

## **3.25 Cumulative Impacts**

### **3.25.1 Regulatory Setting**

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the impacts of this project. A cumulative effect assessment considers the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of wildlife movement corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 Code of Federal Regulations (CFR), Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

### **3.25.2 Methodology**

Construction and operation of any of the MCP Build Alternatives would result in direct and indirect impacts that could contribute to cumulative effects to the built and natural environment when combined with other related past, present, and reasonably foreseeable future actions.

Cumulative impacts were identified by comparing the impacts of the proposed MCP project and other past, current, or proposed actions in the area to establish whether, in the aggregate, they could result in cumulative environmental impacts. Both direct and indirect impacts are assessed. Past actions that have most affected resources and land

uses in western Riverside County are its transformation from rural to urban/suburban communities; public works projects such as flood control and utility infrastructure projects; and the development of the state and interstate highway systems, as well as a network of county and city roads, to support the developing communities.

The cumulative effects analysis focuses on those issues and resources that would be affected by the aggregation of stress factors on the environment and does not address in detail those topics that would not have additional environmental effects from the cumulative condition. The analysis provided in this section considered the effects of the other projects and the MCP Build Alternatives in assessing whether a particular environmental parameter would experience cumulative adverse impacts. Specific geographic boundaries for cumulative effects are determined for each environmental topic analyzed and may vary accordingly. In most cases, the cumulative study area for the MCP Build Alternatives is the MCP study area; however, some topics have larger or smaller areas of assessment due to the sensitivity and/or availability of the resource.

Future actions anticipated to occur include further growth within the county and incorporated city areas and conversion from rural or open space to urban and suburban developed conditions. The growth will require continued expansion of supporting infrastructure such as roadways, commercial uses, public services, and utilities. The anticipated growth is reflected in the regionally adopted growth projections and is planned for in the Riverside County General Plan and the General Plans of affected cities.

The following eight steps serve as guidelines for identifying and assessing cumulative impacts and are based on the *Guidance for Preparers of Cumulative Impact Analysis* (June 2005, Caltrans).<sup>1</sup>

1. Identify the resources to consider in the cumulative impact analysis by gathering input from knowledgeable individuals and reliable information sources. This process is initiated during project scoping and continues throughout the NEPA/CEQA analysis.
2. Define the geographic boundary or Resource Study Area (RSA) for each resource to be addressed in the cumulative impact analysis.
3. Describe the current health and historical context of each resource.

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<sup>1</sup> [www.dot.ca.gov/ser/guidance.htm#cumulative](http://www.dot.ca.gov/ser/guidance.htm#cumulative); accessed on October 16, 2007.

4. Identify the direct and indirect impacts of the proposed project that might contribute to a cumulative impact on the identified resources.
5. Identify a set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impact analysis.
6. Assess cumulative impacts.
7. Report the results of the cumulative impact analysis.
8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

### **3.25.3 Identification of Resources/Issues to Consider for Cumulative Impacts**

As discussed in Sections 3.1 through 3.22 of this EIR/EIS, the proposed MCP project would cause direct or indirect impacts to a number of resources in the human, physical, and natural environment; therefore, many of the resources discussed in the previous sections were considered in the analysis of cumulative impacts, including:

- Growth-Related Effects
- Farmlands/Timberlands
- Community Impacts/Relocations
- Visual/Aesthetics
- Cultural Resources
- Paleontology
- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened and Endangered Species

Those resources for which cumulative effects are not anticipated or for which the impacts were already analyzed in a cumulative context are briefly discussed below. Discussion of cumulative impacts to the resources listed above are provided later in Section 3.25.5.

- **Future and Existing Land Uses.** It is anticipated that future development will be implemented in a manner that is consistent with adopted land use and resource plans, and that the local agency General Plans will be amended to reflect the approved MCP route alignment and facility type.
- **Consistency with State, Regional, and Local Plans.** The evaluation of plan consistency is considered a project-related evaluation and is discussed in Section 3.1.2 of this EIR/EIS. The state, regional, and local plans reviewed for this evaluation provide a broader planning context for the MCP project.
- **Parks and Recreation.** As discussed in Section 3.1.3 of the EIR/EIS, the MCP project would impact 3.60 ha (8.95 ac) of Paragon Park. None of the cumulative projects would impact Paragon Park. Future parks are planned as part of the County and City General Plan Land Use Element; therefore, build out of the future land uses would not result in impacts to parks and recreation. Most of the cumulative transportation projects consist of improvements to existing roadways and freeways, which would limit impacts to only those parks and recreational facilities that are immediately adjacent to the existing roadways and freeways.
- **Environmental Justice.** As discussed in Section 3.4.3 of this EIR/EIS, the MCP project would not result in disproportionate adverse effects to low income and/or minority populations. The adopted land use plans of the county and the three cities provide for housing and employment opportunities for all people in Riverside County, regardless of ethnicity or income. The effects of other transportation and public infrastructure projects on low income and/or minority populations will be assessed as part of the environmental review of those projects. Based on the census data reviewed for the MCP project, it would appear that any adverse effects on these populations would be offset by beneficial effects of the projects in terms of improved mobility or other public services.
- **Utilities/Emergency Services.** As discussed in Section 3.5 of this EIR/EIS, the MCP project would not result in adverse effects to utilities and emergency services, except for short-term effects during construction.
- **Hydrology and Floodplains.** As discussed in Section 3.9 of this EIR/EIS, although the MCP project would encroach on floodplains, it would result in a minimal change in the capacity of the San Jacinto River, Cajalco Creek, Temescal Wash, Bedford Canyon Wash, and Perris Valley Storm Drain to carry water and will improve existing flooding conditions in the project area by providing improved highway crossings of these floodplains. Cumulative land use and transportation projects would comply with the applicable Riverside County General Plan safety policies to reduce flooding and ensure the storm drain

systems have sufficient capacity to accommodate any increase in storm flows due to increased impervious surfaces and runoff.

- **Water Quality.** As discussed in Section 3.10 of this EIR/EIS, the MCP project would not result in adverse effects to water quality. Cumulative land use and transportation projects would be required to comply with National Pollutant Discharge Elimination System (NPDES) requirements and to implement water quality BMPs at the time of development and therefore would not contribute to a cumulative adverse effect to water quality.
- **Traffic and Transportation.** As discussed in Section 3.6 of this EIR/EIS, the MCP project would not result in adverse effects to traffic circulation in the MCP study area, except for short-term effects during construction. The MCP project would have a beneficial effect by improving regional and local mobility. The analysis of future traffic conditions in the 2035 design year is a cumulative analysis in that it considers traffic generated by future planned land uses and the effect of future planned transportation improvements.
- **Geology/Soils/Seismic/Topography.** As discussed in Section 3.11 of this EIR/EIS, any adverse effects of the MCP project to geology, soils, etc., is localized and limited to the grading limits of the project. While other projects would impact the geology at their project sites, the impacts would be localized and not impact regional geology; therefore impacts of other projects are not considered important cumulative impacts.
- **Hazardous Waste and Materials.** As discussed in Section 3.13 of this EIR/EIS, implementation of the MCP project would not result in a substantial permanent adverse impact related to hazardous waste and materials. Future land use and transportation projects would comply with the County of Riverside Hazardous Waste Management Plan and the General Plan policies related to hazardous materials, which would ensure that there would be no adverse hazardous material impacts resulting from future development in Riverside County.
- **Air Quality.** The analysis of air quality provided in Section 3.14 of this EIR/EIS is a cumulative analysis in that it considers the emissions of traffic generated by future planned land uses and the effects of other future planned transportation improvements. The CEQA analysis in Chapter 4 of this EIR/EIS contains a discussion of the possible impacts of the MCP with regard to climate change.
- **Noise.** The analysis of noise impacts provided in Section 3.15 of this EIR/EIS is a cumulative analysis in that it considers the traffic noise generated by future planned land uses and the effects of other future planned transportation improvements on the noise environment.

- **Energy.** The analysis of energy impacts provided in Section 3.16 of this EIR/EIS is a cumulative analysis in that it considers the energy usage of traffic generated by future planned land uses and the effects of other future planned transportation improvements on regional energy consumption.

### **3.25.4 Identification of Cumulative Plans and Projects**

This section identifies the adopted plans and related projects that may, in concert with the proposed MCP project, have a cumulative adverse effect on sensitive resources in the MCP study area and western Riverside County. Adopted plans that will direct future growth, development, and open space preservation include the Riverside County General Plan, the General Plans of the three affected cities—Corona, Perris and San Jacinto—and the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Historical land use trends are examined along with recent development proposals and transportation projects in the MCP study area.

#### **3.25.4.1 Riverside County General Plan**

##### **Overview**

The Riverside County General Plan was adopted in 2003 and provides policy direction and permitted land use intensities for future development in the county. The General Plan was developed as part of the Riverside County Integrated Project (RCIP), a three-part regional planning effort that also included the MSHCP and that guides the preservation of natural open space areas to provide habitat and linkages for protected species. The third component of the RCIP was the intra- and inter-county transportation planning effort known as the Community and Environmental Transportation Acceptability Process (CETAP), which identified regional transportation facilities needed to support the General Plan land uses. The MCP project is the east-west, intra-county CETAP transportation corridor, previously known as the Hemet to Corona/Lake Elsinore (HCLE) corridor.

The General Plan is intended to help guide Riverside County to achieve an integrated and coordinated land use, open space, and transportation system. Central to the vision for Riverside County is the desire to maintain and enhance the character of Riverside County, including its natural resources and unique communities, by clearly defining areas suitable for future growth and those suitable for preservation and maintenance. Key to this goal is the need to focus future growth into a pattern that complements and incorporates the transportation and multipurpose open space systems. The General Plan directs future growth to areas that are well served by public facilities

and services, and preserves significant environmental features such as drainage ways, lands subject to extreme natural hazards, or lands that offer scenic beauty.

### **Land Use**

The General Plan land use designations and applicable area plan policies for the MCP study area reflect and implement the basic tenets of the General Plan described above. The planned community centers in the MCP study area include the three municipalities: the City of Corona in the western portion of the study area, the City of Perris in the center of the study area, and the City of San Jacinto at the eastern terminus of the study area. All three communities are located in areas where the proposed MCP project will connect with interstate or state highways. Multipurpose open space opportunities in the MCP study area include the Lake Perris State Recreation Area and multiple county and city parks and school playgrounds. (See Section 3.1 of the EIR/EIS for more information about recreation resources.) In addition, biological conservation areas are provided for in the existing Habitat Conservation Plan areas managed by the Metropolitan Water District of Southern California (Metropolitan) and the Riverside County Habitat Conservation Agency (RCHCA), and through additional preservation as a result of the MSHCP, which is described in more detail below.

Much of the unincorporated portions of Riverside County are divided into 19 area plans. The purpose of these area plans is to provide more detailed land use and policy direction regarding local issues such as land use, circulation, open space, and other topical areas. The five area plans in the MCP study area include Temescal Canyon, Lake Mathews/Woodcrest, Mead Valley, Lakeview/Nuevo, and San Jacinto Valley, and are described in Section 3.1 of this EIR/EIS.

#### **3.25.4.2 General Plans of Affected Cities**

##### **City of Corona**

The Corona General Plan (2004) states that approximately 30 percent of the city is planned for housing; 4 percent for commercial and office uses; 12 percent for industrial uses; 37 percent for public, parks, and open spaces; and 17 percent as undeveloped or not committed as permanent open space. Less than 1 percent of the lands continue to be used for agricultural purposes. By 2030, the population of Corona is projected to increase 37.2 percent to over 170,000 people. Some of the forecasted growth would be accommodated through the re-use of existing underutilized parcels and redevelopment of older developments.

The portion of the City within the MCP study area is located in the vicinity of Interstate 15 (I-15) and Cajalco Road, and includes a mix of rural and low density residential uses, commercial and light industrial uses, and open space along the Temescal Wash.

