

7.0 Analysis of Long-Term Effects

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

7.1 Cumulative Impacts

The California Environmental Quality Act Guidelines define cumulative effects as “two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts.” The Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present, and reasonably foreseeable future projects (Section 15355). 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 San Jacinto General Plan establishes policy to guide future development within the City and implementation is long-term in nature. The Regional Growth Projections Method is appropriate methodology in evaluating cumulative impacts because it provides general growth projections for the region and considers long-term growth.

Regional Growth Projections

The San Jacinto General Plan assumes that buildout will occur in 2050; however, the analysis conducted for this section of the EIR also uses population and employment data projections prepared by the Southern California Association of Governments (SCAG). The SCAG 2004 Growth Forecasts, City Projections, includes population forecasts and estimates for the City of San Jacinto as well as Riverside County through the Year 2030. **Table 7-1** depicts the 2030 population for San Jacinto and Riverside County as projected by SCAG's 2004 Growth Forecasts, City Projections. The 2030 projection for the County as a whole is 3,143,468 persons. Similarly, the 2030 SCAG estimate for San Jacinto is 42,738 persons.

**Table 7-1
2030 SCAG Projections for San
Jacinto and
Riverside County**

| Jurisdiction | 2030 Population |
|---------------------|------------------------|
| Riverside County | 3,143,468 |
| San Jacinto | 42,738 |

Source: SCAG 2004 Growth Forecasts, City Projections

Cumulative Impacts

The following is a discussion of the cumulative impacts of the proposed General Plan. Implementation of the mitigation measures identified in the previous sections of this EIR help to reduce the cumulative impacts of the project to the extent feasible. In many cases, the mitigation measures result in reducing the project's cumulative impact to a less than significant level. For other impacts, the implementation of the identified mitigation measures may not avoid the project level and/or significant cumulative impact. The following section identifies the potential cumulative impacts associated with implementation of the San Jacinto General Plan.

Aesthetics

While aesthetics impacts associated with the implementation of a general plan are typically confined within that city's boundary, development within one city may create aesthetic impacts outside of that city. For example, development of a ridgeline or hillside in one city may impact views from a scenic highway or public space outside of the city in which the development is occurring. For that reason, the geographic scope for cumulative aesthetics impacts includes the Planning Area and immediately adjacent communities and jurisdictions, such as the City of Hemet and the unincorporated communities located to the north, east and west of San Jacinto.

Limited new residential and non-residential development associated with the General Plan may take place on hillsides and ridgelines on San Jacinto's eastern and western borders. Development of these areas has the potential to significantly impact views of these significant scenic resources from roadways and public spaces located outside the City of San Jacinto. However, the City shall implement mitigation described in Section 5.1 that will reduce these impacts to below a level of significance.

New development associated with the General Plan may also increase the amount of light and glare in the community, particularly in areas planned for non-residential development, such as commercial, public institutional, and industrial areas. This increase in light and glare would have the potential to significantly impact views from outside the City of San Jacinto. However, the new development in the City will be required to meet the standards contained in the City's Lighting Regulations that are contained within the Zoning Ordinance, and no significant impact associated with light and glare will occur. Thus, implementation of the General Plan will not create significant cumulative impacts to visual resources.

Agricultural Resources

San Jacinto, like Riverside County, in general, has historically been an agricultural community, with its rich valley soils providing a wide variety of agricultural crops. Because of this, the geographic scope for cumulative impacts to agricultural resources is Riverside County. While other nearby areas possess agricultural resources as well, the large amount of agricultural resources in San Jacinto represent a substantial amount of the agricultural resources within Riverside County. Existing development pressures and economic realities associated with farming in southern California are fostering the conversion of agricultural lands to non-agricultural uses. Implementation of the proposed General Plan will allow new development to occur that will convert existing agricultural resources to non-agricultural use. Although implementation of the mitigation measures described in Section 5.2 will reduce impacts to agricultural resources to a degree, implementation of the General Plan will have significant and unmitigable impacts on agricultural resources in San Jacinto. Due to development pressures and existing economic realities related to farming in southern California, the impacts to agricultural resources in Riverside County are expected to remain cumulatively significant and unavoidable as well. The Project's contribution to the cumulative loss of agricultural resources in Riverside County will be significant and unavoidable.

