulations regarding land use, habitat preservation, and species conservation. The MSHCP Overall, the Plan area covers approximately 1.26 million acres, which is broken down into 16 area plans. The City and SOI are completely within the Elsinore Area Plan, which also encompasses the entirety of the City of Canyon Lake and additional unincorporated County land outside the City's SOI. Additionally, the western portion of project area is located within the boundary of the adopted Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) area.

The regional setting for the assessment of cumulative biological resource impacts is defined by the Elsinore Area Plan of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and by the jurisdictional area of the Lake Elsinore and San Jacinto Watersheds Program. The Lake Elsinore/San Jacinto watershed, which drains into Lake Elsinore, covers an area of over 750 square miles, including other incorporated areas such as Moreno Valley, Perris, Hemet, and Canyon Lake, and unincorporated territory. For purposes of this cumulative analysis the Lake Elsinore Area Plan is referenced for impacts to both aquatic and non-aquatic habitats and the watershed is referenced as to cumulative impacts on aquatic resources and associated habitats.

As described in Section 3.8 (Biological Resources), the proposed project is consistent with implementation of MSHCP and with the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) and therefore will have a less-than-significant impact upon the provisions of an adopted habitat conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

While the GPU would not result in any specific project, the proposed GPU Land Use Plan could facilitate future developments. Future development activities could result in potential conflicts with plans and policies that are designed to mitigate avoid potential environmental affects. However, implementation of existing State, federal, regional, and local regulatory requirements, including GPU goals, policies and implementation programs, together with implementation of applicable mitigation measures contained herein, would ensure that implementation of the proposed project, and the future development projects derived from it, would not make a cumulatively considerable contribution to cumulative biological resource impacts within either

the Elsinore Area Plan jurisdiction area or the area covered by the LESJWA, and is therefore impacts upon biological resources are not considered to be cumulatively significant.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Biological Resources 1** through **MM Biological Resources 5** is required.

LEVEL OF SIGNIFICANCE

With implementation of the goals and policies of the GPU, applicable local ordinances, regional plans, and the rules and regulations enforced by the resource agencies cited in Section 3.8 (Biological Resources) of this PEIR, together with the mitigation measures outlined above, potential cumulative impacts on biological resources within the City and SOI would be reduced to a less-than-significant level.

4.3.4 CULTURAL AND PALEONTOLOGICAL RESOURCES

ANALYSIS

Cumulative environmental analysis on a regional level generally requires a high degree of quantification, and cultural resources are difficult to quantify on a regional level. The value of prehistoric archaeological sites in a particular area such as those that are found in the planning area cannot be specified by the number of known sites, the acreage of sites, or the number of artifacts found at a site. The value of cultural resources is best expressed by the overall potential for an artifact, site, or group of sites, to yield important information regarding the activities of past inhabitants of a region. Information potential cannot be expressed as a number or identified in a figure, but must be presented qualitatively by archeologists familiar with the issues in the relevant area.

Because of the large areas of undeveloped (and unstudied) land within the planning area and the surrounding region, the archaeological database is relatively incomplete. Resources discovered in the area, therefore, are likely to have a fair amount of information potential and are often deemed significant and subject to mitigation that would lead to the preservation of the sites themselves and their related information potential. The potential of cumulative loss of information related to regionally occurring archaeological resources would be a significant impact; however, federal regulations such as the National Historic Preservation Act and State regulations such as CEQA and Senate Bill 18 provide substantial guidance for identifying significant cultural and historical resources. If a cultural resource is considered significant under CEQA, mitigation is required to address any impacts on the resource. These existing state and federal regulations in place that require identification of significant resources and mitigation for impacts on those resources that must be complied with for all future development projects. Compliance of future development projects with these regulations

would minimize cumulative impacts on those resources. The GPU includes policies under Cultural Resources Goal 5 affirming the City’s intent to prevent the loss of cultural resources. The policy ensures the proper identification and treatment of cultural resources, thereby avoiding contribution to any cumulative impact on archaeological resources.

The City’s GPU policies under Cultural Resources Policy ~~5.16.1~~ and Goal 67 highlight the importance to the City of historical resources and ensure the proper identification, treatment, and preservation of such resources – both known and unknown – thereby avoiding contribution to any cumulative regional impact on historical resources that could occur.

Areas of paleontological sensitivity throughout the County have been delineated by the Riverside County General Plan. Areas identified as “high” or “undetermined” may contain important paleontological resources; therefore, technical analysis by a qualified paleontologist is required in these areas, ensuring the proper identification and treatment of resources. The City’s GPU policies under Cultural Resources Goal 7 reflect the City’s participation in this program, which will ensure any contribution to the cumulative loss of paleontological resources is less than significant.

Since all local jurisdictions, including the City of Lake Elsinore, are subject to the regulatory requirements described in Section 3.2 (Cultural and Paleontological Resources) of this PEIR including CEQA, the National Historic Preservation Act (NHPA) of 1966 and Senate Bill 18, potential cumulative impacts to cultural and paleontological resources should not occur.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Cultural/Paleontological 1** through **MM Cultural/Paleontological 10** is required.

