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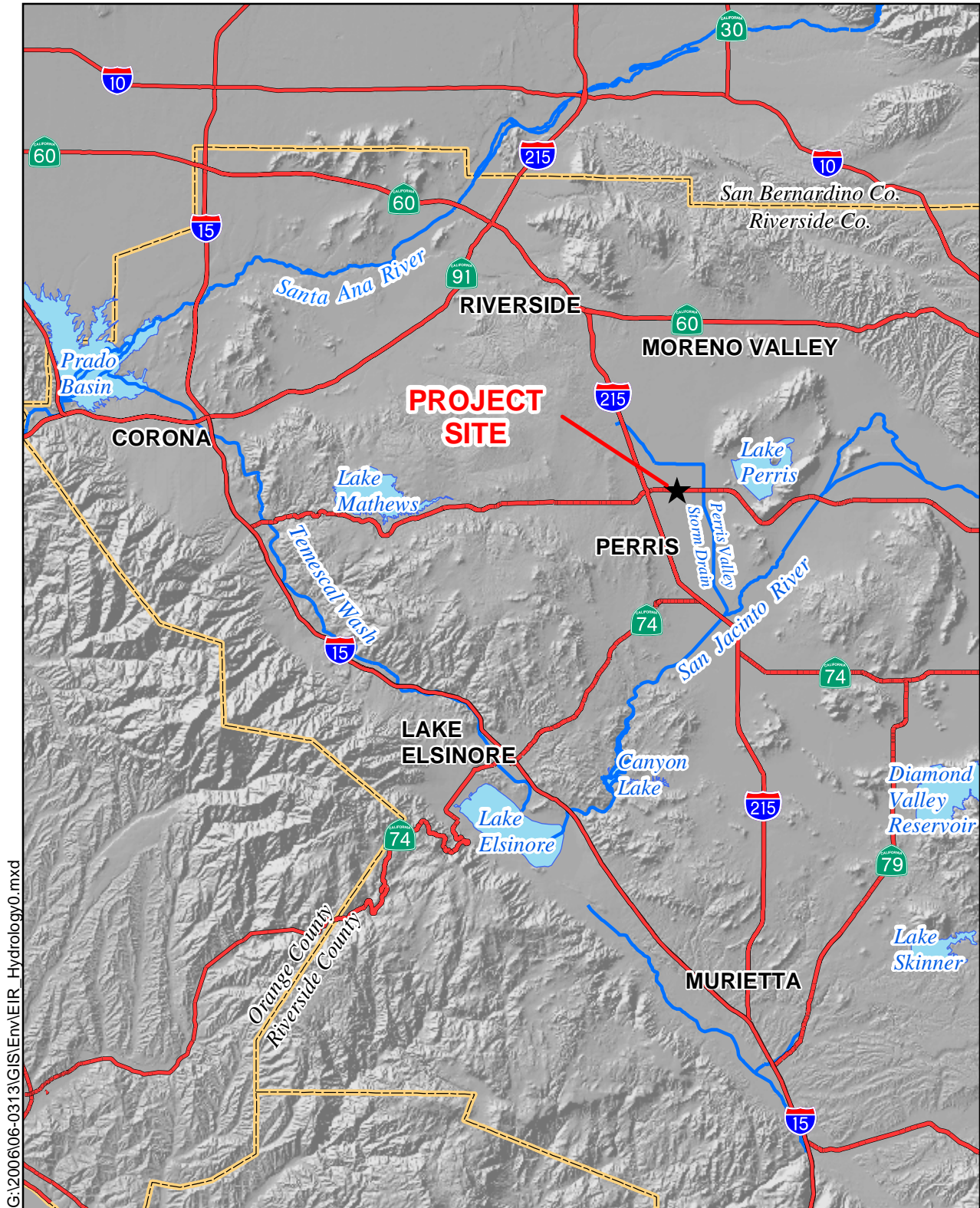
Setting

The PVCC project area is relatively flat and generally slopes in a southeasterly direction towards the PVSD. The PVSD conveys flow in a southerly direction to the San Jacinto River. The San Jacinto River is the main drainage feature in the San Jacinto watershed; draining southwesterly from its headwaters in the San Jacinto Mountains towards Canyon Lake and ultimately to Lake Elsinore.

The easterly boundary of the PVCC project area is located within a Federal Emergency Management Agency (FEMA) designated flood plain. Due to the area's relatively flat terrain and the lack of regional drainage infrastructure, flooding occurs in both major and minor storm events. During larger storm events, runoff creates flooding through the PVCC project area, which flows through the project area toward the PVSD via open drainage channels and storm drains in or along the public ROW. The PVSD is a manmade tributary to the San Jacinto River and it is the eastern limit of the PVCC project area, running north and south. The flows from the PVSD discharge into Reach 3 of the San Jacinto River near I-215. The San Jacinto River then crosses I-215 and flows south to Canyon Lake, which in turn discharges into Lake Elsinore. Lake Elsinore discharges into Temescal Wash, which is tributary to the Santa Ana River, which ultimately drains into the Pacific Ocean (see **Figure 4.7-1, Hydrology Map**).

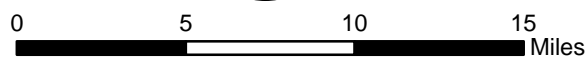
Surface Water Resources

The project site is located approximately four miles northwest of the San Jacinto River (**Figure 4.7-1, Hydrology Map**). The San Jacinto River is the main drainage feature in the San Jacinto watershed; it drains southwesterly from its headwaters at Lake Hemet toward Canyon Lake. The San Jacinto watershed is part of the larger Santa Ana River watershed.



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Sources: County of Riverside, 2011;
USGS DRG's and DLG's



**Figure 4.7-1
Hydrology Map**

Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through National Pollution Discharge Elimination Systems (NPDES) permitting. NPS pollution is now considered to be the leading cause of water quality impairments in the state, as well as the entire nation. NPS pollution is not as readily quantifiable as pollution that is derived from point sources, since it occurs through numerous diffuse sources. Rainwater, snowmelt, or irrigation water can pick up and transport pollutants as it moves across land or paved surfaces, and these pollutants may ultimately be discharged into streams, lakes, oceans, and groundwater. Urban areas and agriculture are both considered to substantially contribute to non-point source pollution in surface waters. As rainfall or irrigation waters intercept pollutants in the landscape, these pollutants may be transported in contaminated runoff and enter streams, lakes, and oceans.

Potential pollutants from the types of industrial facilities that may be developed within the PVCC include trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides (if landscaping or open area exists on the project site), organic compounds (specifically solvents), and metals. For parking areas greater than 5,000 square feet, potential pollutants of concern include sediment/turbidity, nutrients, oxygen demanding substances, bacteria and viruses, pesticides, organic compounds (specifically petroleum hydrocarbons), trash, debris, oil and grease, and metals.

The Pollutants of Concern (POC) for implementing development projects within the PVCC include bacteria and viruses (pathogens), organic compounds Poly-Chlorinated Biphenyls (PCB's), low dissolved oxygen, and nutrients. Since the receiving water bodies are impaired for pathogens and PCBs (organic compounds), treatment control best management practices (BMPs) with a medium or high effectiveness for treating these pollutants as well as other pollutants generated by future implementing development within the PVCC will be incorporated into the design for such development projects.

Groundwater Resources

The PVCC is located within the service area of the Eastern Municipal Water District (EMWD), and the northern portion of EMWD's service area covers the San Jacinto River Watershed. The San Jacinto Watershed covers an area of approximately 728 square miles, measured above a point just downstream from Railroad Canyon Dam. The PVCC site is located within the bounds of the West San Jacinto Groundwater Basin, specifically the North Perris subbasin. The West San Jacinto Groundwater Basin lies within alluvium-filled valleys carved into the elevated bedrock plateau of the Perris Block. The San Jacinto and Casa Loma fault zones are the major geologic features that bound and/or crosscut many of the groundwater basins in this region, and typically are effective barriers to groundwater flow.

Eight groundwater management zones have been delineated within the San Jacinto Groundwater Basin, and the project site is within the Perris North Management Zone (PNMZ). The PNMZ is located north of the San Jacinto River, and is bound by the impermeable, crystalline bedrock outcrops that compose the surrounding mountains and hills, which provide effective hard rock barriers to groundwater flow. The PNMZ is managed by EMWD under the West San Jacinto Groundwater Management Plan, which provides for establishment of an advisory committee, prioritizes the sub-basins (including the PNMZ), and evaluates groundwater resources including establishing groundwater quality, level, and extraction monitoring.

Storm Drain Facilities

The PVCC project area is located within the RCFC&WCD Perris Valley Master Drainage Plan (PVMDP) as shown on **Figure 4.7-2**. The current PVMDP identifies a series of concrete lined trapezoidal channels to convey runoff from the area. The PVMDP is dependent upon the ultimate build-out of the PVSD located along the easterly boundary of the PVCC. Currently, two large diameter Colorado River Aqueduct lines, owned by the Metropolitan Water District of Southern California (MWD), cross the PVSD. These lines prohibit the construction of the PVSD to its ultimate depth. Relocation of these MWD facilities is estimated to cost between \$25-35 million. The current PVMDP also identifies open channels, which are no longer the best option for storm drain facilities as it has become more economically feasible to place backbone drainage facilities underground in existing roadways.

Related Regulations

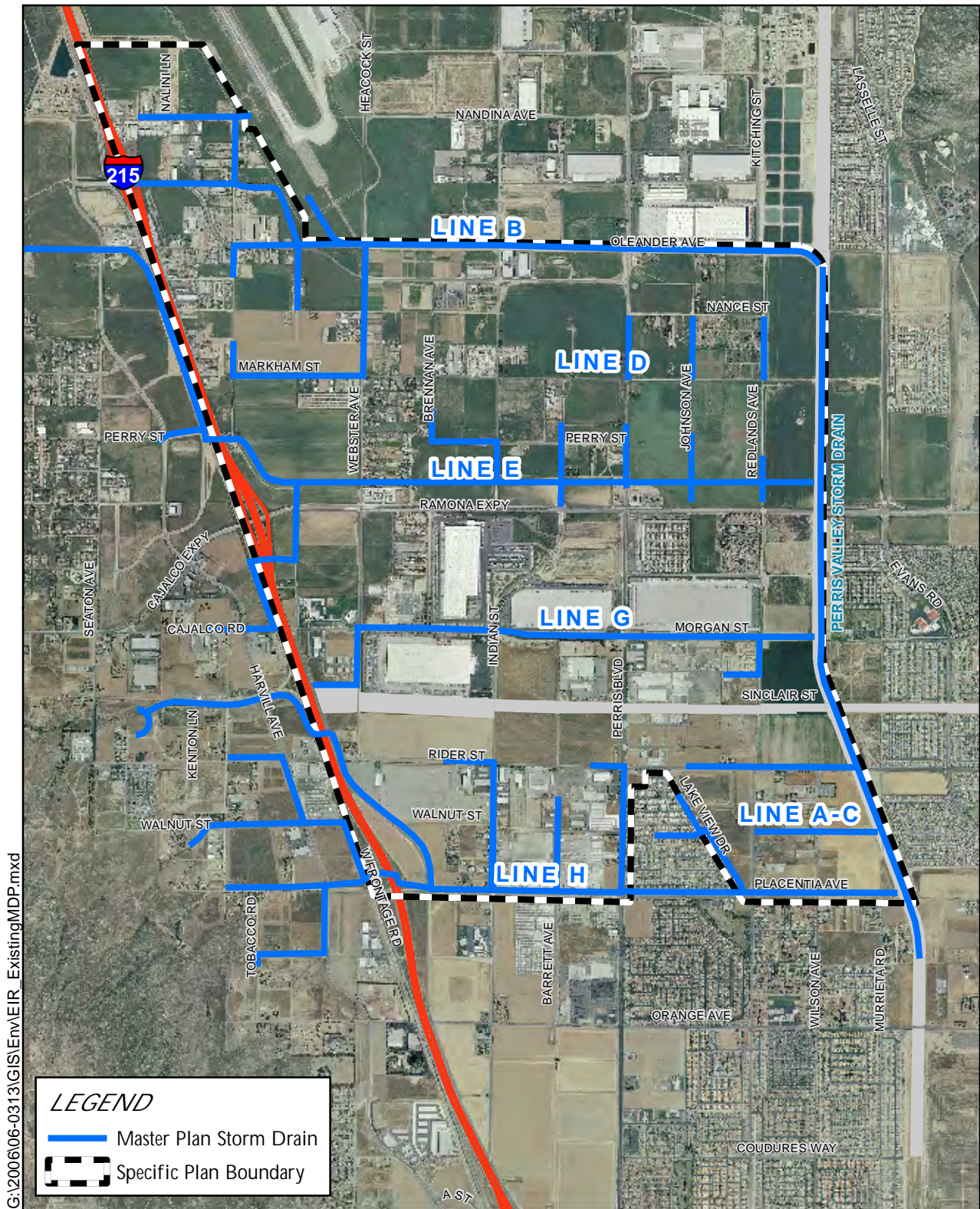
Federal

Clean Water Act

The Federal Clean Water Act (CWA) requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. The water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Santa Ana Regional Water Quality Control Board (SARWQCB) placed Lake Elsinore and Canyon Lake on the 303(d) list of impaired waters in 1994. Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto watershed. Therefore, the proposed project will discharge stormwater into receiving waters with known water quality impairments.

In 1972, the CWA was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a NPDES permit. The CWA focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste discharges, and required implementation of control measures to minimize pollutant discharges. The CWA was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial stormwater discharges. In November 1990, the U.S. Environmental Protection Agency (EPA) published final regulations that establish requirements for specific categories of industries, including construction projects that encompass greater than or equal to five (5) acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to one (1) acre. The regulations require that stormwater and non-stormwater runoff associated with construction activity, which discharge either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4s), must be regulated by an NPDES permit.

Pursuant to Section 404 of the CWA, the United States Army Corps of Engineers (ACOE) regulates discharges of dredged and/or fill material into waters of the United States. "Waters of the United States" are defined in ACOE regulations at 33 C.F.R. Part 328.3(a). Navigable waters of the United States are those waters of the United States that are navigable in the traditional sense. Waters of the United States is a broader term than navigable waters of the United States and includes adjacent wetlands and tributaries to navigable waters of the United States and other waters where the degradation or destruction of which could affect interstate or foreign commerce.



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Sources: County of Riverside, 2011;
 Eagle Aerial, 2010.

**Figure 4.7-2
 Existing MDP**



0 2,000 4,000 6,000
 Feet

National Flood Insurance Program

The federal government has been actively involved in flood control since 1927 following major floods on the Mississippi River. Beginning with the Flood Control Act of 1936, Congress assigned ACOE the responsibility for flood control engineering works and later for floodplain information services. Flood control was provided through the construction of dams and reservoirs. Despite these programs and rapidly rising federal expenditures for flood control, flood losses continued to rise. In 1968, Congress passed the National Flood Insurance Act (the 1968 Act), which created the National Flood Insurance Program (NFIP). The Flood Disaster Protection Act of 1973, which amended the 1968 Act, required the purchase of flood insurance by property owners who were located in special flood hazard areas and were being assisted by federal programs, or by federally supervised, regulated, or insured agencies or institutions.

National Flood Insurance Program Reform Act of 1994

In 1994, the National Flood Insurance Program Reform Act went through the first major revision since inception. Included in this revision were provisions that a lender must escrow for flood insurance if a structure is within the floodplain. The revised legislation also included increased flood insurance limits and the elimination of the 1962 buy-out program. However, the legislation did initiate the Hazard Mitigation Fund as part of the flood insurance policy. Also included in this legislation was the increase from a 5-day to a 30-day waiting period for a new policy to become effective. It also prohibits the waiver of flood insurance purchase requirements as a condition of receiving federal disaster assistance. If the flood insurance policy was not maintained and in the event of another disaster, there would be no disaster assistance available for that structure.

Executive Order 11988, Floodplain Management

Executive Order 11988 requires the ACOE to provide leadership and to take action to:

- reduce the hazards and risks associated with floods;
- minimize the impacts of floods on human health, safety, and welfare; and
- restore and preserve the natural and beneficial values of the current floodplain.

To comply with Executive Order 11988, the policy of the ACOE is to develop projects that, to the extent possible, avoid or minimize adverse effects associated with use of the floodplain and that avoid development (or the inducement of development) in an existing floodplain; unless, there is no practicable alternative.

