
III. GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING

A. Overview of Environmental Setting

Section 15130 of the State CEQA Guidelines requires an EIR to include a discussion of the cumulative impacts of a proposed project when the incremental effects of a project are cumulatively considerable. Cumulative impacts are defined as impacts that result from the combination of the proposed project evaluated in the EIR combined with other projects causing related impacts. Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Section 15125 (c) of the State CEQA Guidelines requires an EIR to include a discussion on the regional setting that the project site is located within.

Detailed environmental setting descriptions are contained in each respective section, as presented in Chapter IV of this Draft EIR.

B. Project Location

The City of Ontario (City) is in the southwestern corner of San Bernardino County and is surrounded by the Cities of Chino and Montclair, and unincorporated areas of San Bernardino County to the west; the Cities of Upland and Rancho Cucamonga to the north; the City of Fontana and unincorporated land in San Bernardino County to the east; the Cities of Eastvale and Jurupa Valley to the east and south. The City is in the central part of the Upper Santa Ana River Valley. This portion of the valley is bounded by the San Gabriel Mountains to the north; the Chino Hills, Puente Hills, and San Jose Hills to the west; the Santa Ana River to the south; and Lytle Creek Wash on the east.

The City comprises approximately 50 square miles (31,958 acres), which includes the 8,200-acre New Model Colony (NMC) in the southern portion of the City (formerly the City's Sphere of Influence). The northern urbanized portion of the City is known as the Original Model Colony (OMC). The City is generally bounded by Benson Avenue and Euclid Avenue on the west; Interstate 10 (I-10), 8th Street, and 4th Street on the north; Etiwanda Avenue and Hamner Avenue on the east; and Merrill Avenue and the San Bernardino County/Riverside County boundary on the south. Regional circulation to and through the City is provided by I-10 and State Route 60 (SR-60) east-west, and by I-15 and SR-83 (Euclid Avenue) north-south. The City is also home to the Los Angeles/Ontario International Airport (LAONT).

The project site is located in the NMC, which is generally south of Riverside Drive. This area comprises the NMC area and is characterized by a mixture of residential

neighborhoods focused around village centers of employment, retail, service, entertainment, cultural, and residential uses connected by a network of greenways and trails, open spaces, amenities, infrastructure, and the Grand Park, a linear open space amenity containing active and passive recreational features, gardens, water features, and cultural facilities.

C. Topography

The topography of the NMC is predominantly flat gently sloping to the south. The area is drained by several major watercourses. The West Cucamonga Creek Channel and the Lower Deer Creek Channel both flow into the Cucamonga Creek Flood Control Channel that empties into the Prado Flood Control Basin. The San Antonio Channel and the Cypress Channel both empty into the Prado Flood Control Basin. The Prado Flood Control Basin empties into the Santa Ana River. The Day Creek Channel and Lower Etiwanda Creek Channel flow into and terminate at the Riverside Basin. The Chino Hills and Anaheim Hills are located to the south and the San Bernardino Mountains are located to the north.

D. Aesthetics

The City is in the southwestern corner of San Bernardino County, south of the San Gabriel Mountains, in the upper Santa Ana Valley. The City is situated on a broad alluvial fan, which extends from the southern flank of the San Gabriel Mountains and dips gradually southward to the confluence of San Antonio Channel, Cucamonga Channel/Mill Creek, and the Santa Ana River at the Prado Dam Flood Control Basin in Riverside County. Elevation ranges from 1,150 feet above mean sea level (amsl) in the northwest portion to 650 feet amsl in the south-central portion of the City.

The City is served by three freeways: I-10, I-15, and SR-60. I-10 and SR-60 traverse the northern and central portion of the City, respectively, in an east-west direction. I-15 traverses the northeastern portion of the City in a north-south direction. These segments of I-10, I-15, and SR-60 have not been officially designated as scenic highways by the California Department of Transportation. However, the Euclid Corridor and the Mission Boulevard Corridor are primary scenic resources in the City. Euclid is a grand boulevard with a wide landscaped median along its length. The median is used for public activities and civic events, such as festivals and music concerts. Visually, Euclid Avenue is the most defining corridor in the City. Mission Boulevard has a wide landscaped median and runs east-west immediately south of the airport.

The City's physical setting lends opportunities for many views of the community and surrounding natural features, including panoramic views of the San Bernardino and San Gabriel Mountains and stretches of open space and undeveloped land south of Riverside Drive. Scenic vistas can be viewed from an extensive system of formal and informal trails that afford recreational, commercial, and scenic opportunities for the community. The majority of planned trails are throughout the NMC. Current trails in urbanized portions of the City are limited to flood control channels and other informal trails.

The dominant visual characteristic in the City is the San Gabriel Mountain range to the north, visible from the Upper Santa Ana River. Other visual characteristics are the Jurupa Mountains and the San Bernardino Mountains to the east, the Santa Ana Mountains to the south, and Chino Hills to the southwest. From a regional perspective, Ontario is located in a highly developed, urban/suburban area. Developed land uses (residential, commercial, industrial, agricultural, recreational, public, institutional, airport, and utility and transportation easements) are located throughout the City. The northern half of the City, known as the Original Model Colony (OMC), north of Riverside Drive, is a developed urbanized area. Undeveloped areas in the OMC are small, scattered, vacant parcels. The southern half of the City, known as the NMC, south of Riverside Drive, is relatively flat and open, and is agricultural and rural in character, containing dairies, poultry farms, and row crops. However, the City is also rapidly suburbanizing in four general areas: Area 1 - generally west of Grove Avenue, Area 2 - the airport and areas generally east of Grove Avenue and north of State Route 60 (SR-60), Area 3 - south of SR-60 and north of Riverside Drive, and Area 4 - generally south of Riverside Drive. In addition, the City can be broken into 15 distinct neighborhoods and districts based on shared aesthetic characteristics, landscaping, and architecture or signage. These areas are categorized by visually prominent buildings, special geographic features, and important cultural centers.

The NMC (Area 4) is generally bounded by Euclid Avenue to the west, Riverside Drive to the north, Milliken/Hammer Avenue to the east, and Merrill and Bellegrave Avenues to the south. The area is characterized by agriculture resources: agricultural fields, dairy operations, pasture, and croplands, as well as scattered poultry operations, residences, and commercial uses associated with agricultural uses. Agriculture-oriented housing is interspersed throughout the area, with suburban-rural housing located along Riverside Drive, where residential development encroaches on agricultural lands.

E. Agricultural Resources

Historically, agricultural lands made up much of the City, including land for citrus, olive, dairy farms, and vineyards. Agriculture has remained an important heritage for the City, but many of the developed portions of the Original Model Colony (OMC) have replaced agricultural land uses with industrial, commercial, and residential land uses. Limited agriculture land uses are currently permitted in areas zoned for Agricultural Residential (AR), Residential Estate (RE), Public Facility (PF), Open Space (OS), Commercial (C-1 to C-4), and Industrial (M1 to M3) land uses. However, only a few remnant parcels of agricultural uses remain in the OMC intermixed with other land uses, mostly to the east of Vineyard Avenue.