### **City of Perris**

The City of Perris updated six of the seven mandatory General Plan Elements in 2005–2006. The MCP study area transects the northern portion of the city in City of Perris Planning Areas 1, 2, 3, 4, and a portion of 5. The plans for these areas as expressed in the Land Use Element include a development pattern that is consistent with existing land uses and infrastructure. For example, air cargo-related uses are proposed near the March Air Reserve Base “Inland Port;” residential uses are proposed to continue in the area adjacent to the Lake Perris State Recreation Area; continued residential and retail/commercial core is proposed for the central city area; and business park development is proposed along Interstate 215 (I-215). A conversion of agricultural land to light industrial and distribution center uses is planned along the I-215 corridor. Between 1990 and 2000, the population of the City of Perris increased 45 percent, from 21,460 to 36,189. It is projected to increase 145 percent by 2030. There is 64 percent of land designated for residential use remaining for development. Similarly, vast tracts of vacant land are designated for employment-generating uses.<sup>1</sup> Much of this vacant land has already received approvals for development or is in the entitlement process.

### **City of San Jacinto**

The city of San Jacinto encompasses an area of approximately 70 square kilometers (km<sup>2</sup>) (27 square miles [mi<sup>2</sup>]) and had a population of 23,779 in 2000. The City of San Jacinto Draft General Plan (2006) promotes the preservation of natural and historic resources while allowing a range of land uses including agriculture. The City of San Jacinto General Plan designations within the MCP study area include light industrial, residential, commercial, public, and conservation land uses.<sup>2</sup> Between 1990 and 2000, the population of the city of San Jacinto increased by 46.7 percent, from 16,210 to 23,779; by 2030, it is projected to increase 79.2 percent, which is over 42,000 people.

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<sup>1</sup> [http://www.cityofperris.org/planning/pdfs/Land\\_Use\\_Element.pdf](http://www.cityofperris.org/planning/pdfs/Land_Use_Element.pdf), January 2, 2007.

<sup>2</sup> <http://www.ci.san-jacinto.ca.us/files/Introduction%20Element.pdf>, January 2, 2007.

### 3.25.4.3 Western Riverside County MSHCP

The western Riverside County MSHCP was described previously in Section 3.17 (Natural Communities) but is discussed further here to provide context for the assessment of cumulative impacts. It is a regional Habitat Conservation Plan and Natural Communities Conservation Plan to enhance and maintain biological diversity and ecosystem processes while allowing for future development and economic growth. The MSHCP provides a programmatic method for mitigating the direct, indirect, and cumulative adverse effects of covered activities (General Plan land use and circulation projects, including the MCP as the west-east, intra-county CETAP corridor) to 146 special-interest species and their associated habitats in western Riverside County. The MSHCP plan area encompasses approximately 5,090 km<sup>2</sup> (1,966 mi<sup>2</sup>) and includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. Ultimately, the MSHCP Reserve will contain approximately 200,000 hectares (ha) (500,000 acres [ac]) assembled from federal and state lands, local public lands, and private sector lands.

The MSHCP Reserve will be assembled through a combination of the following methods:

- Conservation of existing public lands
- Local acquisition of private lands
- Federal and state acquisition of private lands
- Private and public development contributions
- Regional infrastructure

The MSHCP's strategy for assembly of the additional 61,900 ha (153,000 ac) needed to create the envisioned 200,000 ha (500,000 ac) MSHCP Reserve takes a balanced approach. It allocates responsibility for assembling the MSHCP Reserve equitably among the County of Riverside, the 14 cities in western Riverside County, RCTC, Caltrans, and other private and public entities engaged in construction activities that impact covered species. The implementation strategy relies heavily on incentives to encourage private property owners to conserve lands through the land-use entitlement process. Where incentives are not sufficient, conservation will require the purchase of properties from willing sellers.

Over 8,000 ha (20,000 ac) of privately owned land is within MSHCP criteria area within the MCP study area. All or portions of this criteria area may be acquired through purchase or other means for the MSHCP Reserve. The analysis of cumulative effects of the MCP project considers the ability of the MCP project to induce and/or redirect growth in the study area compared to the current, adopted General Plan recommendations for the study area, with consideration given to the anticipated commitment to significant areas of natural open space for the purpose of habitat conservation.

#### **3.25.4.4 Cumulative Land Development Projects**

##### ***Historical Trends***

The cumulative adverse effects to sensitive resources resulting from land and infrastructure development in the MCP study area dates back to the late 1800s. The town of Perris was incorporated first in 1886 and then again in 1922 in its new (present day) location. The Lakeview area was settled in the 1890s and experienced a brief boom in the 1930s during the construction of the Colorado River Aqueduct. The city of Corona was incorporated in 1896 as a town of 1,434 persons founded on an agriculture-based economy. Founded in 1870 and incorporated in 1888, San Jacinto is the oldest incorporated city in Riverside County, and its growth was based on an economy of agriculture, lumber, and tourism.

By 1974, the population of Riverside County had reached nearly 500,000, up from 459,000 in the 1970 census. Between 1980 and 1990, the number of residents in Riverside County grew by over 76 percent, making Riverside the fastest growing county in California. By 1992, the county was “home” to over 1.3 million residents, more than the entire population of 13 states. The United States Census estimated the population of Riverside County in 2005 at almost 2 million (1,946,419), a 20 percent increase above the 2000 population of 1,545,387.

The proposed MCP project is located in an area of western Riverside County that is currently undergoing substantial population and employment growth. The population in western Riverside County is expected to increase by over 1 million people between 2000 and 2025, a more than 85 percent increase. Growth in employment is expected to occur at an even higher rate, with an over 115 percent increase in the number of

jobs.<sup>1</sup> Growth trends in the MCP study area were previously discussed in Section 3.2 (Growth).

### **Planned Specific Projects**

As of October 2007, there are over two dozen active development projects in the MCP study area under the jurisdiction of either the County of Riverside or the Cities of Corona, Perris, and San Jacinto. The active development includes projects that are at the pre-application stage, projects for which an application has been submitted and is still under consideration, projects which have been approved and are pending construction, approved projects under construction, and recently constructed projects that are now operational. Most of the projects within the MCP study area are residential or mixed-use developments. Proposed and recently constructed commercial development is concentrated in areas where the MCP corridor intersects with I-15, I-215 and State Route 79 (SR-79). Proposed and approved industrial development projects are located in the city of Perris. These projects are shown in Figure 3.25.1, Cumulative Projects.

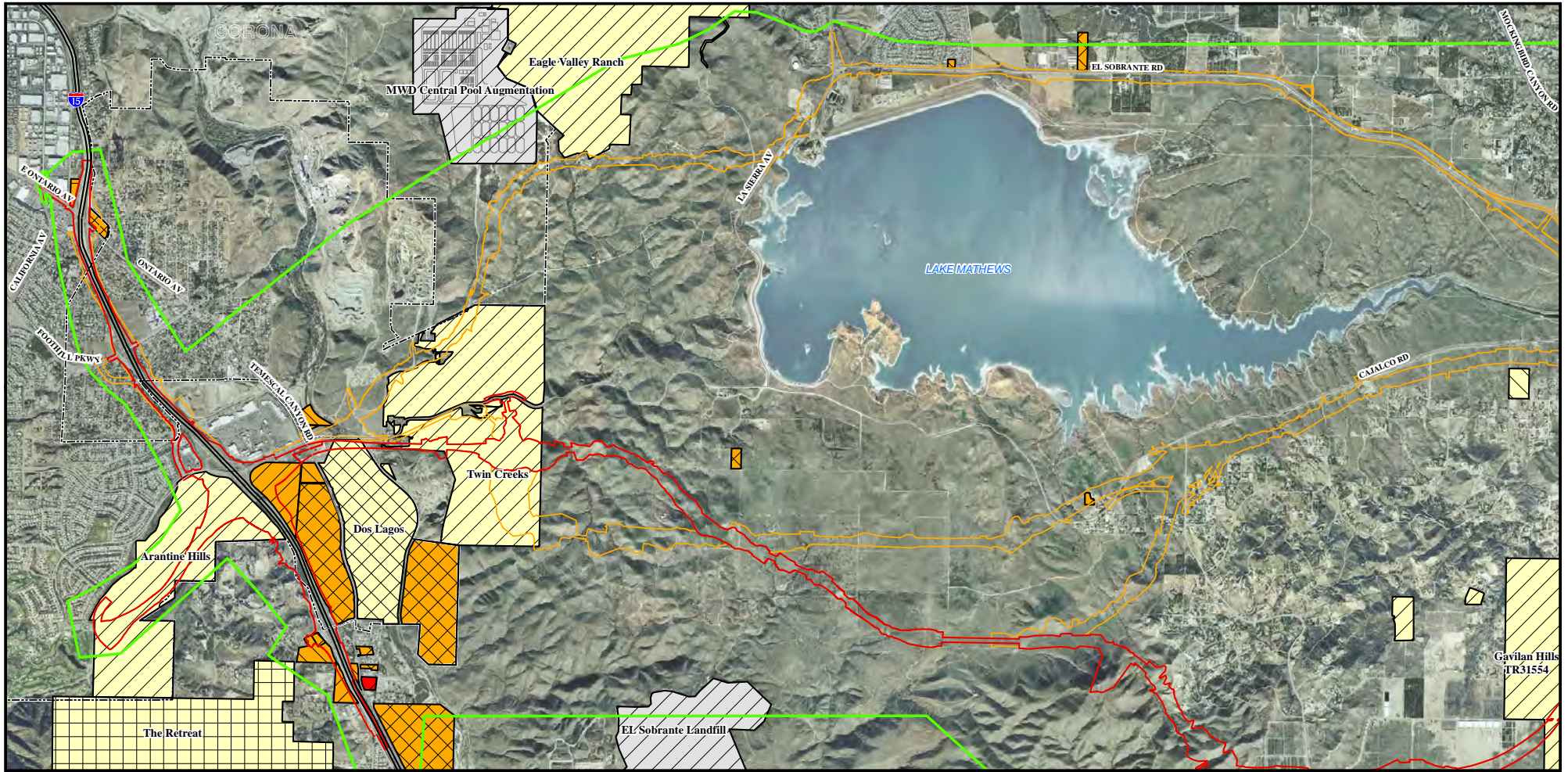
One major cumulative project located just north and outside of the MCP study area along I-215 is the redevelopment of the former March Air Force Base (AFB), which encompasses approximately 2,600 ha (6,500 ac) straddling I-215. March AFB was first established as a military installation in 1918 and has operated almost continually since. In July 1993, March AFB was selected to be realigned and was subsequently converted from an active duty base to an Air Reserve Base, effective April 1, 1996. The decision to realign March AFB resulted in approximately 1,780 ha (4,400 ac) of property and facilities being declared surplus and available for disposal actions, as well as joint use of the airfield.

Prior to base realignment, the base employed over 10,000 military personnel and civilian employees. The existence of the base in its pre-realignment condition contributed an estimated \$500 million annually to the regional economy. With the announcement of realignment, the regional economic loss with the change in military mission at March AFB was immediately recognized. While base realignment and the associated loss to the region came at an inopportune time, the opportunities relative to the planning and implementation of new uses and providing for unmet needs of the region have arisen. The March Joint Powers Authority (JPA) is planning and

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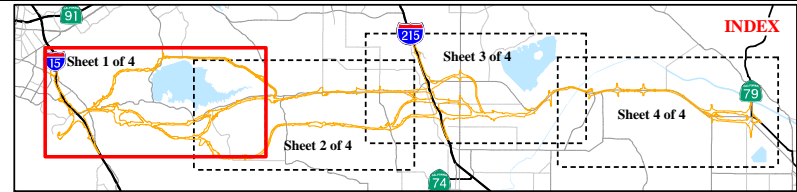
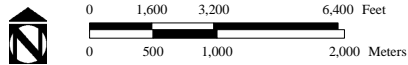
<sup>1</sup> 2004 Regional Transportation Plan, Southern California Association of Governments.