LEVEL OF SIGNIFICANCE

With implementation of the proposed project’s goals, policies and implementation programs and compliance with regulatory requirements, any potential cumulative impacts related to historical, cultural and paleontological resources will be mitigated to a less-than-significant level.

4.3.5 GEOLOGY AND SOILS

ANALYSIS

Potential geology- and soils-related hazards within western Riverside County are a mix of site-specific and area-wide hazards. Risks associated with natural hazards including earthquake faults, strong seismic ground shaking can impact regional areas; whereas seismic-related ground failure (i.e., liquefaction, landslides, and/or unstable geologic units or soils) can be

more localized. Regional development would increase the number of people and structures subject to geologic- and soils-related risks.

As future development occurs within the Lake Elsinore area, construction activities may result in short-term cumulative impacts due to soil erosion or sedimentation caused by excavation, backfilling, and/or grading. However, all future development would be subject to compliance with LEMC provisions that address soil erosion, as well as the SCAQMD AQMP, which specifies procedures for land use activities that may create dust emissions (i.e., construction, grading, and operation). Compliance with LEMC Title 14.08 would be required, in order to mitigate water quality impacts. Finally, development sites encompassing an area of 1.0 or more acres would require compliance with a NPDES permit and consequently the development and implementation of a SWPPP.

Future development pursuant to the General Plan Update within the City and its SOI, considered with other cumulative projects in the region, could incrementally increase in the number of people and properties potentially exposed to impacts involving seismic or geologic hazards. However, the City would regulate future cumulative development under the requirements of the Title 15, Title 17.28 and 17.32 of the LEMC, the goals, policies and implementation programs of the GPU, and project-specific mitigation measures. Impacts involving seismic and geologic hazards would be sufficiently addressed by designing and constructing buildings in conformance with current California Building Cod (CBC) and industry-accepted engineering standards.

Additionally, all future development in the GPU planning area would be subject to compliance with GPU Public Safety and Welfare and Land Use policies and properties that are exposed to higher risk would be required to comply with the provisions of LEMC Title 17.32 and 17.28 and thus would be required to prepare geological and geotechnical investigations in areas of potential seismic or geologic hazards, as part of the environmental impact and development review process. With adherence to the cited GPU policies, the provisions of the cited sections of the LEMC, and CBC requirements for all future development within the City and its SOI, the General Plan Update's contribution to geologic cumulative effects is considered less than cumulatively considerable and thus is not significant.

Development in the City of Lake Elsinore and other cities and unincorporated areas surrounding the project area are be required to comply with federal, State and local regulations that are designed to protect people and structures from increased hazards related to such issues as earthquakes, landslides and soil erosion. As a result, conformance with adopted California building codes, and other measures to protect people and structures from geologic hazards, would reduce this impact to a less than significant level. The proposed project's incremental contribution to these impacts will be less than cumulatively considerable.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Geology and Soils 1** through **MM Geology and Soils 3** is required.

LEVEL OF SIGNIFICANCE

With implementation of the policies of the GPU as, previously cited, the applicable provisions of the LEMC, and proposed mitigation measures, potential cumulative impacts related to geotechnical hazards, expansive soils, corrosive soils, landslides and subsidence within the City and SOI would be less than significant with mitigation incorporated.

4.3.6 GREENHOUSE GAS EMISSIONS

ANALYSIS

Greenhouse gas (GHG) emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

The California Air Pollution Control Officers Association points out that all new projects can be considered to contribute new GHG emissions and that GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. However, if a project can be shown by substantial evidence not to increase GHG emissions relative to baseline emissions, then no fair argument will be available that the project contributes considerably to a significant cumulative climate change impact.¹

As part of the proposed project, the City of Lake Elsinore has prepared a Climate Action Plan. The City of Lake Elsinore Climate Action Plan (CAP) is a long-range plan to reduce community-wide greenhouse gas (GHG) emissions from activities within the City limits. The CAP is designed to:

- Benchmark Lake Elsinore's existing (2008) GHG emissions and projected emissions relative to statewide emissions targets.
- Establish GHG emissions reduction strategies and measures to reduce the City's proportionate share of emissions to meet the statewide targets identified in Assembly Bill (AB) 32 and Executive Order S-3-05.

¹ California Air Pollution Control Officers Association, *CEQA & Climate Change*, pages 35 and 52, January 2008. (Available at <http://www.capcoa.org/>; accessed on August 25, 2011.)

- Set forth procedures to monitor and verify the effectiveness of the CAP and require amendment if the CAP is not achieving targeted levels of emissions.
- Mitigate Lake Elsinore’s GHG emissions impacts (by reducing GHG emissions consistent with the State of California via the California Environmental Quality Act [CEQA] Guidelines, AB 32, and Executive Order S-3-05). The CEQA Guidelines encourage the adoption of plans or mitigation programs as a means of comprehensively addressing the cumulative impacts of projects (see CEQA Guidelines, Sections 15064(h)(3), 15130(c)).