The majority of existing agricultural uses and Important Farmland is in the NMC. Important Farmland in the NMC is now used for dairy, noncommercial poultry farms, alfalfa, barley, strawberry, and other row crop farming. In 2006, approximately 7,330 acres (89 percent) of the NMC were used for agriculture.

With the adoption of the NMC General Plan Amendment in 1999, most of the agricultural land in the NMC has been designated as residential, commercial, industrial, open space, or public land. There are four sections of agricultural preserve in the NMC Land Use Plan, totaling 200 acres in the southwestern portion of the City. The change of land use from agricultural to nonagricultural has mostly been due to increasing population, which has put pressure on cities in southern California to turn Important Farmland into uses that would support residential, economic, and employment needs. Dairies and farms in Ontario have also found that they are being outcompeted by dairies and farms in the Central Valley, so they have either converted their land to more productive, nonagricultural uses or they have left Ontario for the Central Valley.

F. Air Quality

The project site is in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The air basin is a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region is in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild, tempered by cool sea breezes. This weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest the site is in Pomona (ID No. 041779). The average low is reported at 38.6°F in January and the average high is 90.4°F in July. All areas in the SoCAB have recorded temperatures above 100°F in recent years. January is typically the coldest month in this area of the SoCAB, with minimum temperatures in the 30s.

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast with slightly heavier shower activity in the east and over the mountains. Rainfall averages around 16.95 inches per year in the project area, as measured in Pomona.

Although the SoCAB has a semiarid climate, the air near the surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the ocean effect is dominant. Periods of heavy fog, especially along the coastline, are frequent; low stratus clouds, often called high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the east portions of the SoCAB.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the “mixing height.” The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area.

G. Biological Resources

Remnants of native habitats and vegetation communities are virtually absent throughout Ontario. The Original Model Colony (OMC) area, the part of the City north of Riverside Drive, consists primarily of structures and paved surfaces and supports very little vegetation. At one time, the developed OMC portion of the City was a major agricultural area. Native alluvial sage scrub was removed from the region in the late 1800s and early 1900s for vineyards and other forms of cultivation, including citrus groves and field crops. However, agricultural uses in the OMC have been replaced by urban land uses. The plants that are present—turf, weeds, nonnative grasses, and nonnative trees and plants used for landscaping—have limited biological resource value. Recent biological assessments for development projects in the OMC, including the Pacific Gateway Cargo Center, Tessier Work/Live Project, and Ontario Downtown Civic Center Project, found no sensitive natural communities, riparian habitat, or sensitive plant or animal species on the developed and/or highly disturbed project sites.

Riversidean sage scrub, a form of coastal sage scrub found on alluvial fans and drainages along the base of the Transverse and Peninsular ranges. Due to the long-standing agricultural use, the NMC area supports little native vegetation. The Cucamonga and Deer Creeks also

once supported riparian vegetation; however, these drainages are now completely channelized where they traverse the City.

Currently, dairy and poultry farms, pasture, crop land, and remnant vineyards make up the majority of the land uses in the NMC area. The agricultural areas contain mounds of debris, including manure, in piles overlying the native soils. Residential, commercial, industrial, and institutional uses are also scattered throughout the area. Although the NMC has been extensively altered from natural conditions to primarily agricultural use, the land still provides foraging and breeding habitat for a variety of common and sensitive wildlife species. In particular, windrows and surface water areas, such as agricultural ponds, water impoundments, and drainage channels, provide habitat for migratory birds, including raptors.

While native terrestrial vegetation communities are not present in the City, there are four nonnative vegetation communities, known as vegetation associations, primarily in the NMC: surface water areas; flood control channel areas; agricultural fields; and, developed areas.

H. Cultural Resources

The archaeological record of southern California is a rich and complex continuum traditionally divided into time units based on changes in artifact types and styles. Archaeological data and correlations with ethnographic data have resulted in the determination of the following chronology for prehistoric southern California:

Early Man Horizon: This period, predating 6,000 BC, is characterized by the presence of large projectile points and scrapers, suggesting reliance on hunting rather than gathering.

Milling Stone Horizon: This period, from 6,000 BC to 1,000 BC, is characterized by the presence of hand stones, milling stones, choppers, and scraper planes; tools associated with seed gathering hand stones, milling stones, choppers, and scraper planes; tools associated with seed gathering and shellfish processing with limited hunting activities; and evidence of a major shift in the exploitation of natural resources.

Intermediate Horizon: This period, from 1,000 BC to AD 750, reflects the transitional period between the Milling Stone and Late Prehistoric Horizons. Little is known of this period, but evidence suggests interactions with outside groups and a shift in material culture reflecting this contact.

Late Prehistoric Period: This period, from AD 750 to European contact, is characterized by the presence of small projectile points; use of the bow and arrow; steatite containers and trade items; asphaltum; cremations; grave goods; mortars and pestles; and bedrock mortars.

The earliest inhabitants of the Ontario region lived in the area approximately 10,000 years ago. These inhabitants lived in the region on a seasonal basis. Later, permanent settlements formed along streams and creeks as populations used newer technologies and food resources. By 2,000 years ago, the Tongva (or Gabrielino), a group of Uto-Aztecan, Takic-speaking

people used both the coastal and inland areas on a seasonal basis. The Tongva Native Americans were intensive hunter-gatherers, gathering a variety of wild plants in the desert, mountains, and coastal areas. The Tongva are believed to have been one of the most populous and wealthy Native American tribes in southern California prior to European contact. They lived in villages that ranged from 50 to 200 inhabitants, each village owning in common the area surrounding the village. Kinship was organized by groups, with each group composed of several related families.

By the 1700s, local Native Americans in southern California had contact with Europeans. One of the earliest known records of this contact is based upon Father Garcés' trip from the Mojave Desert to the coast of California through the Cajon Pass. In 1771, the Spanish established the Mission San Gabriel Arcangel, about 40 miles west of the area later known as the City. Following the Spanish custom of naming local Native American tribes after nearby missions, the Tongva were called Gabrielino. At its peak, the Mission San Gabriel furnished food and supplies to settlements and other missions throughout California. By the end of the century, the Gabrielino population significantly declined due to diseases introduced by Europeans. The Gabrielino people fragmented as individuals succumbed to Spanish control, fled the region, or died. However, in late 20th century there was a revival of Gabrielino culture.