State

The California Water Code is the principal state law regulating water quality in California. The Health and Safety Code, Fish and Game Code, Harbors and Navigation Code, and the Food and Agriculture Code all contain water quality provisions that require compliance.

The Health and Safety Code provides for protection of ground and surface waters from hazardous waste and other toxic substances. The Harbors and Navigation Code provides regulations designed to prevent the unauthorized discharge of waste from vessels into surface waters. The Fish and Game Code has provisions to prevent unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life. The Food and Agriculture Code provides for the protection of groundwater that may be used for drinking water supplies.

The California Code of Regulations also contains administrative procedures for the state and RWQCBs in Title 23; and for water quality for domestic uses, wastewater reclamation, and hazardous waste management in Title 22. The California Department of Fish and Game (CDFG), through provisions of the California Fish and Game Code (Sections 1601 through 1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. The presence

of a channel bed and banks, and at least an intermittent flow of water, define streams and rivers. The CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake, as defined by the CDFG.

This portion of the California Water Code, Division 7 (Porter-Cologne Act), establishes a program to protect water quality and beneficial uses of the state water resources and includes groundwater and surface water. It establishes waste discharge requirements, water quality control planning and monitoring, enforcement of discharge permits, and ground and surface water quality objectives. It also prevents waste and unreasonable use of water, and adjudicates water rights. It also directs each RWQCB in the State of California to develop a Water Quality Control Plan (Basin Plan) for all areas within its region. The Basin Plan is the basis for each RWQCB's regulatory programs. The proposed PVCC project site is located within the purview of the SARWQCB, Region 8, and must comply with applicable elements of the region's Santa Ana River Basin Plan (the 1995 Basin Plan), as well as the Porter-Cologne Water Quality Control Act, and the CWA.

The RWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the CWA to include the beneficial uses of specific water bodies, the levels of water quality that must be met and maintained to protect those uses (water quality objectives), and the state's anti-degradation policy. Water quality standards for all ground and surface waters overseen by the SARWQCB are documented in the 1995 Basin Plan. Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Nine beneficial uses have been designated for surface water bodies and groundwater in the vicinity of the proposed project site (**Table 4.7-A, Beneficial Uses for Water Bodies in Proximity to the Project Area**).

The State Water Resources Control Board administers the NPDES permit program regulating stormwater from construction activities for projects greater than one acre in size. This is known as the General Permit for Storm Water Discharges Associated with Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002. The main compliance requirement of the NPDES permits is the development and implementation of Storm Water Pollution Prevention Plan (SWPPPs) and project-specific Water Quality Management Plans (WQMPs). The purpose of a SWPPP and project-specific WQMP is to identify potential on-site pollutants, and identify and implement appropriate stormwater pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from stormwater and non-stormwater discharges during construction and operation of implementing development projects, specifically. Stormwater best management practices (BMPs) to be implemented during construction and grading, as well as post-construction BMPs, will be outlined in the SWPPPs and WQMPs prepared for implementing development projects. Examples of BMPs include detention basins for capture and containment of sediments; use of silt fencing, sandbags, or straw bales to control runoff; and identification of emergency procedures in the case of hazardous materials spills. The project proponent will be required to obtain a construction NPDES permit, prior to site disturbance.

All listed water quality objectives governing water quality in inland surface waters were evaluated for potential impacts from development of the proposed project; however, only those numeric and narrative water quality objectives that are most likely to be relevant to the proposed project are listed in **Table 4.7-B, Water Quality Objectives for Water Bodies in Proximity to the Project Site** and **Table 4.7-C, Applicable Narrative Water Quality Objectives**, respectively. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the SARWQCB is designed to minimize and control pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.

**Table 4.7-A
Beneficial Uses for Water Bodies in Proximity to the Project Area**

Water Body	Beneficial Uses
Lake Elsinore	REC 1, REC 2, WARM, WILD
Canyon Lake	AGR, GWR, REC1, REC2, WARM, WILD, MUN
San Jacinto River: Reaches 1, 2, & 3	AGR, GWR, REC1, REC2, WARM, WILD
Perris North – Groundwater Subbasin	AGR, MUN, IND, PROC
Definitions	
AGR	Waters are used for farming, horticulture, or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
MUN	Waters used for community, military, municipal, or individual water supply systems. Uses may also include drinking water supply.
IND	Waters for industrial service supply. These uses do not depend primarily upon water quality, and may include mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well re-pressurization.
PROC	Waters for industrial process supply. Uses are for industrial activities that are dependent upon water quality. Uses may include process water supply and all uses of water related to product manufacture or food preparation.
REC1	Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and the use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction with the above activities.
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.

The information provided in this table was extracted from California Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Plan Santa Ana River Basin, 1995. (Available at RWQCB.)

**Table 4.7-B
 Water Quality Objectives for Water Bodies in Proximity to the Project Site**

Water Body	Water Quality Objectives (mg/L)						
	TDS	Hardness	Na	Cl	TIN	SO ₄	COD
Reaches within SJR:							
Reach 1 - Lake Elsinore to Canyon Lake	450	260	50	65	3	60	15
Reach 2 - Canyon Lake	700	325	100	90	8	290	—
Reach 3 - Canyon Lake to Nuevo Road	820	400	—	250	6	—	15
Perris South - Groundwater Subbasin	1000	~	~	~	~	~	~

~ The SARWQCB has not yet established numeric water quality objectives for these pollutants. The information provided in this table was extracted from California Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Plan Santa Ana River Basin, 1995. (Available at RWQCB.)

**Table 4.7-C
 Applicable Narrative Water Quality Objectives**

<i>Bacteria, Coliform</i>
REC-1 Fecal coliform: log mean less than 200 organisms/100 mL based on five or more samples/30-day period, and not more than ten percent of the samples exceed 400 organisms/100 mL for any 30-day period.
REC-2 Fecal coliform: average less than 2000 organisms/100 mL and not more than 10 percent of the samples exceed 4000 organisms/100 mL for any 30-day period.
<i>Oil and Grease</i>
Waste discharges shall not result in deposition of oil, grease, wax or other materials in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.
<i>Solids, Suspended and Settleable</i>
Inland surface waters shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
All inland surface waters of the region shall be free of changes in turbidity which adversely affect beneficial uses.
Waste discharges shall not contain floating materials, including solids, liquids, foam, or scum, which cause a nuisance or adversely affect beneficial uses.
<i>Nitrate</i>
Nitrate-nitrogen concentrations shall not exceed 45 mg/L as (NO ₃) or 10mg/L (as N) in inland surface waters designated MUN as a result of controllable water quality factors.

The information provided in this table was extracted from California Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Plan Santa Ana River Basin, 1995. (Available at RWQCB.)

Regardless of whether or not a water body has numeric water quality objectives, narrative objectives apply to all inland surface waters and ground waters within the region under jurisdiction of the SARWQCB. Where more than one narrative objective is applicable, the SARWQCB requires a more stringent application of the objective. Table 4.7-C lists all of the applicable narrative objectives for inland surface waters in proximity to the proposed project.

On September 17, 2004, the Water Quality Management Plan for Urban Runoff from New Development and Significant Redevelopment was adopted by the SARWQCB and became effective January 1, 2005. This included the requirement for preparation of a project-specific WQMP that identified BMPs to ensure that the water quality of receiving waters would not be degraded following development.

On September 2, 2009, the California State Water Resources Control Board voted to adopt major revisions to the statewide General Permit for Discharges of Stormwater Associated with Construction Activities (Construction General Permit). The new permit took effect on July 1, 2010 and applies to projects that disturb one or more acres, or projects that disturb less than one acre but are part of a larger common plan of development that disturbs more than one acre in total (e.g., large linear utility projects). The revised permit requires that projects implement a SWPPP that contains specific BMPs and establishes numeric effluent limitations to meet water quality and technology-based standards. It also provides greater clarity so that the public can determine whether permittees are in compliance.

Therefore, new projects submitted to the City of Perris (a co-permittee listed in the Riverside County WQMP) are required to submit a project-specific WQMP prior to the first discretionary project approval or permit. Project applicants may submit a preliminary project-specific WQMP for discretionary project approval (land use permit); however, a final version would be submitted for review and approval prior to the issuance of any grading or building permits.

Cobey-Alquist Flood Plain Management Act (California Water Code Section 8400 et. seq.)

This act states that a large portion of land resources of the State of California is subject to recurrent flooding. The public interest necessitates sound development of land use, as land is a limited, valuable, and irreplaceable resource. The floodplains of the State are a land resource that requires development in a manner that is in conjunction with economically justified structural measures for flood control, and that would result in the prevention of loss of life and economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is a policy of the State of California to encourage local government to plan land use regulations to accomplish floodplain management, and to provide state assistance and guidance.

Regional

RCFC&WCD has adopted the PVMDP the boundaries of which include the proposed project area. According to the RCFC&WCD, the primary responsibility for the design and construction of all Area Drainage Plan (ADP) facilities lies with the RCFC&WCD so that the maximum control and accountability for costs accruing to the Area Drainage Plan funds can be maintained. The following criteria will be applied by the RCFC&WCD Chief Engineer to assist in the evaluation of the engineering and administration responsibility for construction contracts related to the proposed project storm drain connections. Design responsibility for major facilities, including channels, retention basins, and storm drains with diameters of more than 60-inches will be designed by the District (or through private engineering contracts administered by the District), unless otherwise authorized in writing by the Chief Engineer. Local facilities and lateral storm drains with diameters of 60 inches or less will normally be designed by the developer's engineer using District standards, providing that the Chief Engineer has authorized the developer (in writing) to proceed in this manner.

The project is located within the Perris Valley ADP. Accordingly, implementing development proponents will be subject to applicable ADP fees. The Perris Valley ADP fees are currently set at \$8,875 per acre. ADP fees are paid at the time of tentative map recordation, unless deferred by the developer to the grading permit or building permit stage. The actual ADP fee paid by developments may be less than \$8,875 per acre, due to credits for drainage infrastructure previously constructed or drainage facilities constructed, as part of development proposals. Although the ADP fee is established for subdivisions, Riverside County's "Rules and Regulations for Administration of Area Drainage Plans" provides for the payment of ADP fees for other discretionary land uses when a determination has been made that the approved land use will increase runoff which may require earlier construction of downstream Area Drainage Plan facilities.

Local

City of Perris Municipal Code

Chapter 14.22 *Stormwater/Urban Runoff Management and Discharge Control*, 14.22.020 Purpose and Intent. The purpose of this chapter is to ensure the environmental protection and public health, safety, and general welfare of City residents by:

- A. Prohibiting non-stormwater discharges into the stormwater conveyance system;
- B. Eliminating discharges into the stormwater conveyance system from spills, dumping, or disposal of materials, other than stormwater or permitted or exempted discharges;
- C. Reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas (urban runoff), to the maximum extent practicable; and
- D. Reducing pollutants in stormwater discharges to achieve applicable water quality objectives for receiving waters within the City and Santa Ana River Watershed.

The intent of this chapter is to protect and enhance the water quality of the City of Perris water courses, water bodies, groundwater, wetlands, and regional receiving waters in a manner pursuant to and consistent with the Federal CWA (33 U.S.C. Section 1342), and California RWQCB NPDES Permit No. CAS 618033, Order No. R8-2002-0011, and any amendment, revision or re-issuance thereof (Ord. 1194 Section 3(part), 2006).

Chapter 15.09 *Flood Management*, 15.09.090 Standards of Construction. In all areas of special flood hazards, the following standards are required:

- A. Anchoring.
 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 2. All manufactured homes shall meet the anchoring standards of Section 15.09.120.
- B. Construction Materials and Methods.
 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 4. Within Zones AH or AO, adequate drainage paths around structures or slopes shall be constructed to guide floodwaters around and away from the proposed structures.

C. Elevation and Flood-proofing.

1. Residential construction, new or substantial improvement, shall have the lowest floor, including the basement:
 - a. In an AO-Zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade, if no depth number is specified;
 - b. In an A-Zone, elevated to or above the base flood elevation, as determined by this community; and
 - c. In all other Zones, elevated to or above the base flood elevation. Upon the completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or surveyor, or verified by the community building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.
2. Nonresidential construction shall either be elevated to conform with Section 15.09.090 or together with attendant utility and sanitary facilities:
 - a. Be flood-proofed below the elevation recommended under Section 15.09.090 so that the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - c. Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the floodplain administrator.
3. All new construction and substantial improvements that include fully enclosed areas below the lowest floor (excluding basements) that are usable solely for the parking of vehicles, building access, or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must exceed the following minimum criteria:
 - a. Be certified by a registered professional engineer or architect;
 - b. Be certified to comply with a local flood-proofing standard approved by the Federal Insurance Administration, Federal Emergency Management Agency; or
 - c. Have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwater.
4. Manufactured homes shall also meet the standards in 15.09.120 (Ord. 981 § 2(part), 1994).

City of Perris General Plan

The following are applicable policies from the City of Perris GP related to impacts from hydrology and water quality:

City of Perris GP – Conservation Element

Goal II	Conservation of areas with significant biotic communities.
Policy II.A	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.
Measure II.A.3	For those public and private projects that are also subject to federal or state approval with respect to impacts to the waters of the U.S. and/or streambeds, require evidence of completion of the applicable federal permit process prior to the issuance of a grading permit.

Goal V	An adequate water supply to support existing and future land uses, anticipated in the Land Use Element.
Policy V.A	Coordinate land-planning efforts with local water purveyors.
Measure V.A.1	Work with Eastern Municipal Water District to ensure that development does not outpace projections consistent with EMWD's Urban Water Management Plan.
Measure V.A.2	Require use of new technologies and water conserving plant materials for landscaping.
Goal VI	Achieve regional water quality objectives and protect the beneficial uses of the region's surface and groundwater.
Policy VI.A	Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).
Measure VI.A.2	Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.
Measure VI.A.3	Prior to issuance of any grading permit involving a disturbance of one or more acres of land requires proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.
Measure VI.A.4	Review water quality impacts during the project review and approval phases to ensure that appropriate BMPs are incorporated into the project design and long-term operations.
Measure VI.A.5	In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.
Measure VI.A.6	Continue to fulfill the City's obligation as Co-Permittee under the MSA NPDES permit for Riverside County.
Measure VII.A.1	Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.
Measure VII.A.2	Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.
Measure VII.A.3	Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.
Measure VII.A.4	Review water quality impacts during the project review and approval phases to ensure appropriate Best Management Practices are incorporated into the project design and long-term operations.
Measure VII.A.5	In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.
Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City which provides for the protection of the environment while improving the quality of life and promoting sustainability.
Policy VIII.A	Adopt and maintain development regulations, which encourage water and resource conservation.

Measure VIII.A.5 Use permeable paving materials within developments to deter water runoff and promote natural filtering of precipitation and irrigation waters.

City of Perris GP – Safety Element

- Measure I.A.1 Identify all known hazards within the City in the Multi-jurisdictional Hazard Plan.
- Measure I.A.2 Prepare evacuation routes and disaster response plans for all known hazards within the City.
- Measure I.A.3 Participate in on-going disaster preparedness training programs in conjunction with other jurisdictions.
- Measure I.B.5 Require flood mitigation plans for all proposal projects in the 100 year floodplain.
- Measure III.B.1 Work with local telecommunication service providers to publish emergency evacuation routes in phone directories.
- Measure III.B.2 Work with local school districts to distribute emergency information at the schools.
- Measure III.B.3 Work with City service providers such as the waste hauler or water company to put informational inserts about emergency preparedness and evacuation procedures in billing statements or newsletters.
- Measure III.B.4 Work with the local Chamber of Commerce to distribute evacuation plans for all business owner/operators, employees and patrons.
- Measure III.B.5 Develop a map indicating locations of hazards that are likely to affect the City.