Table 3.7-8, Summary of Greenhouse Gas Reduction Measure Potential, provides a summary of the GHG reductions that would result from the state-level and local measures listed above in **Table 3.7-6, Climate Action Plan Strategies and Measures**. Together, the measures would reduce emissions by 399,244 MT CO₂e by 2020 and 768,105 MT CO₂e by 2030. As a result, 2020 emissions would be 665,341 MT CO₂e or 4.6 MT CO₂e/SP in 2020 and 1,263,966 MT CO₂e or 4.2 MT CO₂e in 2030. Therefore, as discussed in greater detail in Section 3.7 (Greenhouse Gas Emissions) of this PEIR, implementation of the strategies and measures set forth in the proposed Climate Action Plan and compliance with the proposed GPU goals, policies and implementation measures will reduce potential greenhouse gas emissions to below target levels and will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, inasmuch as the City will be able to achieve established AB 32 and Executive Order S-3-05 target GHG emission reduction levels, the proposed project will result in less-than-significant cumulative impacts associated with GHG emissions.

MITIGATION MEASURES

No mitigation measures beyond implementation of the strategies and measures set forth in the proposed Climate Action Plan and compliance with the goals, policies and implementation programs identified in the proposed GPU are required.

LEVEL OF SIGNIFICANCE

Through implementation of the proposed Climate Action Plan the proposed project will result in less-than-significant cumulative impacts associated with GHG emissions.

4.3.7 HAZARDS AND HAZARDOUS MATERIALS

ANALYSIS

The increase in local population and employment under the proposed project and due to development elsewhere in western Riverside County would result in the increased use of hazardous household, commercial and industrial materials and increased exposure from use of

hazardous materials and the disposal of hazardous waste and to hazards related to wildland fires and airport operations.

Although some hazardous waste is collected and stored by the City or managed on site, it is also stored elsewhere in the County at hazardous waste facilities. The accumulation of hazardous waste from the City of Lake Elsinore and other cities within the County in these storage facilities could lead to an increased cost of management and potential health effects for the public. The City's solid waste disposal facilities are managed by the County and located outside of city limits. In addition to illegal dumping and disposal of hazardous waste generated in the City in solid waste facilities, the accumulation of this type of illegal disposal from other cities and County areas would result in a greater amount of hazardous waste in municipal solid waste facilities. Goals and policies within the Hazards and Hazardous Materials section of the Public Safety and Welfare chapter include measures to ensure effective hazardous materials management that would reduce the City of Lake Elsinore's cumulative effect on the County and region's hazardous waste generation, treatment, and storage. All future development within the City and SOI would be required to implement these goals and policies.

Increased development throughout the City and SOI in accordance with the Proposed Land Use Plan would contribute to cumulative exposure of people within the project area and in western Riverside County to significant hazards from wildfires. The goals and policies set forth in the Wildfire Hazards section of the Public Safety and Welfare chapter would decrease the risk of wildfire ignition and damage within the City and SOI. All future development within the City and SOI would be required to implement these goals and policies.

Potential cumulative impacts associated with hazards and hazardous materials would be reduced to a less than significant level due to local, regional, State and federal regulations, such as those that control the production, use, and transportation of hazardous materials and waste and control the location of incompatible land uses in airport hazard area.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Hazards 1** through **MM Hazards 5** is required.

LEVEL OF SIGNIFICANCE

With implementation of the policies of the GPU, all project-related impacts related to hazards and hazardous materials would be reduced to less than significant levels. State, federal, regional and local regulations would apply to development within the project area and throughout western Riverside County, thereby reducing the potential for cumulative impacts associated with hazards and hazardous materials to a less than significant level. The proposed project's incremental contribution to these impacts would be less than cumulatively considerable.

4.3.8 HYDROLOGY AND WATER QUALITY

ANALYSIS

Cumulative development consistent with the GPU and Proposed Land Use Plan within the City and future development in surrounding areas could change drainage patterns and have an adverse impact on hydrology. As seen in **Figure 3.9-1, Hydrologic Resources**, there are a large number of blue line streams throughout the City. In every district, residential and/or commercial development is proposed where these streams and drainage areas are currently located. Therefore, grading for increased development throughout the City and SOI would potentially alter the drainage patterns within any of these streams.

Development consistent with the GPU and the Proposed Land Use Plan may also subject future residents and structures to hazards from flooding. Portions of future development consistent with the GPU would be subject to 100-year flooding within the City. A comparison of **Figures 3.9-1 and 2.0-4, Land Use Plan**, shows that there are several areas designated for urban development that would extend within the 100-year floodplain.

In addition, development consistent with the GPU within the City and surrounding areas could result in increased non-point source and point source contamination from common urban sources, construction activity, and vehicle use that would potentially degrade water quality. In general, increased development and population growth in the City and SOI may be expected to result in increased generation of urban water contaminants. In addition to increased sediment related to construction activities, development in the City could increase other types of non-point source pollution.