Air Quality

The City of San Jacinto is located within the South Coast Air Basin, which represents the geographic scope for cumulative impacts to air quality. The South Coast Air Basin is a non-attainment area for federal and state air quality standards for ozone and state standards for particulate matter less than ten microns in diameter (PM10). The Planning Area lies within the South Coast Air Quality Management District Source Receptor Area 28. Since 1997, there has been no active monitoring station in Area 28 because information gathered in Area 28 was consistently redundant with information gathered in Area 24 – Perris Valley, which is located just west of Area 28. Therefore, since 1997, the City uses information gathered from Area 24 to assess PM10 and ozone emissions affecting the Planning Area. No other pollutant is monitored in Area 24 due to the consistently low levels of other pollutant emissions (e.g., carbon monoxide, nitrogen dioxide, and sulfur dioxide) identified in the area in the 1980s and 1990s.

Construction-related air quality impacts will occur periodically throughout implementation of the General Plan. Future development in the City will generate construction impacts associated with the following construction activities: 1) construction equipment exhaust emissions; 2) emissions from worker vehicles traveling to and from construction sites; 3) dust from grading and earth-moving operations; and 4) Reactive Organic Gases (ROG) emissions from the application of architectural coatings and solvent usage. As discussed in Section 5.3, construction related emissions will exceed SCAQMD thresholds. These construction-related emissions will impact cumulative air quality as well and will be significant and unavoidable.

Long-term growth of the San Jacinto area will lead to an ever-increasing amount of trip generation and associated air pollution emissions. However, the on-going rate of vehicular emissions improvements will offset the effects of such growth. Automobile exhaust

pollution (CO, NO_x and CO) is forecast to be reduced by 50 percent in the next 10 years, and 50 percent of the residual in the 10 years thereafter. The average vehicle is forecast to be one fourth as “dirty” in 2025 than in 2005 from low-emissions technology (EMFAC2002). Although the City of San Jacinto is forecast to undergo substantial growth, the rate of emissions improvement may nevertheless create a net emissions reduction for the three major exhaust pollutants.

Mobile source emissions from area-wide development were calculated by combining trip data from city demographic projects with evolving vehicular emission factors. A vehicle occupancy factor of 1.25 was used to convert “person-trips” to vehicle trips. The City’s growth projections prepared by SCAG for 2030, and the proposed General Plan projections, are shown in **Table 7-2**. The General Plan will outpace SCAG’s projections unless maximum growth acceleration does not occur until after 2030.

Table 7-2
City of San Jacinto Demographics

| Parameter | Existing (2005) | 2030 SCAG Forecast | Proposed General Plan |
|-----------------------|------------------------|---------------------------|------------------------------|
| Dwelling Units | 8,883 | 16,016 | 34,926 |
| Population | 25,494 | 42,738 | 100,239 |
| Persons per Household | 2.87 | 2.67 | 2.87 |
| Jobs | 7,154 | 11,620 | 30,262 |
| Jobs: Housing Ratio | 0.805 | 0.726 | 0.866 |
| Person Trips | 208,154 | 378,231(e) | 956,151 |
| Trips per Person | 8.16 | 8.25(e) | 9.54 |

(e)=estimated

The bulk of the trip generation was assumed to be from automobiles and light duty trucks. The vehicular emission factors from the EMFAC2002 computer model shown in the SCAQMD CEQA Handbook update were extrapolated to 2030 and 2050 in order to produce a project-related vehicular emissions burden. The regional emissions calculations are summarized in **Tables 7-3** through 7-5. The effects of growth are offset by continued vehicular emissions improvements for CO, NO_x and ROG. Because SO_x and PM-10 are related to miles driven and not to smog controls, these pollutants will increase over time. The difference between build-out versus existing PM-10 will exceed the 150-pound per day significance threshold. No other pollutant will experience any significant increase despite the more than four-fold increase in travel miles for future city residents.

Table 7-3
Project-Related Vehicular Emissions (lb/1,000 miles)

| Pollutant | 2005 | 2030 | 2050 |
|------------------|-------------|-------------|-------------|
| CO | 15.165 | 2.412 | 0.804 |
| NO _x | 1.634 | 0.228 | 0.076 |
| ROG | 1.626 | 0.325 | 0.108 |
| SO _x | 0.01 | 0.009 | 0.009 |
| PM-10 | 0.113 | 0.126 | 0.131 |

Giroux & Associates, 2005.