George and William Chaffey were among the early pioneers in the region. In 1881, they believed that if the land were properly irrigated it could be converted to profitable agriculture property. They bought approximately 6,000 acres of land in 1882 that was arid and covered by patches of scrub brush. The land would eventually become the cities of Ontario and Upland. George and William Chaffey derived the name of the City from their native province of Ontario in Canada. Initially, development was slow due to the lack of water in the region. The Chaffey brothers developed the City by designing a water system that brought water to every parcel. The brothers helped lay miles of cement pipe from an underground source to bring water to the City. The City was referred to as the "Model Colony" after receiving an award at the World Fair identifying it as a "Model Irrigation Colony," due to the innovation of water rights and technology that assisted in attracting settlers to the City. The City incorporated in 1891, and was one of the early towns in San Bernardino County. Charles Frankish, an early citizen of Ontario, guided and encouraged early development in the City. He was successful in attracting the Southern Pacific Railway to locate a depot in the center of town on Euclid Avenue, making it an important feature of the City. The establishment of the Southern Pacific Railroad depot transformed Ontario into an agricultural center. Ontario focused primarily on the citrus industry, but also grew walnuts, peaches, and grapes. There was a large gentry class of citrus growers who constructed many grand ornamental Victorian houses throughout the City.

In an effort to become more diversified, an airport was established within the City. The economy shifted from an agricultural to an industrial and manufacturing economy. Today, the City retains its history through many recognized historic neighborhoods, buildings, and agricultural districts.

In 1967, the County of San Bernardino designated 14,000 acres of agriculture land in Chino Valley as an agriculture preserve. The area was protected by the Williamson Act and the Land Conservation Act. It has been dominated by dairy farms since the early 1900s. By the 1980s, the area had more cows per acre and higher milk yields than anywhere else in the world (Galvin & Associates 2004).

By the 1990s, increased demand for housing and high dairy operation costs pressured farmers in the San Bernardino Agricultural Preserve to consider relocating their dairies and annexing their land to adjoining cities. Anticipating the expiration of the Williamson Act contracts, this area was divided and portions were incorporated into the Cities of Ontario, Chino, and Chino Hills. The City annexed 8,200 acres of the former San Bernardino Agriculture Preserve in 1999 and called the area the NMC. LAFCO required the City to prepare a General Plan Amendment and EIR prior to annexation. In 1996, the City began planning for annexation in 1996 and adopted the New Model Colony General Plan Amendment and EIR in 1998 (Galvin & Associates 2004).

I. Geology and Soils

The City is in the Upper Santa Ana River Valley, consisting of a series of coalescing alluvial fans formed by streams flowing out of the San Gabriel Mountains to the north. The Upper Valley has a gentle southerly slope of approximately 1 percent grade, such that elevations within the City range from approximately 1,150 feet in the north to 640 feet in the south. The junction of the Upper Valley and the San Gabriel Mountains marks the boundary between two geomorphic provinces. The valley, including the City, lies within the Peninsular Ranges geomorphic province, characterized by northwest-trending mountains and valleys and extending south into Mexico. The San Gabriel Mountains are part of the Transverse Ranges province, a set of east-west-trending mountain ranges extending from Santa Barbara County on the west to San Bernardino and Riverside Counties on the east. The San Gabriel Mountains north of Ontario rise as high as 10,064 feet at Mount San Antonio.

The geologic units exposed at the surface in Ontario consist of sediments less than 11,000 years old (Holocene) deposited either by water or wind. In general, the alluvial fan sediments are coarse grained in the northern part of the City, consisting of various mixtures of sand, gravel, and cobbles. Moving southward, away from the mountains, the sediments gradually become finer grained, consisting primarily of silt, silty clay, and silty sand. Generally, soils with faster infiltration rates, higher levels of organic matter, and improved soil structure, such as sand, sandy loam, and loam-textured soils have a greater resistance to erosion than silt, very fine sand, and certain-clay textured soils.

The City is in one of the more seismically active portions of southern California. The following faults have been identified in and adjacent to the Upper Santa Ana Valley:

Regional Faults, and are described below. An active fault is one that has had surface displacement within the Holocene epoch, that is, within the last 11,700 years.

Chino-Central Avenue Fault: The Chino-Central Avenue Fault extends along the eastern flank of the Chino Hills from the Los Serranos area of Chino Hills to Corona, a distance of approximately 13 miles.

San Jose Fault: The San Jose Fault extends approximately 11 miles from the base of the San Gabriel Mountains near Upland southwest to the San Jose Hills of the San Gabriel Mountains from the San Fernando Valley in the west to San Antonio Canyon in the east, continuing eastward as the Cucamonga Fault. A rupture in the northwestern portion of this fault resulted in the San Fernando Earthquake of 1971.

Cucamonga Fault: The Cucamonga Fault extends approximately 16 miles east-west along the southern front of the San Gabriel Mountains, from San Antonio Canyon in the west to the vicinity of Lytle Creek in the east.

San Andreas Fault - The San Andreas Fault, the main boundary between the Pacific and North American tectonic plates, extends over 750 miles from near Cape Mendocino in northern California to the Salton Sea region of southern California. The fault is divided into several segments; the closest approach to the City is the San Bernardino Segment, approximately 14 miles northeast of the City.

Whittier Fault: The Whittier Fault extends along the southern base of the Puente Hills approximately 24 miles, from the Santa Ana River in the east to the Whittier Narrows area in the west.

Elsinore Fault: The Elsinore Fault extends along the northeastern front of the Santa Ana Mountains from the Santa Ana River on the northwest, where it merges with the Whittier Fault, southeastward into San Diego County.

Puente Hills Blind Thrust Fault: The Puente Hills Blind Thrust Fault, which does not extend to the surface, ranges from northern Orange County to the central Los Angeles area.

San Jacinto Fault Zone: The San Jacinto Fault Zone consists of a series of closely spaced faults that form the western margin of the San Jacinto Mountains. The fault zone extends from its junction with the San Andreas Fault in San Bernardino southeastward through the Imperial Valley into Mexico. The fault zone is divided into several segments, with the San Bernardino segment being the closest to Ontario.

All of these faults are active except for the Puente Hills Blind Thrust Fault, which is also thought to have ruptured on several occasions within Holocene time, but is not exposed at the surface.

Subsidence resulting from oil and gas extraction is not an issue for Ontario. However, the City is above the Chino Subbasin of the Upper Santa Ana Valley Groundwater Basin, from which groundwater has been extracted for decades. The City currently gets approximately 65 percent of its water from 21 wells that pump water from the Chino Subbasin. The thick

alluvial deposits composing the subbasin may be susceptible to compaction, with resulting subsidence at the surface, in the event of rapid groundwater withdrawal. Surface subsidence of up to 2.5 feet and ground fissuring from groundwater production have been reported in the City of Chino to the southwest of Ontario.

Most of the alluvium that underlies the Ontario area is generally not susceptible to collapse due to the granular nature of the soils and the lack of clay needed to form dry bonds between grains.

The young sediments underlying the City are generally dry and loose in the upper few feet, and therefore are susceptible to compression. Areas that have been intensely farmed, such as much of the NMC, are especially susceptible to compression.

The near-surface sediments in the northern and central parts of the City are composed primarily of granular soils, that is, silty sand, sand, and gravel. Such sediments are usually nonexpansive or have very low expansion potential. Expansive soils are more likely to be present in the southern parts of the City, where there are silts, sandy silts, and silty clays.

The young alluvial sediment and wind-blown sand underlying the City are generally granular, poorly consolidated, and very susceptible to erosion. Grading increases the potential for erosion by removing protective vegetation, changing natural drainage patterns, and constructing slopes.

