

5.0 Environmental Impact Analysis

This section of the EIR discusses each of the potentially significant effects of implementing the San Jacinto General Plan, and identifies mitigation measures to reduce impacts found to be potentially significant. This EIR analyzes those environmental issue areas identified in the Initial Study (EIR Appendix A) as having the potential to occur. All answers are discussed in the Initial Study in accordance with the CEQA Guidelines, Section 15063(c); no further analysis is required for those effects which are not considered potentially significant in the Initial Study.

The environmental issues analyzed in this EIR include:

- | | |
|--|------------------------------------|
| 1. Aesthetics | 8. Hydrology/Water Quality |
| 2. Agricultural Resources | 9. Land Use and Planning |
| 3. Air Quality | 10. Noise |
| 4. Biological Resources | 11. Population and Housing |
| 5. Cultural Resources | 12. Public Services and Recreation |
| 6. Geology/Soils and Mineral Resources | 13. Transportation |
| 7. Hazards and Hazardous Materials | 14. Utilities/Service Systems |

Each environmental issue for which the Initial Study identified a potentially significant impact, is analyzed in the following manner:

Environmental Setting describes the existing conditions in the environment in the vicinity of the project before the commencement of the project to provide a baseline for comparing “before the project” and “after the project” environmental conditions. This section also provides an overview of the existing regulatory framework that is relevant to the environmental issue being analyzed.

Threshold for Determining Significance defines and lists specific criteria used to determine whether an impact is or is not considered to be potentially significant. Major sources used in crafting criteria appropriate to the specifics of the project include: the CEQA Guidelines; local, state, federal or other standards applicable to an impact category; and officially established thresholds of significance. “...An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting.” (CEQA Guidelines, Section 15064 [b]). Principally, “... a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance” constitutes a significant impact (CEQA Guidelines, Section 15382).

Potential Environmental Impacts presents evidence, based to the extent possible on scientific and factual data, for the cause and effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant, all of the potential effects, including direct effects, reasonably

foreseeable indirect effects, and considerable contributions to cumulative effects, are considered.

Mitigation Measures identify the means by which potentially significant impacts could be reduced or avoided in cases where the EIR analysis determines such impacts to be potentially significant. Standard existing regulations, proposed Implementation Programs, and procedures that are applied to all similar projects are taken into account in identifying additional project specific mitigation that may be needed to reduce significant impacts. Mitigation, in addition to measures that the lead agency will implement, can also include measures that are within the responsibility and jurisdiction of another public agency (CEQA Guidelines, Section 15091 [a] [2]).

Level of Significance After Mitigation identifies the impacts that will remain after application of mitigation measures, and whether the remaining impacts are or are not considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “unavoidable significant impacts.” In order to approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project that outweigh the unavoidable adverse environmental effects. Thus, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines Section 15093 [a]).

5.1 Aesthetics

5.1.1 Environmental Setting

San Jacinto is located in a valley, and the City's eastern and western borders are largely defined by steep sloping hillsides and ridgelines associated with the San Jacinto Mountain Range. The summit of Mount San Jacinto stands 10,804 feet above sea level, the highest point in the Range and the second highest in southern California. The mountain's granite peaks and subalpine forests provide a scenic vista for the residents of San Jacinto.

Due to the extensive amount of open space in both the western and easternmost portions of the City, the variety of elevations and topography, and the habitat associated with the San Jacinto River, a variety of visual resources exists in the City. Examples of existing scenic resources in the San Jacinto Planning area are shown in **Figure 5.1-1**.

Other features that make up the aesthetic setting of San Jacinto include public parks and open spaces, the density and distribution of existing development, architecture of the built environment, and the agricultural heritage of the area.

5.1.2 Thresholds for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the area and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.3 Potential Environmental Impacts

Scenic Vistas

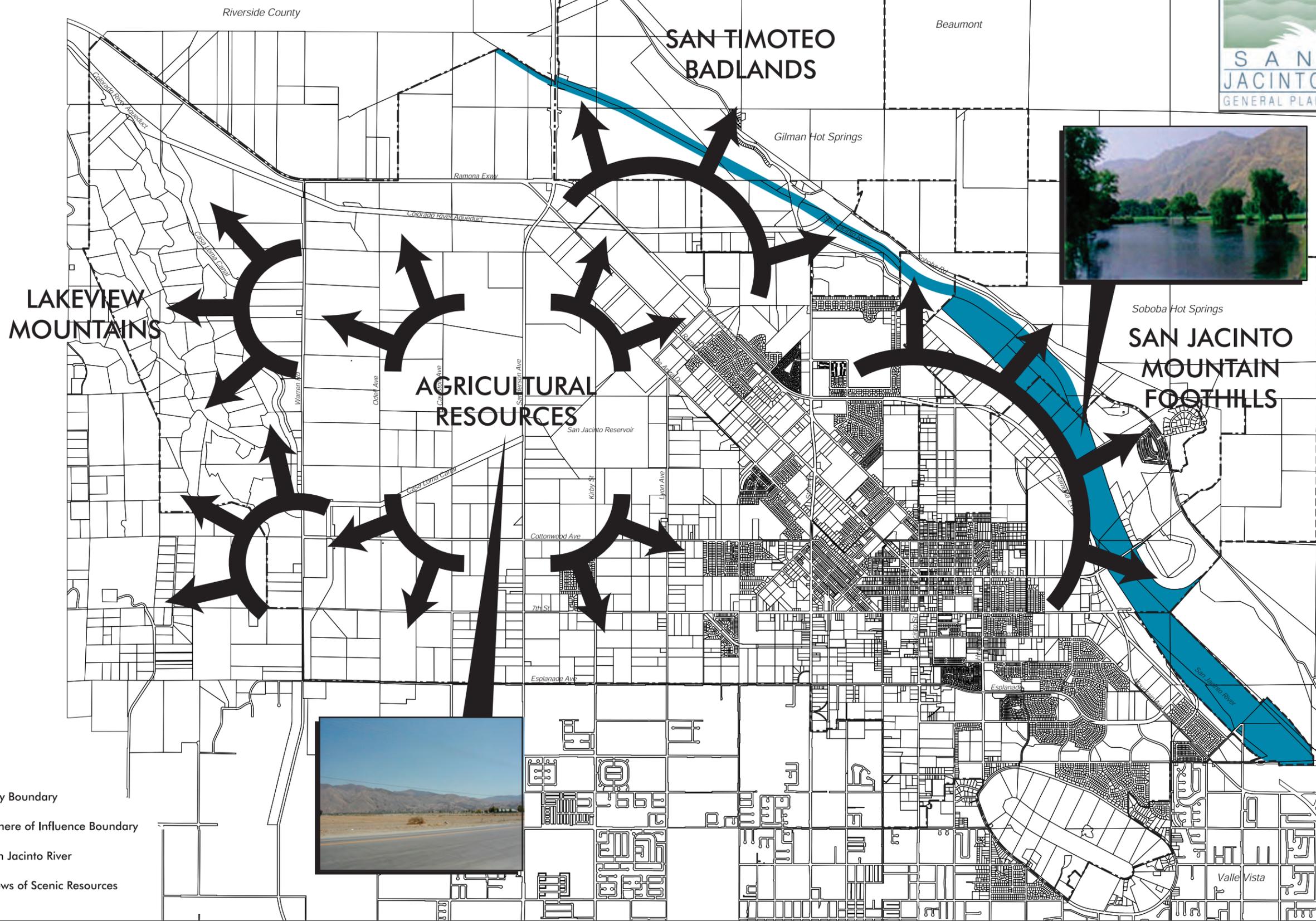
San Jacinto's eastern and western borders are largely defined by steep sloping hillsides and ridgelines on unincorporated lands surrounding the City associated with the San Jacinto Mountain Range. The City of San Jacinto itself also has a number of scenic vistas in the form of open space and agricultural lands. Development of these steep sloping hillsides, ridgelines, open spaces, and agricultural lands with urban uses could result in a significant impact to scenic vistas. Implementation of Mitigation Measures A1 and A2 will reduce these impact to below a level of significance. Mitigation Measure A1 requires that a majority of the land in the hillside areas be designated as Open Space (OS), which allows a maximum of 1 dwelling unit per 40 acres or non residential development with a maximum 0.10 floor area ratio (FAR). This low level of development discourages incompatible development in these areas and maintains the scenic vistas of these hillsides and ridgelines, while providing opportunities for habitat and species preserve areas. In order to provide additional development opportunities in the vicinity of these hillsides, areas of Estate Residential, Rural Residential (RR) and Open Space – Recreation (OS-R) are planned in the more gently sloped areas at the base of both the eastern and western hillsides.

Mitigation Measure A2 requires the City to designate scenic routes and adopt and implement guidelines for development visible from the scenic routes to minimize impacts to scenic vistas.

Scenic Resources Within a State Scenic Highway

California's Scenic Highway Program was created by the State Legislature in 1963 to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highway or have been so designated (State of California 2004).

State Route (SR) 79 passes through the City of San Jacinto, and serves as the primary access route to the City from surrounding communities. The portion of SR-79 that passes through the City has not been identified as having a scenic designation, nor has this portion of SR-79 been identified as being eligible for inclusion in the State Scenic Highway System (State of California 2004). However, as described above, the City recognizes that abundant scenic vistas are available from many of the City's roadways including SR-79. In order to protect views from these local routes, the City will implement a Local Scenic Route program (Mitigation Measure A2). Due to the fact that no adopted scenic highway exists in San Jacinto, the General Plan will not result in any significant impact to scenic resources within a State scenic highway.



- Legend**
-  City Boundary
 -  Sphere of Influence Boundary
 -  San Jacinto River
 -  Views of Scenic Resources

Sources: County of Riverside GIS, City of San Jacinto, USGS



0 1,000 2,000 4,000 Ft
North

Figure 5.1-1
Major Scenic Resources

Visual Character and Quality

Implementation of the San Jacinto General Plan may result in a reduction of the visual character or quality within the City. Future development associated with the General Plan may not be consistent with the rural and agricultural character existing within much of San Jacinto. Additionally, new development may be proposed that is out of character with existing structures and development in the City. This is a significant impact. Implementation of Mitigation Measures A-3 through A-7 will reduce this impact to below a level of significance. Mitigation Measure A-3 calls for the City to implement Planned Unit Development (PUD) and Specific Plan (SP) requirements during the review of applicable projects and require Planned Unit Developments and Specific Plans to include creative and thoughtful design solutions that enhance not only the project, but the community as a whole.

Implementation of Mitigation Measures A-4 through A-7 will help promote the revitalization of the older portions of the community and ensure that new development and redevelopment is compatible and complementary to existing development. Mitigation Measure A-4 calls for the City to implement and update as necessary the Redevelopment Implementation Plan to implement revitalization projects in the downtown area. Mitigation Measure A-5 calls for the City to adopt and implement design guidelines for the Center City Area that encourage:

- Enhancement and restoration of historic resources;
- Development and redevelopment that is compatible with and complementary to the historic feel of the downtown;
- Increased landscaping for shading, beautification, and screening;
- Pedestrian-orientation, amenities and scale;
- Thoughtful solutions to the existing lack of parking;
- A mixture of uses to promote activity in the area both day and night;
- Common open spaces, such as mini-parks and plazas; and
- A unique identity for the downtown area.

Mitigation Measure A-6 calls for the City to enforce the Urban Corridor Overlay District standards on all properties having frontage on San Jacinto Avenue between Seventh Avenue and Menlow Avenue, and all properties having frontage along Esplanade Avenue between Hewitt Street and State Street. The City shall also consider amending the Overlay District to encompass the Mid County Parkway and fronting properties. Mitigation Measure A-7 calls for the City to continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system and landscaping of right-of-ways. The City shall include an arterial streetscape improvements plan as part of future updates to ensure that substandard streetscapes are beautified. These measures, along with the City's ongoing Code Enforcement activities will enhance the visual character and quality in the Planning Area. In conclusion, implementation of the General Plan will result in a less than significant impact to visual character and quality.

Light and Glare

New development in the planning area according to the General Plan may 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. Commercial uses would have the potential to generate the most glare, especially in association with outdoor parking that may remain lit through the night located adjacent to residential areas or visible from roadways. All new development projects will be required to meet the standards contained in the City's Lighting Regulations that are contained within the Zoning Ordinance. These regulations are designed to limit light and glare to acceptable levels; therefore, no significant impact associated with light and glare will occur.

5.1.4 Mitigation Measures

- A-1. Through the City's Hillside Development Guidelines, the City will retain the significant hillsides and ridgelines on San Jacinto's eastern and western borders as Open Space, allowing areas of non-intensive development such as Rural Residential, Estate Residential, and Open Space – Recreation on the more gently sloped areas at the base of the eastern and western hillsides. (Implementation Program RM-5)
- A-2. The City shall designate local scenic routes and vistas and develop guidelines for development visible from these scenic routes to minimize impacts to scenic vistas. (Implementation Program LU-21 and RM-15)
- A-3. The City shall implement Planned Unit Development (PUD) and Specific Plan (SP) requirements during the review of applicable projects and encourage Planned Unit Developments and Specific Plans to include creative and thoughtful design solutions that enhance not only the project, but the community as a whole. (Implementation Program LU-6)
- A-4. The City shall implement and update as necessary the Redevelopment Implementation Plan to implement revitalization projects in the downtown area. (Implementation Program LU-14)
- A-5. The City shall adopt and implement design guidelines for the Center City Area that encourage:
- Enhancement and restoration of historic resources;
 - Development and redevelopment that is compatible with and complementary to the historic feel of the downtown;
 - Increased landscaping for shading, beautification, and screening;
 - Pedestrian-orientation, amenities and scale;
 - Thoughtful solutions to the existing lack of parking;
 - A mixture of uses to promote activity in the area both day and night;
 - Common open spaces, such as mini-parks and plazas; and
 - A unique identity for the downtown area. (Implementation Program LU-17)
- A-6. The City shall enforce the Urban Corridor Overlay District standards on all properties having frontage on San Jacinto Avenue between Seventh Avenue and Menlow

Avenue, and all properties having frontage along Esplanade Avenue between Hewitt Street and State Street. The City shall also consider amending the Overlay District to encompass the Mid County Parkway and fronting properties. (Implementation Program LU-18)

- A-7 The City shall continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system and landscaping of right-of-ways. The City shall include an arterial streetscape improvements plan as part of future updates to ensure that substandard streetscapes are beautified. (Implementation Program C-3)

5.1.5 Impact after Mitigation

Scenic Vistas

Implementation of Mitigation Measures A-1 and A-2 will reduce the impact to scenic vistas to below a level of significance.

Scenic Resources Within a State Scenic Highway

No significant impact to scenic resources within a State Scenic Highway were identified for the project.

Visual Character and Quality

Implementation of Mitigation Measures A-3 through A-7 will reduce the impact to visual character and quality to below a level of significance.

Light and Glare

No significant impacts related to lighting and glare were identified for the project.

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5.2 Agricultural Resources

5.2.1 Environmental Setting

Existing Agricultural Activities

San Jacinto has historically been an agricultural community, with its rich valley soils providing a wide variety of agricultural crops. As depicted in **Figure 5.2-1**, agricultural uses in the Planning Area include groves and orchards, field croplands, and dairy and livestock feedyards. The central, western, southwestern, and northwestern portions of the City are primarily comprised of field croplands, while there are some dairy and livestock feedyards intermixed throughout these areas as well. These agricultural uses extend beyond the southwestern and northwestern boundaries of the City. There are also field croplands and a scattering of dairy and livestock feedyards surrounding the developed areas of the city as well. There are groves/orchards located in the western most portion of the city along the Casa Loma Canal and in the southeastern portion of the City. These agricultural uses provide revenue for the City while preserving rural character and maintaining open space and scenic views.

Figure 5.2-1 also depicts the agricultural preserve (Williamson Act contract) areas within San Jacinto. These agricultural preserves are located in the western and northwestern portions of the city and extend beyond the northwestern boundary of the City. There is also one agricultural preserve beyond the southwestern boundary of the project.

Department of Conservation Important Farmland Classifications

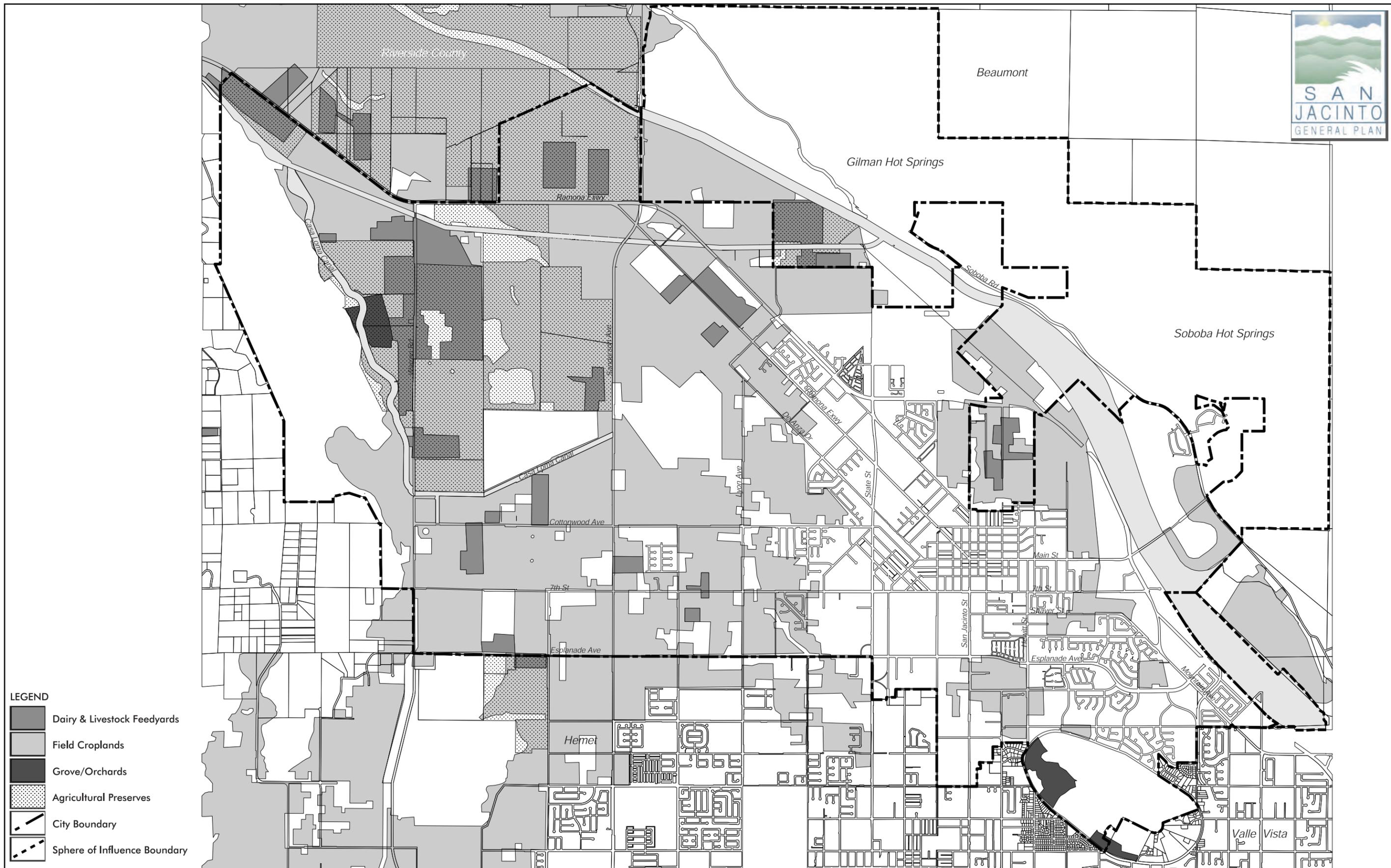
The Planning Area contains land classified by the Department of Conservation (DOC) as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Grazing Land. The goal of the Department of Conservation's Important Farmland Mapping is to provide land use conversion information for decision makers to use in their planning for the present and future use of California's agricultural land resources.

The DOC applies specific criteria for the purposes of categorizing important farmlands as follows:

- Prime Farmland – Land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.
- Farmland of Statewide Importance – Land similar to Prime Farmland that has a good combination of physical and chemical characteristics for the production of agricultural crops. This land has minor shortcomings, such as greater slopes or less ability to store soil moisture than Prime Farmland. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date.

- Unique Farmland – Lesser quality soils used for the production of the state’s leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the two update cycles prior to the mapping date.
- Farmland of Local Importance (Riverside County definition) – Soil that would be classified as Prime Farmland and Farmland of Statewide Importance but lack available irrigation water. This land is used to harvest dryland crops of barley, oats, and wheat. This category also includes lands producing major crops for Riverside County that are not listed as Unique crops and dairylands including corrals, pasture, milking facilities, hay, and manure storage areas if accompanied with permanent pasture of hayland of 10 acres or more. This category also includes land identified by city or county ordinance as Agricultural Zones or Contracts, which includes Riverside City ‘Proposition R’ lands. This category also includes lands planted to jojoba which are under cultivation and are of producing age.
- Grazing Land – Land on which the existing vegetation is suited to the grazing of livestock. This category is used only in California and was developed in cooperation with the California Cattlemen’s Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- Urban and Built Up Land – Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10 acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- Other Land – Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
- Water – Water within the Planning Area.

The DOC updates the Important Farmlands Mapping on a two year cycle. The amount and type of important farmlands designated in the project area could change in the future as a result of updated DOC mapping. Figure 5.2-2 depicts the Important Farmlands in San Jacinto as identified by the Department of Conservation for the most recent cycle. The categories depicted in Figure 5.2-2 were developed by the Department of Conservation Farmland Mapping and Monitoring Program. As indicated by Figure 5.2-2 and Table 5.2-1, a substantial amount of land in the Planning Area is identified as important farmland. Although the majority of land in San Jacinto is categorized as Urban and Built up Land, approximately 839 acres of Prime Farmland, 881 acres of Unique Farmland, and 1,959 acres of Farmland of Statewide Importance are located within the Planning Area.



Sources: County of Riverside GIS, City of San Jacinto, USGS

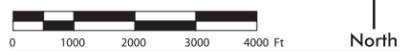
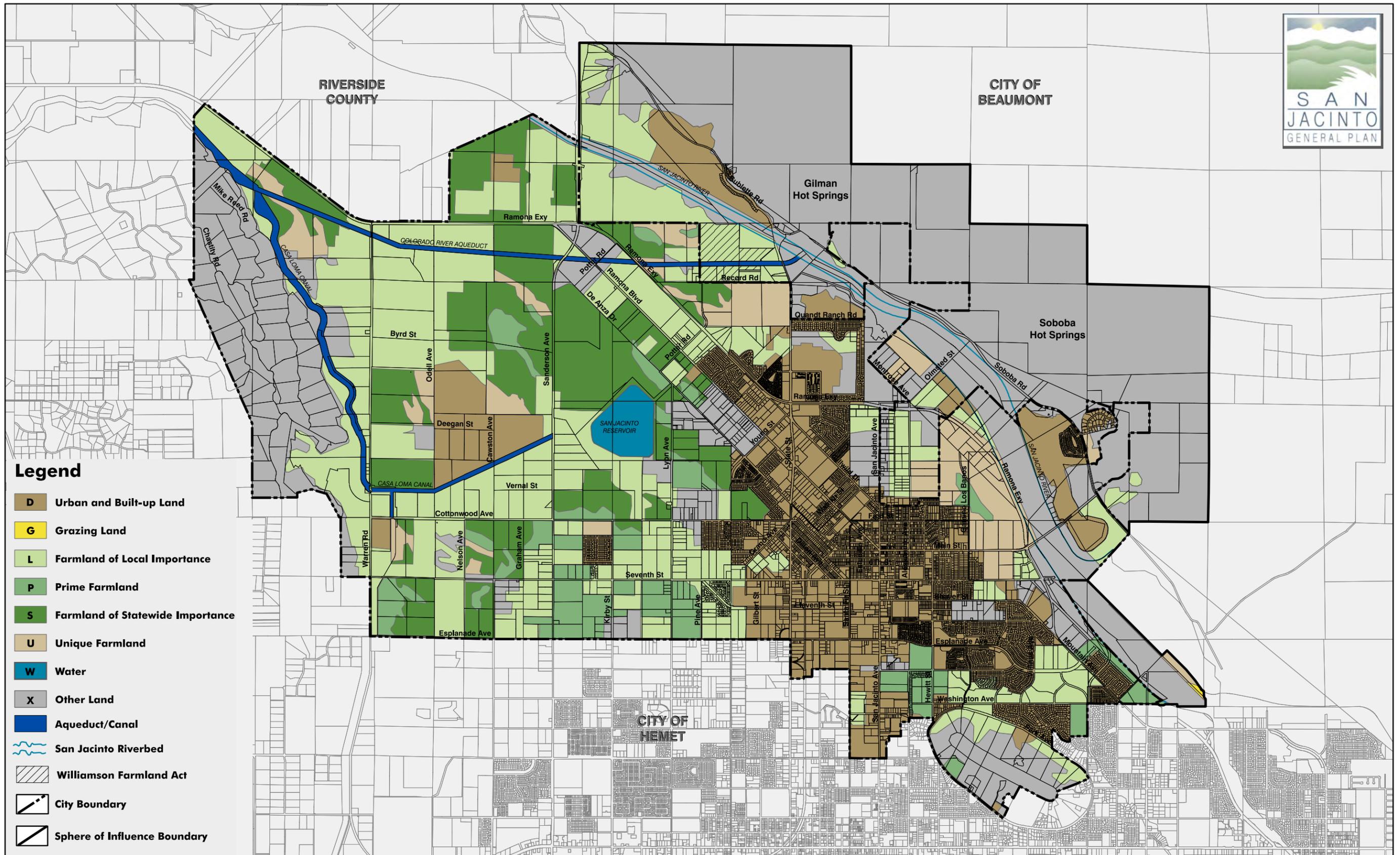


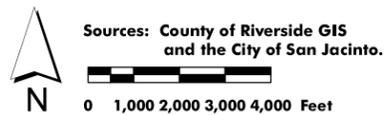
Figure 5.2-1
Agricultural Resources



Legend

- D** Urban and Built-up Land
- G** Grazing Land
- L** Farmland of Local Importance
- P** Prime Farmland
- S** Farmland of Statewide Importance
- U** Unique Farmland
- W** Water
- X** Other Land
- Aqueduct/Canal**
- San Jacinto Riverbed**
- Williamson Farmland Act**
- City Boundary**
- Sphere of Influence Boundary**

Sources: County of Riverside GIS and the City of San Jacinto.



0 1,000 2,000 3,000 4,000 Feet

Figure 5.2-2
Important Farmland

**Table 5.2-1
Important Farmlands**

Farmland Type	Acres
Urban and Built-up Land	3,621.8
Grazing Land	3.9
Farmland of Local Importance	4,341.5
Prime Farmland	839.1
Farmland of Statewide Importance	1,959.0
Unique Farmland	880.9
Water	130.4
Other Land	7,051.2
Total	18,827.6
Source: Department of Conservation Farmland Mapping and Monitoring Program, 2002-2004.	

5.2.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Involve other changes in the exiting environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use.

5.2.3 Potential Environmental Impacts

Conversion of Existing Farmland

The proposed General Plan will not specifically designate any land for agricultural uses and will allow new development to occur that will convert existing agricultural resources and Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to non-agricultural use. While many of the agricultural uses will continue to operate in the foreseeable future, development associated with the implementation of the General Plan and changes in the economy will likely result in the development of many of these areas for urban uses.

This potential conversion of Important Farmland to non-agricultural uses is considered a significant impact. Implementation of Mitigation Measure AG-1 will minimize this impact.

Mitigation Measure AG-1 requires the City of San Jacinto to ensure that new development and redevelopment will provide and maintain setbacks and buffers, such as roadways, topographic features, and open space, to prevent incompatibilities between agricultural and

non-agricultural land uses during the development of new projects. A number of factors shall be used by the City to determine the appropriate buffer, including type of agricultural use, topography, and pesticide and machinery use, among others. Implementation of Mitigation Measure AG-1 will minimize this impact to the extent feasible, but will not reduce it to a level less than significant.

Existing Zoning

The proposed General Plan will allow for the development of land currently zoned for agricultural uses to other urban uses. The pressures of new development in these areas could also foster the conversion of adjacent agricultural areas and even lands in Williamson Contracts to non-agricultural use. Furthermore, since the proposed General Plan will not specifically zone any land for agricultural uses, the potential exists for all land currently zoned for agricultural uses or protected under Williamson Act contracts to be converted to other urban uses. This is a significant impact. Implementation of Mitigation Measure AG-1 will minimize this impact to the extent feasible, but will not reduce it to a level less than significant.

Other Changes

Development of land surrounding current agricultural parcels may cause the operational and economic constraints of agricultural production to increase. These operational and economic constraints include restrictions of hours of operation, restrictions on pesticide and fertilizer applications due to environmental regulations, implementation of required setbacks from adjacent non-agricultural uses, and clean up required due to the use of farm equipment on public roads. This increase in the operational and economic constraints of agricultural production may make farming on existing agricultural parcels economically infeasible and result in their conversion to more profitable uses. Therefore, implementation of the proposed General Plan would result in other changes in the exiting environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use. This is a significant impact. Implementation of Mitigation Measure AG-1 will minimize these impacts. Implementation of Mitigation Measure AG-1, along with the existing Right-To-Farm ordinance and Williamson Act contracts will minimize this impact to the extent feasible, but will not reduce it to a level less than significant.

5.2.4 Mitigation Measures

AG-1. New development and redevelopment projects will provide and maintain setbacks and buffers, such as roadways, topographic features, and open space, to prevent incompatibilities between agricultural and non-agricultural land uses during the development of new projects. A number of factors shall be used to determine the appropriate buffer, including type of agricultural use, topography, and pesticide and machinery use, among others. (Implementation Program RM-22)

5.2.5 Impact After Mitigation

A combination of development pressures and economic realities within the region will continue to foster urban development in communities like San Jacinto. The proposed land

uses and policies of the General Plan will allow such urban development to occur in the community. Implementation of Mitigation Measure AG-1, along with the existing Right-To-Farm ordinance and Williamson Act contracts will minimize this impact to the extent feasible, but will not reduce it to a level less than significant.

Additional mitigation such as onsite and offsite mitigation of existing farmland converted by the proposed General Plan was considered but found to be infeasible. Onsite mitigation at a one to one ratio to mitigate the conversion of existing farmland by the proposed General Plan would be infeasible as the long-term viability of large-scale agricultural production in San Jacinto is likely to deteriorate over time. Factors that will reduce viability of such agricultural uses include land value, water costs, labor costs, urbanization, competition, and environmental regulation.

Land prices for urban development in San Jacinto will rise as demand for new development continues within the Planning Area. This makes agricultural operations performed on the land seem less profitable than other urban uses for which the land could be sold. This rise in land prices will make it unlikely that landowners will continue to use land for agricultural production when it is designated for other uses if substantial financial incentives are not provided.

Water cost is another major factor that determines the viability of agricultural operations. Agricultural operations generally use more water than urban development parcels. Being located in Southern California, San Jacinto farmers will likely be faced with higher prices for water due to the high demand in the surrounding region and State.

The shift to producing more profitable crops in other agricultural production areas within the State with lower production costs has also impacted the ability of some farmers to overcome the high cost of agricultural activities in the competitive market. Similarly, crops from foreign markets in Latin America can be produced at substantially lower costs due to lower labor costs, greater availability of land and resources, an environment more conducive to farming, and the lack of regulatory requirements that exist in the United States. The North American Free Trade Agreement (NAFTA) that is gradually removing tariffs and trade barriers between the United States and Latin America is easing restrictions on the import of foreign grown agricultural products which will create greater competition for growers in the City of San Jacinto.

Regulations pertaining to agricultural activities also raise the costs associated with agricultural operations. For example, the Clean Water Act requirements to adopt and implement water quality standards for water bodies in California and the Clean Air Act requirements to reduce the amount of particulate matters released into the air cause agricultural producers to modify their production process and in turn increase their costs to produce crops.

Consequently, without active private property owner cooperation as well as substantial financial incentives it is highly unlikely that a majority of existing agricultural activities within the Planning Area would continue in the long-term, making permanent onsite mitigation of all impacted existing farmland infeasible.

Similarly, offsite mitigation of existing farmland converted by implementation of the proposed General Plan through an offsite agricultural land mitigation bank is not feasible. A

recent CEQA decision by the California Court of Appeals found that an agricultural land mitigation bank would not successfully avoid or reduce the loss of farmland subject to development (*Friends of the Kangaroo Rat v. California Department of Corrections* (August 18, 2003) Fifth Appellate District Number F040956). In the decision, the court ruled the purchase of an offsite mitigation bank would not mitigate the loss of converted farmland since it would not create any new farmland that would be needed to compensate for the farmland that was converted.

Consequently, absent property owner cooperation and substantial financial incentives, it is infeasible to provide either permanent onsite or offsite mitigation for the existing farmland converted by the proposed General Plan. Without active agricultural preservation programs including voluntary Williamson Act contracts and private land trusts, agricultural land will continue to be converted to other uses. Therefore, implementation of the General Plan will have significant and unavoidable impacts on agricultural resources.

5.3 Air Quality

The following analysis is based upon the findings of a technical report prepared by Giroux and Associates (2005). The complete technical report is included as Appendix B.

5.3.1 Environmental Setting

The City of San Jacinto is located in the South Coast Air Basin, which includes the western portion of Riverside County, southwestern portion of San Bernardino County, the majority of Los Angeles County, and all of Orange County. The climate of the San Jacinto area is characterized by warm summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and the fog that form along the coastlines of Los Angeles County and Orange County rarely extend as far inland as the San Jacinto Valley, and if they do, they usually burn off quickly after sunrise. The most important weather pattern is associated with the warm season airflow across populated areas of the Los Angeles Basin that brings polluted air into western Riverside County late in the afternoon. This transport pattern creates unhealthy air quality when the fringes of this "urban smog cloud" extend to the Planning Area during the summer months. Temperatures in San Jacinto average a very comfortable 65°F year-round, with warm summer afternoons (95+ degrees) and often cool winter mornings (35 degrees). Rainfall in the Planning Area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April with summers often completely dry. Rainfall in the area averages 12.5 inches per year, but varies markedly from one year to the next.

Winds are an important factor in characterizing the local air quality environment because they both determine the regional pattern of air pollution transport and control the local rate of pollution dispersion. Daytime winds are from the NW at 6-8 mph as air moves regionally onshore from the cool Pacific Ocean to the warm Mojave Desert interior of Southern California. These winds allow for good local mixing, but they may bring air pollutants from urbanized coastal areas into interior valleys. Strong thermal convection in the summer ultimately dilutes the smog cloud from urbanized development, but the Planning Area is too close to Los Angeles Basin emissions sources to completely escape the regional air quality degradation.

Light nocturnal winds result mainly from drainage of cool air off mountains east and south of the San Jacinto Valley toward the valley floor. Such winds are characterized by stagnation and poor local mixing. However, the origin of these winds in unpopulated mountain areas does not generally impair air quality. In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin.

A second inversion type forms on clear winter nights when cold air off the mountains sinks to the valley floor while the air aloft over the valley remains warm. This forms radiation

inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Thus, while summers are periods of hazy visibility and occasionally unhealthy air, winter is often a period of spectacular visibility and excellent air quality in the Planning Area.

Ambient Air Quality Standards (AAQS)

In order to gauge the significance of the air quality impacts of implementation of the proposed San Jacinto General Plan, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollutants with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In June 2003, EPA proposed a rule which could extend and establish a new attainment deadline for ozone, which would be as late as year 2021. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between State and national clean air standards. Those standards currently in effect in California are shown in **Table 5.3-1**. The primary sources and associated health effects of common air pollutants are listed in **Table 5.3-2**.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). National AAQS were adopted on July 17, 1997.

Planning and enforcement of the 1997 federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. These attainment planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently downgraded an attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard. Because the South Coast Air Basin is far from attaining the 1-hour federal standard, the 8-hour ozone non-attainment designation will not substantially alter the attainment planning process. The compliance deadline for the 8-hour ozone standard has been extended to 2021.

**Table 5.3-1
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	0.12 ppm (235 µg/m ³)	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m ³)		0.08 ppm (157 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		50 µg/m ³		
Fine Particulate Matter (PM _{2.5})	24-Hour	No Separate State Standard		65 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	Nondispersive Infrared Photometry (NDIR)	9.0 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		-		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	-	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (470 µg/m ³)		-		
Lead	30-Day Average	1.5 µg/m ³	Atomic Absorption	-	-	-
	Calendar Quarter	-		1.5 µg/m ³	Same as Primary Standard	High-Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm (80 µg/m ³)	-	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	-	
	3-Hour	-		-	0.5 ppm (1,300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m ³)		-	-	
Visibility Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of 10 miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70%. Method: Beta Attenuation and Transmittance through Filter Tape		No Federal Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ⁽⁹⁾	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: California Air Resource Board, 2005

**Table 5.3-2
Health Effects of Major Pollutants**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart disease (angina)
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular disease. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resource Board, 2005

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the Statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted on June 20, 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard. The State standard became enforceable in 2003 when it was incorporated into the California Health and Safety Code.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new State standard for an 8-hour ozone exposure was adopted in April 2005 that mirrors the federal standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.08 ppm. The State standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress toward attaining State standards, but there are no hard deadlines or any consequences of nonattainment.

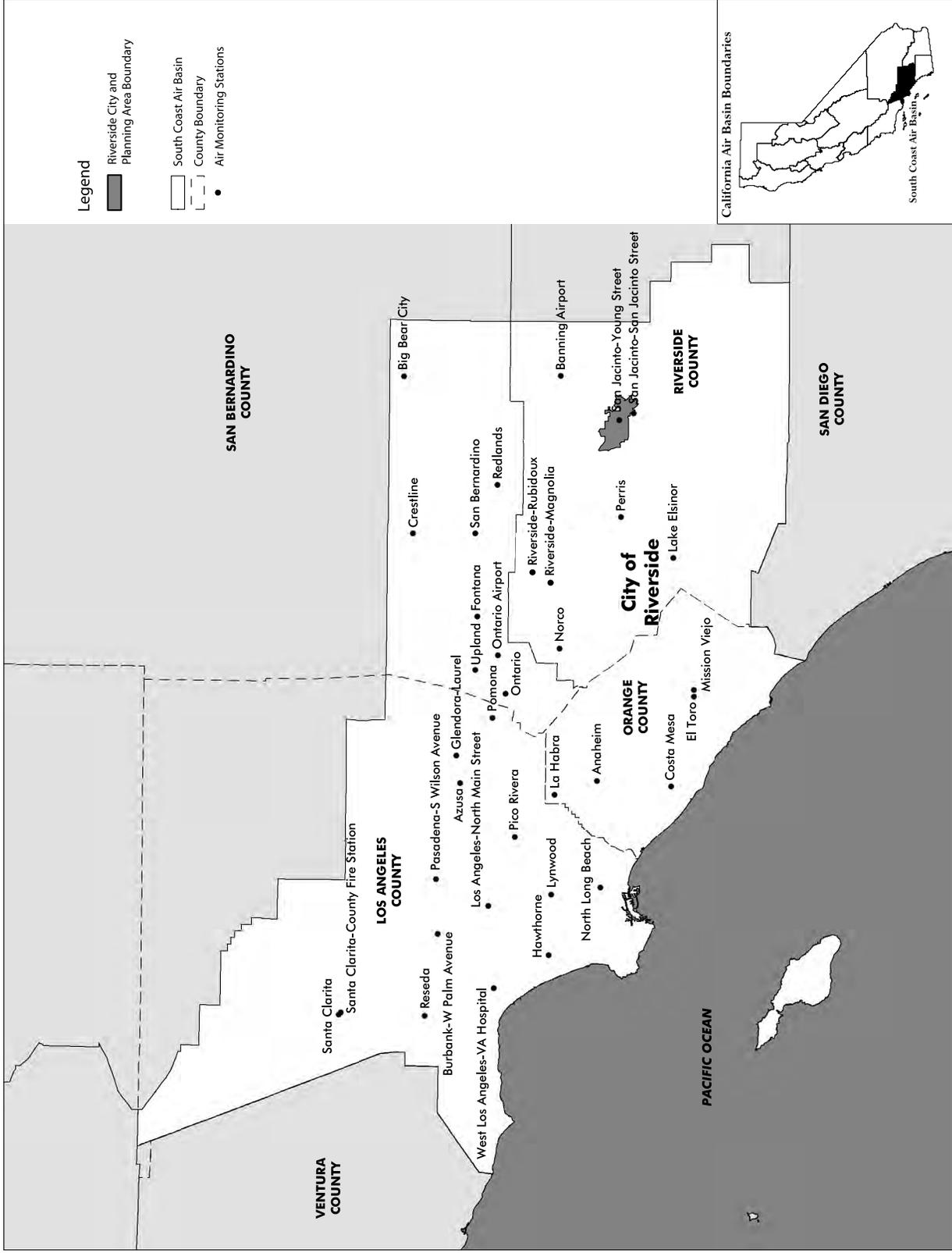
Baseline Air Quality

There are no baseline air quality data available directly from the San Jacinto Planning Area. Long-term air quality monitoring is carried out by the South Coast Air Quality Management District (SCAQMD) at various monitoring stations shown on **Figure 5.3-1**. There are no nearby stations that monitor the full spectrum of pollutants. Ozone, nitrogen oxides, and 10-micron diameter particulate matter are monitored at the Perris facility, while the closest data resource for other particulate and some gaseous species is in Riverside. **Table 5.3-3** summarizes the last six years of monitoring data from a composite of available data resources.

After some marked improvement in ozone air quality in the last 20 years, the past six years have shown very little change in ozone levels. The year 1999 had the fewest violations of standards and the lowest maximum concentration. The last four years have shown increases from the cleanest year on record (1999). Year-to-year meteorological variations may be affecting the trend. Preliminary data from 2004 indicate that it was a very "clean" year again after several years of discouraging results. Overall, it is clear that the rate of growth is balancing any slow emissions reductions. Completely healthful ozone air quality is thus not likely to be achieved in the very near future.

Particulate levels have traditionally been high in western Riverside County. While the ozone trend is very flat in the project vicinity, particulate levels continue to show some slow continuing improvement. In the last six years, the frequency of days exceeding state PM-10 standards has dropped from around 50 percent of all days to around 40 percent. The federal PM-10 standard has not been met in almost ten years in the project vicinity. As with ozone, the project's location downwind of emissions sources in coastal regions will likely cause the most stringent PM-10 standards to be exceeded for well into the current decade.

More localized pollutants such as carbon monoxide, nitrogen oxides, lead, etc. are very low near the project site because background levels even in downtown Riverside never exceed allowable levels, and there are almost no sources of such emissions in the Planning Area. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NO_x or CO without any threat of violating applicable AAQS.



- Legend**
- Riverside City and Planning Area Boundary
 - South Coast Air Basin County Boundary
 - Air Monitoring Stations

California Air Basin Boundaries

Source: California Air Resources Board, State and Local Air Monitoring Network Plan; 2000

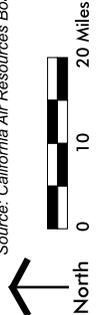


Figure 5.3-1
Air Basin

**Table 5.3-3
Planning Area Air Quality Monitoring Summary - 1998 to 2003
(Days Standards Were Exceeded and Maximum Observed Levels)**

Pollutant/Standard	1998	1999	2000	2001	2002	2003
Ozone¹						
1-hour > 0.09 ppm	38	10	65	73	59	67
1-hour > 0.12 ppm	8	0	15	19	4	7
8-hour > 0.08 ppm	28	6	41	58	41	46
Max 1-hour Conc. (ppm)	0.17	0.11	0.16	0.15	0.15	0.16
Carbon Monoxide²						
1-hour > 20. ppm	0	0	0	0	0	0
8- Hour > 9. ppm	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	5.	7.	5.	5.	4.	4.
Max 8-hour Conc. (ppm)	4.6	4.4	4.3	3.4	3.0	3.7
Nitrogen Dioxide²						
1-hour > 0.25 ppm	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	0.10	0.13	0.10	0.15	0.10	0.10
Inhalable Particulates (PM-10)¹						
24-Hour > 50 µg/m ³	42/78	30/60	13/59	16/60	24/61	19/58
24-Hour > 150 µg/m ³	0/78	0/60	0/59	0/60	0/61	0/58
Max. 24-Hr. Conc. (µg/m ³)	116.	112.	87.	86.	100.	142.
Ultra-Fine Particulates (PM-2.5)²						
24-Hour > 65 µg/m ³	-/-	9/151	11/304	17/325	8/327	8/350
Max. 24-Hr. Conc. (µg/m ³)	--	111.2	119.6	98.0	77.6	104.3

- = No measurements before 1999.

¹Perris Air Monitoring Station Data Summary

²Rubidoux Air Monitoring Station Data Summary

Source: South Coast AQMD.

Air-sheds where ambient air quality standards are exceeded are called "non-attainment" areas. If standards are met, they are designated as "attainment" areas. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." Federal "non-attainment" areas are considered extreme, serious or moderate as a function of deviation from standards. The current attainment designations for the San Jacinto area are presented in **Table 5.3-4**.

Regulatory Framework

The Federal Clean Air Act requires that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that will bring the area into compliance with all national standards by December 31, 1987. The South Coast Air Basin (SCAB) could not meet the deadline for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times subsequently as earlier attainment forecasts were shown to be overly optimistic.

**Table 5.3-4
Attainment Standards for San Jacinto**

		State	Federal
Ozone	1-hour	Non-attainment	Extreme Non-attainment ^a
	8-hour	Non-attainment	Extreme Non-attainment ^b
CO	8-hour	Attainment	Non-attainment ^c
NO ₂	1-hour	Attainment	Attainment
PM-10	Annual	Non-attainment	Serious Non-Attainment
PM-2.5	Annual	Non-attainment	Non-attainment
All Other		Attainment or Unclassified	Attainment or Unclassified

^aScheduled for attainment in 2010.

^bTentative attainment date of 2021.

^cScheduled for attainment in 2006, standard is currently met, redesignation request for "attainment/maintenance" has been submitted to EPA.

State standard attainment is as early as practical without any specific year.

In 1988, because of considerable uncertainty in Federal Clean Air Act reauthorization, the California Legislature enacted the California Clean Air Act (CCAA). The CCAA requires that regional emissions be reduced by 5 percent per year until attainment can be demonstrated. In July 1991, the SCAQMD adopted a revised AQMP that was designed to meet the CCAA requirements. The 1991 AQMP deferred the attainment date to 2010, consistent with the 1990 Federal Clean Air Act.

The most recent clean air plan was approved locally (SCAQMD/SCAG) and at the State level (ARB) in 2003. It was forwarded to EPA and became the adopted SIP Revision in 2004. The plan continues most emissions reductions programs, but also points out that some emissions have been undercounted and incorrectly reported, and that additional control measures must be implemented if the federal attainment deadlines for clean air standards are to be met.

With the conversion of the federal 1-hour ozone standard to an 8-hour standard, a new attainment timeline will be adopted. EPA's proposed attainment scheduled for the South Coast Air Basin is 17 years to 2021. The progress mile-posts would be spread out over a longer period than for the current 2010 attainment deadline for the 1-hour standard.

5.3.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Violate any Federal, State, or local ambient air quality standard as identified in Table 5.3-5;
- Exceed the SCAQMD significance thresholds as identified in Table 5.3-5;
- Conflict with the SCAQMD Air Quality Management Plan;

- Create objectionable odors affecting a substantial number of people; or
- Expose sensitive receptors to substantial pollutant concentrations.

5.3.3 Potential Environmental Impacts

Air Quality Standards

Standards of Significance Many air quality impacts that derive from dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted the primary exhaust pollutants into secondary contaminants such as ozone. The incremental air quality impact of an individual project is generally immeasurably small. Therefore, SCAQMD developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. SCAQMD Pollutant Emissions Thresholds are shown in **Table 5.3-5**. Any projects in the SCAB with daily emissions that exceed any of these thresholds are considered significant.

Table 5.3-5
SCAQMD Pollutant Emissions Thresholds (lb/day)

Pollutant	Construction	Operations
ROG	75	55
NO _x	100	55
CO	550	550
PM-10	150	150
SO _x	150	150

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Construction Activity Impacts Temporary construction activity emissions will occur during Planning Area build-out. Such emissions include on-site generation of dust and equipment exhaust and off-site emissions from construction employee commuting and/or trucks delivering building materials. Construction has traditionally been considered mainly a source of potential nuisance from dust or odors such that these temporary emissions are typically categorized as insignificant in many air quality impact analyses. However, because construction activities are substantial contributors to the basin-wide air pollution burden, they have become increasingly important in the regional air pollution attainment strategy. Regulatory programs such as SCAQMD Rule 403 have been strengthened, and CEQA-based discretionary emissions reduction measures for construction are actively encouraged and pursued.

Dust is normally the primary concern during construction of new buildings and amenities. Dust includes small inhalable particulate matter, as well as larger diameter particles that rapidly settle out on any surface adjacent to the source. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive"

emissions. Dust (PM-10) emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). Regulatory agencies typically use one universal factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into mid-range average values. The SCAQMD, in its 1993 "CEQA Air Quality Handbook," estimates daily PM-10 emissions during construction to be 26.4 pounds per day per acre disturbed when "standard" dust control procedures required by SCAQMD Rule 403 are used. Upgraded dust control procedures will reduce the average daily PM-10 emission rate to as low as around 10 pounds per day when a highly aggressive control program is implemented. Example components of this control program are described below in Mitigation Measure AQ-2.

Use of "standard" daily PM-10 emission factors allows for the simultaneous disturbance of around 5.7 acres to generate a potentially significant emission level of 150 pounds per day determined to be potentially significant in the SCAQMD Handbook ($150 \div 26.4 = 5.7$). If strongly enhanced dust control procedures are implemented, around 15 acres could be under simultaneous disturbance to maintain a less-than-significant daily PM-10 emission rate.

The General Plan anticipates the conversion of around 12,000 acres of existing agriculture or open space to residential and supporting commercial land uses. This process is estimated to cover 50 years. Around 240 acres per year would be under development. With major grading requiring around three months, the average instantaneous disturbance area is estimated to be 60 acres.