**Table 7-4
Project-Related Vehicular Emissions (lb/day)***

| Pollutant | 2005 | 2030 | 2050 |
|------------------|-------------|-------------|-------------|
| CO | 18,941 | 5,473 | 4,613 |
| NOx | 2,041 | 517 | 436 |
| ROG | 2,031 | 737 | 620 |
| SOx | 12 | 20 | 52 |
| PM-10 | 141 | 286 | 752 |

Giroux & Associates, 2005.

**Table 7-5
Project-Related Vehicular Emission Changes (lb/day)***

| Pollutant | 2005-2030 | 2030-2050 | 2005-2050 | SCAQMD Threshold |
|------------------|------------------|------------------|------------------|-----------------------------|
| CO | -13,468 | -860 | -14,328 | +550. |
| NOx | -1,524 | -81 | -1,605 | +55. |
| ROG | -1,294 | -117 | -1,411 | +55. |
| SOx | +8 | +32 | +40 | +150. |
| PM-10 | +145 | +466 | +611 | +150. |

Giroux & Associates, 2005. *Person trips * 0.8 * 7.5 mi/trip * EMFAC2002 factor

Regional emissions impact significance, however, is more related to project consistency with area growth projections than with the emissions magnitude some 45 years from now. The rate of growth anticipated under the General Plan may exceed the growth that SCAG has allocated for the City of San Jacinto and its sphere of influence. However, the possible difference between SCAG's forecast for 2030 and the General Plan build-out assumptions may not necessarily have a significant air quality impact because:

1. The SCAG 2030 forecast can be accommodated within the General Plan estimates if one presumes that a greater fraction of growth will occur from 2030 to 2050, than from 2005 to 2030.
2. The growth and associated emissions will occur somewhere within the air basin if not in/near San Jacinto with identical regional air quality impacts.
3. Vehicular emissions at assumed citywide build-out in 2050 may be far different than predicated by extrapolation of current emissions trends if engine technology or lack of fossil-fuel (petroleum) resources creates a more dramatic shift to alternative-fueled transportation.

The proposed General Plan will therefore be consistent with SCAG's regional comprehensive plan forecasts. However, additional trip generation associated with implementation of the proposed general plan will generate emissions of PM-10 that will exceed SCAQMD thresholds. These emissions will be cumulatively significant and unavoidable.

Biological Resources

The geographic scope for cumulative biological impacts is the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. As described in Section 5.4, the Western Riverside County MSHCP is the regional plan with jurisdiction over biological resources in the Planning Area. Development in the Planning Area will have the potential to impact biological resources, which could diminish the amount of biological resources within the Western Riverside County MSHCP region. However, the Project is consistent with and will facilitate implementation of the applicable policies and programs identified in the Western Riverside County MSHCP. Additionally, the General Plan includes numerous objectives and policies designed to reduce impacts to biological resources over the long-term. The project's implementation of the General Plan programs and policies and mitigation described in Section 5.4 will manage and reduce impacts to biological resources in San Jacinto to a level of significance consistent with the regional biological resources planning efforts contained in the MSHCP. Thus, implementation of the General Plan will not create significant cumulative impacts to biological resources.

Cultural Resources

The geographic scope for cumulative impacts to cultural resources includes Riverside County. Historical, archeological, and paleontological resources in Riverside County could be cumulatively impacted by future development, like that which could occur under the proposed General Plan. However, like other jurisdictions in Riverside County, the City shall implement local policies and programs as well as mitigation that will reduce these impacts to below a level of significance. Thus, implementation of the General Plan will not create significant cumulative impacts to cultural resources.

Geology/Soils and Mineral Resources

The geographic scope for cumulative impacts to geology/soils and mineral resources is Riverside County. Future development in San Jacinto will increase the number of people exposed to earthquakes and other geologic hazards. However, like other jurisdictions in Riverside County, the City shall implement local policies and programs as well as mitigation that will reduce these individual project impacts to below a level of significance. Implementation of the General Plan will not have any impacts on mineral resources in the County since no valuable minerals have been discovered within the Planning Area. Thus, implementation of the General Plan will not create significant cumulative impacts to geology/soils and mineral resources.

Hazards and Hazardous Materials

The geographic scope for cumulative impacts to hazards and hazardous materials includes Riverside County. As future development occurs within San Jacinto and within Riverside County, the population will rise and the number of people exposed to hazards related to hazardous materials, flooding, and fires will increase. The cumulative impact of regional development on public safety is potentially significant. However, the City shall implement mitigation described in Section 5.7 that will reduce these impacts to below a level of significance. In addition, cumulative hazards impacts will be limited by public safety policies and programs implemented by other Riverside County jurisdictions. These programs establish policies to ensure that planned land uses are compatible with the

surrounding natural and urban environment and hazardous conditions are minimized. Enforcement of state, county, and local hazardous material regulations will reduce significant public health hazards to a less than significant level. Thus, implementation of the General Plan will not create significant cumulative impacts to hazards and hazardous materials.