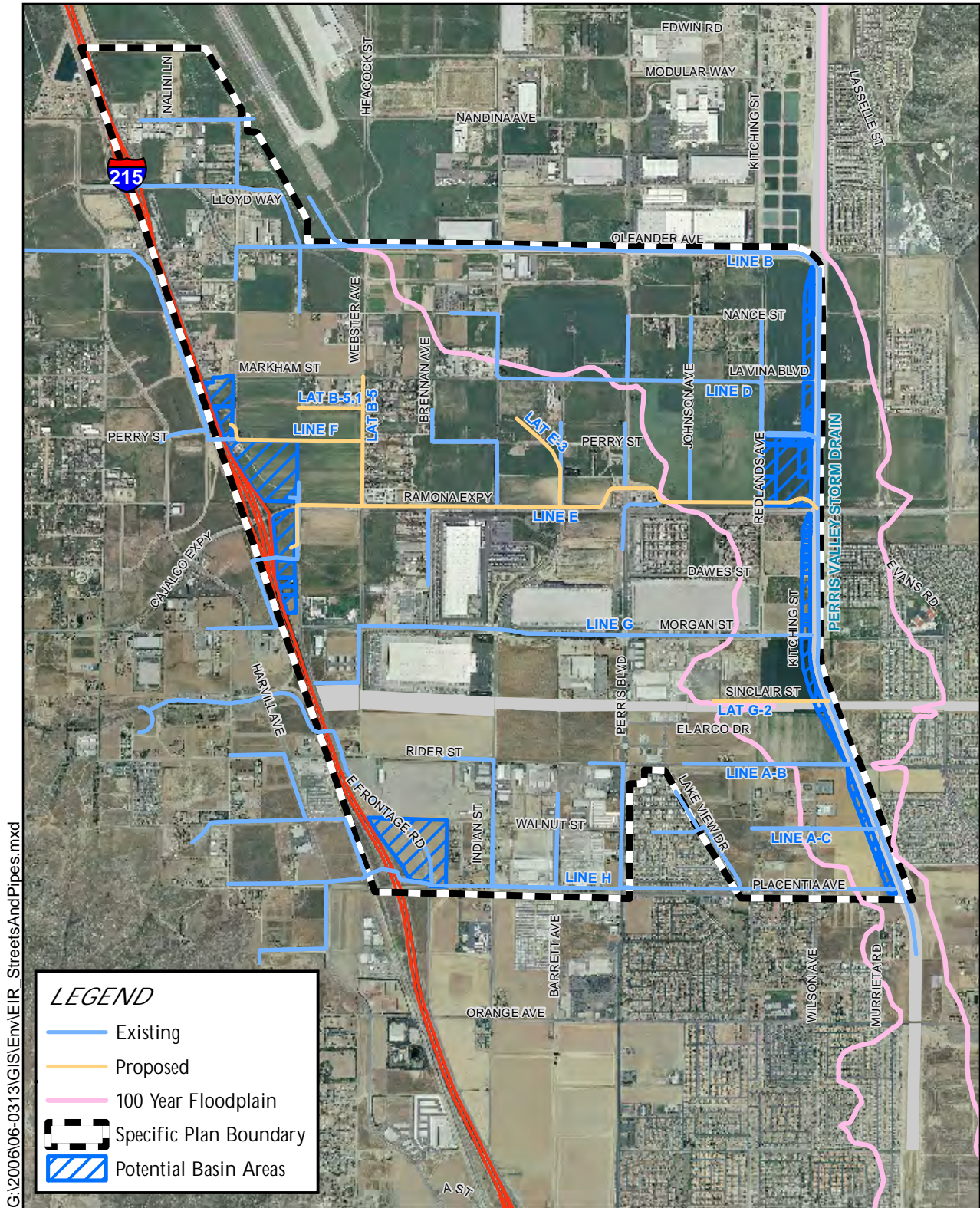
City of Perris GP – Land Use Element

Measure II.A.1 Prepare and adopt a revised Area Drainage Plan including regional stormwater detentions basins capable of serving contributory areas of at least 100 acres.

Design Considerations

Each implementing development project site will be graded and buildings designed to the recommendations of the Geotechnical Engineering Investigation. Each implementing development project within the PVCC is required to implement Site Design BMPs accomplishing each of four different techniques: 1) minimize urban runoff; 2) minimize impervious footprint; 3) conserve Natural Areas and 4) minimize directly connected impervious areas. Incorporation of Site Design BMPs will reduce potentially significant impacts to surface and groundwater resources.

With respect to overall drainage in the PVCC area, the drainage systems that will be developed in conjunction with the proposed PVCC will consist of two basic components: storm drains and detention basins. This drainage system will capture surface runoff from within the PVCC and surrounding area and convey the runoff into proposed storm drains and detention basins before continuing to the PVSD. The drainage plan for the PVCC proposes modifications to facilities identified in the PVMDP as shown in **Figure 4.7-3**.

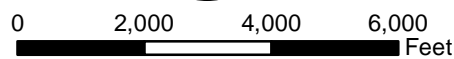


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Sources: County of Riverside, 2011;
 Eagle Aerial, 2010.



Figure 4.7-3
Project-Related Modifications
to Existing Perris Valley MDP



Proposed Storm Drains

The existing RCFC&WCDPVMDP, as previously shown on **Figure 4.7-2**, proposes a series of concrete lined trapezoidal channels to convey runoff from the area. At the time the PVMDP was prepared, the drainage concept as presented was feasible because most of the area was agricultural land and relatively inexpensive. Due to development in the area and the increased land values, open channels are no longer the best option and it has become more economically feasible to place the backbone drainage facilities underground in the existing roadways. Additionally, several other issues make the timely implementation of the existing PVMDP problematic. The PVMDP is dependent upon the ultimate build-out of the PVSD located along the easterly boundary of the PVCC. Currently, two large diameter MWD Colorado River Aqueduct lines cross the PVSD. These lines prohibit the construction of the PVSD to its ultimate depth. Relocation of these MWD facilities is estimated to cost between \$25-35 million.

Therefore, revisions to the facilities identified in the PVMDP are proposed in order to meet the PVCC development goals. The drainage systems proposed for development in conjunction with the PVCC will consist of two basic components: storm drains and detention basins. The drainage system will capture surface runoff from, which has been reviewed and deemed acceptable by RCFC&WCD, are described below:

Line D (From the PVDF to the upstream end of the facility, approximately 2,000 feet west of Indian Avenue on Nance Street). Line D will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box and an underground reinforced concrete pipe. While the proposed slope of the underground portions of this facility are less than the RCFC&WCD design standards, an agreement has been reached with RCFC&WCD to ensure this will be a District maintained facility.

Line E (From the PVSD to the proposed Line E Detention Basin). Line E will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box, and an underground reinforced concrete pipe. While the proposed slope of a segment of this facility is less than the RCFC&WCD design standards, an agreement has been reached with RCFC&WCD to ensure this will be a District maintained facility.

Line E Detention Basin. This basin(s) will be located in the vicinity of the intersection of the Ramona Expressway and I-215. Line E Detention Basin(s) is a key component to the proposed Line E system. The basin(s) will reduce peak flows and allow the majority of the downstream facility to be constructed in the street right-of-way. Line E Detention Basin(s) conceptually requires a surface area of approximately 9.5 acres with an approximate depth of 20 feet. The Line E Detention Basin(s) will be designed to handle a 100-year storm event. It is anticipated that the Line E Detention Basin(s) may serve as a dual use facility, recreational park and a flood control basin.

Line F (From the Line E Detention Basin to the Line F Detention Basin). Line F will consist of an underground reinforced concrete pipe from the Line E Detention Basin to the Line F Detention Basin. The slope proposed for Line F meets the minimum RCFC&WCD design criteria, and as such would be a District maintained facility.

Line F Detention Basin. This Basin will be located in the vicinity of the intersection of Markham Street and the I-215. Line F Detention Basin will reduce peak flows and allow a majority of the downstream facilities to be constructed within the street right-of-way. Line F Detention Basin conceptually requires a surface area of approximately 8 acres with an approximate depth of 20 feet. The Line F Detention Basin will be designed to handle a 100-year storm event. It is anticipated that the Line F Detention Basin may serve as a dual use facility, recreational park, and flood control basin.

Line H from the Perris Valley Storm Channel to the proposed Line H Detention Basin. Line H is proposed to be an underground reinforced concrete box in Placentia Avenue, from the PVSD to the Line H Detention Basin. The slope proposed for Line H meets the minimum RCFC&WCD design criteria, and as such would be maintained by RCFC&WCD.

Line H Detention Basin. This basin will be located in an area approximately 1,000 feet west of Indian Avenue and south of Walnut Street. The Line H Detention Basin has a surface area of approximately 15.5 acres and is approximately 20 feet deep. The basin will reduce peak flows and allow the downstream Line H facility to be constructed in the street right-of-way. The Line H Basin will be designed with a holding capacity to accommodate the 100-year storm event. It is anticipated that the Line H Detention Basin will serve as a dual use facility. It will be used as a recreational park and a flood control basin.

In addition to the modified facilities discussed above, other adopted PVMDP facilities in the PVCC project area will also need to be constructed to accommodate the drainage needs of the area. **Figure 4.7-3** shows the adopted and modified drainage facilities that will need to be constructed. These facilities will be required to accommodate developed 100-year storm flows in the project area. It is anticipated that the above-described drainage systems will be constructed in conjunction with future development projects within the PVCC project area. Once developed, runoff from the project area will be increased. This increased runoff is consistent with the existing PVMDP. Runoff will be discharged into the PVSD and ultimately into the San Jacinto River.

Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Based on Appendix G to the State *CEQA Guidelines*, impacts to hydrology/water quality may be considered potentially significant if the project would:

- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the groundwater table level;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- place within a 100-year flood hazard area structures that would impede or redirect flood flows; or
- expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or a dam.

Environmental Impacts

Threshold: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

EMWD is the provider of domestic water to the project area. According to EMWD, approximately twenty percent of EMWD's potable water demand is supplied by EMWD groundwater wells and the remainder is supplied by imported water from the Metropolitan Water District of Southern California (MWD) through its Colorado River Aqueduct and its connections to the State Water Project. The majority of the groundwater produced by EMWD comes from its wells in the Hemet and San Jacinto area. The PVCC does not include groundwater extraction wells and domestic water to serve the future implementing development projects is expected to come from MWD and not from local groundwater sources.

(EMWD provides and distributes potable water to the project area that is a combination of water sourced from MWD EMWD relies on MWD for 80% of its potable water supply. Potable water is supplied to EMWD either as treated or untreated water. Treated water is supplied from two treatment facilities: Mills MWD Water Treatment Facility and Lake Skinner Water Treatment Facility. Untreated water from MWD through the State Water Project is treated at a micro-filtration plant located in the City of Perris. The water treated at the Mills Treatment Facility is water from the State Water Project. Water treated at Lake Skinner Treatment Facility is from both the Colorado River and State Water Project. A small amount of raw water from MWD is also used for agricultural purposes. MWD has developed and implemented an Integrated Resource Plan. The plan was updated and adopted in July 2004. It analyzes current data to determine demand and supply alternatives to determine reliability through year 2025. The plan sets targets for conservation, local supplies, State Water Project supplies, Colorado River Aqueduct supplies, groundwater banking, and water transfers. By using a diverse mix of resources, MWD and its agencies reduce its dependency on a single water supply resource.

Currently, EMWD provides service to the North Perris area through its system of existing pipelines within the 1627 and 1705 pressure zones. Although EMWD has no conceptual plans for expansion of these waterlines, they will assess demand as growth occurs and upgrades are designed by the as part of implementing development projects within the PVCC and other development within EMWD boundaries in order to meet future demands of the project area. As discussed in Section 4.11 (Utilities and Service Systems) of this document, EMWD will have sufficient supplies in normal, dry, and multiple dry years to satisfy projected demands within its service area, including the proposed project.

Related to ground water recharge, the PVCC project site is located within EMWD's Perris North groundwater subbasin. Development within the PVCC will introduce additional impervious surfaces into the project area. However, since each implementing development project will be required to prepare project-specific WQMPs, it is anticipated the future implementing development projects will incorporate site design measures such as pervious pavement and the direction of rooftop runoff into landscaped areas to facilitate infiltration and groundwater recharge. Additionally, the PVCC proposes implementing development projects use native drought tolerant vegetation to reduce the amount of water needed for landscaping.

The land uses proposed by the PVCC and the subsequent implementing development projects are consistent with the Perris GP, which acknowledged that development of General Plan land uses will result in an increase in the amount of impermeable surfaces and concurrent diminution in the volume of recharge that occurs through percolation of precipitation into Perris groundwater sub-basins. Recharge from percolation of precipitation is one of numerous processes of aquifer recharge and reduction in volume from this source is not likely to be significant. Recharge of these sub-basins from current and planned EMWD storage/percolation ponds, and formulation and implementation of an inter-agency

management plan for Perris-area groundwater basins will promote maintenance of existing groundwater levels.

Due to the PVCC's small size in relationship to the total size of the groundwater subbasin and implementation of BMPs by implementing development projects, there will not be a substantial effect upon groundwater recharge within the groundwater basin. Therefore, groundwater recharge is not expected to be significantly impacted by implementation of the PVCC. Impacts are **less than significant**.

***Threshold:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.*

The existing community is currently characterized by agricultural, residential, commercial, and industrial uses. The project site is relatively flat; sloping in a southeasterly direction with elevations ranging from approximately 1,430 to 1,500 feet above mean sea level. The existing drainage pattern of the site is from the northwest to the southeast, following the topography of the project area.

Development of the PVCC will increase the amount of impervious surfaces, thereby reducing the amount of rain water that would be subject to infiltration. By increasing the percentage of impervious surfaces on the site, less water will percolate into the ground and more surface runoff will be generated. In order to reduce surface runoff, implementing development projects will incorporate Site Design BMP's accomplishing each of four different techniques: (1) minimize urban runoff; 2) minimize impervious footprint; 3) conserve Natural Areas and 4) minimize directly connected impervious areas. Methods of accomplishing the Site Design Techniques include:

- Each developer is required to implement as many methods as possible, but shall propose means for accomplishing at least two (2) objectives from each Site Design 'Technique' (see Riverside County Flood Control WQMP template). In general, a brief description of the reasons for NOT implementing any one of the methods shall be mentioned in preliminary and final WQMP reports.
- Maximize the permeable area.
- Incorporate landscaped buffers between impervious areas.
- Use natural drainage systems when possible.
- Use perforated pipe and/or retention facilities for low flow infiltration.
- Construct light-traffic areas using open jointed or pervious materials, such as unit pavers or pervious concrete.
- Eliminate and/or minimize use of impervious surfaces in landscaping design, such as decorative concrete, unless otherwise directed.
- Maximize water conservation by providing drought tolerant vegetation in the landscape design.
- Contain and infiltrate roof runoff or direct roof runoff to landscaped areas for infiltration.
- Use vegetated swales in lieu of underground piping.
- Implement rural/urban swales where street runoff drains to curb with frequent openings leading to vegetated swales or filtration features.
- Side slopes should not exceed 3:1.
- Landscaped block walls may be permitted for limited use in specific circumstances.
- A 2-foot wide clear and level area shall be provided for use as an access path at the top of slopes on each side of a swale or trench.

Inverted medians shall be considered along drives and parking aisles to serve the site design function. In place of raised or mounded landscaped medians, depressed landscaped areas should be designed which will capture parking lot and street runoff, reduce directly connected impervious areas, promote infiltration, and pre-treat runoff in a swale or trench prior to discharge to a treatment control facility. The inverted median can incorporate a flow line slope or utilize a grated inlet in order to achieve drainage of the depression within 72 hours (maximum).

The on-site surface runoff will be collected within the proposed PVMDP storm drain facilities mentioned above, and will be conveyed to the PVSD east of the project site. The on-site facilities have been designed to accommodate 100-year storm runoff from the project site. PVSD is also designed to accommodate 100-year storm flows. Therefore, after implementation of the proposed modifications to the PVMDP and project-specific WQMPs for implementing development projects, the proposed PVCC is not anticipated to result in peak flows exiting the project site that would result in flooding on or off site. Impacts are considered to be **less than significant**.

***Threshold:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site.*

The PVCC project site has been heavily disturbed by activities associated with agricultural, residential, commercial, and industrial uses. The existing drainage pattern of the site is from the northwest to the southeast. Currently, drainage from the PVCC project site and areas upstream of this site discharge as detailed in **Figure 4.7-2, Existing MDP**. After the construction of implementing development and infrastructure projects, on-site runoff will increase. In order to reduce the volume of on-site runoff in the post-project conditions, basins are proposed within the vicinity of the intersection of Ramona Expressway and I-215, in the vicinity of Markham Street and I-215, and approximately 1,000 feet west of Indian Avenue and south of Walnut Street. These detention basins will attenuate peak flows down to existing flow quantities. The basins, which also serve as water quality treatment control facilities, are designed to reduce peak flows associated with storms ranging from 2 to 100 year return frequencies. Implementing development projects will be required to obtain encroachment permits for connection to RCFC&WCD's PVSD, prior to construction of connections.