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|--|-------------|-----------------------|
| MCP Study Area                         | Residential | Application Submitted |
| Right-of-Way (Preferred Alternative 9) | Commercial  | Project Approved      |
| Right-of-Way (Alternatives 4-7)        | Industrial  | Under Construction    |
| City Boundary                          | Other       | Operational           |
| Perris Valley Pipeline Project         |             |                       |
| Proposed Perris Valley Rail Extension  |             |                       |

SOURCE: AirPhoto USA (2006), TBM (2007), Jacobs Engineering (2007)

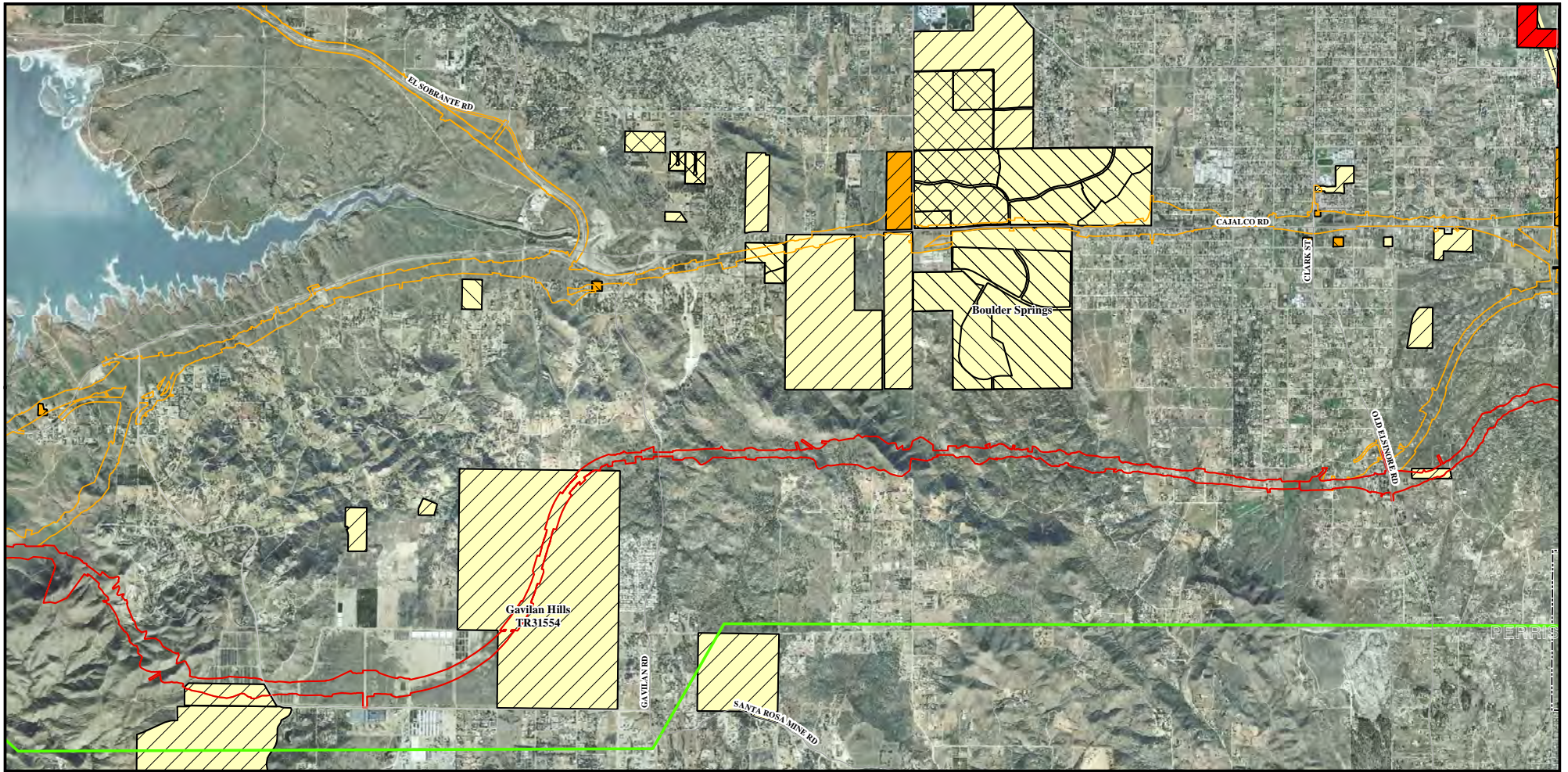


**Cumulative Projects**  
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Figure 3.25.1  
 Sheet 1 of 4



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|--|----------------------------|---|
| MCP Study Area                         | <b>Development by Type</b> | <b>Development by Status (as of 10/15/07)</b> |
| Right-of-Way (Preferred Alternative 9) | Residential                | Application Submitted                         |
| Right-of-Way (Alternatives 4-7)        | Commercial                 | Project Approved                              |
| City Boundary                          | Industrial                 | Under Construction                            |
| Parris Valley Pipeline Project         | Other                      | Operational                                   |
| Proposed Parris Valley Rail Extension  |                            |   |

SOURCE: AirPhoto USA (2006), TBM (2007), Jacobs Engineering (2007)

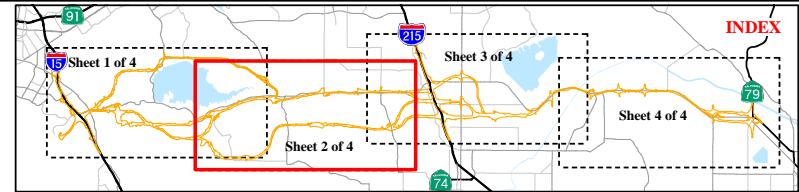
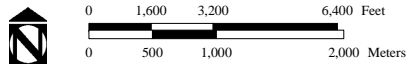
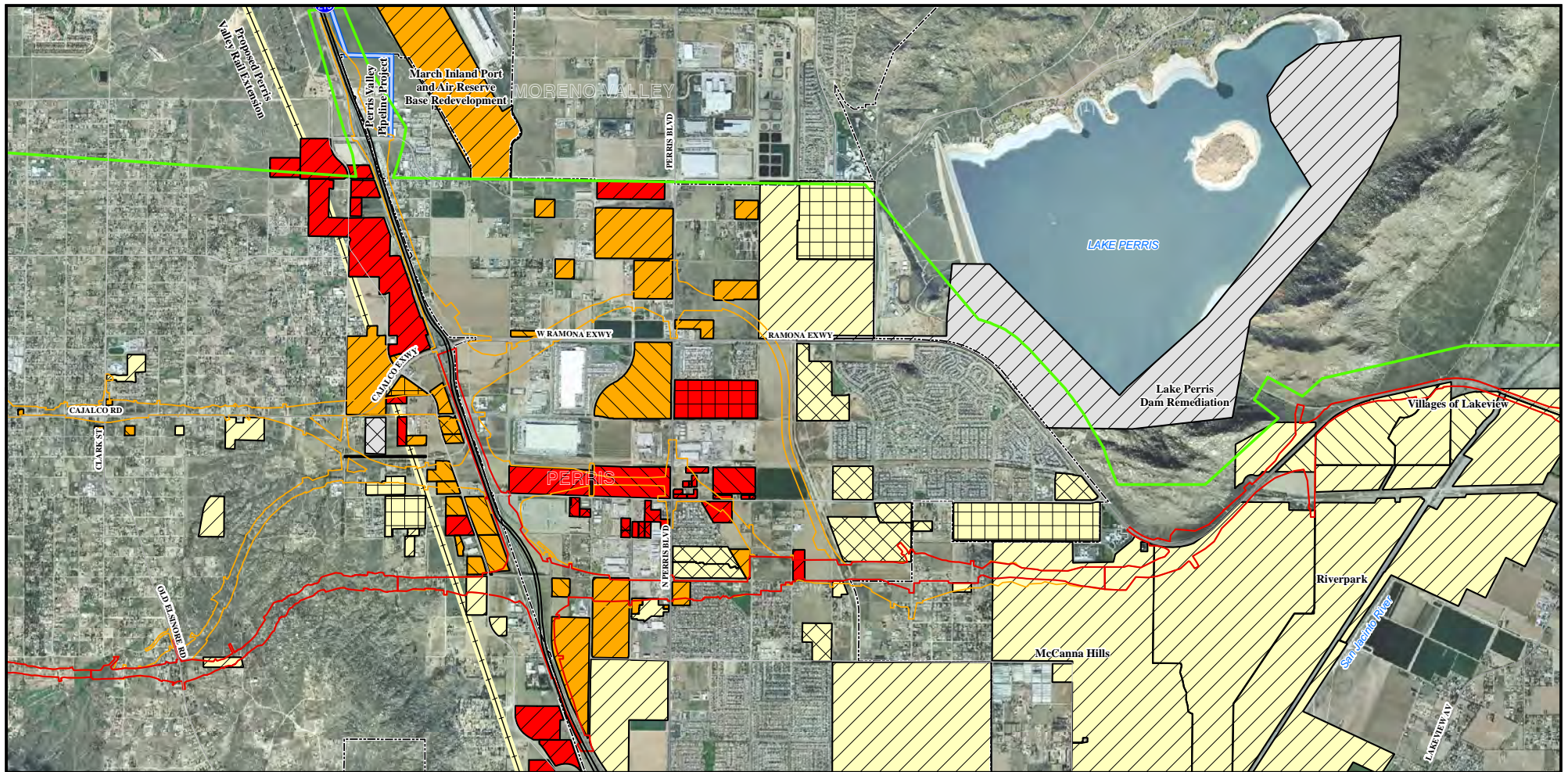


Figure 3.25.1  
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**Cumulative Projects**  
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|--|----------------------------|---|
| MCP Study Area                         | <b>Development by Type</b> | <b>Development by Status (as of 10/15/07)</b> |
| Right-of-Way (Preferred Alternative 9) | Residential                | Application Submitted                         |
| Right-of-Way (Alternatives 4-7)        | Commercial                 | Project Approved                              |
| City Boundary                          | Industrial                 | Under Construction                            |
| Perris Valley Pipeline Project         | Other                      | Operational                                   |
| Proposed Perris Valley Rail Extension  |                            |   |

SOURCE: AirPhoto USA (2006), TBM (2007), Jacobs Engineering (2007)

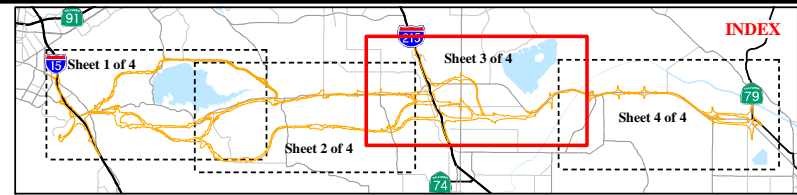
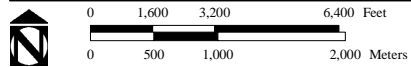
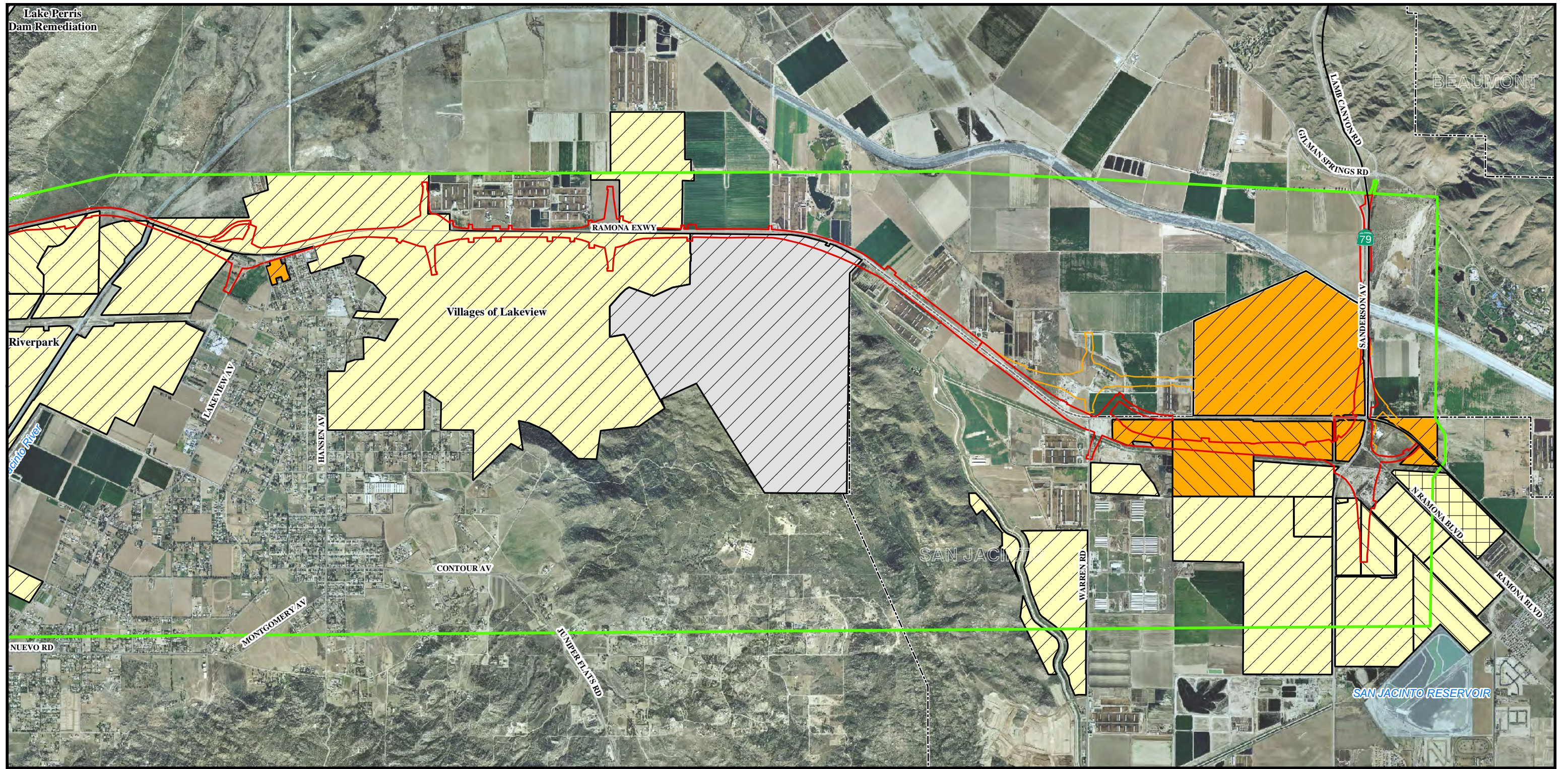