Hydrology/Water Quality

The geographic scope for cumulative impacts to hydrology/water quality is the San Jacinto River Basin. As development proceeds in the San Jacinto River Basin of the California Regional Water Quality Control Board Region 8, the amount of pollutants in runoff will increase, also impacting surface and groundwater quality. The amount of impervious surfaces will increase as development proceeds and groundwater recharge rates will consequently decrease. Erosion and sedimentation impacts on surface water will occur during grading and construction activity. However, the City shall implement mitigation described in Section 5.8 that will reduce these impacts to below a level of significance. Thus, implementation of the General Plan will not create significant cumulative impacts to hydrology/water quality.

Land Use and Planning

The geographic scope for cumulative land use impacts includes the Planning Area and immediately adjacent communities and jurisdictions, such as the City of Hemet and the unincorporated communities located to the north, east and west of San Jacinto. The Southern California Association of Governments (SCAG) is the regional organization that provides guidance for planning for the region. The General Plan is consistent with the goals and policies of SCAG. The project proposes a mix of land uses that will improve the jobs-housing ratio and reduce the number and length of work trips. The project will also be consistent with the goals and policies of the South Coast Air Quality Management Plan (AQMP). The project organizes land uses in relation to the circulation system, promoting compact, pedestrian, and transit-friendly development, and providing a balanced Land Use Plan that promotes a favorable relationship between jobs and housing. The project is also consistent with the Western Riverside County MSHCP, as described above in the *Biological Resources* subsection. Thus, implementation of the General Plan will not create significant cumulative land use impacts.

Noise

The geographic scope for cumulative noise impacts includes the Planning Area and immediately adjacent communities and jurisdictions, such as the City of Hemet and the unincorporated communities located to the north, east and west of San Jacinto. Anticipated regional development will generate short term noise during the construction process of individual projects. Increased development will also increase traffic volumes and associated noise levels on regional roadways. Significant noise levels already occur along many of the region's transportation corridors. Some existing development is already impacted by vehicular noise, and may continue to experience high noise levels whether or not the project is implemented. Implementing local noise ordinances, constructing buildings according to state acoustical standards, and proper land use planning will reduce cumulative impacts to new noise sensitive land uses to a less than significant level. In addition, the proposed General Plan does not propose any land use that would result in a significant increase to the ambient noise level in the region. Existing development may continue to be

impacted by the cumulative vehicular traffic along the region's roadways. As a result, implementation of the General Plan may result in an unavoidable, significant, cumulative noise impact to existing development.

Population and Housing

The geographic scope for cumulative population and housing is Riverside County. Implementation of the proposed General Plan would not result in the displacement of substantial numbers of existing housing units or persons since the majority of the land designated for future development consists of vacant land or development of non-residential land. According to SCAG projections, Riverside County is projected to grow by approximately 1.5 million people over the next 25 years. Although the land uses allowed under the General Plan will provide for sufficient land to accommodate a portion of the region's projected population growth through the provision of additional housing and employment opportunities, implementation of the San Jacinto General Plan would allow a large increase in the population of the Planning Area that exceeds the 2030 SCAG projections. As a result, implementation of the General Plan will result in a significant and unavoidable cumulative impact to population and housing.

Public Services and Recreation

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 can lead to unanticipated demand for public services from nearby service providers.

Future regional growth will result in increased demand for police protection, fire protection, schools, libraries, and recreation and open space throughout the region. Local and regional service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand. In addition, local agencies must consistently review and update mutual aid agreements between the various service providers. 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 the policies and program identified in the General Plan and the mitigation identified in this EIR will reduce potential cumulative impacts associated with the provision of police protection, fire protection, schools, libraries, and recreation and open space to below a level of significance. Funding and implementation of these services will be ensured by concurrency requirements, assessment district requirements, development impact fees, and CFD. Thus, implementation of the General Plan will not create significant cumulative impacts to public services and recreation.