Off-site flows will be mitigated by implementation of conveyance features such as fully improved streets, as well as concrete lined trapezoidal channels. These features simultaneously protect the site and convey runoff in a controlled fashion around the proposed development. Ultimately, the largest off-site flows are released as sheet flow to historical destinations. Runoff will be discharged into the PVSD and ultimately into the San Jacinto River and Pacific Ocean.

Through implementation of site specific WQMPs by implementing development projects, and the construction of the on- and off-site storm drain facilities, impacts to the natural drainage pattern of the site are considered **less than significant**.

***Threshold:** Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.*

Implementing development projects within the PVCC will incorporate Site Design BMPs to 1) minimize urban runoff; 2) minimize impervious footprint; 3) conserve Natural Areas and 4) minimize directly connected impervious areas. In addition to the Site Design BMPs that will be incorporated into the individual implementing development projects, the PVCC proposes revisions to the PVMPD to accommodate storm flows generated on the project site. Line D will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box, and an underground reinforced concrete pipe that will convey stormwater from the edge of the facility approximately 2,000 feet west of Indian Avenue on Nance

Street to the PVSD. Line E will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box, and an underground reinforced concrete pipe and will convey stormwater from the proposed Line E Detention Basin to the PVSD. The Line E Detention Basin(s) will be located in the vicinity of the intersection of the Ramona Expressway and I-215. Line E Detention Basin(s) is a key component to the proposed Line E system. The basin(s) will reduce peak flows and allow the majority of the downstream facility to be constructed in the street right-of-way. The Line E Detention Basin(s) will be designed to handle a 100-year storm event. Line F will consist of an underground reinforced concrete pipe from the Line E Detention Basin to the Line F Detention Basin.

The Line F Detention Basin will be located in the vicinity of the intersection of Markham Street and I-215. Line F Detention Basin will reduce peak flows and allow a majority of the downstream facilities to be constructed within the street right-of-way. The Line F Detention Basin will be designed to handle a 100-year storm event. Line H is proposed to be an underground reinforced concrete box in Placentia Avenue, which will convey stormwater from the Line H detention basin end to the PVSD. The Line H Detention Basin will be located in an area approximately 1,000 feet west of Indian Avenue and south of Walnut Street. The basin will reduce peak flows and allow the downstream Line H facility to be constructed in the street ROW. The Line H Basin will be designed with a holding capacity to accommodate the 100-year storm event.

In addition to the modified facilities discussed above, other adopted PVMDP facilities in the PVCC area will also need to be constructed to accommodate the drainage needs of the area. **Figure 4.7-3** shows the adopted and modified drainage facilities that will be required to accommodate developed 100-year storm flows in the project area. It is anticipated that the above-described drainage systems will be constructed in conjunction with future implementing development projects within the PVCC. Once developed, runoff from the project area will be increased. This increased runoff is consistent with that planned for by the existing PVMDP. Runoff will be discharged into the PVSD and ultimately into the San Jacinto River.

Design criteria for interim stormwater facilities require that new development does not disrupt existing drainage patterns. These include requirements that runoff from adjoining contributory drainage areas are included in calculations of potential stormwater runoff volumes and accommodated in design of the interim facilities and that stormwater discharge to storm drain facilities does not increase from predevelopment volumes. In addition, the interim detention facilities are designed to prevent “first flush” stormwater discharges and nuisance drainage discharges such as irrigation overspray that contain contaminants from entering storm drain facilities that eventually discharge to the San Jacinto River. The PVCC’s implementing development projects will abide by the Interim Development Criteria as adopted by the City of Perris, City Council with Ordinance No. 3403, and pay all applicable drainage fees to the RCFC&WCD prior to the issue of grading permits.

The March Air Force Base Reuse Drainage Master Plan identifies stormwater conveyance through the PVCC project area discharging into the PVMDP Lateral B. The PVCC does not propose any changes to this part of the PVMDP and, as such, will not affect, or be inconsistent with the PVMDP. According to the PVMDP, the PVSD is an earthen flood control channel and conveys flows released from upstream areas and flows from storm drains discharging into the channel. The PVSD is a PVMDP facility designed to accommodate flows from the Perris Valley watershed in a 100-year storm event after development of the watershed, including development proposed by the PVCC. On-site storm drain facilities will be constructed and connected to the PVSD. Stormwater runoff from the proposed project will not exceed the capacity of existing or planned stormwater drainage systems. Potential impacts related to existing or planned stormwater drainage systems are, therefore, **less than significant**.

In order to reduce the discharge of expected pollutants, such as sediment, into receiving waters during construction of the PVCC’s implementing development projects, the implementing development project

proponents will be required to prepare a site-specific SWPPP for each implementing development project in accordance with the State Water Resources Control Board's (SWRCB) General Permit for Construction Activities. The General Permit requires development and implementation of a site-specific SWPPP that identifies an effective combination of erosion control and sediment control BMPs to minimize or eliminate the discharge of pollutants into receiving waters. In addition, BMPs for managing sources of non-stormwater discharges and waste are required to be identified in the SWPPP. Examples of construction BMPs that may be used by implementing development projects include silt fencing, gravel bag berms, fiber rolls, and street sweeping. The SWPPP is also required to identify non-structural post-construction BMPs. Examples of non-structural, post-construction BMPs include catch basin stenciling, and tenant education.

In order to reduce the discharge of expected pollutants, such as oil, grease and trash, into receiving waters following development, the implementing development projects will be required to be in compliance with the latest version of the water quality requirements for new development and redevelopment, including development and implementation of project-specific WQMPs. The project-specific WQMP will identify BMPs to ensure that water quality of receiving waters is not degraded following development. New implementing development projects submitted to the City of Perris will be required to submit a project-specific WQMP prior to the first discretionary project approval or permit. Implementing development project applicants may submit a preliminary project-specific WQMP for discretionary project approval (land use permit); however, a final version would be submitted for review and approval prior to the issuance of any grading or building permits. Land uses proposed by the PVCC will include industrial development and parking lots. By complying with WQMP requirements and the NPDES permit requirements implementation of the proposed project is not anticipated to provide substantial additional sources of polluted runoff. Potential impacts related to stormwater runoff are, therefore, **less than significant**.

Threshold: Place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Implementing development projects within the PVCC that occurs within the floodplain will be in compliance with Title 15, "Floodplain Regulations," of the City of Perris Municipal Code, which regulates, restricts, or prohibits development in flood hazard areas as necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. Subject to Title 15, development proposed by the PVCC within the 100-year floodplain **will not be exposed to significant risk from flooding**. Development of the PVCC will be regulated to ensure that flood flow is not redirected or impeded to the detriment of properties within the City of Perris or properties upstream or downstream.

Threshold: Expose people or structures to a significant loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or a dam.

The City of Perris is subject to inundation from dam failure at any of three reservoirs: Lake Perris Dam adjoining the northeasterly boundary of the City of Perris; Pigeon Pass Reservoir in Moreno Valley; and Little Lake Reservoir in Hemet. Because of proximity to the City of Perris, inundation from breach of the Lake Perris dam is assumed to be the worst-case scenario in terms of volume and minimal elapsed time from breach to maximum flow within the city. The dam inundation study for Lake Perris Reservoir indicates that sudden failure of the dam as a result of a seismic event is so unlikely that the inundation simulation is based on a dam breach that follows an initial, small leak near the base of the dam. Based on this study, a maximum flood flow of 365,000 cubic feet of water per second would reach central Perris approximately 3.1 hours after the initial dam leak. A maximum flood depth of twenty-eight feet could be reached in the lowest lying areas. Virtually all of Perris, east of Perris Boulevard, would be flooded.

Development pursuant to the PVCC will result in an increase in the number of people residing (live-work units) and working within the project area. Approximately half of this future development will occur in

the area east of Perris Boulevard that is subject to inundation after breach of the Lake Perris dam. Although failure of the Lake Perris dam is an extremely unlikely event, the scenario outlined in the inundation study indicates that flooding would occur hours after the beginning of the dam breach. Accordingly, emergency evacuations could preclude injury and loss of life, but not property damage. The Perris GP Safety Element includes Implementation Measures I.A.1 through III.B.1 that provide for swift evacuation of people within the Lake Perris Dam inundation area.

Subject to these Perris GP Safety Element Implementation Measures, evacuation of those living and working within the dam inundation area is feasible. The feasibility of evacuation measures combined with the extreme improbability of a dam breach allows the impacts associated with dam inundation to be deemed less than significant. Development pursuant to PVCC may occur within the identified floodplain of the PVSD. Development in the floodplain would alter the existing drainage pattern. All future development in the floodplain must be in compliance with Title 15, "Floodplain Regulations," of the City of Perris Municipal Code which regulates development in flood hazard areas. Title 15 conforms to requirements of the Federal Emergency Management Agency and National Flood Insurance Program. In addition, the Perris GP Safety Element includes Implementation Measure I.B.5, which requires flood mitigation plans for all proposal projects in the 100-year floodplain.

Subject to Title 15, and consistent with Safety Element Implementation Measure I.B.5, **development of the PVCC will not result in exposure of people or property to significant risk of flooding.** Accordingly, impacts resulting from construction of PVCC are considered less than significant.

Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). No mitigation measures related to Hydrology and Water Quality have been identified, as implementation of the regulatory requirements that require project-specific WQMP and NPDES permits for each implementing development project will eliminate or reduce the potential significant adverse impacts related to increased flows and water quality.

Summary of Environmental Effects After Mitigation Measures Are Implemented

After implementation of NPDES permit requirements and required implementing development project-specific WQMP, all potential impacts with respect to hydrology and water quality are reduced to a level that is less than significant.

4.8 Land Use and Planning

Potential impacts related to physically dividing an established community were found to be less than significant in the Initial Study/NOP prepared for this proposed project (Appendix A). The focus of the following discussion is related to potential conflicts with applicable land use plans, policies or regulations. Potential conflicts with any applicable habitat conservation plan or natural community conservation plan are addressed in Section 4.3 (Biological Resources) of this document.

In response to the NOP, a comment letter was received from the Southern California Association of Governments (SCAG). SCAG encouraged the use of mitigation measures from the Riverside Transportation Plan and requested the EIR provide a side by side comparison of all of SCAG's policies with a discussion of the consistency, non-consistency or non-applicability of the policy. These comments and concerns are incorporated into this section of the EIR.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- City of Perris, *City of Perris General Plan 2030*, July 12, 2005. (Available at the City of Perris and at www.cityofperris.org/city-hall/general-plan.html, accessed November 17, 2009.) (GP Perris)
- City of Perris, *City of Perris Development Code*, 1997, amendments through January 2010. (Available under the title of *Perris City Zoning Code* at <http://www.cityofperris.org/city-hall/zoning.html>, accessed December 17, 2009.)
- Hogle-Ireland, Inc., *Draft Environmental Impact Report, City of Perris General Plan 2030*, October 2004. (Available at the City of Perris and at http://www.cityofperris.org/city-hall/general-plan/General_Plan_2030.pdf, accessed November 17, 2009.) (Perris GP EIR)
- Lieb, Jacob. Southern California Association of Governments (SCAG). *Comments on Notice of Preparation of an Environmental Impact Report for the Perris Valley Commerce Center Specific Plan [I20090536]*, Letter, September 17, 2009.
- Riverside County Airport Land Use Commission, *Riverside County Airport Land Use Plan*, October 14, 2004. (Available at http://www.rcaluc.org/plan_new.asp, accessed January 6, 2010.)
- Southern California Association of Governments, *Regional Comprehensive Plan*, October 2008. (Available at http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/f2008RTP_Complete.pdf accessed January 7, 2010.)
- Southern California Association of Governments, *Regional Transportation Plan*, May 2008. (Available at http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/f2008RTP_Complete.pdf accessed January 7, 2010.)
- Southern California Association of Governments, *2008 RTP Growth Forecasts*, (Available at www.scag.ca.gov/forecast/index.htm, accessed April 22, 2010.)
- Southern California Association of Governments, *The New Economy and Jobs/Housing Balance in Southern California*, April 2001. (Available at www.scag.ca.gov/Housing/balance.html, accessed February 7, 2010.)

Setting

Existing and Surrounding Land Uses

The proposed Perris Valley Commerce Center Specific Plan (PVCC) is located within the northern area of the city of Perris. The PVCC project area and its surroundings are in transition from agricultural land uses to a mix of commerce, industrial and business park uses. The project site comprises approximately 3,500 gross acres within the city of Perris. The site is located adjacent to the east side of Interstate 215 and the west side of the Perris Valley Storm Channel (PVSC), south of the March Air Reserve Base (MARB) and Riverside County Flood Control District Channel, and north of Placentia Avenue.

Current land uses within the northern portion of the proposed project are generally made up of industrial uses with some residential uses. At this time, a large portion of the proposed PVCC project area is undeveloped land currently used for agriculture. The other portions contain some existing developments including warehouse/distribution facilities, neighborhood commercial, smaller-scale industrial facilities, a rural residential community, and a mobile home subdivision.

The surrounding area includes vacant land, March Air Reserve Base and industrial uses within the jurisdiction of the City of Moreno Valley to the north of the project site; industrial, residential and vacant land to the south of the project site; residential, vacant land and the PVSC to the east; and vacant property, industrial uses, Interstate 215 and an existing rail line within Riverside County jurisdiction to the west of the project site.

General Plan Land Use Designation

The City of Perris adopted its General Plan Land Use Element on April 26, 2005. For purposes of the Land Use Element, the City of Perris is divided into ten Planning Areas to provide more detailed land use and policy direction regarding local issues, such as land use, circulation, and open space (**Figure 4.8-1, City of Perris Planning Areas**). The planning areas are defined by similarities and opportunities in land uses, development patterns, and future developments. The project site lies within Perris Planning Area 1: North Industrial, Planning Area 3: Agricultural Conversion Area, Planning Area 4: Freeway Business Park and Planning Area 5: Central Core. A very small portion of the project falls within Planning Area 5 which is located within the “Central Core” of Perris and is designated for a mix of residential, office and commercial uses. The one parcel of the project located within Planning Area 5 is designated for Business Park land uses in the General Plan.

As per the City of Perris General Plan (Perris GP), the designated land uses across the project site consist of Business Park (BP), Community Commercial (CC), General Industrial (GI), Light Industrial (LI), Multi-Family Residential (MFR-14), Neighborhood Commercial (NC), Open Space (OS), Professional Office (PO), Public/Semi Public Facility (P), Residential (R-6,000), Residential (R-20,000) and Specific Plan (SP) (**Figure 4.8-2, Existing Land Use Designations**).