Figure 3.25.1  
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**Cumulative Projects**  
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|--|----------------------------|---|
| MCP Study Area                         | <b>Development by Type</b> | <b>Development by Status (as of 10/15/07)</b> |
| Right-of-Way (Preferred Alternative 9) | Residential                | Application Submitted                         |
| Right-of-Way (Alternatives 4-7)        | Commercial                 | Project Approved                              |
| City Boundary                          | Industrial                 | Under Construction                            |
| Perris Valley Pipeline Project         | Other                      | Operational                                   |
| Proposed Perris Valley Rail Extension  |                            |   |

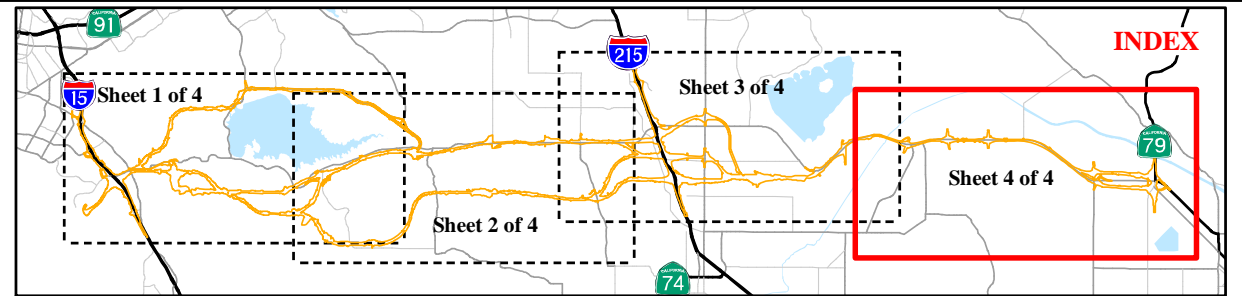
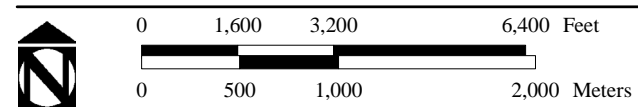


Figure 3.25.1  
Sheet 4 of 4

SOURCE: AirPhoto USA (2006), TBM (2007), Jacobs Engineering (2007)



**Cumulative Projects**  
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implementing new uses for currently vacant lands, reuse of existing facilities, and joint use of the airfield facilities for the development of an air cargo facility. Long-term economic gains in the form of developing a civilian air cargo center, and the growth and development of an employment center to account for 38,000 jobs, are projected.<sup>1</sup>

### ***Related Major Public Works Projects***

#### ***Perris Dam Remediation Project***

Construction of the Perris Dam Remediation project is estimated to begin in 2010 and be completed by 2012. All projects concerning the Perris Dam are anticipated to be complete by fall 2014. Lake Perris is the southernmost State Water Project Facility and the southern terminus of the East Branch of the California aqueduct. The Lake Perris State Recreation Area is one of the state's most popular recreation destinations, with an average attendance of 1.1 million visitors. Recreational activities at the Lake Perris State Recreation Area, including water sports, rock climbing, and the use of the trail from the climbing area, would be affected temporarily during construction of the proposed project.<sup>2</sup>

#### ***Central Pool Augmentation and Water Quality Project***

The Central Pool Augmentation and Water Quality (CPA) project is an approved but not built Metropolitan public works project west of Lake Mathews. The Final EIR was certified in August 1995. The CPA project is a proposed system of raw water conveyance, water treatment, and treated water delivery facilities to augment Metropolitan's existing facilities that provide drinking water to the Central Pool, which consists of the major urban areas of Los Angeles, Orange, southern Ventura County, and southwestern San Bernardino County. The project originates in western Riverside County at the Lake Mathews reservoir, which will provide source water to the project. The project consists of a drinking water treatment plant and 3.7- or 4.0-meter (m) (12- or 13-foot [ft]) diameter pipelines and tunnels to convey up to 11 cubic meters (400 cubic feet) per second of treated water to existing water distribution facilities in western Riverside County and southern Orange County. The objectives of the CPA project are to meet treated water demand needs in the Central Pool for the next 20 years and to strengthen the reliability of the water system. The CPA project will also enhance groundwater replenishment by increasing the

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<sup>1</sup> <http://www.marchjpa.com/about.html>; site accessed October 17, 2007.

<sup>2</sup> <http://www.perrisdam.water.ca.gov>; site accessed September 27, 2008.

operational flexibility of Metropolitan's distribution system into the Central Pool. There is no estimated construction date for the CPA project at this time.

### ***Perris Valley Pipeline***

The Perris Valley Pipeline is a major water line that will provide substantial water reliability and quality benefits to a significant portion of western Riverside County. Construction is expected to begin in September 2007 and be completed in late 2009. The Metropolitan Water District of Southern California, Western Municipal Water District, and Eastern Municipal Water District are developing the \$110 million project jointly. When completed, the pipeline will enhance the treated water delivery capacity in Eastern and Western service areas by up to 568 million liters (150 million gallons) per day.

The Perris Valley Pipeline will consist of 10.5 kilometers (km) (6.5 miles [mi]) of 244-centimeter (cm) (96-inch [in]) pipeline from Metropolitan's Henry J. Mills Water Treatment Plant, east along Alessandro Boulevard and then south to Oleander Street in the right of way paralleling I-215. The Eastern Municipal Water District is constructing a separate 1.2 m (4.0 ft) diameter, 9.7 km (6.0 mi) long water pipeline that will connect its service area to the Perris Valley Pipeline at Cactus Avenue.<sup>1</sup>

### ***Related Transportation Projects***

Major transportation projects in the MCP study area were previously discussed in Chapter 1 of this EIR/EIS and shown in Figure 1.2.4. These related improvements are on facilities that represent future connections or are complementary to the MCP project, and are considered in the assessment of cumulative effects.

Most of the major transportation projects consist of freeway widening or interchange improvement projects, which are expected to have limited impacts. Some of the projects (such as the SR-79 realignment) have a greater potential to impact resources of concern, specifically aquatic, biological, and cultural resources. These projects are covered activities under the MSHCP and are considered part of the MSCHP. These projects are also part of the Riverside County General Plan Circulation Element; therefore, their impacts were considered in the General Plan EIR/EIS.

The County of Riverside's proposed improvement project to realign and widen Cajalco Road in the area south of Lake Mathews is of particular concern with regard to cumulative impacts. As noted in Section 2.6.3 of this EIR/EIS, it is RCTC's intent

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<sup>1</sup> <http://www.perrisvalleypipeline.com/>; accessed September 27, 2008.

to use the coverage provided in Section 7.2.3 of the MSHCP for the MCP project. This same coverage could also be used by the County of Riverside for the Cajalco Road realignment and widening project. The MSHCP only provides conditional coverage for one transportation facility south of Lake Mathews. To address this concern, the County of Riverside and RCTC have agreed that, in the event that County road improvements to Cajalco Road precede construction of the MCP project in the area described in Section 7.2.3 of the MSHCP (south of Lake Mathews), any existing improvements at the time the MCP project is complete would be subject to the design considerations identified in the MSHCP. Specifically, when the MCP is constructed, any portions of the existing or future improved Cajalco Road south of Lake Mathews from Gavilan Road 5.5 km (3.4 mi) west that are not needed to provide for local access will be removed and restored to a natural state consistent with the conditions in Section 7.2.3 of the MSHCP.

#### **3.25.4.5 Summary of Cumulative Impact Considerations**

The MCP study area is approximately 29,000 ha (55,000 ac) in size. The potential for the MCP project to result in or contribute to cumulative adverse environment effects is defined in part by the recent adoption of applicable General Plans for the County and the Cities in the study area, the existing development and future development patterns, and existing and planned open space preservation in accordance with the MSHCP.

As described above, the adopted General Plans include provisions for additional open space preservation as well as additional development. Approximately 23 percent of the MCP study area is already developed (see previous Figure 3.1.1, Existing Land Use). In addition to existing land uses, there are over two dozen active or recently approved development projects in the MCP study area that represent a commitment of land for thousands of additional residential units plus commercial and industrial uses.

#### **3.25.5 Environmental Consequences**

The cumulative effects or contributions to adverse cumulative effects that could result from the MCP project are discussed below. A key resource document for this analysis was the EIR for the Riverside County General Plan update approved in October 2003 (General Plan EIR). The General Plan EIR provides a comprehensive assessment of environmental impacts that would result from the build out of General Plan land uses and infrastructure.

### 3.25.5.1 Growth-Related Effects

The cumulative resource study area for growth-related effects is western Riverside County. As described above, historically, growth in western Riverside County has been characterized by the conversion of raw land to agricultural uses followed by development associated with the defense industry and post-World War II urbanization. By 1974, the population of Riverside County had reached nearly 500,000, up from 459,000 in the 1970 census.<sup>1</sup> Between 1990 and 2000, the number of residents in Riverside County grew by over 32 percent, making Riverside County the fastest growing county in California. By 2000, the County was home to over 1.3 million residents, more than the entire population of 13 states. According to the Riverside County General Plan, the population of Riverside County is expected to nearly double to 2.8 million people by 2020.

Growth-related effects of the MCP Build Alternatives are discussed in Section 3.2 of this EIR/EIS. Implementation of any of the MCP Build Alternatives would involve improvement to existing and proposed service interchanges to provide service-level connectivity to the study area as well as providing regional connectivity of these highways with the MCP project. The systems interchanges are proposed in locations where interchanges already exist, where development has already occurred, and where additional development is planned for in the adopted land use plans of the local jurisdictions. The MCP project, as connected with other highways through these interchanges, will make the study area more regionally accessible and will accommodate future growth and development in a manner consistent with that proposed in the adopted land use plans for the area.

The current and reasonably foreseeable future actions or projects that may affect growth-related effects are the projects identified in Section 3.25.4, as well as continued land and infrastructure development in accordance with adopted General Plans and open space preservation in accordance with the adopted MSHCP.

The land use designations in the Riverside County General Plan accommodate the projected growth and also support a more favorable jobs-to-housing ratio compared to current conditions where many residents of Riverside County are traveling to surrounding counties to work. The approved General Plan provides for an increase in employment opportunities closer to where people are and will be living; therefore, the

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<sup>1</sup> Introducing the Counties of Riverside and San Bernardino (Bank of America, 1975).

General Plan EIR found that the General Plan would have a beneficial impact on the jobs/housing balance for Riverside County and the Southern California Association of Governments (SCAG) region. However, the General Plan EIR also found that development at the scale and intensity permitted under the General Plan would result in cumulative population increases in the county and the region.