The project level assessment conducted for future developments will be required to address goals and policies of the GPU related to Hydrology and Water Quality and Flooding and Floodways. Biological Resources Policies 1.1-1.4 require the City to adhere to MSHCP policies and encourage barriers between development and MSHCP Conservation Areas. These policies protect the water and hydrology of the San Jacinto River, which is proposed to have a buffer of open space and floodway designation. In addition, Policy 2.2 discourages development in riparian areas, which will help protect the natural drainages from alteration. Water Resources Policies 4.1, and 4.2 require development projects to obtain an NPDES permit and implementing BMPs is an effective way to reduce the amount of pollutants being discharged into the drainage system. Biological Resources Policies 1.1 through 1.4 call for implementation of the MSHCP to preserve wetlands and natural drainages which drain into Lake Elsinore, such as the waterways of the San Jacinto River. In addition, project level assessment must be prepared for any future development for hydrology or groundwater and surface water quality impacts. Because the lake is polluted, Water Resources Goal 4 and its related policies, address protecting and improving the water quality of the lake. Implementing Flooding and Floodplains Policies 5.1-5.2 at the project level would ensure that projects avoid exposing people or property to flooding.

All projects within the City of Lake Elsinore and other jurisdictions in the region are required to comply with USACE, EPA, RWQCB, and City regulations and obtain various permits regarding water quality for construction. In addition, project-level assessment must be prepared for any future development for hydrology or groundwater and surface water quality impacts.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measure **MM Hydrology 1** is required.

LEVEL OF SIGNIFICANCE

Increased development throughout the project area and throughout western Riverside County could result in increased non-point source and point source contamination from common urban sources, construction activity, and vehicle use. This pollution could have a potentially significant impact on surface and groundwater quality. Additionally, more people could be exposed to potential flooding and impacts from debris flows. However, through compliance with existing regulatory requirements, compliance with the goals, policies and implementation programs of the proposed GPU and implementation of mitigation measure MM Hydrology 1 potential cumulative impacts related to hydrology and water quality will be less than significant.

4.3.9 LAND USE AND PLANNING (INCLUDING AGRICULTURAL RESOURCES)

ANALYSIS

The land use designations set forth in the Proposed Land Use Plan allow for a substantial increase in population from existing conditions and from that anticipated for the area by SCAG. The Growth Management Program developed by the City provides a strategy for developing a pattern and rate of growth to ensure that adequate public facilities and infrastructure can be provided to meet the rate of new construction and population growth. The goals and policies under the Growth Management section of the Community Form chapter provide principles for a growth management section. Implementation of the development pattern provided in the Growth Management Program and implementation of policies from the Growth Management Section of the Community Form chapter, in association with future development, would reduce impacts related to the population and housing forecasts to less-than-significant levels.

Future development projects within the City and its SOI, County of Riverside, and the region could result in the loss of agricultural resources. Development in the region impacting agricultural resources designated as prime farmland, farmland of statewide importance, unique farmland, grazing lands, or farmland of local importance would be considered a potentially significant impact. However, currently there are only approximately 865 acres of agricultural land existing within the City and SOI. Agricultural uses constitute approximately 0.8% of the City's total acreage. The Elsinore Area Plan established by the Riverside County General Plan

does not designate any agricultural land uses. The City and SOI boundaries fall within the Elsinore Area Plan. The GPU does not designate land for agricultural uses. These designations will be converted to other uses such as residential and open space. Due to the small percentage of land currently dedicated to agriculture, and its designation by the Riverside County General Plan as non-agricultural land uses, the conversion of this land will have a less than considerably cumulative impact upon agricultural resources in western Riverside County.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Land Use 1** through **MM Land Use 4** is required.

LEVEL OF SIGNIFICANCE

The GPU includes goals and policies that, in combination with a growth management strategic plan, will reduce increased development and density impacts. Implementation of the growth management plan would reduce impacts related to the inconsistency of the GPU with the population and housing forecasts of SCAG to below a level of significance. Potential cumulative impacts related to the loss of agricultural lands are less than significant.

4.3.10 MINERAL RESOURCES

ANALYSIS

Future development projects in the City of Lake Elsinore, the County of Riverside, and the region may impact mineral resources. The history of the planning area includes mineral extraction within some areas of the City and its SOI. As described in Section 3.12 of this PEIR, the City, its SOI, and the surrounding area have been classified as MRZ-3, and areas along the I-15 corridor north of Lake Elsinore are classified MRZ-2. However, mining activities within this area is planned be phased out over time and the areas converted to other land uses, such as residential and commercial. This land use designation change has already been approved, and therefore, development under the GPU would not significantly affect the availability of known mineral resources that would be of value to the region and the residents of the state.

Additionally, the proposed GPU includes an Extractive Overlay designation located in the Alberhill District, the Business District, and the North Central Sphere District which provides for continued operations of extractive uses, such as aggregates, coal, clay mining, and certain ancillary uses. The policies provided within the proposed General Plan, including the implementation of an Extractive Overlay designation, will both guide future development of residential, commercial, industrial, recreational, public and open space land uses and provide for continued operations of extractive uses, such as aggregates, coal, clay mining, and certain ancillary uses.

The policies within the proposed General Plan pertaining to mineral resources seek to conserve areas identified as containing significant mineral deposits for potential use. The policies will maintain the availability of mineral resources while continuing to encourage proper reclamation and enhancement of areas impacted by extractive/mining activities for the public's health, safety and welfare. Therefore, the increased growth and development associated with the implementation of the proposed project would not significantly impact mineral resources located within City and its SOI and would not result in a cumulatively considerable impact upon these resources.