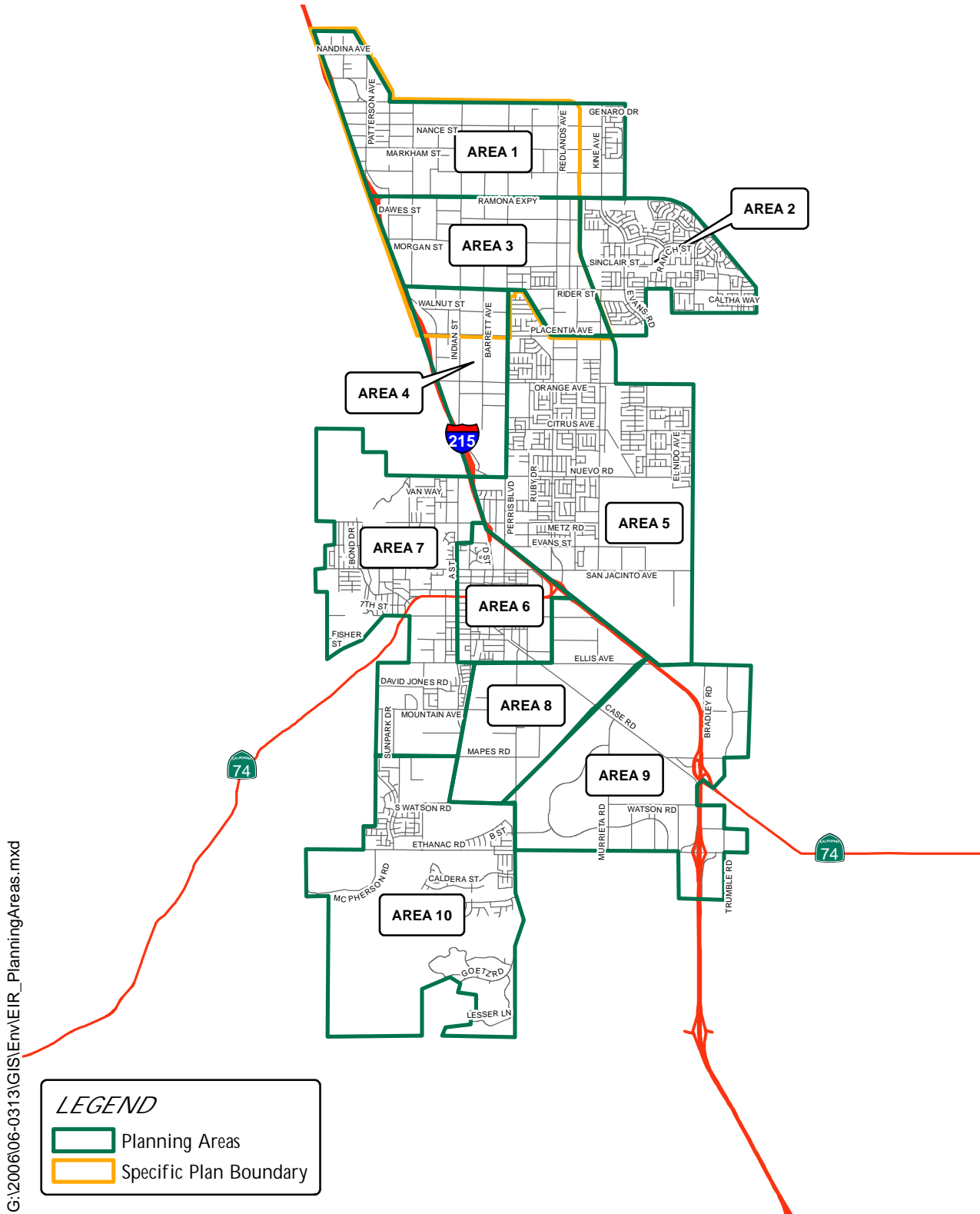
The site is currently zoned A1 (Light Agriculture), BP (Business Park), CC (Commercial Community), GI (General Industrial), LI (Light Industrial), MFR-14 (Multi-Family Residential), NC (Neighborhood Commercial), OS (Open Space), P (Public), R-6,000 (Residential) and R-20,000 (Residential). The A1 (Light Agriculture) zoning is inconsistent with the General Plan land use designations of LI (Light Industrial) and CC (Community Commercial) applicable to a portion of the project site (**Figure 4.8-3, City of Perris Zoning Map**).

The PVCC proposes to redistribute the existing land use designations and combine the Community Commercial (CC) and Neighborhood Commercial (NC) to form one Commercial (C) land use designation, to combine the Business Park (BP) and Professional Office (PO) uses to form Business

Professional Office (BPO) and to combine Public/Semi-Public/Utilities (P) and Park, Recreation, and Natural Open Space (OS) to form Public (P) as reflected in **Table 4.8-A, Proposed Land Use Designation Changes**. Additionally, the project proposes to remove the existing general plan land use map designation of Specific Plan (SP) for land along the northeasterly boundary adjacent to the PVSC because a specific plan has not been proposed or approved for this location, nor is it currently zoned as Specific Plan (SP) on the City’s zoning map (**Figure 4.8-4, PVCC Proposed Land Use Map**).

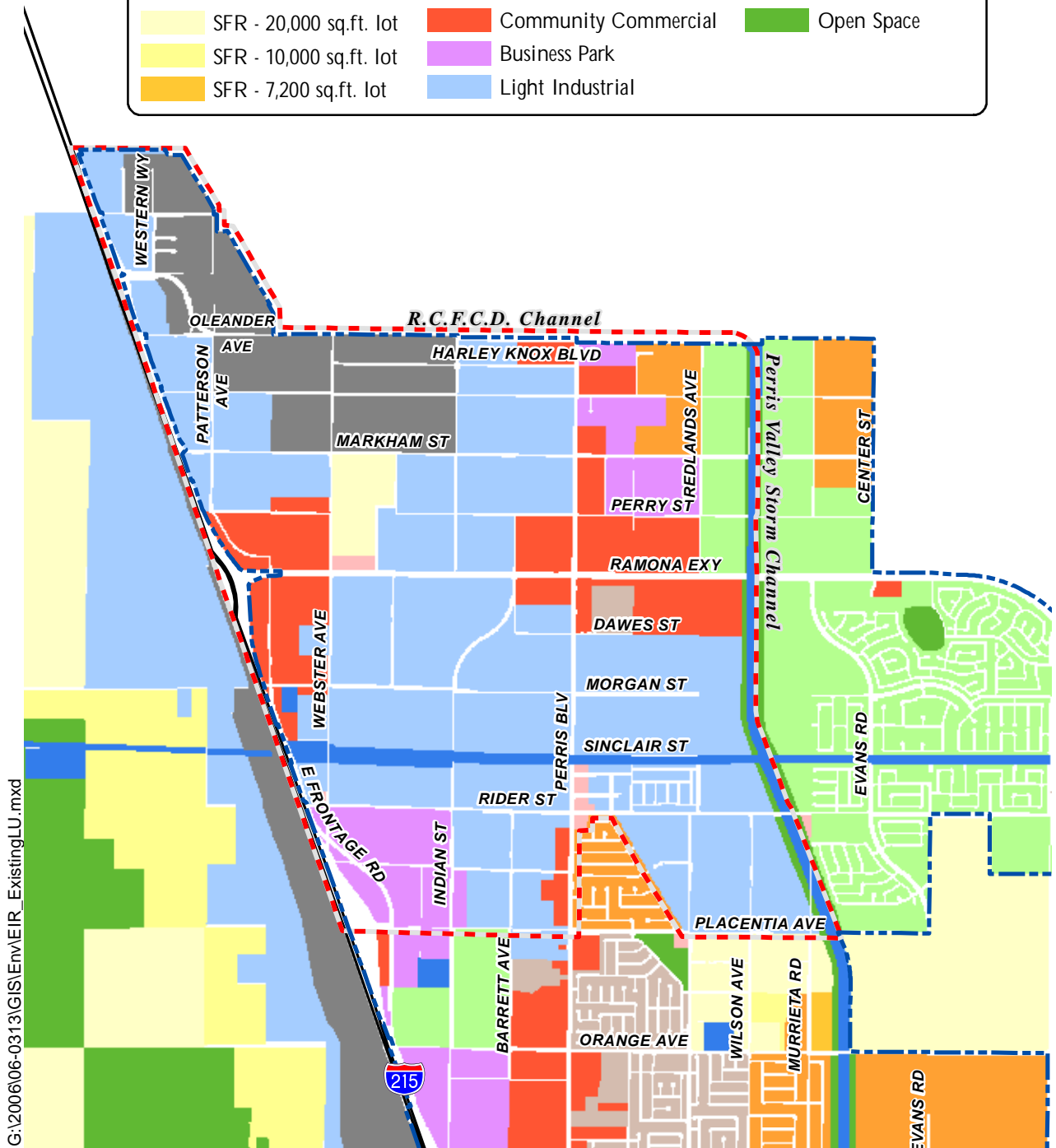
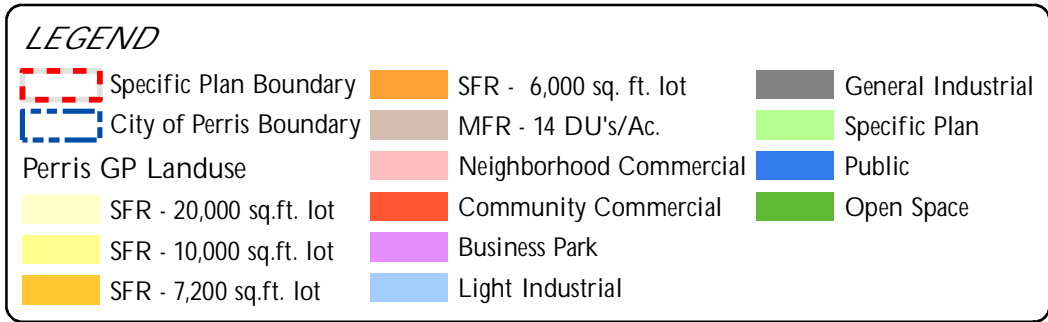
Table 4.8-A, Proposed Land Use Designation Changes

General Plan Land Use	Current Perris GP Acreage	PVCC Proposed Acreage
Business Park/Professional Office (BPO) Professional Office (PO) Business Park (BP)	317.0	357.12
Commercial (C) Community Commercial (CC) Neighborhood Commercial (NC)	462.32	309.22
General Industrial (GI)	422.9	407.95
Light Industrial (LI)	1,620.08	1,836.28
Public (P) Public/Semi-Public/Utilities Park, Recreational and Natural Open Space (OS)	120.09	248.71
Multi-Family Residential Residential (Multi-Family) (MFR-14)	0	22.33
Residential (R) Residential/Single-Family (R-6,000 and R-20,000)	122.0	62.88
Specific Plan (SP)	190.33	0
Other (ROW, basin, etc.)	329.24	339.47
Total Acres	3,583.96	3,583.96



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**Figure 4.8-1
 City of Perris
 Planning Areas**



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Source: City of Perris General Plan, adopted April 2005, as amended through Feb. 2009.

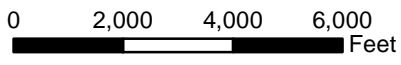
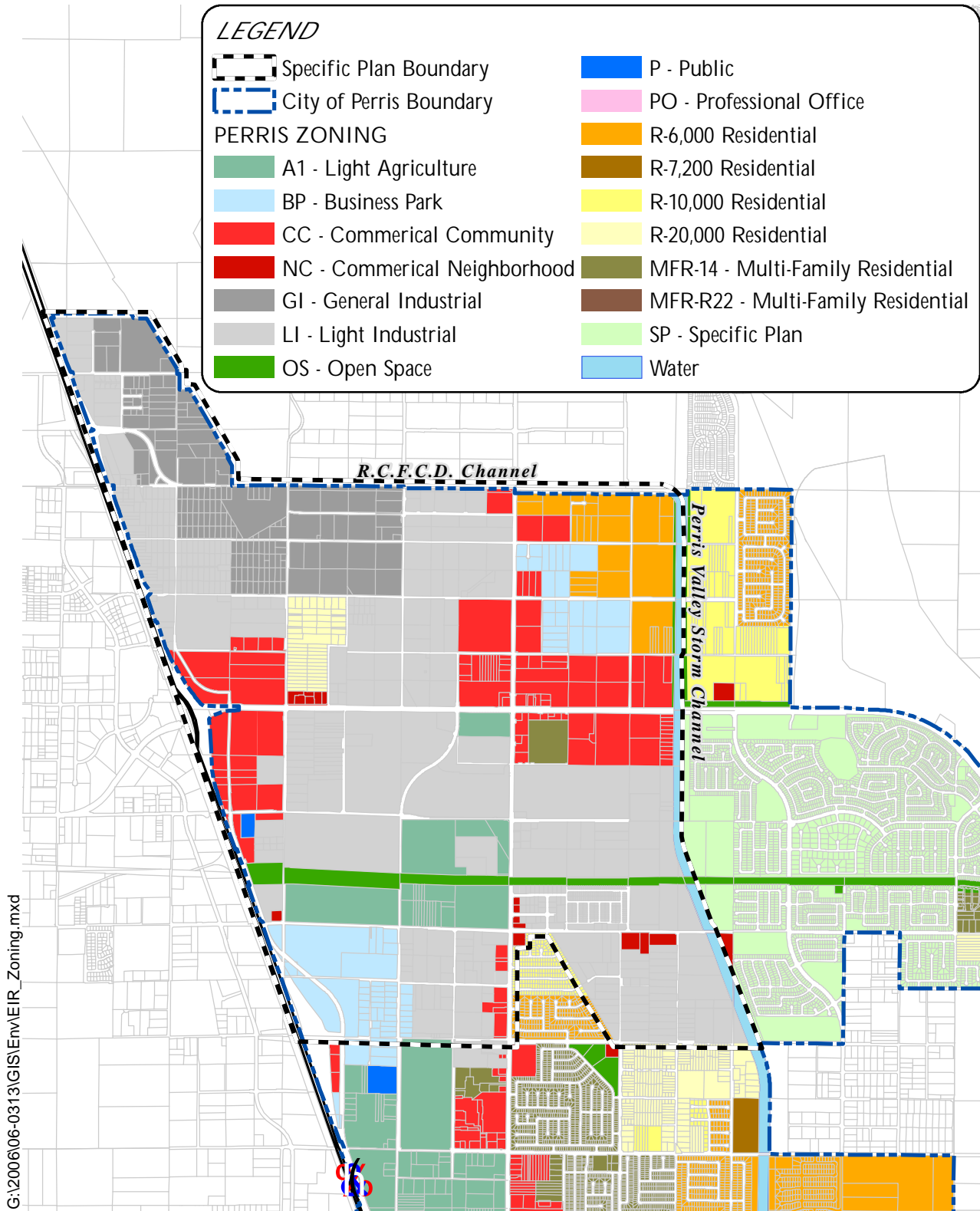


Figure 4.8-2
Existing Land Use Designations

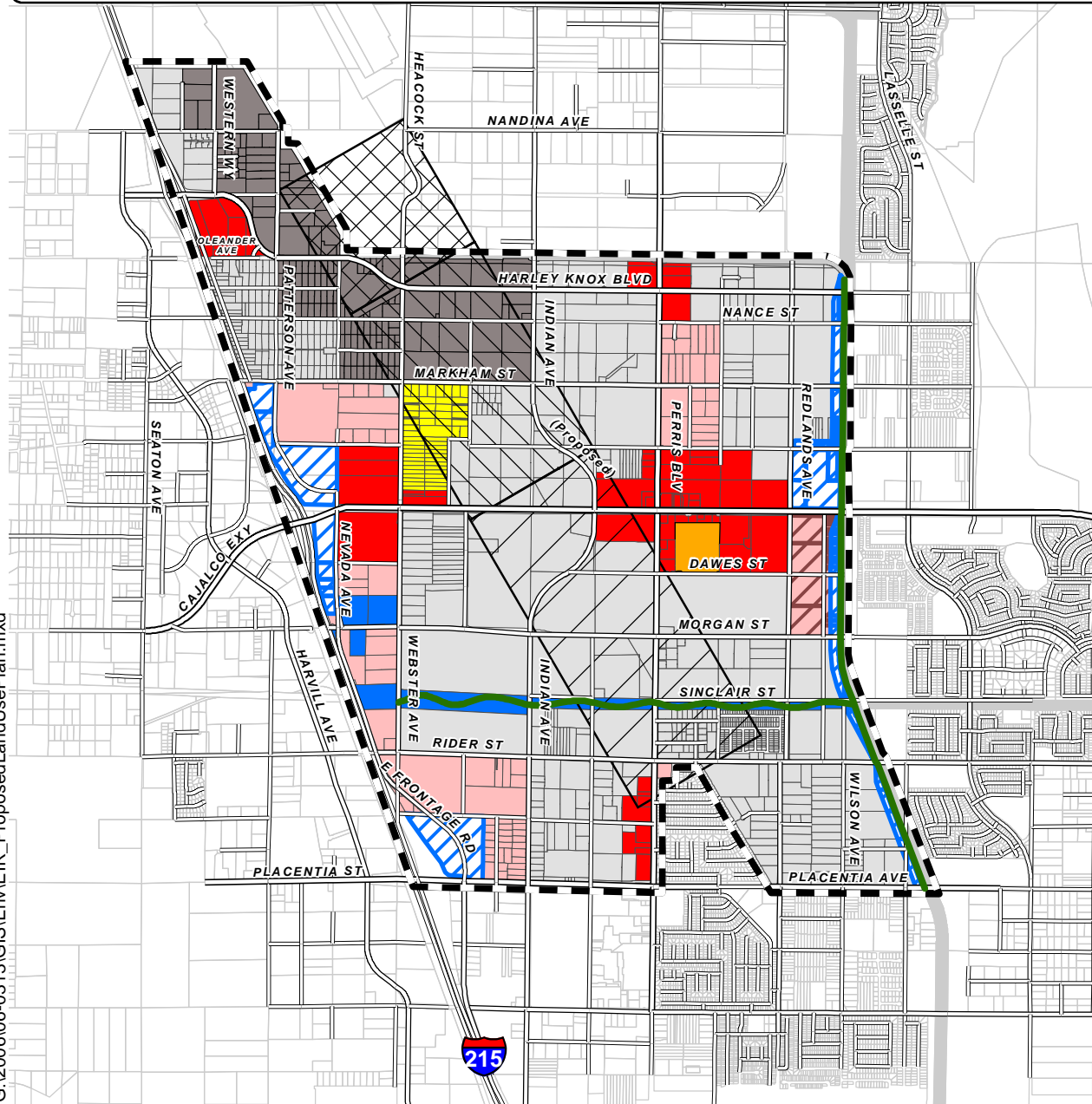
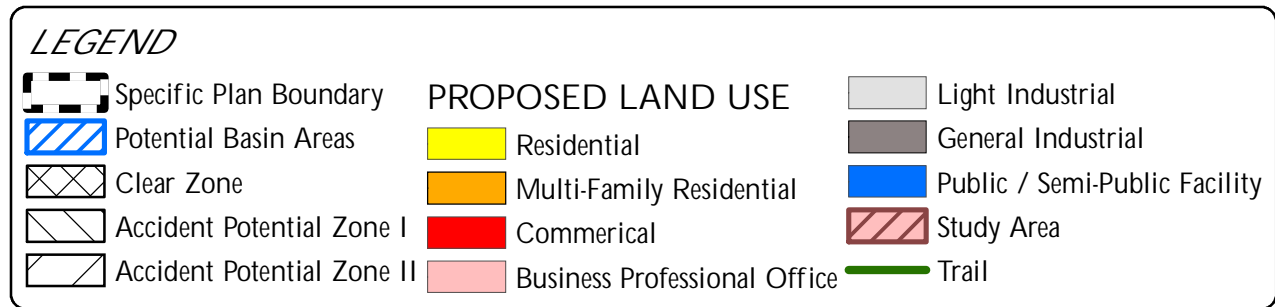


Source: City of Perris General Plan, adopted April 2005, as amended through Feb. 2009.