**Build Alternatives**

The effects of the implementation of the adopted General Plans and the development projects listed above, when combined with any of the proposed MCP Build Alternatives, include increased mobility to support job growth, an improved jobs/housing balance, and projected population increases. In addition, while Section 3.2 of this document recognizes that development may intensify and/or hasten in the FS Segment, intensification of land use in this area is not anticipated. The adopted Riverside County General Plan identifies other areas in the MCP study area that are better suited to more dense residential development for geographic and topographic reasons. For Alternative 9, the planned interchanges at Lake Mathews Drive and at Old Elsinore Road are in an area characterized by existing and planned rural, very low density and low density residential uses. The presence of the MCP project interchanges at these locations, outside the area originally contemplated for the west-east CETAP corridor in the Riverside County General Plan, may affect the rate, type, amount, and location of growth in this area. While additional growth in this area is constrained by topography and existing land use patterns, including the overall rural character of the areas, these two interchanges could hasten the build out of these areas or result in landowners submitting development applications for more intense uses than those in the adopted General Plan. As mentioned above, all future development projects would be subject to their own environmental review process, and would be required to develop mitigation measures to offset impacts to resources of concern. The development intensity of the area around the interchanges with Lake Mathews Drive and Old Elsinore Road is ultimately within the control of the local appointed and elected officials. Neither project mitigation nor mitigation for cumulative effects is feasible to modify approved population projections and adopted regional and local land use plans and resource plans that define the future development pattern of Riverside County.

**No Build Alternatives**

No Build Alternatives 1A and 1B would both involve construction and improvement of the street network without implementation of an MCP facility. These alternatives would not make the study area more regionally accessible, and would not increase

mobility to the degree that it would support substantial job growth. Therefore, it is unlikely that an improved jobs/housing balance would be achieved with these alternatives. Even without the MCP project, population increases are still likely to occur as a result of regional population growth trends and in accordance with the approved land use designations in the adopted county and city General Plans. If the MCP project (which is included in both the Regional Transportation Plan and local General Plans) is not approved and a No Build Alternative is selected, amendments to approved population projections and adopted regional and local land use plans and resource plans may be warranted.

### **3.25.5.2 Farmlands/Timberlands**

As discussed in Section 3.3 of this EIR/EIS, all of the MCP Build Alternatives will impact farmlands. There are no timberlands in the project study area; therefore, there is no project-related change to timberlands that would contribute to cumulative effects to this resource.

The cumulative resource study area for farmlands is Riverside County. The Riverside County General Plan found that approximately 137,190 ha (339,000 ac) of land in the County were devoted to agricultural uses, including 108,050 ha (267,000 ac) in unincorporated areas and 29,130 ha (72,000 ac) within cities. Of the 108,050 ha (267,000 ac) of land in the unincorporated county that are actively utilized for agricultural production, 85,790 ha (212,000 ac) are designated as “prime,” “of Statewide importance,” or “Unique” farmland.

Historically, farmland has been under pressure for conversion to suburban and urban uses, particularly since World War II. Currently, the health of agricultural resources in Riverside County is characterized by continued pressure from urbanization, foreign competition, and rising production costs. Direct impacts of urbanization to agricultural use are the conversion of farmland to nonagricultural use as the result of land development. Indirect effects include increased air pollution, livestock predation by pets, crop diseases from inadequate care of off-farm ornamental plants, restrictions on pesticide use and burning, and requirements to set aside on-farm buffer zones. Production cost increases result from rising land values, water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability resulting from trespassing on farms.

Agriculture was identified as the largest industry in Riverside County in terms of dollar value. The total gross valuation of agricultural crops in the county in 2001 was

\$1,124,908,400. This amount represents an increase of \$76,346,800 over the 2000 gross value. The economic value of agricultural uses is increasing at the same time that the resource is experiencing pressure from several sources, including development and urbanization pressures.

Farmland conversion is occurring at a rapid rate in Riverside County. Based on the *Farmland Conversion Report 2002-2004*, published by the California Department of Conservation, between the years 2002 and 2004, 18,688 ha (46,719 ac) of agricultural land in Riverside County were converted to nonagricultural uses.

### **Build Alternatives**

The MCP Build Alternatives result in project impacts that include the conversion of existing farmland to roadway as a result of right of way acquisition. MCP Build Alternatives 4 through 7 will result in the acquisition of between 370.4 ha (915.3 ac) and 430.7 ha (1,064.4 ac) of farmland. The impact to designated farmlands and existing agricultural uses as a result of Alternatives 4 through 7 is generally within that contemplated by the General Plan because the MCP project is one of the designated CETAP corridors included in the General Plan. Alternative 9 will result in the acquisition of 332.7 ha (822.2 ac) of farmland. As shown previously in Table 3.3.C, Alternative 9 would impact 0.18 percent of the prime/unique farmlands and 0.14 percent of the total farmlands in Riverside County. Alternative 9 has the lowest impact of all MCP Build Alternatives to agricultural uses due primarily to its routing south of Mead Valley through the Gavilan Hills area.

The current and reasonably foreseeable future actions or projects that may affect farmlands are the projects identified in Section 3.25.4. While the related transportation projects could result in the conversion of small areas of farmlands, most of the project involves widening existing facilities where such impacts would be limited to minor edge effects to existing farmlands.

The impact to designated farmlands and existing agricultural uses as a result of the MCP project is generally within that contemplated by the General Plan because the MCP project is one of the designated CETAP corridors included in the General Plan. Therefore, additional mitigation for cumulative effects of the MCP project is not warranted.

### **No Build Alternatives**

No Build Alternatives 1A and 1B would both involve construction and improvement of the street network without implementation of the MCP project. These alternatives

could result in “edge” impacts to existing agricultural uses, particularly in cases where additional right of way acquisition is required to implement planned improvements. Indirect effects could also result from impacts to access or other operational constraints and increased noise, air quality, or other effects of road construction and widening. Acquisition of additional right of way for these projects could also result in the direct conversion of designated farmlands to transportation uses.

### **3.25.5.3 Community Impacts/Relocations**

The cumulative study area for community impacts/relocations is the same as the MCP project study area. The cumulative study area consists of undeveloped, developed, and developing areas. The health of this resource changes as land or infrastructure development results in property acquisitions and relocations. In the cumulative study area, housing for relocations is available because abundant housing stock was developed during the most recent decade, and additional residential developments are currently planned (as shown in Figure 3.25.1).

Relocations occur when development, redevelopment, or infrastructure projects are located in areas where residential and commercial developments currently exist. Development of vacant land does not displace residential units or people. The General Plan EIR found that, without the exact location of new development, it was not possible to determine whether build out of Riverside County would result in displacement of residential units or people. As shown in Figure 3.25.1, most of the planned development is located in currently vacant areas. However, widening of roadways adjacent to existing development may result in the displacement and relocation of businesses and residents.

#### ***Build Alternatives***

The MCP Build Alternatives would result in the acquisition of nonresidential (dairies, agriculture, sod farms, open storage, big box distribution, manufacturing, and retail), residential (mobile homes, single-family, multifamily), and municipal (fire station, police station, school district offices, and a high school) properties.

Combined with the proposed MCP project, anticipated cumulative impacts resulting from the cumulative projects in the MCP study area include the acquisition of residential and nonresidential properties and the displacement of occupants. Most displacement of residential and nonresidential properties would be anticipated to occur along existing or planned roadways as the planned street network is developed.

Properties along I-15 and I-215 in the MCP study area may be affected by right of way acquisition required for the MCP project as well as by future improvement projects to I-15 and I-215.

All relocations required for the MCP project and other cumulative projects would be handled in accordance with Federal and State laws requiring that prior to any property acquisition or relocations, relocation analysis must be prepared and adequate and appropriate compensation provided. The Uniform Relocation Assistance and Real Property Acquisitions Policies Act (Uniform Act) of 1970 (Public Law 91-646, 84 Stat. 1894) mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by development. The Uniform Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced. Considering the abundant housing stock developed during the most recent decade and the amount of planned residential developments (as shown in Figure 3.25.1), a sufficient number of "comparable replacement dwellings" meeting decent, safe, and sanitary standards exist within the cumulative study area to provide adequate relocation opportunities for displaced residents affected by all cumulative projects. The exception is those displaced from mobile homes (the MCP Build Alternatives will impact 40 to 45 mobile homes). The current inventory for mobile home unit sales and rentals is scarce. The area lacks in-kind mobile home replacement housing suitable as decent, safe, and sanitary. One option is for mobile home displacees to relocate into slightly larger single-family residences, resulting in a housing-of-last-resort entitlement. "Last Resort Housing" payments combined with additional resources in finding suitable single-family or multifamily residential replacement housing is anticipated.

Because the MCP project and all other cumulative projects would comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 (Public Law 91-646, 84 Stat. 1894), additional mitigation for cumulative effects is not warranted.

### **No Build Alternatives**

The No Build Alternatives include the construction of planned roadway improvements without implementation of the MCP project. Implementation of these alternatives would affect properties immediately adjacent to the roads, particularly where new right of way acquisition is required for roadway widening. Right of way

acquisition may displace both residential and non-residential properties along the roadways.

#### **3.25.5.4 Visual/Aesthetics**

The cumulative resource study area for visual and aesthetics is the MCP project study area, including portions of the cities of Corona, Perris and San Jacinto as well as the unincorporated area between the cities (see Figure 2.1.1, Project Vicinity and Study Area). Historically, visual resources in the cumulative study area have been characterized by the conversion of raw land to agriculture uses, followed by development associated with the defense industry and post-World War II urbanization. Currently, the health of this resource is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing adopted General Plans that identify areas appropriate for new and more intensive development to accommodate project growth, as well as identifying areas that are to remain as natural or recreation open space. The current and reasonably foreseeable future actions or projects that may affect this resource are the projects identified on Figure 3.25.1, as well as continued development and open space preservation in accordance with adopted General Plans and the adopted MSHCP.

The Riverside County General Plan includes policies to improve the visual character of the built environment, including the concentration of growth and preservation of rural and open space character in certain areas of the county; providing for the permanent preservation of important natural and scenic resources; incorporating open space within developed areas; ensuring the compatibility of existing and new development; maintaining or enhancing the character of the individual project site and the immediate area; conserving view corridors, skylines and scenic vistas; and imposing restrictions on development activities that may adversely affect the existing visual characteristics of areas within the county. Mitigation in the General Plan EIR includes design review of development projects. Even with these policies in place, future development of unincorporated areas of the county may alter the characteristics of locally or regionally important visual resources. The General Plan EIR found that the conversion of open space to urban land was a significant and unavoidable project and cumulative effect (under CEQA) of the General Plan land uses by causing the obstruction of existing open views and/or obstructing distant panoramic views from existing development.

Riverside County Ordinance Number 655 restricts the permitted use of certain light fixtures that emit undesirable light rays into the night sky and that have a detrimental

effect on astronomical observation and research. This ordinance and mitigation specified in the General Plan EIR were found to reduce the impact of light and glare from development allowed by the General Plan to a level that is less than significant under CEQA.

The effects of the cumulative development and transportation projects described above include contributing to a change from a county characterized by large undeveloped areas, including open space and agricultural landscapes, to a more developed, urbanized landscape. The Perris Dam Remediation Project will have localized, short-term effects to aesthetics, but will not notably alter the character and visual conditions of the recreation area.

### **Build Alternatives**

All of the MCP Build Alternatives would contribute to a cumulative effect with regard to visual impacts and change of visual character within the MCP study area. As one of the fastest growing areas in the United States, western Riverside County in general and the MCP study area in particular are changing from open space and agricultural landscapes to a more urbanized one. As discussed previously in Section 3.7, Visual/Aesthetics, tracts of vacant land within the MCP study area are either approved or planned for future land development. The provision of transportation infrastructure such as the MCP project typically accompanies the development of land for residential or commercial purposes. Although the MCP project would contribute to a cumulative visual impact within the MCP study area, this new transportation facility was expected and planned in the Riverside County General Plan.

The MCP project would contribute to the cumulative change in visual character of the MCP study area from rural to urban by introducing a major transportation facility and its associated activity, which did not exist there before, particularly in the portion of the MCP study area between I-15 and I-215.

The visual impacts of the MCP project include the introduction a major transportation facility and large bridge structures within existing open space (habitat reserve), rural, and agricultural areas. The MCP project would also alter existing landforms due to grading and construction of various cut and fill slopes. Compared to MCP Build Alternatives 4 through 7, more extensive landform alteration would occur under Alternative 9 due to its alignment through the Gavilan Hills and the area south of Lake Mathews near Monument Peak.