The PM-10 emission rate from grading and other soil disturbance is around 10-pounds per acre per day. At 60 acres, the average PM-10 construction dust will be 600 pounds per day for many years to come. General Plan build-out construction will cause the PM-10 threshold of 150 pounds per day to be exceeded by a very substantial margin. This is a potentially significant impact.

Similarly, construction equipment operations will generate equipment exhaust that contains both "standard" air pollutants and toxic air contaminants such as diesel particulate matter (DPM) and various harmful organic gases (benzene, etc.) The average energy expenditure to develop one acre of land into residences and infrastructure is around 300,000 brake-horsepower-hours (BHP-HR). At 240 acres developed per year in around 300 work days, daily energy consumption will average around 240,000 BHP-HR. For a 250 hp scraper as the most typical type of construction equipment, the average daily activity level would be equivalent to 960 scraper hours. The daily emissions from scrapers in 2050 as the most representative type of construction equipment are shown in **Table 5.3-6**.

**Table 5.3-6
Daily Emissions from Scrapers in 2050**

Source	CO	NO _x	ROG	PM-10	SO _x
Emissions (lb/hour)	0.371	0.763	0.079	0.041	0.298
Daily Emissions (lb/day)	593.4	1220.4	126	65.4	476.4
SCAQMD Threshold (lb/day)	550	100	75	150	150

Source: Giroux & Associates, 2005.

Emission levels for four out of the five of the pollutants analyzed would exceed threshold levels. As with PM-10 emissions from fugitive dust, the area wide build-out will generate exhaust emissions that will likely exceed SCAQMD thresholds by a wide margin. This is a significant impact.

Paint associated with construction activities will also have the potential to impact air quality. There will be an average of approximately 578 residential units and approximately 595,760 square feet (sf) of non-residential uses developed per year over the next 50 years in the San Jacinto area¹. The unmitigated ROG emissions from paints and architectural coatings used during the development of these residential and non-residential uses could exceed the recommended SCAQMD significance thresholds. The recommended SCAQMD significance thresholds for ROG emissions during construction activities is 75 pounds per day. Use of low-VOC paints and coatings, of pre-coated construction materials, use of high-efficiency transfer equipment and limiting the gallons of paints used per day will help to mitigate the excess ROG emissions created by this level of development.

Low VOC paint applied with high-efficiency transfer equipment produces 4.25 pounds of ROG per 1,000 square feet of painted surface (SCAQMD CEQA Handbook, Table A9-13, water based). Based upon the SCAQMD Handbook, the average daily calculated ROG emissions for 577.82 dwelling units and 595,760 sf per year is 103.98 pounds per work day². Therefore, ROG emissions will exceed the daily threshold. They will occur concurrently with vehicular ROG emissions already exceeding SCAQMD thresholds. This is a significant impact.

Implementation of Mitigation Measures AQ-1 and AQ-2 will minimize these impacts. Mitigation Measure AQ-1 calls for the City to review development proposals for potential regional and local air quality impacts per the California Environmental Quality Act (CEQA). If potential impacts are identified, mitigation will be required to reduce the impact to a level less than significant, where feasible.

Mitigation Measure AQ-2 calls for the City to reduce dust and particulate matter levels during construction activities in cooperation with developers and SCAQMD. Prior to the issuance of any grading permits, all project applicants shall submit construction plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction equipment that conforms to the requirements of SCAQMD will be utilized or that their use was investigated and found to be infeasible for the project. SCAQMD requirements include the utilization of oxidation catalyst technology. All construction shall comply with SCAQMD Rules 402 and 403. Additionally, dust and particulate matter can be reduced by implementing fugitive dust control measures such as:

¹ The approximate yearly average of new residential and non-residential development was calculated by dividing the projected change in residential units and non-residential square footage shown in Table 5.9-1 by 50.

² The average daily calculated ROG emission methodology for paint related impacts is displayed in the following table.

Residential sf	= 578 residential units x 3,000 sf foundation x 2.7 conversion factor	= 4,680,342 sf
Non-Residential sf	= 595,760 x 2.0 conversion factor	= 1,191,520 sf
Total Annual Coverage	= sum of residential sf and non-residential sf.	= 5,871,862 sf
Pounds per work day	= (total annual coverage x (4.25 pounds of ROG/1,000 sf))/240 workdays per year)	= 103.98 lbs/work day

- Reestablishing groundcover on the construction site through seeding and watering;
- Scheduling activities to minimize the amounts of exposed excavated soil during and after the end of work periods;
- Sweeping streets as necessary if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling;
- Suspending grading operations during high winds;
- Maintaining a minimum 24 inch freeboard on soils, haul trucks, or cover payloads;
- Restricting outdoor storage of fine particulate matter;
- Providing tree buffers between residential and agricultural uses;
- Monitoring construction and agricultural activities and emissions;
- Paving areas used for vehicular maneuvering; and
- Prohibiting parking or vehicle storage in unpaved areas.

These mitigation measures will reduce construction related air quality impacts. However, these mitigation measures will not be able to mitigate construction related air quality impacts to below a level of significance. Therefore, implementation of the General Plan will have significant and unavoidable construction related air quality impacts.

Vehicular Impacts The trip threshold that triggers a finding of potential impact significance is around 5,000 trips per day. The anticipated traffic growth in the City of San Jacinto is around 600,000 trips between now and ultimate City build-out. Clearly, the total of all vehicular emissions from citywide traffic will far exceed the SCAQMD individual project threshold. This is a significant impact.

Implementation of Mitigation Measures AQ-1, AQ-3, AQ-4, and AQ-5 will minimize these impacts. Mitigation Measure AQ-3 calls for the City to continue to cooperate with the SCAQMD to implement the most recent Air Quality Management Plan to address regional motor vehicle emissions. In particular, the City shall coordinate with SCAQMD and the Southern California Association of Governments (SCAG), and provide technical assistance and demographic data when available during the development of future population projections by SCAG and the SCAQMD. SCAQMD will incorporate this demographic data into their air quality analyses so that they may adequately plan for reducing future air emissions in the region. Mitigation Measure AQ-4 calls for the City to provide and maintain a network of bicycle and pedestrian trails that link housing, schools, parks, and retail and employment centers to each other, thereby reducing vehicular trips in the Planning Area.

Mitigation Measure AQ-5 calls for the City to reduce vehicular emissions by:

- Improving traffic flow through synchronized traffic signals;
- Increasing non-vehicular modes of transportation by working with the Riverside Transit Agency to develop a local transit system that provides efficient service and is connected to the regional transit system; and
- Improving parking design and management in public and private projects.

These mitigation measures will reduce vehicular related air quality impacts by reducing vehicle trips and congestion. However, these mitigation measures will not be able to mitigate vehicular related air quality impacts to below a level of significance. Therefore, implementation of the General Plan will have significant and unavoidable vehicular related air quality impacts.

Stationary Sources

Stationary sources of pollution can be divided into two sources. Point sources are large facilities such as power plants, refinery boilers and polluting activities such as agricultural production. Additional point source facilities may be developed as a part of the proposed General Plan. The specific environmental impact of constructing new point source facilities in the Planning Area cannot be determined at this General Plan level of analysis because no specific projects are proposed; however, like the development of other uses allowed under the General Plan, development and operation of point source facilities may result in potentially significant impacts that are addressed by various City policies and mitigation measures included in this EIR. However, given that the proposed General Plan would exceed SCAQMD daily thresholds as shown in Table 5.3-6, it is likely that new point source facilities would contribute to the exceedance of these thresholds. Furthermore, agricultural activities within the Planning Area, which are the main source of stationary source pollution in the City, would decrease air quality as well. Blowing dust from agricultural operations and unpaved roads will have the potential to increase particulate matter emissions. Although agricultural activities are projected to decrease as discussed in Section 5.2, particulate matter emissions from remaining agricultural activities will contribute to particulate matter levels that already exceed SCAQMD daily thresholds as shown in **Table 5.3-6**. This is a significant impact.

Implementation of Mitigation Measure AQ-6 will minimize this impact. Mitigation Measure AQ-6 calls for the City to require development and redevelopment to comply with applicable SCAQMD rules and to implement Best Available Control Technology (BACT) for all new, modified, or relocated stationary sources of air pollution. BACTs refer to the most stringent emission limitation or control technique that has been achieved in practice for the relevant category or class of emitting source, is contained in any state implementation plan approved by the United States Environmental Protection Agency, or is any other emission limitation or control technique, found by the Executive Officer or designee to be technologically feasible for such class or category of sources or for a specific source, and cost-effective as compared to measures as listed in the AQMP or rules adopted by the District Governing Board. This mitigation measure will reduce construction related air quality impacts. However, this mitigation measure will not be able to mitigate construction related air quality impacts to below a level of significance. Therefore, stationary source related air quality impacts from point source facilities will be significant and unavoidable.

Area sources are smaller emission sources such as residential water heaters and architectural coatings. The specific environmental impact of new area source facilities in the Planning Area cannot be determined at this General Plan level of analysis because no specific projects are proposed; however, like the development of other uses allowed under the General Plan, development and operation of area source facilities may result in potentially significant impacts that are addressed by various City policies and mitigation measures included in this EIR.

SCAQMD Air Quality Management Plan

Future growth anticipated in San Jacinto relates to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If proposed development is consistent with those growth forecasts, and if all available

applicable emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the air quality impact on a regional basis may be considered less-than-significant. However, buildout of the proposed General Plan is not expected until post-2050. Since growth forecasts do not exist for post-2050, it can not be concluded whether or not the proposed General Plan would be consistent with the future SCAQMD AQMP at buildout. Assessment of such future consistency would be speculative at this time; therefore, this EIR only addresses consistency of the proposed General Plan with the existing AQMP.

Although the rate of growth anticipated under the proposed General Plan may exceed the growth that SCAG has allocated for the City of San Jacinto and its sphere of influence, the possible difference between SCAG's forecast for 2030 and the General Plan build-out assumptions for 2050 may not necessarily have a significant air quality impact for the following reasons:

- 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.
- The growth and associated emissions will occur somewhere within the air basin if not in/near San Jacinto with similar regional air quality impacts.
- 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.

As described, there is no clear-cut basis to conclude that any difference between SCAG's regional comprehensive plan forecasts and the proposed General Plan growth for San Jacinto. Therefore, no significant impact has been identified.

Objectionable Odors

Construction activities and certain types of land uses, such as agricultural, commercial, and industrial may create objectionable odors in the Planning Area. Future construction activity associated with implementation of the proposed General Plan would have the potential to generate objectionable odors. These odors would be short-term in nature. Future agricultural, commercial, and industrial uses would also have the potential to generate objectionable odors. Any objectionable odor may be reported to the AQMD, which resolves complaints through investigation within one business day of the received complaint, and issuance of Notices to Comply/Notices of Violation, when necessary. These existing regulations will reduce significant impacts associated with objectionable odors. Furthermore, Implementation of Mitigation Measure AG-1 (p. 5.2-8) will reduce objectionable odors related to agricultural uses. Mitigation Measure AG-1 requires the City to ensure that new development and redevelopment will provide and maintain setbacks and buffers, such as roadways, topographic features, and open space, to prevent incompatibilities between agricultural and non-agricultural land uses during the development of new projects. A number of factors shall be used by the City to determine the appropriate buffer, including type of agricultural use, topography, and pesticide and machinery use, among others. However, compliance with existing regulations and Mitigation Measure AG-1 may not be able to fully mitigate objectionable odors to below a level of significance.

Therefore, air quality impacts related to objectionable odors are identified as significant and unavoidable.

Pollutant Concentrations

Hot Spots Greater concentrations of traffic and associated congestion may lead to elevated levels of primary air pollutants such as carbon monoxide (CO) near major city intersections, known as “hot spots”. However, the SCAQMD has demonstrated that there will be no CO hot spots at the most congested intersections in coastal areas of the air basin where background CO levels are much higher than in the Inland Empire. With smaller intersections with fewer cars, with less congestion, with a cleaner future vehicle fleet, and with lower background CO values than at the SCAQMD analysis sites, area wide CO levels will be much lower in San Jacinto. If the worst-case locations do not experience any “hot spot” potential in 2003, San Jacinto area roadway air pollution exposure will be acceptable with a large margin of safety. To verify this preliminary conclusion, a CO screening analysis was conducted at 25 intersections in the San Jacinto area for existing conditions for General Plan built-out with existing roadway design standards and for built-out with enhanced roadway geometry standards that reduce congestion levels through the implementation of mitigation measures described in Section 5.13. A screening procedure based upon the Bay Area AQMD CEQA Handbook was used. The Bay Area procedures were modified to add any effects of congestion by including idling emissions along inbound roadway segments. The results of the screening analysis are shown in **Table 5.3-7**. The maximum 1-hour CO concentration in 2003 in the San Jacinto area was 4 ppm. The 8-hour maximum was 3.7 ppm. It would require a local contribution of 16 ppm for 1-hour or 5.3 ppm over 8 hours to equal the most stringent CO standard. **Table 5.3-7** shows that the maximum hourly CO level for any scenario is 3.2 ppm. This level is well below any contribution that could possibly create a CO “hot spot.”

Although the mitigated General Plan will reduce congestion and thus reduce CO exposures for the same number of vehicles at a given intersection, future CO levels will be so low as to be unaffected by adoption of new roadway standards. A small regional emissions reduction benefit may accrue from reduced congestion, but the effect is again very small when considered within the context of basin-wide patterns of vehicular emissions.

Table 5.3-7
Micro-scale CO Screening Analysis
(1-hour CO concentrations in ppm above background)

	Existing	Exist. G.P.	Mitigated G.P.
Warren Rd.			
Ramona Ex WB	0.7	0.2	0.2
Ramona Ex EB	0.7	0.6	0.6
Bridge St.		0.3	0.3
Cottonwood Ave.	0.3	0.5	0.5
Esplanade Ave.	0.4		
Florida Ave.	1.2		
SR-79 SB			
Esplanade Ave.		0.2	0.2
Cottonwood Ave.		1.1	0.6
SR-79 Corridor			

**Table 5.3-7
Micro-scale CO Screening Analysis
(1-hour CO concentrations in ppm above background)**

	Existing	Exist. G.P.	Mitigated G.P.
SR-74		3.2	0.3
SR-79 NB			
Esplanade Ave.		0.6	0.8
Cottonwood Ave.		0.9	0.5
Sanderson Ave.			
Bridge St.		0.7	0.5
Ramona Expwy	1.5		
SR-79 SB		0.8	0.7
SR-79 NB		0.6	0.6
Cottonwood Ave.	0.5	0.8	0.8
7 th Street	0.7	0.6	0.6
Esplanade Ave.	0.6	0.7	0.7
Lyon Ave.			
Ramona Expwy		1.2	1.0
Cottonwood Ave.	0.2	0.6	0.6
State Street			
Ramona Expwy	0.9	1.3	1.1
Cottonwood Ave.	0.9	0.8	0.7
Esplanade Ave.	0.9	0.9	0.8
San Jacinto Ave.			
Esplanade Ave.	0.8	1.0	0.8
Ramona Expwy			
Esplanade Ave.	0.5	1.0	0.7

Source: Screening procedure based on CALINE4 as modified from BAAQMD CEQA Guidelines (Data detail in Appendix).

Health Risks

The “excess” ROG and NO_x emissions from both construction and operational sources will combine to form ozone (photochemical smog). Because this process requires a long time, there is no way to quantify the regional smog impact from any single project or any one community. The health effects of ozone at levels exceeding clean air standards include aggravation of asthma or other respiratory disease, aggravation of cardiovascular disease, irritation of eyes, and breathing difficulties because of bronchial constriction. Ozone also causes damage to new leaves on sensitive plants, and oxidizes plastics, rubber and other organic materials to accelerate wear and tear.

The most significant air toxics issue in Southern California is from diesel particulate matter (DPM). The annual average DPM concentration in the South Coast Air Basin is currently around 2.4 µg/m³, but somewhat higher in western Riverside County. This translates into 720 additional cancer cases per 1,000,000 residents over a 70-year exposure period. However, programs are in place to sharply reduce DPM emissions (80+ percent over the next two decades). The lifetime exposure risk for young or new residents to Southern California is much less than for long-term, older residents.

Residential growth will not substantially increase health risk for DPM because trucking or rail activities as DPM generators are related to commercial or industrial growth. Some growth-related retail uses in San Jacinto will be served by diesel vehicles. However, recent (2005) ARB guidelines on toxics health risk consider any facility generating 100 truck loads of goods, with 40 or more refrigeration units, to be a substantial source of risk. The types of growth envisioned in the proposed General Plan would not likely include such levels of truck activity. The greater concern would be the exposure of current and future San Jacinto residents to ambient DPM rather than any long-term DPM increase attributable to such planned growth.

5.3.4 Mitigation Measures

AQ-1 The City shall review development proposals for potential regional and local air quality impacts per the California Environmental Quality Act (CEQA). If potential impacts are identified, mitigation will be required to reduce the impact to a level less than significant, where feasible. (Implementation Program RM-26)

AQ-2 The City, in cooperation with developers and SCAQMD, shall reduce dust and particulate matter levels during construction activities. Prior to the issuance of any grading permits, all project applicants shall submit construction plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low emission mobile construction equipment that conforms to the requirements of SCAQMD will be utilized or that their use was investigated and found to be infeasible for the project. SCAQMD requirements include the utilization of oxidation catalyst technology. All construction shall comply with SCAQMD Rules 402 and 403. Additionally, dust and particulate matter can be reduced by implementing fugitive dust control measures such as:

- Reestablishing groundcover on the construction site through seeding and watering;
- Scheduling activities to minimize the amounts of exposed excavated soil during and after the end of work periods;
- Sweeping streets as necessary if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling;
- Suspending grading operations during high winds;
- Maintaining a minimum 24 inch freeboard on soils, haul trucks, or cover payloads;
- Restricting outdoor storage of fine particulate matter;
- Providing tree buffers between residential and agricultural uses;
- Monitoring construction and agricultural activities and emissions;
- Paving areas used for vehicular maneuvering; and
- Prohibiting parking or vehicle storage in unpaved areas. (Implementation Program RM-24)

AQ-3 Continue to cooperate with the SCAQMD to implement the most recent Air Quality Management Plan to address regional motor vehicle emissions. In particular, coordinate with the SCAQMD and the Southern California Association of Governments (SCAG), providing technical assistance and demographic data when

available, during the development of future population projections by SCAG and the SCAQMD. (Implementation Program RM-25)

AQ-4 The City shall provide and maintain a network of bicycle and pedestrian trails that link housing, schools, parks, and retail and employment centers to each other, thereby reducing vehicular trips in the Planning Area. (Implementation Program RM-27)

AQ-5 The City shall reduce vehicular emissions by:

- Improving traffic flow through synchronized traffic signals;
- Increasing non-vehicular modes of transportation by working with the Riverside Transit Agency to develop a local transit system that provides efficient service and is connected to the regional transit system; and
- Improving parking design and management in public and private projects. (Implementation Program RM-28)

AQ-6 The City shall require development and redevelopment activities to comply with applicable SCAQMD rules and to implement Best Available Control Technology (BACT) for all new, modified, or relocated stationary sources of air pollution (RM-29).

5.3.5 Impact After Mitigation

Air Quality Standards

Air quality impacts to existing air quality standards will be significant and unavoidable.

SCAQMD Air Quality Management Plan

No significant impact was identified.

Objectionable Odors

Impacts related to objectionable odors will be significant and unavoidable.

Pollutant Concentrations

Air quality impacts related to pollutant concentrations will be less than significant.

5.4 Biological Resources

5.4.1 Environmental Setting

Vegetation and Wildlife

The San Jacinto Planning Area ranges from 1,480 feet above mean sea level (AMSL) on the valley floor to 3,800 feet AMSL in the San Jacinto Mountains. The Planning Area is dominated by a mixture of urban development in the central and eastern portion of the Planning Area and agricultural uses and open space in the western portion of the Planning Area. The easternmost portion of the Planning Area consists of largely undeveloped steep hillsides associated with the San Jacinto Mountain Range.

Urban development coupled with extensive agricultural uses limits the extent of high quality native vegetation in the Planning Area. Native vegetation communities are concentrated within open space areas associated with the hillsides in the eastern and western portions of the Planning Area, as well as disturbed and undisturbed areas along the San Jacinto River. The general location of the sensitive and non-sensitive communities in and adjacent to the Planning Area is depicted on **Figure 5.4-1**. **Table 5.4-1** provides the acreage totals for the vegetation communities located within the Planning Area.

The value of an area to wildlife is dependent on physical and biological factors including the location relative to other land uses, the quality of habitat on and adjacent to the area, and the uniqueness of the habitat within a regional context. The Planning Area supports habitat ranging from very disturbed to high quality native plant communities. However, much of the habitat's value is decreased due to adjacent urban development and agricultural uses.

Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, of particularly high wildlife value or provide habitat to rare or endangered species. These resources have been defined by Federal, State, and local government conservation programs. The California Natural Diversity Database (CNDDDB) (CDFG 2003) was used to determine the sensitivity of vegetation communities within the Planning Area.

Alkali playa, chamise chaparral, coast live oak woodland, coastal and valley freshwater marsh, Riversidean alluvial fan sage scrub, Riversidean sage scrub, southern cottonwood/willow riparian and vernal pool communities are considered sensitive habitats under the California Environmental Quality Act (CEQA). Other vegetation communities occurring with the Planning Area include agricultural, chaparral, disturbed alluvial, non-native grassland, oak woodland, open water, ornamental, riparian forest and riparian scrub. All of these communities are depicted in **Figure 5.4-1** and are described in the Final Western Riverside County Multiple Species Habitat Conservation Plan prepared by Dudek and Associates, Inc. (June 2003).

**Table 5.4-1
Vegetation Communities Located Within the Planning Area**

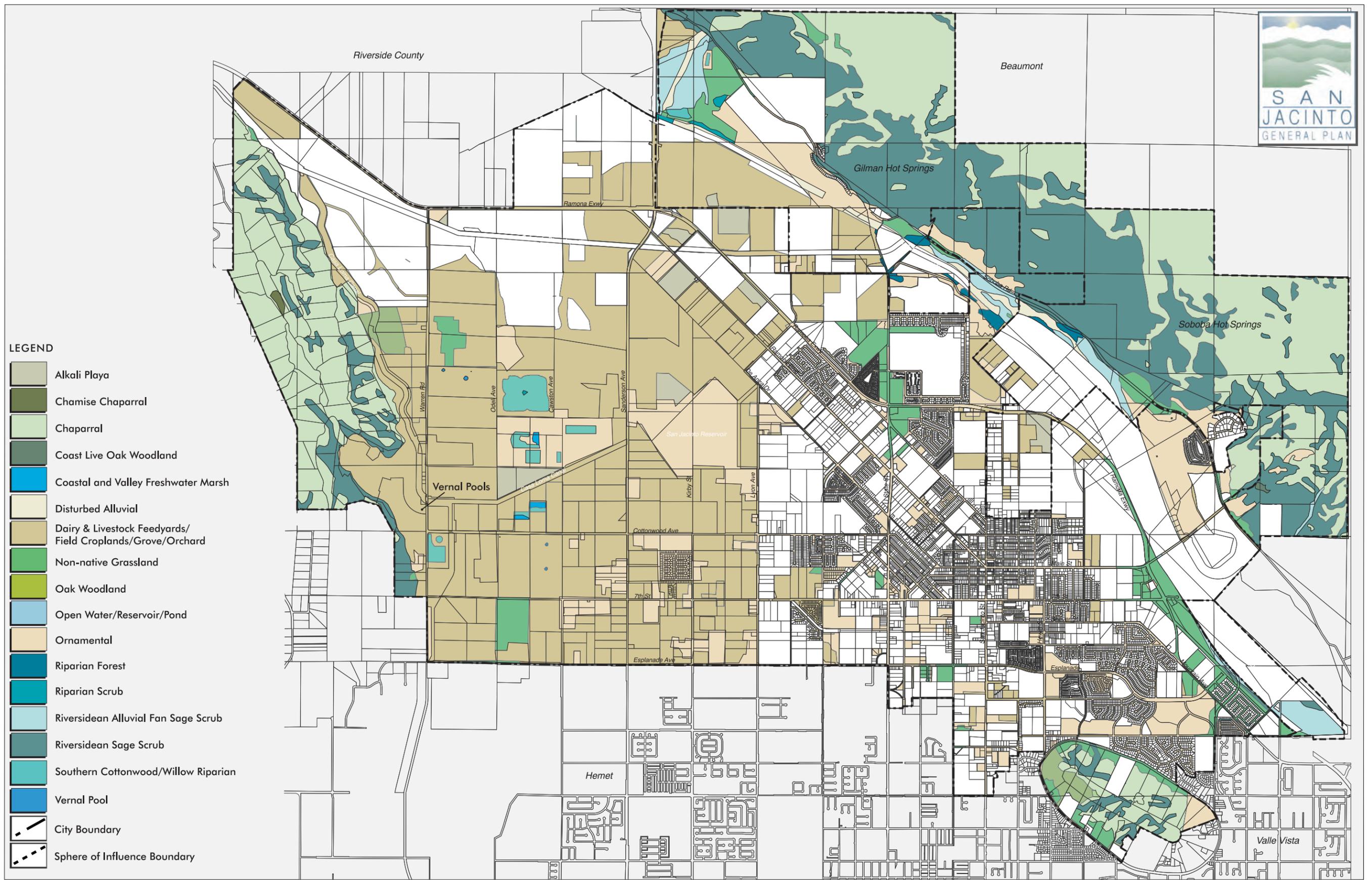
Vegetation Community	Total Acreage Within the Planning Area
Agriculture	5,616
Alkali Playa	195
Chamise Chaparral	6
Chaparral	3,018
Coast Live Oak Woodland	3
Coastal and Valley Freshwater Marsh	8
Disturbed Alluvial	107
Non-native Grassland	716
Oak Woodland	1
Open Water	105
Ornamental	2,503
Riparian Forest	40
Riparian Scrub	13
Riversidean Alluvial Fan Sage Scrub	254
Riversidean Sage Scrub	2,442
Southern Cottonwood/Willow Riparian	7
Vernal Pool	1
TOTAL	15,035

Source: Cotton/Bridges/Associates GIS/Graphics Department, November 2004.

In addition, waters, wetlands and riparian communities may also be regulated by the United States Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG) and the Regional Water Quality Control Board (RWQCB) as described under "Regulatory Framework." Major waterways with the Planning Area include the Colorado River Aqueduct, Casa Loma Canal, San Diego Aqueduct, Second San Diego Aqueduct, San Jacinto Reservoir, San Jacinto River, Juaro Canyon blue line stream, Poppet Creek and Bautista Wash.

Sensitive Flora

Certain species of flora are designated as sensitive based on the federal and State status of the species, as well as the California Native Plant Society (CNPS) designation. The potential presence of sensitive flora within the Planning Area has been determined through review of Western Riverside County Multiple Species Habitat Conservation Plan data, which includes information culled from the California Natural Diversity Database, the County GIS database, available literature and field survey data. The following sensitive flora species potentially occur within or adjacent to the Planning Area: chaparral sand-verbena, Yucaipa onion, Munz's onion, Jaeger's milk vetch, San Jacinto valley crownscale, South Coast saltscale, Parish's brittlescale, Davidson's saltscale, thread-leaved brodiaea, Munz's mariposa lily, Plummer's mariposa lily, intermediate mariposa lily, Payson's jewelflower, smooth tarplant, Parry's spineflower, white-bracted spineflower, Mojave tarplant, slender-horned spineflower, San Jacinto Mountains bedstraw, California bedstraw, mesa horkelia, Coulter's goldfields, heart-leaved pitcher sage, Robinson's pepper-grass, lemon lily, mud nama, spreading navarretia, snake cholla, California Orcutt grass, California beardtongue, San Miguel savory, southern skullcap, salt spring checkerbloom and Wright's trichocoronis. **Table 5.4-2** provides detailed information about the status and distribution of these species.



- LEGEND**
-  Alkali Playa
 -  Chamise Chaparral
 -  Chaparral
 -  Coast Live Oak Woodland
 -  Coastal and Valley Freshwater Marsh
 -  Disturbed Alluvial
 -  Dairy & Livestock Feedyards/
Field Croplands/Grove/Orchard
 -  Non-native Grassland
 -  Oak Woodland
 -  Open Water/Reservoir/Pond
 -  Ornamental
 -  Riparian Forest
 -  Riparian Scrub
 -  Riversidean Alluvial Fan Sage Scrub
 -  Riversidean Sage Scrub
 -  Southern Cottonwood/Willow Riparian
 -  Vernal Pool
 -  City Boundary
 -  Sphere of Influence Boundary

Sources: County of Riverside GIS, City of San Jacinto, USGS

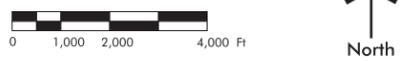


Figure 5.4-1
Vegetation Communities

**Table 5.4-2
Special-Status Plant Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Distribution Notes
Chaparral sand-verbena	<i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: 1B	Chaparral, coastal scrub, sandy areas. 80-1,600 m elevation.
Yucaipa onion	<i>Allium marvinii</i>	Federal: None State: None CNPS: 1B	Chaparral, openings on clay soils. 760-1065m.
Munz's onion	<i>Allium munzii</i>	Federal: END State: THR CNPS: 1B	Chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Only in Riverside County. Heavy clay soils; grows in grasslands and openings within shrublands or woodlands. 300-1,035m elevation.
Jaeger's milk vetch	<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Federal: None State: None CNPS: 1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland. Endemic to riverside county. Dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral. 365-915m.
San Jacinto Valley Crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	Federal: END State: None CNPS: 1B	Playas, chenopod scrub, valley and foothill grassland, vernal pools. Endemic to Riverside County. Dry, alkaline flats in the San Jacinto river valley. 400-500m.
South Coast saltscale	<i>Atriplex pacifica</i>	Federal: None State: None CNPS: 1B	Coastal scrub, coastal bluff scrub, playas, chenopod scrub. Alkali soils. 1-500m.
Parish's brittlescale	<i>Atriplex parishii</i>	Federal: None State: None CNPS: 1B	Alkali meadows, vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 4-140m. Plant collected only once in California since 1974 (in 1993).
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	Federal: None State: None CNPS: 1B	Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m.
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Federal: END State: THR CNPS: 1B	Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Clay soils. 35-855m.
Munz's mariposa lily	<i>Calochortus palmeri</i> var. <i>munzii</i>	Federal: None State: None CNPS: 1B	Lower montane coniferous forest, chaparral, meadows. Endemic to riverside county. Seen in open jeffrey pine forest as well as in chaparral. 900-1640m.
Plummer's mariposa lily	<i>Calochortus plummerae</i>	Federal: None State: None CNPS: 1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.

Common Name	Scientific Name	Status Designation	Distribution Notes
Intermediate mariposa lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	Federal: None State: None CNPS: 1B	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky open slopes and rock outcrops. 120-850m.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CNPS: 1B	Valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 0-480m elevation.
Parry's spineflower	<i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CNPS: 1B	Coastal scrub, chaparral. Dry slopes and flats; sometimes at interface of 2 vegetation such as chaparral and oak woodland; dry, sandy soils. 40-1,705m elevation.
White-bracted spineflower	<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Federal: None State: None CNPS: 1B	Mojave desert scrub, pinyon juniper woodland. 300-1200m.
Mojave tarplant	<i>Deinandra mohavensis</i>	Federal: None State: END CNPS: 1B	Riparian scrub, chaparral. Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 850-1600m.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Federal: END State: END CNPS: 1B	Chaparral, coastal scrub (alluvial fan sage scrub), flood deposited terraces and washes.
San Jacinto Mountains bedstraw	<i>Galium angustifolium</i> ssp. <i>jacinticum</i>	Federal: None State: None CNPS: 1B	Lower montane coniferous forest. Endemic to the lake fulmor/black mtn. Area in Riverside County. Open mixed forest. 1630-1940m.
California bedstraw	<i>Galium californicum</i> ssp. <i>primum</i>	Federal: None State: None CNPS: 1B	Chaparral, lower montane coniferous forest. Known only from Riverside and San Bernardino Counties. Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. 360m.
Mesa horkelia	<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Federal: None State: None CNPS: 1B	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: 1B	Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Alkaline soils in playas, sinks, and grasslands. 1-1,400m elevation.
Heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	Federal: None State: None CNPS: 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, 550-1370m.
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CNPS: 1B	Chaparral, coastal scrub. Dry soils, shrubland. 1-945m elevation.
Lemon lily	<i>Lilium parryi</i>	Federal: None State: None CNPS: 1B	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 1300-2790m.
Mud nama	<i>Nama stenocarpum</i>	Federal: None State: None CNPS: 2	Marshes and swamps. Lake shores, river banks, intermittently wet areas. 5-500m.
Spreading navarretia	<i>Navarretia fossalis</i>	Federal: THR State: None	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San

Common Name	Scientific Name	Status Designation	Distribution Notes
		CNPS: 1B	Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. 30-1300m.
Snake cholla	<i>Opuntia parryi serpentina</i>	Federal: None State: None CNPS: 1B	Chaparral, coastal scrub. Known only from San Diego County and Baja. 30-150m.
California Orcutt grass	<i>Orcuttia californica</i>	Federal: END State: END CNPS: 1B	Vernal pools. Known only from Southern California and Baja. 15-660m.
California beardtongue	<i>Penstemon californicus</i>	Federal: None State: None CNPS: 1B	Chaparral, lower montane coniferous forest, pinyon juniper woodland. Stony slopes and shrubby openings; sandy or granitic soils. 1160-2300m.
San Miguel savory	<i>Satureja chandleri</i>	Federal: None State: None CNPS: 1B	Chaparral, cismontane woodland, coastal scrub, rip woodland, valley and foothill grassland. Rocky, gabbroic or metavolcanic substrate. 120-1005m.
Southern skullcap	<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	Federal: None State: None CNPS: 1B	Chaparral, cismontane woodland, lower montane coniferous forest. In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000m.
Salt Spring checkerbloom	<i>Sidalcea neomexicana</i>	Federal: None State: None CNPS: 2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, mojavean desert scrub. Alkali springs and marshes. 0-1500m.
Wright's trichocoronis	<i>Trichocoronis wrightii</i> var. <i>wrightii</i>	Federal: None State: None CNPS: 2	Marshes and swamps, riparian forest, meadows and seeps, vernal pools. Mud flats of vernal lakes, drying river beds, alkali meadows. 5-435m.
Federal designations: (Federal Endangered Species Act, USFWS): END: Federally listed, endangered THR: Federally listed, threatened SOC: Federal Species of Concern Candidate: Federal Candidate			
State designations: (California Endangered Species Act, CDFG) END: State-listed, endangered THR: State-listed, threatened SOC: State Species of Special Concern			
California Native Plant Society (CNPS) Designations: List 1A: Plants presumed extinct in California. List 1B: Plants rare and endangered in California and throughout their range. List 2: Plants rare and endangered in California, but more common elsewhere. List 3: More information is needed. List 4: Limited distribution.			
Source: California Natural Diversity Database (CNDDDB October 2004), San Jacinto, El Casco, Lakeview, Winchester, Hemet, Blackburn Canyon, Lake Fulmor, Cabzon and Beaumont USGS quads and Final Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) (Dudek and Associates, June 2003) and species maps and lists provided at http://ecoregion.ucr.edu .			

Sensitive Wildlife

Sensitive wildlife known or expected to occur within the Planning Area includes amphibians, reptiles, birds, mammals and invertebrates. In addition to the CNDDDB, the Final Western Riverside MSHCP (Dudek and Associates, June 2003) and species maps and lists provided at <http://ecoregion.ucr.edu> were used to determine the presence/absence of sensitive species within the Planning Area. The Final MSHCP, species lists and maps were compiled from numerous surveys and records searches for species within the Western Riverside County MSHCP Planning Area. This data has been used to determine which sensitive species may potentially occur within the Planning Area; a lack of sightings within the Planning Area does not indicate that the species does not or will not occur within the Planning Area. In addition, species present near the border of the Planning Area can potentially expand their range or migrate into the Planning Area. In order to ensure that a comprehensive search was completed, the species search performed for the Planning Area included a significant amount of land bordering the Planning Area.

Birds

Table 5.4-3 identifies the sensitive bird species occurring or likely to occur in the Planning Area, their sensitivity status and preferred habitat. The following sensitive bird species potentially occur within the Planning Area: Coopers hawk, tricolor blackbird, Southern California rufous-crowned sparrow, Bell's sage sparrow, Golden eagle, burrowing owl, coastal cactus wren, Ferruginous hawk, Turkey vulture, Mountain plover, Northern harrier, western yellow-billed cuckoo, black swift, California horned lark, Merlin, Loggerheaded shrike, white-faced ibis, coastal California gnatcatcher, purple martin, Le Conte's thrasher and Least Bell's vireo.

Amphibians/Reptiles

Sensitive amphibian species occurring or likely to occur in the Planning Area include the California tiger salamander and the mountain yellow-legged frog. Sensitive reptiles occurring or potentially occurring within the Planning Area include: California legless lizard, orange throated whiptail, coastal western whiptail, rosy boa, San Diego banded geko, northern red-diamond rattlesnake, coast (San Diego) horned lizard and western spadefoot toad. **Table 5.4-3** provides more additional information about these species including their sensitivity status and their preferred habitat.

Mammals

As indicated in **Table 5.4-3**, the following sensitive mammalian species occur or potentially occur within the Planning Area: Dulzura pocket mouse, Northwestern San Diego pocket mouse, San Bernardino kangaroo rat, Stephens' kangaroo rat, San Diego black-tailed jackrabbit, San Diego desert woodrat, Los Angeles pocket mouse, Palm Springs round-tailed ground squirrel and American badger.

Invertebrates

As indicated in **Table 5.4-3**, the federally endangered Quino checkerspot butterfly may potentially occur within the study area.

**Table 5.4-3
Special-Status Wildlife Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
Birds			
Coopers hawk	<i>Accipiter cooperii</i>	Federal: None State: CSC	Open, interrupted or marginal woodlands. Nest sites are found mainly in riparian growths of deciduous trees, in canyon bottoms or on river flood-plains; also, in live oaks.
Tricolor blackbird	<i>Agelaius tricolor</i>	Federal: FSOC State: CSC	Freshwater marshes. Suitable breeding habitat includes cattails and bulrushes, as well as non-native thistles and mustards.
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	Federal: None State: CSC	Rocky slopes, especially where a relatively open shrub cover dominated by California sagebrush is interspersed with grassy areas.
Bell's sage sparrow	<i>Amphispiza belli belli</i>	Federal: FSOC State: CSC	Relatively open chaparral, especially where dominated by chamise, but also occurs in sage scrub, especially in the more arid associations of this plant community.
Golden eagle	<i>Aquila chrysaetos Canadensis</i>	Federal: State:	Rolling foothills mountain areas, sage-juniper flats, desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Burrowing owl	<i>Athene cunicularia</i>	Federal: FSOC State: CSC	Requires fairly large expanses of relatively open level terrain, including grasslands, agricultural fields, dairies and occasionally may use undisturbed edges of golf courses or airports.
Coastal cactus wren	<i>Ampylorhynchus brunneicapillus sandiegensis</i>	Federal: None State: CSC	Coastal sage scrub, require tall Opuntia cactus for nesting and roosting.
Ferruginous hawk	<i>Biteo regalis</i>	Federal: None State: CSC	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon-juniper habitats. (wintering)
Mountain plover	<i>Charadrius montanus</i>	Federal: None State: CSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground and flat topography. Prefer grazed areas and areas with burrowing rodents.
Northern harrier	<i>Circus cyaneus hudsonius</i>	Federal: None State: CSC	Coastal salt and fresh-water marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Federal: FC State: SE	Restricted to extensive deciduous riparian thickets or forest with dense, low-level or understory foliage which occur along slow moving watercourses, backwaters or

**Table 5.4-3
Special-Status Wildlife Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
			seeps. Willows are almost always a dominant component nesting habitat.
Black swift	<i>Cypseloides niger</i>	Federal: None State: CSC	Likely migratory. Forages over wide variety of habitats. Only known breeding population in Planning Area is in San Jacinto Mountains.
California horned lark	<i>Eremophila editha actia</i>	Federal: None State: CSC	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.
Merlin	<i>Falco columbarius</i>	Federal: None State: CSC	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.
Loggerheaded shrike	<i>Lanius ludovicianus gambeli</i>	Federal: None State: CSC	Broken woodlands, savannah, pinyon-juniper, joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.
White-faced ibis	<i>Plegadis chihi</i>	Federal: None State: CSC	Shallow fresh-water marshes, dense tule thickets for nesting interspersed with areas of shallow water for foraging.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Federal: FT State: CSC	Obligate resident of several distinct sub-associations of the coastal sage scrub plant community.
Purple martin	<i>Progne subis</i>	Federal: None State: CSC	Inhabits woodlands, low elevation coniferous forest of douglas fir, ponderosa pine, and monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.
Le Conte's thrasher	<i>Toxostoma lecontei</i>	Federal: None State: CSC	Primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Federal: FE State: SE	Mature riparian habitat with a dense understory of young willows, mule fat, blue elderberry, California rose, desert wild grape, and a variety of other shrubby species.
Amphibians			
California tiger salamander	<i>Ambystoma californiense</i>	Federal: FT State: ST	Restricted to grassland and low foothills, with long-lasting vernal pools for breeding. Permanent aquatic sites used for breeding only in the absence of predatory fish. Dry season habitat sites are within reasonable distance of breeding sites, consist of small

**Table 5.4-3
Special-Status Wildlife Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
			mammal burrows (especially ground squirrel) as well as man-made enclosures.
Mountain yellow-legged frog	<i>Rana muscosa</i>	Federal: FT State: ST	Always encountered within a few feet of water. Tadpoles may require up to 2 yrs to complete their aquatic development. Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains only.
Reptiles			
California legless lizard	<i>Anniella pulchra puchra</i>	Federal: State:	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. Prefer soils with high moisture content.
Orange throated whiptail	<i>Aspidoscelis hyperythrus</i>	Federal: None State: CSC	Inhabits low-elevation coastal scrub, chaparral and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.
Coastal western whiptail	<i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: CSC	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy or rocky.
Rosy boa	<i>Charina trivirgata</i>	Federal: FSOC State: CSC	Desert and chaparral. Prefers moderate to dense vegetation and rocky cover. Mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains.
San Diego banded geko	<i>Coleonyx variegates abbotti</i>	Federal: None State: CSC	Primarily a desert species, although also occurs in habitats ranging from cismontane chaparral to arid tropical forests. Also prefers rocky outcrops in coastal scrub.
Northern red-diamond rattlesnake	<i>Crotalus rubber rubber</i>	Federal: None State: CSC	Chaparral, woodland, grassland, and desert areas. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.
Coast (San Diego) horned lizard	<i>Phrynosoma coronatum (blainvillei)</i>	Federal: None State: CSC	Open or sparse scrub and chaparral communities. This species prefers loose, friable soil for burrowing.
Western spadefoot Toad	<i>Spea hammondii</i>	Federal: FSOC State: CSC	Grassland, coastal sage scrub and other habitats with open sandy gravel soils. Breeds in vernal pools and temporary ponds/pools associated with river bottoms and floodplains. Primarily a species of the lowlands, frequenting washes, floodplains of rivers, alluvial fans and alkali flats.
Mammals			
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	Federal: None State: CSC	Variety of habitats including coastal scrub, chaparral and grassland in San Diego County. Attracted to grass-chaparral

**Table 5.4-3
Special-Status Wildlife Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
			edges.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	Federal: None State: CSC	Coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper and annual grassland in sandy herbaceous areas, usually in association with rocks or coarse gravel.
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Federal: FE State: CSC	Occupies habitat along the San Jacinto River, where in areas of sparse vegetation, disturbed habitat, and riparian habitat. Also uses Riversidean sage scrub and grazing lands.
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	Federal: FE State: ST	Inhabits annual grassland with sparse perennial vegetation in the San Jacinto Valley and adjacent areas of western Riverside and northwestern San Diego County.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	Federal: None State: CSC	Arid regions supporting short-grass habitats such as annual grassland, Riversidean sage scrub, alluvial fan sage scrub. Great Basin sagebrush, chaparral, disturbed habitat and agriculture.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	Federal: None State: CSC	Habitat consists of riparian scrub, chaparral, grassland, coastal sage scrub, and mulefat scrub. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes.
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	Federal: None State: CSC	Restricted to lower elevation grasslands and coastal sage scrub associations in the Los Angeles Basin.
Palm Springs round-tailed ground squirrel	<i>Spermophilus tereticaudus chlorus</i>	Federal: FC State: CSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees.
American badger	<i>Taxidea taxus</i>	Federal: None State: CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.
Invertebrates			
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Federal: FE State: None	Sunny openings within chaparral and coastal sage shrublands, need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , <i>Orthocarpus purpureus</i>

**Table 5.4-3
Special-Status Wildlife Species Potentially Occurring in the
San Jacinto Planning Area**

Common Name	Scientific Name	Status Designation	Preferred Habitat
Status Codes			
Federal			
FE: Federal listed; Endangered			
FT: Federal listed; Threatened			
FPE: Federal Proposed Endangered			
FPT: Federal Proposed Threatened			
FSOC: Federal Species of Concern			
FC: Federal Candidate Species			
State			
ST: State-listed; Threatened			
SE: State-listed; Endangered			
CSC: California Species of Special Concern			
Source:			
California Natural Diversity Database (CNDDB October 2004), San Jacinto, El Casco, Lakeview, Winchester, Hemet, Blackburn Canyon, Lake Fulmor, Cabzon and Beaumont USGS quads and Final MSHCP (Dudek and Associates, June 2003) and species maps and lists provided at http://ecoregion.ucr.edu .			

Wildlife Movement/Migration Corridors

Wildlife Corridor Definition

Wildlife movement/migration corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization tends to create isolated islands of wildlife habitat. Several studies have shown that in the absence of habitat linkages, which facilitate wildlife movements between adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist over time. This is because fragmentation and/or the isolation of habitat areas can prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Wildlife corridors can often mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby allowing depleted populations to be replenished; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events such as fire or disease will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (defined as juvenile animals moving from natal areas and individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities such as foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as wildlife corridor, travel route, habitat linkage, and wildlife crossing, to refer

to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel route - a landscape feature such as a ridgeline, drainage, canyon, or riparian strip in a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources such as water, food, cover, and den sites. The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover between habitat areas; and it provides a relatively direct link between target habitat areas.

Wildlife corridor - a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement in the corridor. Larger, landscape-level corridors, often referred to as habitat or landscape linkages, can provide both transitory and resident habitat for a variety of species.

Wildlife crossing - a small, narrow area, relatively short in length and generally constricted, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent choke points along a movement corridor.

Wildlife Movement in the Study Area

It is important to note that, in a large open space area in which there are few or no manmade or naturally occurring physical constraints to wildlife movement, wildlife corridors as defined above may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and provide a variety of travel routes including canyons, ridgelines, trails, riverbeds, and others, wildlife may be able to utilize these local routes while searching for food, water, shelter, and mates, rather than needing to cross into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is in or contiguous with a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or the construction of physical obstacles such as roads and highways, remaining landscape features or travel routes that connect the larger open space areas can become corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions such as manmade noise or artificial lighting that would generally hinder wildlife movement.

This concept applies to many of the open space areas in the Planning Area, including Gilman Hot Springs, Soboba Hot Springs and Lakeview Mountains. In other words, these open space areas in the Planning Area are currently large enough to support a variety of resident wildlife species and populations. While there are likely a number of preferred travel

routes and landscape features that the larger and more mobile wildlife species use to move within and between these permanent open space areas, no apparent movement corridors, as defined above, presently exist in the open space habitat areas in the survey area and surrounding permanent open space areas at this time. This is essentially because the current open space areas between and adjacent to the permanently designated open space areas (parks and forests) have generally not been constrained or reduced to the point of creating, or necessitating, movement corridors. However, as development continues and the open spaces between Gilman Hot Springs, Soboba Hot Springs and other areas become constrained, any remaining habitat links between these areas and other permanent open space areas could become movement corridors.

Regulatory Framework

Many federal and State regulations address impacts to sensitive resources. These plans and programs have been enacted through federal, State and local action, and are administered by agencies and special districts. The following paragraphs summarize the regulatory context under which biological resources are managed at the Federal, State and local levels.

Federal Endangered Species Act (FESA; 16 U.S. Code Section 153 et seq.)

The United States Fish and Wildlife Service (USFWS), under the auspices of the Federal Endangered Species Act of 1973 (as amended), manages and protects species listed as endangered or threatened. The USFWS can issue a permit for incidental "take" of listed species as a result of otherwise lawful activities. Take, under the Federal definition, means to harass, harm (including habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. The permitting process is used to determine if a project would jeopardize the continued existence of listed species and what mitigation measures would be required to avoid or minimize impacts to listed species. Procedures for obtaining a permit for incidental take are identified under Section 7 of the Act for Federal properties or where Federal actions are involved, and are identified under Section 10 of the Act for non-Federal actions.

Candidate species do not have the full protection of the FESA; however, the USFWS advises applicants that candidate species could be elevated to listed species at any time.

Migratory Bird Treaty Act (16 USC Section 703-711)

The Migratory Bird Treaty Act (MBTA) of 1918, implemented by the USFWS, is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter, any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21). The MBTA requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (1 February to 31 August, annually).

Bald and Golden Eagle Protection Act (16 USC Section 668)

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (the national emblem) and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. If compatible with the

preservation of bald and golden eagles, the Secretary of the Interior may permit the taking, possession and transportation of bald and golden eagles and nests for scientific or religious purposes, or for the protection of wildlife, agricultural or other interests. The Secretary of the Interior may authorize the take of golden eagle nests which interfere with resource development or recovery operations. Bald eagles may not be taken for any purpose unless the Secretary issues a permit prior to the taking.

Clean Water Act (33 USC 1252-1376)

Section 401 of the Clean Water Act (CWA) requires an applicant to obtain certification for any activity that may result in a discharge of a pollutant into Waters of the United States. As a result, proposed fill in waters and wetlands requires coordination with the appropriate State Regional Water Quality Control Board (RWQCB) that administers Section 401 and provides certification. The RWQCB also plays a role in review of water quality and wetland issues, including avoidance and minimization of impacts. Section 401 certification is required prior to the issuance of a Section 404 permit.