J. Greenhouse Gas Emissions

Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The climate system is interactive, consisting of five major components: the atmosphere, the hydrosphere (ocean, rivers, and lakes), the cryosphere (sea ice, ice sheets, and glaciers), the land surface, and the biosphere (flora and fauna). The atmosphere is the most unstable and rapidly changing part of the system. It is made up of 78.1 percent nitrogen (N₂), 20.9 percent oxygen (O₂), and 0.93 percent argon (Ar). These gases have only limited interaction with the incoming solar radiation and do not interact with infrared (long-wave) radiation emitted by the Earth. However, there are a number of trace gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃), that absorb and emit infrared radiation and therefore affect climate. These are greenhouse gases (GHG), and while they comprise less than 0.1 percent of the total volume mixing ratio in dry air, they play an essential role in influencing climate (IPCC 2001).

California is the second largest total emitter of GHGs in the United States, surpassed only by Texas, and the tenth largest GHG emitter in the world (CEC 2005). However, because of more stringent air emission regulations, in 2001 California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in CO₂ emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services). In 2004, California produced 492 million metric tons of CO₂-equivalent (CO₂e) GHG

emissions, of which 81.8 percent were CO₂ from the combustion of fossil fuels, 2.8 percent were from other sources of CO₂, 5.7 percent were from methane, and 6.8 percent were from N₂O. The remaining 2.9 percent of GHG emissions were from High Global Warming Potential gases (CEC 2006).

CO₂ emissions from human activities make up 84 percent of the total GHG emissions. California's transportation sector is the single largest generator of GHG emissions, producing 40.7 percent of the state's total emissions. Electricity consumption is the second largest source, comprising 22.2 percent. While out-of-state electricity generation comprises 22 to 32 percent of California's total electricity supply, it contributes 39 to 57 percent of the GHG emissions associated with electricity consumption in the state. Industrial activities are California's third largest source of GHG emissions, comprising 20.5 percent of state's total emissions. Other major sources of GHG emissions include mineral production, waste combustion and land use, and forestry changes. Agriculture, forestry, commercial, and residential activities comprise the balance of California's greenhouse gas emissions

K. Hazards and Hazardous Materials

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials can occur from a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

The RCRA manages and keeps an inventory of hazardous waste handlers with a national program called RCRA Info. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies pass on the information to regional and national EPA offices. As of June 2006, the City has 393 facilities reporting the processing, handling, or use of hazardous materials.

The CERCLIS database is maintained by the EPA in accordance with CERCLA and contains information on hazardous waste sites, potentially hazardous waste sites, and remedial activities across the nation. The database includes sites that are on or being considered for the NPL. Based on an online query, Ontario has six sites being assessed under the Superfund program.

In accordance with the EPCRA, the EPA maintains and publishes a database that contains information on toxic chemical releases and other waste management activities by certain

industry groups and federal facilities, which is available to the public online through the EPA's TRI website. As of March 2009, the EPA regulates 55 TRI facilities in Ontario.

The DTSC's Site Mitigation and Brownfields Reuse Program Envirostor Database (Envirostor) online search tool provides information on properties in California where hazardous substances have been released or where the potential for a release exists. The database includes information on federal Superfund sites (NPL), state response sites, voluntary cleanup sites, school cleanup sites, permitted sites, and corrective action sites. In addition, information is provided to those who may want to purchase a site profile report, or request special database reports. A search of the Envirostor database found 13 sites listed under the category of unconfirmed referrals.

The Hazardous Waste and Substances Site List (Cortese List) is a planning document used by the state and local agencies and developers to comply with CEQA requirements in providing information about the locations of hazardous materials releases. Cal/EPA is required to develop an updated Cortese List at least annually. DTSC is responsible for preparing a portion of the information in the Cortese List, and other state and local government agencies are required to provide additional hazardous material release information for the list. A search of the 2007 Cortese List for San Bernardino County found four sites in Ontario.

The SWRCB keeps track of permitted USTs and LUSTs. This information can be accessed via the online Geotracker database. In 2008, the City had 112 UST sites and 100 LUST sites recorded in the City's boundaries. The underground storage tanks are monitored by the SWRCB and leaking tanks are either in the process of being assessed and remediated or the cleanup process has been completed.

The Ontario Air National Guard Station (Air Force) is listed as a military cleanup site on the Geotracker Online Database. This base was closed in 1995 by the Defense Base Closure and Realignment Commission. The Ontario Air National Guard Station was on the Ontario Army Airfield, which is now LAONT. This property went through a hazardous materials assessment in the form of a Stationwide Environmental Baseline Survey (November 1996) conducted by the Department of the Air Force prior to its transformation into a public airport. Contaminated areas were assessed and remediated based on the classification of the Stationwide Environmental Baseline Survey. However, this site is still designated as having open status as of 2008 by the SWRCB, according to the Geotracker database.

L. Hydrology and Water Quality

The Santa Ana River Watershed includes portions of San Bernardino, Orange, and Riverside Counties and covers approximately 2,800 square miles. The Santa Ana River is the main surface drainage course in the region, and the largest river in the basin. It is approximately 75 miles long. The City is nearest to Reach 3 of the Santa Ana River, which extends from the Mission Boulevard Bridge in the City of Riverside to Prado Dam. The river originates in the San Bernardino Mountains, travels southwest, and terminates at the Pacific Ocean near the Huntington Beach/Newport Beach city boundary. Water flow in the river is regulated by the

Prado Dam, the Seven Oaks Dam, and other flood-control facilities along the river and its tributaries.

The City is in the Chino Watershed, which consists of most of the Upper Santa Ana River Valley and portions of the San Gabriel Mountains and Puente and Chino Hills. The Santa Ana River forms the southern boundary of the Watershed. The primary direction of drainage flow in the watershed is from the San Gabriel Mountains southward to the Santa Ana River, then southwest in the river. Streams in the watershed flowing north-south include the San Antonio, West Cucamonga, Deer Creek, Day Creek, and Etiwanda Creek Channels, and the Cucamonga Creek Flood Control Channel. All of these except for the San Antonio Channel pass through the City, and all of the channels in the City are engineered concrete channels. West Cucamonga Channel and Deer Creek Channel discharge into the Cucamonga Creek Flood Control Channel, while the Cucamonga Creek Flood Control Channel and San Antonio Channel each discharge into the Santa Ana River. Some stormwater runoff is diverted for recharge in flood retention and spreading basins, including (from west to east) the Eighth Street, Ely, Turner, Chris, Cucamonga, and Wineville Basins.

Three other surface water bodies in the Chino Watershed are on the list of Water Quality Limited Segments. Reach 2 of Chino Creek, west of Ontario in the City of Chino Hills, is listed for coliform bacteria from an unknown point source. Reach 1 of Chino Creek, in the cities of Chino and Chino Hills southwest of Ontario, is listed for nutrients from agricultural sources, and for pathogens from agricultural sources and urban runoff. Reach 3 of the Santa Ana River is listed for pathogens from dairies.