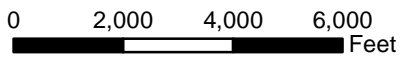
0 2,000 4,000 6,000
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Figure 4.8-3
City of Perris Zoning Map



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Source: City of Perris General Plan, adopted April 2005, as amended through Feb. 2009.



**Figure 4.8-4
 PVCC Specific Plan
 Proposed Land Use**

Related Regulations

Riverside County Airport Land Use Compatibility Plans

On April 26, 1984, the Riverside County ALUC adopted the Riverside County ALUP. This plan established land use restrictions within the Airport-Influenced Areas that were adopted by the ALUC around airports in Riverside County. In 1986, airport-influenced areas were established around March Air Force Base, which was realigned and converted to the March Air Reserve Base (MARB) on April 1, 1996.

The Riverside County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Riverside County Airport Land Use Commission in October 2004. The purpose of the ALUCP is to promote compatibility between airports and land uses that surround them and serves as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinance and to landowners (including special district and other local government entities as well as private parties) in their design of new development.

In December 2010 the March Joint Powers Commission (JPC) completed the March Air Reserve Base/Inland Port (ARB/IP) Joint Land Use Study (JLUS). The 2010 JLUS is an update of the 2005 JLUS prepared by the City of Perris and other member jurisdictions in cooperation with the March Joint Powers Authority (JPA) as part of the March Operations Assurance Task Force (MOATF). It is the first step towards updating the Riverside County ALUCP for the MARB. The statutory authority to approve an airport compatibility plan rests with the Airport Land Use Commission. The process for approval of the 2010 JLUS and subsequent ALUCP requires ALUC to complete an EIR on the plan. Until the EIR is prepared and certified, the JPC has taken the following actions: 1) approved a Resolution adopting the JLUS as a planning and feasibility study; 2) forwarded the study to the RCALUC for review and approval; 3) directed JPA staff to analyze the JLUS as a component of the future General Plan update; and 4) make related findings. The City of Perris and other member jurisdictions of the JPA are in the process of adopting the JLUS as a planning and feasibility guide to development, however the 1984/86 ALUCP remains the current airport land use document until the 2010 JLUS is approved by the ALUC.

SCAG Regional Comprehensive Plan

SCAG's Final 2008 Regional Comprehensive Plan (RCP) was adopted October 2008 and contains ten chapters. Each chapter is based on a specific goal area of planning or resource management. The document is described as a regional policy framework for future land use decisions in Riverside County that respects the need for strong local control but that also recognized the importance of regional comprehensive planning for issues of regional significance.

Regional Transportation Plan (RTP)

The RTP was adopted by the SCAG in May 2008 and contains a set of existing socioeconomic projections that are used as the basis for the SCAG's transportation planning efforts. They include projections of population, housing, and employment at the regional, county, sub-regional, jurisdictional, census tract, and transportation analysis zone levels. The RTP includes policies and regulations set forth to ensure development within the SCAG regional area is within planned and forecast future socioeconomic projections.

Local Plans

General Plan

On April 26, 2005, the City of Perris approved Perris General Plan 2030. The Perris GP includes land use policies and land use maps to guide the future development of the City of Perris. As part of the General Plan, Planning Areas were established that define the nature of those communities and define the land use designations that are appropriate for the development envisioned. The proposed project site is located within Planning Areas 1, 3 4 and 5 of the General Plan. The project site's land use designations, shown on **Figure 4.8-2**, are Business Park (BP), Community Commercial (CC), General Industrial (GI), Light Industrial (LI), Multiple-Family Residential (MFR-14), Neighborhood Commercial (NC), Open Space (OS), Professional Office (PO), Public/Semi-Public Facility (P), Residential (R-6,000), Residential (R-20,000) and Specific Plan (SP).

Title 19 Zoning Code

Development of the proposed project site is regulated by the City of Perris zoning ordinance (Perris Municipal Code, Title 19). This ordinance contains the regulatory framework that specifies allowable uses for real property and development intensities; the technical standards such as site layout, building setbacks, heights, lot coverage, parking, etc.; aesthetics related to physical appearance, landscaping, and lighting; a program that implements policies of the General Plan; and the procedural standards for amending or establishing new zoning regulations.

General Plan Policies

The following are applicable policies from the Perris GP related to Land Use and Planning:

- | | |
|--------------------------|---|
| Circulation Policy I.A: | Design and develop the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the designated Transportation System, Exhibit 4.2 Future Roadway Network. |
| Circulation Policy I.B: | Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities. |
| Circulation Policy I.C: | Cooperate with local, regional, State and federal agencies to establish an efficient multi-modal circulation system. |
| Circulation Policy I.D: | Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation. |
| Circulation Policy II.A: | Maintain the following target Levels of Service: <ul style="list-style-type: none">• LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at I-215 freeway ramps. |
| Circulation Policy II.B: | Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes. |

Circulation Policy III.A:	Implement a transportation system that accommodates and is integrated with new and existing development and is consistent with financing capabilities.
Circulation Policy IV.A:	Provide non-motorized alternatives for commuter travel as well as recreational opportunities that maximize safety and minimize potential conflicts with pedestrians and motor vehicles.
Circulation Policy V.A:	Provide for safe movement of goods along the street and highway system.
Circulation Policy VII.A:	Implement the Transportation System in a manner consistent with federal, State, and local environmental quality standards and regulations.
Conservation Policy II.A:	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.
Conservation Policy III.A:	Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.
Conservation Policy IV.A:	Comply with state and federal regulations and ensure preservation of the significant historical, archaeological and paleontological resources.
Conservation Policy V.A:	Coordinate land-planning efforts with local water purveyors.
Conservation Policy VI.A:	Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).
Conservation Policy VIII.A:	Adopt and maintain development regulations that encourage water and resource conservation.
Conservation Policy VIII.B:	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.
Conservation Policy VIII.C:	Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building rating system).
Conservation Policy X.A:	Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.

Conservation Policy X.B:	Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.
Conservation Policy X.C:	Encourage strategic shape and placement of new structures within new commercial and industrial projects.
Conservation Policy XI.A:	The City shall support LEED development standards and gray water usage for all new and refurbished public buildings and facilities. All projects undertaken by the City, or that receive funding from the City or the Redevelopment Agency should be encouraged to utilize green building practices.
Conservation Policy XI.C:	The City shall encourage Green Building and Sustainable Community actions whenever possible through subsidy funding.
Land Use Policy I.A:	Promote variety in dwelling types, densities, and locations to satisfy changing demands as the community evolves and matures.
Land Use Policy II.A:	Require new development to pay its full, fair-share of infrastructure costs.
Land Use Policy II.B:	Require new development to include school facilities or pay school impact fees, where appropriate.
Land Use Policy III.A:	Accommodate diversity in the local economy.
Land Use Policy IV.A:	The General Plan and the Zoning Code shall be revised and updated to maintain consistency with each other, and with regional plans.
Land Use Policy V.A:	Protection from natural or man-made disasters.
Noise Policy 1.A:	The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.
Noise Policy II.A:	Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing sensitive noise receptors.
Noise Policy III.A:	Mitigate existing and future noise impacts resulting from train movement.
Noise Policy IV.A:	Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.
Noise Policy V.A:	New large scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria.
Open Space Policy I.A:	Develop more active recreational parks.

Open Space Policy II.A:	All development will be accessible by a trail system.
Safety Policy I.C:	Fire – Reduce the risk of damage from fires.
Safety Policy I.D:	Aircraft – Consult the AICUZ Land Use Compatibility Guidelines and ALUP Airport Influence Area development restrictions when considering development project applications.
Safety Policy I.E:	Seismic Hazards – All development will be required to include adequate protection from damage due to seismic incidents.
Safety Policy II.A:	The City shall require roadway improvements to expedite quick and safe travel by emergency responders.

Design Considerations

The intent of the proposed project is to promote various land uses for the area through design standards and guidelines (PVCC Guidelines), streamline the development process, promote sustainable development through the encouragement of “green” technologies, establish an identity for the area by promoting high level development standards, preserving historic attributes of the area and using non-native drought tolerant plant species as well as identifying infrastructure for various vehicular and non-vehicular circulation. These standards and guidelines will be used by the City of Perris to evaluate development projects subject to discretionary review within the project’s boundaries. Design and development will comply with City development standards and Development Standards and Guidelines of the Perris Valley Commerce Center Specific Plan (SP No. 08-10-007). Specific Plan (SP) is consistent with the City of Perris GP and Airport Land Use Plan.

Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Based on Appendix G to the State *CEQA Guidelines*, impacts to land use and planning may be considered potentially significant if the project would:

- conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinances) adopted for the purpose of avoiding or mitigating an environmental effect; or
- conflict with any applicable habitat conservation plan or natural community conservation plan.

Compatible land uses create less than significant environmental impacts on each other. Incompatible land uses create environmentally significant impacts between the land uses. Potential land use compatibility issues include such potential impacts as unsuitable noise levels, unsafe traffic conditions, offensive views, odors, and air, water quality degradation, and jobs to housing balance. Such compatibility issues can become very subjective. What is a nuisance or concern about a neighboring use for one business owner or individual may not be a problem for the next.

Each of these compatibility issues is identified and discussed as objectively as possible in the following sections of this document: Agricultural Resources (Section 4.1), Air Quality (Section 4.2), Biological Resources (Section 4.3), Hazards and Hazardous Materials (Section 4.6), Hydrology and Water Quality (Section 4.7), Noise (Section 4.9), and Transportation and Traffic (Section 4.10). If impacts for each of

these topics are determined to be less than significant, then land uses are considered compatible and potential land use compatibility impacts below a level of significance.

Additionally, the California Environmental Quality Act, Section 15125(d), requires an Environmental Impact Report to discuss any inconsistencies between the proposed project and applicable regional plans. The purpose of this section is to discuss the proposed project's consistency with the regional and local growth forecasts and the Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Guide (RCPG) Policies and the SCAG Regional Transportation Plan (RTP) and provides an analysis of the project's impacts on the population, housing, and job projections for the region, as projected by SCAG. Additionally, a discussion of the project's impacts upon the growth forecasts and its compliance with SCAG's regional policies are discussed below.

A discussion of the proposed project's consistency with the City of Perris GP is described below. Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) are contained in Section 4.3 (Biological Resources) of this DEIR. The Air Quality Section of this DEIR (Section 4.2) discusses consistency with the applicable Air Quality Management Plan. Consistency with applicable Airport Land Use Compatibility Plans is discussed in Section 4.6 (Hazards and Hazardous Materials) of this DEIR. Consistency with regional water quality plans is discussed in Section 4.7 (Hydrology and Water Quality) and EMWD's Urban Water Management Plan is discussed in Section 4.11 (Utilities and Service Systems) of this DEIR.

Environmental Impacts

Threshold: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinances) adopted for the purpose of avoiding or mitigation an environmental effect.

Section 15125(d) of the State *CEQA Guidelines* requires EIRs to "...discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The objective of such a discussion is to find ways to modify the proposed project, if warranted, to reduce any identified inconsistencies with relevant plans and policies. Pursuant to Section 15125(d), this Draft EIR chapter includes an evaluation of the consistency of the proposed project with pertinent goals and policies of relevant adopted local.

Local Plans

General Plan

The City of Perris adopted its General Plan Land Use Element on April 26, 2005. For purposes of the Land Use Element the City of Perris is divided into ten Planning Areas. The planning areas are defined by similarities and opportunities in land uses, development patterns, and future developments. The PVCC is located in Planning Area 1: North Industrial, Planning Area 3: Agricultural Conversion Area, Planning Area 4: Freeway Business Park and a small portion of Planning Area 5: Central Core.

To determine more specifically how the proposed project and its related growth effects relate to adopted General Plan policies, each environmental analysis chapter of this EIR (Agricultural Resources, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use, Noise, Transportation, Utilities) includes a subsection that describes those applicable General Plan policies adopted for the purpose of avoiding or mitigating a pertinent environment effect. Where the proposed project or its environmental effects have been found in this EIR to be potentially inconsistent with one or more of these particular City of Perris GP policies, a potentially significant environmental impact has been

identified, and one or more mitigations have been identified to reduce the impact and implement the identified policy or policies.

The following are applicable policies from the City of Perris GP and a description of the proposed project’s consistency with each policy (see **Table 4.8-B, Consistency with City of Perris General Plan Policies and Measures**).

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
Circulation Element		
<i>Policy/Measure No.</i>	<i>Policy/Measure Text</i>	<i>Statement of Consistency</i>
<i>Policy I.A:</i>	<i>Design and develop the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the designated Transportation System, Exhibit 4.2 Future Roadway Network.</i>	The PVCC includes a circulation plan showing a transportation system that has been designed to accommodate traffic generated by future development within the project area. Therefore, the proposed project is consistent with this policy.
<i>Measure I.A.6:</i>	<i>Require parking facility design that minimizes visual and physical impacts while maintaining pedestrian and motorist safety and supporting adjacent activities.</i>	Proposed developments within project area will be required to comply with the City’s Municipal Code and the PVCC Standards and Guidelines by minimizing vehicular conflict, avoiding conflicts between pedestrian and vehicular circulation and screening parking lots from public view through the use of berms, low walls and/or plant materials. Therefore, the proposed project will comply with this measure.
<i>Policy I.B:</i>	<i>Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.</i>	Riverside Transit Agency (RTA) Routes 19 and 41 operate within the proposed project area, and can be accessed from multiple bus stops and transfer points within the project area. The proposed project is also located directly adjacent to I-215, providing easy access for employees and shoppers. Therefore, the proposed project is consistent with this policy.
<i>Measure I.B.1:</i>	<i>Require on-site improvements that accommodate public transit vehicles (i.e., bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e., community centers, tourist and employment centers, etc.).</i>	As required by the proposed PVCC Standards and Guidelines (Section 5.2.3), bus turnouts shall be incorporated into future developments. Therefore, the proposed project will comply with this measure.