Under Section 404 of the CWA, the U.S. Army Corps of Engineers (ACOE) has jurisdiction over "Wetlands" and "Waters of the United States." Permitting of activities that could discharge fill or dredge materials or otherwise adversely modify wetlands or other waters of the United State and associated habitat is required. Permits authorized by ACOE under the Act typically involve mitigation to offset unavoidable impacts on wetlands and other waters of the United States in a manner that achieves no net loss of wetland acres or values.

Executive Order 11990, Protection of Wetlands (May 24, 1977)

This Executive Order establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. On projects with Federal actions or approvals, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm to those wetlands must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding in the final environmental document for the proposed project.

California Endangered Species Act (Fish and Game Code 2050 et seq.)

The California Endangered Species Act (CESA) establishes State policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA definitions of endangered and threatened species parallel those defined in the FESA. Take authorizations from California Department of Fish and Game (CDFG) are required for any unavoidable impact to State-listed species resulting from proposed projects.

Prior to being considered for protected status, the CDFG designates a species as a species of special concern. Species of special concern are those species for which CDFG has information indicating that the species is declining.

Native Plant Protection Act (Fish and Game Code Sections 1900-1913)

California's Native Plant Protection Act (NPPA) requires all State agencies to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of the CDFG at least 10 days in advance of any change in land use which would adversely impact listed plants. This requirement allows CDFG to salvage listed plant species that would otherwise be destroyed.

Fish and Game Code Sections 1600-1603

The CDFG, through provisions of the Fish and Game Code Sections 1600-1603, is empowered to issue agreements (Streambed Alteration Agreements) for projects that would "divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" (Fish and Game Code Section 1602[a]). Streams and rivers are defined by the presence of a channel bed and banks, and intermittent flow. The limits of CDFG jurisdiction are also based on riparian habitat and may include wetland areas that do not meet ACOE criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream away from frequently saturated soils).

**Natural Community Conservation Planning Act
(Fish and Game Code Sections 2800-2835)**

The purpose of natural community conservation planning is to sustain and restore those species and their habitat identified by the department that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. It is also the policy of the State to conserve, protect, restore, and enhance natural communities. The State may acquire a fee or less than fee interest in lands consistent with approved natural community conservation plans and may provide assistance with the implementation of those plans.

Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP)

In June of 2003, the Riverside County Board of Supervisors adopted a comprehensive MSHCP to provide a regional conservation solution to species and habitat issues that have historically threatened to stall infrastructure and land use development. The MSHCP is a multi-jurisdictional effort that includes the unincorporated area of western Riverside County and fourteen cities, including the City of San Jacinto. The MSHCP covers 146 species and addresses biological diversity within 1.26 million acres, from west of the San Jacinto Mountains to the Orange County border. The MSHCP is designed to protect more than 30 federally threatened and endangered species, and to conserve 510,000 acres of native habitat, of which 347,000 acres are already in public and quasi-public ownership.

The MSHCP serves as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA, as well as an NCCP under the NCCP Act of 2001. Though the USFWS and CDFG have authority to regulate the take of threatened and endangered species, consistent with the terms and conditions of approval of the MSHCP, the USFWS and CDFG has granted "Take Authorization" for otherwise lawful actions in exchange for the assembly and

management of coordinated MSHCP Conservation Areas for 146 “covered species” (including 14 narrow endemic plant species). Of the 146 “covered species,” 118 species are considered “adequately conserved” within the MSHCP.

5.4.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan, such as the Western Riverside County MSHCP.

5.4.3 Potential Environmental Impacts

Sensitive Species

The proposed General Plan has the potential to significantly impact sensitive species as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, and street and utility improvements. Fragmentation of wildlife habitat and increased impacts from pets, lighting, and noise that may potentially occur as a result of development within the Planning Area could reduce the existing habitat for some special status plant and wildlife species. This is a significant impact. Implementation of Mitigation Measures B-1 through B-3 will reduce these impacts to below a level of significance.

Mitigation Measure B-1 calls for the City to work closely with the U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (FWS), and the California Department of Fish and Game (CDFG) during the discretionary project permitting and CEQA review of any project that may result in the alteration of a stream bed, involve the removal of vegetation in wetland and riparian habitats, disturb Waters of the United States or otherwise impact sensitive biological resources. (Implementation Program RM-3)

Mitigation Measure B-2 calls for the City to cooperate with the County of Riverside to develop and manage preserve areas within the urban landscape. During the review of development proposals, the Western Riverside County MSHCP (particularly Section 3.2.13 San Jacinto Valley Area Plan) will be used to help assess potential project impacts and mitigation requirements. Development in the City shall be required to comply with the applicable terms of the MSHCP including, but not limited to, the payment of mitigation fees, narrow endemic surveys, riparian/riverine policy, and other applicable surveys. Anyone applying for a discretionary permit for property located in a MSHCP designated Criteria Area/Criteria Cell(s) shall submit a HANS Application to the Riverside County EPD and subsequently to the Western Riverside RCP for JPR. (Implementation Program RM-4)

Mitigation Measure B-3 calls for the City, when applicable, to require the use of Planned Unit Developments, Specific Plans, and clustering, during the processing of new development projects, as a means of preserving significant natural resources and reducing risks associated with hazards related to seismic activities, unstable soils and landslides. (Implementation Program RM-6)

Sensitive Habitats

Similar to sensitive species, the proposed General Plan has the potential to significantly impact, directly and indirectly, sensitive habitats as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, and street and utility improvements. Impacts to non-sensitive vegetation communities or habitats that commonly occur throughout Southern California and do not support special status species are not considered significant. Within the Planning Area, removal of ruderal areas or landscape trees is not considered a significant impact to biological resources. However, implementation of the proposed General Plan may result in a significant impact associated with sensitive biological resources including alkali playa, chamise chaparral, coast live oak woodland, coastal and valley freshwater

marsh, Riversidean alluvial fan sage scrub, and Riversidean sage scrub. Additionally, removal of existing agricultural resources may result in impacts to sensitive biological species, particularly foraging birds and raptors. This is a significant impact. Implementation of Mitigation Measures B-1 through B-3 will reduce these impacts to below a level of significance.

Wetlands

Similar to sensitive species, the proposed General Plan has the potential to significantly impact wetlands as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, and street and utility improvements. Implementation of the General Plan may result in a significant impact associated with southern cottonwood/willow riparian and vernal pool vegetation communities. This is a significant impact to wetlands. Implementation of Mitigation Measures B-1 through B-3 will reduce these impacts to below a level of significance.

Wildlife Corridors

Similar to sensitive species, the proposed General Plan has the potential to significantly impact wildlife corridors as a result of grading, excavation, and construction activities associated with the implementation of the building of community facilities, private developments, and street and utility improvements. Implementation of the General Plan may result in a significant impact associated with wildlife movement. This is a significant impact. Implementation of Mitigation Measures B-1 through B-3 will reduce these impacts to below a level of significance.

Existing Plans, Policies, and Programs

As described in the Resource Management Element of the proposed General Plan, the City is required to comply with the federal and State regulations that address impacts to sensitive resources. The Western Riverside County MSHCP serves as a HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as an NCCP under the NCCP Act of 2001. The City of San Jacinto is a permittee under the MSHCP and is a signatory to the implementing agreement. As a permittee, the City of San Jacinto may not approve any projects requiring a discretionary, or certain ministerial permits or approvals that could have adverse impacts to species covered under the MSHCP, nor shall the city of San Jacinto initiate any public project that is not consistent with the MSHCP unless the project meets the criteria of certain exemptions.

As described in the Final MSHCP prepared by Dudek and Associates, (June 2003), The City of San Jacinto is located entirely within the San Jacinto Valley Area Plan of the MSHCP. The San Jacinto Valley Area Plan is divided into five subunits, four of which partially fall within the City boundaries. The Gilman Springs/Southern Badlands Subunit is located within and adjacent to the northern edge of the City. The Lakeview Mountains East and Hemet Vernal Pool Areas East Subunits are located near the western edge of the City and the Upper San Jacinto River/Bautista Creek Subunit is located along the San Jacinto River in the eastern portion of the City. Conservation goals including target acreage range for additional reserve lands, planning species and special biological issues and considerations are specified for each Subunit in Volume 1 of the MSHCP.

The San Jacinto Valley Area Plan also identifies the target conservation range for the City of San Jacinto at 1,580 – 2,680 acres. As described in the City of San Jacinto General Plan Land Use Element, there are four specific land use designations (general open space, open space recreation, parks and San Jacinto River) that are applied to public and private lands that are intended for conservation, open space, and recreational uses. These designations are typically applied to areas that have an abundance of natural resources, visual resources and/or public safety concerns, including the San Jacinto River. These open space conservation areas are generally located within the San Jacinto Valley Plan Subunits as described in the MSHCP. Large areas of open space are designated along the San Jacinto River, Gilman Hot Springs, Soboba Hot Springs and west of the Casa Loma Canal correspond to areas of the Gilman Springs/Southern Badlands Subunit and Lakeview Mountains East Subunits.

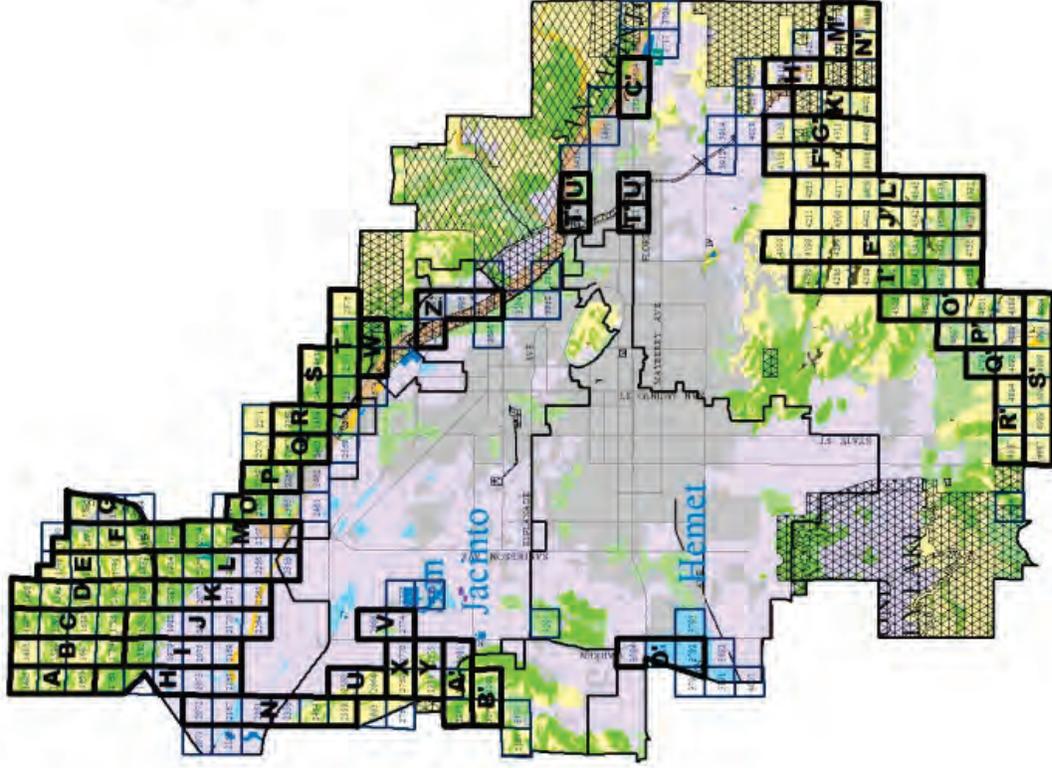
Land use projections under the proposed General Plan show an increase in acreage designated for general open space, open space recreation, parks and the San Jacinto River from 2,217 acres to 5,849 acres. Therefore, the General Plan is consistent with the MSHCP.

Each Area Plan Subunit in the MSHCP is further divided into Criteria Areas and Criteria Cells. A Criteria Cell is land (approximately 160 acres) that has been identified as an area where conservation potentially needs to occur. The locations of the Criteria Cells within the City of San Jacinto are shown in **Figure 5.4-2**. To ensure consistency with the MSHCP, anyone applying for a discretionary permit for property located in a MSHCP designated Criteria Area/Criteria Cell(s) must fill out a Habitat Evaluation and Acquisition Negotiation Strategy (HANS) Application. The Riverside County Environmental Programs Department (EPD) reviews HANS Applications for criteria consistency and issues a HANS Criteria Determination Letter within 45-days of receiving a complete application. The HANS Criteria Determination Letter identifies whether or not the subject property is described for conservation under the MSHCP and other relevant MSHCP compliance provisions. If the applicant disagrees with the HANS determination, a HANS I extended meeting may be scheduled to provide additional biological documentation to EPD staff. When an agreement is reached, HANS I is completed.

The HANS Application is then forwarded to the Western Riverside Regional Conservation Authority (RCA) for Joint Project Review (JPR). The RCA reviews the County's HANS determination to ensure compliance with the MSHCP and other MSHCP requirements including applicable biological surveys. A list of necessary biological surveys by species is located in Section 6.3.2 (Additional Survey Needs and Procedures) and Appendix E (Survey Requirements Summary) in the Final MSHCP, Volume 1, The Plan. RCA will issue comments within 14 days of receiving a HANS JPR file. If RCA agrees, the project has cleared JPR and will be forwarded to the wildlife Agencies for a 10-day review. If RCA does not concur, the applicant will be called for a "meet and confer" meeting.

HANS projects must clear JPR before being scheduled for a Directors Hearing, Planning Commission or Board of Supervisors. If a property is described for inclusion in the MSHCP Conservation Area, then the County and the applicant may enter into negotiations of terms and incentives to provide compensation. The negotiation period is 120 days but may be extended by mutual consent. Incentives may include a waiver

- Vegetation Communities:**
- Montane Coniferous Forest
 - Woodlands and Forests
 - Coastal Sage Scrub
 - Riversidean Alluvial Fan Sage Scrub
 - Desert Scrubs
 - Chaparral
 - Playas and Vernal Pools
 - Grassland
 - Riparian Scrub, Woodland, Forest
 - Meadows and Marshes
 - Cismontane Alkali Marsh
 - Water
 - Developed, Disturbed Land
 - Agricultural Land
- SOURCE: PSBS/KTU-4, 1995*



- Cell With Unique ID
- Cell Group with Identifier
- American Indian Lands (Not a Part)
- Public/Quasi-Public Conserved Lands

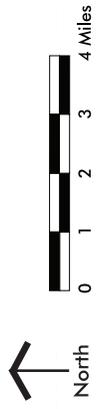


Figure 5.4-2
San Jacinto Valley Area Plan with Vegetation,
Cells and Cell Groups Keyed to MSHCP Criteria

and/or reduction of development fees, monetary compensation, fast track processing, density bonuses, etc. The HANS II process may proceed concurrently with JPR. Implementation of the General Plan will not result in a significant biological resources impact associated with any existing plans, policies, and programs.

5.4.4 Mitigation Measures

- B-1. The City shall work closely with the U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (FWS), and the California Department of Fish and Game (CDFG) during the discretionary project permitting and CEQA review of any project that may result in the alteration of a stream bed, involve the removal of vegetation in wetland and riparian habitats, disturb Waters of the United States or otherwise impact sensitive biological resources. (Implementation Program RM-3)
- B-2. The City shall cooperate with the County of Riverside to develop and manage preserve areas within the urban landscape. During the review of development proposals, the Western Riverside County MSHCP (particularly Section 3.2.13 San Jacinto Valley Area Plan) will be used to help assess potential project impacts and mitigation requirements. Development in the City shall be required to comply with the applicable terms of the MSHCP including, but not limited to, the payment of mitigation fees, narrow endemic surveys, riparian/riverine policy, and other applicable surveys. Anyone applying for a discretionary permit for property located in a MSHCP designated Criteria Area/Criteria Cell(s) shall submit a HANS Application to the Riverside County EPD and subsequently to the Western Riverside RCP for JPR. (Implementation Program RM-4)
- B-3. When applicable, the City shall require the use of Planned Unit Developments, Specific Plans, and clustering, during the processing of new development projects, as a means of preserving significant natural resources and reducing risks associated with hazards related to seismic activities, unstable soils and landslides. (Implementation Program RM-6)

5.4.5 Impact After Mitigation

Sensitive Species

Implementation of mitigation Measures B-1 through B-3 will reduce impacts to sensitive species to below a level of significance.

Sensitive Habitats

Implementation of mitigation Measures B-1 through B-3 will reduce impacts to sensitive habitats to below a level of significance.

Wetlands

Implementation of mitigation Measures B-1 through B-3 will reduce impacts to wetlands to below a level of significance.

Wildlife Corridors

Implementation of mitigation Measures B-1 through B-3 will reduce impacts to wildlife corridors to below a level of significance.

Existing Plans, Policies, and Programs

Implementation of Mitigation Measure B-2, will reduce impacts to impacts to existing plans, policies, and programs to below a level of significance.

5.5 Cultural Resources

5.5.1 Environmental Setting

Historical Setting

The San Jacinto Valley was first settled by the native Cahuilla peoples, many of whose descendants still live in the valley. The San Jacinto valley area was first seen by Europeans when Juan Bautista explored the valley in 1774. In the early 1800s it became a cattle ranch for Mission San Luis Rey and was named for Saint Hyacinth, or San Jacinto. At this time, Rancho San Jacinto extended from the San Jacinto mountains to present day Corona. When the mission system was broken up, approximately 35,500 acres of land in the valley was granted to the Estudillo family in 1842. As families began to move into the area, Don Jose Antonio Estudillo sold off portions of his holdings and decided to begin a town.

The City was founded in 1870 and incorporated in 1888, making San Jacinto the oldest incorporated city in Riverside County. For more than 100 years the fertile valley of the Planning Area has supported businesses and ranches with jobs, good resources and bumper crops such as grains apricots, peaches, walnuts and citrus. In the early 1900s, the local hot springs and mild climate attracted many visitors and new residents to the area.

Historical Resources

As the oldest incorporated city in Riverside County, San Jacinto contains many late 19th and early 20th century homes, including a number of Victorian houses and California bungalows. In addition, the City contains several late 19th and early 20th century commercial structures in the downtown area. The locations of many of the historical and archeological resources are shown on **Figure 5.5-1**. Some of these historic buildings and properties include the Estudillo Mansion, Scherman Home, Hotel Vosberg, Dunham House, Pioneer Hotel, Geiser Home, The Hogan, and the Hyacinth Inn.

The 1885 Estudillo Mansion, located at Main and Seventh Streets is the oldest and most significant historical building in the San Jacinto Valley. The history of the mansion links San Jacinto valley's present to the Mission Era of Spanish rule in California through the Mexican California era through the settlement of the valley by American and European settlers. Tours of the mansion promote tourism and the learning of local history. The site can also be used for business opportunities such as, weddings, private parties, and other receptions. Preservation of the site and protection of the site from incompatible development enhances the historic and economic value of the site to the community.

Other notable historic resources in the community include:

- Brick blocks in "Old San Jacinto" located on the two blocks between Hewitt Avenue and Evans Street;
- Lime kilns and quarry at Massacre Canyon;

- Historic trash dumps located along the western bank of the San Jacinto River, just east of the existing City boundary;
- A portion of the historic 1,600 mile route of the 1777 De Anza Expedition;
- The 1934 landing site of the Soviet Trans-polar Airship, which is now identified by a marker on Cottonwood Avenue, between Sanderson Avenue and Warren Road; and
- The San Jacinto High School Bell Tower.

Archeological Resources

San Jacinto includes a great number of prehistoric and historic archaeological resources. The Planning Area includes many important prehistoric sites in the Lakeview Mountains and one in Massacre Canyon. Rock art, including the locally famous “Ramona Maze Stone”, is located in the Lakeview Mountain area. Other types of prehistoric sites in the Lakeview area include rock shelters, open camps, and acorn and seed milling areas. According to legend, Massacre Canyon was once the site of the ancient Indian village of *Ivah*. This area may thus have prehistoric and historic significance.

Paleontological Resources

The Division of Geological Sciences of the San Bernardino County Museum (SBCM) completed a literature review and records search of the San Jacinto General Plan area. The records search included a review of the Regional Paleontologic Locality Inventory (RPLI) at the SBCM. The results of this search indicate that no previously-known paleontologic resource localities are recorded by the SBCM within the boundaries of the San Jacinto Planning Area or within a one mile radius of the San Jacinto Planning Area. Previous geologic mapping indicated that the proposed San Jacinto Planning Area is located primarily on surface exposures of Holocene alluvial valley deposits. These sediments have low potential to contain significant nonrenewable paleontological resources and were assigned low paleontological sensitivity.

However, these young alluvial sediments overlie older Pleistocene sediments present in the subsurface. These older Pleistocene alluvial deposits have high potential to contain significant nonrenewable paleontologic resources, and so are assigned high paleontologic sensitivity. Similar Pleistocene sediments in the Diamond and Domenigoni Valleys to the south yielded tens of thousands of Pleistocene age vertebrate fossils. Older Pleistocene alluvial sediments elsewhere throughout Riverside and inland San Bernardino Counties and the Inland Empire have been reported to yield significant fossils of plants and extinct animals from the Ice Age. Fossils recovered from these Pleistocene sediments represent extinct taxa including mammoths, mastadons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, large and small horses, large and small camels, and bison(SBCM, 2005).

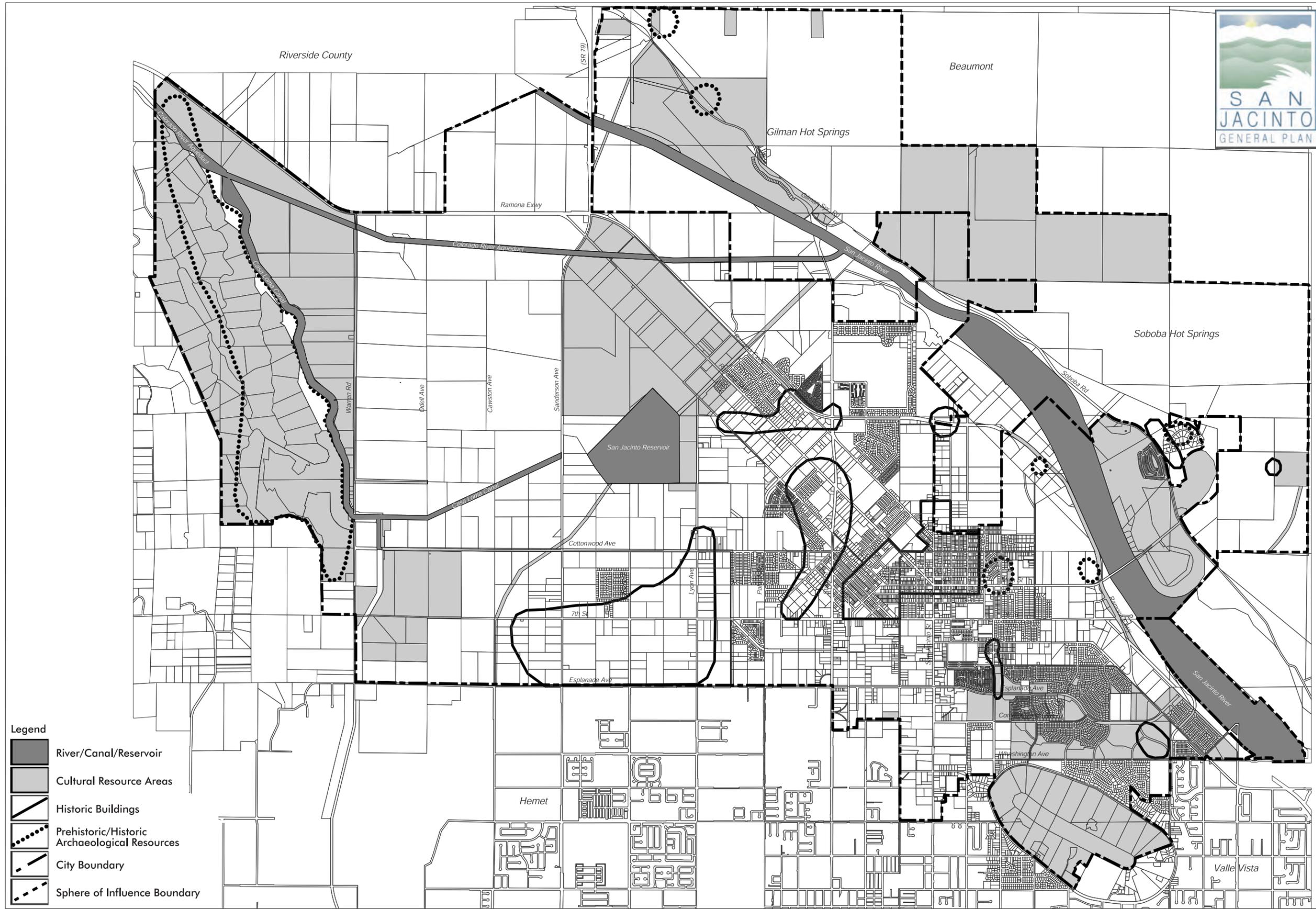


Figure 5.5-1
Existing Cultural Resources

5.5.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan:

- Causes a substantial change in the significance of a historical resource;
- Causes a substantial adverse change in the significance of an archaeological resource;
- Directly or indirectly destroys a unique paleontological resource or site or unique feature; or
- Disturbs any human remains, including those interred outside of formal cemeteries.

5.5.3 Potential Environmental Impacts

Historic Resources

Growth in San Jacinto in accordance with the General Plan has the potential to impact historic resources either through direct impacts to resources themselves or impacts to their immediate surroundings. Impacts to the immediate surroundings may result from individual developments that alter a historic structure or the unique character of the physical environment. This is considered a significant impact.

Implementation of Mitigation Measures C-1 through C-7 will reduce this impact to a level less than significant. Mitigation Measure C-1 requires the City to continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

- For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings pursuant to City of San Jacinto guidelines. If a historic building cannot be avoided by a project associated with the proposed General Plan, the significant historic building may be relocated to avoid impacting the structure.
- For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

- The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontologic resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.
- The City shall make provisions for archeological resources accidentally discovered during construction, or when the City does not have approval authority over the project, encourage the lead agency to make such provisions. These provisions shall include an immediate evaluation of the find and contingency funding and time allotment sufficient to allow for the recovery of the archeological resource or implement measures to avoid disturbing the resource if the archeological resource is determined to be unique.
- In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.
- Prior to adopting any general plan, specific plan, or any amendment thereto, the City shall notify appropriate tribes of the opportunity for consultation for the purpose of preserving, or mitigating impacts to, cultural places located on land within the City's jurisdiction that may be affected by the proposed plan or amendment.
- Prior to the adoption or substantial amendment of a general plan or specific plan, the City shall refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the City's jurisdiction for a 45 day comment period. In addition, at least 10 days prior to a public hearing, the City shall send notice to tribes that have filed a written request for such notice.
- Prior to designating open space, the City shall consult with tribes if the affected land contains a cultural place and if the affected tribe has requested public notice under Government Code section 65092.

Mitigation Measure C-2 requires the City to promote public awareness and encourage tourism in the City by actively identifying and enhancing the community's many historic resources through the location of historic landmark plaques and a Historic Tour Guide. The City shall promote tours of these sites on the City's and other organization's websites. Mitigation Measure C-3 requires the City to continue to support the improvement and enhancement of the Estudillo Mansion and expand opportunities for public access and use of the historic treasure. Under Mitigation Measure C-4, the City will develop and implement architectural standards and historical preservation guidelines for development and redevelopment in the downtown core of the community. The City shall use housing and façade rehabilitation programs to support development and redevelopment activities that preserve and complement historic structures and resources in the downtown. Mitigation Measure C-5 calls for the City to develop and implement programs and/or incentives for private property owners to help preserve, restore, or reuse historic structures while enhancing their historical significance and integrity. Finally, Mitigation Measure C-6 requires the City to conduct a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance. Mitigation Measure C-7 call's for the City to preserve San Jacinto's rich history by maintaining important historic structures and continually updating the exhibits in the San Jacinto Municipal Museum. Whenever economically feasible, the City shall retain historic structures and resources through local, State, and federal programs, such as the Mills Act. The City shall also work with the Estudillo Mansion Committee to identify and preserve historic resources, and use these resources as education tools and tourist draws.

Archeological Resources

Future growth in accordance with the proposed General Plan has the potential to impact significant archaeological resources. The development of residential or urban land uses, roads, and infrastructure may impact buried archaeological resources located throughout the undeveloped portions of the planning area, particularly in those areas identified on Figure 5.5-1. Current conditions create a potential for adverse impacts on archaeological resources due to unauthorized collecting, inadvertent damage from grading and/or road maintenance activities, or accelerated erosion resulting from intensive or careless land use practices. This is considered a significant impact. Implementation of Mitigation Measures C-1 through C-10 will reduce this impact to a level less than significant.

Mitigation Measure C-8 calls for the City, prior to approval of any project subject to CEQA that involves earth-disturbing activities, to require the project applicant to commission an assessment of the potential for archeological and cultural resources, to be performed by a qualified archeologist in conjunction with recognized Native American tribes, including the Soboba Band of Luiseno Indians ("Soboba"), in order to determine the presence and extent of any such resources within the project area and evaluate the significance of such resources. The assessment shall include a NAHC and CHRIS records search, a Phase I walkover survey, and preparation of an archeological report containing the results of this assessment. Phase II archeological evaluations will be completed prior to project approval if recommended in the assessment.

Mitigation Measure C-9 calls for the City to enter into a Treatment and Disposition Agreement ("TDA") with Soboba to address treatment and disposition of archeological and cultural resources and human remains associated with Soboba that may be uncovered or otherwise discovered during construction of projects subject to CEQA within the City. The

TDA may establish provisions for tribal monitors. Following execution of the TDA by the City and Soboba, the TDA will be incorporated by reference into individual grading permits for projects within the City that are subject to CEQA.

Mitigation Measure C-10 states that if the archeological/cultural resources assessment described in Mitigation Measure C-8 demonstrates the potential for archeological/cultural resources to occur on the project site, tribal monitors, including those from Soboba, may be allowed to monitor, at such tribe's sole cost and expense, all grading, excavation and ground disturbing activities, including further surveys. Following the agreement of the City, the designated archeologist, the tribal monitor, and any applicable responsible or trustee agencies, grading, excavation, ground disturbing activities shall be stopped temporarily and redirected in the event that any archeological/cultural resources are discovered in order to evaluate the significance of any archeological/cultural resources discovered on the property.

Paleontological Resources

Future growth in accordance with the proposed General Plan has the potential to impact significant paleontological resources. The development of residential or urban land uses, roads, and infrastructure may impact buried paleontological resources located throughout the undeveloped portions of the planning area. This is considered a significant impact. Implementation of Mitigation Measure C-1 will reduce this impact to a level less than significant.

Human Remains

Future growth in accordance with the proposed General Plan has the potential to impact significant human remains. The development of residential or urban land uses, roads, and infrastructure may impact buried human remains located throughout the undeveloped portions of the planning area. This is considered a significant impact. Implementation of Mitigation Measures C-1 and C-8 through C-10 will reduce this impact to a level less than significant.

5.5.4 Mitigation Measures

- C-1. The City shall continue to assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).
- o For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings pursuant to City of San Jacinto guidelines. If a historic building cannot be avoided by a project associated with the proposed General Plan, the significant historic building may be relocated to avoid impacting the structure.

- For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.
- The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontologic resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.
- The City shall make provisions for archeological resources accidentally discovered during construction, or when the City does not have approval authority over the project, encourage the lead agency to make such provisions. These provisions shall include an immediate evaluation of the find and contingency funding and time allotment sufficient to allow for the recovery of the archeological resource or implement measures to avoid disturbing the resource if the archeological resource is determined to be unique.
- In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.
- Prior to adopting any general plan, specific plan, or any amendment thereto, the City shall notify appropriate tribes of the opportunity for consultation for the purpose of preserving, or mitigating impacts to, cultural places located on land within the City's jurisdiction that may be affected by the proposed plan or amendment.

- Prior to the adoption or substantial amendment of a general plan or specific plan, the City shall refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the City's jurisdiction for a 45 day comment period. In addition, at least 10 days prior to a public hearing, the City shall send notice to tribes that have filed a written request for such notice.
 - Prior to designating open space, the City shall consult with tribes if the affected land contains a cultural place and if the affected tribe has requested public notice under Government Code section 65092. (Implementation Program RM-16)
- C-2. The City shall promote public awareness and encourage tourism in the City by actively identifying and enhancing the community's many historic resources through the location of historic landmark plaques and a Historic Tour Guide. The City shall promote tours of these sites on the City's and other organization's websites. (Implementation Program RM-17)
- C-3. The City shall continue to support the improvement and enhancement of the Estudillo Mansion and expand opportunities for public access and use of the historic treasure. (Implementation Program RM-18)
- C-4. The City shall develop and implement architectural standards and historical preservation guidelines for development and redevelopment in the downtown core of the community. The City shall use housing and façade rehabilitation programs to support development and redevelopment activities that preserve and complement historic structures and resources in the downtown. (Implementation Program RM-19)
- C-5. The City shall develop and implement programs and/or incentives for private property owners to help preserve, restore, or reuse historic structures while enhancing their historical significance and integrity. (Implementation Program RM-20)
- C-6. The City shall conduct a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance. (Implementation Program RM-21)
- C-7. The City shall preserve San Jacinto's rich history by maintaining important historic structures and continually updating the exhibits in the San Jacinto Municipal Museum. Whenever economically feasible, the City shall retain historic structures and resources through local, State, and federal programs, such as the Mills Act. The City shall also work with the Estudillo Mansion Committee to identify and preserve historic resources, and use these resources as education tools and tourist draws. (Implementation Program LU-20)
- C-8. Prior to approval of any project subject to CEQA that involves earth-disturbing activities, the City shall require the project applicant to commission an assessment of the potential for archeological and cultural resources, to be performed by a qualified archeologist in conjunction with recognized Native American tribes, including the

Soboba Band of Luiseno Indians ('Soboba '), in order to determine the presence and extent of any such resources within the project area and evaluate the significance of such resources. The assessment shall include a NAHC and CHRIS records search, a Phase I walkover survey, and preparation of an archeological report containing the results of this assessment. Phase II archeological evaluations will be completed prior to project approval if recommended in the assessment.

- C 9. The City shall enter into a Treatment and Disposition Agreement ('TDA') with Soboba to address treatment and disposition of archeological and cultural resources and human remains associated with Soboba that may be uncovered or otherwise discovered during construction of projects subject to CEQA within the City. The TDA may establish provisions for tribal monitors. Following execution of the TDA by the City and Soboba, the TDA will be incorporated by reference into individual grading permits for projects within the City that are subject to CEQA.
- C 10. If the archeological/cultural resources assessment described in Mitigation Measure C 8 demonstrates the potential for archeological/cultural resources to occur on the project site, tribal monitors, including those from Soboba, may be allowed to monitor, at such tribe's sole cost and expense, all grading, excavation and ground-disturbing activities, including further surveys. Following the agreement of the City, the designated archeologist, the tribal monitor, and any applicable responsible or trustee agencies, grading, excavation, ground disturbing activities shall be stopped temporarily and redirected in the event that any archeological/cultural resources are discovered in order to evaluate the significance of any archeological/cultural resources discovered on the property.

5.5.5 Level of Significance After Mitigation

Historic Resources

With implementation of Mitigation Measures C 1 through C 7, impacts to historic resources will be less than significant.

Archaeological Resources

With implementation of Mitigation Measures C 1 through C 10, impacts to archeological resources will be less than significant.

Paleontological Resources

With implementation of Mitigation Measure C 1, impacts to paleontological resources will be less than significant.

Human Remains

With implementation of Mitigation Measure C 1 and C 8 through C 10, impacts to human remains will be less than significant.

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5.6 Geology/Soils and Mineral Resources

5.6.1 Environmental Setting

The City of San Jacinto lies in the San Jacinto Valley between the Lakeview Mountains on the west, the San Jacinto Mountains foothills on the southeast and east, and the San Timoteo badlands on the northeast. Physiography (landforms and topography) of the City is controlled by the distribution and character of geologic units, by fault movements, and by climate and erosion. The terrain of the City consists predominately of the gently sloping, nearly flat valley floor that at one time was a closed basin. The relief of the valley floor is minimal consisting of incised drainages from the surrounding hills. The northeastern slopes of the steep Lakeview Mountains shed sediment onto the valley floor forming alluvial fans. The San Jacinto River cuts through the City from the southeast, forming the eastern edge of the valley floor, crossing the northern boundary of the City and exiting to the west north of the Lakeview Mountains. Park Hill is located along the south edge of the City between two active faults. Approximately 1,500 feet of vertical relief is present within the Planning Area, most of it in the steep San Jacinto Mountains foothills.

Geologic Conditions

There is a predominance of clay, silt, and fine-grained sand deposits beneath the valley floor that are sometimes soft, expansive, and prone to consolidation under building loads. The most common types of soil include Grangeville, Dello, San Emigdio, Traver, and Metz. (Natural Resource Conservation Service, 1971). Groundwater, which is pumped for use by the local citizens, can range from very shallow (less than 30 feet deep) in certain areas to deep (several hundred feet deep) in the vicinity of pumping wells.

The Lakeview Mountains have a granitic bedrock character consisting of moderately hard to hard, "layered" material that is generally stable and suitable for foundations. Park Hill is composed on older uplifted alluvium that consists of sand, silt, and clay generally stable, but susceptible to debris slides. The San Jacinto Mountains foothills and the San Timoteo badlands are geologically complex, being made up of sedimentary, granitic, and metamorphic rock types, as well as landslides and debris flows, particularly when saturated. Spring flow is found in these foothill areas due to the upland runoff and fractured bedrock.

Seismic Activity

The City of San Jacinto is located in a region with many seismically active faults and is crossed by two significant active faults zoned by the State Alquist-Priolo Earthquake Fault Zoning (APEFZ) Act discussed below. The Claremont fault (often mapped as the main San Jacinto fault entering the San Jacinto Valley from the north) has been mapped in young surficial alluvium and in exploratory subsurface trenches. On the east side of the City the subparallel Casa Loma fault has been similarly mapped as it extends from the east side of

the Lakeview Mountains to the northeast and southwest sides of Park Hill. **Figure 5.6-1** identifies the seismic hazard areas in the Planning Area.

In addition to the active faults discussed above, San Jacinto is located within 100 kilometers (62 miles) of several known potential sources of strong seismic shaking (up to about 60 percent the force of gravity, "g"), including the San Andreas, Elsinore, and other segments of the San Jacinto fault both northwest and southeast of the City. The San Andreas fault zone southern segment near Indio is located approximately 16 miles east of the City and the Elsinore fault zone is located approximately 23 miles southwest of the City near Temecula. The Claremont/Casa Loma faults are less than ½ mile away and continuation segments are approximately 23 miles north and 4.5 miles north. The San Jacinto Valley segments (Claremont/Casa Loma) are considered active faults requiring special near-source factors to be incorporated into buildings developed within 10 kilometers (6.2 miles) of the fault. The Uniform Building Code requires that the entire City incorporate near-source factors into the design of new buildings. Other significant faults located within 100 kilometers of the City that may generate ground accelerations over 10g include the Pinto Mountain fault and two other segments of the Elsinore fault.

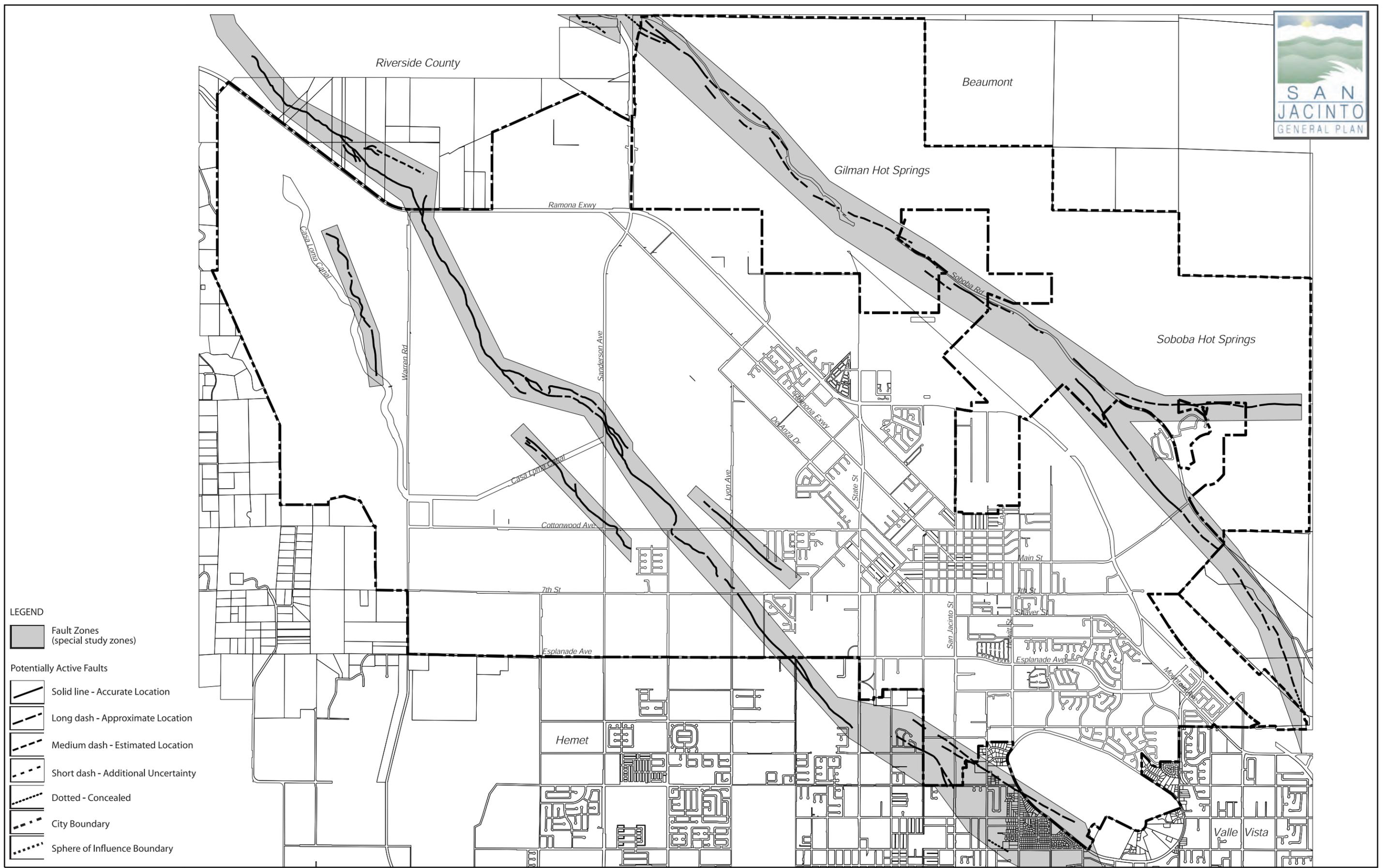
A major earthquake associated with any of these faults could result in moderate to severe groundshaking in San Jacinto. Groundshaking associated with these seismic hazard areas both within and near the Planning Area may cause liquefaction to occur. The potential for liquefaction is particularly high in the floodways located adjacent to and downstream of the San Jacinto River and in the valley floor where water is less than 30 feet deep.

Tsunamis and Seiches

Great earthquakes occurring around the Pacific Ocean can generate seismic sea waves, called tsunamis, which can cause damage along the California coast. The City of San Jacinto lies well inland from the coastline, which should provide sufficient distance and protection from tsunamis. However, the City of San Jacinto and adjacent jurisdictions have enclosed bodies of water such as tanks, reservoirs, lakes, and swimming pools that are subject to potentially damaging oscillation, or seiches during earthquakes.

Related Plans and Programs

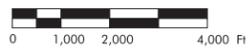
Seismic Hazards Mapping Act. Pursuant to the Seismic Hazards Mapping Act, the State Geologist compiles maps identifying seismic hazard zones. Development in seismic hazard areas is subject to policies and criteria established by the State Mining and Geology Board. Additionally, approval of development on a site within a seismic hazard area requires the preparation of a geotechnical report and local agency consideration of the policies and criteria set forth by the State Mining and Geology Board (Public Resources Code Section 2690 et. seq.).



LEGEND

-  Fault Zones (special study zones)
- Potentially Active Faults**
-  Solid line - Accurate Location
-  Long dash - Approximate Location
-  Medium dash - Estimated Location
-  Short dash - Additional Uncertainty
-  Dotted - Concealed
-  City Boundary
-  Sphere of Influence Boundary

Sources: County of Riverside GIS, City of San Jacinto, USGS



0 1,000 2,000 4,000 Ft



North

Figure 5.6-1
Seismic Hazards
April 2006

Alquist-Priolo Earthquake Fault Zoning Act. The Alquist-Priolo Earthquake Fault Zoning Act requires the state Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones, must inform the public regarding the location of these zones, which are usually one-quarter mile or less in width. Proposed development plans within these earthquake fault zones must be accompanied by a geotechnical report prepared by a qualified geologist describing the likelihood of surface rupture.

Landslide Hazard Identification Program. The Landslide Hazard Identification Program requires the state Geologist to prepare maps of landslide hazards within urbanizing areas. According to Public Resources Code Section 2687 (a), public agencies are encouraged to use these maps for land use planning and for decisions regarding building, grading and development permits.

City of San Jacinto Codes. The City has adopted the most recent Uniform Building Code, Uniform Mechanical Code, Uniform Fire Code and the National Electric Code, which contain structural requirements for existing and new buildings. The codes are designed to ensure structural integrity during seismic and other hazardous events, and prevent injury, loss of life and substantial property damage. To protect public safety, planned development in San Jacinto is subject to these structural codes.

5.6.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Expose people or structures to unacceptable risks of major geologic, seismic or soils hazards, including 1) landslides, 2) soil erosion, 3) unstable soils, 4) expansive soils 5) fault rupture, 6) seismic groundshaking, or 7) seismic-related ground failure that could not be overcome by using reasonable construction and/or maintenance practices.
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

5.6.3 Potential Environmental Impacts

Geologic Conditions

Landslides and Debris Flows. Landslides and debris flows can occur rapidly and without warning during periods of exceptionally high rainfall. Although rockfall hazards are low in the City, mudflows are more likely to occur. Due to the predominant underlying geologic formations and topography, the eastern foothills, and to a lesser extent the western Lakeview Mountains, are most susceptible to mud debris flows. The risk of debris flow hazard is considered moderate to high in these areas of San Jacinto. The proposed General Plan may allow development to occur that could be impacted by landslides and debris flows. This is considered a significant impact. Implementation of Mitigation Measures GS-1 GS-2 will reduce this potential impact to a level less than significant.

Mitigation Measure GS-1 requires the City to reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts during the development of specific projects. The City shall assess development proposals for potential hazards pursuant to the California Environmental Quality Act and require measures to mitigate all identified significant public safety hazards. Prior to project approval, the City shall require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate during review of discretionary development and redevelopment proposals. When potential geologic impacts are identified, the City shall require project applicants to mitigate the impacts per the recommendations contained within the geologic survey. Mitigation Measure GS-2 requires the City to adopt and implement the most recent State seismic requirements for structural design of new development and redevelopment to minimize damage from earthquakes and other geologic activity.

Potential impacts related to erosion are discussed on page 5.3-11 with respect to air quality, and on page 5.8-6 with respect to surface water quality.

Expansive Soils. The relatively significant amounts of clay present in the sediments underlying the valley in the alluvial formations can pose an expansive soils hazard. Soils overlying these formations are considered moderately to highly expansive. When grading requires imported fill materials, differences in the rate of settlement and expansion can result in damage to structures. The proposed General Plan may allow development to occur that could be impacted by expansive soils. This is considered a significant impact. Implementation of Mitigation Measures GS-1 and GS-2 will reduce this potential impact to a level less than significant.

Groundwater. Groundwater is a resource that has been extracted from the San Jacinto basin for decades at ever increasing rates of withdrawal. Areas along the edge of the mountains, along the active Casa Loma fault, and the northern SOI have had surface fissuring due to non-uniform subsidence as the internal porosity of the sediments collapses during dewatering. The existing ground fissures provide conduits for infiltration and may cause foundation damage if undetected under heavy structures. This is considered a significant impact. Implementation of Mitigation Measures GS-1 and GS-2 will reduce this potential impact to a level less than significant.

Seismic Activity

Seismic activity poses two types of hazards: primary and secondary. Primary hazards include ground rupture, ground shaking, ground displacement and subsidence and uplift from earth movement. Primary hazards can induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

Because known active seismic faults traverse San Jacinto, the potential for ground rupture is high. Damage (more than cosmetic) to buildings and infrastructure would be expected as a result of groundshaking during a severe seismic event on the nearest segments of the San Jacinto and San Andreas fault zones. Damage from earthquakes is most often the result of liquefaction. Liquefaction occurs primarily in areas of recently deposited sands and silts and

in areas of high groundwater levels. Poorly consolidated sediment and high groundwater levels occur most frequently in creekbeds and floodplains. This is considered a significant impact. Implementation of Mitigation Measures GS-1, GS-2, and GS-3 will reduce this potential impact to a level less than significant.

Mitigation Measure GS-3 requires the City of San Jacinto to use open space easements and other regulatory techniques to prohibit development and avoid public safety hazards where the threat from natural hazards (such as fault rupture or flooding) cannot be mitigated. The City shall permit the joint-use of preserve areas and easements such as seismic faults and drainage basins for open space and recreational uses where feasible.

Large scale landslides, as well as rockfalls, are relatively common events in major earthquakes. Unstable slopes are located throughout the eastern foothill portions of the City and the SOI. **Figure 5.6-1** depicts slope regions that have confirmed, known or highly suspected landslides. While those hillside regions depicted are considered the most vulnerable to failure during a significant earthquake, almost all hillside regions over 20 percent slope are vulnerable to some degree. This is considered a significant impact. Implementation of Mitigation Measures GS-1, GS-2, and GS-3 will reduce this potential impact to a level less than significant.