The Chino Basin is one of the largest groundwater basins in southern California, covering approximately 235 square miles of the Upper Santa Ana River Valley. The basin is bounded by the Rialto-Colton Fault on the northeast, the Jurupa Mountains and La Sierra Hills to the southeast, the Central Avenue Fault to the southwest, and the San Jose Fault and Red Hill Fault to the northwest. The basin currently contains approximately 5,000,000 acre-feet (af) of water and has an unused storage capacity of about 1,000,000 af. Groundwater is produced from the basin by cities and other water supply entities and by about 300 to 400 agricultural users overlying the basin. Prior to 1978, the basin was in overdraft. After 1978, the basin has been managed via ongoing court adjudication in the 1978 judgment Chino Basin Municipal Water District vs. City of Chino et al.

The City currently draws all of its groundwater supply from the Chino Basin. Groundwater flows through the Chino Basin north-south, and groundwater quality tends to be better in the northern portion of the basin, where significant recharge occurs. Salinity, measured as total dissolved solids (TDS), and nitrate concentrations increase in the southern portion of Chino Basin. Generally, TDS exceeds 500 mg/L and nitrate exceeds 50 mg/L south of Riverside Drive. TDS and nitrate generally originate from nonpoint sources such as land application of wastes and fertilizer from previous and current agricultural activities. In addition, there are several point sources of contamination in the basin that affect groundwater quality in localized areas.

Contamination plumes are water quality anomalies emanating from known point-source discharges and spreading through the groundwater. The known groundwater plumes affecting the City's groundwater supply are the General Electric Flatiron Facility, General Electric Engine Maintenance Center Test Cell Facility, Kaiser Steel Fontana Steel Site, and VOC Anomaly South of the Los Angeles/Ontario International Airport.

The City is subject to flooding and flood hazards. While significant hydrologic improvements have been made within Ontario, including channelization of many of the City's watercourses, flooding associated with peak 100-year and 500-year floods and dam inundation remains a potential hazard.

M. Land Use and Planning

The City developed from a small agricultural town centered mainly on the citrus industry to a suburban community with a large manufacturing and industrial base. The estimated City population in 2012 was 166,134 (California Department of Finance 2013), with the majority of whom live in the developed lands north of Riverside Avenue. This area was the City's boundary prior to the annexation of the NMC in 1999 and is called the Original Model Colony (OMC). The area south of Riverside Drive, the NMC, was predominantly used for citrus and dairy agriculture. It is still used for dairy, poultry, and row crop agriculture, and it has some residential land uses. These residential land uses are older, single-family land uses and newer planned communities. Portions of the land are under contract with the City through the Williamson Act of 1964 to preserve agriculture land. However, as the NMC continues to develop, these contracts will expire or will be terminated.

Existing residential areas tend to be in the older portions of the City west of Grove Avenue, between SR-60 and Riverside Drive, and scattered throughout the NMC. Business land uses include commercial and industrial land uses. Commercial land uses are prominent in the historic downtown area, mostly along Euclid and Holt Avenues; around the Los Angeles Ontario International Airport (LAONT) and the business parks and industrial areas surrounding the airport; and around the Ontario Mills commercial and entertainment complex. There is little commercial land use in the NMC at this time outside of neighborhood-serving commercial areas immediately south of Riverside Drive. Industrial and employment-based centers are prominent in Ontario, especially in the eastern portions of the City and areas surrounding the LAONT. In this area, types of businesses include light manufacturing, research and development, and technology development, as well as medical services, entertainment venues, retail stores, galleries, health clubs, financial institutions, day care facilities, and professional offices. Public open space areas in the City include the Whispering Lakes Golf Course north of Riverside Drive and the Cucamonga-Guasti Regional Park in north Ontario.

N. Mineral Resources

Two areas in the City are classified as MRZ-2: one is in the northwestern portion of the City and the second is along the eastern City boundary. These two areas total approximately 6,132

acres, or approximately 19 percent of the City's area. The remainder of the City, approximately 81 percent of its area, is MRZ-3, where the significance of mineral deposits is unknown. Mineral resources in the City are limited to construction aggregates such as sand and gravel. There are currently no permitted mining operations in the City.

O. Noise

The City is impacted by a multitude of noise sources, many of them directly connected with major interstate commerce and intrastate thoroughfares that divide the City. Mobile sources of noise, especially cars and trucks, are the most common and significant sources of noise in most communities. In addition, the City is home to LAONT and major rail lines operated by the Union Pacific Railroad (UPRR), which also contribute significant noise. Other major transportation sources include Interstate 10 (I-10), I-15, State Route 60 (SR-60), Euclid Avenue (SR-83), and the Chino Airport. Secondly, land uses throughout the City generate stationary-source noise.

In addition to local traffic volumes, regional roadways in the City accommodate large volumes of traffic that support the movement of people and goods for the southern California region. Major regional roadways such as I-10, I-15, SR-60, Mission Boulevard, and Milliken Avenue accommodate very large volumes of traffic and are responsible for a significant contribution to the noise environment in Ontario. These roadways accommodate a large amount of truck traffic, which adds significantly to the noise environment.

Two major UPRR rail lines traverse the City going east-west. The northern route through the City is the UPRR Alhambra Line, which begins at the Los Angeles/Long Beach ports and runs through Pomona and Colton to points farther east. The southern route is the UPRR Los Angeles Subdivision Line, which also begins at the Los Angeles/Long Beach ports and runs through Pomona, but travels southeast to Riverside and points farther east. Noise generated by the train traffic on the Alhambra and the Los Angeles Lines contributes to the ambient noise environment along these two transportation routes. Noise from trains on the UPRR is generated by warning horns and crossing bells at at-grade crossings, engines, exhaust systems, cooling fans, and other mechanical gear noise. The interaction of steel wheels and rails generates rolling noise due to continuous contact: impact noise when a wheel encounters a discontinuity, such as a rail joint, turnout, or crossover; and squeals generated by friction on tight curves.

Noise from aircraft at LAONT and the Chino Airport is produced by takeoffs, flyovers/overflights, approaches, and landings. Each of these events results in noise exposure to sensitive receptors near the airports located in the City, and few areas are unaffected by noise generated by the airport or aircraft overflights. The airport is a medium-hub, full-service airport. Traffic at the airport includes general aviation, commercial passenger aviation, and air cargo freight movement. LAONT is a member of the Los Angeles World Airport (LAWA) system.

The Chino Airport is adjacent to the southwestern boundary of the City near the NMC. The Chino Airport is the largest general aviation airport in the County of San Bernardino and home to the Planes of Fame Museum.

Stationary sources of noise include commercial and industrial equipment and activities. Whereas mobile-source noise affects many receptors along an entire length of roadway, stationary noise sources affect only their immediate areas. Major stationary sources in the City are industrial and warehousing operations and schools (train noise from sounding of bells and whistles at at-grade crossings is considered mobile-source noise).