MITIGATION MEASURES

No mitigation measures beyond the goals, policies and implementation programs identified in the proposed GPU are required.

LEVEL OF SIGNIFICANCE

Implementation of the proposed General Plan policies related to mineral resources ensure that future development in the City and its SOI would not have any significant adverse impacts on mineral resources nor would future mineral resource extraction have any significant adverse impacts on future development. This cumulative impact would be less than cumulatively considerable.

4.3.11 NOISE

ANALYSIS

Short-term noise impacts would be associated with excavation, grading and erecting buildings during construction of individual projects allowed through the implementation of the proposed GPU and other development projects within western Riverside County. Construction-related short-term noise would be higher than ambient noise levels, but would no longer occur once construction of the project is completed. Construction of projects that implement the proposed Land Use Plan, when considered in concert with other projects in the area, would result in short-term noise impacts that would accompany the construction phases of individual development projects. However, since all future development would not occur simultaneously, construction noise impacts would be short term, incremental and can be mitigated to below a level of significance with controls on construction time periods and equipment use. Thus such impacts would not be regarded as cumulatively significant.

When growth within the project area is considered in combination with regional growth, cumulative traffic volume would be the major noise-related concern. The City and SOI are located in an area of southern California that has seen rapid growth in the past decades - a trend that is likely to continue. Additional regional residents would present increased traffic on the roadways, especially on I-15 and SR-74, the project area's major features. Regional traffic has the potential to combine with project-related traffic and cause significant cumulative noise

impacts on sensitive uses sited along the busy corridors, to which the GPU projects would substantially contribute.

An increase in traffic volume throughout the local and regional circulation system as a result of GPU implementation has the potential to generate noise levels along roadway corridors that would exceed standards set forth in the Zoning Code and the General Plan's Noise and Land Use Compatibility Matrix and Interior and Exterior Noise Standards. The corridors of I-15, SR-74, and Railroad Canyon Road are particularly sensitive to additional traffic noise due to the substantial noise levels currently generated along these routes.

Traffic-related cumulative noise impacts were considered as part of the noise analysis provided in Section 3.5 (Noise) of this PEIR, since the future traffic projections used for the noise analysis were generated by a traffic model that considered growth under the proposed project in conjunction with projected area-wide traffic. At 2030 traffic levels associated with buildout of the GPU, the ADT on the freeways and roadways would increase as described in the previous paragraph. As shown by comparing **Figure 3.5-2, Existing Noise Contours**, and **Figure 3.5-4, Land Use Plan Noise Contours**, the increase in traffic at GPU buildout would extend the 70 dBA, 65 dBA and 60dBA Ldn contours beyond existing conditions. For I-15, the 65 Ldn contour would extend beyond that for existing conditions by approximately 400 to 620 feet. For the SR-74/Ortega Highway corridor, the 65 Ldn contour could extend beyond existing conditions by approximately 70 to 135 feet. The 65 Ldn contour on Grand Avenue would extend approximately 65 to 165 feet beyond existing conditions. The 65 Ldn contour on Riverside Drive would extend approximately 75 to 1400 feet beyond existing conditions. The 65 Ldn contour on Lakeshore Drive would extend approximately 70 to 120 feet from existing conditions. The 65 Ldn on Railroad Canyon Road would extend approximately 25 to 125 feet. As shown in **Table 3.5-4, Lake Elsinore Noise and Land Use Compatibility Matrix**, and **Table 3.5-5, Interior and Exterior Noise Standards**, residential uses are generally incompatible inside the 65 Ldn contour. Considering that the 65 Ldn contour would extend beyond existing conditions, additional existing and planned residential areas in proximity to major public roadways could be subject to exterior noise levels that exceed City standards.

Since the traffic associated with the proposed project in conjunction with the increased traffic generated by cumulative growth would extend the 70 dBA, 65 dBA and 60dBA Ldn contours beyond existing conditions, cumulative long-term traffic-related noise impacts would be significant and unavoidable.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Noise 1** through **MM Noise 10** is required.

LEVEL OF SIGNIFICANCE

On a programmatic basis, all noise impacts would be less than significant if GPU policies are followed. It is the ultimate intent of the GPU policies and the mitigation measures detailed above to reduce significant noise impacts for GPU and 3rd Street Annexation projects to less-than-significant levels. However, due to the programmatic level of noise analysis for this EIR it is impossible to make a definitive statement that all noise-related impacts associated with increased traffic noise on existing land uses and future development projects would be reduced to a less-than-significant level through policies proposed in the GPU. This increased traffic noise would be contributing to significant and unavoidable cumulative impacts.

4.3.12 PARKS AND RECREATION

ANALYSIS

The increase in development allowed under the proposed Land Use Plan would require increases in availability and adequacy of parks and other recreational facilities. The goals and policies pertaining to parks and recreation in the GPU include extensive measures to provide adequate parkland, programs, and recreational facilities and opportunities and establish funding mechanisms to ensure quality recreational services that meet the needs of the population as it grows.