Tsunamis and Seiches

The City is protected from sea waves (tsunamis) due to its inland location. However, the City's (and adjacent jurisdictions') tanks, reservoirs, lakes and swimming pools are enclosed bodies of water that are subject to potentially damaging oscillation, or seiches during earthquakes. The hazard is dependent upon specific earthquake parameters, and the degree of damage due to seiches is likely to be minor. A failure of Lake Hemet dam would cause some flooding along the San Jacinto River. This is a potentially significant impact. Implementation of Measures GS-4 and GS-5 will reduce this potential impact to a level less than significant.

Mineral Resources

The Surface Mining and Reclamation Act of 1975 (SMARA) mandated that the state geological service classify mineral resources in order to identify and protect mineral resources in areas subject to urban expansion or other irreversible land uses that would preclude mineral extraction. The SMARA classification system uses 4 categories: MRZ-1 refers to areas where adequate geological information indicates that there are no significant mineral deposits present or where it is judged that mineral deposits are unlikely to exist. MRZ-2 refers to areas where geological data indicates that significant measured, indicated, or inferred mineral resources are present. MRZ-3 refers to areas containing known or inferred mineral deposits that may qualify as mineral resources and MRZ-4 refers to areas where geologic information does not rule out either the presence or absence of mineral resources (Department of Conservation, 2005). According to the California Geological Survey, the City of San Jacinto has been classified as MRZ-1 (Miller, 2005). Therefore, implementation of the proposed General Plan will not have any significant impacts on mineral resources.

Emergency Response

Most loss of life and injuries that occur during an earthquake are related to the collapse of buildings and structures. The geologic hazards noted above, combined with groundshaking can result in substantial structural damage, personal injury and a related loss of life and property. The State Department of Conservation Division of Mines and Geology published an earthquake scenario report for the San Jacinto fault zone. This report did not concentrate on residential, commercial and industrial properties, but on critical facilities that support the local population. Local facilities affected by a 7.0 scenario earthquake are:

- **Communications** – General Telephone’s two central switching offices in Hemet will be subject to design criteria established capable of withstanding a category MMI VII earthquake as described in the 1931 Modified Mercalli Intensity Scale. Seismic design should allow light to moderate damage to be repaired within several hours after the earthquake. Buried cables that cross a fault rupture zone will be vulnerable to damage. Cellular service may be unreliable due to overloading.
- **Electric Power** – A major Southern California Edison transmission line crosses the San Jacinto Valley at the north end of the planning area. Romoland Substation at SR-74 and the I-215 should sustain minor damage and be at full capacity after one day. The transmission towers entering the valley from Beaumont will be susceptible to landslides and may operate at limited capacity for 2 to 4 days.
- **Water Supply** – The Colorado River Aqueduct enters the planning area near San Jacinto Park and branches into the Casa Loma siphons, the San Diego Aqueduct/Canal. Part of this system passes through the San Jacinto Reservoir. In general water supplies will be reduced 20 percent and services may be out for three days due to fault rupture on the Casa Loma and Claremont segments, although local wells may alleviate shortage conditions much sooner. The Colorado River Aqueduct may be out of service for one to two weeks.
- **Natural Gas** – Southern California Gas Company has major transmission lines (30 and 36-inch diameter) crossing the San Jacinto Valley well north of the planning area which are subject to damage from landslides and fault rupture. This will reduce service for about 20 percent of residents for about one week. A local major distribution trunk line (8 to 12-inch diameter) passes through the City and crosses the fault zones several times. Disruptions may cause fires and service may be interrupted for several weeks.
- **Highways** – SR-74 and SR-79, the major routes through the City, should remain open following the scenario earthquake, however local damage due to liquefaction, fault rupture, and settlement will create lane restrictions and detours. Repairs will require months.
- **Public Services** - under a probable earthquake scenario, San Jacinto schools, and fire and police stations are estimated to function at less than 20 percent of normal capacity one day after the earthquake.

These are considered significant impacts. Implementation of Mitigation Measures GS-4 and GS-5 will reduce these potential impacts to a level less than significant. Mitigation Measure GS-4 requires the City to annually review and update the Emergency Preparedness Plan under the provision of the State Emergency Management System format to maximize the efforts of emergency service providers (e.g., fire, medical, and law enforcement) and minimize human suffering and property damage during disasters. This review should provide annual practice sessions to City staff and support high-level multi-jurisdictional cooperation and communication for emergency planning and management. The City shall also solicit private individuals and organizations to enhance service provider communications and response with cellular telephones, ham radios, AM/FM radio, and cable television. Mitigation Measure GS-5 calls for the City of San Jacinto to coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

5.6.4 Mitigation Measures

- GS-1 The City shall reduce the risk to the community from hazards related to geologic conditions, and seismic activity by requiring feasible mitigation of such impacts on development projects. The City shall assess development proposals for potential hazards pursuant to the California Environmental Quality Act and require measures to mitigate all identified significant public safety hazards. Prior to project approval, the City shall require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate during review of discretionary development and redevelopment proposals. When potential geologic impacts are identified, the City shall require project applicants to mitigate the impacts per the recommendations contained within the geologic survey. (Implementation Program PS-1 and PS-4)
- GS-2 The City shall adopt and implement the most recent State seismic requirements for structural design of new development and redevelopment to minimize damage from earthquakes and other geologic activity. (Implementation Program PS-3)
- GS-3 The City shall use open space easements and other regulatory techniques to prohibit development and avoid public safety hazards where the threat from natural hazards (such as fault rupture or flooding) cannot be mitigated. The City shall permit the joint-use of preserve areas and easements such as seismic faults and drainage basins for open space and recreational uses where feasible. (Implementation Program PS-2)
- GS-4 The City shall annually review and update the Emergency Preparedness Plan under the provision of the State Emergency Management System format to maximize the efforts of emergency service providers (e.g., fire, medical, and law enforcement) and minimize human suffering and property damage during disasters. This review should provide annual practice sessions to City staff and support high-level multi-jurisdictional cooperation and communication for emergency planning and management. The City shall also solicit private individuals and organizations to enhance service provider communications and response with cellular telephones, ham radios, AM/FM radio, and cable television. (Implementation Program PS-17)

GS-5 The City shall coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation. (Implementation Program PS-18)

5.6.5 Impact after Mitigation

Geologic Conditions

With implementation of Mitigation Measures GS-1 and GS-2, impacts related to geologic conditions will be less than significant.

Seismic Activity

With implementation of Mitigation Measures GS-1 through GS-5, impacts related to seismic activity will be less than significant.

Mineral Resources

No impact was identified.

5.7 Hazards and Hazardous Materials

5.7.1 Environmental Setting

Hazardous Materials

Hazardous materials are used in San Jacinto for a variety of purposes including manufacturing, service industries, small businesses, agriculture, medical clinics, schools and households. Many chemicals used in household cleaning, construction, dry cleaning, film processing, landscaping and automotive maintenance and repair are considered hazardous. Accidents can occur in the production, use, storage, transport and disposal of hazardous materials.

As identified in County of Riverside Ordinance 615.3, the County of Riverside Department of Environmental Health enforces the provisions of the Hazardous Waste Control Law of the State of California as set forth in the California Health and Safety Code and the California Code of Regulations. In order to effectively manage hazardous materials and waste, the City coordinates with the County of Riverside Environmental Health Department to implement the following programs:

- **Household Hazardous Waste Program** – Provides for the collection of household wastes at scheduled events throughout the County;
- **Hazardous Waste Minimization** – County personnel provides technical assistance and education programs for businesses in order to identify ways to significantly reduce the amount of hazardous waste produced;
- **Emergency Response and Investigations** – County Environmental Health Department staff in conjunction with County Fire responds to hazardous materials incidents. Also, the County District Attorney investigates environmental crimes and illegal hazardous waste disposal complaints.
- **Local Oversight Underground Storage Tank (UST) Program** – Monitors the remediation of sites contaminated by petroleum products as a result of a leaking UST.
- **Underground Storage Tank (UST) Program** – Regulates all non-exempt USTs in Riverside County that contain hazardous substances;
- **Waste Generator Permit** – Regulates facilities in the community that generate a hazardous waste. Regulatory requirements are fulfilled through a program of annual permits, supported by routine inspections;

- **Hazardous Materials Handlers Program** – Regulates facilities that handle and store on-site specified types and quantities of hazardous and acutely/extremely hazardous materials. Regulatory requirements are fulfilled through permitting routine facility inspections and review of detailed site plans indicating where hazardous materials are stored. Facilities monitored under this program generally require a Business Emergency Plan.

Environmental Crimes Task Force – Investigates environmental crimes Countywide.

Hazardous materials also pass through the City en route to other destinations via the freeway, rail and surface street system. However, the City has no direct authority to regulate the transport of hazardous materials on State highways or rail lines. Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. These federal safety standards are also included in the California Administrative Code. The California Health Services Department also regulates the haulers of hazardous waste, but does not regulate all hazardous materials.

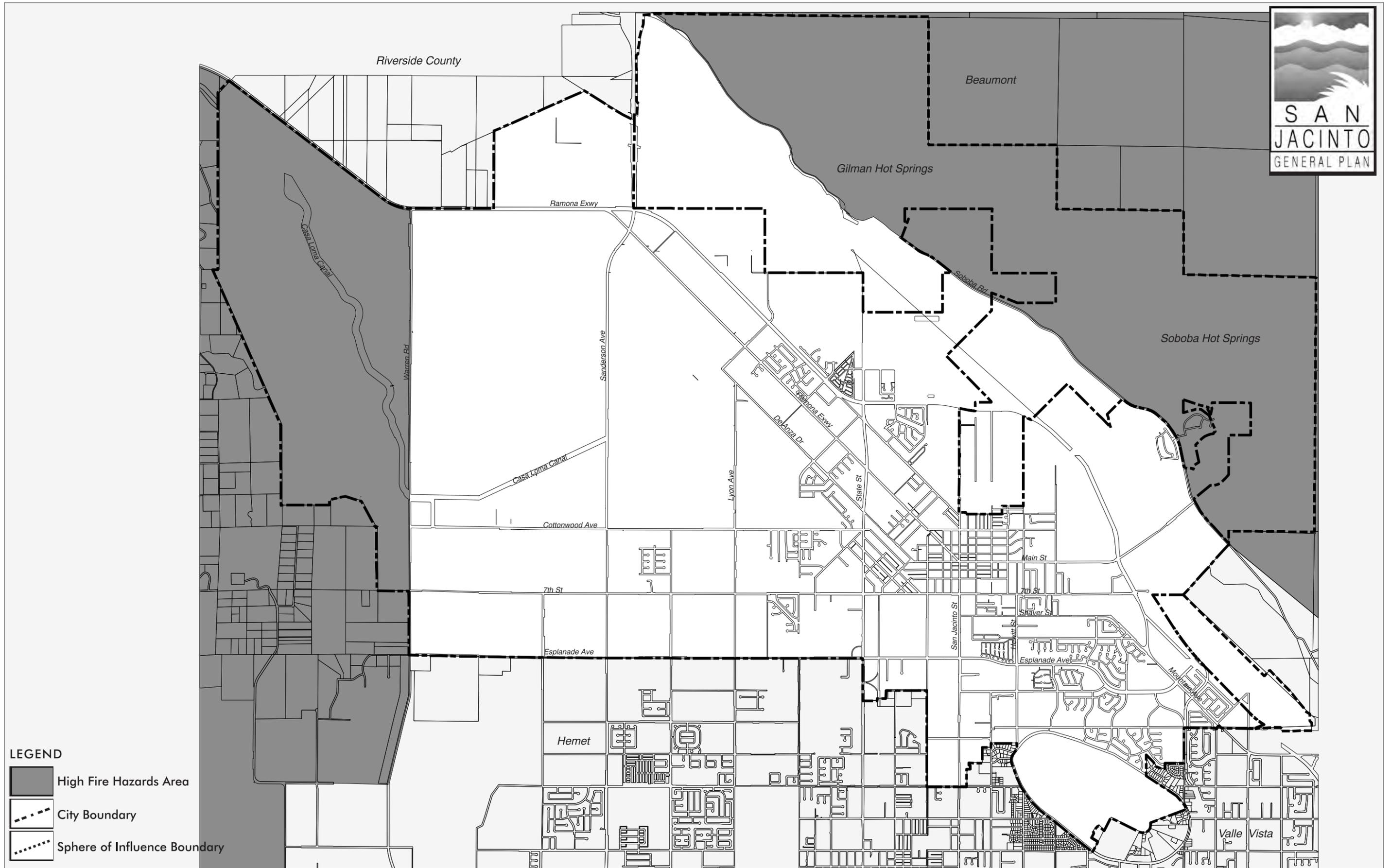
Fire Hazards

San Jacinto is subject to both wildland fires and structural fires. **Figure 5.7-1** illustrates the areas prone to fire. The natural vegetation in the Planning Area is highly prone to wildland fires. The largely undeveloped hillsides located in both the westernmost and easternmost portions of the Planning Area are High Fire Hazard Areas. These areas could create public safety hazards for residents within the Planning Area.

The City reduces the potential for dangerous fires by coordinating with the Riverside County Fire Department (RCOFD) to implement fire hazard education programs and requirements for fire protection and fuel modification zones around existing and proposed development. The current Uniform Fire Code is also used to reduce structural fire hazards in these areas. In addition, the City and RCOFD review development proposals to ensure that existing fire department staffing, water pressure and emergency access is adequate for fire fighting purposes. In particular, future development in the hillside areas shall be required to provide dual access to the proposed development site.

Floods

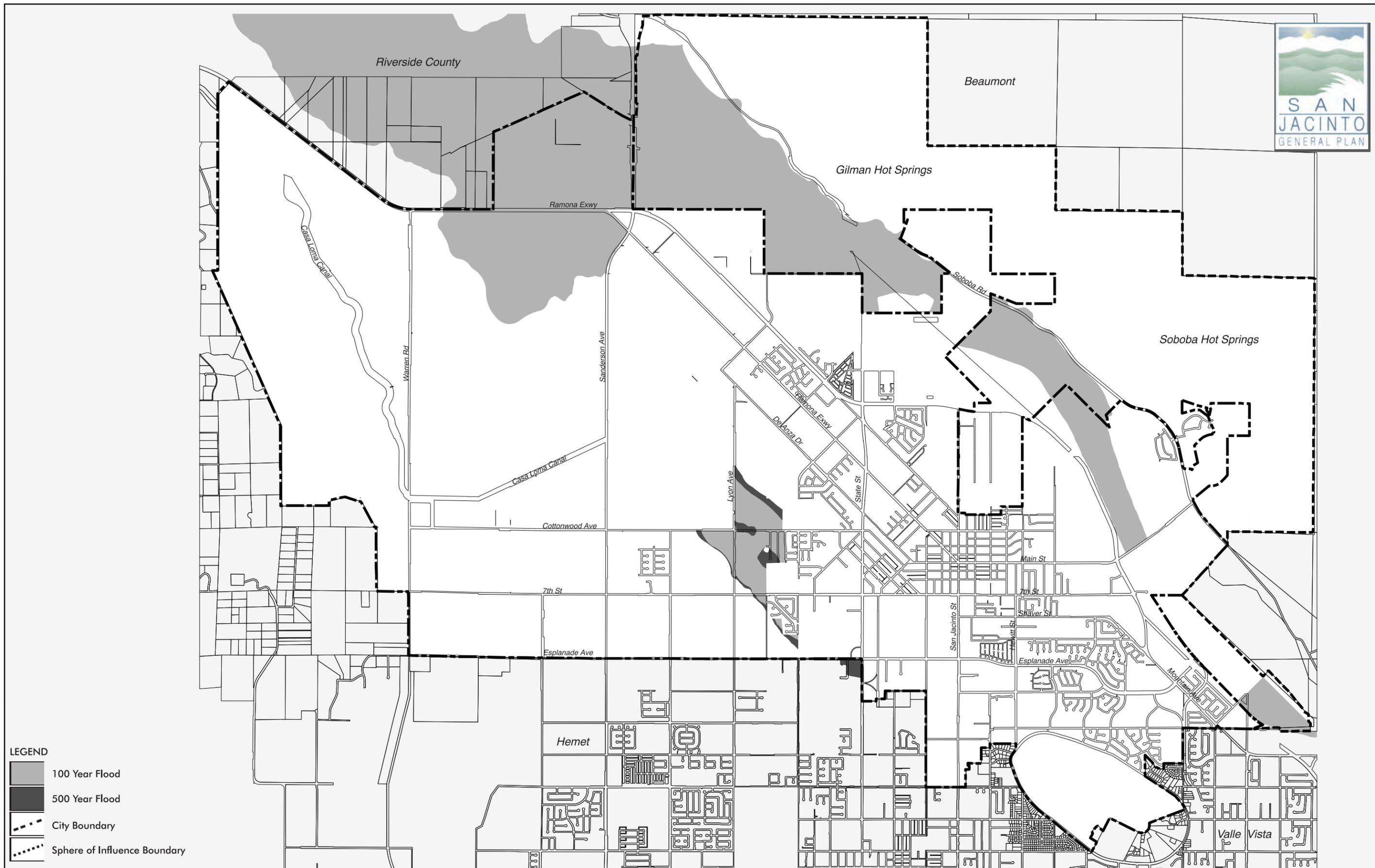
The Casa Loma Canal, Colorado River Aqueduct and the San Jacinto River traverse the Planning Area. **Figure 5.7-2** depicts the flood prone areas within the Planning Area as mapped by FEMA. This figure depicts the inundation areas for a 100-year flood; a flood of this size has a one percent chance of occurring in a given year. As depicted in **Figure 5.7-2**, flooding is particularly expected along the San Jacinto River and the Colorado River Aqueduct. Floods in residential areas and employment centers are considered hazardous due to the potential for injury and property damage. Business and commercial activities can also be impeded by floods due to facility damage and access related problems.



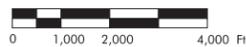
Sources: County of Riverside GIS, City of San Jacinto, USGS



Figure 5.7-1
Fire Hazards



Sources: County of Riverside GIS, City of San Jacinto, USGS



Portions of the Planning Area are also subject to potential hazards associated with failure of the Hemet Lake dam. As previously discussed, a failure of Lake Hemet dam would cause some flooding along the San Jacinto River as indicated on **Figure 5.7-2**.

A flood control system has been constructed to direct runoff from developed areas and prevent flooding. Flood control deficiencies are also identified and improvements are proposed in the County of Riverside Flood Control District Master Drainage Plans and Area Drainage Plans for San Jacinto Regional, San Jacinto River, Northwest Hemet, West Hemet, and Little Lake. The Riverside County Flood Control District is the agency responsible for the regional drainage facilities while the City controls the local facilities. The City coordinates with the Riverside County Flood Control District to ensure regularly scheduled maintenance of flood control channels and completion of necessary facilities and repairs, and both the City and the Riverside County Flood Control District are currently in the preliminary planning phases for future levee improvements along the San Jacinto River.

The City of San Jacinto is required by Section 8589.5 of the California Government Code to have in place emergency procedures for the evacuation and control of populated areas within the limits of possible dam inundation. In addition, real estate disclosure upon sale or transfer of property in the inundation area is required under AB 1195 Chapter 65 passed on June 9, 1998.

San Jacinto participates in the National Flood Insurance Program (NFIP), which is administered by FEMA. The NFIP provides federal flood insurance and federally financed loans for properties within identified flood hazard areas. To qualify for federal flood insurance, the City is required to identify flood hazard areas and implement a system of protective controls.

Emergency Response

Local emergency preparedness plans serve as extensions of the California Emergency Plan and the Emergency Resource Management Plan. The purpose of the City's Emergency Preparedness Plan is to respond to emergency situation with a coordinated system of emergency service providers and facilities.

The Emergency Preparedness Plan identifies resources available for emergency response and establishes coordinates action plans for specific emergency situations and disasters including earthquakes, fires, major rail and roadway accidents, flooding, hazardous materials incidents and civil disturbance. This plan is maintained and updated as necessary to reflect the current circulation system and current facilities.

To support the Emergency Preparedness Plan, the City supports a high level of multi-jurisdictional cooperation and communication for emergency planning and response management. In order for emergency response and planning to be effective, vital facilities such as hospitals, fire stations, police stations, and communication centers must be functional during disasters.

Educating residents and businesses about potential disasters and the Emergency Preparedness Plan increases the effectiveness of response efforts. A public educated in emergency preparedness is more likely to know how to prevent injury and property damage during and after emergency episodes and also know how to find help. Through brochures

and presentations to civic groups and local schools, the City works to educate residents and businesses about appropriate actions to take during an emergency situation.

5.7.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the proposed project:

- Creates a significant hazard to the public and environment involving the production, use, or transport of hazardous waste and materials;
- Creates a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Is located on a site which is included on a list of hazardous materials sites, and as a result, creates a significant hazard to the public or the environment;
- Exposes people or structures to a significant risk of loss, injury, or death involving wildfires;
- Places housing or structures within a 100-year flood hazard area exposing people and structures to flooding hazards and/or impeding or redirecting flood flows;
- Impairs implementation of an adopted emergency response plan or emergency evacuation plan.

5.7.3 Potential Environmental Impacts

Hazardous Materials

Implementation of the General Plan will result in the development of new residential, commercial, and industrial land uses which would increase the amount of hazardous materials that will be used within the Planning Area. The expected increase in residential development will result in more household hazardous materials being used, stored, and discarded within the community. Community commercial and downtown commercial land use designations will accommodate additional small businesses that handle hazardous materials. Regional commercial developments will accommodate big box retail and auto dealerships that could handle hazardous materials.

Implementation of the General Plan will also include Industrial Land Use designations for office park, business park, and industrial development. These land use designations will accommodate uses that could potentially use, store, and transport hazardous materials such as medical facilities, research and development, storage, high technology, industrial activities, and manufacturing activities. Additional hazardous materials that would be used and stored within the City would be common materials associated with uses such as gasoline stations and automotive repair shops. Therefore, implementation of the proposed General Plan will have the potential to create a significant hazard to the public and environment involving the production, use, or transport of hazardous waste and materials.

This is considered a potentially significant impact. Implementation of Mitigation Measures H-1 through H-4 will reduce the impact to a level less than significant.

Mitigation Measure H-1 requires the City minimize public health risks and environmental risks from the use, transport, storage, and disposal of hazardous materials by:

- Cooperating with federal, state, and county agencies to effectively regulate the management of hazardous materials and hazardous waste;
- Cooperating with the County of Riverside Environmental Health Department to advertise and implement the following programs described in the Public Safety Element:
 - Hazardous Waste Minimization
 - Emergency Response and Investigations
 - Local Oversight Underground Storage Tank (UST)
 - Underground Storage Tank (UST)
 - Waste Generator Permit
 - Hazardous Materials Handlers
 - Environmental Crimes Task Force
- Identifying roadway transportation routes for conveyance of hazardous materials (the City does not exercise jurisdiction over transportation of freight along railroad right-of-way or state highways);
- Discouraging the location of facilities that may produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive receptors such as parks, recreational facilities, schools, and other sensitive facilities.
- Implementing the Emergency Preparedness Plan for accidents involving hazardous materials; and
- Cooperating with the County of Riverside and the San Jacinto Fire Department to administer Risk Management Plans for businesses within the City.

Mitigation Measure H-2 calls for the City to continue to work with the County of Riverside Environmental Health Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. The City shall provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, the County's Antifreeze, Batteries, Oil, and Paint (ABOP) program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Mitigation Measure H-3 requires the City to protect the community from hazards related to hazardous materials by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Mitigation Measure H-4 requires the City to continue to work with the County of Riverside's Environmental Health Department to implement the Conditionally Exempt Small Quantity Generators (CESQG) program, which is a hazardous waste pick-up disposal service for eligible, businesses/non-profit organizations in the County of Riverside. This program provides an affordable way to legally dispose of this waste. The City shall also provide

informational materials at public locations and links on the City's website about the County's CESQG program.

More hazardous materials will also be transported through the City's transportation circulation system with implementation of the General Plan. The transport of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures and these federal safety standards are also included in the California Administrative Code. However, despite these existing safety regulations, implementation of the proposed General Plan would have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This is considered a potentially significant impact.

Implementation of Mitigation Measures H-1 through H-5 will reduce these impacts to below a level of significance. Mitigation Measure H-5 calls for the City of San Jacinto to minimize the potential for accidents involving railways, automobiles, pedestrians and cyclists by working closely with the San Jacinto Police Department, California Highway Patrol, Riverside County Sheriff's Department, Caltrans, Riverside Transportation Agency (RTA), and Burlington Northern Santa Fe Rail Road (BNSF) to identify safety problems and implement corrective measures, including re-routing vehicles carrying hazardous materials.

Although no specific projects are proposed, implementation of the proposed General Plan will have the potential to allow facilities that may produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste to be located within one-quarter mile of an existing or proposed school. However, school districts applying for State funding would be required to conduct a Preliminary Endangerment Assessment with the Department of Toxic Substances Control to ensure that the proposed school site is not located near facilities containing hazardous facilities. Conversely, project proponents proposing to construct facilities that may produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste would be required to obtain necessary permits with appropriate agencies to ensure that their facilities do not harm surrounding development, including schools. Implementation of Mitigation Measures H-1 through H-5 will further reduce these impacts to below a level of significance.

Implementation of the proposed General Plan will have the potential to locate structures on a site which is included on a list of hazardous materials sites, and as a result, creates a significant hazard to the public or the environment. The specific environmental impact of such facilities cannot be determined at this General Plan level of analysis because no specific projects are proposed. Nonetheless, this is a potentially significant impact. Implementation of Mitigation Measures H-1 through H-5 will reduce these impacts to below a level of significance.

Fires

Implementation of the General Plan will result in both the construction of new development in the urban area and the expansion of urban uses onto lands located within or adjacent to wildland fire hazards area. The interface between the urban areas and natural vegetation will thus be expanded, resulting in a greater potential for wildland and urban fires. This is considered a significant impact. Implementation of Mitigation Measures H-6 through H-8

will reduce the impact to a level less than significant. Mitigation Measure H-6 requires the City of San Jacinto to continue to promote fire prevention in San Jacinto by:

- Working closely with the San Jacinto Fire Department and County of Riverside Sheriff's Department to implement fire hazard education and fire prevention programs;
- Coordinating with the water districts and the San Jacinto Fire Department to ensure that water pressure for existing developed areas and sites to be developed is adequate for fire fighting purposes;
- Conforming to Fire Department requirements for individual projects;
- Adopting and implementing the most recent Uniform Fire Code provisions and appropriate amendments;
- Requiring sprinklers in new non-residential buildings; and
- Requiring future development in the hillside areas to provide dual access to the proposed development site.

Mitigation Measure H-7 calls for the City to adopt and implement a monitoring mechanism to ensure that the Riverside County Fire Department, in cooperation with local water companies, conducts annual fire flow tests, especially in or adjacent to areas of high fire hazard such as the hillsides. Mitigation Measure H-8 requires that during the development review process, the City's Community Development Department in cooperation with the City Engineer and the Riverside County Fire Department, shall ensure that:

- New private access roads are at least 24 feet wide and provide adequate turning radius for fire and emergency vehicles.
- A fire management plan is prepared for all development located in or adjacent to wildfire-prone areas such as naturally vegetated hillsides. The fire management plan may require fire protection measures such as landscape or open space buffers, maintenance programs for weed and vegetation abatement and fire resistant plants, as well as non-combustible building materials, including roofing.
- Adequate service and response times can be provided to the development without reducing service to existing areas.
- Development plans clearly identify fire flows, hydrant siting, and access points.

Flooding

The General Plan designates land in the Planning Area for various types of land use. Park and open space designations are applied to a majority of the land within the 100-year flood zone. Parks and open space land use designations are partially applied to protect people and property from natural and man-made hazards. The designation allows only natural open space, parks, and recreational facilities, prohibiting residential uses. A small portion of the 100-year flood zone, west of the Laguna Grande, is designated as regional commercial. The regional commercial land use designation, west of the Laguna Grande, allows hotels, auto sales, "big box" retail, and movie theatres. As a result, the General Plan does not propose a resident population within the 100-year flood zone.

As new development occurs, development could create an increase in runoff and will also have the potential to be impacted by flooding. These are considered potentially significant impacts. Implementation of Mitigation Measures H-9 through H-12 will reduce these

potential impacts to a level less than significant. Mitigation Measure H-9 requires the City of San Jacinto to continue to participate in the National Flood Insurance Program (NFIP). Mitigation Measure H-10 calls for the City to continue to implement the Flood Plain Management Ordinance, which establishes rules and regulations for flood plain management. The City shall continue to apply the rules and regulations to development in areas of special flood hazards as determined by the Federal Emergency Management Agency (FEMA) and as illustrated on the most recent Flood Insurance Rate Map (FIRM).

Mitigation Measure H-11 requires the City to continue to work with the Riverside County Flood Control District to complete the construction of a 100-year levee along the river. The City shall also ensure the Federal Emergency Management Agency (FEMA) updates the Flood Insurance Rate Map (FIRM) to account for updated flood control facilities. The City shall also include bicycle, hiking, and horseback riding trails along the levees when possible.

Mitigation Measure H-12 requires the City of San Jacinto to review all proposed development projects for project-related flood control and stormwater management impacts and to ensure that all proposed developments comply with the City's MS4 permit (Order No. R8-2002-0011 (NPDES No. CAS 618033)). As a condition of project approval, the City shall require new developments to provide adequate on-site and off-site stormwater and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine what facilities and Best Management Practices (BMPs) will be needed, the City will require, a hydrological/drainage analysis be performed by a certified and City-approved engineer when necessary. The cost of this analysis will be the responsibility of future project applicants.

Emergency Response

San Jacinto is traversed by a variety of transportation systems including the Ramona Expressway, State Route 79, the Burlington Northern Santa Fe (BNSF) Rail Road, and major arterials and roadways. The Riverside Transit Agency (RTA) transit system provides bus service on two routes in the Planning Area. The preponderance of ground transportation systems is an asset to local economic development but poses several potential hazards including automobile accidents, rail accidents, and pedestrian and bicycling accidents.

The risk of accidents can be reduced by properly maintaining the transportation system infrastructure and correcting deficiencies. The City works with the San Jacinto Police Department, Riverside County Sheriff's Department, and the California Highway Patrol to monitor the ground transportation system for hazardous conditions. When safety problem are identified, the City coordinates with the appropriate agency (e.g., Caltrans, RTA, BNSF, the City Public Works Department) to take corrective measures. Still, the potential remains for the City of San Jacinto to be impacted during an emergency. This is considered a potentially significant impact.

Implementation of Mitigation Measures GS-4 and GS-5 from Section 5.6 will reduce this impact to a level less than significant. Mitigation Measure GS-4 requires an annually review and update the Emergency Preparedness Plan under the provision of the State Emergency Management System format to maximize the efforts of emergency service providers (e.g., fire, medical, and law enforcement) and minimize human suffering and property damage

during disasters. Provide annual practice sessions to City staff. Support high-level multi-jurisdictional cooperation and communication for emergency planning and management. Solicit private individuals and organizations to enhance service provider communications and response with cellular telephones, ham radios, AM/FM radio, and cable television. Mitigation Measure GS-5 requires the City of San Jacinto to coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

5.7.4 Mitigation Measures

H-1 The City shall minimize public health risks and environmental risks from the use, transport, storage, and disposal of hazardous materials by:

- Cooperating with federal, state, and county agencies to effectively regulate the management of hazardous materials and hazardous waste;
- Cooperating with the County of Riverside Environmental Health Department to advertise and implement the following programs described in the Public Safety Element:
 - Hazardous Waste Minimization
 - Emergency Response and Investigations
 - Local Oversight Underground Storage Tank (UST)
 - Underground Storage Tank (UST)
 - Waste Generator Permit
 - Hazardous Materials Handlers
 - Environmental Crimes Task Force
- Identifying roadway transportation routes for conveyance of hazardous materials (the City does not exercise jurisdiction over transportation of freight along railroad right-of-way or state highways);
- Discouraging the location of facilities that may produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive receptors such as parks, recreational facilities, schools, and other sensitive facilities;
- Implementing the Emergency Preparedness Plan for accidents involving hazardous materials; and
- Cooperating with the County of Riverside and the San Jacinto Fire Department to administer Risk Management Plans for businesses within the City. (Implementation Program PS-11)

H-2 The City shall continue to work with the County of Riverside Environmental Health Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. The City shall provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, the County's Antifreeze, Batteries, Oil, and Paint (ABOP) program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. (Implementation Program PS-12)

- H-3 The City shall protect the community from hazards related to hazardous materials by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. (Implementation Program PS-8)
- H-4 The City shall continue to work with the County of Riverside's Environmental Health Department to implement the Conditionally Exempt Small Quantity Generators (CESQG) program, which is a hazardous waste pick-up disposal service for eligible, businesses/non-profit organizations in the County of Riverside. This program provides an affordable way to legally dispose of this waste. The City shall also provide informational materials at public locations and links on the City's website about the County's CESQG program. (Implementation Program PS-13)
- H-5 The City shall minimize the potential for accidents involving railways, automobiles, pedestrians and cyclists by working closely with the San Jacinto Police Department, California Highway Patrol, Riverside County Sheriff's Department, Caltrans, Riverside Transportation Agency (RTA), and Burlington Northern Santa Fe Rail Road (BNSF) to identify safety problems and implement corrective measures, including re-routing vehicles carrying hazardous materials. (Implementation Program PS-14)
- H-6 The City shall promote fire prevention in San Jacinto by:
- Working closely with the San Jacinto Fire Department and County of Riverside Sheriff's Department to implement fire hazard education and fire prevention programs;
 - Coordinating with the water districts and the San Jacinto Fire Department to ensure that water pressure for existing developed areas and sites to be developed is adequate for fire fighting purposes;
 - Conforming to Fire Department requirements for individual projects;
 - Adopting and implementing the most recent Uniform Fire Code provisions and appropriate amendments;
 - Requiring sprinklers in new non-residential buildings; and
 - Requiring future development in the hillside areas to provide dual access to the proposed development site. (Implementation Program PS-5)
- H-7 The City shall adopt and implement a monitoring mechanism to ensure that the Riverside County Fire Department, in cooperation with local water companies, conducts annual fire flow tests, especially in or adjacent to areas of high fire hazard such as the hillsides. (Implementation Program CSF-8)
- H-8 During the development review process, the City's Community Development Department in cooperation with the City Engineer and the Riverside County Fire Department, shall ensure that:
- New private access roads are at least 24 feet wide and provide adequate turning radius for fire and emergency vehicles.
 - A fire management plan is prepared for all development located in or adjacent to wildfire-prone areas such as naturally vegetated hillsides. The fire management plan may require fire protection measures such as landscape or open space

buffers, maintenance programs for weed and vegetation abatement and fire resistant plants, as well as non-combustible building materials, including roofing.

- Adequate service and response times can be provided to the development without reducing service to existing areas.
- Development plans clearly identify fire flows, hydrant siting, and access points. (Implementation Program CSF-9)

H-9 The City shall continue to participate in the National Flood Insurance Program (NFIP). (Implementation Program PS-6)

H-10 The City shall continue to implement the Flood Plain Management Ordinance, which establishes rules and regulations for flood plain management. The City shall continue to apply the rules and regulations to development in areas of special flood hazards as determined by the Federal Emergency Management Agency (FEMA) and as illustrated on the most recent Flood Insurance Rate Map (FIRM). (Implementation Program PS-7)

H-11 The City shall continue to work with the Riverside County Flood Control District to complete the construction of a 100-year levee along the river. The City shall also ensure the Federal Emergency Management Agency (FEMA) updates the Flood Insurance Rate Map (FIRM) to account for updated flood control facilities. The City shall also include bicycle, hiking, and horseback riding trails along the levees when possible. (Implementation Program CSF-18)

H-12 The City shall review all proposed development projects for project-related flood control and stormwater management impacts and to ensure that all proposed development comply with the City's MS4 permit (Order No. R8-2002-0011 (NPDES No. CAS 618033)). As a condition of project approval, the City shall require new developments to provide adequate on-site and off-site stormwater and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine what facilities and Best Management Practices (BMPs) will be needed, the City will require, a hydrological/drainage analysis be performed by a certified and City-approved engineer when necessary. The cost of this analysis will be the responsibility of future project applicants. (Implementation Program CSF-19)

5.7.5 Impact after Mitigation

Hazardous Materials

With implementation of Mitigation Measures H-1 through H-5, impacts related to geologic conditions will be less than significant.

Fires

With implementation of Mitigation Measures H-6 through H-8, impacts related to seismic activity will be less than significant.

Flooding

With implementation of Mitigation Measures H-9 through H-12, impacts related to flooding will be less than significant.

Emergency Response

With implementation of Mitigation Measures GS-4 through GS-5 from section 5.6, impacts related to emergency response will be less than significant.

5.8 Hydrology/Water Quality

5.8.1 Environmental Setting

Regional Hydrology

The City of San Jacinto is located in the Santa Ana Region, known as Region 8, of the State of California Regional Water Quality Control Board (RWQCB). Within the Santa Ana Region, San Jacinto is located in the San Jacinto River Basin. **Figure 5.8-1** depicts the Santa Ana Regional Boundary and the San Jacinto River Basin.

The Santa Ana Region extends from the San Bernardino and San Gabriel Mountains in the north and east to Newport Bay along the coast. The region represents one of the most rapidly growing areas of the State, covering 2,800 square miles and a population of nearly five million people. The Santa Ana Region includes ocean waters; eleven bays, estuaries and tidal prisms; two major surface streams (Santa Ana and San Jacinto Rivers); seventeen lakes and reservoirs, wetlands, and forty groundwater basins. The San Jacinto River drains approximately 765 square miles of watershed (CARCD 2004).

Surface Water Resources

The City's surface water resources include two reaches of the San Jacinto River, the Casa Loma Canal, and the Colorado River Aqueduct. Neither of the reaches of the San Jacinto River, the two natural water resources, are listed on the 2002 CWA Section 303(d) List of the Santa Ana Regional Water Quality Control Board, and therefore are not considered impaired at this time. The beneficial uses of the two reaches of the San Jacinto River are shown in Table 5.8-1. Additionally, Juaro Canyon, Poppet Creek, Protrero Creek, and Bautista Wash are tributary waters of the San Jacinto River reaches identified in Table 5.8-1 and therefore are subject to the same water quality standards." This revision does not change the overall analysis, conclusions, or mitigation requirements contained within the EIR. These resources, along with the City's many wells, are subject to pollutants and sediment carried in runoff. The pollutants common in San Jacinto's runoff include landscape and agricultural pesticides and fertilizers, automobile products, and degreasers. Urban and agricultural pollutants degrade water quality and can impact wildlife and plants dependent on aquatic habitat.

**Table 5.8-1
Beneficial Uses of Project Effected Watersheds**

<i>Beneficial Uses</i>	San Jacinto River (Reach 4)	San Jacinto River (Reach 5)
Municipal and Domestic Supply	x	x
Agricultural Supply	+	+
Groundwater Recharge	+	+
Water Contact Recreation	+	+

**Table 5.8-1
Beneficial Uses of Project Effected Watersheds**

Non-contact Water Recreation	+	+
Warm Freshwater Habitat	+	+
Wildlife Habitat	+	+

+ Indicates an intermittent beneficial use.

x Indicates that the water body has been exempted by the RWQCB from the municipal use designation under the terms and conditions of State Board Resolution No. 88-63, *Sources of Drinking Water Policy*.

Source: California Regional Water Quality Control Board, Santa Ana Region, Water Quality Control Plan (1995)

Groundwater Resources

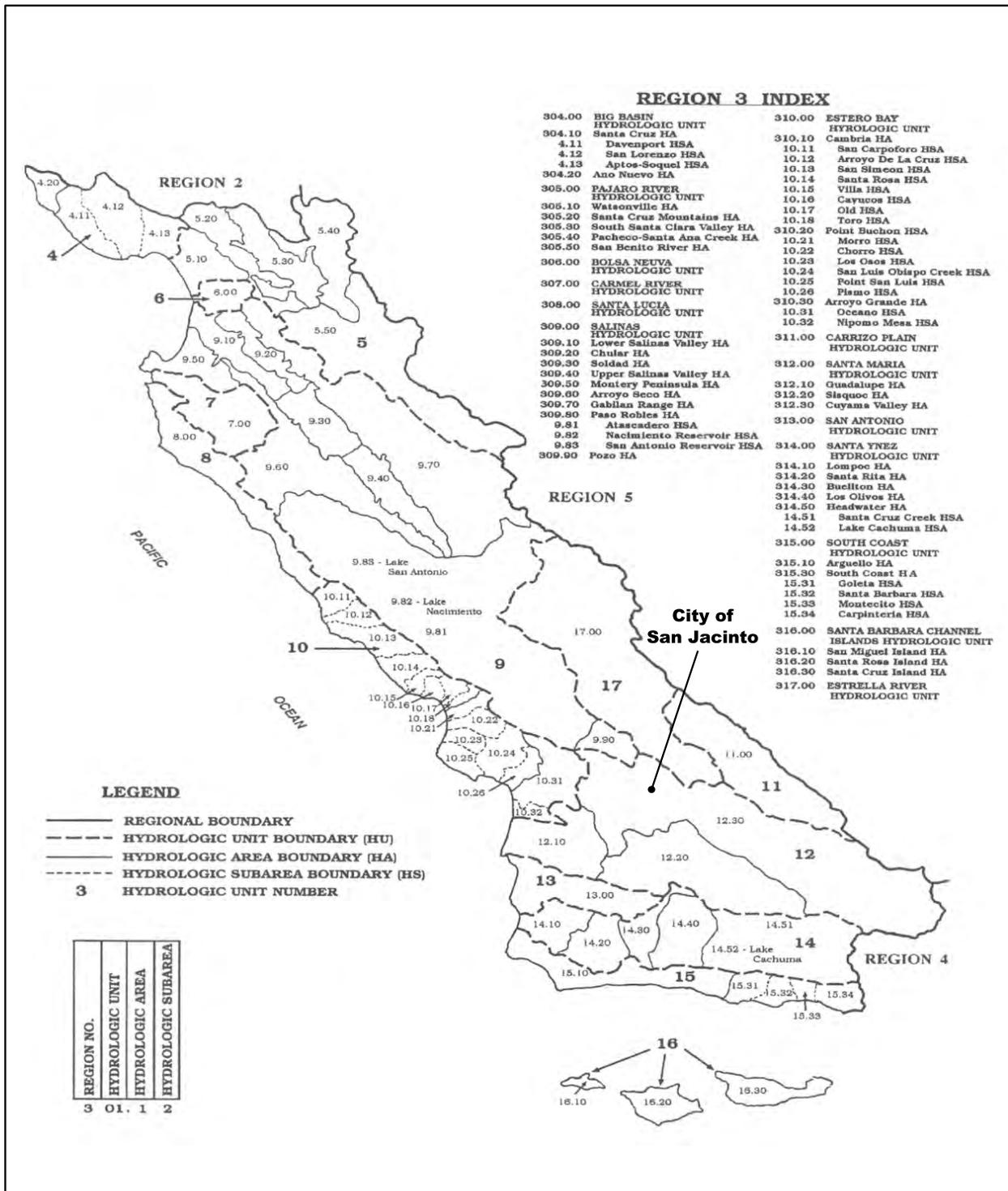
San Jacinto is located within the San Jacinto Groundwater Basin (Basin). The Basin underlies the cities of San Jacinto, Perris, Moreno, and Menifee Valleys in western Riverside County. The Basin contains sediments that have filled valleys and underlying canyons incised into crystalline basement rock. Maximum depths of valley fill reach about 900 feet in the western and northern parts of the basin, but may exceed 5,000 feet in the eastern portion of the basin. Natural recharge to the Basin is primarily from percolation of flow in the San Jacinto River and its tributary streams; less recharge is from infiltration of rainfall on the valley floor. Natural recharge is augmented by spreading of the State Water Project (SWP) and reclaimed water through infiltration ponds in the upper reaches of the San Jacinto River. Percolation of stored water in Lake Perris has been an additional source of recharge. Artificial recharge can exceed natural recharge, particularly in years with low precipitation (DWR 2004).

Related Plans and Programs

The following programs and regulations address water quality, drainage, and flooding in San Jacinto.

National Pollutant Discharge Elimination System (NPDES)

Under the authority of the Clean Water Act, the federal Environmental Protection Agency created the National Pollutant Discharge Elimination System (NPDES) to protect water resources and control pollutants in runoff. Under the NPDES storm water permit (also known as MS4 program permit) issued to the County of Riverside and the City of San Jacinto as a co-permittee, all development and significant redevelopment must be implemented with runoff pollution control measures known as Best Management Practices (BMPs). Proposed development projects (both public and private) within San Jacinto must incorporate structural and non-structural BMPs to preclude significant water quality impact from non-point source pollutants. The Municipal Stormwater Management Program helps to protect surface water quality in San Jacinto.



Source: California Air Resources Board.



Figure 5.8-1
Hydrologic Planning Area

Watershed Management Initiative

A key goal of the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) is to provide water resource protection, enhancement, and restoration while balancing economic and environmental impacts. This is done using an integrated planning approach called watershed management. The main ideas that define watershed management and distinguish it from previous efforts are as follows:

1. Water resource problems are identified and prioritized primarily on the basis of water quality within individual watersheds (geographic drainage areas and groundwater basins used for management purposes). Unique solutions are developed for each watershed that consider all local conditions and pollution sources and rely on the input and involvement of local stakeholders.
2. Historically, the SWRCB's programs have functioned on a statewide and/or region-wide basis. This has worked reasonably well for controlling conventional pollutants from point source, but has not proven adequate to address non-point sources of pollution (also called polluted runoff). Watershed management can better coordinate existing efforts to regulate point source problems along with efforts to address challenges from the threat of non-point source pollution. This involves establishing working relationship between staff who previously worked only within a single program.
3. The RWQCBs work collaboratively with local stakeholder groups. In conjunction with the SWRCB, they attempt to coordinate the actions of governmental agencies and programs to best assist the local groups. Better coordination of overlapping State, federal and local activities and programs, especially those involving regulations and funding, is critical to the success of local watershed groups.

The project area falls within the Lake Elsinore/San Jacinto River Watershed Management Area (WMA) of the Santa Ana Region (Region 8). Primary water quality concerns identified by the RWQCB within this WMA include summer lake algal blooms and fish kills; bacterial quality; lake water level management; nitrogen and TDS in groundwater; and impacts from confined animal feeding operations.

5.8.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems;
- Substantially alter the existing drainage patterns of the basin;
- Degrade or deplete groundwater or surface water; or

- Substantially degrade water quality, violate any water quality standards, or waste discharge requirements.

5.8.3 Potential Environmental Impacts

Urban growth and agricultural production within the region places continued demand on the City's groundwater supply. Continued development and agricultural production also contribute to increased erosion and runoff that pollute the City's surface waters. Management of the water supply and enhancement of water quality is essential to the future of San Jacinto. Both local and regional water resources are important to the City. Urban and agricultural activities in San Jacinto affect regional water resources as well as local sources.

Existing Drainage System

Development of the planned land uses will affect the drainage system in the Planning Area. New development will result in greater areas of impervious surfaces such as streets, roofs, sidewalks, and parking lots. The absorption rate for impervious surfaces is less than the rate for natural lands. Instead of absorbing into the ground, water on impervious surfaces drains off into local surface streams and improved channels or the existing drainage system. This increase in water could overwhelm the existing drainage system. However, as public and private projects move forward throughout the Planning Area the City shall ensure that all components of the City's storm drain system potentially affected by existing and future projects conform to the most current Riverside County Flood Control and Water Conservation District master drainage plans and the requirements of the Federal Emergency Management Agency (FEMA). Therefore, no significant impacts associated with the existing drainage system would occur.

Alter Existing Drainage Pattern

Implementation of the proposed General Plan will not substantially alter the existing drainage patterns of the basin. However, new development associated with the General Plan will result in greater areas of impervious surfaces such as streets, roofs, sidewalks, and parking lots. As stated previously, water on impervious surfaces runs and drains off into local surface streams and improved channels or the existing drainage system. The volume of additional runoff could pose a potential flooding hazard during intense rainstorms. However, as public and private projects move forward throughout the Planning Area the City shall ensure that all components of the City's storm drain system potentially affected by existing and future projects conform to the most current Riverside County Flood Control and Water Conservation District master drainage plans and the requirements of the Federal Emergency Management Agency (FEMA). Therefore, no significant impacts associated with alterations of the existing drainage pattern would occur.

Surface Water Resources

Implementation of the General Plan will not deplete surface water resources since the City of San Jacinto obtains its potable water from groundwater resources. Implementation of the General Plan will result in the development of new residential and non-residential land uses

such as new commercial, industrial, and community facilities. The quality of surface waters, including the Santa Ana and San Jacinto River Watersheds and their tributary waters will be affected by the development allowed by the proposed General Plan. Pollutants associated with residential and open space recreation uses such as oil, grease, pesticides, fertilizers and detergents will be used more widely over time. In addition, grading and construction activity could cause erosion, and sediment load of runoff may increase. These non-point source pollutants in the runoff will flow into the local watersheds, and incrementally degrade the water quality of existing surface waters. This is considered a potentially significant impact. Implementation of Mitigation Measures HW-1 through HW-4 would reduce this impact to below a level of significance.

Mitigation Measures HW-1 calls for the City to reduce soil erosion and pollutants in urban runoff by requiring new development projects, substantial rehabilitation projects, and ongoing agricultural operations to incorporate Best Management Practices (BMPs) pursuant to the NPDES permit to ensure that the City complies with applicable State and federal regulations. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). The City shall also require that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to California Regional Water Quality Control Board (RWQCB) Santa Ana Region - Order No. 00-65 and the City's MS4 permit (order no. R8-2002-0011 (NPDES No. CAS 618033). Example BMPs include, but are not limited to:

- Using hydroseeding, soil binders, straw mulch, and other erosion and sediment control devices to prevent pollution and control erosion flows;
- Conducting dewatering operations, vehicle and equipment maintenance, and proper vehicle and equipment fueling to prevent pollution;
- Conducting hazardous waste management, concrete waste management, and contaminated soil management when necessary;
- All streams and other natural drainage systems, whether perennial or ephemeral, water bodies, and naturally vegetated slopes shall be preserved to reduce impacts to water quality.