P. Population and Housing

As housing has become more expensive and buildable land more scarce in the Los Angeles metropolitan region, San Bernardino County has experienced significant growth in population. The county saw its first appreciable growth spurt between 1980 and 1990, when the county population passed the one million mark. According to DOF, between 1990 and 2000 San Bernardino County witnessed a 20 percent increase in population, an annual average of 29,105. Between 2000 and 2012, the DOF estimates the population in San Bernardino County rose approximately 345,627 to 2,063,919 in 2012.

The City has experienced steady population growth of an average of 1.5 percent, less than the county average of 2.1 percent. According to the DOF, which uses estimates based on the most recent decennial US Census and modified using building permit information provided by the county, the City has an estimated population of 173,690, approximately 8.4 percent of the county's population in 2008. The 2008 estimate is a 23 percent increase from the City's population in 1990. During the same period, San Bernardino County experienced a 45 percent increase.

Housing growth in the City and the County of San Bernardino has been consistent, but population has outpaced housing in both jurisdictions (see Tables 5.13-1 and 5.13-3). In 2008, the City had an estimated 47,276 housing units, an 11 percent increase from 1990s. During the same time period, San Bernardino County experienced a 26 percent increase in total housing units. The City has a total of 7 percent of the housing stock in the county.

According to the California Employment Development Department, the growth rate of employment in the City has slowed down in recent years. As of September 2008, the estimated employment in the City is 79,201. Employment in the County of San Bernardino has mirrored the City, as employment has slowed down since 2004. San Bernardino County has experienced a net loss of 13,000 jobs from 2007 to September 2008, a decline of 1.6 percent; the City experienced a net loss of 301, a decline of .38 percent.

The City's population and housing growth has not matched employment growth. The City's population, housing, and employment have been growing at a constant pace, but employment opportunities outnumber housing more than two to one. According to SCAG, from 2003 to 2008 employment in Ontario increased by 20 percent; in comparison, housing increased by

11 percent. As shown in Table 5.13-7, in 2003 the City had a jobs/housing ratio of 2.20, with a disproportionate number of employment opportunities to housing; in 2008, the jobs/housing ratio had increased to 2.50. The high number suggests that a large number of Ontario workers are commuters to the City. The jobs/housing ratio for the entire San Bernardino Associated Governments (SANBAG) subregion was 1.16 in 2003 and 1.25 in 2008. SCAG projects employment will grow disproportionately to housing through 2035. According to SCAG projections, the City is expected to remain jobs-rich, and the jobs/housing ratio is expected to decrease from 2.50 in 2008 to 2.04 in 2035.

Q. Public Services

The City Fire Department has eight stations, each with its own fire district, that serve the City's 173,690 residents. The Ontario Fire Department employs a total of 132 sworn personnel, with 7 support staff and 4 administrative personnel. Each station has one fire engine and one company (4 personnel) on duty at any given time.

The Ontario Police Department is a full-service police agency providing a wide range of crime suppression, education, and prevention services to the community. The Ontario Police Department has three main service bureaus: the Uniform Bureau, Investigations Bureau, and Service Bureau. Within these bureaus, the department comprises the Police Administration, Air Support Unit, Community Oriented Problem Solving unit, Special Weapons and Tactics Team, Traffic Division, Communications Division, Investigation Division, and Crime Prevention Division. The Ontario Police Department employs 230 sworn police officers, 109 civilian personnel, and four K-9 units. The Ontario Police Department does not use an officers-to-residents ratio to determine staffing; it prefers to take into consideration the differing requirements between residential, commercial, and industrial land uses and the civilian support staff that can perform necessary duties when sworn personnel are not required. For reference purposes, the Ontario Police Department employs 1.4 sworn officers per 1,000 residents. Based on a current population of 173,690, this would equal 243 sworn officers, 13 more than the currently employed 230 sworn officers. However, as mentioned above, the Police Department does not use this ratio to determine staffing requirements and these numbers should only be used for reference.

There are 35 public schools and 10 private schools in the City providing through 12th grade education, with a public school student enrollment of 30,529 for the 2011-2012 academic year. 1,993 students were enrolled in private schools in the City of Ontario. Chaffey Joint Union High School District (CJUHSD) oversees all 5 of the high schools in Ontario. Ontario-Montclair School District (OMSD) serves the western half of the OMC and provides the majority (22) of the elementary and middle schools in Ontario. Cucamonga School District (CSD) serves the eastern half of the OMC and has 1 school (The Ontario Center School) within the City's boundaries. Mountain View School District (MVSD) serves the eastern half of the NMC and a portion of the OMC and has 4 elementary and middle schools in Ontario. Chino Valley Unified School District (CVUSD) serves the western half of the NMC and has 3 elementary and middle schools in Ontario.

The City operates its library system independently from the county. The Ontario City Council appoints a Board of Trustees that is responsible for the services and activities of the library. The library system has a main library and one branch library: the Main Library at 215 East C Street and the Colony High Branch Library at 3850 East Riverside Drive. The library system provides the citizens of Ontario with over 184,000 books, 450 magazine subscriptions, 25 newspaper subscriptions, 14,000 videocassettes, 2,500 compact discs, a government document depository, and pamphlet files. The Ontario library system is also a member of the Inland Library System, which includes 19 independent libraries and other resources in San Bernardino, Riverside, and Inyo Counties. This allows Ontario library members to use the interlibrary loan between the participating libraries.

R. Recreation

The City provides a variety of recreational opportunities in the City and nearby open space areas, including City parks, county parks, community centers, school recreation facilities, private parks, private golf courses, and recreational trails for bicycles, horses, and hiking. Open space provides many benefits to the community, including park and recreation areas, recreational trails, conservation of natural and significant resources, buffers between land uses, and the preservation of scenic views. The City has convenient access to several active and passive open space areas. Active recreation areas typically include facilities such as tailored playing surfaces, buildings, parking areas, and similar modifications to a natural site. Passive recreation areas accommodate less-structured recreational pursuits and typically include minor modifications such as trails, service vehicle access improvements, enhanced landscape materials, and similar non-intrusive changes to the site. The City has 592 acres of parkland.

S. Transportation and Traffic

The City circulation system includes three freeways, an international airport, two railroad main lines of the Union Pacific Railroad (UPRR) and one Southern California Regional Rail Authority (SCRRA) rail line, and a system of arterial and local streets. Major arterial access in the NMC is provided by the following east-west roadways: Riverside Drive, Chino Avenue, Schaefer Avenue, Edison Avenue, Eucalyptus Avenue, and Merrill Avenue. Major arterials providing north-south circulation include the following: Euclid Avenue, Bon View Avenue, Grove Avenue, Baker Avenue, Archibald Avenue, Haven Avenue, and Milliken Avenue. Freeway access is provided by Interstate (I) 15 (Ontario Freeway), providing north-south circulation, and State Route (SR) 60 (Pomona Freeway), providing east-west circulation.