As described in Section 3.15 (Parks and Recreation) of this PEIR, the City of Lake Elsinore's Parks and Recreation Master Plan establishes the standard of 5 acres of usable park land per 1,000 population. The proposed Land Use Plan would allow for approximately 15,438 acres of permanent open space and recreation and MSHCP Conservation areas. With full buildout of the proposed Land Use Plan, population in the City and SOI would be approximately 318,856 people. The Land Use Plan proposes approximately 1,314 acres of recreational uses and approximately 9,369 acres of open space within the City and SOI. Therefore, in order to meet the standard of 5 acres of usable parkland per 1,000 residents, approximately 1,594 acres of usable parks and recreational open space would be required within the City and SOI.

There are 16 existing park facilities (approximately 125.1 acres) and four recreational facilities totaling 21,000 square feet (see Table 3.15-1, Existing Parks and Recreation Facilities) in the City of Lake Elsinore, with 12 additional parks and three recreational facilities slated for future development. However, the dominant parkland in the City is Lake Elsinore. Lake Elsinore is the largest natural freshwater lake in southern California with 3,000 surface acres and over 14 miles of shoreline and includes the 86-acre Lake Elsinore Recreational Area Campground. Although not designated as recreational land by the proposed Land Use Plan, this property is and will for perpetuity be used for public park and recreation purposes. Therefore, the proposed project will provide sufficient acreage to meet the projected parks needs of the residents of the City of Lake Elsinore. Inasmuch as the City will be able to provide adequate park and recreation services to serve its future population, potential impacts are not considered to be cumulatively significant.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measure **MM Parks and Recreation 1** is required.

LEVEL OF SIGNIFICANCE

With implementation of the policies of the GPU and the above-cited mitigation measures, potential cumulative impacts related to parks and recreation within will be less than significant.

4.3.13 POPULATION AND HOUSING

ANALYSIS

The California Department of Finance's January 2007 population estimate for Lake Elsinore was 47,634 persons.² These residents receive public services from the public agencies discussed in Sections 3.14 through 3.16 of this PEIR. The City of Lake Elsinore is still developing and contains significant amounts of un- or under-utilized, developable land both within its corporate boundaries and within its SOI. According to the Southern California Association of Governments, the City is anticipated to have a total of approximately 26,448 dwelling units by the year 2030 and an estimated population of 85,376 in the year 2030.

The Southern California Association of Government provides population, housing and employment projections to 2030. The Southern California Association of Governments projects that Riverside County's population is estimated to grow from 1,931,332 in 2005 to 3,343,777 in 2030³. The number of households in Riverside County is projected to increase from approximately 612,341 dwelling units in 2005 to 1,097,950 dwelling units in 2030. The number of jobs in Riverside County is projected to increase from approximately 650,319 in 2005 to approximately 295,487 in 2030.²

Projections for population, employment, and residential dwellings were identified to reflect the theoretical buildout of vacant land within the City and SOI, utilizing land use designations and assumptions detailed in the proposed GPU. The projected population of the Land Use Plan buildout is 318,856 persons by 2030 (see **Table 3.13-11, Comparison of SCAG 2005 and General Buildout Projections**). The projected population is based on the land use categories and density assumptions included in the proposed Land Use Plan. Though the projected population with buildout of both the incorporated and unincorporated portions of the GPU is 318,856, projected buildout for the incorporated area only is 209,756. This is in direct

² California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2010, with 2000 Benchmark, Revised, 1/1/2007*. (Available at <http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2001-10/view.php>; accessed on August 25, 2011.)

³ Southern California Association of Governments, *Adopted 2008 RTP Growth Forecasts*. (Available at <http://www.scag.ca.gov/forecast/adoptedgrowth.htm>; accessed on August 22, 2011.)

comparison with the adopted SCAG population forecast for 2030 of 85,376 in the incorporated area. The GPU population projections are considered consistent with the projections being considered by SCAG for several key reasons. First, the SCAG population forecast is not based upon buildout pursuant to the City's General Plan, but rather on projected annual growth rates; second, the greater range set forth in the GPU allows for greater flexibility in providing affordable housing, a state mandated program; and, third, the GPU will require a jobs-housing balance that meets or exceeds the regional goals.

The proposed Land Use Plan (**Figure 2.0-2**) provides for an estimated 19,420,687 square feet of commercial uses, 16,424,826 square feet of industrial uses and 9,344,617 square feet of public institutional uses. By GPU buildout in 2030, there would be an estimated 118,792 employees working within the City and its SOI. The jobs-to-housing ratio based on the GPU would be 1.26, compared to 0.68 based on SCAG projections (**Table 3.13-11**).

The proposed project establishes goals, policies and implementation programs that will reduce potential growth-related impacts. Compliance with these goals, policies and implementation programs and with federal, State and local regulatory requirements will assure that necessary services and infrastructure sufficient to serve the planned growth will be development over the projected buildout period of 20 years. It is important to note that the proposed GPU does not include any policy provisions that require its buildout potential be attained. Therefore, the proposed project will direct growth and development so that it occurs in a manner that is manageable for the City and avoids significant physical impacts that result from population growth.