Additionally, these BMPs shall serve as a part of the City's participation in local municipal compliance with the RWQCB's Total Maximum Daily Loads (TMDLs) for nutrients (phosphorus, nitrogen, and dissolved oxygen) and pathogens (bacteria) entering Canyon Lake, which, along with Lake Elsinore (to which it is a tributary) is currently listed as an impaired water body.

Mitigation Measure HW-2 requires the development of a plan, in coordination with RWQCB, to assist agricultural operations to reduce nitrate and sediment input to surface waters. Such a plan will enhance water quality and benefit aquatic plants and wildlife within the planning area as well as downstream.

Mitigation Measure HW-3 calls for San Jacinto's cooperation with the state, regional, and local water agencies and suppliers, to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Additionally, it calls for supporting expansion of the use of recycled water for urban and agricultural irrigation.

Mitigation Measures HW-4 identifies the requirement for coordination between San Jacinto and the water districts and private developers to encourage water conservation in the following ways:

- Implementing aquifer and groundwater recharge programs;
- Participating in water conservation programs operated by the local and regional water districts;
- Establishing water conservation education programs;
- Requiring the use of drought resistant plant species in landscaping for public and private areas, including parks and recreational facilities;
- Expanding the production and use of reclaimed water; and
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

Groundwater Resources

As described in Section 5.14 of this EIR, the City's potable water is supplied through water pumped from wells operated by the City of San Jacinto in the San Jacinto Groundwater Basin. Increases in impervious surfaces will result in a reduction in the amount of water that will infiltrate the soil to the groundwater table. This will likely result in a modest reduction in groundwater recharge rates over time. Implementation of the proposed General Plan will also increase the demand for potable water. Stetson Engineers, who are currently updating the City of San Jacinto Water Master Plan, have concluded that the City of San Jacinto will be able to meet projected demand for potable water through the year 2020 with the existing groundwater resources. However, Stetson does not have projections for post-2020, and General Plan buildout is not expected until after 2050. Therefore, although the City will be able to meet demand through the year 2020, it can not be concluded that the City will be able to meet demand for potable water at buildout. This is a significant impact. Implementation of Mitigation Measure HW-5 will reduce this impact to below a level of significance. Mitigation Measure HW-5 calls for the City to ensure that sufficient water supply and water infrastructure capacity is available to serve a new development prior to approval of the project, pursuant to water Code § 10910 and Government Code § 66473.7, as part of the environmental review process.

Development allowed under the proposed General Plan may result in an increase in the amount of industrial chemicals and urban contaminants infiltrating groundwater supplies. As increasing levels of urban contaminants, such as fertilizers and pesticides enter groundwater aquifers, groundwater quality will be degraded over time. Therefore, the proposed General Plan will result in a significant impact associated with the degradation of groundwater resources. Implementation of Mitigation Measure HW-6 will reduce this potential impact to below a level of significance.

Mitigation Measure HW-6 calls for the incorporation of improved open space, preservation areas, and quasi-active recreation facilities in areas used for ground water recharge and/or drainage detention.

Water Quality and Waste Discharge Requirements

The City of San Jacinto routinely monitors for contaminants according to United States Environmental Protection Agency (USEPA) and California Department of Health Services (CDHS) standards. The 2004 Annual Water Quality Report prepared by the City of San Jacinto found that the water quality provided by the City met all USEPA and CDHS standards. However, as stated previously, development allowed under the proposed General Plan may result in an increase in the amount of industrial chemicals and urban contaminants infiltrating groundwater supplies. According to Stetson Engineers, the City's current water treatment facilities will be able to adequately treat their groundwater resources and provide potable water that meets all applicable water quality standards.

As stated previously, development allowed under the proposed General Plan may result in an increase in the amount of impervious surfaces. This could result in an increase in the amount of urban pollutants in the surface creeks and drainage channels as well as an overall increase in the volume of runoff. This could in turn impact the existing beneficial uses and exceed existing water quality and waste discharge requirements. This is considered to be a potentially significant impact. Implementation of Mitigation Measure HW-1 will reduce this impact to below a level of significance.

5.8.4 Mitigation Measures

- HW-1. The City shall reduce soil erosion and pollutants in urban runoff by requiring new development projects, substantial rehabilitation projects, and ongoing agricultural operations to incorporate Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit to ensure that the City complies with applicable State and federal regulations. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). The City shall also require that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to California Regional Water Quality Control Board (RWQCB) Santa Ana Region - Order No. 00-65 and the City's MS4 permit (order no. R8-2002-0011 (NPDES No. CAS 618033)). (Implementation Program RM-8)
- HW-2. The City shall develop a plan, in coordination with RWQCB, to assist agricultural operations to reduce nitrate and sediment input to surface waters. Such a plan will enhance water quality and benefit aquatic plants and wildlife within the planning area as well as downstream. (Implementation Program RM-9)
- HW-3. In cooperation with the state, regional, and local water agencies and suppliers, the City shall participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Specifically, support the expansion of the use of recycled water for urban and agricultural irrigation. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects. (Implementation Program RM-10)

HW-4. The City shall coordinate with the water districts and private developers to encourage water conservation in the following ways:

- Implementing aquifer and groundwater recharge programs;
- Participating in water conservation programs operated by the local and regional water districts;
- Establishing water conservation education programs;
- Requiring the use of drought resistant plant species in landscaping for public and private areas, including parks and recreational facilities;
- Expanding the production and use of reclaimed water; and
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects. (Implementation Program RM-11)

HW-5 The City shall ensure that sufficient water supply and water infrastructure capacity is available to serve a new development prior to approval of the project, pursuant to water Code § 10910 and Government Code § 66473.7, as part of the environmental review process. (Implementation Program RM-12)

HW-6. The City shall, whenever feasible, incorporate improved open space and preservation areas and quasi-active recreation facilities in areas used for ground water recharge and/or drainage detention. (Implementation Program RM-13)

5.8.5 Impact After Mitigation

Existing Drainage System

No significant impacts related to the existing drainage system were identified for the project.

Existing Drainage Pattern

No significant impacts related to the existing drainage pattern were identified for the project.

Surface Water Resources

Implementation of Mitigation Measures HW-1 through HW-5 will reduce impacts to Surface water resources to below a level of significance.

Ground Water Resources

Implementation of Mitigation Measures U-2 and HW-6 will reduce impacts to groundwater resources to below a level of significance.

Water Quality and Waste Discharge Requirements

Implementation of Mitigation Measures HW-2 will reduce impacts to water quality and waste discharge requirements to below a level of significance.

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5.9 Land Use

5.9.1 Environmental Setting

Existing Land Uses

Existing land uses within San Jacinto are generally divided between the more urbanized southeastern portion of the City, and the agriculturally-dominated western portion of the City (**Figure 4-1**). Additionally, a large area in the northeastern portion of the City, associated with the Soboba and Gilman Hot Springs, is vacant.

Table 5.9-1 indicates the existing uses, by acreage, within San Jacinto. The dominant existing land uses, particularly in western San Jacinto are agriculture and vacant land. Existing residential uses are primarily a combination of Low and Medium Density Residential (2.1 to 5.0 du/acre and 5.1 to 10.0 du/acre respectively). Lesser amounts of High Density Residential and Mobile Homes are located throughout the urbanized portion of San Jacinto. Commercial land uses are concentrated within the downtown areas (Downtown Commercial), and along San Jacinto and State Streets. Industrial uses are concentrated in the southwestern portion of San Jacinto, in the vicinity of Esplanade Avenue, west of San Jacinto Street.

Related Plans and Policies

There are a number of related plans and programs that are considered in the formulation, adoption, and implementation of local land use policy. Related plans and programs are both local and regional in nature. Regional planning agencies, such as the Southern California Association of Governments (SCAG) and the Western Riverside Council of Governments (WRCOG), recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as air quality, transportation, affordable housing, and habitat conservation have resulted in the adoption of regional plans. The form and distribution of development in San Jacinto are affected by regional plans. Relevant local and regional plans related to the Land Use Element are discussed briefly in the following sections.

San Jacinto Zoning Ordinance. The Zoning Ordinance is the primary implementation tool for the Land Use Element. Together, the Zoning Ordinance and Zoning Map identify specific types of land use, intensity of land use, and development and performance standards applicable to specific areas and parcels of land within the City.

San Jacinto Redevelopment Plan. San Jacinto created the San Jacinto and Soboba Springs Redevelopment Plans in 1983 in accordance with the California Community Redevelopment Law to eliminate blight within the designated redevelopment project area. The City contains a total of 27 project areas, mainly located within the eastern portion of the Planning Area. With the adoption of Assembly Bill 1290, the Redevelopment Agency

prepared a five-year implementation plan in 1999 for the Redevelopment Project Areas. Redevelopment is one of the tools the City uses to implement policies included in the Land Use Element.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In June of 2003, the Riverside County Board of Supervisors adopted a comprehensive MSHCP to provide a regional conservation solution to species and habitat issues that have historically threatened to stall infrastructure and land use development. The MSHCP is a multi-jurisdictional effort that includes the unincorporated area of western Riverside County and fourteen cities, including the City of San Jacinto. The MSHCP covers 146 species and addresses biological diversity within 1.26 million acres, from west of the San Jacinto Mountains to the Orange County border. The MSHCP is designed to protect more than 30 federally threatened and endangered species, and to conserve 510,000 acres of native habitat, of which 347,000 acres are already in public and quasi-public ownership.

The MSHCP serves as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA as well as an NCCP under the NCCP Act of 2001. Though the USFWS and CDFG have authority to regulate the take of threatened and endangered species, consistent with the terms and conditions of approval of the MSHCP, the USFWS and CDFG has granted "Take Authorization" for otherwise lawful actions in exchange for the assembly and management of coordinated MSHCP Conservation Areas for 146 "covered species" (including 14 narrow endemic plant species).

SCAG Growth Management Plan. The SCAG Growth Management Plan recommends methods to direct regional growth to minimize traffic congestion and better protect environmental quality. The goals of the Growth Management Plan include balancing jobs and housing. While SCAG has no authority to mandate implementation of its Growth Management Plan, principal goals have implications for the land use composition of San Jacinto.

South Coast Air Quality Management Plan. The South Coast Air Quality Management Plan (AQMP) mandates a variety of measures to improve air quality. To comply with the AQMP, the Land Use Element organizes land uses in relation to the circulation system, promotes commercial and industrial land uses with convenient access to transportation, and provides a balanced Land Use Plan that promotes a favorable relationship between jobs and housing.

5.9.2 Thresholds for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigation and environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

**Table 5.9-1
Comparison of Existing Land Uses and General Plan Land Uses at Buildout**

Land Use Designations	Net Acreage			Dwelling Units/ Households			Non-Residential Square Feet of Floor Area (Thousands)			Population		
	Existing	Buildout	Change	Existing	Buildout	Change	Existing	Buildout	Change	Existing	Buildout	Change
Open Space Land Use Designations	816	4,261	3,445	14	72	58	36	186	150	40	208	168
OS												
General Open Space	452	515	63	0	0	0	0	2,241	2,241	0	0	0
OS-R												
Open Space Recreation	50	68	18	0	0	0	110	294	184	0	0	0
P												
Parks												
Residential Land Use Designations												
ER												
Estate Residential	0	401	401	0	160	160	0	0	0	0	460	460
RR												
Rural Residential	372	1,030	658	335	1,545	1,210	0	0	0	961	4,433	3,472
LDR												
Low Density Residential	909	5,278	4,369	2,726	21,112	18,386	0	0	0	7,823	60,591	52,768
MDR												
Medium Density Residential	231	1,876	1,645	1,384	11,256	9,872	0	0	0	3,973	32,303	28,330
MHR												
Mobile Home Residential	265	0	(265)	2,914	0	(2,914)	0	0	0	8,362	0	(8,362)
HDR												
High Density Residential	91	165	74	1,001	1,817	816	0	0	0	2,873	5,216	2,343
VDHR												
Very High Density residential	23	91	68	462	1,823	1,361	0	0	0	1,325	5,233	3,908
Commercial Land Use Designations												
CC												
Community Commercial	114	951	837	0	0	0	1,238	10,357	9,119	0	0	0
DC												
Downtown Commercial	32	34	2	32	34	2	1,055	1,095	40	93	96	3
RC												
Regional Commercial	0	0	0	0	0	0	0	0	0	0	0	0
Industrial Land Use Designation												
OP												
Office Park	0	0	0	0	0	0	0	0	0	0	0	0
BP												
Business Park	0	30	30	0	0	0	0	331	331	0	0	0
I												
Industrial	266	349	83	0	0	0	3,477	4,558	1,081	0	0	0
Public Institutional Land Use Designation												
PI												
Public Institutional	590	858	268	0	0	0	1,284	1,869	585	0	0	0
PIW												
Public Institutional Water	331	0	(331)	0	0	0	0	0	0	0	0	0
Special Land Use Designations												
SP												
Gateway Specific Plan	0	1,488	1,488	0	0	0	0	16,199	16,199	0	0	0
PUD												
Planned Unit Development	0	0	0	0	0	0	0	0	0	0	0	0
AG												
Agriculture	7,035	0	(7,035)	1,055	0	(1,055)	0	0	0	0	0	0
MIXDEV												
Mixed Development	11	0	(11)	0	0	0	142	0	(142)	3,029	0	(3,029)
VAC												
Vacant	5,930	0	(5,930)	0	0	0	0	0	0	0	0	0
RIVER												
San Jacinto River	899	1,023	124	0	0	0	0	0	0	0	0	0
TOTAL	18,417	18,418	1*	9,923	37,819	27,896	7,342	37,130	29,788	28,479	108,540	80,061

*The decrease in one acre noted is due to rounding of acreages not shown in the table.

5.9.3 Potential Environmental Impacts

A variety of land uses proposed within the Planning Area affect the important balance between the generation of public revenues and the provision of public services and facilities. Achieving and maintaining a balance of land uses can ensure fiscal stability and also create a desirable community in which people can work, shop, reside, and recreate. The Proposed General Plan Land Use Plan designates a variety of land uses that will assist in creating jobs, housing units, retail opportunities, and recreational areas within the Planning Area.

Community Cohesion

The San Jacinto General Plan reflects regional and local development trends, environmental policy, economic patterns, social conditions, community aspirations, and current State planning law. The General Plan establishes a long-term development plan for the planning area. The proposed General Plan Land Use Plan (**Figure 3-2**) provides for growth and redevelopment activities in within the City. **Table 5.9-1** provides a comparison of the existing land uses and the uses proposed under the General Plan at buildout.

Upon buildout of the General Plan there will be an increase in the amount of residential, community commercial, and industrial areas, compared to the existing development. There will be a corresponding decrease in agricultural and vacant lands.

The proposed arrangement of land uses of General Plan will not result in the division of an established community. Rather, the General Plan uses the existing land use development patterns as a basis for future development. The future alignment of SR-79 will pass through an area that is currently used for agriculture, and will not divide existing development. Furthermore, implementation of the MCP project alignment ultimately selected by RCTC will be required to comply with CEQA Guidance, including mitigation of any impacts to community cohesion. Therefore, the General Plan will have a less than significant impact with regard to division of an existing community.

Existing Land Use Plans, Policies, and Regulations

Implementation of the proposed General Plan may impact the existing land use plans, policies, and regulations that have been adopted to avoid or mitigate an environmental effect. The potential impact to the plans, policies, and regulations are described below.

San Jacinto Zoning Ordinance. The proposed project will create new land use designations and change existing General Plan land use designations for certain parcels within the Planning Area. The existing zoning designations for those parcels may not be consistent with the new land use designation. A significant impact associated with the Zoning Code may occur where zoning on specific parcels is inconsistent with new General Plan land use designations for those parcels. Implementation of Mitigation Measure LU-1 will reduce the impact to a level less than significant. Mitigation Measure LU-1 calls for a review and update the Zoning and Subdivision Ordinances to address the following:

- Ensure consistency with the General Plan land use designations and implement the General Plan policies. Careful review of the land use designations and Housing Element programs and policies must be undertaken.
- In order to enhance the design of higher density residential uses, the Zoning and Subdivision Ordinances shall include enhanced design, open space amenities, and landscaping standards for higher density residential development over and above minimum zoning development requirements.
- Consider an option for density transfers to increase density in order to preserve ridge lines, steep slopes, scenic features, and other natural resources.
- Review permitted uses, particularly industrial uses, to promote “clean industry” in San Jacinto.
- Incorporate standards that expand upon the goals and policies found in the Urban Corridor Overlay Zone addressing pedestrian-oriented, neo-traditional development throughout the applicable sections of the Zoning Ordinance.

San Jacinto Redevelopment Plan. The proposed project will change existing General Plan land use designations for certain parcels within the Planning Area, and may impact project areas under consideration in the Redevelopment Agency’s Implementation Plan. This represents a significant impact. Implementation of Mitigation Measure LU-2 will reduce the impact to a level less than significant. Mitigation Measure LU-2 calls for the implementation and update (as necessary), of the Redevelopment Implementation Plan to implement revitalization projects in the downtown area.

SCAG Growth Management Plan. The SCAG Growth Management Plan recommends methods to direct regional growth to minimize traffic congestion and better protect environmental quality. The goals of the Growth Management Plan include balancing jobs and housing. The SCAG goals are generally reflected throughout all of the General Plan elements, including the Land Use Element. For example, the proposed land use plan includes increases the amount of industrial and commercial uses compared to the existing plan. This will provide for a better balance of jobs and housing, and could reduce commute times.

The Southern California Association of Governments’ (SCAG) Regional Comprehensive Plan and Guide (RCPG) includes a number of policies applicable to the proposed General Plan. These are discussed below.

Growth Management

- 3.01 The population, housing and jobs forecasts, which are adopted by SCAG’s Regional Council, and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

The EIR uses population and housing projections which extend through 2050 in order to provide a comprehensive future growth forecast. Because these projections extend beyond the SCAG 2020 projections requested in the comment letter, the EIR does not use 2020 population and housing projections for comparison with SCAG 2020 projections. Similarly, the Housing Element Technical Report of the General Plan provides employment projections which extend through 2050 in the place of SCAG 2020 employment projections. The impacts related to growth associated with these projections are discussed in Section 5.10 Population and Housing. Land Use Goal 8: "Promote a growing and skilled labor force that will attract a range of jobs and wage levels to satisfy the employment and income needs of the City's labor force through all cycles of the economy", and its associated discussion, policies, and related implementation programs provide a planning framework to meet future employment needs within the City. Therefore, even though the proposed General Plan uses projections that differ from the SCAG 2020 projections, the proposed general plan is consistent with RCPG 3.01.

- 3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.
- 3.05 Encourage patterns of urban development and land use that reduce costs on infrastructure construction and make better use of existing facilities.
- 3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery and efforts to seek new sources of funding for development and the provision of services.

The proposed General Plan includes land use goals, policies, and implementation programs that address RCPG policies 3.03, 3.05, and 3.09. Specifically, Land Use Goal 2: "Manage and direct growth so that the community and its neighborhoods are protected and enhanced" and its associated discussion, policies, and related implementation programs provide a planning framework that address the timing, financing, and location of public facilities, utility systems, and transportation systems, reduces the costs on infrastructure construction and make better use of existing facilities, and minimize the cost of infrastructure and public service delivery and efforts to seek new sources of funding for development and the provision of services. Therefore, the proposed General Plan is consistent with RCPG 3.01, 3.05, and 3.09.

- 3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

The proposed General Plan includes policies and programs that will provide for a diversified local economy, retain and attract businesses, and maintain a strong sales tax base and competitive edge. These policies include, among others, those designed to support Land Use Goal 7 (Capitalize on the City's many economic development opportunities to promote a strong and economically healthy community) and Land Use Goal 8 (Promote a growing and skilled labor force that will attract a range of jobs and wage levels to satisfy the employment and income needs of the City's labor force through all cycles of the economy) and Land Use Policy 9.8 (Develop and enforce development standards and design guidelines that provide clear yet flexible direction for achieving quality community design in

new development and redevelopment projects throughout the community). Additionally, the City of San Jacinto provides developers with the option to pay for expedited project processing and hires consultants to process project applications as needed. The proposed General Plan is consistent with RCPG Policy 3.10.

- 3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.
- 3.13 Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.

The proposed General Plan includes land use goals, policies, and implementation programs that address RCPG policies 3.12 and 3.13. Specifically, Land Use Goal 4: "Promote high-quality development that ensures compatibility with surrounding land uses and major transportation corridors" and its associated discussion, policies, and related implementation programs provide a planning framework that address shall encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike. Additionally, Land Use Goal 5: "Rejuvenate San Jacinto's downtown area" and its associated discussion, policies, and related implementation programs, in conjunction with Land Use Goal 4 and its associated discussion, policies, and related implementation programs will maximize the use of existing urbanized areas accessible to transit through infill and redevelopment. The proposed General Plan is consistent with RCPG 3.12, and 3.13.

- 3.14 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.
- 3.15 Support local jurisdictions strategies to establish mixed-use clusters and other transit oriented developments around transit stations and along transit corridors.
- 3.16 Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.

As shown on Figure 3-2 Land Use Policy Map, higher density development has been clustered around major arterials and in proximity of other higher density developments. Additionally, the proposed General Plan will implement redevelopment within the downtown area. The proposed General Plan is consistent with RCPG 3.14, 3.15, and 3.16.

- 3.18 Encourage planned development in locations least likely to cause environmental impact.
- 3.19 Support policies and actions that preserve open space areas identified in local, state, and federal plans.
- 3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.

Figure 3-2 of the General Plan EIR illustrates the areas within the City's planning area that are designated as Open Space, Open Space Recreation, Park and other protective designations. Further, as discussed in Section 5.4 Biological Resources, development associated with the proposed General Plan shall be required to minimize environmental impact, preserve open space areas identified in local, state, and federal plans, and preserve wetlands, woodlands, production lands, and land containing unique and endangered plants and animals. Additionally, Section 5.8 Hydrology/Water Quality addresses potential impacts related to groundwater recharge. The proposed General Plan is consistent with RCPG 3.18, 3.19, and 3.20.

3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural and archaeological sites.

As described in Section 5.5 Cultural Resources, development associated with the proposed General Plan will be required to assess potential impacts related to unrecorded cultural and archaeological resources. In particular, mitigation measure C-1 provides for accidentally discovered archeological resources, and mitigation measures C-2 through C-7 aim to preserve the City's historic resources. The proposed General Plan is consistent with RCPG 3.21.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.

As described in Sections 5.6 Geology/Soils and Mineral Resources and 5.7 Hazards and Hazardous materials, development associated with the proposed General Plan will be required to assess potential impacts related to steep slopes, high fire, flood, and seismic hazards. Mitigation measures GS-1 through GS-3, for example, require the City to address geologic risks of new development during the CEQA process and to prohibit such development through the use of open space easements where such risks cannot be mitigated. Further, mitigation measures H-6 through H-8 address design standards to reduce fire hazards, and mitigation measures H-9 through H-12 will reduce potential flood hazards. The proposed General Plan is consistent with RCPG 3.22.

3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that will reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

As described in Sections 5.4 Biological Resources, 5.6 Geology/Soils and Mineral Resources, 5.7 Hazards and Hazardous materials, and 5.10 Noise, development associated with the proposed General Plan will be required to assess potential impacts related to noise (mitigation measures N-1 through N-4), biological and ecological resources (mitigation measures B-1 through B-3), exposure to seismic hazards and potential earthquake damage (mitigation measures GS-1 through GS-5), and to develop emergency response and recovery plans (mitigation measures GS-4 through GS-5). The proposed General Plan is consistent with RCPG 3.23.

- 3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing evaluated in the Regional Housing Needs Assessment.

As discussed in Section 5.11 Population and Housing, housing growth allowed by the proposed General Plan will provide a variety of housing types affordable to lower, middle, and upper income households consistent with the goals of the Regional Housing Needs Allocation (RHNA) established by SCAG. Additionally, the Housing Element of the General Plan contains policies designed to increase the supply and quality of housing, including affordable housing, within the City. (General Plan, H-5 to H-8.) The proposed General Plan is consistent with RCPG 3.24.

- 3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement and fire protection.

Implementation of the policies and programs contained in the proposed General Plan will foster the development of a sustainable community. As discussed in Section 5.11 Population and Housing, housing growth allowed by the proposed General Plan will provide a variety of housing types affordable to lower, middle, and upper income households consistent with the goals of the Regional Housing Needs Allocation (RHNA) established by SCAG. (EIR, at p. 5.11-2; see also General Plan, at pp. H-15 to H-17.) As discussed in Section 5.12 Public Services and Recreation, the proposed General Plan shall provide for public education, recreational facilities, law enforcement and fire protection. Implementation of the proposed General Plan will not impede access by any members of society to health care and social or other services. The proposed General Plan is consistent with RCPG 3.27.

Regional Transportation Plan (RTP)

- 4.01 Transportation investments shall be based on SCAG's adopted Regional Performance Indicators:

Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient, and economical movements of people and goods.

Accessibility - Transportation Systems should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.

Environment - Transportation Systems should sustain development and preservation of the existing system and environment. (all trips)

Reliability - Transportation system should have reasonable and dependable levels of service by mode. (all trips)

Safety - Transportation Systems should provide minimal risk, accident, death, and injury. (all trips)

Equity/Environmental Justice – The benefits of transportation investments should be equitably distributed among all ethnic, age, and income groups.

Cost effectiveness – Maximize return on transportation investment. (all trips)

The proposed policies and programs of the proposed General Plan will facilitate implementation of the RTP. (General Plan, Circulation Element.) As discussed in Section 5.13 Transportation, the City has established policies and programs to maintain and improve local and regional roadways, encourage use of alternative transportation options, and facilitate expanded use of non-vehicular transportation options. The proposed General Plan is consistent with RCPG 4.01.

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

Mitigation measures provided throughout the EIR shall minimize environmental impacts related to transportation investments. Mitigation measures applicable to all future development projects in the City, including transportation projects, are listed in Table 2-1 of the EIR. The proposed General Plan is consistent with RCPG 4.02.

4.04 Transportation Control Measures shall be a priority.

Mitigation Measures described in Section 5.13 shall provide transportation control measures for the proposed General Plan. For example, mitigation measures T-3 and T-7 provide for the planning and financing of improvements to the City's circulation system, including improvements to the pedestrian and bicycle system and other alternative modes of transportation. Additionally, mitigation measure T-8 encourages the integration of Intelligent Transportation Systems into the City's circulation system. The General Plan also contains policies specifically directed at alternative transportation modes, trails, and transportation demand management. (General Plan, at pp. C-9 to C-11.) The proposed General Plan is consistent with RCPG 4.04.

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

Mitigation Measures described in Section 5.13 shall provide for the maintenance and operation of the existing transportation system. In particular, mitigation measures T-1 through T-3 require that new development proposals be accompanied by assessments of potential impacts to the existing roadway system and identification of potential mitigation and funding mechanisms. The proposed General Plan is consistent with RCPG 4.16.

Air Quality Chapter Core Actions

5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provisions of community base shuttle services, provision of demand management base programs, or vehicle-miles-traveled/emissions fees) so that options to command and control regulations can be assessed.

- 5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, County, subregional, and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

The proposed General Plan supports these policies by establishing policies and programs that will require analysis of air quality impacts on a project-by-project basis as part of the development and environmental review process. These issues related to implementation of the proposed General Plan itself are analyzed throughout this EIR, but most specifically in Section 5.3 Air Quality, Section 5.9 Land Use and Section 5.13 Traffic. The proposed General Plan is consistent with RCPG 5.07 and 5.11.

Open Space Chapter Ancillary Policies

Outdoor Recreation

- 9.01 Provide adequate land resource to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.
- 9.02 Increase the accessibility to open space lands for outdoor recreation.
- 9.03 Promote self-sustaining regional recreation resources and facilities.

As described in Sections 5.12 Public Services and Recreation, the proposed General Plan will provide open space and recreation areas that meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region, increase the accessibility to open space lands for outdoor recreation, and promote self-sustaining regional recreation resources and facilities. (EIR, at pp. 5.12-13 to 5.12-17.) The proposed General Plan is consistent with RCPG 9.01, 9.02, and 9.03.

Public Health and Safety

- 9.04 Maintain open space for adequate protection of lives and properties against natural and man-made hazards.
- 9.05 Minimize potentially hazardous development in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.

As described in Section 5.7 Hazards and Hazardous materials, development associated with the proposed General Plan will be required to assess potential impacts related to natural and man-made hazards, hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment. Mitigation measures GS-1 through GS-3, for example, require the City to address geologic risks of new development during the CEQA process and to prohibit such development through the use of open space easements where such risks cannot be mitigated. Further, mitigation measures H-6 through H-8 address design standards to reduce fire hazards, and mitigation measures H-9 through H-12 will reduce potential flood hazards. The proposed General Plan is consistent with RCPG 9.04, and 9.05.

Resource Protection

- 9.08 Develop well-managed viable eco-systems or known habitats of rare, threatened and endangered species, including wetlands.

As discussed in Section 5.4 Biological Resources, development associated with the proposed General Plan shall be required to assess potential impacts related to eco-systems or known habitats of rare, threatened and endangered species, including wetlands. Mitigation measures B-1 through B-3 will each ensure that biological resources are protected from the impacts of development. In particular, mitigation measure B-2 provides that development within the City shall comply with the Western Riverside County Multiple Species Habitat Conservation Plan, the purpose of which is to protect vital ecosystems. The proposed General Plan is consistent with RCPG 9.08.

Water Quality Chapter Recommendations and Policy Options

- 11.02 Encourage “watershed management” programs and strategies, recognizing the primary role of local governments in such efforts.
- 11.05 Support regional efforts to identify and cooperatively plan for wetlands to facilitate both sustaining the amount and quality of wetlands in the region and expediting the process for obtaining wetland permits.
- 11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

As discussed in Section 5.8 Hydrology/Water Quality, the proposed General Plan shall minimize impacts related to watersheds. In particular, mitigation measures HW-1 and HW-2 describe City-wide plans for addressing non-point source pollution. Additionally, mitigation measures HW-3, HW-4 and HW-6 will reduce the City’s reliance on imported water by facilitating recycled water programs and encouraging recharge of groundwater resources. As discussed in Section 5.4 Biological Resources, development associated with the proposed General Plan shall be required to minimize impacts related to wetlands in the region through the environmental review process (pursuant to CEQA, the Fish and Game Code and the Clean Water Act), and comply with the provisions of the MSHCP. Section 5.14 Utilities/Services System addresses the potential impacts related to water supply and waste water. The proposed General Plan is consistent with RCPG 11.02, 11.05, and 11.07.

Implementation of the General Plan will be consistent with the SCAG Growth Management Plan, and will result in a less than significant impact from a plan consistency perspective.

South Coast Air Quality Management Plan (AQMP). To comply with the South Coast AQMP, the Land Use Element 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. This organization of uses reduces the amount of vehicle travel time and promotes the use of public transportation, thereby decreasing vehicle emissions. Consistency with the AQMP is discussed in Section 5.3, Air Quality, of the EIR.

Mid County Parkway Project. The Riverside County Transportation Commission (RCTC) is in the planning stages of the Mid County Parkway (MCP) project. The MCP is a proposed 32-mile transportation corridor that will relieve traffic congestion for east-west travel in western Riverside County between the San Jacinto and Corona areas and help address future transportation needs through 2030.

The proposed corridor is a component of the Riverside County Integrated Project, a region wide transportation and environmental planning project undertaken over several years by the Riverside County Transportation Commission (RCTC) and the County of Riverside. The Project determined that a corridor in the vicinity of Cajalco Road in the west and Ramona Expressway in the east would significantly reduce congestion, improve traffic flow, and reduce travel times on I-215, SR 91, SR 74, and SR 60. County residents, through their input at public meetings, helped determine the general corridor locations under consideration. Further study of potential route locations is being conducted by RCTC. Implementation of any of these three alignments will have the potential to impact the existing land use plans, policies, and regulations discussed above. This is a significant impact. Coordinating the final alignment chosen with the planning process described in Mitigation Measures LU-1 and LU-2 will reduce the impact to a level less than significant. Furthermore, implementation of the alignment ultimately selected by RCTC will be subject to be required to comply with CEQA Guidance.

Existing Conservation Plans

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Consistency with the Western Riverside County MSHCP is discussed in Section 5.4, Biological Resources, of the EIR. As noted in Section 5.4, the MSHCP provides regional conservation to special status species and habitat while allowing urban growth and development to occur.

5.9.4 Mitigation Measures

- LU-1. The City shall review and update the Zoning and Subdivision Ordinances to address the following:
- Ensure consistency with the General Plan land use designations and implement the General Plan policies. Careful review of the land use designations and Housing Element programs and policies must be undertaken.
 - In order to enhance the design of higher density residential uses, the Zoning and Subdivision Ordinances shall include enhanced design, open space amenities, and landscaping standards for higher density residential development over and above minimum zoning development requirements.
 - Consider an option for density transfers to increase density in order to preserve ridge lines, steep slopes, scenic features, and other natural resources.
 - Review permitted uses, particularly industrial uses, to promote “clean industry” in San Jacinto.
 - Incorporate standards that expand upon the goals and policies found in the Urban Corridor Overlay Zone addressing pedestrian-oriented, neo-traditional

development throughout the applicable sections of the Zoning Ordinance.
(Implementation Program LU-3)

LU-2. The City shall implement and update as necessary the Redevelopment Implementation Plan to realize successful revitalization projects in the downtown area. (Implementation Program LU-14)

5.9.5 Impact after Mitigation

Community Cohesion

No impact to community cohesion was identified.

Existing Land Use Plans, Policies, and Regulations

Implementation of Mitigation Measures LU-1 and LU-2 will reduce the significant land use impact due to potential inconsistencies any applicable land use plan, policy, or regulation to below a level of significance.

Existing Conservation Plans

No impact to existing conservation plans was identified.

5.10 Noise

5.10.1 Environmental Setting

Noise in the Planning Area is the cumulative effect of noise generated by transportation activities and stationary sources. Transportation noise refers to noise from automobile use, trucking, airport operations, and rail operations. Non-transportation noise typically refers to noise from stationary sources such as commercial establishments, machinery, air conditioning systems, compressors and landscape maintenance equipment. Regardless of the type of noise, noise levels are highest near the source and decrease with distance.

Noise Standards and Land Use Compatibility Guidelines

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis to its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.” Sound pressure magnitude is measured and quantified using a logarithmic ration of pressures, the scale of which gives the level of sound in decibels (dB). The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human, frequency-dependent response, the A-weighting filter system is used to adjust measured sound levels and is expressed as dBA.

Noise consists of pitch, loudness, and duration; therefore, it is difficult to describe noise with a single unit of measure. Federal and state agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. Two measurement scales commonly used in California and the Community Noise Equivalent Level (CNEL) and the day-night level (L_{dn}). In order to account for increased human sensitivity at night, the CNEL level includes a five dB penalty on noise during the 7:00 P.M. to 10:00 P.M. time period and a ten dB penalty on noise during the 10:00 P.M. to 7:00 A.M. time period. The L_{dn} level includes only the ten dB weighting for late-night noise. These values are nearly identical for all but unusual noise sources.

Noise Sensitive Receptors

Noise is problematic when noise sensitive land uses are affected. Noise sensitive land uses, (i.e., sensitive receptors) include residences, schools, hospitals, religious meetings and recreation areas. Most noise impacts can be avoided when noise sources, sensitive land uses and information about the future noise environment are considered in land use planning and development decisions.

To ensure that noise producers do not adversely affect sensitive receptors, the City uses land use compatibility standards when planning and making development decisions. **Table 5.10-1** summarizes City noise standards for various types of land uses. The standards represent the maximum acceptable noise level and are used to determine noise impacts.

**Table 5.10-1
Interior and Exterior Noise Standards**

Land Use	Noise Standards ¹	
	Exterior	Interior
Residential – single-family, multi-family, duplex and mobile home	65 dB(A)	45 dB(A)
Residential – transient lodging, hotels, motels, nursing homes, hospitals, assisted care facilities	65 dB(A)	45 dB(A)
Private offices, churches, libraries, theaters, concert halls, meeting halls, schools	65 dB(A)	45 dB(A)
General commercial, office, retail, reception, restaurant	65 dB(A)	45 dB(A)
Light industrial ²	–	–
Parks and playgrounds	65 dB(A)	50 dB(A)
Golf courses, outdoor spectator sports	70 dB(A)	–

1 In Community Noise Level Equivalent (CNEL).

2 Noise standards do not apply to Light Industrial areas.

3 Outdoor environment limited to playground areas, picnic areas and other areas of frequent human use.

These noise standards are the basis for the development of the land use compatibility guidelines presented in **Table 5.10-2**. If the noise level of a project falls within Zone A or Zone B, the project is considered compatible with the noise environment. Zone A implies that no mitigation will be needed. Zone B implies that minor mitigation measures may be required to meet the City's noise standards.

If the noise level of a project falls within Zone C, substantial noise mitigation will be necessary to meet the noise standards. Mitigation may involve construction of noise barriers and substantial building sound insulation. Projects in Zone C can be successfully mitigated; however, project proponents must demonstrate that the noise standards will be met prior to issuance of building permits. If noise levels fall outside of Zones A, B, and C, projects are considered clearly incompatible with the noise environment and should not be approved.

Existing Noise

The primary source of noise in San Jacinto results from transportation related noise. The Ramona Expressway, State Route 79, the railroad, and other major roadways create high levels of noise that affect the overall quality of life in the community. Trucks and tractors associated with agricultural activities also create noise that may not be compatible with surrounding land uses. As shown in **Table 5.10-3**, land uses adjacent to certain segments of Cottonwood Avenue, Esplanade Avenue, Ramona Expressway, San Jacinto Avenue, Sanderson Avenue, 7th Street, State Street, and Warren Road are located within a 65 dB or higher noise contour. This means persons living or attending school in these areas may be subject to noise levels exceeding the City's standards. Additional noise sources that are not directly related to transportation include construction, manufacturing or business operations, agricultural operations, and property maintenance activities.

Table 5.10-2 Noise/Land Use Compatibility Matrix Noise Contours and Noise Impact Areas							
Land Use Category	Community Noise Equivalent Level CNEL, dB						
	55		60	65	70	75	80
Residential - Single Family, Multifamily, Duplex	A	A	B	B	C	---	---
Residential - Mobile Homes	A	A	B	C	C	---	---
Transient Lodging - Motels, Hotels	A	A	B	B	C	C	---
Schools, Libraries, Churches, Hospitals, Nursing Homes	A	A	B	C	C	---	---
Auditoriums, Concert Halls, Amphitheaters, Meeting Halls	B	B	C	C	---	---	---
Sports Arenas, Outdoor Spectator Sports, Amusement Parks	A	A	A	B	B	---	---
Playgrounds, Neighborhood Parks	A	A	A	B	C	---	---
Golf Courses, Riding Stables, Cemeteries	A	A	A	A	B	C	C
Office and Professional Buildings	A	A	A	B	B	C	---
Commercial Retail, Banks, Restaurants, Theaters	A	A	A	A	B	B	C
Industrial, Manufacturing, Utilities, Wholesale, Service Stations	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Source: Taken in part from Aircraft Noise Impact Planning Guidelines for Local Agencies, U.S. Department of Housing and Urban Development, TE/NA-472, November 1972.

A = Normally Acceptable - Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

B = Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

C = Normally Unacceptable - New construction or development should generally be discouraged. If it does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

--- = Clearly Unacceptable - New construction or development should generally not be undertaken.

Related Plans and Programs

There are a number of existing plans and programs that directly relate to the goals of the Noise Element. These plans and programs have been enacted through state and local legislation and are administered by agencies with powers to enforce state and local laws.

California Noise Insulation Standards (Title 24). The California Commission of Housing and Community Development officially adopted noise standards in 1974. In 1988, the Building Standards Commission approved revisions to the standards (Title 24, Part 2,

California Code of Regulations). As revised, Title 24 establishes an interior noise standard of 45 dB(A) for residential space (CNEL or Ldn). Acoustical studies must be prepared for residential structures to be located within noise contours of 60 dB(A) or greater (CNEL or Ldn) from freeways, major streets, thoroughfares, rail lines, rapid transit lines, or industrial noise sources. The studies must demonstrate that the building is designed to reduce interior noise to 45 dB(A) or lower (CNEL or Ldn).

Construction Standards. The provisions of the state Noise Insulation Standards (Title 24) are enforced in San Jacinto. Title 24 specifies that combined indoor noise for multi-family living spaces shall not exceed 45 db(A) CNEL. This standard must be implemented when the outdoor noise level exceeds 60 dB(A) CNEL. The future noise contour map (**Figure N-1**) can be used to determine when to implement this standard. Title 24 requires that the standard be applied to all new hotels, motels, apartments and multi-family projects. The City also applies the standard to new single-family development. The City also requires all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the City noise regulations (Title 24 California Code of Regulations, Noise Ordinance).

City of San Jacinto Noise Ordinance. The City Noise Ordinance is designed to protect people from non-transportation noise sources such as construction activity; commercial, industrial, and agricultural operations; machinery and pumps; and air conditioners. Enforcement of the ordinance ensures that adjacent properties are not exposed to excessive noise from stationary sources. Enforcing the ordinance includes requiring proposed development projects to show compliance with the ordinance, including operating in accordance with noise levels and hours of operations limits placed on the project site. The City also requires construction activity to comply with established work schedule limits. The Noise Ordinance establishes allowable interior and exterior noise levels for residential and commercial areas. Specific standards for daytime and nighttime hours are also provided. Certain noise sources are prohibited and the ordinance establishes an enforcement process. The ordinance is reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

5.10.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the General Plan would:

- Exceed the City of San Jacinto Noise Standards as shown in Tables 5.10-1 and 5.10-2; or
- Expose persons to excessive groundborne vibration or groundborne noise levels;
- Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

**Table 5.10-3
Existing Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2001	CNEL @ 50' From Near Lane C/L 2001	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
COTTONWOOD AVENUE												
	3	50	AT			2,300	62.0					
	3	50	AT	1.8%	0.7%	2,300	62.0	75				
	3	50	AT	1.8%	0.7%	3,700	64.0	110				
	3	50	AT	1.8%	0.7%	4,100	64.0	110				
	3	50	AT	1.8%	0.7%	4,400	64.5	120				
	3	50	AT	1.8%	0.7%	5,400	65.5	143	56			
ESPLANADE AVENUE												
	3	50	AT	1.8%	0.7%	700	57.0					
	3	50	AT	1.8%	0.7%	4,200	64.5	120				
	3	50	AT	1.8%	0.7%	5,200	65.0	130	50			
	3	50	AT	1.8%	0.7%	6,900	66.5	170	69			
	6	45	AT	1.8%	0.7%	13,400	67.5	200	83			
	6	45	AT	1.8%	0.7%	14,600	68.0	215	90			
	5	40	AT	1.8%	0.7%	12,700	66.5	170	69			
	5	40	AT	1.8%	0.7%	5,300	62.5	83				
LYON AVENUE												
	3	50	AT	1.8%	0.7%	2,300	62.0	75				
	3	50	AT	1.8%	0.7%	1,300	59.5					
RAMONA EXPRESSWAY												
	3	55	AT	1.8%	0.7%	12,700	70.0	300	130	50		
	3	55	AT	1.8%	0.7%	15,900	71.0	340	155	62		
	3	55	AT	1.8%	0.7%	19,100	72.0	395	185	75		
	3	55	AT	1.8%	0.7%	15,400	71.0	340	155	62		
	6	55	AT	1.8%	0.7%	13,100	69.5	278	120			
	6	55	AT	1.8%	0.7%	13,100	69.5	278	120			
	6	55	AT	1.8%	0.7%	12,000	69.0	255	110			
	3	45	AT	1.8%	0.7%	12,000	68.0	215	90			
	3	55	AT	1.8%	0.7%	11,900	70.0	300	130	50		
SAN JACINTO AVENUE												
	6	45	AT	4.8%	4.7%	12,900	69.5	278	120			
	6	45	AT	4.8%	4.7%	13,000	69.5	278	120			
	3	50	AT	1.8%	0.7%	13,900	69.5	278	120			

**Table 5.10-3
Existing Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2001	CNEL @ 50' From Near Lane C/L 2001	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Esplanade to 7th	3	50	AT	1.8%	0.7%	11,000	68.5	235	100	—	—	—
7th to Cottonwood	3	50	AT	1.8%	0.7%	10,800	68.5	235	100	—	—	—
North of Cottonwood	3	50	AT	1.8%	0.7%	11,800	69.0	255	110	—	—	—
South of Ramona Blvd.	3	50	AT	1.8%	0.7%	16,800	70.5	320	143	56	—	—
Ramona Expwy. to Gilman Springs	6	60	AT	1.8%	0.7%	28,500	74.0	520	255	110	—	—
7TH STREET												
Cawston to Sanderson	1	35	AT	1.8%	0.7%	100	49.0	—	—	—	—	—
Sanderson to Kirby	1	35	AT	1.8%	0.7%	10,000	65.5	143	56	—	—	—
STATE STREET												
Menlo to Esplanade	5	40	AT	1.8%	0.7%	15,900	67.0	185	75	—	—	—
Esplanade to 7th	5	40	AT	1.8%	0.7%	15,100	67.0	185	75	—	—	—
7th to Cottonwood	5	40	AT	1.8%	0.7%	17,700	67.5	200	83	—	—	—
Cottonwood to Ramona Blvd.	6	50	AT	1.8%	0.7%	19,900	70.0	300	130	50	—	—
Ramona Blvd. to Ramona Expwy.	6	50	AT	4.8%	4.7%	14,400	71.0	340	155	62	—	—
North of Ramona Expwy.	3	55	AT	4.8%	4.7%	9,800	71.0	340	155	62	—	—
South of Gilman Springs	1	35	AT	4.8%	4.7%	9,800	68.5	235	100	—	—	—
WARREN ROAD												
South of Esplanade	3	50	AT	1.8%	0.7%	8,800	67.5	200	83	—	—	—
Esplanade to 7th	3	55	AT	1.8%	0.7%	6,700	67.5	200	83	—	—	—
7th to Cottonwood	3	55	AT	1.8%	0.7%	6,700	67.5	200	83	—	—	—
North of Cottonwood	3	55	AT	1.8%	0.7%	6,000	67.0	185	75	—	—	—
South of Ramona Expwy.	3	55	AT	1.8%	0.7%	6,600	67.0	185	75	—	—	—
North of Ramona Expwy.	3	55	AT	1.8%	0.7%	200	53.5	—	—	—	—	—

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.
 Notes: 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the arterial relative to the surrounding area.
 Source: Weiland Associates, Inc

5.10.3 Potential Environmental Impacts

Construction Activities

Implementation of the San Jacinto General Plan would result in additional development within the Planning Area, which would generate noise during construction activity. **Table 5.10-4** illustrates typical noise levels from operating construction equipment at a distance of 50 feet. As shown in **Table 5.10-4**, construction equipment generates high levels of intermittent noise ranging from 70 dB(A) to 105 dB(A). These elevated noise levels would subject noise sensitive land uses adjoin construction sites to noise levels that exceed existing standards, excessive groundborne noise levels and vibration, and excessive periodic or temporary increases in the ambient noise level. This impact will be short-term and will cease upon completion of construction, but is still a significant impact. Implementation of Mitigation Measures N-1 and N-2 will reduce the construction related noise impact to a level less than significant.

Implementation of Mitigation Measure N-1 calls for the City to require all construction activities to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the City noise regulations (Title 24 California Code of Regulations, Noise Ordinance) in order to reduce impacts associated with temporary construction noise to the extent feasible. Trucks associated with construction activities shall follow the designated truck routes described in Implementation Program C-3 of the General Plan. Implementation of Mitigation Measure N-2 calls for the City to actively enforce the standards identified within the City's Noise Ordinance and Noise Plan. The City shall update and amend the Noise Ordinance and Plan as appropriate and provide a link on the City's website for residents to file complaints against activities and uses that may be violating the Noise Ordinance. Mitigation Measure N-2 calls for the City to actively enforce the standards identified within the City's Noise Ordinance and Noise Plan in order to reduce impacts associated with temporary construction noise to the extent feasible. The City shall update and amend the Noise Ordinance and Plan as appropriate and provide a link on the City's website for residents to file complaints against activities and uses that may be violating the Noise Ordinance.

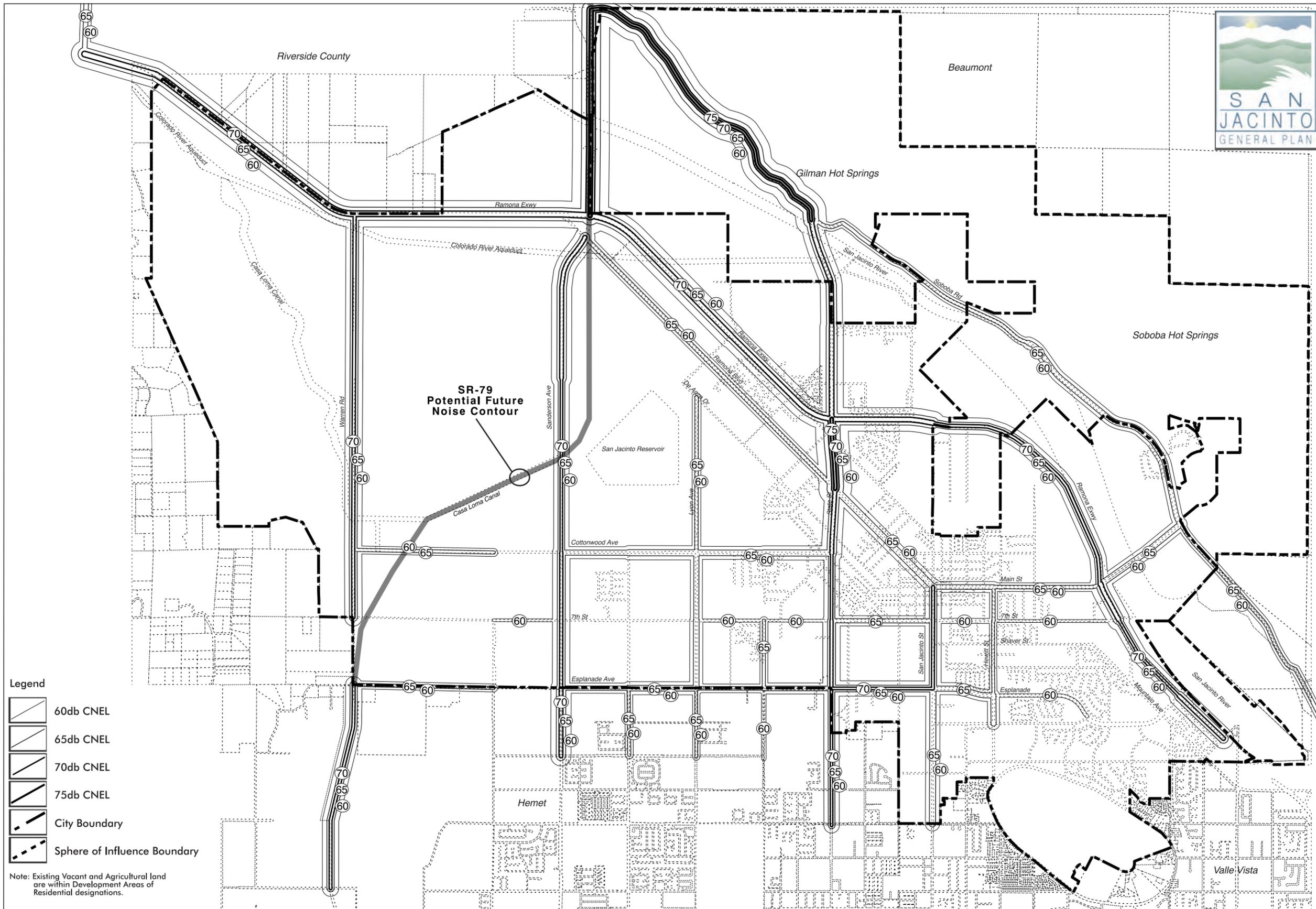
Vehicular Traffic

Implementation of the San Jacinto General Plan will allow new development within the Planning Area. Such development will generate additional traffic that will increase noise levels along existing roadways. **Figure 5.10-1** shows the buildout year noise contours for San Jacinto and **Table 5.10-5** shows summarizes the buildout year noise levels from roadways within the planning area. As **Figure 5.10-1** and **Table 5.10-5** show, future noise levels along major streets in the planning area are projected to range from approximately CNEL 60 dB(A) to CNEL 75 dB(A) and greater. SR-79 will generate the most noise with noise levels reaching greater than CNEL 80 dB(A) at a distance of 50 feet from the roadway centerline.