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
<i>Policy I.C:</i>	<i>Cooperate with local regional, state and federal agencies to establish an efficient multi-modal circulation system.</i>	The PVCC includes a multi-model circulation plan that addresses automobile and truck traffic; mass transit including buses and Metrolink; non-vehicular circulation such as trails and bike paths; and pedestrian circulation. Therefore, the proposed project is consistent with this policy.
<i>Policy I.D:</i>	<i>Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation.</i>	RTA Routes 19 and 41 operate within the proposed project area, and can be accessed from multiple bus stops and transfer points within the project area. The proposed project is also located directly adjacent to I-215, providing easy access for employees and shoppers. The PVCC circulation plan incorporates alternative modes of transportation including mass transit and bicycles. Therefore, the proposed project is consistent with this policy.
<i>Policy II.A:</i>	<p><i>Maintain the following target Levels of Service:</i></p> <ul style="list-style-type: none"> ● <i>LOS D along all City-maintained roads (including intersections) and LOS D along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS E, at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at I-215 freeway ramps.</i> ● <i>LOS “E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.</i> 	Future PVCC development applicants shall be required to improve certain intersections, and comply with these standards. Therefore, the proposed project is consistent with this policy.
<i>Measure II.A.I:</i>	<i>Utilize existing infrastructure (lanes, median</i>	The PVCC will utilize and improve the

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
	<i>islands, turn lanes, available right-of-way) and rights-of-way to the maximum extent practicable.</i>	surrounding existing infrastructure. Therefore, the proposed project will comply with this measure.
<i>Policy II.B:</i>	<i>Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.</i>	The PVCC will maintain the existing transportation network and will improve the surrounding existing transportation network based on travel demand. Additionally, the proposed project is accessible by alternative travel modes, including Riverside Transit Agency’s Routes 19 and 41 which operate throughout the proposed project area. The proposed project is also located directly adjacent to I-215, providing easy access for employees and shoppers. The proposed project is consistent with this policy.
<i>Measure II.B.I:</i>	<p><i>Develop Standard Specifications for the City of Perris that include the following:</i></p> <ul style="list-style-type: none"> ● <i>Cross sections and classifications identified in Exhibit CE-11;</i> ● <i>Facilities that accommodate bus operations, including bus turn outs, and other design features;</i> ● <i>Design guidelines that define the minimum design and technical criteria for the analysis and design of roadway facilities. Such design guidelines shall identify intersection improvements consistent with the lane geometrics referenced in Table CE-7;</i> ● <i>Limiting access points and intersections of streets and highways based upon the road’s General Plan classification and function to reduce motorist conflicts and enhance continual traffic flow. Access points must be located a sufficient distance away from major intersections and from access points on adjoining parcels to allow for safe, efficient operation; and</i> ● <i>Roadway pavement cross-section to accommodate large trucks where extensive truck travel involving regional movement of bulk goods is</i> 	As shown in the City of Perris GP, Table CE-7, Exhibit CE-11A through CE-11F, the City has adopted roadway standards for its roadway network. The design of the PVCC complies with this implementation measure, including lane geometrics, limited access points, and truck access points. Therefore, the proposed project will comply with this measure.

<p style="text-align: center;">Table 4.8-B Consistency with City of Perris General Plan Policies and Measures</p>		
	<p><i>anticipated.</i></p>	
<p><i>Measure II.B.2:</i></p>	<p><i>Allow roundabouts or other innovative design solutions when a thorough traffic impact assessment has been conducted demonstrating that such an intersection design alternative would manage traffic flow and improve safety.</i></p>	<p>The PVCC does not utilize roundabouts or other such design features. However, the PVCC circulation plan incorporates design components intended to manage traffic flow in a safe manner. Therefore, although the proposed project will not implement roundabouts or other innovative design solutions, it will comply with this measure’s intent to manage traffic flow in a safe manner.</p>
<p><i>Measure II.B.3:</i></p>	<p><i>Restrict on-street parking to reduce traffic congestion and improve safety in appropriate locations such as expressways and arterials, and require all new development to provide adequate off-street parking based on expected parking needs.</i></p>	<p>Future PVCC development applicants shall design parking in accordance with PVCC Standards and Guidelines and the City Municipal Code requirements. Therefore, the proposed project will comply with this measure.</p>

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
<i>Policy III.A:</i>	<i>Implement a transportation system that accommodates and is integrated with new and existing development and is consistent with financing capabilities.</i>	As discussed in Transportation and Traffic (Section 4.10), the PVCC utilizes and implements the City’s adopted transportation system. Future PVCC development applicants will be required to construct near-term improvements and fund its fair share contributions for long-term improvements. The proposed project is consistent with this policy.
<i>Measure III.A.1:</i>	<i>Distribute the costs of transportation system improvements for new development equitably among beneficiaries through the City’s Traffic Impact Fee Program.</i>	Future development applicants will be required to pay their fair share of the City’s Traffic Impact Fee Program. Therefore, the proposed project will comply with this measure.
<i>Measure III.A.2:</i>	<i>Use redevelopment agreements, revenue sharing agreements, tax allocation agreements and the CEQA process as tools to ensure that new development pays a fair share of costs to provide local and regional improvements and to mitigate cumulative traffic impacts.</i>	As has been analyzed in Transportation and Traffic (Section 4.10), future PVCC development applicants will be required to contribute their fair share of fees and other improvements to mitigate cumulative traffic impacts. Development of the proposed PVCC will improve the facilities needed to address cumulative traffic impacts. Therefore, the proposed project will comply with this measure.
<i>Measure III.A.4:</i>	<i>Require developers to be primarily responsible for the improvements of streets and highways to developing commercial, industrial, and residential areas. These may include road construction or widening, installation of turning lanes and traffic signals, and the improvement of any drainage facility or other auxiliary facility necessary for the safe and efficient movement of traffic or the protection of road facilities.</i>	As has been analyzed in Transportation and Traffic (Section 4.10), future development applicants will be required to contribute their fair share of fees and other improvements to mitigate project-specific and cumulative traffic impacts. Development of the proposed PVCC will improve those circulation-related facilities needed to address traffic impacts. Therefore, the proposed project will comply with this measure.
<i>Policy IV.A:</i>	<i>Provide non-motorized alternatives for commuter travel as well as recreational opportunities that maximize safety and minimize potential conflicts with pedestrians and motor vehicles.</i>	A regional trail runs along the eastern border of the PVCC project site from the northernmost border to the southernmost border as well as from the east along Sinclair Street to Webster Avenue providing for non-motorized commuter travel and recreational opportunities. The proposed project is consistent with this policy.

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<i>Measure IV.A.1:</i>	<i>Develop a multi-purpose recreational bikeway plan for the City of Perris based on standards in the Caltrans Highway Design Manual and in the Riverside County General Plan as identified in Chapter 4.</i>	The PVCC has established bikeways per the Perris GP which is based on the standards in the Caltrans Highway Design Manual as well as the Riverside County General Plan. Therefore, the proposed project will comply with this measure.
<i>Measure IV.A.5:</i>	<i>Incorporate pedestrian paths or sidewalks in road design standards and provide tree easements between curbs and paths or sidewalks except within the Downtown Specific Plan Area.</i>	The PVCC Standards and Guidelines have incorporated pedestrian paths or sidewalks into roadway design to comply with the City of Perris GP, Exhibit CE-11A through CE-11. Therefore, the proposed project will comply with this measure.
<i>Policy V.A:</i>	<i>Provide for safe movement of goods along the street and highway system.</i>	The PVCC Standards and Guidelines (Section 5.2.2) require the efficient movement of goods along the street and highway system through designated truck routes and requirements for separate truck entrances in order to avoid conflicts with other automobile traffic entering and exiting the site. The proposed project is consistent with this policy.
<i>Measure V.A.3:</i>	<i>Monitor commercial truck movements and operations in the City and establish new truck routes away from noise-sensitive areas where feasible.</i>	The PVCC incorporates existing truck routes established by the City of Perris and does not necessitate the establishment of additional truck routes. The existing truck routes avoid noise-sensitive areas, wherever feasible. Therefore, the proposed project will comply with this measure.
<i>Measure V.A.4:</i>	<i>Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and truck through-traffic to designated routes; and distribute maps of approved truck routes to City traffic officers.</i>	The PVCC identifies truck routes within the project area that will serve future development within the area. Additionally, future PVCC development applicants shall be required to establish a designated truck entrance for construction of the site and delivery of goods to the site. Therefore, the proposed project will comply with this measure.
<i>Measure V.A.7:</i>	<i>Require streets abutting properties in Light Industrial and General Industrial zones to conform to standard specifications for industrial collector streets to accommodate</i>	Future PVCC development applicants shall implement the City’s adopted transportation system in accordance with local regulations and in compliance with

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	<i>the movement of heavy trucks.</i>	CEQA. Therefore, the proposed project will comply with this measure.
<i>Measure V.A.8:</i>	<i>Provide adequate off-street loading areas for all commercial and manufacturing land uses.</i>	The PVCC Standards and Guidelines (Sections 7.0 and 8.0), in accordance with City of Perris Municipal Code Section 19.69, require future development applicants to establish off-street loading areas for commercial and manufacturing activities. Therefore, the proposed project will comply with this measure.
<i>Policy VII.A:</i>	<i>Implement the Transportation System in a manner consistent with Federal, State, and local environmental quality standards and regulations.</i>	The PVCC will implement the Perris GP Transportation System in accordance with local regulations and in compliance with CEQA. The proposed project is consistent with this policy.
<i>Measure VII.A.1:</i>	<i>Incorporate the specific requirements of the Riverside County Multi-Species Habitat Conservation Plan into transportation plans and development proposals.</i>	As described in Section 4.3 (Biology) of this EIR, the proposed project is in compliance with the requirements of the Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Therefore, the proposed project will comply with this measure.
<i>Measure VII.A.2:</i>	<i>Require noise mitigation measures (e.g., wall treatments, landscape berms, and/or building and window enhancements) along freeways, expressways, and four-lane highways in order to protect adjacent noise-sensitive land uses from traffic-generated noise impacts consistent with requirements of Title 24 of the California Codes and Regulations.</i>	Section 4.9 (Noise) of this EIR addresses potential noise impacts related to the proposed project and it has been determined that no noise mitigation measures are required at this time. Nevertheless, future PVCC development will be required to comply with the applicable noise-related provisions of Title 24. Therefore, the proposed project will comply with this measure.
<i>Measure VII.A.3:</i>	<i>Identify adequate flood control measures along roadways located within identified flood areas.</i>	Future PVCC development applicants shall be required to act in accordance with this measure as discussed in the Hydrology and Water Quality section (Section 4.7) of this EIR. Therefore, the proposed project will comply with this measure.
<i>Measure VII.A.4:</i>	<i>Control dust and mitigate other environmental impacts during all stages of roadway construction consistent with air quality regulations and mitigation measures</i>	During the construction of future development projects within the PVCC, periodic watering for short-term stabilization of disturbed surface areas will

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	<i>established in environmental documents.</i>	be utilized by future PVCC developers in order to control fugitive dust. All construction activities shall comply with all applicable air quality regulations. Therefore, the proposed project will comply with this measure.
<i>Measure VII.A.6:</i>	<i>Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.</i>	The PVCC Standards and Guidelines for roadway landscaping have been developed in accordance with the City of Perris GP and Perris Municipal Code Section 19.70. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.D.1:</i>	<i>Implement the City’s Transportation Control Measure (TCM) Ordinance to comply with federal, State, regional, and local requirements.</i>	Implementing development projects within the PVCC project area will comply with all applicable federal, state, regional, and local requirements. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.D.3:</i>	<i>Construct traffic signals at intersection where signal warrants have been met.</i>	Future developments on the project site will result in on and off-site road improvements, including traffic signals pursuant to City of Perris Municipal Code requirements. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.D.4:</i>	<i>To optimize traffic operation, maintain spacing and operation of traffic signals as a coordinated system.</i>	The implementing development projects within the PVCC will participate in the City’s requirements for spacing and operation of traffic signals. Therefore, the proposed project will comply with this measure.
Conservation Element		
<i>Policy II.A:</i>	<i>Comply with state and federal regulations to ensure protection and preservation of significant biological resources.</i>	Future PVCC development applicants shall be required to comply with Ordinance Number 1123 adopted by the City of Perris to establish a local development mitigation fee for funding the preservation of natural ecosystems in accordance with the MSHCP. Implementing development projects will also be required to comply with all applicable state and federal regulations concerning biological resources.

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		Therefore, the proposed project is consistent with this policy.
<i>Measure II.A.2:</i>	<i>Public and private projects, located in areas with potential for moderate or high plant and wildlife sensitivity, require biological surveys as part of the development review process.</i>	A Habitat Assessment (Appendix B) was completed by Glenn Lukos Associates and is discussed in the Biological Resources section (Section 4.3) of this EIR. Additionally, the mitigation measures set forth in Section 4.3, which require future implementing development projects to complete biological surveys, also implements this measure. Therefore, the proposed project will comply with this measure.
<i>Measure II.A.3:</i>	<i>For those public and private projects that are also subject to Federal or State approval with respect to impacts to Waters of the U.S. and/or Streambeds, require evidence of completion of the applicable Federal permit process prior to the issuance of a grading permit.</i>	Future PVCC implementing projects that include existing drainages will be required to determine, through completion of jurisdictional delineations as discussed in the Biological Resources section (Section 4.3) of this EIR, the limits of any impacted Waters of the U.S and/or streambeds. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency. Therefore, the proposed project will comply with this measure.
<i>Policy III.A:</i>	<i>Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.</i>	Consistency and compliance with the MSHCP is discussed in detail in the Biological Resources section (Section 4.3) of this EIR. Therefore, the proposed project is consistent with this policy.
<i>Policy IV.A:</i>	<i>Comply with State and Federal regulations and ensure preservation of the significant historical, archaeological, and paleontological resources.</i>	As stated in the Cultural Resources section (Section 4.4) of this EIR, several historical and archeological sites are located within the project site. Mitigation measures discussing impacts to historical, archaeological and paleontological resources are discussed in Section 4.4. Future PVCC development applicants' adherence to the mitigation measures and to mandatory regulatory requirements will ensure the proposed project remains

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		consistent with this policy. Therefore, the proposed project is consistent with this policy.
<i>Measure IV.A.1:</i>	<i>For all private and public projects involving new construction, substantial grading, or demolition, including infrastructure and other public service facilities, staff shall require appropriate surveys and necessary site investigations in conjunction with the earliest environmental document prepared for a project.</i>	Mitigation measures discussing impacts to historical, archaeological and paleontological resources are discussed in Section 4.4 (Cultural Resources) of this EIR. Future PVCC implementing development project applicants shall be required to submit surveys, technical studies, and site investigations in accordance with these mitigation measures; thereby ensuring the proposed project remains consistent with this measure. Therefore, the proposed project will comply with this measure.
<i>Measure IV.A.2:</i>	<i>For all projects subject to CEQA, applicants will be required to submit results of an archaeological records search request through the Eastern Information Center (EIC), at the University of California, Riverside.</i>	The results of the <i>Cultural Resources Technical Report</i> prepared by CRM TECH for the proposed project, as summarized in Section 4.4 (Cultural Resources) of this EIR were submitted to the Eastern Information Center (EIC). Therefore, the proposed project has complied with this measure.
<i>Measure IV.A.3:</i>	<i>Require Phase I Surveys for all projects located in areas that have not previously been surveyed for archaeological or historical resources, or which lie near areas where archaeological and/or historic sites have been recorded.</i>	A Phase I Cultural Resources Survey was completed by CRM TECH for the proposed project. The results of this survey are summarized in Section 4.4 (Cultural Resources) of this EIR. Therefore, the proposed project complies with this measure.
<i>Measure IV.A.4:</i>	<i>In Areas 4 and 5, paleontologic monitoring will be required once subsurface excavations reach five feet in depth, with monitoring levels reduced if appropriate, at the discretion of a certified Project Paleontologist.</i>	The proposed project is located within Area 4 of the Paleontological Sensitivity Map. Mitigation measures discussing impacts to paleontological resources are discussed in the Cultural Resources section (Section 4.4) of this EIR. Therefore, the proposed project complies with this measure.
<i>Measure IV.A.5:</i>	<i>Identify and collect previous surveys of cultural resources. Evaluate such resource and consider preparation of a comprehensive citywide inventory of cultural resources including both prehistoric sites and man-made</i>	A <i>Cultural Resources Technical Report</i> was prepared by CRM Tech which includes a record of surveys that were prepared within the project boundary and a discussion of the study is included in