In addition, light and glare would increase as a result of the MCP in those areas that are currently open space or are rural in character. Alternatives 4, 5, and 9 would increase light and glare in the open space (habitat reserve) areas south of Lake Mathews and in the open space/agricultural areas between the McCanna Hills and SR-79. Alternative 9 would also introduce a new source of light and glare in the Gavilan Hills area. This would be an adverse effect to area residents near the MCP project where the light from vehicles traveling at night would encroach on viewers' enjoyment of the night sky in this area.

Combined with the proposed MCP project, anticipated cumulative impacts to the visual environment include the conversion of open space, rural, and agricultural areas to urbanized residential developments.

Project mitigation is identified in Section 3.7, Visual/Aesthetics, and includes: the development and implementation of a landscape plan for MCP; saving existing mature trees; incorporating attractive walls, medians, and other visually pleasing hardscape into the final design of the MCP project; and aesthetic enhancements for sound walls in the final design. Cumulative projects are anticipated to be conditioned to comply with the applicable City and County design requirements, open space policies, and land use policies.

### ***No Build Alternatives***

Under Alternative 1A, the planned street network would be constructed except for improvements to Cajalco Road and Ramona Expressway. Because Cajalco Road and Ramona Expressway would remain as they are today, Alternative 1A would not change the existing visual setting and would not create visual impacts to the MCP study area.

Under Alternative 1B, the MCP project would not be constructed, but both Cajalco Road and Ramona Expressway would be constructed to their ultimate width and alignment as shown in the Riverside County General Plan. The widening of Ramona Expressway between I-215 easterly to SR-79 would include some removal of agricultural land but would not include the construction of any interchange structures in this area. The effects of widening and realigning Cajalco Road and El Sobrante Road in the area from I-15 west to the existing Cajalco Road/El Sobrante Road intersection would result in the same visual effects as MCP Build Alternatives 6 and 7. Through Mead Valley, the widening of Cajalco Road to its General Plan Circulation Element width would result in the removal of mature ornamental

vegetation as well as some existing residences and businesses but would not include the construction of any interchange structures in this area.

### **3.25.5.5 Cultural Resources**

As discussed in Chapter 3.8 of this EIR/EIS, all of the MCP Build Alternatives will impact cultural resources. Under Section 106, the consideration of indirect and cumulative impacts is limited to those impacts caused by a single project and is required when applying the criteria of adverse effect on historic properties (36 CFR §800.5(a)(1)). Delineating the area of potential effect (APE) is also part of the Section 106 process. Under NEPA and CEQA, however, cumulative impacts refer to the cumulative effects of multiple past, present, and future projects. The study area for cumulative effects on cultural resources is defined as the MCP APE.

According to the Riverside County General Plan EIR, the cultural resource characteristics of Riverside County reflect human settlement, exploitation, arts, crafts, technology, ideology, and past environmental conditions. Prehistoric land use of the APE and surrounding areas has been prevalent for thousands of years. The area was also settled historically by Euro-Americans in the late 1800s. The APE and surrounding areas therefore contain numerous cultural resources that are under constant pressure by modern land uses such as agriculture, livestock and dairy farming, and urban and suburban development. These land uses can and do destroy cultural resources. The health of this resource is fragile because there are a limited number of cultural resources, and they cannot be replaced. The health of cultural resources in the APE is determined by following NEPA and CEQA guidelines, and by local municipalities and the County of Riverside implementing adopted General Plans that identify cultural resources and provide goals, policies, and measures to protect them.

The Riverside County General Plan EIR identifies areas of sensitivity for cultural resources. In the MCP APE, the area between I-15 and I-215 is classified as having high sensitivity for cultural resources. Most of this area is within the jurisdiction of the County of Riverside and is subject to these General Plan policies. The MCP project and other transportation improvement projects are also subject to NEPA and CEQA policies regarding cultural resources. The regulations implementing Section 106 of the National Historic Preservation Act acknowledge that a project's adverse effects include any that are reasonably foreseeable, even if they may occur later in time, are farther removed in distance (indirect), or are cumulative.

The direct impacts to cultural resources from the MCP project are the destruction of cultural resources within the APE. Indirect effects include possible looting and vandalism of cultural resources that would be more accessible to the general public due to the presence of the MCP. In addition, cultural resources are subject to damage and destruction by natural erosion and erosion exacerbated by excavation for the MCP project and other cumulative projects. The current and reasonably foreseeable future actions or projects that may affect this resource are the projects identified on Figure 3.25.1, as well as continued development in areas of known and currently unknown cultural resources.

The MCP would cumulatively contribute to the loss of cultural resources, some of which have been determined to be significant under NEPA and/or CEQA. Avoidance and preservation of cultural resources is preferred, and specific measures for the identification of cultural resources that can be feasibly preserved are being studied. These may include parcel acquisition for preservation in perpetuity.

However, in instances where avoidance is not possible, mitigation measures to reduce project impacts are presented in Chapter 3.8 of this EIR/EIS. They include:

- Mitigative archaeological excavations of sites recommended as eligible for listing in the National and California Registers as outlined in Chapter 3.8 of this EIR/EIS.
- Monitoring of all ground disturbing activities during construction of the MCP that are within known cultural resources, or in areas that are sensitive for cultural resources, by a qualified archaeologist and Native American monitor.

### ***Build Alternatives***

As discussed in Section 3.8, Alternative 9 would result in impacts to significant cultural resources, as would all Build Alternatives. Six significant cultural resources recommended as eligible or eligible for listing in the National Register of Historic Places (National Register) and/or the California Register of Historical Resources (California Register) are within the APE of Alternative 9. Three of these six sites will be protected by designation as an Environmentally Sensitive Area (ESA) and will be fenced off and avoided during construction. Although the MCP project and the cumulative projects will occur in compliance with the applicable Federal and State regulations identified in Section 3.8.1, there would still be a cumulative adverse effect to these resources.

Three significant cultural resources that may be eligible for listing in the National Register and California Register are within the APE of Alternative 5. Four significant cultural resources that may be eligible for listing in the National Register and California Register are within the APE of Alternatives 4 and 7. Five significant cultural resources that may be eligible for listing in the National Register and California Register are within the APE of Alternative 6. Table 3.25.A lists the significant cultural resources affected by the MCP Build Alternatives and how they may be impacted by other cumulative projects, as well as other mitigation measures that have been proposed.

In addition to these measures, other measures that could be considered by the County for mitigating impacts to Sites P-33-1649, P-33-1650/P-33-16687, P-33-12230, P-33-13791, and P-33-16598 include: (1) redesigning development plans to avoid the sites or minimize impacts to the sites where avoidance is not feasible; (2) conducting testing and data recovery to ensure that archaeological data from these sites are not lost prior to construction; and (3) providing for archaeological and Native American monitoring during construction. For the CBJ Burrows Dairy, no development plans are available from the City of San Jacinto to determine the extent of the impact. Assuming that the dairy and its various buildings would be fully demolished as a result of future development plans, the City of San Jacinto could provide mitigation in the form of historical recordation of the dairy and provision of historical information and/or interpretive exhibits at the site of the new development, at City Hall, or at a local museum. For the Cajalco Tin Mine District, Metropolitan should consider placement of facilities for the Central Pool Augmentation project in areas that will not affect resources within the Cajalco Tin Mine District. Where avoidance is not possible, Metropolitan could provide mitigation in the form of historical recordation of the mining district and provision of historical information and/or interpretive exhibits at the site of the project, at Metropolitan's offices, or at a local museum.

### **No Build Alternatives**

Because no improvements to Cajalco Road and Ramona Expressway would be made under Alternative 1A, this Alternative would not impact significant cultural resources in the cumulative study area. Three significant cultural resources that may be eligible for listing in the National Register and California Register would likely be affected by Alternative 1B, which involves widening of Cajalco Road and Ramona Expressway as called for in the Riverside County General Plan Circulation Element.

**Table 3.25.A Cultural Resources Cumulative Impacts**

Resources Determined Significant	Significant Under NEPA/CEQA	Summary of MCP Project Effect	MCP Alternatives that Impact Resource						Cumulative Projects Effects and Additional Mitigation	
			4	5	6	7	9	9 SJN DV		
P-33-1512, Prehistoric Quarry Site	NEPA/CEQA	Alternative 9 would result in the physical destruction of the southern third of P-33-1512, with the exception of the southernmost tip.						X		Resource is located within a reserve area and is not planned for future development
P-33-1649, Prehistoric Quarry, ESA	Assumed Eligible/Avoided	Resource will be protected by ESAs and will have no adverse effect. No substantial adverse change.						X		Resource may be impacted by a proposed residential development, for which an application has been submitted. It is not clear what impacts this project will have on the site. RCTC will work with the County to provide cultural resource site information so that it can be considered in preparing the development site plan.
P-33-1650/33-16687, Prehistoric Quarry Site	NEPA/CEQA	Alternative 9 would result in the physical destruction of roughly the eastern 60 percent of the site.						X		Resource may be impacted by a proposed residential development for which an application has been submitted. It is not clear what impacts this project will have on the site. RCTC will work with the County to provide cultural resource site information so that it can be considered in preparing the development site plan.
P-33-4759/H, Cajalco Tin Mine District	NEPA/CEQA	Alternatives 6 and 7 both pass through Site 33-4759, the 1-square-mile Cajalco Tin Mine District, resulting in the same use/take of this historic site: 25.2 ha (62.5 ac). Alternatives 4, 5, and 9 completely avoid this site.			X	X				Resource may be impacted by Metropolitan's Central Pool Augmentation project and the proposed Eagle Valley Ranch residential development. It is not clear what impacts, if any, these projects will have on the resource. RCTC will work with Metropolitan and the County to provide cultural resource site information so that it can be considered in preparing the development site plan.
P-33-7640, C.B. Bullock House	CEQA	The resource would be impacted by Alternatives 4 and 6 and may result in a substantial adverse change to the site under CEQA. Alternatives 5, 7, and 9 completely avoid this site.	X		X					The resource is located in an area designated as a community center in the Riverside County General Plan. No known developments are currently proposed at this site.

**Table 3.25.A Cultural Resources Cumulative Impacts**

Resources Determined Significant	Significant Under NEPA/CEQA	Summary of MCP Project Effect	MCP Alternatives that Impact Resource						Cumulative Projects Effects and Additional Mitigation
			4	5	6	7	9	9 SJN DV	
P-33-12230, Prehistoric Habitation Site, ESA	Assumed Eligible/Avoided	Resource will be protected by ESAs and will have no adverse effect. No substantial adverse change.					X		Resource may be impacted by the proposed Gavilan Hills residential development for which an application has been submitted. It is not clear what impacts this project will have on the site. RCTC will work with the County to provide cultural resource site information so that it can be considered in preparing the development site plan.
P-33-13791, Prehistoric Village Site	NEPA/CEQA	Three site loci (33-816, 33-817, and 33-818) are located within the current MCP direct APE for Alternatives 4, 5, 6, and 7. Alternatives 4, 5, 6, and 7 result in the same use of this historic site: 8.3 ha (20.5 ac). Alternative 9 is the only alternative that completely avoids this site.	X	X	X	X			This site is located in an area slated for residential development by Boulder Springs Venture, LLC. It is not clear what impacts the housing development will have on the site. RCTC will work with the County to provide cultural resource site information so that it can be considered in preparing the development site plan.
P-33-16598, Multi-use Prehistoric Site	NEPA/CEQA	Alternative 9 would result in the physical destruction of the northeastern 7 percent of P-33-16598. The area that would be impacted is highly disturbed and does not contribute to the overall site eligibility for the National or California Registers. Therefore, the direct effect would not be adverse to the site (historic property) under NEPA, and there would not be a substantial adverse change to the site (historical resource) under CEQA. The same impacts would occur as a result of all MCP Build Alternatives.	X	X	X	X	X		This site is located in an area that is slated for a large mixed use development by Lewis Homes. The developer and the County are working with the County and the involved Native American Tribes to keep the site parcels in open space to protect the resource.