Traffic

The geographic scope for cumulative traffic is Riverside County. Development consistent with project implementation will facilitate new growth in the Planning Area that will generate additional roadway traffic within both the Planning Area and the region. As discussed in Section 5.13, segments of Ramona Expressway (west of Warren Road) and State Route 79 will be significantly impacted by implementation of the General Plan and cumulative traffic. This is consistent with the Riverside County Integrated Project (RCIP) projections. Adherence to and implementation of the mitigation measures described in Section 5.13 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 Mitigation Measures described in Section 5.13, the project's contribution to cumulative traffic impacts, particularly at SR-79 and on Ramona Expressway in the vicinity of the Planning Area, will remain significant and unavoidable.

Utilities

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 can lead to unanticipated demand for public services from nearby service providers.

Future regional growth will result in increased demand for, water supply, sewer services, solid waste services, power services, and communication services. Local and regional Service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand. In addition, local agencies must consistently review and update mutual aid agreements between the various service providers. 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 water supply, sewer services, solid waste services, power services, and communication services. Funding and implementation of these services will be ensured by concurrency requirements, assessment district requirements, development impact fees, and CFD. Thus, implementation of the General Plan will not create significant cumulative impacts to public services and recreation.

7.2 Growth Inducing Impacts

CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the growth-inducing impact of the proposed project. Growth-inducement includes, "...ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

The Project is specifically intended to provide for the orderly development and redevelopment of San Jacinto, 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 3-2** 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.

Development pursuant to Project policies and regulatory standards will result in the addition of 28,382 new dwelling units and approximately 27,000,000 square feet of new non-residential construction between now and approximately 2050 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 San Jacinto.

7.3 Significant Irreversible Environmental Changes

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

Several irreversible commitments of limited resources would result from implementation of the proposed General Plan. The resources include, but are not limited to the following: lumber and other related forest products; sand; gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead and other metals; and water consumption. Buildout 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 San Jacinto.

7.4 Unavoidable Significant Environmental Impacts

Implementation of the General Plan update will result in significant unavoidable project-level and cumulative short-term impacts to agricultural resources. Implementation of the mitigation measures in Section 5.2 of this EIR will reduce impacts to agricultural resources to the extent feasible; however, since the implementation of the General Plan will convert large amounts of existing agricultural lands to other uses, implementation of the General Plan will have significant and unmitigable impacts to agricultural resources.

Implementation of the General Plan update will result in significant unavoidable project-level and cumulative air quality impact. Implementation of the mitigation measures in Section 5.3 of this EIR will reduce the air quality impacts to the extent feasible; however, as the Planning Area is located within a non-attainment air basin, there will continue to be a significant and unavoidable short-term air quality impact due to construction emissions that will occur from future development pursuant to buildout of the General Plan.

Additionally, future development in the Planning Area will continue to add pollutants to the atmosphere from both transportation and stationary sources. Potential cumulative air quality impacts will be partially reduced through implementation of the mitigation measures described in Section 5.3. However, despite these mitigation measures, analysis within this EIR indicates that long term air quality impacts will be significant and unavoidable. These impacts will be cumulatively significant and unavoidable as well. The Project's contribution to cumulative air quality impacts will be significant and remains unavoidable.

Implementation of the General Plan update will result in significant unavoidable cumulative noise impact. Implementation of the mitigation measures in Section 5.10 of this EIR will reduce project level noise impacts to below a level of significance; however, existing development may continue to be impacted by the cumulative vehicular traffic along the region's roadways. As a result, implementation of the General Plan may result in an unavoidable, significant, cumulative noise impact to existing development.

Implementation of the General Plan update will result in significant unavoidable project-level and cumulative population and housing impact. Although the land uses allowed under the General Plan will provide for sufficient land to accommodate a portion of the region's projected population growth through the provision of additional housing and employment opportunities, the additional population increases encouraged by implementation of the General Plan will be significant and unavoidable. No feasible mitigation exists to reduce these impacts to below a level of significance.

The buildout of the San Jacinto General Plan will generate traffic that will impact major highways and roadways external to the City of San Jacinto. Because of this, buildout of the General Plan will contribute to a significant and unavoidable cumulative traffic impact.

7.5 Areas of No Significant Impact

The following areas are analyzed as part of this EIR and were found to be less than significant.

- Mineral Resources

Mitigation measures will reduce all other impacts to less than significant levels with the exception of project-level and cumulative agricultural resources, project-level and cumulative air quality (short-term and long term), and project-level and cumulative traffic, which are considered unavoidable.

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