Two major east-west freight lines traverse the City. A third east-west line runs just north of the northern boundary of the City. The northern route through the City is the UPRR Alhambra Subdivision Line, which begins at the Ports of Los Angeles/Long Beach, then runs through Los Angeles, Pomona, Colton, and to points farther east. The southern route is the UPRR Los Angeles Subdivision Line, which also begins at the Ports of Los Angeles/Long Beach and runs through Pomona, but travels southeast to Riverside and points farther east.

Omnitrans Transit Agency provides local transit service throughout San Bernardino County, including the City. Omnitrans provides countywide bus service and currently has five bus routes in the City that provide connections between rail stations, LAONT, major employment and shopping centers, and residential areas.

Commuter train service in the City is provided by Metrolink, which operates six commuter rail lines throughout southern California. The Riverside County Line runs between Los Angeles Union Station and downtown Riverside on Mondays through Fridays between 4:30 AM and 8:00 PM, passing through Ontario. There is no Metrolink service on this line on Saturdays or Sundays. There is one Metrolink station in Ontario, off Haven Avenue on Francis Street. This station is served by Omnitrans Bus Route 81.

Amtrak has one route that regularly stops in Ontario, the Sunset Limited route, which travels between Los Angeles and New Orleans, Louisiana.

T. Utilities and Service Systems

The City sits on the Chino Groundwater Basin and in the Santa Ana River Watershed. The City water supply is derived from a combination of local and imported water, obtained primarily from four sources: Ontario wells and treatment in the Chino Groundwater Basin, the Chino Desalter Authority (CDA) wells and treatment in the Chino Groundwater Basin, treated State Water Project water from the Water Facilities Authority (WFA), and recycled water from the Inland Empire Utilities Agency (IEUA), a member agency of the Metropolitan Water District of Southern California (MWD).

Chino Groundwater Basin: The Chino Basin is the primary source of water for the City, which currently receives approximately 70 to 80 percent of its water supply from this source. The Chino Basin is one of the largest groundwater basins in southern California, with approximately five million acre-feet (af) of water in the basin and an unused storage capacity of about one million af. The safe yield is the annual amount of water that can be taken from a source of supply over a period of years without depleting that source beyond its ability to be replenished naturally in wet years. The 1978 judgment in the case *Chino Basin Municipal Water District v. City of Chino* defined the safe yield of the basin to be 140,000 acre-feet per year (afy). The judgment allows each water producer, including the City, a “base water right,” which is a percentage of what can be safely pumped from the Chino Basin. The judgment provides that water producers can pump in excess of their base water right if they either pay for replenishment water or purchase water rights from other users (Ontario 2005a). Importantly, the judgment also provides that as agricultural uses convert to urban uses, agricultural water rights in the basin also convert at 2 af per acre to the water agency that will serve them. Thus, development of agricultural lands in Ontario comes with a share of local reliable water supply. Consequently, the actual quantitative water right of the City to the Chino Basin in a particular year is the total of various separate water rights under the Judgment, which may vary slightly from year to year. However, the initial base right to water in the Chino Basin is expected to be 10,337 afy at buildout.

The City water supply is derived from a combination of local and imported water, obtained primarily from four sources: water pumped from Ontario wells, non-potable water pumped from CDA wells in the Chino Groundwater Basin and then treated for potable uses, treated SWP water from WFA, and recycled water from IEUA.

The City water system infrastructure is governed by its Water and Recycled Water Masterplan. The potable water network in Ontario includes 536 miles of pipeline, ranging from 2 to 42 inches in diameter (Ontario 2006b). The City has four pressure zones. Locally obtained water comes from approximately 20 operating groundwater wells in Ontario and the CDA. The total production of operational wells is 37,088 gallons per minute (gpm), or 53.4 mgd.

Ontario has a rapidly expanding recycled water program and currently serves approximately 4,000 afy of recycled water to over 70 customers, including interim agricultural users in the NMC area.

The City began construction of its sewer system in the early 1900s (Ontario, 2006c). City sewer mains are primarily constructed of vitrified clay pipe ranging from 4 to 42 inches in diameter. Approximately 75 percent of the pipes are 8 inches in diameter. The City's sewers are classified into two groups: primary sewers, greater than 15 inches in diameter, and secondary sewers, 15 inches or smaller in diameter. The City has about 375 miles of gravity sewers.

A large portion of the pipelines were built in the 1950s and 1960s when the City experienced expansive growth. Most of the pipes were vitrified clay pipes, which have a life of about 80 or more years. The majority of the City's collection system is less than 50 years old. Approximately 68,000 linear feet of pipeline was constructed prior to 1930 (Ontario 2006c) and will require repair or replacement as necessary. The City Sewer master plan and CIP identifies these areas.

Some areas of sewer size deficiencies were identified in the 1995 Sewer Master Plan. Most of these deficient areas are in the older residential communities west of Euclid Avenue and south of Mission Boulevard. Many of these issues have since been fixed by diverting drainage flows from Upland to Montclair, the construction of IEUA's Upland Relief Interceptor Phase 1, reconstruction of pipelines, the construction of the City Eastern Trunk Sewer in the NMC, and the Holt Boulevard Trunk Sewer (Ontario 2006c).

The City's wastewater collection system also consists of two City-owned pump stations, one privately owned/City-maintained pump station, over 7,000 feet of associated force mains, and five siphons. The first of the two City-owned pump stations (Magnolia) is small and services a residential neighborhood in the southwestern portion of the city. The other is a large pump station (Haven) that services a commercial /industrial area in the central eastern portion of the city. The privately owned/City-maintained pump station is small and services an NMC residential neighborhood in the southeastern portion of the City. The five siphons were constructed to go under major flood control channels or a conflicting utility. As the

proposed land use plan is developed, implementing the Sewer Master Plan eliminates the need for the Haven and Eden Glen lift stations, replacing them with future reliable gravity mains.

The City maintains the local stormwater drainage system, which includes regional (major) drainage facilities designed to convey peak 100-year discharge flows and secondary drainage facilities designed for peak 10-, 25-, or 100-year flows that convey locally generated flows to regional facilities. The City's stormwater is collected and diverted into various channels that empty into the Santa Ana River; a small portion is reclaimed in spreading basins for reuse as percolated groundwater. The primary direction of drainage flow in the Chino watershed is from the San Gabriel Mountains southward to the Santa Ana River, then southwest in the river. Streams in the watershed flowing north-south include the San Antonio, West Cucamonga, Deer Creek, Day Creek, and Etiwanda Creek Channels, and the Cucamonga Creek Flood Control Channel. All of these except for the San Antonio Channel pass through the City, and all of the channels in the City are engineered concrete channels. West Cucamonga Channel and Deer Creek Channel discharge into the Cucamonga Creek Flood Control Channel, while the Cucamonga Creek Flood Control Channel and San Antonio Channel each discharge into the Santa Ana River.

The City provides its own solid waste hauling service within the City limits. As of 2008, the City serves approximately 28,000 single-family homes with a fleet of 23 residential, 17 commercial, and 10 roll-off container collection trucks, stationed at the City's Public Works yard. The City's household hazardous waste collection facility is located at 1430 S. Cucamonga Avenue.