Riverside County as a whole is still developing. It is anticipated that future growth in the subregion would be accomplished through a combination of new and infill development within both incorporated urban and unincorporated rural areas of the County. Environmental constraints such as: water supply, landfill capacity, energy demand, air quality, traffic constraints and others, will become predominate issues of concern as the subregion continues to expand its housing opportunities and economic base.

MITIGATION MEASURES

No mitigation measures beyond the goals, policies and implementation programs identified in the proposed GPU are required.

LEVEL OF SIGNIFICANCE

Subsequent land use activities associated with the implementation of the proposed project, in addition to existing, approved, proposed and reasonably foreseeable development, could result in a cumulative increase in the population and housing growth in western Riverside County. However, implementation of the goals, policies and implementation programs will enable the City of Lake Elsinore to direct growth and development so that it occurs in a manner that is manageable for the City and avoids significant physical impacts that result from population

growth. Therefore, there will be a less than significant cumulative impact related to population and housing.

4.3.14 PUBLIC SERVICES

ANALYSIS

Future regional growth would result in increased demand for public services including police and fire protection, schools, libraries, and animal control. Currently, the City of Lake Elsinore contracts with the County of Riverside Sheriff’s Department for police services and with the Riverside County Fire Department for fire protection services. These agencies also provide service in unincorporated areas and other cities in western Riverside County. The City of Lake Elsinore is part of the Riverside County Library System and it contracts with a private company called Animal Friends of the Valley (AFV) for all animal control services. Planning efforts by these County service providers take anticipated growth of the planning area and neighboring cities and unincorporated County areas into account.

Future regional growth would result in increased demand for schools throughout western Riverside County. The Lake Elsinore Unified School District (LEUSD) serves most of the City of Lake Elsinore, all of the cities of Canyon Lake and Wildomar, and a portion of unincorporated Riverside County. There are two small portions of the City of Lake Elsinore that are not within the LEUSD. In the center of the northern part of the City, a small section falls within the Perris Elementary and Union High School districts; on the eastern edge of the City, a portion of the Canyon Hills Specific Plan area falls within the Menifee Union School District.

The goals and policies pertaining to schools in the GPU include measures to ensure adequate school services that meet the needs of the population as it grows. Additionally, State law provides that payment of these school impact fees pursuant to Senate Bill (SB) 50 and Proposition 1A are “deemed to provide full and complete school facilities mitigation.” (Section 65996(b) of the California Government Code.).

The applicable goals and policies for each public service in the proposed GPU ensure adequacy and availability of these services and facilities as development occurs. With the population growth allowed by the Proposed Land Use Plan, cumulative impacts are inevitable. With the provisions made in the goals and policies in planning efforts by County agencies and other service providers, implementation of future development in accordance with the Proposed Land Use Plan would not have significant cumulative impacts upon these services.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Public Services 1** is required.

LEVEL OF SIGNIFICANCE

With implementation of the goals, policies and implementation programs of the GPU and mitigation measure **MM Public Services 1**; potential cumulative impacts on public facilities and services within the City and SOI would be less than significant.

4.3.15 UTILITIES AND SERVICE SYSTEMS

ANALYSIS

The Elsinore Valley Water District (EVMWD) is a public nonprofit agency that was created on December 23, 1950, under the Municipal Water District Act of 1911. EVMWD provides water, wastewater, and reclaimed water service to the City of Lake Elsinore, the cities of Canyon Lake and Wildomar, portions of the city of Murrieta, and unincorporated portions of Riverside County. In determining the water needs in its service area, EVMWD is required to prepare an Urban Water Management Plan (UWMP) pursuant to the UWMP Act (Water Code, §10610 et seq.).

As discussed in more detail in Section 3.16 (Utilities and Service Systems) of this PEIR, the EVMWD UWMP indicates that there are sufficient water supplies and water shortage contingency plans to protect existing and future water needs within its service area. EVMWD has also prepared a Wastewater Master Plan to provide long range planning for the provision of wastewater services.

Through compliance with EVMWD's UWMP and Water Distribution System Master Plan, EVMWD's Wastewater Master Plan, Chapter 16 of the LEMC and the City's Water Efficient Landscaping Requirements (LEMC Chapter 19.08), and payment of established EVMWD utility rates and connection fees, impacts upon water supply, wastewater-related impacts and infrastructure associated with the proposed project will have a less than cumulatively considerable impact.

CR&R is responsible for trash disposal in the City of Lake Elsinore as well as in Temecula, Canyon Lake, and parts of the unincorporated County of Riverside. Riverside County Waste Management (RCWM) manages the landfills used by the City of Lake Elsinore. RCWM facilitates waste management services for Riverside County. These services are provided on a countywide basis, and each private or public entity determines which landfill or transfer station to use. Typically, this determination is made based on geographic proximity.

Implementation of the proposed project in conjunction with regional growth will result in population increases and increases in commercial, industrial and other non-residential uses which would potentially impact solid waste disposal services and the capacity of landfill facilities that serve the City. However, through compliance with City and County waste reduction programs and compliance with applicable State and local laws and regulations, the proposed project's contribution to cumulative impacts upon landfills is considered to be less than cumulatively considerable.