**Table 5.10-4
Construction Equipment Noise Levels**

Equipment Item	Range of Noise Level at 50 Feet	Nominal Noise Level, Leg, at 50 Feet
Earthmoving		
Backhoes, 200 HP	71 to 93 dB(A)	85 dB(A)
Berm Machine, 100 HP	74 to 84 dB(A)	80 dB(A)
Dozers	72 to 96 dB(A)	86 dB(A)
Front Loaders, 300 HP	71 to 96 dB(A)	82 dB(A)
Graders	73 to 95 dB(A)	85 dB(A)
Paver	80 to 92 dB(A)	89 dB(A)
Roller, 180 HP	78 to 84 dB(A)	79 dB(A)
Scrapers	73 to 95 dB(A)	88 dB(A)
Tractors, 200 HP	72 to 96 dB(A)	84 dB(A)
Trencher, 80 HP	76 to 86 dB(A)	82 dB(A)
Truck/Trailer, 200 HP	70 to 92 dB(A)	82 dB(A)
Truck:125 HP, 150 HP	76 to 85 dB(A)	80, 82 dB(A)
Materials Handling		
Concrete Mixer	70 to 90 dB(A)	85 dB(A)
Concrete Pump	74 to 84 dB(A)	82 dB(A)
Crane, Moveable: 50 HP, 200 HP, 400 HP	75 to 95 dB(A)	76, 80, 83 dB(A)
Derrick	86 to 89 dB(A)	88 dB(A)
Forklift, 40 HP	68 to 82 dB(A)	80 dB(A)
Side Boom, 200 HP	80 to 90 dB(A)	85 dB(A)
Water Truck, 500 HP	79 to 88 dB(A)	84 dB(A)
Stationary Equipment		
Boiler, 1600 HP	79 to 85 dB(A)	82 dB(A)
Compressors: 100 HP, 200 HP	68 to 87 dB(A)	78, 81 dB(A)
Generators: 20 HP, 400 HP, 1300 HP	69 to 81 dB(A)	74, 81, 84 dB(A)
Pumps: 25 HP, 200 HP, 350 HP	60 to 80 dB(A)	73, 76, 80 dB(A)
Impact Equipment		
Compactor, 20 HP	84 to 90 dB(A)	86 dB(A)
Jack Hammers	75 to 104 dB(A)	88 dB(A)
Pile Drivers (Peak Level)	90 to 104 dB(A)	101 dB(A)
Pneumatic Tools	82 to 88 dB(A)	86 dB(A)
Rock Drills	90 to 105 dB(A)	98 dB(A)
Steam Boiler (Pile Driver)	83 to 92 dB(A)	88 dB(A)
Other Equipment		
Saws	67 to 92 dB(A)	78 dB(A)
Vibrators	69 to 80 dB(A)	76 dB(A)
Welding Machines: 50 HP, 80 HP	76 to 85 dB(A)	80, 82 dB(A)

Source: Wieland and Associates, 1999.



Sources: County of Riverside GIS, City of San Jacinto, USGS

0 1,000 2,000 4,000 Ft

North

Figure 5.10-1
Future Noise Contours

**Table 5.10-5
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet							
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB			
BRIDGE STREET															
North of Ramona Expwy.	6	55	AT	1.8%	0.7%	11,200	68.5	235	100						
South of Ramona Expwy.	6	45	AT	1.8%	0.7%	16,800	68.5	235	100						
North of unnamed B Street	6	45	AT	1.8%	0.7%	16,500	68.5	235	100						
Unnamed B Street to Warren	6	45	AT	1.8%	0.7%	13,400	67.5	200	83						
Warren to Sanderson	6	45	AT	1.8%	0.7%	8,000	65.5	143	56						
Sanderson to SR-79	6	45	AT	1.8%	0.7%	15,900	68.0	215	90						
SR-79 to Ramona Blvd.	6	45	AT	1.8%	0.7%	10,700	66.5	170	69						
Ramona Blvd. to Ramona Expwy.	6	45	AT	1.8%	0.7%	8,000	65.5	143	56						
Ramona Expwy. to Record	6	45	AT	1.8%	0.7%	10,800	66.5	170	69						
BRINTON STREET															
State to Main	2	40	AT	1.8%	0.7%	12,700	67.5	200	83						
CAWSTON AVENUE															
Esplanade to 7th	6	45	AT	1.8%	0.7%	13,600	67.5	200	83						
7th to Cottonwood	6	45	AT	1.8%	0.7%	9,200	66.0	155	62						
Unnamed A Street to Record	6	45	AT	1.8%	0.7%	8,000	65.5	143	56						
COTTONWOOD AVENUE															
West of Warren	6	50	AT	1.8%	0.7%	8,800	66.5	170	69						
Warren to SR-79	6	50	AT	1.8%	0.7%	21,600	70.5	320	143	56					
SR-79 to Cawston	6	50	AT	1.8%	0.7%	52,300	74.5	560	278	120					
Cawston to Sanderson	6	50	AT	1.8%	0.7%	36,900	73.0	460	215	90					
Sanderson to Kirby	6	50	AT	1.8%	0.7%	42,500	73.5	490	235	100					
Kirby to Lyon	6	50	AT	1.8%	0.7%	33,700	72.5	428	200	83					
Lyon to Palm	6	50	AT	1.8%	0.7%	34,700	72.5	428	200	83					
Palm to State	6	50	AT	1.8%	0.7%	27,600	71.5	368	170	69					
ESPLANADE AVENUE															
West of SR-79	6	50	AT	1.8%	0.7%	4,900	64.5	120							
SR-79 to Odell	6	50	AT	1.8%	0.7%	23,800	71.0	340	155	62					
Odell to Cawston	6	50	AT	1.8%	0.7%	24,000	71.0	340	155	62					
Cawston to Sanderson	6	50	AT	1.8%	0.7%	34,700	72.5	428	200	83					
Sanderson to Kirby	6	50	AT	1.8%	0.7%	39,400	73.0	460	215	90					
Kirby to Lyon	6	50	AT	1.8%	0.7%	40,900	73.5	490	235	100					
Lyon to Palm	6	45	AT	1.8%	0.7%	41,400	72.5	428	200	83					
Palm to State	6	45	AT	1.8%	0.7%	38,400	72.0	395	185	75					

**Table 5.10-5
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hwy.			60dB	65dB	70dB	75dB	80dB
State to Santa Fe	6	45	AT	1.8%	0.7%	47,100	73.0	460	215	90	—	—
Santa Fe to San Jacinto	6	45	AT	1.8%	0.7%	44,700	73.0	460	215	90	—	—
San Jacinto to Hewitt	5	40	AT	1.8%	0.7%	46,000	72.0	395	185	75	—	—
Hewitt to Commonwealth	5	40	AT	1.8%	0.7%	22,800	69.0	255	110	—	—	—
Commonwealth to Ramona Expwy.	5	40	AT	1.8%	0.7%	27,400	69.5	278	120	—	—	—
GILMAN SPRINGS ROAD												
West of SR-79	6	55	AT	3.7%	3.6%	26,100	74.0	520	255	110	—	—
SR-79 to State	6	55	AT	3.7%	3.6%	8,900	69.5	278	120	—	—	—
HEWITT STREET												
Shaver to 7th	4	30	AT	1.8%	0.7%	18,100	65.5	143	56	—	—	—
7th to Main	4	30	AT	1.8%	0.7%	15,100	65.0	130	50	—	—	—
KIRBY AVENUE												
Esplanade to 7th	2	40	AT	1.8%	0.7%	11,100	66.5	170	69	—	—	—
7th to Cottonwood	2	40	AT	1.8%	0.7%	10,400	66.5	170	69	—	—	—
LYON AVENUE												
Esplanade to 7th	6	50	AT	1.8%	0.7%	24,500	71.0	340	155	62	—	—
7th to Cottonwood	6	50	AT	1.8%	0.7%	18,700	70.0	300	130	50	—	—
Cottonwood to De Anza	6	50	AT	1.8%	0.7%	28,700	72.0	395	185	75	—	—
De Anza to Ramona Blvd.	6	50	AT	1.8%	0.7%	21,600	70.5	320	143	56	—	—
Ramona Blvd. to Ramona Expwy.	6	50	AT	1.8%	0.7%	24,000	71.0	340	155	62	—	—
Ramona Expwy. to Record	6	50	AT	1.8%	0.7%	15,900	69.0	255	110	—	—	—
MAIN STREET												
Ramona Blvd. to Cam. Los Banos	5	40	AT	1.8%	0.7%	15,600	67.0	185	75	—	—	—
Cam. Los Banos to Ramona Expwy.	5	40	AT	1.8%	0.7%	16,700	67.5	200	83	—	—	—
Ramona Expwy. to Soboba	5	40	AT	1.8%	0.7%	8,000	64.5	120	—	—	—	—
MERIDIAN STREET												
Park to Washington	2	40	AT	1.8%	0.7%	18,500	69.0	255	110	—	—	—
Washington to Esplanade	2	40	AT	1.8%	0.7%	17,700	69.0	255	110	—	—	—
ODELL AVENUE												
Esplanade to 7th	6	45	AT	1.8%	0.7%	10,900	66.5	170	69	—	—	—
Unnamed A Street to Record	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	—	—	—
PALM AVENUE												
Esplanade to 7th	4	35	AT	1.8%	0.7%	10,300	64.0	110	—	—	—	—
7th to Cottonwood	4	35	AT	1.8%	0.7%	9,300	64.0	110	—	—	—	—

**Table 5.10-5
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Cottonwood to De Anza	4	35	AT	1.8%	0.7%	8,000	63.0	90	--	--	--	--
PARK AVENUE												
Hewitt to Meridian	2	40	AT	1.8%	0.7%	5,800	64.0	110	--	--	--	--
RAMONA BOULEVARD												
Warren to Odell	6	45	AT	1.8%	0.7%	9,800	66.0	155	62	--	--	--
Odell to Cawston	6	45	AT	1.8%	0.7%	10,800	66.5	170	69	--	--	--
Cawston to Sanderson	6	45	AT	1.8%	0.7%	15,300	68.0	215	90	--	--	--
Sanderson to Bridge	6	45	AT	1.8%	0.7%	21,000	69.5	278	120	--	--	--
Bridge to Lyon	6	45	AT	1.8%	0.7%	25,800	70.5	320	143	56	--	--
Lyon to Palm	6	45	AT	1.8%	0.7%	27,800	70.5	320	143	56	--	--
Palm to State	6	45	AT	1.8%	0.7%	21,800	69.5	278	120	--	--	--
State to San Jacinto	5	40	AT	1.8%	0.7%	26,700	69.5	278	120	--	--	--
RAMONA EXPRESSWAY												
West of Bridge	8	55	AT	1.8%	0.7%	112,100	78.5	905	490	235	100	--
Bridge to Warren	8	55	AT	1.8%	0.7%	92,100	77.5	810	428	200	83	--
Warren to Sanderson	8	55	AT	1.8%	0.7%	87,900	77.5	810	428	200	83	--
Sanderson to SR-79	8	55	AT	1.8%	0.7%	71,800	76.5	720	368	170	69	--
SR-79 to Bridge	8	55	AT	1.8%	0.7%	81,800	77.0	760	395	185	75	--
Bridge to Lyon	8	55	AT	1.8%	0.7%	74,800	76.5	720	368	170	69	--
Lyon to State	8	55	AT	1.8%	0.7%	71,500	76.5	720	368	170	69	--
State to San Jacinto	8	55	AT	1.8%	0.7%	66,100	75.5	640	320	143	56	--
East of San Jacinto	6	55	AT	1.8%	0.7%	47,500	75.0	600	300	130	50	--
North of Main	6	55	AT	1.8%	0.7%	40,800	74.5	560	278	120	--	--
Main to 7th	6	55	AT	1.8%	0.7%	48,800	75.0	600	300	130	50	--
7th to Esplanade	6	55	AT	1.8%	0.7%	46,300	75.0	600	300	130	50	--
South of Esplanade	6	55	AT	1.8%	0.7%	39,500	74.0	520	255	110	--	--
RECORD ROAD												
Bridge to Cawston	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
Cawston to Sanderson	6	45	AT	1.8%	0.7%	18,900	69.0	255	110	--	--	--
Sanderson to SR-79	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
SR-79 to Bridge	6	45	AT	1.8%	0.7%	12,500	67.0	185	75	--	--	--
Bridge to Lyon	6	45	AT	1.8%	0.7%	9,900	66.0	155	62	--	--	--
Lyon to State	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
SAN JACINTO AVENUE												

**Table 5.10-5
Future Noise Contours**

	Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
				Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Washington to Commonwealth	6	45	AT	1.8%	0.7%	23,100	70.0	300	130	50	--	--
Commonwealth to Esplanade	6	45	AT	1.8%	0.7%	39,000	72.0	395	185	75	--	--
Esplanade to 7th	6	45	AT	1.8%	0.7%	43,800	72.5	428	200	83	--	--
7th to Main	6	45	AT	1.8%	0.7%	35,800	72.0	395	185	75	--	--
Main to Ramona Expwy.	6	45	AT	1.8%	0.7%	15,300	68.0	215	90	--	--	--
SANDERSON AVENUE												
Eaton to Esplanade	6	50	AT	1.8%	0.7%	42,800	73.5	490	235	100	--	--
Esplanade to 7th	6	50	AT	1.8%	0.7%	44,500	74.0	520	255	110	--	--
7th to Cottonwood	6	50	AT	1.8%	0.7%	48,300	74.0	520	255	110	--	--
Cottonwood to SR-79	6	50	AT	1.8%	0.7%	49,800	74.5	560	278	120	--	--
SR-79 to unnamed Street A	6	50	AT	1.8%	0.7%	53,900	74.5	560	278	120	--	--
Unnamed Street A to Bridge	6	50	AT	1.8%	0.7%	32,500	72.5	428	200	83	--	--
Bridge to Ramona Blvd.	6	50	AT	1.8%	0.7%	25,600	71.5	368	170	69	--	--
Ramona Blvd. to Ramona Expwy.	6	50	AT	1.8%	0.7%	22,800	71.0	340	155	62	--	--
Ramona Expwy. to Record	6	60	AT	1.8%	0.7%	22,200	72.5	428	200	83	--	--
7TH STREET												
SR-79 to Cawston	4	35	AT	1.8%	0.7%	10,800	64.5	120	--	--	--	--
Cawston to Sanderson	4	35	AT	1.8%	0.7%	8,000	63.0	90	--	--	--	--
Sanderson to Kirby	4	35	AT	1.8%	0.7%	9,400	64.0	110	--	--	--	--
Kirby to Lyon	4	35	AT	1.8%	0.7%	9,900	64.0	110	--	--	--	--
Lyon to Palm	4	35	AT	1.8%	0.7%	9,700	64.0	110	--	--	--	--
Palm to State	4	35	AT	1.8%	0.7%	12,800	65.0	130	50	--	--	--
State to San Jacinto	4	35	AT	1.8%	0.7%	19,100	67.0	185	75	--	--	--
San Jacinto to Hewitt	4	25	AT	1.8%	0.7%	14,800	62.5	83	--	--	--	--
Hewitt to Ramona Expwy.	4	25	AT	1.8%	0.7%	12,000	62.0	75	--	--	--	--
SOBOBA ROAD												
State to Main	6	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
SR-79												
Gilman Springs to Ramona Expwy.	8	65	AT	4.8%	4.7%	128,500	82.5	1,400	810	428	200	83
Ramona Expwy. to Sanderson	8	65	AT	4.8%	4.7%	99,800	81.5	1,200	720	368	170	69
Sanderson to Cottonwood	8	65	AT	4.8%	4.7%	88,400	81.0	1,150	680	340	155	62
Cottonwood to Esplanade	8	65	AT	4.8%	4.7%	114,900	82.0	1,250	760	395	185	75
South of Esplanade	8	65	AT	4.8%	4.7%	126,400	82.5	1,400	810	428	200	83
STATE STREET												

**Table 5.10-5
Future Noise Contours**

Arterial Type	Speed Limit (mph)	Elev.	% Trucks		Avg. Daily Traffic 2050	CNEL @ 50' From Near Lane C/L 2050	Distance to Existing Contours From Near Lane Centerline, feet				
			Med.	Hvy.			60dB	65dB	70dB	75dB	80dB
Menlo to Esplanade	40	AT	1.8%	0.7%	31,500	70.0	300	130	50	--	--
Esplanade to 7th	40	AT	1.8%	0.7%	45,000	72.0	395	185	75	--	--
7th to Cottonwood	40	AT	1.8%	0.7%	38,700	71.0	340	155	62	--	--
Cottonwood to Ramona Blvd.	50	AT	1.8%	0.7%	40,600	73.5	490	235	100	--	--
Ramona Blvd. to Ramona Expwy.	50	AT	1.8%	0.7%	38,500	73.0	460	215	90	--	--
Ramona Expwy. to Record	50	AT	1.8%	0.7%	15,600	69.0	255	110	--	--	--
Record to Gilman Springs	55	AT	1.8%	0.7%	10,900	68.5	235	100	--	--	--
UNNAMED A STREET											
Warren to Odell	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
Odell to Cawston	45	AT	1.8%	0.7%	10,600	66.5	170	69	--	--	--
Cawston to Sanderson	45	AT	1.8%	0.7%	8,900	66.0	155	62	--	--	--
Sanderson to SR-79	45	AT	1.8%	0.7%	14,000	67.5	200	83	--	--	--
UNNAMED B STREET											
Bridge to Warren	45	AT	1.8%	0.7%	19,400	69.0	255	110	--	--	--
UNNAMED C STREET											
Warren to Sanderson	45	AT	1.8%	0.7%	8,000	65.5	143	56	--	--	--
WARREN ROAD											
SR-79 to Cottonwood	55	AT	1.8%	0.7%	11,100	68.5	235	100	--	--	--
Cottonwood to unnamed Street A	55	AT	1.8%	0.7%	28,000	72.5	428	200	83	--	--
Unnamed Street A to Bridge	55	AT	1.8%	0.7%	27,500	72.5	428	200	83	--	--
Bridge to Ramona Blvd.	55	AT	1.8%	0.7%	17,000	70.5	320	143	56	--	--
Ramona Blvd. to unnamed Street B	55	AT	1.8%	0.7%	23,100	72.0	395	185	75	--	--
Unnamed Street B to Ramona Expwy.	55	AT	1.8%	0.7%	25,500	72.5	428	200	83	--	--
Ramona Expwy. to Record	55	AT	1.8%	0.7%	8,000	67.5	200	83	--	--	--
WASHINGTON AVENUE											
Hewitt to Meridian	40	AT	1.8%	0.7%	3,400	61.5	69	--	--	--	--

* Arterial Types: 1) 2 lanes, 35 mph or less; 2) 2 lanes, 40 mph; 3) 2 lanes, 45 mph or more; 4) 4-6 lanes, 35 mph or less; 5) 4-6 lanes, 40 mph; 6) 4-6 lanes, 45 mph or more; 7) 4-6 lane freeway, 55 mph or more; 8) 8 lane freeway, 55 mph or more.

Notes: 'AT', 'ABOVE', and 'BELOW' refer to the elevation of the arterial relative to the surrounding area.

Source: Weiland Associates, Inc

As identified in **Table 5.10-5**, large portions of the City will be subject to noise levels exceeding the City's noise standards. This increase in noise levels would result in a permanent increase in ambient noise levels above levels existing without the project. This is considered a significant impact. Implementation of Mitigation Measure N-3 would reduce the impacts associated with vehicular noise to a level less than significant. Mitigation Measure N-3 calls for the City to review discretionary development proposals for potential on- and off-site stationary and vehicular noise impacts per CEQA. Any proposed development located within a 60 dB or higher noise contour (per Figures 5.10-1) shall be reviewed for potential noise impacts and compliance with the noise and land use compatibility standards. The thresholds established in **Tables 5.10-1** and **5.10-2** will be used to determine the significance of impacts. If potential impacts are identified, mitigation in the form of noise reduction designs/structures (e.g., landscaped berms, barriers, walls, enhanced parkways, increased setbacks) will be required to reduce the impact to the extent feasible.

Stationary Noise

Implementation of the General Plan may result in excessive noise generated by non-residential projects such as industrial and commercial centers, restaurants and bars, religious institutions, and civic centers, which are allowed throughout the Planning Area. This noise generated by stationary sources may subject some residents and sensitive land uses to substantial increases in groundborne vibration and ambient noise levels that exceed established standards. This is considered a potentially significant impact. Implementation of Mitigation Measures N3 and N4 will reduce these impacts to a level less than significant.

Implementation of Mitigation Measure N-4 calls for the City to review proposed projects with the potential to generate stationary noise that could impact sensitive receptors through the discretionary project review process. The City shall limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. The City shall only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved.

5.10.4 Mitigation Measures

- N1 The City shall require all construction activities to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the City noise regulations (Title 24 California Code of Regulations, Noise Ordinance) in order to reduce impacts associated with temporary construction noise to the extent feasible. Trucks associated with construction activities shall follow the designated truck routes described in Implementation Program C-3 of the General Plan. (Implementation Program N-3)
- N2 The City shall actively enforce the standards identified within the City's Noise Ordinance and Noise Plan in order to reduce impacts associated with temporary construction noise to below a level of significance. The City shall update and amend the Noise Ordinance and Plan as appropriate and provide a link on the City's website for residents to file complaints against activities and uses that may be violating the Noise Ordinance. (Implementation Program N-4)

- N3 The City shall review discretionary development proposals for potential on- and off-site stationary and vehicular noise impacts per the CEQA. Any proposed development located within a 60 dB or higher noise contour (per Figures 5.10-1) shall be reviewed for potential noise impacts and compliance with the noise and land use compatibility standards. The thresholds established in **Tables 5.10-1** and **5.10-2** will be used to determine the significance of impacts. If potential impacts are identified, mitigation in the form of noise reduction designs/structures (e.g., landscaped berms, barriers, walls, enhanced parkways, increased setbacks) will be required to reduce the impact to the extent feasible. (Implementation Program N-1)
- N4 The City shall review proposed projects with the potential to generate stationary noise that could impact sensitive receptors through the discretionary review process. The City shall limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. The City shall only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved. (Implementation Program N-2)

5.10.5 Impact after Mitigation

Construction Activities

With implementation of Mitigation Measures N-1 and N-2, impacts related to construction activities will be less than significant.

Vehicular Traffic

With implementation of Mitigation Measure N-3, impacts related to vehicular traffic will be less than significant.

Stationary Noise

With implementation of Mitigation Measures N-3 and N-4, impacts related to stationary noise will be less than significant.

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5.11 Population and Housing

5.11.1 Environmental Setting

San Jacinto has experienced substantial population and housing growth in recent years. According to the U.S. Census Bureau, the City's population was 16,210 in 1990 and grew by 47 percent to 23,779 in 2000. When compared to other incorporated areas in Western Riverside County, San Jacinto's population growth rate was higher than the County's from 1990 to 2000, but lower than all of the surrounding jurisdictions except for Moreno Valley. The number of housing units grew by 38 percent from 6,845 in 1990 to 9,476 in 2003. Compared to the County as a whole, San Jacinto experienced a greater housing growth (38 percent compared to 20 percent), though many of the surrounding jurisdictions experienced greater levels of housing growth than San Jacinto.

The City had approximately 7.1 million square feet of non-residential building floor area in 2003. According to the 2000 Census, 8,603 San Jacinto residents were in the civilian labor force, representing a labor participation rate of approximately 50 percent. (The labor force includes employed and unemployed persons aged 16 years and above.). Residents were employed in three major occupation categories –managerial/professional, sales/office, and Service positions. The first two categories tend to provide higher pay jobs but service occupations tend to be lower pay. According to the State Employment Development Department, San Jacinto's unemployment rate in April 2002 was 6.2 percent, which is slightly lower than statewide rate of 6.4 percent.

5.11.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the proposed project:

- Induces substantial population growth in an area, either directly or indirectly;
- Displaces substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere; or
- Displaces substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.11.3 Potential Environmental Impacts

Population Growth

The General Plan will induce population growth as it proposes an increase of dwelling units and non-residential uses within the Planning Area. The location of vacant areas designated for housing is depicted in **Figure 5.11-1**. At buildout of the proposed General Plan, San Jacinto will have approximately 108,540 residents and 37,819 housing units. In addition, the General Plan proposes an increase of approximately 27 million square feet of non-residential building floor area.

These changes constitute a significant increase in urban development. This increase in urban development is designed to accommodate growth and housing demand that has already begun in the City and region. Currently, there is additional infrastructure being built in the western portion of the City independent of this General Plan update that will induce growth within the City. The General Plan will serve to provide the necessary guidance to ensure that the growth is properly managed in the future. However, this large increase in urban development will allow for the City of San Jacinto to increase to approximately 108,540 residents and 37,819 housing units. Therefore, implementation of the General Plan will induce substantial population growth within the City of San Jacinto. This is a significant impact.

Population and Housing Displacement

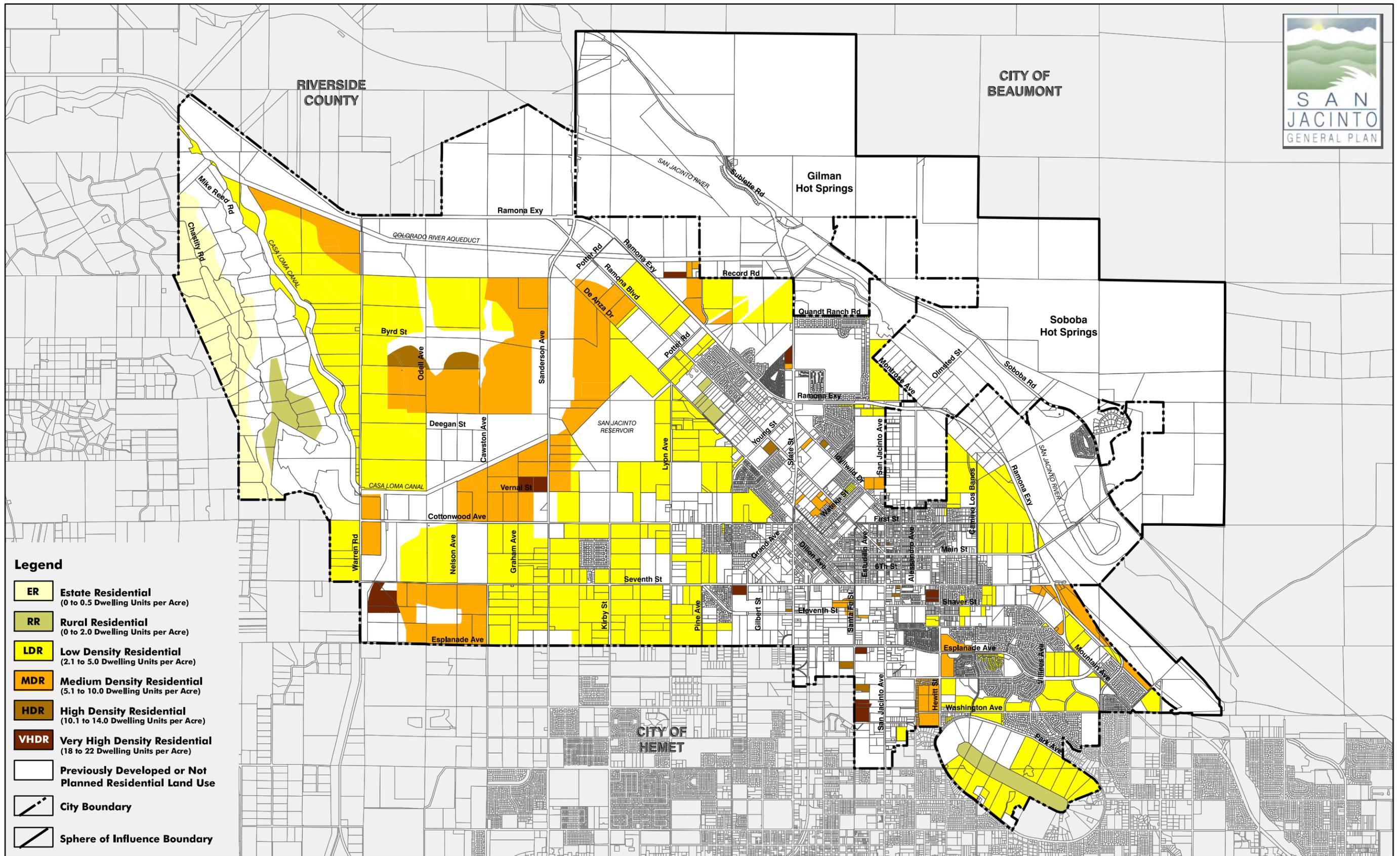
Implementation of the proposed General Plan would not result in the displacement of substantial numbers of existing housing units or persons since the majority of the land designated for future development will take place on undeveloped land. Some residential units may be removed in conjunction with the redevelopment of land for non-residential uses. However, this impact would not be significant, as removal of a large number of units is not likely and removal would likely be at the discretion of the property owner when land is sold or transferred for development. Housing growth allowed by the proposed General Plan will provide a variety of housing types affordable to lower, middle, and upper income households consistent with the goals of the Regional Housing Needs Allocation (RHNA) established by SCAG. As a result, no significant impact will result from the displacement of a large number of persons or housing units.

5.11.4 Mitigation Measures

The environmental impacts related to housing and population growth have been analyzed throughout this EIR and will be reduced to the extent feasible by mitigation measures identified elsewhere in the EIR.

5.11.5 Level of Significance After Mitigation

A combination of development pressures and economic realities within the region will continue to foster urban development in communities like San Jacinto. Consequently, the population of San Jacinto will increase dramatically between the present and future buildout. Due to the large population increases projected for the region and City of San Jacinto in particular, it is infeasible to reduce the environmental impacts associated with population growth within the City of San Jacinto to a level less than significant. Additionally, the purpose of the proposed General Plan is to update the existing General Plan so the City of San Jacinto can adequately accommodate projected growth and housing needs as determined by the State and regional agencies such as SCAG. The proposed land uses and policies of the General Plan are intended to accommodate this projected growth in an orderly and efficient manner while providing a variety of housing, shopping, employment, and recreational activities.



↑ Sources: County of Riverside GIS and the City of San Jacinto.

NORTH 0 1,500 3,000 4,500 6,000 Feet

Figure 5.11-1
San Jacinto Vacant Sites Land Use

Population Growth

Implementation of the General Plan will have significant and unavoidable impacts to population growth.

Population and Housing Displacement

No significant impacts related to population and housing displacement were identified for the project.

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5.12 Public Services and Recreation

Police Services

5.12.1.1 Environmental Setting

Sufficient law enforcement is necessary to ensure the public health and safety of the community. The City of San Jacinto began contracting for law enforcement services with the Riverside County Sheriff Department effective June 1, 2004. The Riverside County Sheriff Department maintains a Police Station at 160 W. 6th Street. The Police Department does not have a formally adopted target officer per population staffing ratio. The Police Department is currently staffed at a ratio of 1.08 officers per 1,000 citizens. This ratio was based on the staffing level that existed under the former City operated police department prior to its abolishment in May 2004.

Services offered by the Police Department include police patrol, traffic enforcement, Community Oriented Policing and Problem Solving (COPPS), investigations, bicycle patrol, canine team, Allied Riverside Cities Narcotics Enforcement Team (ARCNET), animal control, police explorers, citizen volunteers, Drug Abuse Resistance Education (DARE), and neighborhood watch.

Burglary, auto theft, and assault are the most frequent crimes in San Jacinto. The frequency of violent crimes such as homicide, rape and robbery is low. Protecting citizens and businesses from criminal activity is a priority in San Jacinto. Crime prevention techniques include substantive levels of police protection and education of the public about methods to reduce criminal activity.

The Police Department responded to 8,648 calls for service between June 1, 2004 and December 31, 2004. The Police Department classifies responses to calls for service into four categories based on the priority of the call for service. Life threatening calls, such as traffic collision injuries and assaults with weapons, are classified as a Priority 1 call. Calls pertaining to past thefts with no suspect information or abandoned vehicle are classified as a Priority 4 call. Most calls for service were categorized as a Priority 3 call and involved circumstances of a non emergency or past nature that were assigned to an available unit as soon as possible. **Table 5.12-1** shows the number of calls classified for each priority group and the average response time for each priority group (Vest, 2005).

**Table 5.12-1
Calls for Service and Response Times**

Priority Group	1	2	3	4	Total
Response Time (Minutes)	4.17	6.9	10.5	11.6	-
Number of Calls	193	3,155	3,235	2,065	8,648

5.12.1.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.

5.12.1.3 Potential Environmental Impacts

Implementation of the General Plan will result in an increase in population and new development. With the increase in population and new development, additional police services, and new or expanded facilities will be required to provide acceptable service levels. This is a potentially significant impact.

Implementation of Mitigation Measures PS-1 through PS-6 will reduce these impacts to a level less than significant. Mitigation Measure PS-1 calls for the City to adopt and maintain level of service (e.g" response times, call handling) and staffing standards as well as a developer fee program for the Police Department. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and facilities are provided and maintained based on short-term and long-term growth projections. Future developers will contribute funds for police services through developer fees.

Mitigation Measure PS-2 calls for the City to continue to work with the school districts to provide School Resource Officers (SROs) to assist the school districts with safety and security concerns. The City shall review the success of the program and funding/staffing levels on an annual basis, adjusting when necessary to ensure that adequate levels of service are provided and maintained. Mitigation Measure PS-3 calls for the City to continue to improve the City's ability to enforce traffic laws and respond to accidents through the Traffic Enforcement program. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and equipment/fleet maintenance are provided and maintained.

Mitigation Measure PS-4 calls for the City to implement an Emergency Operation Center (EOC) to respond to and manage disasters in cooperation with the school districts, police and fire departments, and local, state, and federal emergency management agencies. The City shall provide annual training for City staff in emergency management so that when they are called into action, they will be able to distribute information and resources to the public effectively.

Mitigation Measures PS-5 calls for the City to require design features on all new developments that reduce the potential for crime during the development review process. New projects should:

- Provide well-lighted and visible streets and street names, building entrances and addresses, common areas, and parking facilities.
- Limit access into and between buildings to reduce escape routes and to make undetected entry difficult.
- Provide landscaping that permits the natural surveillance of open areas and entryways, and avoids creating places for concealment.
- Be designed to permit emergency vehicle access to all sides of buildings located in multi-family and non-residential developments.
- Be designed to allow for defensible space.

Mitigation Measure PS-6 calls for the City to promote the establishment and operation of Neighborhood Watch programs throughout the City at City Hall and on the City's website. The City shall assign a police officer or volunteer patrol person to each Neighborhood Watch group for assistance in launching and maintaining a successful program.

The specific environmental impact of constructing new police facilities in the Planning Area cannot be determined at this General Plan level of analysis because no specific project is proposed at this time; however, like the development of other uses allowed under the General Plan, development and operation of public facilities, such as a police station, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.12.1.4 Mitigation Measures

- PS-1 The City shall adopt and maintain level of service (e.g" response times, call handling) and staffing standards as well as a developer fee program for the Police Department. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and facilities are provided and maintained based on short-term and long-term growth projections. Future developers will contribute funds for police services through developer fees. (Implementation Program CSF-1)
- PS-2 The City shall continue to work with the school districts to provide School Resource Officers (SROs) to assist the school districts with safety and security concerns. The City shall review the success of the program and funding/staffing levels on an annual basis, adjusting when necessary to ensure that adequate levels of service are provided and maintained. (Implementation Program CSF-2)
- PS-3 The City shall continue to improve the City's ability to enforce traffic laws and respond to accidents through the Traffic Enforcement program. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and equipment/fleet maintenance are provided and maintained. (Implementation Program CSF-3)
- PS-4 The City shall implement an Emergency Operation Center (EOC) to respond to and manage disasters in cooperation with the school districts, police and fire departments, and local, state, and federal emergency management agencies. Provide annual training for City staff in emergency management so that when they

are called into action, they will be able to distribute information and resources to the public effectively. (Implementation Program CSF-4)

PS-5 The City shall require design features on all new developments that reduce the potential for crime during the development review process. New projects should:

- Provide well-lighted and visible streets and street names, building entrances and addresses, common areas, and parking facilities.
- Limit access into and between buildings to reduce escape routes and to make undetected entry difficult.
- Provide landscaping that permits the natural surveillance of open areas and entryways, and avoids creating places for concealment.
- Be designed to permit emergency vehicle access to all sides of buildings located in multi-family and non-residential developments.
- Be designed to allow for defensible space. (Implementation Program CSF-5)

PS-6 The City shall promote the establishment and operation of Neighborhood Watch programs throughout the City at City Hall and on the City's website. The City shall assign a police officer or volunteer patrol person to each Neighborhood Watch group for assistance in launching and maintaining a successful program. (Implementation Program CSF-6)

5.12.1.5 Impact After Mitigation

Implementation of Mitigation Measure PS-1 through PS-6 shall reduce impacts to police services to less than significant level.

Fire Protection

5.12.2.1 Environmental Setting

As with law enforcement, fire protection is necessary to ensure the public health and safety. Riverside County Fire Department (RCOFD) is contracted to provide fire protection service to the City. Riverside County in turn has contracted with the State to administer RCOFD. The City is served by a fire station located on First Street. Two additional fire stations are located south of San Jacinto in Hemet and the unincorporated portion of the County. During fire season (seven months of the year), the California Department of Forestry (CDF) staffs an engine at the San Jacinto Station.

In 2004, the standard for fire protection was 3.0 firefighters per shift. The provision of adequate fire protection staffing, equipment and facilities is necessary to ensure public safety. San Jacinto continues to work with RCOFD to ensure that the level of service provided by RCOFD corresponds to the level of development within the City, as well as the risk of fire hazards.

The San Jacinto Fire Department provides fire suppression, vehicular accident response, and technical rescue. In 2004, the City San Jacinto Fire Station responded to 3,370 calls for

service, and the temporary CDF engine responded to an additional 686 calls for service. Approximately 72 percent of these responses were for vehicular accident response, 5 percent for structural fires, 7.5 percent for other fires, 3 percent for assistance outside of the city limits, 12.5 percent for miscellaneous calls. The San Jacinto Fire Department's average response time is 4.5 minutes, which is well below their target time of 5 minutes.

The San Jacinto Fire Department is rated as a Class Five Fire Department by the Insurance Services Organization (I.S.O.) (Michael, 2005). The I.S.O. inspects fire protection in cities and counties across the United States. A Class One is the best rating that can be achieved. Insurance companies use the I.S.O. Grade to figure premiums for homeowners or business insurance.

San Jacinto is subject to both wildland fires and structural fires. The natural vegetation in the Planning Area is highly prone to wildland fires. As shown in **Figure 5.12-1**, the largely undeveloped hillsides located in both the westernmost and easternmost portions of the Planning Area are High Fire Hazard Areas. These areas could create public safety hazards for residents within the Planning Area.

5.12.2.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.

5.12.2.3 Potential Environmental Impacts

Implementation of the General Plan will result in an increase in development and population in the planning area. This increase in development and population generated by the proposed land uses will require additional fire stations, personnel, and equipment over time to ensure adequate fire and emergency service capabilities. The Battalion Chief for the San Jacinto Fire Department has indicated that an additional station is planned to be ready for service in 2006. This station will help to meet the growing needs of the City, but it can not be stated that this station will adequately meet all the City's future needs for fire protection as implementation of the General Plan proceeds. Therefore, implementation of the General Plan will have a significant impact on fire protection resources.

Implementation of Mitigation Measures H-6, H-7, and H-8 in Section 5.7 and Mitigation Measure PS-7 shall reduce this impact to below a level of significance. Mitigation Measure H-6 requires the City of San Jacinto to continue to promote fire prevention in San Jacinto by:

- Working closely with the San Jacinto Fire Department and County of Riverside Sheriff's Department to implement fire hazard education and fire prevention programs;
- Coordinating with the water districts and the San Jacinto Fire Department to ensure that water pressure for existing developed areas and sites to be developed is adequate for fire fighting purposes;
- Conforming to Fire Department requirements for individual projects;
- Adopting and implementing the most recent Uniform Fire Code provisions and appropriate amendments;
- Requiring sprinklers in new non-residential buildings; and
- Requiring future development in the hillside areas to provide dual access to the proposed development site.

Mitigation Measure H-7 calls for the City to adopt and implement a monitoring mechanism to ensure that the Riverside County Fire Department, in cooperation with local water companies, conducts annual fire flow tests, especially in or adjacent to areas of high fire hazard such as the hillsides. Mitigation Measure H-8 requires that during the development review process, the City's Community Development Department in cooperation with the City Engineer and the Riverside County Fire Department, shall ensure that:

- New private access roads are at least 24 feet wide and provide adequate turning radius for fire and emergency vehicles.
- A fire management plan is prepared for all development located in or adjacent to wildfire-prone areas such as naturally vegetated hillsides. The fire management plan may require fire protection measures such as landscape or open space buffers, maintenance programs for weed and vegetation abatement and fire resistant plants, as well as non-combustible building materials, including roofing.
- Adequate service and response times can be provided to the development without reducing service to existing areas.
- Development plans clearly identify fire flows, hydrant siting, and access points.

Mitigation Measure PS-7 calls for the City to adopt and maintain level of service (e.g., response times, call handling) and staffing standards, as well as a developer fee program, for fire services in cooperation with the Riverside County Fire Department. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and facilities are provided and maintained. Future developers will contribute funds for fire services through the adopted developer fees. During the budget and CIP process, the City shall reserve future sites through purchase, eminent domain, dedication, donation, or a combination of these procedures.

The specific environmental impact of constructing new fire facilities in the Planning Area in the future cannot be determined at this General Plan level of analysis because no specific project is proposed at this time; however, like the development of other uses allowed under the General Plan, development and operation of public facilities, such as a fire station, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.12.2.4 Mitigation Measures

PS-7 The City shall adopt and maintain level of service (e.g., response times, call handling) and staffing standards, as well as a developer fee program, for fire services in cooperation with the Riverside County Fire Department. The City shall review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service and facilities are provided and maintained. Future developers will contribute funds for fire services through the adopted developer fees. During the budget and CIP process, the City shall reserve future sites through purchase, eminent domain, dedication, donation, or a combination of these procedures. (Implementation Program CSF-7)

5.12.2.5 Impact After Mitigation

Implementation of Mitigation Measures PS-7 and H-7 of Section 5.7 will reduce all impacts to fire protection to less than significant level.

Education

5.12.3.1 Environmental Setting

San Jacinto is served by San Jacinto Unified School District (SJUSD) and Hemet Unified School District (HUSD). SJUSD serves the majority of the Planning Area, with a section of the southern portion of the City, including Park Hill, located within HUSD

Ten SJUSD schools are located within the City limits, including six primary (K- 5), one intermediate (5-6), one middle (7-8) and two 9-12 high schools (one comprehensive and one continuation) (**Table 5.12-2**) (Kleinman, 2004). No HUSD school is located within the Planning Area, however, students from San Jacinto attend six HUSD schools. Although the Hemet Unified School District was contacted during preparation of the EIR, it was not possible to obtain data from them regarding existing San Jacinto Student attendance at Hemet District schools. However, we have provided the capacity and enrollments of the schools nearest San Jacinto that are likely to be attended by San Jacinto students currently or that may be attended by them in the future in **Table 5.12-3** (Peckham, 2004).

Table 5.12-2
San Jacinto Unified School District Schools

School	Location	Capacity	Enrollment	Excess Capacity
Hyatt Elementary School	400 East Shaver Street	692	600	92
Park Hill Elementary School	1157 East Commonwealth Avenue	792	619	173
San Jacinto Elementary School	136 North Ramona Boulevard	692	615	77
De Anza Elementary School	1089 De Anza Drive	818	650	168
Clayton A. Record Elementary School	1600 Malaga Drive	825	525	300

**Table 5.12-2
San Jacinto Unified School District Schools**

Estudillo Elementary School	900 Las Rosas Drive	650	647	3
Monte Vista Middle School	181 North Ramona Boulevard	1,116	752	364
North Mountain Middle School	1202 East Seventh Street	1,080	817	263
San Jacinto High School	500 Idyllwild Drive	1,530	1,665	-135
Mountain View Alternative Learning Center	699 Young Street	100	165	-65
Total		8,295	7,055	1240

Source: San Jacinto Unified School District, 2004

**Table 5.12-3
Hemet Unified School District Schools**

School	Location	Capacity	Enrollment	Excess Capacity
Bautista Creek Elementary School	441 Lake Street	650	1029	-379
Cawston Elementary School	4000 W. Menlo Avenue	750	514	236
Fruitvale Elementary School	2800 W. Fruitvale Avenue	550	684	-134
Hemet Elementary School	633 E. Kimball Avenue	575	832	-257
Little Lake Elementary School	26091 Meridian Street	550	794	-244
Santa Fe Middle School	831 E. Devonshire Avenue	1053	1044	9
Alessandro High School	6866 San Jacinto Street	354	180	174
Hemet High School	41701 Stetson Avenue	575	832	-257
Total		5,057	5,909	-852

Source: Hemet Unified School District, 2004

5.12.3.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public school facilities.

5.12.3.3 Potential Environmental Impacts

Implementation of the General Plan will result in approximately 28,891 additional dwelling units within the Planning Area, which will increase the student-age population of San Jacinto and generate a need for expansion of existing schools and staff within the school district. New or expanded education facilities will be required to achieve the City's acceptable education levels.

In order to adequately meet the needs associated with future urban growth associated with the proposed General Plan, the SJUSD shall periodically conduct an analysis of the future need for schools based on current and future population figures. In this analysis, SJUSD will develop student generation rates based on future population projections and residential units that have been constructed within the last five years that are representative of dwelling units that will be constructed in the future. These generation rates can then be used to estimate the number for new students SJUSD will need to accommodate and how many new schools will be needed and when they will need to be ready to open. Since student generation rates are recalculated periodically based on changing conditions over the course of a five year period, it is impossible to predict the number of schools that will be required at buildout of the general plan. The total number of new students will be divided between the ten existing schools that currently serve San Jacinto and potential future schools depending on the location and type of students, and capacity of nearby schools. The specific location of school sites will be determined by the San Jacinto Unified School District as future development is proposed.

Thus, for the reasons discussed above, implementation of the General Plan will have a significant impact on education resources. Implementation of Mitigation Measures PS-8 and PS-9 will reduce this impact to below a level of significance. Mitigation Measure PS-8 calls for the city to continue to work with the school districts to the extent allowed by State law to ensure that adequate school facilities are provided and maintained in the community. Specifically, the City shall:

- Ensure that the school districts are consulted regarding the potential impact the project may have on educational services and facilities during the processing of residential and non-residential development proposals. When proposed developments cannot be served by existing facilities and services, the City shall work with the developer and the school district to explore other options for service provision and facility funding.
- Prior to approving a project that is likely to generate students, the City shall require the applicant to mitigate school impacts to the full extent permitted by State law through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.
- Cooperate with school districts to update population projections, student generation formulas, potential school sites, and facilities improvement plans in their Long Range Facility and Master Plans.
- Work with school districts to expedite the construction of new schools, when necessary.

- Cooperate with school districts and recommend appropriate sites for new school development as proposals for new school facilities come forward.

Mitigation Measure PS-9 requires that during the development and environmental review process for future schools located in San Jacinto, the City shall cooperate with the appropriate school district to minimize the impacts of school development through traffic management and parking measures, and the use of appropriate site layout and buffering techniques. When feasible, the City shall encourage the location of new schools at the periphery of residential neighborhoods and provide buffers at all common property lines with residential uses.

The funding of school facilities has been impacted by the passing of SB 50, which has established the base amount of allowable developer fees, known as "Level 1 fees" at \$1.93 per square foot for residential developments and \$0.31 per square foot for commercial developments (See Government Code 65995(b)). These fees are the same caps that were in place at the time the SB-50 was enacted and are subject to inflation adjustment every two years.