**Table 3.25.A Cultural Resources Cumulative Impacts**

Resources Determined Significant	Significant Under NEPA/CEQA	Summary of MCP Project Effect	MCP Alternatives that Impact Resource						Cumulative Projects Effects and Additional Mitigation
			4	5	6	7	9	9 SJN DV	
P-33-16679, Multi-use Prehistoric Site	NEPA/CEQA	Alternative 9 TWS DV would result in the physical destruction of 95 percent of P-33-16679. Therefore, there would be an adverse effect to this site (historic property) under NEPA and a substantial adverse change to the site (historical resource) under CEQA.					X		The resource is located in the MSHCP Critical Area and is designated as rural residential in the Riverside County General Plan. No known developments are currently proposed at this site.
LSA-JCV531-S-207, Historic Site, ESA	Assumed Eligible/Avoided	Resource will be protected by ESAs and will have no adverse effect. No substantial adverse change.					X		The resource is located in the MSHCP Criteria Area and is designated as rural community (2 ac minimum) in the Riverside County General Plan. No known developments are currently proposed at this site.
CBJ (Burrows) Dairy	CEQA	The CBJ Dairy falls within the APE for Alternatives 4, 5, 6, 7, and 9. The majority of the resource and its structures are located within the SJN DV. Only a small portion of the open space found on the eastern end of the property falls into the SJS Segment alignment, which is common to all MCP Build Alternatives. No effect except under SJN DV.	X	X	X	X	X	X	The resource will be impacted by the SR-79 Realignment Project and a proposed commercial development. It is not clear what impacts these projects will have on the site. RCTC will work with the City of San Jacinto to provide site information so that it can be considered in preparing the development site plan in coordination with both the MCP project and the SR-79 project.

ac = acres  
 APE = Area of Potential Effect  
 California Register = California Register of Historical Resources  
 CEQA = California Environmental Quality Act  
 County = Riverside County  
 ESA = Environmentally Sensitive Area  
 ha = hectares  
 MCP = Mid County Parkway  
 Metropolitan = Metropolitan Water District of Southern California

MSHCP = Multiple Species Habitat Conservation Plan  
 National Register = National Register of Historic Places  
 NEPA = National Environmental Policy Act  
 RCTC = Riverside County Transportation Commission  
 RCTC = Riverside County Transportation Commission  
 SJN DV = San Jacinto North Design Variation  
 SJS = San Jacinto South  
 SR-79 = State Route 79  
 TWS DV = Temescal Wash Area Design Variation

### **3.25.5.6 Paleontology**

The cumulative study area for this resource is the same as the MCP study area. The health of this resource is fragile because there are a limited number of paleontological resources in the cumulative study area and they are a nonrenewable resource. Land and infrastructure development can destroy paleontological resources; therefore, the health of this resource is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing adopted General Plans that identify areas of high paleontological sensitivity and include goals, policies, and actions to preserve these resources. The current and reasonably foreseeable future actions or projects that may affect this resource are the projects identified on Figure 3.25.1 as well as continued development in areas of high paleontological sensitivity. In addition, paleontological resources are subject to damage and destruction by natural erosion and erosion exacerbated by excavation and grading. Resources may also be damaged and removed from meaningful stratigraphic context by vandalism and unauthorized collecting by construction crews and after-hours visitors.

Although grading activities of development projects removes paleontological resources from the ground, the finding, excavation, and preservation of fossils allows the opportunity to contribute to the body of knowledge of the history of Western Riverside County, which is a beneficial cumulative impact. Development of a Paleontological Resource Impact Mitigation Program (“PRIMP” for Riverside County and Society of Vertebrate Paleontology, and “PMP” for Caltrans) that plans for fossil recovery and institutional storage is in accord with guidelines of the international Society of Vertebrate Paleontology.

#### ***Build Alternatives***

There are sensitive paleontological resource localities in formations that are crossed by the MCP Build Alternatives.

Because ground-disturbing activities associated with the MCP project may impact paleontological resources, a project-specific Paleontological Mitigation Plan (PMP) shall be completed prior to construction as described in Mitigation Measure PAL-1. Additional mitigation for cumulative effects is not warranted because paleontological conditions and finds are localized and specific to each area of development.

Combined with the proposed MCP project, anticipated cumulative impacts include the continued destruction and recovery of paleontological resources as a result of

excavation associated with construction of other land development and infrastructure projects. The cumulative projects will also be required to comply with the applicable Federal and State regulations identified in Section 3.12.1.

### **No Build Alternatives**

Under the MCP No Build Alternatives, the permanent impacts discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but impacts to paleontological resources would occur for the other transportation improvement projects included in the No Build Alternatives.

#### **3.25.5.7 Natural Communities**

The cumulative study area for natural communities is western Riverside County. The health of this resource is determined to a large extent by the effectiveness of local municipalities and the County of Riverside in implementing the adopted western Riverside County MSHCP. Historically, this resource has become more fragmented over time by development. Since its approval in 2004, implementation of the western Riverside County MSHCP allows for development while maintaining the health of this resource by providing for conservation of species and habitats and a coordinated system of linkages to connect conservation areas.

The western Riverside County MSHCP provides a comprehensive, habitat-based approach to the protection of covered species by focusing on conservation and management of lands essential for their long-term conservation. This approach is consistent with United States Fish and Wildlife (USFWS) regulations concerning the designation of critical habitat in providing for the protection of “those physical and biological features essential to the conservation” of the species (MSHCP, Volume 3, Section 14.2). As a regional plan, the MSHCP serves to provide mitigation for cumulative impacts to covered species and their habitats. Project consistency with the MSHCP ensures that the cumulative impacts to those species are effectively mitigated.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS (Riverside County Transportation and Land Management Agency, 2004) concluded that because of features incorporated into the MSHCP and the additional mitigation measures included in the

EIR/EIS, impacts to sensitive vegetation communities would be reduced to less than significant levels under CEQA.

**Build Alternatives**

Alternatives 4, 5, 6, and 7 would permanently impact 1,128 ha (2,786 ac), 1,094 ha (2,704 ac), 1,331 ha (3,289 ac), and 1,298 ha (3,207 ac) of natural communities, respectively, as detailed previously in Table 3.17.B. In addition to impacting the Metropolitan reserve lands established by the Lake Mathews MSHCP, which is not impacted by Alternative 9, these alternatives also impact the Habitat Conservation Plan for the Stephen’s kangaroo rat and El Sobrante Landfill MSHCP reserve areas. Therefore, Alternatives 4, 5, 6, and 7 would have a greater contribution to cumulative adverse effects to natural communities than Alternative 9.

Alternative 9 would permanently impact 1,067 ha (2,637 ac) of natural communities, as detailed previously in Table 3.17.B. Project construction would contribute to the incremental loss of natural communities in the region. Cumulative impacts to sensitive natural communities of the MCP project are covered by the MSHCP since the project is a covered activity under the MSHCP as the west-east intra-county CETAP corridor. The MCP project would comply with the provisions of the MSHCP.

In addition to MCP’s compliance with the provisions of the MSHCP, project mitigation includes implementation of Mitigation Measures BIO-1 through BIO-3 to avoid, minimize, and/or compensate impacts to biological resources, including those discussed in Sections 3.18 through 3.21, by protecting the long-term conservation value of sensitive areas and requiring construction monitoring to ensure compliance with all applicable provisions of the MSHCP and other biological resource mitigation measures or permit conditions.

In addition, Mitigation Measures HCP-1 and HCP-3 are mitigation specifically identified to address the impacts to habitat conservation plans. These measures address edge effects to existing habitat conservation areas and require that RCTC coordinate with USA Waste to amend the El Sobrante Landfill MSHCP to address the MCP project and its effects on that Plan’s easterly conservation area. The amendment will address the addition of mitigation lands to the El Sobrante Landfill MSHCP that would offset the loss of functions, values, and species covered under that Plan.

Compliance with provisions of the MSHCP, the El Sobrante Landfill MSHCP, and the Habitat Conservation Plan for the Stephens’ kangaroo rat address the direct, indirect, cumulative, and growth-related effects on covered species and habitats in

western Riverside County resulting from activities covered by the MSHCP, including the MCP project.

Combined with cumulative projects, construction of the MCP would contribute to the incremental loss of natural communities in the region; however, the MSHCP provides a comprehensive approach to the regional conservation of natural communities and, as a regional plan, serves to provide mitigation for cumulative impacts to such habitats. The cumulative projects would be consistent with the MSHCP, which would ensure that the cumulative impacts to those habitats are effectively mitigated.

### **No Build Alternatives**

Alternative 1A would result in fewer impacts to natural communities than any of the proposed Build Alternatives since the MCP project would not be built and no improvements would be made to Cajalco Road or Ramona Expressway. Alternative 1B would result in fewer impacts than the Build Alternatives since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as Build Alternatives 6 and 7 since these Alternatives implement the General Plan roadway alignments in this area.

### **3.25.5.8 Wetlands and Other Waters**

The cumulative study area for wetlands and other waters is western Riverside County, specifically the Santa Ana River and San Jacinto River watersheds. Historically, the health of this resource has declined as over 80 percent of historical wetlands in California have been destroyed. Major loss of wetland habitat occurred during the mid-1950s to mid-1970s, but since then the rate of loss has decreased. Currently, the health of this resource is determined to a large extent by the effectiveness of federal restoration efforts.<sup>1</sup>

Approximately 60 percent of western Riverside County (304,686 ha (752,870 ac) out of the 509,428 ha (1,258,780 ac) within the MSHCP Plan Area) is reasonably foreseeable for development, based on anticipated impacts projected by the MSHCP within the next 75 years. Planned activities that are covered under the MSHCP include seven types of roadways, freeways, CETAP corridors, and other major facilities that have been identified in the Riverside County General Plan Circulation Element, flood control facilities, waste/wastewater facilities, electrical utility facilities, and natural gas facilities. Projects that may impact high-value or sensitive

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<sup>1</sup> United States Geological Survey. <http://geochange.er.usgs.gov/sw/impacts/hydrology/wetlands/>; site accessed October 21, 2007.

wetlands include the SR-79 Realignment project, San Bernardino to Moreno Valley Corridor, Orange County to Riverside County Corridor, the San Jacinto River Flood Control Project, bridge projects crossing the Santa Ana River and the San Jacinto River, as well as other projects.

To mitigate for impacts resulting from these and other reasonably foreseeable projects covered under the MSHCP, approximately 202,350 ha (500,000 ac) in the MSHCP Plan Area are to be assembled as Conservation Area. Since the existing MSHCP database does not provide project-specific level of detail for vegetation mapping, the MSHCP requires certain local implementation measures that require additional information that must be gathered during the long-term implementation of the MSHCP. These local implementation measures require identifying and mapping of riparian/riverine areas and vernal pools, as well as other habitats for species survey requirements.

Riparian/riverine areas are defined by the MSHCP as lands that contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby freshwater source, or areas with freshwater flow during all or a portion of the year. Additionally, drainage vegetated by upland species may meet the definition of riparian/riverine areas if it is determined that the functions and values of the drainage have the potential to affect species downstream within the MSHCP Conservation Area. A functions and values assessment of the mapped riparian/riverine and vernal pool areas is required under the MSHCP and should consider hydrologic regimen, flood storage and flood flow, modification, nutrient retention and transformation, sediment trapping and transport, toxicant trapping, public use, wildlife habitat, and aquatic habitat. The functions and values assessment should focus on riparian/riverine areas and those functions that may affect downstream values within the MSHCP Conservation Area. Additionally, the assessment of these riparian/riverine and vernal pool areas shall include identification and mapping of these areas as well as consideration of species composition, topography/hydrology, and soil analysis.

Where impacts occur to riparian/riverine areas or vernal pools, the MSHCP requires that an avoidance alternative be selected and that measures shall be incorporated into the project design to ensure the long-term conservation of the areas to be avoided, and their associated functions and values, through the use of deed restrictions, conservation easement, or other appropriate mechanisms. If avoidance is infeasible, then those impacts that are unavoidable shall be mitigated in that a determination of

biologically equivalent or superior preservation shall be made to ensure replacement of any lost functions and values of habitat as it relates to covered species.

A functional assessment and programmatic wetland delineation for the San Jacinto River and Upper Santa Margarita River watersheds within the MSHCP Plan Area is currently being developed by the United States Army Corps of Engineers (USACE). This effort is part of the USACE Special Area Management Plan (SAMP) process currently underway for those watersheds. As data assembled through the SAMP process becomes available, the requirements may be reviewed and reduced (with the concurrence of the wildlife agencies).

The guidelines in the western Riverside County MSHCP include design criteria that avoid and minimize impacts to sensitive habitats known to occur in the vicinity of planned development and planned roadways, including riparian and riverine environments. Impacts to wetlands and other waters would be reduced to less than significant levels under CEQA due to the features incorporated into the MCP project that are provided pursuant to the requirements of the MSHCP and the additional mitigation measures included in the MSHCP EIR/EIS. This is consistent with the conclusions of the MSHCP EIR/EIS.