Solid waste generated on the project site would be taken to the West Valley Materials Recovery Facility (MRF) in Fontana for processing, recycling, or landfilling. The MRF is operated by West Valley Recycling and Transfer, and is under the administration of the San Bernardino County Department of Public Health. Most refuse is transported from the MRF to El Sobrante Landfill in the City of Corona. Other landfills include the Badlands Sanitary Landfill, Bakersfield Metropolitan Sanitary Landfill, Colton Sanitary Landfill, Frank R. Bowerman Sanitary Landfill, Lancaster Landfill and Recycling Center, Mid- Valley Sanitary Landfill, Olinda Alpha Sanitary Landfill, and Puente Hills Landfill. El Sobrante Landfill encompasses 1,322 acres, can accommodate 10,000 tons per day, has a maximum capacity of 184,930,000 tons, and its expected closure date is January 1, 2030 (CIWMB 2008b).

U. Related Projects and Basis for Cumulative Analysis

The California Environmental Quality Act (CEQA) requires that the analysis of potential project impacts include cumulative impacts. CEQA defines cumulative impacts as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts."

According to Section 15130(b)(1) of the CEQA Guidelines, either one of the following elements is necessary to adequately discuss significant cumulative impacts:

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

A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of green house gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

The project is anticipated to be completed by 2020. Accordingly, the effects of other proposed development projects that may be constructed between 2013 and 2020 in the project area are considered as potentially contributing to cumulative impacts. This cumulative analysis has utilized a listing of related projects based on information on file at the City. The study area generally incorporates the area in which the project might substantially affect traffic conditions. The development of eight related projects is anticipated in the project study area.

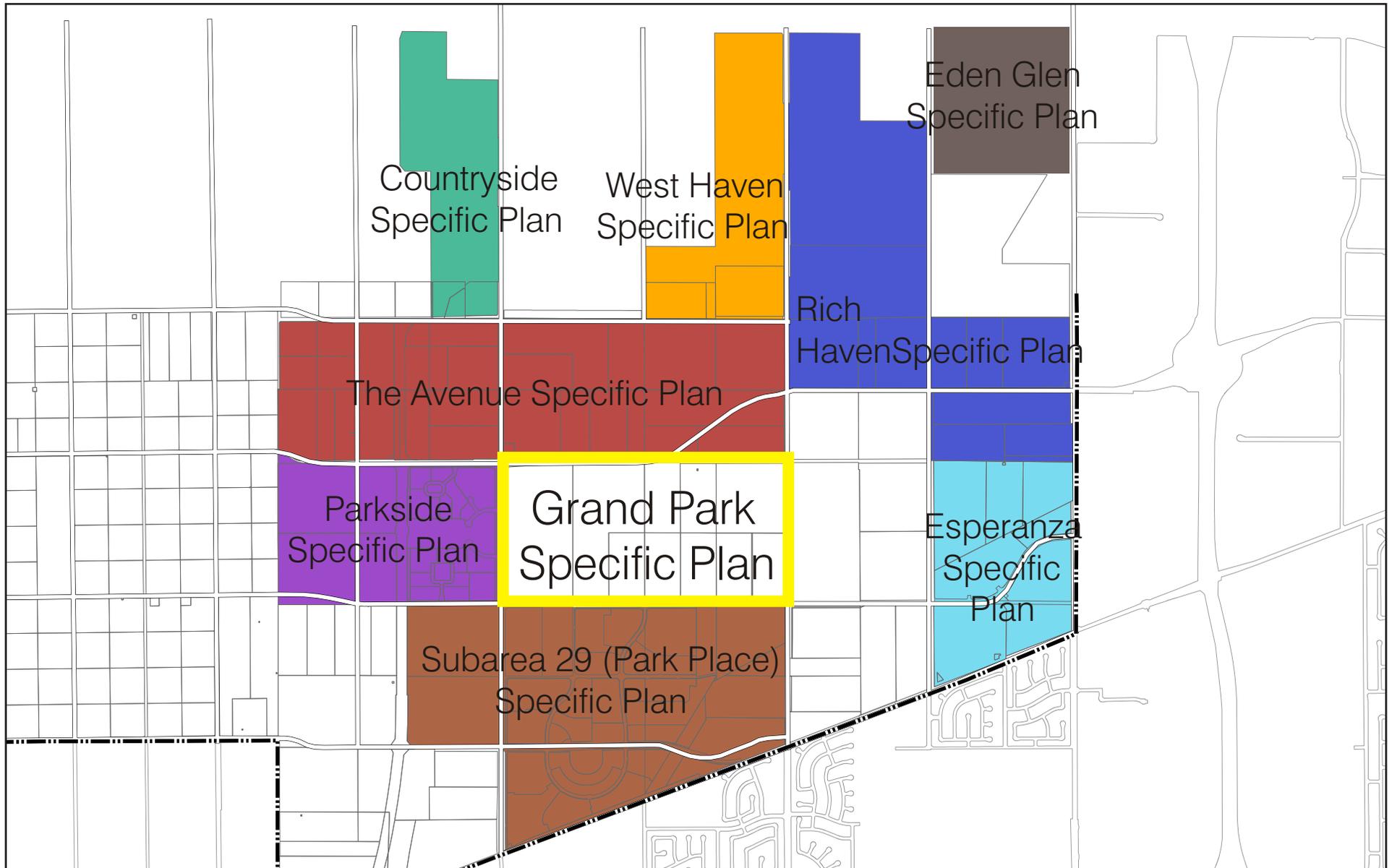
These related project Specific Plans, and the development proposed pursuant to them in conjunction with the proposed project, are summarized in Table III-1 below. The locations of the identified related projects are illustrated below in Figure III-1.

Table III-1: Summary of Related Projects and Cumulative Development

Related Project	Residential	Commercial	Educational	Parks/Open Space	Public Use	Status
Countryside SP	819 DU					Planned
West Haven SP	2,357 DU	87,000 SF	1,229 STU	12 acres	15,000 SF	Planned
Edenglen SP	584 DU	767,520 SF		12.05 acres		Not Completed
Parkside SP	4,740 DU	1,658,754 SF	4,076 STU	255 acres	105,000 SF	Planned
Rich-Haven SP	4,256 DU	889,200 SF				Planned
Esperanza SP	1,456 DU					Planned
Sub Area 29 SP	1,937 DU	87,000 SF	2,751 STU	24 acres	30,000 SF	Planned

Table III-1 (cont.): Summary of Related Projects and Cumulative Development

Related Project	Residential	Commercial	Educational	Parks/Open Space	Public Use	Status
The Avenue SP	2,606 DU	250,000 SF	Middle / Elementary Schools			Planned
Notes: SP = Specific Plan DU = dwelling units SF = square feet STU = students Source: City of Ontario, April 26, 2013.						



Source: City of Ontario Land Use Plan.



Michael Brandman Associates

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Figure III-1
Location of Related Projects

CITY OF ONTARIO • GRAND PARK SPECIFIC PLAN
DRAFT ENVIRONMENTAL IMPACT REPORT