Southern California Edison (SCE) and the Southern California Gas Company are regional purveyors of electricity and natural gas and provide these utility services to the City of Lake Elsinore and throughout western Riverside County. Both Southern California Edison and The Gas Company anticipate the ability to accommodate future growth within the City of Lake Elsinore.

MITIGATION MEASURES

No mitigation measures beyond the goals, policies and implementation programs identified in the proposed GPU are required.

LEVEL OF SIGNIFICANCE

With implementation of the goals, policies and implementation programs of the proposed project and compliance with existing regulatory requirements and service provider Master Plans; potential cumulative impacts on utilities and service systems will be less than significant.

4.3.16 TRANSPORTATION AND CIRCULATION

ANALYSIS

The results of the traffic analysis described in Section 3.4 include cumulative effects of development within the City and SOI on the circulation network within the City. The analysis addresses the proposed Circulation Element Roadway Plan and the Riverside County General Plan Circulation Element. Traffic conditions are evaluated in this report for existing conditions and three future horizon years. The WRSATM model, modified for the City of Lake Elsinore to support the GPU process, was used to predict Horizon Year (2030) traffic volumes in terms of weekday AM and PM peak hours of traffic. As discussed further in Section 3.4, with implementation of the GPU, all roadways within the study area would be expected to have substantial traffic volumes and nearly all of the intersection analysis locations would require improvements assuming buildout of the City and growth in the region by the 2030 horizon. **Table 3.4-7, Intersection Analysis Summary - General Plan Buildout Conditions**, includes the LOS for intersections after buildout of the GPU along with improvements suggested in the traffic study. With implementation of the Land Use Plan all roadways within the study area would be expected to have substantial traffic volumes and several of the intersection analysis locations would require improvements. Roadway segment capacities were also evaluated based on the projected daily traffic volumes for the proposed GPU Land Use Plan. The results of this evaluation are summarized in **Table 3.4-10, Highway Link/Roadway Capacity Analysis - General Plan Buildout Conditions**.

Therefore, implementation of the GPU and Land Use Plan could result in significant impacts on traffic levels within the City and SOI. As shown in **Table 3.4-7**, all study area intersections are projected to operate at acceptable LOS during the peak hours with improvements that are consistent with the proposed roadway system and the implementation of the GPU Circulation

Element and Capital Improvements Program. Therefore, with implementation of the improvements and goals and policies set forth by the Circulation Section of the Community Form Chapter and implementation of the City-wide Capital Improvements Program as a part of future development, impacts of the project on traffic levels would be reduced to less than significant.

Implementation of individual projects and associated population growth anticipated in accordance with the Land Use Plan could result in significant impacts on traffic levels and create hazards associated with existing roadway and intersection design features that are inadequate to accommodate increased traffic. However, as described in Section 3.4 (Transportation and Circulation) of this PEIR, measures have been incorporated into the proposed GPU to address potential impacts on roadways and intersections associated with cumulative population growth.

Future developments within the City will contribute to the construction of the circulation improvements proposed as a part of the GPU. In addition future projects will need to conform with GPU goals, policies and implementation programs related to provision of an adequate circulation network (Goal 6, Policies 6.1-6.5) and implement the street improvement projects from the Capital Improvement Program. Therefore with implementation of the improvements and goals, policies and implementation programs set forth by the GPU Circulation Section of the Community Form Chapter as well as the City Capital Improvement Program, the contribution of the GPU to cumulative traffic impacts would be reduced to a less-than-significant level.

However, the actual construction of the required intersection and roadway improvements cannot be determined with certainty. It is anticipated that as development that implements the proposed Land Use Plan proceeds, each development will pay for and construct general plan level road improvements on roads adjacent to the development sites. However, the timing of road improvements needed to improve level of service on a regional basis will be determined by the City of Lake Elsinore, other cities in western Riverside County, the County of Riverside and the Riverside County Transportation Commission based upon need and the availability of funding. Thus, it is possible that the required improvements will not be constructed in time to mitigate the proposed project's traffic and circulation impacts to below the level of significance. Therefore, the proposed project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) and even after mitigation, cumulative impacts will remain significant.

MITIGATION MEASURES

In addition to implementation of the goals, policies and implementation programs identified in the proposed GPU, implementation of mitigation measures **MM Transportation 1** through **MM Transportation 5** is required.

LEVEL OF SIGNIFICANCE

With implementation of the Land Use Plan all roadways within the study area would be expected to have substantial traffic volumes and nearly all of the intersection analysis locations would require improvements. However, through implementation of the GPU goals, policies and implementation programs and the above-listed mitigation measures, all study area intersections would operate at acceptable LOS during peak hours after implementation of the proposed improvements. However, the actual construction of the required intersection and roadway improvements cannot be determined with certainty. Thus, it is possible that the required improvements will not be constructed in time to mitigate the proposed project’s traffic and circulation impacts to below the level of significance. Therefore, the proposed project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) and even after mitigation, cumulative impacts will remain significant and unavoidable.