### ***Build Alternatives***

Waters of the United States were identified and riparian ecosystems were assessed at a watershed level for the areas impacted by the MCP Build Alternatives. The findings of this assessment are contained in the report titled *Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California* (US Army Engineer Research and Development Center, 2008). The objective of this study was to analyze and compare the direct and indirect impacts of the MCP Build Alternatives on waters of the United States and riparian ecosystems. The results of the report indicate that overall, the impact of all the MCP Build Alternatives to riparian ecosystems was minimal given the relatively large size of the permanent impact footprint associated with the project alternatives. The minimal impact reflects the strategic placement of the alignments for each MCP Build Alternative to avoid riparian ecosystems to the extent feasible.

In the evaluation of impacts of each MCP Build Alternative to hydrologic, water quality, and habitat integrity of riparian ecosystems, it was determined that Alternatives 6 and 7 had the greatest impact, Alternatives 4 and 5 had the second

greatest impact, and Alternative 9 had the least impacts. For the specified criteria, the level of impact generally correlated with the size of the permanent impact footprint associated with each Build Alternative.

Based on the Jurisdictional Delineation, Alternative 9 would result in 4.5 ha (11.1 ac) of permanent impacts and 3.4 ha (8.5 ac) of temporary impacts to USACE jurisdictional areas. As discussed in the Conceptual Mitigation Plan, there are adequate mitigation opportunities available on site and off site to compensate for these impacts that would result in a no net loss of wetlands and wetland functions.

The MCP project is required to obtain a Section 404 permit from the USACE, a Section 1602 Agreement for Streambed Alteration from the California Department of Fish and Game (CDFG), and a water quality certification or waiver from the Santa Ana Regional Water Quality Control Board (RWQCB). Additionally, a Determination of Biologically Equivalent or Superior Preservation (DBESP) must be made for impacts to riparian/riverine areas that encompass the USACE, RWQCB, and CDFG jurisdictional areas. Wetland habitat would be mitigated at a minimum 1.5:1 ratio. Detailed mitigation requirements will incorporate measures addressed in the Conceptual Mitigation Plan for the MCP project. The cumulative projects shown in Figure 3.25.1 would be subject to similar mitigation requirements as the MCP project. Because each cumulative project would be required to replace impacted wetlands and nonwetland waters, additional mitigation for cumulative effects of the MCP project is not warranted.

### **No Build Alternatives**

Under Alternative 1A, because Cajalco Road and Ramona Expressway would remain as they are today, there would be no permanent impacts to wetlands or other waters along these roadways under this Alternative. Therefore, permanent impacts to wetlands and other waters in the vicinity of Cajalco Road and Ramona Expressway would be less for Alternative 1A than for under the MCP Build Alternatives.

Under Alternative 1B, permanent impacts to wetlands and other waters would be expected to be less than the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as Build Alternatives 6 and 7 since these Alternatives implement the General Plan roadway alignments in this area.

### **3.25.5.9 Plant Species**

The cumulative study area for plant species is western Riverside County. Historically, the health of this resource has become more degraded by development over time. Since its approval in 2004, implementation of the western Riverside County MSHCP allows for development of covered activities while maintaining the health of this resource by providing for conservation of species and habitats. The MSHCP provides a comprehensive approach to the regional conservation of plant habitats and covered species; as a regional plan, it serves to provide mitigation for cumulative impacts to habitats and covered species. The sensitive species in the section that are not covered also benefit from the conservation measures of the MSHCP because they occupy some of the same habitats.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive plant habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS concluded that, because of features incorporated into the MSHCP, impacts to listed and nonlisted plant species covered by the MSHCP would be at less than significant levels under CEQA. However, the MSHCP EIR/EIS concluded that impacts to plant species not covered by the MSHCP would not be mitigated and would therefore remain significant.

#### ***Build Alternatives***

The MCP Build Alternatives would contribute to the incremental loss of many-stemmed dudleya, Coulter's goldfields, and target plant species within the El Sobrante Landfill. Specifically, Alternatives 4, 5, and 9 would impact 3.07 ha (7.58 ac) of habitat inferred to have long-term conservation value for many-stemmed dudleya. A shared portion of Alternatives 4, 5, and 9 has been realigned in order to avoid all currently known locations of many-stemmed dudleya. Alternatives 6 and 7 would impact 0.01 ha (0.2 ac) of habitat suitable for long-term conservation for many-stemmed dudleya. This location is within the Lake Mathews-Estelle Mountain Reserve and would not be impacted by any cumulative projects. All MCP Build Alternatives would impact 0.63 ha (1.55 ac) of habitat suitable for long-term conservation of Coulter's goldfields. These populations are located in the area near the San Jacinto River and may be impacted either by approved development projects or widening of the Ramona Expressway.

As a regional plan, the western Riverside County MSHCP serves to provide mitigation for cumulative impacts to sensitive plant species and their habitats. The

MCP project would comply with the requirements of the MSHCP. Project consistency with the MSHCP would ensure that the cumulative impacts are effectively mitigated; therefore, additional mitigation for cumulative effects of the MCP project to sensitive plant species is not warranted.

**No Build Alternatives**

Alternative 1A would generally result in less impacts to plant species than any of the proposed MCP Build Alternatives since the MCP project would not be built, and no improvements would be made to Cajalco Road or Ramona Expressway.

Alternative 1B would generally result in less impacts than the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as Alternatives 6 and 7 since these alternatives follow the General Plan roadway alignments in this area.

**3.25.5.10 Animal Species**

The cumulative study area for animal species is western Riverside County. Historically, the health of this resource has become more degraded by development over time. Since its approval in 2004, implementation of the western Riverside County MSHCP allows for development of covered activities while maintaining the health of this resource by providing for conservation of species and habitats and a coordinated system of linkages that provide for wildlife connectivity between conservation areas.

The MSHCP provides guidelines that would avoid and minimize impacts to sensitive animal habitats known to occur in the vicinity of planned development and planned roadways while permitting continued development and the construction, operation, and maintenance of roadways. The MSHCP EIR/EIS concluded that because of features incorporated into the MSHCP and the additional mitigation measures included in the EIR, impacts to animal species would be reduced to less than significant levels under CEQA.

**Build Alternatives**

All MCP Build Alternatives would contribute to the incremental loss of 16.2 ha (40.0 ac) of habitat with long-term conservation value for the Los Angeles pocket mouse. The habitat impacted by the MCP project would also be impacted by approved development projects near the San Jacinto River and the SR-79 Realignment project. Per the MSHCP, proposed inclusion of approximately 13,185 ha

(32,581 ac) (62 percent) of suitable conserved habitat for this species in the MSHCP conservation area would minimize cumulative impacts to the species.

As a regional plan, the western Riverside County MSHCP serves to provide mitigation for cumulative impacts to sensitive animal species and their habitats. The MCP project would comply with the requirements of the MSHCP. Project consistency with the MSHCP would ensure that the cumulative impacts are effectively mitigated; therefore, additional mitigation for cumulative effects of the MCP to sensitive animal species is not warranted.

### **No Build Alternatives**

Under Alternative 1A, because Cajalco Road and Ramona Expressway would remain as they are today, there would be no permanent impacts to animal species along these roadways under this alternative. Therefore, impacts to special-status animal species in the vicinity of Cajalco Road and Ramona Expressway would be less for Alternative 1A than for that under the MCP Build Alternatives.

Under Alternative 1B, permanent impacts to animal species would be expected to be less than that for the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as Build Alternatives 6 and 7 since these alternatives follow the General Plan roadway alignments in this area.

### **3.25.5.11 Threatened and Endangered Species**

The cumulative study area for threatened and endangered species is western Riverside County. Historically, the health of this resource has become more degraded by development over time. Threatened and endangered species and their habitats are protected under the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402 and the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. Project proponents are required to consult with the USFWS and CDFG to ensure that they do not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

### **Build Alternatives**

All MCP Build Alternatives would impact 0.31 ha (0.77 ac) of habitat with long-term conservation value for spreading navaretia, most of which is in the San Jacinto River floodplain and therefore not expected to be developed. All MCP Build Alternatives would also impact approximately 0.4 ha (1.0 ac) of habitat with long-term

conservation value for San Bernardino kangaroo rat, and 1.2 ha (2.9 ac) of designated critical habitat for San Bernardino kangaroo rat. This habitat may also be impacted by the SR-79 Realignment project.

Alternatives 4 and 5 would impact 13.6 ha (33.5 ac) and Alternatives 6 and 7 would impact no final critical habitat for coastal California gnatcatcher. Alternative 9 would impact 16.2 ha (40.1 ac) of proposed critical habitat for coastal California gnatcatcher. The area affected is within the Lake Mathews-Estelle Mountain Reserve and would not be impacted by any cumulative projects.

Alternatives 4 and 5 would impact 63.8 ha (157.6 ac) and Alternatives 6 and 7 would impact 56.6 ha (140.0 ac) of designated critical habitat for Quino checkerspot butterfly. Alternative 9 would impact 132.6 ha (327.6 ac) of designated critical habitat for Quino checkerspot butterfly. Most of this land is within existing reserves or MSHCP Criteria Area; therefore, there would be little or not impact from cumulative projects.

Alternatives 4 and 5 would impact 2.5 ha (6.1 ac) and Alternatives 6 and 7 would impact 3.4 ha (8.5 ac) of least Bell's vireo habitat with long-term conservation value. Alternative 9 would impact 0.9 ha (2.2 ac) of least Bell's vireo habitat with long-term conservation value. Most of this habitat is within an area of Temescal Wash where no additional development is proposed.

Combined with cumulative projects, any of the MCP Build Alternatives would contribute to the incremental loss of potentially suitable habitat for the spreading navarettia, San Bernardino kangaroo rat, coastal California gnatcatcher, Quino checkerspot butterfly, and least Bell's vireo. The MCP project and other cumulative projects would comply with the requirements of the MSHCP, which as a regional plan serves to provide mitigation for cumulative impacts to threatened and endangered species and their habitats. Project consistency with the MSHCP would ensure that the cumulative impacts are effectively mitigated. In addition, cumulative projects would undergo review by the USFWS and CDFG to ensure that they do not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Therefore, additional mitigation for cumulative effects of the MCP to threatened and endangered animal species is not warranted.

### **No Build Alternatives**

Under Alternative 1A, the planned street network would be constructed, except for improvements to Cajalco Road and Ramona Expressway. Because Cajalco Road and

Ramona Expressway would remain as they are today, there would be no permanent impacts to threatened and endangered species along these roadways under Alternative 1A. Therefore, impacts to threatened and endangered species in the vicinity of Cajalco Road and Ramona Expressway would be less for Alternative 1A than under the MCP Build Alternatives.

Under Alternative 1B, the planned street network would be developed according to the Circulation Element of the Riverside County General Plan. Under Alternative 1B, permanent impacts to threatened and endangered species would be expected to be less than for the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as for Build Alternatives 6 and 7, since these alternatives follow the General Plan roadway alignments in this area.

### **3.25.6 Summary**

In summary, the MCP project would not contribute to cumulative adverse impacts related to growth, community impacts/relocations, and hydrology and floodplains.

The MCP project, when combined with the other anticipated cumulative projects, would contribute to a cumulative loss of farmlands, visual/aesthetics, cultural resources, paleontological resources, natural communities, wetlands and other waters, plant species, animal species, and threatened and endangered species. Anticipated cumulative impacts include the permanent loss of farmlands, the loss of significant cultural resources, and the continued destruction and recovery of paleontological resources as a result of excavation associated with construction of the MCP and other future land development and infrastructure projects.

Cumulative impacts to natural communities, plant species, animal species, and threatened and endangered species will be mitigated through compliance by RCTC and other permittees with the MSHCP. Cumulative impacts to wetlands and other waters will be mitigated through compliance by RCTC and other agencies with the provisions of the SAMP for the San Jacinto River watershed, once it is approved. For cultural and paleontological resources, RCTC will work with those agencies responsible for approval of the cumulative projects to provide information on these resources from the MCP project that may be useful to those agencies in mitigating impacts to those resources. The cumulative loss of farmlands has been previously acknowledged by the County and the Cities of Corona, Perris, and San Jacinto as an

unavoidable adverse impact resulting from the planned growth within western Riverside County.

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