School Districts can impose higher fees, known as Level 2 fees, for residential construction under certain circumstances. Level 2 fees, which are equal to 50 percent of land and construction costs, can be imposed if the school district (1) prepares and adopts a school needs analysis for facilities, (2) are determined by the State Allocation Board to be eligible to impose those fees, and (3) meet at least two of the following conditions:

- At least 30 percent of the district's students are on a multi-track year-round schedule;
- The district has placed on the ballot within the previous four years a local school bond that received at least 50 percent of the votes cast;
- The District has passed bonds equal to 30 percent of its bonding capacity; or
- At least 20 percent of the district's teaching stations are relocatable classrooms.

In the event that the State's bond funds are exhausted, a school district eligible to impose Level 2 fees would be eligible to impose Level 3 fees, which are equal to 100 percent of land and construction costs of new schools required as a result of new developments.

SB-50 stipulates that the exclusive method of mitigation for the impact of school facilities in accordance with CEQA is to pay the maximum school fees. Furthermore, SB-50 stipulates that these fees provide full mitigation of school facilities when considering the approval of a development project. Therefore, impacts related to school fees will be less than significant.

5.12.3.4 Mitigation Measures

PS-8 The City shall continue to work with the school districts to ensure that adequate school facilities are provided and maintained in the community to the full extent permitted by State law. Specifically, the City shall:

- Ensure that the school districts are consulted regarding the potential impact the project may have on educational services and facilities during the processing of residential and non-residential development proposals. When proposed developments cannot be served by existing facilities and services, the City shall work

with the developer and the school district to explore other options for service provision and facility funding.

- Prior to approving a project that is likely to generate students, the City shall require the applicant to mitigate school impacts to the full extent permitted by State law through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.
- Cooperate with school districts to update population projections, student generation formulas, potential school sites, and facilities improvement plans in their Long Range Facility and Master Plans.
- Work with school districts to expedite the construction of new schools, when necessary.
- Cooperate with school districts and recommend appropriate sites for new school development as proposals for new school facilities come forward. (Implementation Program CSF-10)

PS-9 During the development and environmental review process for future schools located in San Jacinto, the City shall cooperate with the appropriate school district to minimize the impacts of school development through traffic management and parking measures, and the use of appropriate site layout and buffering techniques. When feasible, the City shall encourage the location of new schools at the periphery of residential neighborhoods and provide buffers at all common property lines with residential uses. (Implementation Program CSF-11).

The specific environmental impact of constructing new school facilities in the Planning Area cannot be determined at this General Plan level of analysis because no specific project is proposed at this time; however, like the development of other uses allowed under the General Plan, development and operation of public facilities, such as a school, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.12.3.5 Impact After Mitigation

Implementation of mitigation measures PS-8 and PS-9 will reduce the impact to educational services to below a level of significance.

Libraries

5.12.4.1 Environmental Setting

The Riverside County Library System provides library services to the City through Library Systems & Services, which has been contracted by the County to operate the various County libraries. A new library branch was opened next to the San Jacinto High School at 500 Idyllwild Drive in May 2000. The San Jacinto Library is 10,000 square feet in size and

serves as a joint use public library and high school library. The San Jacinto Library offers summer reading programs for age groups ranging from toddlers to high school age children, and offer a “Children’s Story Hour” every week for young children. In conjunction with the Riverside County Library System, the San Jacinto Library offers a literacy program, the English Language and Literacy Institute (ELLI), which focuses on helping children learn English as a second language. The San Jacinto Library also offers a program called Leer Es Triunfar (Reading is Succeeding), which is a Latino community outreach program. (Pilate, 2005).

5.12.4.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public libraries.

5.12.4.3 Potential Environmental Impacts

Implementation of the General Plan will result in an increase in population and new development. With the increase in population and new development, additional library services, and potentially new or expanded facilities will be required to adequately serve San Jacinto. The City of San Jacinto has established that the appropriate ratio of library services to residents is 935 square feet of library space and 3,178 books per 1,000 estimated dwelling units (edu). Estimated dwelling units are calculated using a multiplier of 1.00 for single family residential units and 0.84 units for apartments. At buildout, the City of San Jacinto would have 34,073 single family residential units and 3,640 apartments, which would necessitate a total of approximately 34,717 square feet of library space and approximately 118,001 books. The existing library facilities would not meet these ratios. This represents a potentially significant impact. Implementation of Mitigation Measure PS-10 will reduce the impact to below a level of significance. Mitigation Measure PS-10 requires the City to continue to work with the Riverside County Library System to ensure that library development keeps pace with overall City development and population growth. As part of the development review process, the City shall ensure that developers pay all required library fees prior to occupancy of their projects.

The specific environmental impact of constructing a new library in the Planning Area cannot be determined at this General Plan level of analysis because no specific projects are proposed; however, like the development of other uses allowed under the General Plan, development and operation of public facilities, such as a new library, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.12.4.4 Mitigation Measures

PS-10 The City shall continue to work with the Riverside County Library System to ensure that library development keeps pace with overall City development and population growth. As part of the development review process, the City shall continue to ensure that developers pay all required library fees prior to occupancy of their projects, which currently stand at \$630 per single family unit and \$532 per apartment. (Implementation Program CSF- 29)

5.12.4.5 Impact After Mitigation

Implementation of Mitigation Measure PS-10 will reduce the impact to library service to below a level of significance.

Recreation and Open Space

5.12.5.1 Environmental Setting

The City and the Valley-Wide Recreation and Park District provide a wide range of recreational activities and facilities for the residents of San Jacinto. The majority of the existing park facilities are located within the developed core of the City, where they best serve the residents of the community. The City's park system consists of existing mini parks, neighborhood parks, and community parks, as described below. **Table 5.12-4** provides a complete list and description of existing park facilities within the City. The locations of existing park facilities are shown on **Figure 4-1**.

Table 5.12-4
Existing Parks and Recreational Facilities Inventory

Name	Size	Location
Druding Park	1.0 acres	Bordered by Ramona Blvd, Pico Ave, and 2 nd St.
Francisco Estudillo Heritage Park	5.0 acres	Dillon Ave., Main St., Ash St., and 7th St.
Harvest Park	2.0 acres	Ramona Blvd. and Savory Lane
Hoffman Park	2.0 acres	At Community Center - west side of San Jacinto Ave, south of 6 th St.
Mistletoe Park	2.5 acres	South side of Main St between Hewitt Ave and Mistletoe Ave.
Rancho San Jacinto Parks	20.0 acres	Multiple locations
Sagecrest Park	4.5 acres	Sagecrest lane, southwest of Skyview Park
Sallee Park	6.7 acres	On Idyllwild Dr between Tahquitz and Monte Vista Avenues.
Skyview Park	4.0 acres	Ramona Blvd. at Skyview
Soboba Springs Park	2.5 acres	Verona, west of Soboba Rd.
Valley-Wide Regional Park	35 acres	North side of Esplanade Ave between State Street and Palm Ave.
Total Acres	83.5	

Mini Park

A mini park is typically one acre or less in size and has a service area of ½ mile or less. A mini park may take the form of a city's entry feature, a viewpoint, a small downtown plaza, or a vest pocket park. Examples of mini parks within San Jacinto include Druding Park and Hofmann Park. This type of small park is best suited to areas of higher density housing or commercial uses where it becomes a substitute for a backyard or provides a retreat from heavy vehicular congestion. While there may be a few appropriate examples for the future use of mini parks within San Jacinto, such as existing apartment complexes or senior housing where little open space is available for a larger park, mini parks will generally be discouraged since they serve a very limited area, offer minimal recreational opportunities, and are expensive to maintain.

Neighborhood Parks

There are two neighborhood parks within San Jacinto: Mistletoe Park and Rancho Park. The following criteria are considered when developing neighborhood parks:

- The park should serve an area of approximately one square mile and be centrally located so that its service area has no more than a 2 mile radius, allowing residents to walk to the park.
- The park size should generally range from five to 15 acres in size, depending on the facilities provided.
- The park should provide for the daily recreational needs of residents in the immediate area, and should provide a variety of active and passive recreational facilities. Facilities may include picnic areas, tot lots, court areas, multipurpose ball fields, and limited parking to meet the needs of the on-site activities.

Community Parks

The City currently has two parks with community park facilities that serve the community: Sallee Park and Valley-Wide Regional Park. The following criteria are considered when developing community parks:

- The park should serve a radius of up to two miles, and should be centrally located with adequate parking facilities.
- The park should be 15 to 25 acres in size,
- The park should provide adequate facilities which can include swimming pools, tennis courts, ball fields which are designed to allow league play, recreation buildings, picnic facilities, and walking trails.

The City continues to implement its policies regarding the expansion, provision, maintenance, and funding of parks in order to expand the recreational opportunities at its community parks.

Regional Parks

While there are no improved regional parks within the Planning Area, the unimproved San Jacinto River Park provides an opportunity for the development of a regional park. Regional parks typically provide service to persons living within one hour driving of the park. These parks, particularly linear parks, can range in size from a few acres, but are usually larger in size, reaching sizes in excess of 1,000 acres, depending on the facilities provided within the park. Regional parks often are associated with large natural areas, and provide a range of passive activities, such as trails and camping. The City continues to work with the County and other agencies responsible for the provision of large scale regional parks to promote the development of regional parks within the Planning Area.

Linear Parks

The Rancho San Jacinto community was designed with a linear park system. The existing 35-acre linear park system uses storm water detention basins to connect with a system of bicycle/pedestrian paths. Additional opportunities for future linear parks include bike and pedestrian paths along the river levee. Linear parks do not serve a specific service area, nor is there a standard size for these facilities. Typical facilities associated with linear parks include pathways, horseback riding trails, and hiking and bicycling trails, often located along a scenic or otherwise interesting corridor. Linear parks are appropriate uses for drainage courses, utility easements, fault zones, and river levees. The City continues to review subdivision proposals for the potential inclusion of linear parks along required flood control facilities and other open space easements.

Planned Park Space and Other Recreational Opportunities

The approximate acreage and features of planned parks are summarized in **Table 5.12-5**. The locations of proposed park facilities are shown on the land use policy map illustrated in **Figure 3-2**. Other recreational opportunities include the two golf courses within the sphere of influence, the Soboba Springs and Golden Era Golf Courses. The unimproved San Jacinto River Park is also within the City's sphere of influence and the new Diamond Valley lake recreational area to the south of the City also offers the residents of San Jacinto additional outdoor recreation.

The Valley-Wide Recreation and Park District provides another important resource for the City to ensure the provision of adequate amounts of parkland for residents. The District has access to additional funding sources and operational expertise that can expand the recreational opportunities for San Jacinto residents.

**Table 5.12-5
Planned Parks and Recreational Facilities**

Site	Net New Acreage	Location
Camino Los Banos Park	10 acres	East of Camino Los Banos, between Main St and 7 th St.
Cottonwood Park	15 acres	N/A
De Anza Park	10 acres	De Anza Elementary School
Potter Road Park	10 acres	South of Record Rd, between Chase St and Potter Road
Sallee Park (expansion)	5 acres	Monte Vista Middle School, adjacent to existing Sallee Park
Total Acres	50 acres	

Park Space Demand

To ensure sufficient park and recreational opportunities, the City has established a parkland standard of five acres per 1,000 residents. The standard is useful in determining existing parkland deficiencies and predicting the demand from future population growth. **Table 5.12-6** summarizes the parkland requirements for the existing population, as well as the existing park space within the City. Currently the City has adequate park space to meet the existing population.

**Table 5.12-6
Existing Park Demand**

	Population	Park Space Demand based on Population ⁽¹⁾	Available Acreage from Existing Parkland ⁽³⁾
Existing City ⁽²⁾ (2001)	28,479	143 acres	502 acres

Notes:

1. Five acres per 1,000 persons.
2. Existing City population based on P&D Consultants Land Use analysis (See Table 5.9-1 of the EIR).
3. Includes parks and open space recreation.

5.12.5.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for park and recreational facilities; or
- Increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

5.12.5.3 Potential Environmental Impacts

Buildout of San Jacinto in a manner consistent with the proposed General Plan will result in an increase in population, and a corresponding increase in the amount of needed park space. Based upon the population forecast information provided in **Table 5.1-1**, build out of the General Plan will result in a population of 108,541. This translates in to a park need of 543 acres. Based upon the projected land uses and acreages identified in **Table 5.1-1**, there will be 649 acres of existing and planned park space available (**Table 5.12-7**). Therefore, implementation of the proposed General Plan will not result in a significant impact to park facilities.

**Table 5.12-7
Existing and Future Park Acreage Needs**

	Population	Park Space Demand based on Population ⁽²⁾	Available Acreage from Existing and Planned Parkland ⁽³⁾
Future ⁽¹⁾ (2050)	108,541	543 acres	649 acres

Notes:

1. Projected population based on P&D Consultants Land Use analysis (See Table 5.9-1 of the EIR).
2. Five acres per 1,000 persons.
3. Includes parks and open space recreation.

5.12.5.4 Mitigation Measures

No significant impact to recreation and open space was identified for the project, therefore no mitigation measures are required.

5.12.5.5 Impact After Mitigation

No significant impact to recreation and open space was identified for the project, therefore no mitigation measures are required. Implementation of the proposed General Plan will have a less than significant impact on recreation and open space.

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5.13 Traffic

5.13.1 Environmental Setting

Methodology

Urban Crossroads, Inc. inventoried the Planning Area during 2001 to identify existing transportation conditions, and conducted the necessary field work to document the relevant issues. In addition, responsible or potentially affected agencies, groups and individuals, including RCTC, WRCOG and SCAG, were contacted to identify issues regarding traffic and circulation aspects of the General Plan. The information presented in this section is summarized from the City of San Jacinto General Plan Traffic Study (January, 10 2005 – revised) provided in Appendix C of this EIR.

Level of Service (LOS) Standards

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.
- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service were determined using the HCM methodology. For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. Levels of service at the signalized Planning Area intersections were evaluated using an HCM intersection analysis program. For all way stop (AWS) controlled intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. The AWS controlled intersection has been evaluated using the HCM methodology for this type of multi-way stop controlled intersection configuration. The level of service criteria for this type of intersection analysis is also based on average total delay per vehicle for the overall intersection.

The Planning Area intersections, which are currently stop sign controlled with stop control on the minor street only, have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. The level of service is calculated using data that describes the intersection configuration and traffic volumes at the Planning Area location. The level of service criteria for this type of intersection analysis is based on average total delay per vehicle for the worst minor street movement(s). The level of services are defined for the various analysis methodologies in **Table 5.13-1**.

Table 5.13-1
Average Total Delay Per Vehicle Per Vehicle (seconds)

	Average Total Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
Level of Service A	0 to 10.00	0 to 10.00
Level of Service B	10.01 to 20.00	10.01 to 15.00
Level of Service C	20.01 to 35.00	15.01 to 25.00
Level of Service D	35.01 to 55.00	25.01 to 35.00
Level of Service E	55.01 to 80.00	35.01 to 50.00
Level of Service F	80.01 and up	50.01 and up

Source: Urban Crossroads, 2005

Existing Roadway Characteristics

Figure 5.13-1 contains existing roadway cross-sections and intersection lane configurations for the San Jacinto area. **Figure 5.13-2** shows available average daily traffic (ADT) count data for the existing roadways which are described below:

Bridge Street is currently a two (2) lane undivided roadway in the Planning Area.

Warren Road is currently a two (2) lane undivided roadway in the Planning Area. Warren Road carries approximately 6,000 to 8,800 vehicles per day (VPD). North of the Ramona Expressway, Warren Road carries approximately 200 VPD.

Lamb Canyon Road is a four (4) lane divided roadway through the Planning Area north of Gilman Springs Road. There is an existing urban interchange with Gilman Springs Road.

Lyon Avenue is a two (2) lane undivided roadway in the Planning Area. It currently serves between 1,300 and 2,300 vehicles per day.

Palm Avenue is a two (2) lane undivided highway.

State Street is a four (4) lane undivided roadway south of Cottonwood Avenue to north of Esplanade Avenue and carries between 15,100 and 17,700 VPD. It is a four (4) lane divided roadway north of Cottonwood Avenue and south of Ramona Boulevard and carries 19,900 VPD. North of Ramona Boulevard, and south of Esplanade Avenue it is a two (2) lane undivided roadway and carries between 9,800 to 15,900 VPD.

San Jacinto Avenue is a two (2) lane undivided roadway and carries approximately 13,000 vehicles per day in the Planning Area.

Hewitt Street is a two (2) lane undivided highway in the Planning Area except just north of Esplanade Avenue, where it is four (4) lanes, undivided.

Gilman Springs Road is a two (2) lane undivided roadway in the Planning Area. It provides access to the City of San Jacinto from the Moreno Valley area.

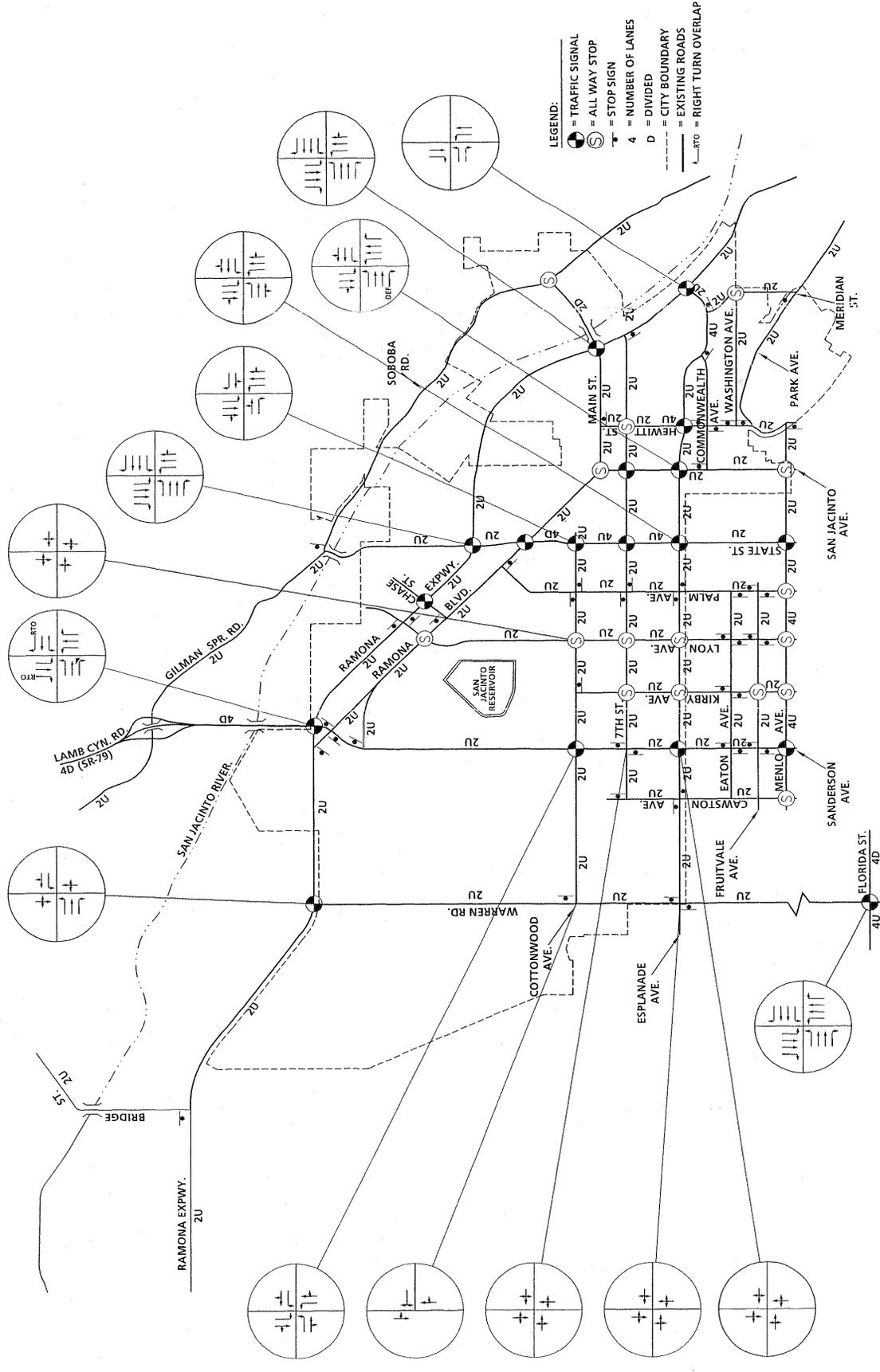
Meridian Street, Cawston Avenue and Kirby Avenue are two (2) lane undivided roadways in the Planning Area.

Ramona Expressway is a two (2) lane undivided roadway. It carries approximately 11,900 to 19,100 VPD. The Ramona Expressway provides regional access to the City of San Jacinto from the surrounding communities.

Cottonwood Avenue is currently a two (2) lane undivided roadway in the Planning Area. It carries approximately 2,300 to 5,400 VPD.

Eaton Avenue is currently a two (2) lane undivided roadway in the Planning Area.

Menlo Avenue is a four (4) lane undivided roadway through the Planning Area west of Palm Avenue. East of Palm Avenue it becomes a two (2) lane undivided roadway.



Sources: Urban Cross Roads, 2005



North Not to Scale

Figure 5.13-1 Existing Roadway Network

Ramona Boulevard and Soboba Road are two (2) lane undivided roadways.

Florida Street provides access to the City of San Jacinto from surrounding areas. It is a four (4) lane undivided roadway east and west of Warren Road.

Seventh Street is a two (2) lane undivided roadway. It carries approximately 100 to 1,000 VPD.

Sanderson Avenue is a two (2) lane undivided roadway south of the Ramona Expressway. On this segment, Sanderson carries from 10,800 to 16,800 VPD. North of the Ramona Expressway, it is a four (4) lane divided section carrying 28,500 VPD.

Main Street is a two (2) lane divided roadway east of the Ramona Expressway. It is a two (2) lane undivided road east of San Jacinto Avenue.

Esplanade Avenue is a two (2) lane undivided roadway throughout the Planning Area. Just west of Warren Road, it carries 700 vehicles per day. East of Warren Road, average daily traffic (ADT) volume is 4,200. The highest segment of Esplanade Avenue is east of State Street, with a volume of 14,600 VPD.

Additionally, the Riverside County Transportation Commission (RCTC) is in the planning stages of the Mid County Parkway (MCP) project, referred to in this document as the Ramona Expressway. The MCP is a proposed 32-mile transportation corridor that will relieve traffic congestion for east-west travel in western Riverside County between the San Jacinto and Corona areas and help address future transportation needs through 2030.

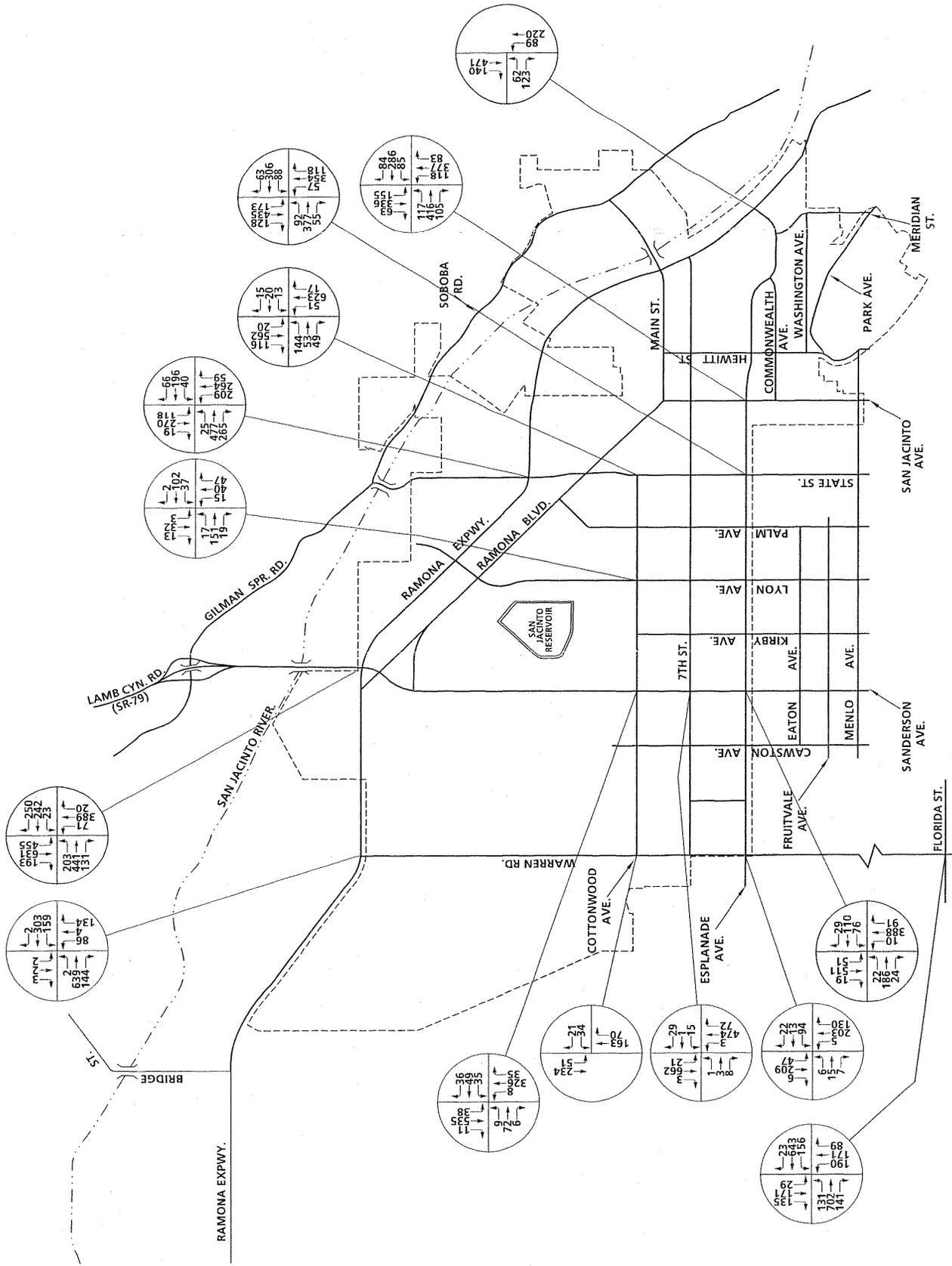
The proposed corridor is a component of the Riverside County Integrated Project, a region wide transportation and environmental planning project undertaken over several years by the Riverside County Transportation Commission (RCTC) and the County of Riverside. The Project determined that a corridor in the vicinity of Cajalco Road in the west and Ramona Expressway in the east would significantly reduce congestion, improve traffic flow, and reduce travel times on I-215, SR 91, SR 74, and SR 60. County residents, through their input at public meetings, helped determine the general corridor locations under consideration. Further study of potential route locations is being conducted by RCTC.

Intersection Service Levels

Figures 5.13-3 and Figure 5.13-4 contain existing AM and PM peak hour intersection turning movement counts, respectively. Traffic count data sheets are contained in Appendix C of this EIR.

Existing peak hour traffic operations have been evaluated for key Planning Area intersections. The results of this analysis are summarized in **Table 5.13-2**, along with the existing intersection geometrics and traffic control devices at the analysis locations.

For existing traffic conditions, most of the Planning Area intersections are currently operating at Level of Service "C" or better during the peak hours. However, the



Sources: Urban Cross Roads, 2005



North Not to Scale

Figure 5.13-4 Existing PM Peak Hour Intersection Volumes

intersection of Sanderson Avenue/Ramona Expressway operates at Level of service "D". Existing HCM calculation worksheets are provided in Appendix "B".

Alternative Transportation

Public transportation and alternative modes of travel such as bicycling are an important component of a comprehensive circulation system. Public and alternative modes of transportation offer an alternative to the use of automobiles and help reduce air pollution and road congestion. To promote the increased usage of these modes of transportation, adequate facilities must be provided. In addition, truck route orientation and availability of regional and local airport services are important transportation components.

Bike Facilities

Riverside County has a bikeway system in the unincorporated area of the county areas. Portions of this bikeway system are located near and within the City of San Jacinto. Bikeway facilities that make up this bikeway system are described below:

Class I Bikeway (off-road): A Class I bikeway (off-road) provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians. Crossflows with motorized vehicles are minimized. Minimum width for a two-way bikeway is eight (8) feet. Desirable width is 10-12 feet. The minimum shoulder width is two (2) feet on each side.

Class II Bikeway (on-road): A Class II bikeway provides a restricted right-of-way on a roadway's shoulder designated for the exclusive or semi-exclusive use of bicycles. Through travel by motor vehicles or pedestrians is prohibited. Crossflows by pedestrians and motorists are permitted. Vehicle parking is prohibited. The typical lane width for a bikeway is eight (8) feet. A reduction in width to allow for added turning lanes may be permitted. In such cases, a five (5) foot width, or gutter width plus three (3) feet, whichever is greater is the minimum width.

Class I and Class II bikeways are located on or adjacent to the following roadway segments:

- Ramona Expressway (Class I), West City Limit to East City Limit
- Warren Road (Class II), Cottonwood to Ramona Expressway
- Sanderson Avenue (Class II), South City Limit To Ramona Expressway
- State Street (Class II), South City Limit to North City Limit
- Cottonwood Avenue (Class II), Warren Road to State Street
- Esplanade Avenue, West City Limit to Ramona Expressway

Bus Routes

Public bus service is provided by the Riverside Transit Agency. The existing bus routes provide limited access to employment centers, shopping and recreational areas within the City.

Three bus routes currently operate in the City of San Jacinto. Route 31 provides access along State Street and to the north and south ends of the City. Route 32 serves Mount San

Jacinto Community College. Route 42 provides service from the eastern portion of the City to shopping areas in the south.

Metrolink

Commuter rail in the Southern California region has significantly grown along with the Riverside Metrolink system, which now provides service from Riverside County to Orange County and Los Angeles County. The long term plan calls for extension of the Riverside Transit Corridor, in accordance with performance standards, along the San Jacinto branch line to the City of Hemet.

Truck Routes

San Jacinto experiences moderate amounts of truck traffic generated by commercial and light industrial uses. Truck traffic will increase in future years to support new businesses. Noise impacts and congestion can be caused by truck traffic in urban areas. To avoid such impacts, truck routes will be oriented to the Ramona Expressway and on SR-79 through the Planning Area.

Aviation Facilities

There are several major commercial airports in Southern California used for passenger service by residents of San Jacinto including: Palm Springs Regional, Ontario International Airport (San Bernardino County), Orange County-John Wayne Airport, Los Angeles International Airport, and Lindbergh Field (San Diego County). Of these, only Palm Springs International Airport is located in Riverside County. In addition to the regional air passenger airport facilities, the March Inland Port/Air Reserve is located in Riverside County along SR-215 near Perris. This airport provides regional air cargo service and also continues to function as the Air Reserve Base in Riverside County.

Closer to the City of San Jacinto, two public-use general aviation airports are in operation: French Valley Airport and Hemet-Ryan Airport.

5.13.2 Threshold for Determining Significance

For the purposes of this EIR, a significant impact would occur if implementation of the proposed project:

- Causes an increase in traffic that exceeds LOS D for roadway intersections;
- Increases hazards due to a design feature or incompatible uses;
- Results in inadequate emergency access;
- Conflicts with adopted policies, plans, or programs supporting alternative transportation.

5.13.3 Potential Environmental Impacts

Roadway Segments

The arterial roadway system in San Jacinto is defined using a hierarchical classification system. Roadway functional classifications are differentiated by size, function, and capacity. The arterial roadway functional classification system is generally derived from the Riverside County General Plan Circulation System. The proposed General Plan circulation system has been designed to more closely reflect City plans.

A well-planned and designed street and highway system facilitates the movement of vehicles and provides convenient access to surrounding developments. The City of San Jacinto's efforts to develop a system of collector and arterial highways and roads provide the basis for a safe, efficient roadway system. **Figure 5.13-5** shows the proposed future streets and highways system at build-out in addition to functional classifications. The figure inset shows the north and south MCP alignments currently being analyzed by RCTC.

Functional Classifications

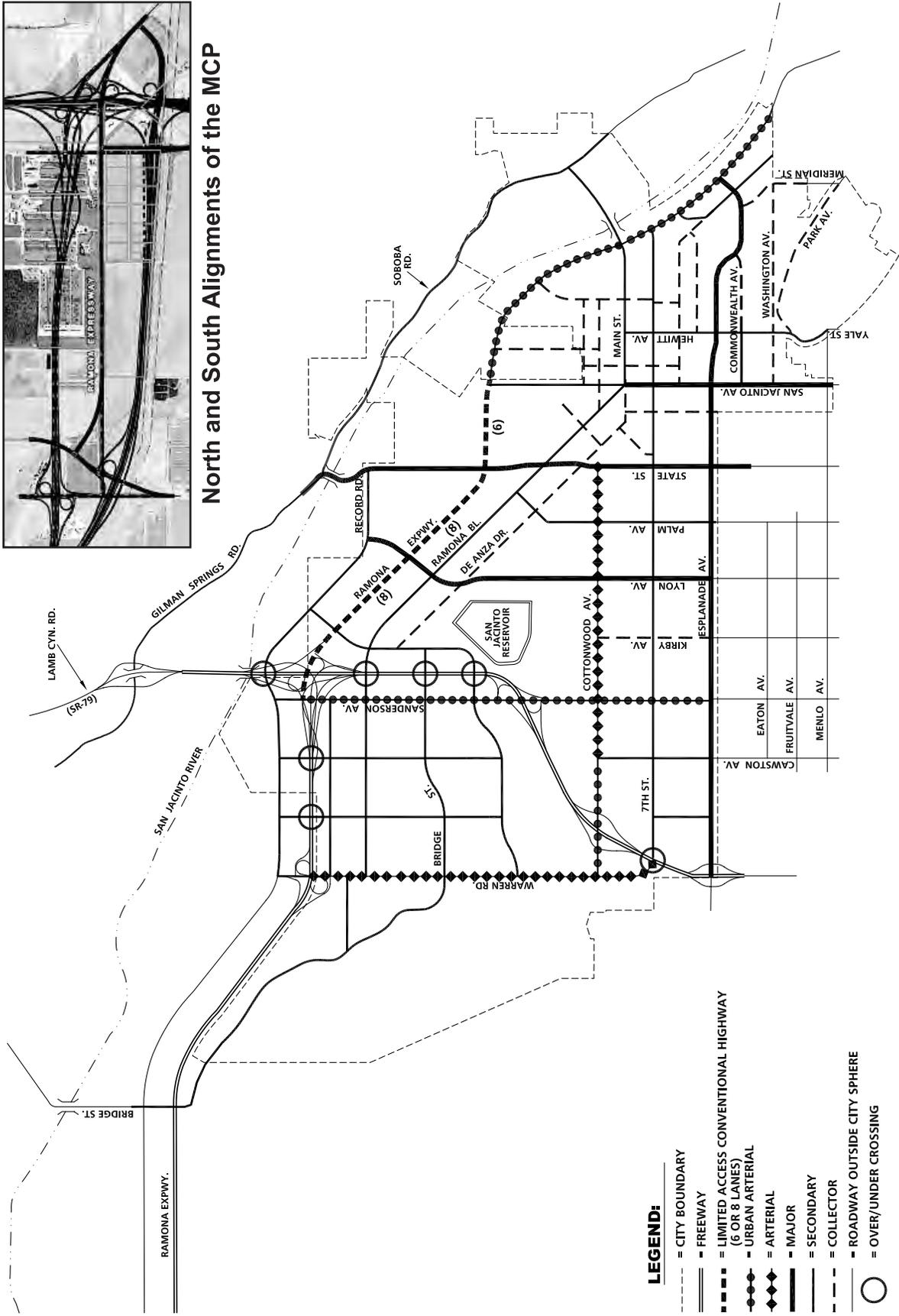
Functional classification is the process by which street and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

There are six basic categories within the functional classification hierarchy in San Jacinto, ranging from an eight-lane divided roadways with the highest capacity, to two-lane undivided roadways with the lowest capacity. **Table 5.13-3** presents approximate daily capacity values for the various roadway types.

Table 5.13-3
Daily Link Volume Capacities for City of San Jacinto Roadways¹

Roadway Classification	Number of Lanes	Maximum Two-Way Traffic Volume (ADT) ²
Collector	2	13,000
Secondary	4	25,900
Major	4	34,100
Arterial	2	18,000
Arterial	4	35,900
Urban Arterial	4	35,900
Urban Arterial	6	53,900
Urban Arterial	8	71,800
Limited Access Conventional Highway	4	40,900
Limited Access Conventional Highway	6	61,300
Limited Access Conventional Highway	8	81,700

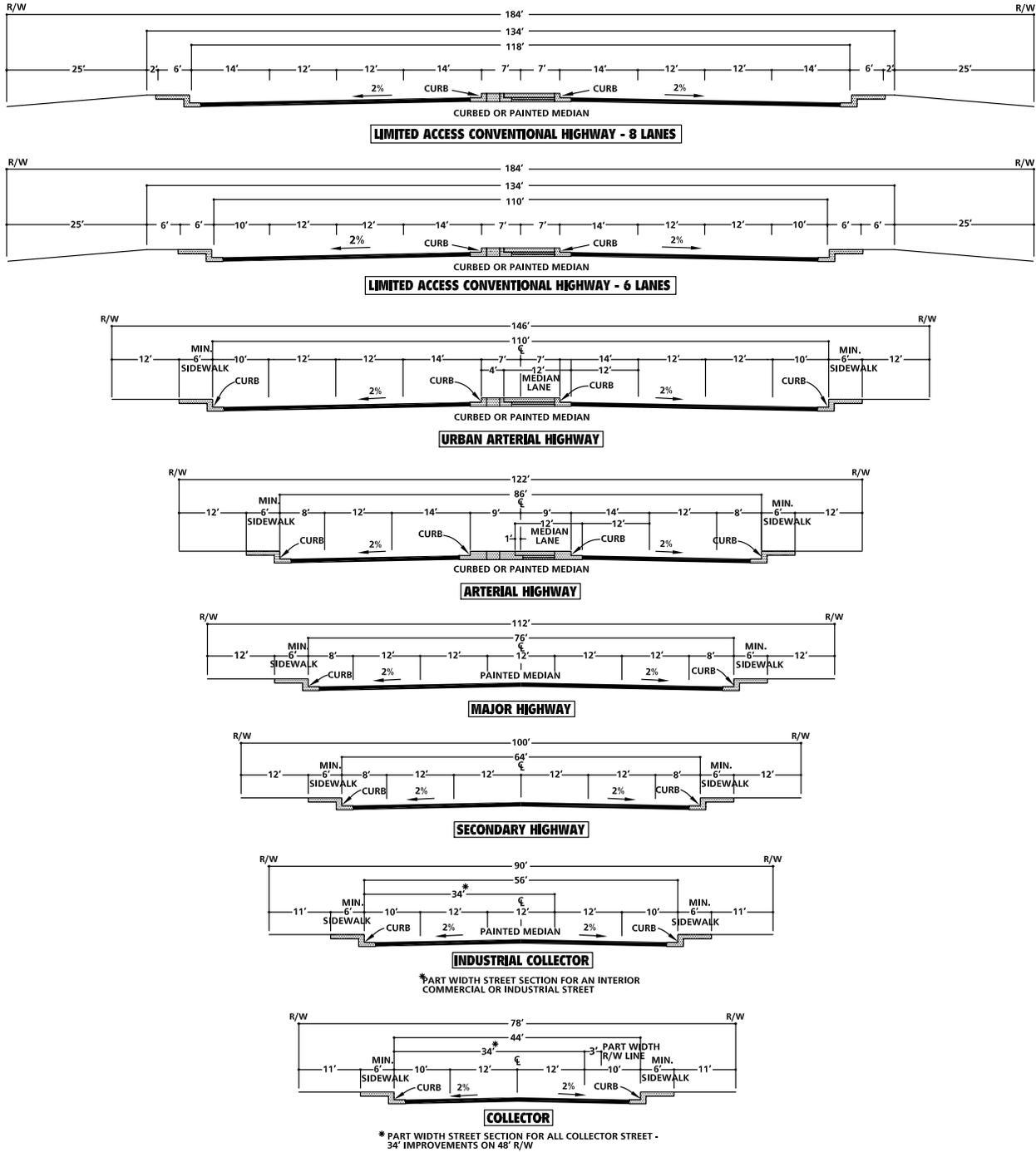
- 1 All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.
- 2 Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables defined in the Riverside County Congestion Management Program.
- 3 Two-lane roadways designated as future arterials that conform to arterial design standards for vertical and horizontal alignment are analyzed as arterials.



North Not to Scale

Figure 5.13-5 Proposed City of San Jacinto General Plan Network

Sources: Urban Cross Roads, 2005



Sources: Urban Cross Roads, 2005

Figure 5.13-6
General Plan Roadway Cross-Sections

Typical cross-sections for the different street functional classifications are shown on **Figure 5.13-6**. Note, however, that these typical sections represent general guidelines; the official sections used for implementation will be those contained in the latest City of San Jacinto Improvement Standards Manual.

A description of the City roadway classifications is as follows:

Limited Access Conventional Highway – A Limited Access Conventional Highway is a high speed facility with no driveway access and restricted access to side streets. This limits weaving and other capacity issues. It serves a large amount of through traffic.

Urban Arterial – An Urban Arterial will typically have six (6) lanes. Urban Arterials carry a large volume of through traffic not handled by other limited access highways and freeways.

Arterial – Arterials are typically four (4) lane divided roadways. An Arterial distributes traffic between local streets and higher volume facilities.

Major– A Major is also typically a four (4) lane divided roadway; however, the center median is striped and an increased amount of access is permitted. Majors function similarly to Arterials, distributing traffic through the system.

Secondary – A Secondary is a four (4) lane roadway, often undivided. Although some Secondaries serve as through routes, most provide more direct access to surrounding land uses than Majors or Arterials.

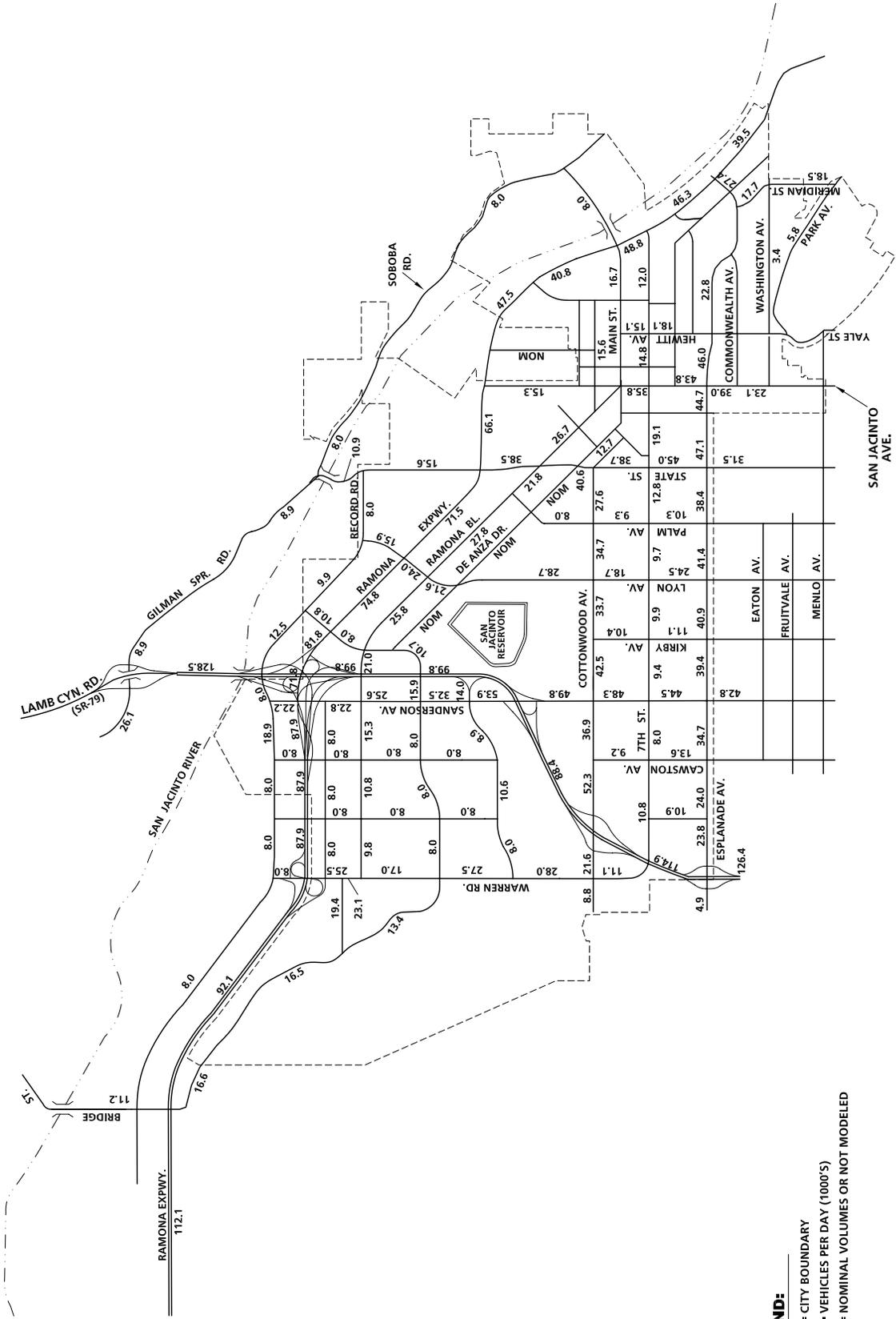
Collector– A collector is a two (2) lane, unrestricted access roadway. It differs from a local street in its ability to handle some through traffic movements between Secondary, Major and Arterial facilities.

Projected Daily Volumes

Future daily traffic volumes were developed by using regionally derived traffic model projections. The projections incorporate data from Southern California Association of Government's (SCAG) Comprehensive Transportation Plan (CTP) regional model (Riverside County Integrated Project version). The CTP modeling area covers the entire SCAG area (all of Los Angeles, Orange, and Ventura Counties, and the urbanized western portion of Riverside and San Bernardino Counties) with concentration on Riverside County.

Forecasts were reviewed in comparison to existing count data to assess the potential traffic volume increases. Proposed General Plan Buildout (Post-2050) refined forecasts are shown graphically on **Figure 5.13-7**. The highest volumes are along SR-79 with volumes on both ends of the City greater than 120,000 vehicles per day. Ramona Expressway is projected to carry daily traffic volumes in excess of 90,000 VPD west of Warren Road, an increase of almost 80,000 vehicles over existing conditions.

Esplanade Avenue is classified as a Major Highway throughout the City of San Jacinto. It will be a four (4) lane divided roadway projected to carry approximately 23,800 to 47,100 vehicles per day (VPD) for Buildout (Post-2050) conditions.



LEGEND:
 - - - - - = CITY BOUNDARY
 10.0 = VEHICLES PER DAY (1000'S)
 NOM = NOMINAL VOLUMES OR NOT MODELED

Sources: Urban Cross Roads, 2005



North Not to Scale

Figure 5.13-7
 Proposed General Plan Buildout (Post 2050)
 Daily Traffic Volumes

State Street is classified as a Major Highway, already constructed to its ultimate cross-section of four (4) lanes wide through the Planning Area south of Ramona Boulevard. This stretch carries approximately 31,500 to 45,000 VPD at Buildout (Post-2050). North of Ramona Expressway, traffic levels drop to approximately 15,000 VPD.

Bridge Street is classified as a Secondary Highway through the Planning Area west of Warren Road. On that stretch, it is projected to carry from 11,200 to 16,600 vehicles per day at Buildout. East of Warren Road, the highest daily traffic volume is 15,900 VPD.

Warren Road is classified as an Arterial Highway on the Riverside County General Plan Circulation Map and on the proposed City of San Jacinto General Plan network. Buildout forecast volumes on Warren Road south of the Ramona Expressway range from 11,100 to 28,000 VPD. In the Buildout forecasts, the section of Warren Road north of the Ramona Expressway is classified as a Secondary with a volume of 8,000 VPD.

State Route 79 is classified as Freeway within the City of San Jacinto. In Buildout, projected volumes range from 88,400 to 128,500 VPD.

Lyon Avenue is classified as a Secondary Highway for the portion north of the Ramona Expressway with a Buildout volume of 15,900 VPD. The stretch of Lyon Avenue south of the Ramona Expressway and north of Cottonwood Avenue is classified as a Major Highway. It has a Buildout volume ranging from 21,600 to 28,700 VPD. The segment of Lyon Avenue south of Cottonwood Avenue and north of Esplanade Avenue is classified as a Secondary Highway. It has a Buildout volume from 18,700 to 24,500 VPD.

Palm Avenue is a Secondary Highway, south of Ramona Boulevard and north of Esplanade Avenue with a Buildout volume from 8,000 to 10,300 VPD.

San Jacinto Avenue was classified as a Secondary Highway in the initial General Plan Buildout network. The section from the Ramona Expressway to Main Street remains a Secondary Highway and carries a Buildout volume of 15,300 VPD. The segment south of Main Street to Commonwealth Avenue is recommended to be upgraded to a Major Highway. Buildout volumes range from 35,800 to 43,800 VPD. The portion south of Commonwealth Avenue is a Secondary Highway and has a Buildout volume of 23,100 VPD.

Hewitt Avenue is classified as a Secondary Highway with Buildout volumes ranging from 15,100 to 18,100 VPD.

Cawston Avenue is a Secondary Highway in the City of San Jacinto. The Buildout volumes range from 9,200 to 13,600 VPD. Kirby Avenue is a Secondary Highway north of Esplanade Avenue. Buildout volumes range from 10,400 to 11,100 VPD.

Ramona Expressway was initially classified as an Urban Arterial between Main Street and Warren Road, a Major south of Main Street, and a Limited Access Conventional Highway west of Warren Road. The proposed General Plan includes the Ramona Expressway as a Freeway west of State Route 79 with a Buildout volume of 87,900 VPD (which increases approaching the west Planning Area boundary to 112,000 VPD). The segment between State Route 79 and State Street is recommended for classification as an 8 lane Limited Access Conventional Highway. Between State Street and San Jacinto Avenue, Ramona

Expressway is recommended as a 6 lane Limited Access Conventional Highway. Volumes range between 66,100 and 81,800 VPD. The portion between San Jacinto Avenue and Main Street is an Urban Arterial. Buildout volumes range from 40,800 to 47,500 VPD. South of Main Street, the Ramona Expressway is a Major Highway, carrying Buildout volumes from 39,500 to 48,800 VPD.

As discussed previously, this roadway currently has three alignments that are being reviewed as a part of the MCP project. However, the discussion of traffic related impacts to Ramona Expressway discussed above will be the same no matter which of the three alignments are selected.

Cottonwood Avenue was initially classified as an Arterial in the Planning Area. In the proposed plan, it is classified as an Urban Arterial west of Cawston Avenue with Buildout volumes ranging from 21,600 to 52,300 VPD. From Cawston Avenue to State Street, Cottonwood Avenue is an Arterial Highway. Buildout volumes range from 27,600 to 42,500 VPD.

Ramona Boulevard is classified as a Secondary Highway in the Planning Area. Buildout volumes range from 8,000 to 27,800 VPD.

Soboba Road is classified as a Secondary Highway in the Planning Area, carrying approximately 8,000 VPD.

Sanderson Avenue was classified as a Secondary Highway to the north of Ramona Expressway, a Major Highway to the south of the Ramona Expressway and north of State Route 79, and as an Arterial Highway from south of State Route 79 to Esplanade Avenue. It is still classified as a Secondary Highway from Record Road to the Ramona Expressway and carries 22,200 VPD for Buildout conditions. The segment between the Ramona Expressway and State Route 79 is classified as a Major Highway. Buildout volumes range between 22,800 and 32,500 VPD. The section from State Route 79 to Esplanade Avenue is an Urban Arterial. Buildout volumes range from 44,500 to 53,900 VPD.

Main Street is classified as a Secondary Highway in the Planning Area. Buildout volumes are between 8,000 to 20,700 VPD.

Record Road is classified as a Secondary Highway in the Planning Area. Record Road has Buildout volumes ranging from 8,000 to 18,900 VPD.

Seventh Street is classified as a Secondary Highway in the Planning Area. Seventh Street has Buildout volumes ranging from 8,000 to 19,100 VPD.

Commonwealth Avenue is a Secondary Highway between San Jacinto Avenue and Hewitt Avenue.

The daily capacity of a roadway correlates to a number of widely varying factors, including traffic peaking characteristics, traffic turning volumes, and the volume of traffic on crossing streets. The daily capacities are therefore most appropriately used for long-range general plan analysis, or as a screening tool to determine the need for more detailed peak hour analysis and to assist in determining the appropriate mitigation measures (i.e., whether additional through lanes may be a necessary or desirable mitigation). When considering traffic at the peak hour level, the level of

service in the absence of mid-block bottlenecks (e.g., roadway segments that have not been constructed to full standard cross-section) is ultimately dependent upon the flow of traffic at the intersections of roadways. The flow of traffic is interrupted as right of way is assigned to opposing traffic, causing potential bottlenecks in the flow of traffic. For this reason, the basic criteria for evaluating traffic impacts is the peak hour traffic operations at roadway intersections. However, the assessment of General Plan buildout conditions indicates that segments of Ramona Expressway (west of Warren Road) and State Route 79 will not achieve Level of Service "D" peak hour operations without further regional network improvements. This conclusion is consistent with Preliminary RCIP findings. Because no regional improvements are planned or funded at this time impacts to these roadway segments are considered significant and unavoidable.

Future Intersection Service Levels

PM peak hour turning movements for twenty-two (22) intersections were performed on the buildout forecasts. AM peak hour turning movements were not analyzed, because PM peak hour projections are consistently higher than the projections generated for AM peak hour analyses. Therefore, only PM peak hour was analyzed. **Figure 5.13-8** contains the forecast PM peak hour intersection volumes. The proposed General Plan intersection analysis for these 22 intersections are contained in Appendix C of this EIR. **Table 5.13-4** shows the projected LOS of intersections for buildout post 2050. **Table 5.13-4** shows that ten intersections will operated below LOS D. These intersections are:

- SR-79 SB (NS) at Cottonwood Ave. (EW);
- SR-79 Corridor (NS) at SR-74 (EW);
- SR-79 NB (NS) at Cottonwood Ave. (EW);
- Sanderson Ave. (NS) at SR-79 SB (EW);
- Lyon Ave. (NS) at Ramona Expressway (EW);
- State St. (NS) at Ramona Expressway (EW);
- State St. (NS) at Cottonwood Ave. (EW);
- State St. (NS) at Esplanade Ave. (EW);
- San Jacinto Ave. (NS) at Esplanade Ave. (EW); and
- Ramona Expressway (NS) at Esplanade Ave. (EW)

This is a significant impact. Implementation of Mitigation Measure T-1 through T-6 will reduce these impacts to below a level of significance. Mitigation Measure T-1 calls for the City to review discretionary development proposals for potential impacts to the transportation and infrastructure system and to ensure the roadway system meets City standards. The Level of Service Standards established in the Circulation Element will be used to determine the significance of impacts. Intersection level of service will be determined by the Vehicle Delay and the Highway Capacity Manual calculations. Mitigation in the form of physical improvements and/or impact fees will be required to reduce the significant impacts.

When development is proposed that is shown to impact the intersections of State St, (NS) at Cottonwood Avenue (EW), State St, (NS) at Esplanade Avenue (EW), and San Jacinto Av. (NS) at Esplanade Avenue (EW), the City may require roadway improvements, including roadway widening beyond the normal General Plan cross-sections. Adequate right-of-way along new roadways will also be required to permit pedestrian and bicycle facilities, where applicable. Proper roadway drainage must also be provided to ensure a safe system.

Table 5.13-5 shows the projected LOS of intersections for buildout post 2050 with the necessary improvements. **Table 5.13-5** shows that all intersections will operate at LOS D, or better and that all impacts to roadway intersections will be reduced to below a level of significance.

Mitigation Measure T-2 calls for the City to require projects that propose an increase in currently approved density and intensity of land use to prepare a traffic analysis that evaluates the long-term impacts of the project, demonstrating that the planned road system can support the proposed project, together with those land uses already allowed in the area. The analysis would project average daily traffic roadway links for the buildout situation of the entire area to demonstrate conformance with the peak hour intersection Level of Service "D" standard. In addition, any individual development proposal may be required to provide a traffic analysis to assess peak hour impacts at affected intersections, identifying needed mitigation measures to achieve or maintain the peak hour Level of Service "D" standard. Such impacts may be mitigated by construction of all improvements necessary to achieve the target Level of Service, by payment of a fee or fees if an appropriate funding mechanism is in place, or by any other appropriate means. Project traffic mitigation may include, but is not limited to, compliance with standard conditions of approval, or the construction of improvements or payment of fees necessary to mitigate the incremental impact for each development proposal.

Mitigation Measure T-3 calls for the City to continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system, within the community. As part of future updates, the City shall include an arterial streetscape improvements plan to ensure that substandard streetscapes are beautified

Mitigation Measure T-4 calls for the City to work with Riverside County Transportation Commission (RCTC), Caltrans, South Coast Air Quality Management District (SCAQMD), and other regional agencies to coordinate local street improvements with major transportation system improvement projects, such as improvements to SR-79, in order to reduce expenditures, improve designs, and minimize traffic disruption. The City will also continue to participate in proposed roadway modifications (including SR-79) and revise the General Plan circulation system, if necessary, to reflect changes in these modifications. In addition, the impacts of discretionary development projects and major transportation projects will be monitored and mitigation may be required.

Mitigation Measure T-5 calls for the City to continue to work with the County of Riverside and the RCTC to support the alignment of SR-79 shown in **Figure 5.13-5**. This shall be done as part of an effort to maintain a highway system with adequate capacity and acceptable levels of service to accommodate projected travel demands associated with buildout of the Land Use Element. This can be accomplished by maintaining LOS "D" or better during peak hours at intersections along the designated street and highway system. Strategies that result in improvements to the transportation system, coupled with local job creation, will allow City residents to have access to a wide range of job opportunities within reasonable commute times.

Mitigation Measure T-6 calls for the City to support construction of the Mid County Parkway (MCP) as a means of reducing commute times for San Jacinto residents and providing

adequate transportation infrastructure for businesses and major employers in the region. As part of this measure, the City shall monitor the decision-making and construction process to ensure the ultimate alignment brings the most benefit to San Jacinto and its residents and businesses. In particular, the City will ensure the MCP is consistent with and compatible with the City's plans for the Gateway area.

Roadway Design and Emergency Access

Implementation of the proposed General Plan will include traffic improvements that will have the potential to make existing and future roadways unsafe. Similarly, increases in vehicular traffic associated with the general plan will have the potential impede emergency access. This is a significant impact. Implementation of Mitigation Measures T-1 through T-6 will reduce this impact to below a level of significance.

Alternative Transportation

Enhanced local bicycle and pedestrian linkages are anticipated to be implemented in the City of San Jacinto. The goal is to link residential areas, schools, parks and commercial centers so that residents can travel within the community without driving. New development projects will be required to include safe and attractive sidewalks, walkways, and bike lanes, and homeowners associations will be encouraged to construct links to adjacent areas and communities where appropriate. Additionally, the City of San Jacinto is committed to ensuring that public transportation improves as a viable alternative to the automobile for residents. To achieve this objective, the City will coordinate with the Riverside Transit Agency in developing future scheduling and route alignments to serve San Jacinto. With these improvements, implementation of the proposed General Plan will not conflict with adopted policies, plans, or programs supporting alternative transportation.

To ensure that alternative modes of transportation are incorporated into San Jacinto in the future, the City shall implement Mitigation Measures T-7 through T-9. These mitigation measures will identify and secure financing for alternative modes of transportation and ensure that the City of San Jacinto incorporates alternative transportation improvements developed by the Inland Empire Intelligent Transportation Systems (ITS) Strategic Plan. These mitigation measures will also improve the traffic roadway system to both reduce traffic congestion and provide increased access to alternative modes of transportation.

Mitigation Measure T-7 calls for the City to identify available funding sources and establish a financing plan to guide construction and funding of transportation system improvements. The City shall require new development projects to construct and/or fund in whole or in part necessary traffic improvements associated with the proposed project. Transportation improvements should include both automotive, as well as alternative means of transportation.

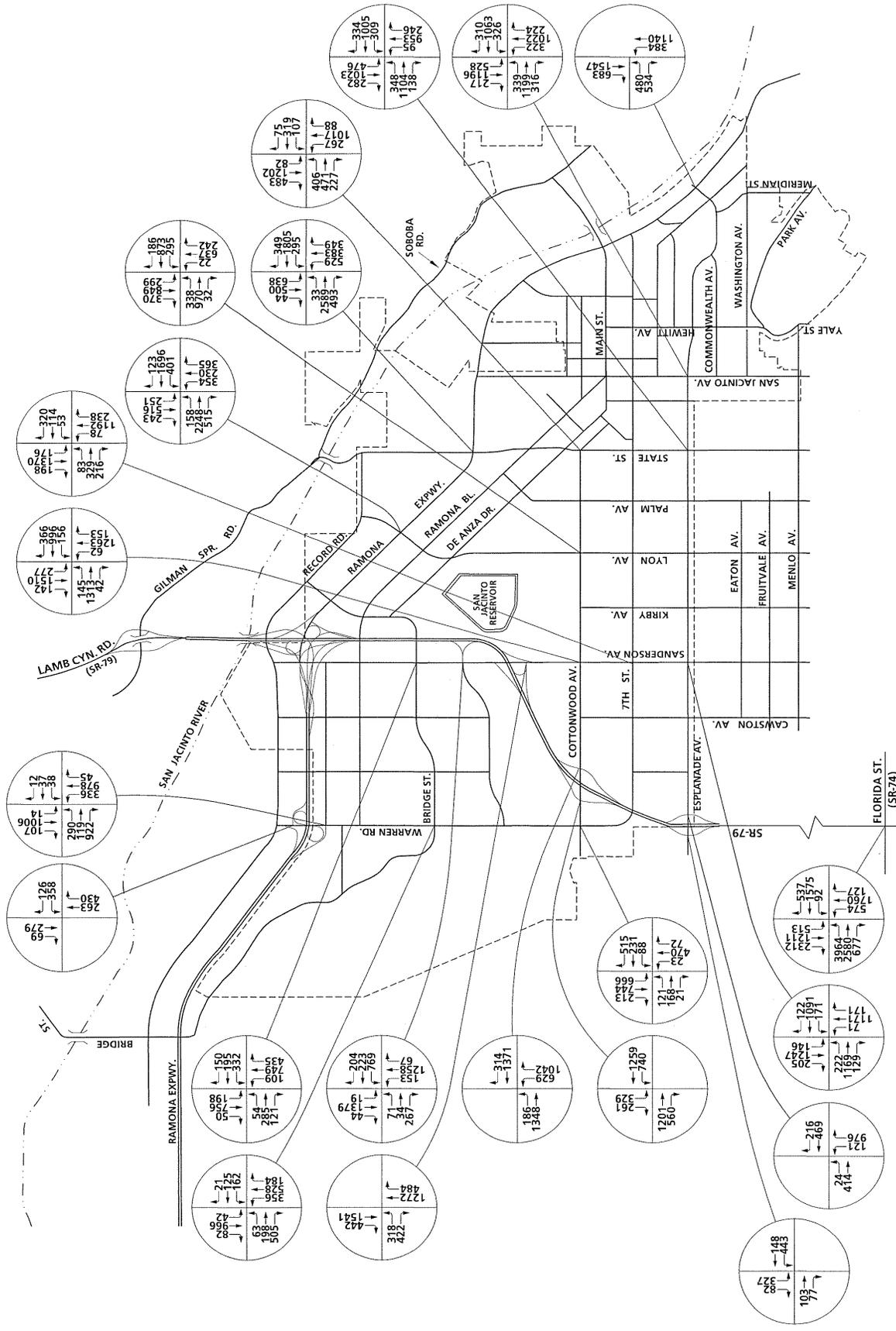


Figure 5.13-8
 Proposed General Plan Buildout (Post 2050)
 PM Peak Hour Intersection Volumes

Sources: Urban Cross Roads, 2005



North
 Not to Scale

**Table 5.13-4
Intersection Analysis for Buildout Post 2050
(Typical General Plan Cross-Sections)**

Intersection	Traffic Control	Intersection Approach Lanes ¹												PM Delay ² (Secs.)	PM Level of Service			
		Northbound			Southbound			Eastbound			Westbound							
		L	T	R	L	T	R	L	T	R	L	T	R					
Warren Rd. (NS) at:																		
Ramona Expressway WB (EW) ⁴	TS	0	2	1>>	0	2	1>>	0	0	0	0	0	0	1	0	1	11.5	B
Ramona Expressway EB (EW) ⁴	TS	1	2	1	1	2	1	1	0.5	1.5	1	1	1	1	1	1	29.0	C
Bridge St. (EW)	TS	1	2	1	1	2	1	1	2	0	1	2	0	2	0	0	32.0	C
Cottonwood Ave. (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	2	1	1	35.0	C
SR-79 SB (NS) at:																		
Esplanade Ave. (EW) ⁴	TS	0	0	0	1	0	1	0	2	0	1	2	0	2	0	0	25.8	C
Cottonwood Ave. (EW) ⁴	TS	0	0	0	1	0	1	0	3	1	1	3	0	3	0	0	- ⁵	F
SR-79 Corridor (NS) at:																		
SR-74 (EW)	TS	1	4	1	1	4	1	1	4	1	1	4	1	4	1	1	- ⁵	F
SR-79 NB (NS) at:																		
Esplanade Ave. (EW) ⁴	TS	1	0	1	0	0	1	2	0	0	0	2	0	2	0	0	46.0	D
Cottonwood Ave. (EW) ⁴	TS	1	0	1	0	0	1	3	0	0	0	3	0	3	1	1	- ⁵	F
Sanderson Ave. (NS) at:																		
Bridge St. (EW)	TS	1	2	0	1	2	0	1	2	0	1	2	0	2	0	0	43.2	D
SR-79 SB (EW) ⁴	TS	1	3	0	1	3	0	1	2	0	1	2	0	2	0	0	- ⁵	F
SR-79 NB (EW) ⁴	TS	0	3	1	0	3	1	0	1	0	1	0	0	0	0	0	13.7	B
Cottonwood Ave. (EW)	TS	1	3	1	1	3	1	1	2	1	1	2	1	2	1	1	47.5	D
7th St. (EW)	TS	1	3	1	1	3	1	1	2	0	1	2	0	2	0	0	17.5	C
Esplanade Ave. (EW)	TS	1	3	1	1	3	1	1	2	0	1	2	0	2	0	0	42.5	D
Lyon Ave. (NS) at:																		
Ramona Expressway (EW)	TS	1	2	0	1	2	0	1	4	1	1	4	1	4	1	1	- ⁵	F
Cottonwood Ave. (EW)	TS	1	2	0	1	2	0	1	2	1	1	2	1	2	1	1	53.7	D
State St. (NS) at:																		
Ramona Expressway (EW)	TS	1	2	0	1	2	0	1	4	1	1	4	1	4	1	1	- ⁵	F
Cottonwood Ave. (EW)	TS	1	2	0	1	2	0	1	2	1	1	2	1	2	1	1	- ⁵	F
Esplanade Ave. (EW)	TS	1	2	0	1	2	0	1	2	0	1	2	0	2	0	0	- ⁵	F
San Jacinto Ave. (NS) at:																		
Esplanade Ave. (EW)	TS	1	2	0	1	2	0	1	2	0	1	2	0	2	0	0	- ⁵	F
Ramona Expressway (NS) at:																		
Esplanade Ave. (EW)	TS	1	2	0	0	2	0	1.5	0	1.5	0	0	0	0	0	0	- ⁵	F

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn
² Delay and level of service calculated using the following analysis software: Traffix, Version 7.5.1015 (2000)/ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
³ AWS = All Way Stop; CSS = Cross Street Stop; TS = Traffic Signal
⁴ Intersection geometry consistent with ultimate SR-79 design
⁵ - = Delay High, Intersection Unstable, volume may exceed capacity
 Source: Urban Crossroads, 2005

**Table 5.13-5
Intersection Analysis for Buildout Post 2050
(Augmented General Plan Cross-Sections)**

Intersection	Traffic Control	Intersection Approach Lanes ¹												PM Delay ² (Secs.)	PM Level of Service			
		Northbound			Southbound			Eastbound			Westbound							
		L	T	R	L	T	R	L	T	R	L	T	R					
Warren Rd. (NS) at:																		
Ramona Expressway WB (EW) ⁴	TS	0	2	1>>	0	2	1>>	0	0	0	0	0	0	1	0	1	11.5	B
Ramona Expressway EB (EW) ⁴	TS	1	2	1	1	2	1	1	0.5	1.5	1	1	1	1	1	1	29.0	C
Bridge St. (EW)	TS	1	2	1	1	2	1	1	2	0	1	2	0	2	0	32.0	C	
Cottonwood Ave. (EW)	TS	1	2	1	1	2	1	1	2	1	1	2	1	2	1	35.0	C	
SR-79 SB (NS) at:																		
Esplanade Ave. (EW) ⁴	TS	0	0	0	1	0	1	0	2	0	1	2	0	1	2	0	25.8	C
Cottonwood Ave. (EW) ⁴	TS	0	0	0	1	0	1	0	3	1	2	3	0	3	0	23.0	C	
SR-79 Corridor (NS) at:																		
SR-74 (EW)																		
SR-79 NB (NS) at:																		
Esplanade Ave. (EW) ⁴	TS	1	0	1	0	0	0	1	2	0	0	0	0	2	0	46.0	D	
Cottonwood Ave. (EW) ⁴	TS	1.5	0	1.5	0	0	0	1	3	0	0	0	3	1	22.2	C		
Sanderson Ave. (NS) at:																		
Bridge St. (EW)	TS	1	2	0	1	2	0	1	2	0	1	2	0	2	0	43.2	D	
SR-79 SB (EW) ⁴	TS	1	3	0	1	3	0	1	2	0	2	2	0	2	0	39.2	D	
SR-79 NB (EW) ⁴	TS	0	3	1	0	3	1	1	0	1	0	0	0	0	13.7	B		
Cottonwood Ave. (EW)	TS	1	3	1	1	3	1	1	2	1	1	2	1	2	1	47.5	D	
7th St. (EW)	TS	1	3	1	1	3	1	1	2	0	1	2	0	2	0	17.5	C	
Esplanade Ave. (EW)	TS	1	3	1	1	3	1	1	2	0	1	2	0	2	0	42.5	D	
Lyon Ave. (NS) at:																		
Ramona Expressway (EW)	TS	2	2	0	1	2	0	1	4	1	1	4	1	4	1	33.7	D	
Cottonwood Ave. (EW)	TS	1	2	0	1	2	0	1	2	1	2	2	1	2	1	53.7	D	
State St. (NS) at:																		
Ramona Expressway (EW)	TS	2	2	0	1	2	0	1	4	1	1	4	1	4	1	31.0	D	
Cottonwood Ave. (EW) ⁵	TS	1	2	0	1	2	0	2	2	1	1	2	1	2	1	52.9	D	
Esplanade Ave. (EW) ⁵	TS	1	2	1	1	2	1	2	2	0	2	2	0	2	0	37.3	D	
San Jacinto Ave. (NS) at:																		
Esplanade Ave. (EW) ⁵	TS	2	2	1	1	2	1	2	2	1	2	2	1	2	2	35.1	D	
Ramona Expressway (NS) at:																		
Esplanade Ave. (EW)	TS	1	2	0	0	2	1	1.5	0	1.5	0	0	0	0	23.3	C		

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; > = Right Turn Overlap; >> = Free Right Turn

² Delay and level of service calculated using the following analysis software: Traffix, Version 7.5.1015 (2000). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ AWS = All Way Stop; CSS = Cross Street Stop; TS = Traffic Signal

⁴ Intersection geometry consistent with ultimate SR-79 design

⁵ Augmented cross-section may require roadway widening at the intersection.

Source: Urban Crossroads, 2005

Mitigation Measure T-8 calls for the City to encourage the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations referenced in the Inland Empire ITS Strategic Plan.

Mitigation Measure T-9 calls for the City to continue to work with trucking industry representatives to orient trucks to the Ramona Expressway and SR-79 to avoid traffic and noise impacts on local roadways. The City shall also designate other local truck routes when necessary.

5.13.4 Mitigation Measures

T-1 The City shall review discretionary development proposals for potential impacts to the transportation and infrastructure system and to ensure the roadway system meets City standards. The Level of Service Standards established in the Circulation Element will be used to determine the significance of impacts. Intersection level of service will be determined by the Vehicle Delay and the Highway Capacity Manual calculations. Mitigation in the form of physical improvements and/or impact fees will be required to reduce the significant impacts.

When development is proposed that is shown to impact the intersections of State St, (NS) at Cottonwood Avenue (EW), State St, (NS) at Esplanade Avenue (EW), and San Jacinto Av. (NS) at Esplanade Avenue (EW), the City may require roadway improvements, including roadway widening beyond the normal General Plan cross-sections. Adequate right-of-way along new roadways will also be required to permit pedestrian and bicycle facilities, where applicable. Proper roadway drainage must also be provided to ensure a safe system. (Implementation Program C-1)

T-2 The City shall require projects that propose an increase in currently approved density and intensity of land use to prepare a traffic analysis that evaluates the long-term impacts of the project, demonstrating that the planned road system can support the proposed project, together with those land uses already allowed in the area. The analysis would project average daily traffic roadway links for the buildout situation of the entire area to demonstrate conformance with the peak hour intersection Level of Service "D" standard. In addition, any individual development proposal may be required to provide a traffic analysis to assess peak hour impacts at affected intersections, identifying needed mitigation measures to achieve or maintain the peak hour Level of Service "D" standard. Such impacts may be mitigated by construction of all improvements necessary to achieve the target Level of Service, by payment of a fee or fees if an appropriate funding mechanism is in place, or by any other appropriate means. Project traffic mitigation may include, but is not limited to, compliance with standard conditions of approval, or the construction of improvements or payment of fees necessary to mitigate the incremental impact for each development proposal. (Implementation Program C-2)

T-3 The City shall continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system, within the community. As part of future updates, the City shall include an

arterial streetscape improvements plan to ensure that substandard streetscapes are beautified (Implementation Program C-3)

- T-4 The City shall work with Riverside County Transportation Commission (RCTC), Caltrans, South Coast Air Quality Management District (SCAQMD), and other regional agencies to coordinate local street improvements with major transportation system improvement projects, such as improvements to SR-79, in order to reduce expenditures, improve designs, and minimize traffic disruption. The City will also continue to participate in proposed roadway modifications (including SR-79) and revise the General Plan circulation system, if necessary, to reflect changes in these modifications. In addition, the impacts of discretionary development projects and major transportation projects will be monitored and mitigation may be required. (Implementation Program C-5)
- T-5 The City shall continue to work with the County of Riverside and the RCTC to support the alignment of SR-79 shown in **Figure 5.13-5**. This shall be done as part of an effort to maintain a highway system with adequate capacity and acceptable levels of service to accommodate projected travel demands associated with buildout of the Land Use Element. This can be accomplished by maintaining LOS "D" or better during peak hours at intersections along the designated street and highway system. Strategies that result in improvements to the transportation system, coupled with local job creation, will allow City residents to have access to a wide range of job opportunities within reasonable commute times. (Implementation Program C-6)
- T-6 Support construction of the Mid County Parkway (MCP) as a means of reducing commute times for San Jacinto residents and providing adequate transportation infrastructure for businesses and major employers in the region. Monitor the decision-making and construction process to ensure the ultimate alignment brings the most benefit to San Jacinto and its residents and businesses. In particular, ensure the MCP is consistent with and compatible with the City's plans for the Gateway area. (Implementation Program C-7)
- T-7 The City shall identify available funding sources and establish a financing plan to guide construction and funding of transportation system improvements. The City shall require new development projects to construct and/or fund in whole or in part necessary traffic improvements associated with the proposed project. Transportation improvements should include both automotive, as well as alternative means of transportation. (Implementation Program C-8)
- T-8 The City shall encourage the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations referenced in the Inland Empire ITS Strategic Plan. (Implementation Program C-9)
- T-9 The City shall continue to work with trucking industry representatives to orient trucks to the Ramona Expressway and SR-79 to avoid traffic and noise impacts on local roadways. The City shall also designate other local truck routes when necessary. (Implementation Program C-4)

5.13.5 Impact After Mitigation

Roadway Segments

Impacts to segments of Ramona Expressway (west of Warren Road) and State Route 79 will be significant and unavoidable.

Future Intersection Service Levels

With implementation of Mitigation Measure T-1 through T-6, impacts related to future intersection service levels will be less than significant.

Roadway Design and Emergency Access

With implementation of Mitigation Measure T-1 through T-6, impacts related to future roadway design and emergency access will be less than significant.

Alternative Transportation

With implementation of Mitigation Measure T-7 through T-9, impacts related to alternative transportation will be less than significant.

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5.14 Utilities and Service Systems

Water Supply

5.14.1.1 Environmental Setting

San Jacinto residences, businesses, and other uses are served by the City of San Jacinto Water Department (City), the Eastern Municipal Water District (EMWD), and the Lake Hemet Municipal Water District (LHMWD). The City's water supply consists of four groundwater wells, one irrigation well, two treatment facilities, and three service connections to EMWD. Historically, nearly 100 percent of the City's direct water supply has come from groundwater, but the City has also purchased treated imported water from EMWD between 1995 and 1998 and between 2002 and 2004, primarily during summer months to supplement peak demands due to mechanical failure at one of the City's wells. The City has recently constructed a new well, which allows the City to rely solely on groundwater and provide operational flexibility. In 2004, the City had an existing water supply of 7,100 acre-feet per year (afy)¹ and an existing storage capacity of 3.5 million gallons, while the demand for potable water was 2,968 afy in 2004.

The supply of both groundwater and imported water is limited and conservation encouraged by the City. Water conservation measures encouraged by the City include

- Implementing aquifer and groundwater recharge programs;
- Participating in water conservation programs operated by the EMWD and MWD;
- Establishing water conservation education programs;
- Requiring the use of drought-resistant plant species in landscaping for private and public areas, including parks and recreational facilities;
- Expanding the production and use of reclaimed water; and
- Requiring the incorporation of water conservation devices, including low-flush toilets, flow restriction devices and water conserving appliances in both new public and private development projects and rehabilitation projects.

The City also cooperates with the EMWD in the operation and management of the Hemet/San Jacinto Multipurpose Constructed Wetlands Research Facility, which provides additional treatment of secondary wastewater. This facility is an integral component of the Hemet/San Jacinto Regional Water Reclamation Facility.

¹ 1 acre-foot = approximately 325,850 gallons

However, the City of San Jacinto Water Department directly served approximately 13,200 people of the total 23,800 people recorded by the 2000 Census. The majority of the remaining San Jacinto residents are served directly by EMWD, which has a 555 square mile service area that includes five other incorporated cities and the incorporated areas of the County of Riverside. EMWD's water supply is provided by Metropolitan Water District of Southern California (MWD), local groundwater, and recycled water. EMWD relies on MWD for 80 percent of its total potable water supply, while the remaining 20 percent is provided by groundwater extracted from the San Jacinto Watershed. Groundwater has been the primary source of water supply for residents in the Hemet/San Jacinto area serviced by EMWD. In 2004, 83% of EMWD's potable water provided to the Hemet/San Jacinto area was supplied by groundwater and 17 percent was provided by imported water. Due to the size and scope of the EMWD service area, more specific data on supply, demand, and capacity are not available. The small remainder of the City is serviced by LHMWD.

Both the City and EMWD conduct water quality sampling and treatment of the wells that provide water to the City of San Jacinto. The City of San Jacinto 2004 Annual Water Quality Report concluded that the water quality for the City's water met the safety thresholds of the United States Environmental Protection Agency (USEPA).

5.14.1.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in the demand for water that exceeds the capacity of the existing entitlements and resources; or
- Requires or results in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.14.1.3 Potential Environmental Impacts

Stetson Engineers have projected that water supply will remain at 7,100 afy in 2025 for Average Years, Single Dry Years, and Multiple Dry Years. Stetson Engineers also projected that the storage capacity will remain at 3.5 million gallons in 2020. However, the City of San Jacinto is contemplating building an elevated reservoir between the years 2007 and 2009 west of the new Lake Park Well. The addition of this reservoir could increase the projected supply and storage capacity of potable water for the City of San Jacinto.

Stetson Engineers have projected that demand for water will be 4,912 afy for an Average Year in 2025, and even less for a Single Dry Year or Multiple Dry Years in 2025. Given that Stetson has concluded that the projected water supply will be 7,100 afy for all of three types, the City of San Jacinto will be able to meet projected water demand for 2025. It is anticipated that the City will continue to meet all future demand from its groundwater resources.

Additionally, EMWD has projected that 7,200 afy of groundwater will be available for the Hemet/San Jacinto area through 2030. EMWD projects that this amount will be available for Average Years, Single Dry Years, and Multiple Dry Years. Furthermore, this water can be

supplemented by other EMWD sources of potable water should it become necessary. Overall, EMWD has concluded that they will be able to meet future demand for water supply for the entire EMWD service area through 2030, including future San Jacinto development that will take place within the jurisdiction of LHMWD.

The reliability of these supplies will be further enhanced by the groundwater management plan currently being developed and implemented by the City of San Jacinto, EMWD, LHMWD, and the City of Hemet. The groundwater management plan will limit the amount of water being extracted and implement continued recharge of the basin using imported water to ensure that an adequate supply of groundwater resources are available for residents within the region. Furthermore, both the City and EMWD have water plans to address water shortages if they materialize. The City of San Jacinto has interconnections with EMWD to obtain water should any of their wells experience mechanical failure. The City also has a "four stage" rationing plan including up to 50 percent reduction in water supply in the event of a water supply shortage and has drafted a water shortage contingency ordinance. EMWD has a Water Shortage Contingency Plan that would guide EMWD in advising and enforcing conservation during times of water shortage and a Water System Emergency Operations Procedures which would provide operational guidance for averting water shortages during emergency conditions.

Both the City and EMWD anticipate that their existing facilities will be adequate for continuing to conduct water quality treatment of their groundwater wells through 2025.

However, both Stetson and EMWD do not have projections for project buildout, which is anticipated post-2050. Therefore, although the City will be able to meet demand through the year 2025 and EMWD will be able to meet demand through 2030, it can not be concluded that the City will be able to meet demand for potable water at buildout. This is a significant impact. Implementation of mitigation measures HW-5 and HW-6 from Section 5.8 and Mitigation Measures U-1 will reduce this impact to below a level of significance.

Mitigation Measure HW-5 requires that the City ensure that sufficient water supply and water infrastructure capacity is available to serve a new development prior to approval of the project, as part of the environmental review process. Mitigation Measure HW-6 calls for the incorporation of improved open space, preservation areas, and quasi-active recreation facilities in areas used for ground water recharge and/or drainage detention.

Mitigation Measure U-1 calls for the City to continue to cooperate with the water districts to ensure adequate water supply and sewage treatment facilities are provided and maintained in the community. Specifically, the City shall:

- During the processing of development proposals, ensure the water districts are consulted regarding the potential impact of the project on water supplies and sewage treatment facilities. When requested by the district or City Engineer, require proposed developments to include a water quality assessment as part of the application materials, and implement identified mitigation measures during construction and development.
- Ensure the project applicant has paid the require water district fees prior to occupancy of any new development.

- Require water conservation devices and Xeriscape™ landscaping in new public and private development and redevelopment projects.
- Cooperate with the water districts to update population projections, water use and sewer generation formulas, needed improvements, and programs within the Water and Sewer Master Plans at least every five years.
- Work with the water districts to expedite the improvement and expansion of water, reclaimed water, and sewer facilities, when necessary.
- Whenever feasible, require the installation and use of reclaimed water systems for irrigation purposes in new developments.
- Adopt, implement, and update as necessary, a Ground Water Management Plan.

The specific environmental impact of constructing a new reservoir in the Planning Area in the future cannot be determined at this General Plan level of analysis because no specific project is proposed at this time; however, like the development of other uses allowed under the General Plan, development and operation of a new reservoir may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.14.1.4 Mitigation Measures

- U-1 The City shall continue to cooperate with the water districts to ensure adequate water supply and sewage treatment facilities are provided and maintained in the community. Specifically, the City should:
- Ensure the water districts are consulted regarding the potential impact of the project on water supplies and sewage treatment facilities during the processing of development proposals. When requested by the district or City Engineer, require proposed developments to include a water quality assessment as part of the application materials, and implement identified mitigation measures during construction and development.
 - Ensure the project applicant has paid the require water district fees prior to occupancy of any new development.
 - Require water conservation devices and Xeriscape™ landscaping in new public and private development and redevelopment projects.
 - Cooperate with the water districts to update population projections, water use and sewer generation formulas, needed improvements, and programs within the Water and Sewer Master Plans at least every five years.
 - Work with the water districts to expedite the improvement and expansion of water, reclaimed water, and sewer facilities, when necessary.
 - Whenever feasible, require the installation and use of reclaimed water systems for irrigation purposes in new developments.
 - Adopt, implement, and update as necessary, a Ground Water Management Plan. (Implementation Program CSF-13)

5.14.1.5 Impact After Mitigation

With implementation of mitigation measures HW-6 and HW-7 from Section 5.8 and Mitigation Measure U-1, impacts to water supply will be less than significant.

Sewer Services

5.14.2.1 Environmental Setting

The Eastern Municipal Water District (EMWD) provides sewer services to the community. The Eastern Municipal Water District owns and operates an industrial waste and sewer treatment plant that has a capacity of 11.0 million gallons per day. Sewage flows to this treatment facility through a system of sewer lines that are aided by several lift stations located throughout the City which pump sewage from a manhole at a lower elevation to a manhole at a higher elevation. Sewage is then transported to the EMWD treatment facility through a "gravity flow" system of pipelines.

5.14.2.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Requires or results in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Results in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.14.2.3 Potential Environmental Impacts

Stetson Engineers have estimated that future development associated with implementation of the General Plan will generate sewer at a rate of 10.1 million gallons per day in the year 2020. EMWD is planning to expand their facilities to be able to handle 14 million gallons per day by 2010 and 18 million gallons per day by 2023. Therefore, EMWDs expanded facilities will be capable of handling the projected increase. All current and future EMWD facilities are, or will be designed to comply with all applicable RWQCB standards. However, although the City will be able to meet demand through the year 2020, it can not be concluded that the City will be able to meet demand for sewer services at buildout. The increased demand may exceed the capacity of the existing facilities and result in the need for new or expanded facilities. This is a significant impact.

Additionally, the increased demands for sewer treatment generated by the implementation of the general plan will generate the need for additional sewer infrastructure and improvements to the collection system within the City of San Jacinto. The City has identified the following improvements that will be needed to improve the existing system:

- Replace the 8-inch diameter pipeline along De Anza Drive between Grand Army Avenue and Wateka Street with a 12-inch diameter pipeline with an approximate length of 510 feet.
- Replace the 12-inch diameter pipeline along Grand Avenue between Victoria Avenue and Bissell Drive with a 15-inch diameter pipeline with an approximate length of 1,110 feet.
- Replace the 8-inch diameter pipeline along Victoria Avenue and Seventh Street between Main Street and Santa Fe Avenue with a 10-inch diameter pipeline with an approximate length of 1,375 feet.
- Reline and replace additional segments of pipes identified in the 2005 Sewer Master Plan Update.

The specific environmental impact of improving existing sewer facilities in the Planning Area in the future cannot be determined at this General Plan level of analysis because no specific project is proposed at this time; however, like the development of other uses allowed under the General Plan, improvement and operation of existing sewer facilities may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA. Implementation of Mitigation Measures U-1 and U-2 will reduce these impacts to less than significant. Mitigation Measure U-2 calls for the City to only allow new septic systems for low density projects if they have met the RWQCB's minimum lot size requirement of one half acre per subsurface disposal system, and where sewer connection is infeasible during the development review process.

5.14.2.4 Mitigation Measures

- U-2 The City shall only allow new septic systems for low density projects if they have met the RWQCB's minimum lot size requirement of one half acre per subsurface disposal system, and where sewer connection is infeasible during the development review process. (Implementation Program CSF-14)

5.14.2.5 Impact After Mitigation

With implementation of Mitigation Measures U-1 and U-2, impacts to sewer services will be less than significant.

Solid Waste

5.14.3.1 Environmental Setting

The community disposes of its waste in the Lamb Canyon Landfill. The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road (State Route 79), with Interstate 10 to the north and Highway 74 to the south. The landfill is owned and operated by Riverside County and encompasses approximately 1,088 acres, 144.6 of which are permitted for waste disposal. The landfill is currently permitted to receive 3,000 tons of refuse per day, and as of November 6, 2002, had a remaining disposal capacity of approximately 13.330 million tons.

5.14.3.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Is served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Does not comply with federal, state, and local statutes and regulations related to solid waste.

5.14.3.3 Potential Environmental Impacts

Implementation of the proposed General Plan will result in new residential and non-residential development, as well as population growth. This new development and population growth will generate an increased demand for solid waste collection and disposal capacity. As shown in **Table 5.14-1** it is estimated that the generation of solid waste is anticipated to increase by about 442,688 pounds per day, for a total of about 579,217 pounds per day at buildout of the proposed General Plan.

**Table 5.14-1
Estimated Current and Future Solid Waste Generation**

Land Use	Generation Factor (lbs/du or ksf)	Estimated Existing Development	Existing Waste Generation	Buildout of General Plan	Waste Generation at Buildout	Estimated Increase in Solid Waste Generation (lbs/day)
Single-Family Residential	10/du	7,359 du	73,590	33,879 du	338,790	265,200
Multi-Family Residential	7/du	1,463 du	10,241	3,325 du	23,275	13,034
Commercial	6/ksf	2,293 ksf	13,758	27,664 ksf	165,984	152,226
Public & Institutional	8/ksf	4,761 ksf	38,088	6,396 ksf	51,168	13,080

**Table 5.14-1
Estimated Current and Future Solid Waste Generation**

Land Use	Generation Factor (lbs/du or ksf)	Estimated Existing Development	Existing Waste Generation	Buildout of General Plan	Waste Generation at Buildout	Estimated Increase in Solid Waste Generation (lbs/day)
Mixed Use	6/ksf	11 du/ 142 ksf	852	0 du/ 0 ksf	0	-852
Total			136,529		579,217	442,688

Source: Modified by P&D Consultants from Orange County Sanitation Department

Notes:

du = dwelling units

ksf = thousand square feet

lbs = pounds

This buildout will generate a substantial amount of additional solid waste. As of January 1, 2006, the landfill had a total remaining capacity of 12,338 million tons. The current remaining disposal capacity is estimated to last until approximately 2016. Further landfill expansion potential exists at the Lamb Canyon Landfill site. Furthermore, the City shall ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the County Solid Waste Management Plan.

The California Integrated Waste Management Act of 1989 (AB939) mandates local governments to develop a long-term strategy for the management and diversion of solid waste, by requiring cities and counties to divert 50 percent of its solid waste. According to the most recent State Integrated Waste Management Board information that has been approved, San Jacinto diverted 57 percent of its waste in 2000.

The specific environmental impact of constructing or expanding solid waste facilities in the Planning Area cannot be determined at this General Plan level of analysis; however, development and operation of public facilities, such as local solid waste facilities, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.14.3.4 Mitigation Measures

No significant impact to solid waste was identified for the project, therefore no mitigation measures are required.

5.14.3.5 Impact After Mitigation

Implementation of the proposed General Plan will have a less than significant impact on solid waste disposal.

Power

5.14.4.1 Environmental Setting

The Southern California Gas Company provides natural gas to San Jacinto and Southern California Edison (SCE) provides electricity. Energy that is provided throughout California, including the Planning Area, is generated by numerous power plants that are located within and outside the State. Electricity and natural gas is supplied via grids and transmission lines, respectively. **Table 5.14-2** identifies actual monthly instantaneous peak demand and peak forecast for electricity in the State between 2000 and 2002, for the California Independent System Operator (CAISO) Control Area, which comprises the bulk of California's transmission system. The State of California has experienced energy shortages in recent years, with peak demand approaching or reaching daily load supply. During a power shortage, rolling, or rotating blackouts may be ordered that affect entire grids.

Table 5.14-2
Actual Monthly Instantaneous Peak Demand and
Peak Forecast For Electrical Loads (MW)CAISO Control Area

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2000	32,744	32,394	32,552	33,911	39,808	43,630	45,245	45,494	43,740	35,712	33,338	34,115
2001	32,623	30,683	29,778	31,770	37,808	39,762	41,192	41,419	37,993	38,805	32,138	33,347
2002	33,488	31,854	31,033	31,460	38,165	41,146	42,441	40,803	41,358	35,269	31,770	32,307
2003	32,519	31,529	30,830	32,188	37,386	39,577	41,477	42,894	38,708	35,132	32,037	32,995
2004	34,867	32,786	32,541	33,481	38,338	42,184	43,637	45,794	40,501	35,661	33,843	34,855
2005	35,578	33,472	33,230	34,165	39,040	42,875	44,289	46,477	41,144	36,328	34,524	35,528

Source: CAISO 2003 Summer Assessment, California Independent System Operator, April 11, 2003.

5.14.4.2 Threshold for Determining Significance

For the purpose of this EIR, a significant impact would occur if implementation of the proposed project:

- Results in the use of substantial amounts of fuel and/or energy; or
- Results in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, need for new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service.

5.14.4.3 Potential Environmental Impacts

Table 5.14-3 depicts the monthly instantaneous peak load forecast for years 2006 through 2013 for the CAISO control area. The table shows that in 2013, monthly peak electrical loads are anticipated to range from a low of approximately 39,000 megawatts (MW) in February and March to a high of approximately 52,605 MW in August.

**Table 5.14-3
Monthly Peak Electrical Load Forecast (MW)
CAISO Control Area 2006-2013**

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2006	36,304	34,173	33,933	34,863	39,756	43,578	44,951	47,171	41,796	37,007	35,218	36,213
2007	37,044	34,888	34,651	35,575	40,485	44,293	45,623	47,875	42,459	37,699	35,927	36,912
2008	37,799	35,618	35,385	36,302	41,227	45,019	46,305	48,589	43,132	38,404	36,649	37,624
2009	38,570	36,363	36,134	37,044	41,982	45,757	46,998	49,314	43,816	39,123	37,386	38,350
2010	39,356	37,124	36,898	37,801	42,752	46,507	47,700	50,049	44,510	39,854	38,138	39,090
2011	40,158	37,900	37,679	38,574	43,535	47,270	48,413	50,796	45,216	40,600	38,905	39,845
2012	40,977	38,694	38,477	39,362	44,333	48,044	49,137	51,554	45,933	41,359	39,688	40,614
2013	41,813	39,483	39,261	40,165	45,237	49,024	50,139	52,605	46,870	42,202	40,497	41,442

Source: CAISO 2003 Summer Assessment, California Independent System Operator, April 11, 2003.

New development within the Planning Area resulting from implementation of the General Plan will result in an additional demand for fuel and energy. **Tables 5.14-4** and **5.14-5** depict the anticipated increase in demand for electricity and natural gas. The demand for electricity is anticipated to increase by about 158.97 megawatt hours (mwh) per month, while the demand for natural gas is anticipated to increase by about 184.26 million cubic feet (mcf) per month. This represents an increase over current electrical and gas usage of approximately 332 percent for electricity and 335 percent for natural gas.

**Table 5.14-4
Estimated Current and Future Electricity Demand**

Land Use	Usage Factor (kwh/month / du or ksf)	Existing du/ksf	Estimated Existing Annual Usage (mwh/month)	Buildout of General Plan du/ksf	Estimated Usage at Buildout (mwh/month)	Change in Usage (mwh/month)
Single-Family Residential	5,700/du	7,359 du	41.95	33,879 du	193.11	151.16
Multi-Family Residential	3,940/du	1,463 du	5.76	3,325 du	13.10	7.34
Commercial	20/ksf	2,293 ksf	0.05	27,664 ksf	0.55	0.51*
Public & Institutional	8/ksf	4,761 ksf	0.04	6,396 ksf	0.05	0.01
Mixed Use	3,940/du; 20/ksf	11 du/ 142 ksf	0.05	0 du/ 0 ksf	0.00	-0.05
TOTAL			47.84		206.82	158.97

Sources: South Coast Air Quality Management District and Cotton/Bridges/Associates.

Notes:

kwh = kilowatt hours

mwh = megawatt hours

du = dwelling unit

sf = square feet

ksf = thousand square feet

* This number does not equal the total of subtracting the estimated existing usage and estimated buildout usage due to the rounding of those numbers.

**Table 5.14-5
Estimated Current and Future Natural Gas Demand**

Land Use	Usage Factor (cf/month/ du or ksf)	Existing du/ksf	Estimated Existing Usage (mcf/month)	Buildout of General Plan du/ksf	Estimated Usage at Buildout (mcf/month)	Change in Usage (mcf/month)
Single-Family Residential	6,665.0	7,359 du	49.05	33,879 du	225.80	176.76
Multi-Family Residential	4,011.5	1,463 du	5.87	3,325 du	13.34	7.47
Commercial	2.9 ksf	2,293 ksf	0.01	27,664 ksf	0.08	0.07
Public & Institutional	2.0	4,761 ksf	0.01	6,396 ksf	0.01	0.00
Mixed Use	4,011.5 du/ 2.9 ksf	11 du/ 142 ksf	0.04	0 du/ 0 ksf	0.00	-0.04
TOTAL			54.98		239.23	184.26

Sources: South Coast Air Quality Management District and Cotton/Bridges/Associates.

Notes:

cf = cubic feet

sf = square feet

ksf = thousand square feet

du = dwelling unit

mcf = million cubic feet

Although in recent years, the State of California has experienced energy shortages, the increased electricity demand of 158.97 mwh per month is not anticipated to place a significant increase in demand upon the State electricity supply system. Also, the increased natural gas demand of 184.26 mcf is not anticipated to be a significant increase in demand upon the State supply of natural gas. The General Plan does not involve any uses that are considered to be excessively high energy uses, or wasteful with respect to energy use. No significant impact associated with the use of substantial amounts of fuel and/or energy will occur.

Implementation of the General Plan will have an impact on Southern California Gas Company's gas system and may require additions and improvements to the facilities that supply new development. Expansion of distribution and transmission lines and related facilities to provide adequate capacity is a necessary consequence of growth and development. Further upgrades or additions needed to accommodate additional load on the gas system could include facilities such as regulator stations, odorizer stations, valve lots, and distribution and transmission lines. In addition, implementation of the General Plan will have an impact on SCE's electricity system and also may require additions and improvements to the facilities that supply new development. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate growth may include upgrading existing substation and transmission line equipment, expanding existing substations to their ultimate buildout capacity, and building new substations and interconnecting transmission lines.

Additionally, the City will implement Mitigation Measures U-3 and U-4. Mitigation Measure U-3 states that during the development review process, the City shall require all new developments adjacent to or near natural gas lines, install and connect to the those natural gas lines.

Mitigation Measure U-4 calls for the City to work with SCE to improve the compatibility of its facilities with other development and scenic resources. On an ongoing basis and through the development review process, the City shall:

- Request SCE improve transmission line corridors with attractive ornamental plantings, landscape screening, and trails.
- Require new development to underground all utility lines needed to serve the development.
- Work with SCE to coordinate the undergrounding of new utilities with the undergrounding of existing utilities whenever financially and physically feasible.

The specific environmental impact of constructing new energy facilities in the Planning Area cannot be determined at this General Plan level of analysis because no specific projects are proposed; however, like the development of other uses allowed under the General Plan, development and operation of public facilities, such as utilities, may result in potentially significant impacts that will be subject to future environmental analysis and mitigation per CEQA.

5.14.4.4 Mitigation Measures

U-3 During the development review process, the City shall require all new developments adjacent to or near natural gas lines, install and connect to the lines. (Implementation Program CSF-15)

U-4 Work with Southern California Edison (SCE) to improve compatibility of its facilities with other development and scenic resources. On an ongoing basis and through the development review process, the City shall:

- Request SCE improve transmission line corridors with attractive ornamental plantings, landscape screening, and trails.
- Require new development to underground all utility lines needed to serve the development.
- Work with SCE to coordinate the undergrounding of new utilities with the undergrounding of existing utilities whenever financially and physically feasible. (Implementation Program CSF-16)

5.14.4.5 Level of Significance After Mitigation

With implementation of mitigation measures U-3 and U-4 impacts related to energy supply will be less than significant.