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	<i>resources.</i>	the Cultural Resources section (Section 4.4) of this EIR. Therefore, the proposed project complies with this measure.
<i>Policy V.A:</i>	<i>Coordinate land-planning efforts with local water purveyors.</i>	As part of its development review process, the City of Perris advised EMWD of proposed development applications. Therefore, EMWD will be given the opportunity to review on individual development projects located within the boundaries of the PVCC Specific Plan in order to identify needed improvements to the water system. Therefore, the proposed project is consistent with this policy.
<i>Measure V.A.1:</i>	<i>Work with Eastern Municipal Water District to ensure that development does not outpace projections consistent with the Water District Urban Water Management Plan.</i>	The Perris GP requires that the City work with EMWD to ensure development does not outpace water supply consistent with EMWD’s Urban Water Management Plan. As discussed in Section 4.11 (Utilities and Service Systems) of this EIR, the projected annual water demand for the project is approximately 7,428.8 acre-feet per year. As shown in Section 4.11, EMWD will have sufficient supplies in normal, dry, and multiple dry years to satisfy projected demands within its service area, including the proposed project. Therefore, the proposed project will comply with this measure.
<i>Measure V.A.2:</i>	<i>Require use of new technologies and water conserving plant materials for landscaping.</i>	The proposed PVCC Landscape Standards and Guidelines (Section 6.0) are based on drought tolerant plant materials consistent with City of Perris Municipal Code Section 19.70. Therefore, the proposed project complies with this measure.
<i>Policy VI.A:</i>	<i>Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).</i>	Future PVCC development applicants will be required to comply with the regulatory requirements of the NPDES. Therefore, the proposed project is consistent with this policy.
<i>Measure</i>	<i>Evaluate the Planning Department’s CEQA</i>	Water quality impacts and mitigation

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<i>VI.A.2:</i>	<i>implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.</i>	measures are discussed in the Hydrology and Water Quality section (Section 4.7) of this EIR. Therefore, the proposed project complies with this measure.
<i>Measure VI.A.3:</i>	<i>Prior to issuance of any grading permit involving a disturbance of one or more acres of land, require proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan.</i>	Future PVCC development applicants will be required to prepare site-specific Storm Water Pollution Prevention Plans (SWPPP), as discussed in Section 4.7 of this EIR. Therefore, the proposed project will comply with this measure.
<i>Measure VI.A.4:</i>	<i>Review water quality impacts during the project review and approval phases to ensure appropriate BMPs are incorporated into the proposed project design and long-term operations.</i>	In accordance with City of Perris, state and federal regulatory requirements, future PVCC development applicants will be required to prepare a site-specific Water Quality Management Plan (WQMP) to identify the BMPs that will be implemented and maintained throughout the life of a project. Therefore, the proposed project will comply with this measure.
<i>Measure VI.A.5:</i>	<i>In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals.</i>	As discussed in Section 4.7 (Hydrology and Water Quality) of this EIR, future PVCC development applicants shall be required to comply with existing regulatory requirements by completing Water Quality Management Plans which will be submitted to the City of Perris Engineering Department for approval. Therefore, the proposed project will comply with this measure.
<i>Policy VIII.A:</i>	<i>Adopt and maintain development regulations that encourage water and resource conservation.</i>	The proposed PVCC Landscape Standards and Guidelines (Section 6.0) are based on drought tolerant plant materials in compliance with City of Perris Municipal Code Section 19.70. Therefore, the proposed project is consistent with this policy.
<i>Measure VIII.A.1:</i>	<i>Use indigenous and/or drought-resistant planting materials and efficient irrigation systems within residential projects as a means of reducing water demand, including smart irrigation systems.</i>	The proposed PVCC Landscape Standards and Guidelines (Section 6.0) are based on drought tolerant plant materials in compliance with City of Perris Municipal Code Section 19.70. Therefore, the proposed project will

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		comply with this measure.
<i>Measure VIII.A.2:</i>	<i>Use indigenous and/or drought-resistant planting and efficient irrigation systems in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25% or less of the landscaped areas.</i>	The proposed PVCC Landscape Standards and Guidelines (Section 6.0) are based on drought tolerant plant materials in compliance with City of Perris Municipal Code Section 19.70. Additionally, PVCC Landscape Standards and Guidelines limit turf usage to active purposes only. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.A.4:</i>	<i>Use gray water, water conserving appliances and fixtures within all new commercial and industrial developments.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards. LEED promotes the use of gray water. The proposed project will also comply with all regulations requiring the use of water conserving appliances and fixtures. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.A.5:</i>	<i>Use permeable paving materials within proposed developments to deter water runoff and promote natural filtering of precipitation and irrigation waters.</i>	The PVCC Standards and Guidelines (Section 4.2.2.7) requires future PVCC development applicants to use permeable paving materials. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.A.7:</i>	<i>Create and maintain reclaimed water systems to provide reclaimed water for irrigation of municipal and commercial landscaping.</i>	The proposed project will install necessary on-site facilities so that recycled water may be used on-site once off-site infrastructure is extended to the proposed project site by others. Future PVCC development applicants may be required to make recycled water connection or construct facilities if the future project is located within one mile of existing EMWD recycled water facilities and requires more than 3,000 square feet of landscape as established in the proposed PVCC Standards and Guidelines (Section 5.4.3). Therefore, the proposed project will comply with this measure.
<i>Measure</i>	<i>Explore the use of private water well systems for</i>	The proposed PVCC will connect to

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<i>VIII.A.8:</i>	<i>all potable and/or landscaping water use for larger commercial and industrial projects.</i>	water and sewer lines as is discussed in the Utilities and Service Systems section of this EIR (Section 4.11). A private water well system is not feasible for this project site. Therefore, this measure is not applicable to the proposed project.
<i>Policy VIII.B:</i>	<i>Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.</i>	The proposed project shall comply with the provisions of City of Perris Municipal Code Section 7.44 which promotes the recycling of construction and demolition debris which is recyclable and reusable and establishes regulations to compel applicants for "covered projects" to divert a minimum of fifty percent of their construction and demolition debris from landfills. Therefore, the proposed project is consistent with this policy.
<i>Measure VIII.B.1:</i>	<i>Initiate and maintain incentive programs to encourage and reward developments that employ energy and resource conservation and green building practices similar to the City's current recycling program.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards. Therefore, the proposed project will comply with this measure.
<i>Measure VIII.B.3:</i>	<i>Require the installation of recycling bins and provide space for storage and collection of recyclables within development sites.</i>	Through its development review process, the City of Perris shall review all implementing development projects to assure that recycling bins and space for the storage and collection of recyclables are included, where appropriate, within the PVCC. Therefore, the proposed project will comply with this measure.
<i>Policy VIII.C:</i>	<i>Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building rating</i>	The PVCC encourages green building development and LEED building standards through a proposed incentive program (Section 13.0). Therefore, the proposed project is consistent with this policy.

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	<i>system).</i>	
<i>Measure VIII.C.5:</i>	<i>Encourage green building density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new developments.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards. Therefore, the proposed project complies with this measure.
<i>Measure IX.A.1:</i>	<i>Encourage installation of shared vehicle transportation facilities and support within new and refurbished commercial and industrial developments (examples: dual fuel vehicles and charging systems on site, car pool parking, and bus stop shelters).</i>	The PVCC Standards and Guidelines encourage bus stops be provided at large commercial centers and large employment centers along existing and future bus routes. In addition, implementing development projects within the PVCC project area will comply with all applicable federal, state, regional, and local requirements including the use of shared vehicle transportation facilities, where practicable. Therefore, the proposed project will comply with this measure.
<i>Measure IX.A.2:</i>	<i>Install bicycle paths and create secure and accessible bicycle storage for visitors and occupants within new and refurbished commercial and industrial developments.</i>	The PVCC Standards and Guidelines concerning bicycle paths and storage for visitors and occupants adhere to City of Perris Municipal Code requirements. Therefore, the proposed project complies with this measure.
<i>Measure IX.A.4:</i>	<i>Encourage building and site designs that facilitate pedestrian activity (i.e., locating buildings close to the street and providing direct connections to public walkways and neighboring land uses).</i>	The PVCC Standards and Guidelines encourage walkability through placement of buildings and pedestrian circulation facilities and pathways to public walks. Therefore, the proposed project complies with this measure.
<i>Measure IX.A.5:</i>	<i>The City shall require all new public and private development to include bike and walking paths wherever feasible.</i>	The PVCC Standards and Guidelines require bike and walking paths where feasible in accordance with City of Perris Municipal Code requirements. Therefore, the proposed project complies with this measure.
<i>Measure IX.A.6</i>	<i>The City shall purposely design interconnections between existing and proposed bicycle and walking paths, and trails throughout the city.</i>	The PVCC Standards and Guidelines require bike, walking paths and trails where feasible in accordance with City of Perris Municipal Code requirements. Therefore, the proposed project

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		complies with this measure.
<i>Policy X.A:</i>	<i>Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.</i>	The PVCC (Section 13.0) establishes an incentive program to provide expedited processing to future development applicants who exceed current Title 24 requirements for new development. Therefore, the proposed project is consistent with this policy.
<i>Measure X.A.2:</i>	<i>Encourage energy conservation devices including but not limited to lighting, water heater treatments, solar energy systems, etc. for all residential projects.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards which includes energy conservation measures. Therefore, the proposed project complies with this measure.
<i>Policy X.B:</i>	<i>Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.</i>	The PVCC establishes objectives to reduce the heat island effect and requires tree canopies to provide 50% shade coverage of parking areas. Additionally, the plant palette for proposed PVCC includes and requires the use of drought tolerant plant material to reduce landscaping water demand. Therefore, the proposed project is consistent with this policy.
<i>Measure X.B.1:</i>	<i>Explore the formation of an urban forestry program such as Tree City USA, to capitalize on the environmental, social, aesthetic and economic benefits of trees in urban environments.</i>	Although the City of Perris would be responsible for this implementation measure, the landscaping plan for this proposed project encourages the social, aesthetic, and economic benefit of drought-resistant landscaping in this section of Perris. Therefore, the proposed project will comply with this measure.
<i>Policy X.C:</i>	<i>Encourage strategic shape and placement of new structures within new commercial and industrial projects.</i>	The PVCC provides standards and guidelines (Sections 7.0 and 8.0) for new commercial and industrial projects. For aesthetic, traffic and other considerations, new structures proposed by implementing development projects are to be shaped and placed in the best strategic locations within each development site. Therefore, the proposed project is consistent with

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		this policy.
<i>Measure X.C.1:</i>	<i>Promote energy conservation by taking advantage of natural site features such as natural lighting and ventilation, sunlight, shade and topography during the site plan process.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards, which promotes such energy conservation features. Therefore, the proposed project will comply with this measure.
<i>Measure X.C.2:</i>	<i>When possible, locate driveways and parking on the east and north sides of the buildings to reduce heat buildup during hot afternoons.</i>	Future PVCC development applicants will be required to meet PVCC Standards and Guidelines and City of Perris Municipal Code requirements. Therefore, the proposed project complies with this measure.
<i>Policy XI.A:</i>	<i>The City shall support LEED development standards and gray water usage for all new and refurbished public buildings and facilities. All projects undertaken by the City, or that receive funding from the City or the Redevelopment Agency should be encouraged to utilize green building practices.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards. Therefore, the proposed project is consistent with this policy.
<i>Policy XI.C:</i>	<i>The City shall encourage Green Building and Sustainable Community actions whenever possible through subsidy funding.</i>	The proposed project includes a proposed incentive program allowing for expedited permitting for LEED building standards. Therefore, the proposed project is consistent with this policy.
Housing Element		
<i>Policy 1.1:</i>	<i>Improve access to affordable housing for all segments of the community, particularly for low/moderate income residents by continuing to work with private and public sectors.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.2:</i>	<i>Continue to support nonprofit and for-profit organizations in their efforts to construct, acquire, and improve housing to accommodate households with lower and moderate incomes.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.3:</i>	<i>Promote development within specific plans that provide a variety of housing types and densities based on the suitability of the land, including the availability of infrastructure, the provision of adequate services and recognition of</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.

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	<i>environmental constraints.</i>	
<i>Policy 1.4:</i>	<i>Provide sites for residential development, available in response to market demand, so that scarcity of land does not duly increase the cost or decrease the availability of housing for all segments of the community.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.5:</i>	<i>Avoid concentrating housing constructed expressly for lower income households in any single portion of the planning area.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.6:</i>	<i>Encourage and participate in efforts designed to achieve economies and efficiencies which will facilitate the production of quality, more affordable housing.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.7:</i>	<i>Locate higher density residential development in close proximity to public transportation, services and recreation.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 1.8:</i>	<i>The City shall strive to meet through new construction the proportions of units indicated in the Southern California Association of Governments (SCAG) RHNA for the period of 1998-2005: 354 very low income; 215 Low income; 290 Moderate income, and 404 Above Moderate income.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 2.1:</i>	<i>Encourage the development of residential units which are accessible to handicapped persons or are adaptable for conversion to residential use by handicapped persons.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 2.2:</i>	<i>Work with nonprofit agencies and private sector developers to encourage the development of senior housing.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 2.3:</i>	<i>Provide access to emergency shelter with emergency support for city residents, including disadvantaged groups.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 2.4:</i>	<i>Support innovative public, private and nonprofit efforts in the development of affordable housing, particularly for the special needs groups.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 2.5:</i>	<i>Encourage the development of rental units with three or more bedrooms to provide affordable</i>	The proposed project does not propose any residential housing; therefore this

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	<i>housing for large families.</i>	policy does not apply to the project.
<i>Policy 2.6:</i>	<i>Promote the utilization of the City’s Density Bonus Ordinance through advertisements and incentives to potential developers.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 3.1:</i>	<i>When feasible, consider the reduction, subsidy or deferral of development fees to facilitate the provision of affordable housing.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 3.2:</i>	<i>Periodically review and revise City development standards to facilitate high quality housing at rates within the means of the incomes of lower and moderate income households.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 3.3:</i>	<i>Establish a reasonable processing time of applications for new construction or rehabilitation of housing.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 3.4:</i>	<i>Monitor all regulations, ordinances, departmental processing procedures and fees related to the rehabilitation and/or construction of dwelling units to assess their impact on housing costs.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 4.1:</i>	<i>In order to create affordable housing opportunities, pursue a variety of forms of private, local, state and federal assistance to support development or purchase of housing within the income limits of lower income households.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 5.1:</i>	<i>Correct housing deficiencies through the Neighborhood Preservation Program administered by the newly formed Neighborhood Division of the City. Continue to utilize the Neighborhood Preservation program to bring substandard units into compliance with City codes and to improve overall housing conditions in Perris.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 5.2:</i>	<i>Promote increased awareness among property owners and residents of the importance of property maintenance to long term housing quality.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 5.3:</i>	<i>Encourage compatible design of new residential units to minimize the impact of intensified</i>	The proposed project does not propose any residential housing; therefore this

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
	<i>reuse of residential land on existing residential development.</i>	policy does not apply to the project.
<i>Policy 5.4:</i>	<i>Through the Neighborhood Preservation Program, inventory 52 existing neighborhoods within Perris based on common residential land use patterns. Utilize identified neighborhoods as key elements in creating plans and programs to maintain or improve the character and quality of existing housing and housing environments.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 5.5:</i>	<i>Conduct an assessment of available financial resources to be utilized for rehabilitation and neighborhood enhancement activities.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 6.1:</i>	<i>Encourage and support the enforcement of laws and regulations prohibiting discrimination in lending practices and in the sale of rental housing.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 6.2:</i>	<i>Remove regulatory constraints that impede equal opportunity to housing in the City.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 7.1:</i>	<i>Comply with all adopted federal and state actions to promote energy conservation.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Policy 7.2:</i>	<i>Promote development of public policies and regulations that achieve a high level of energy conservation in new and rehabilitated housing units.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
Land Use Element		
<i>Policy I.A:</i>	<i>Promote variety in dwelling types, densities, and locations to satisfy changing demands as the community evolves and matures.</i>	The intent of the proposed project is to promote various land uses for the area, streamline the development process, promote sustainable development, establish an identity for the area and identify infrastructure for various vehicular and non-vehicular circulation. The PVCC also proposes to change land use designations to provide consistency with zoning. Therefore, the proposed project is consistent with this policy.
<i>Measure I.A.3:</i>	<i>Require inclusion of new residential</i>	The proposed project does not propose

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
	<i>development within a Landscape and Lighting District or comparable organization as a condition of tentative tract map approval for the purpose of funding maintenance of common area improvements.</i>	any residential housing; therefore this measure does not apply to the project.
<i>Policy II.A:</i>	<i>Require new development to pay its full, fair-share of infrastructure costs.</i>	Future PVCC implementing development applicants will be required to pay development impact fees and/or construct required infrastructure to service the future PVCC development sites. Therefore, the proposed project is consistent with this policy.
<i>Policy II.B</i>	<i>Require new development to include school facilities or pay school impact fees, where appropriate.</i>	The proposed project does not propose any residential development and therefore will not be required to include school facilities. Nevertheless, future PVCC implementing development applicants will be required to pay applicable school impact fees. Therefore, the proposed project is consistent with this policy.
<i>Measure II.B.1</i>	<i>Circulate all development plans to local school districts to assess need to include potential future school sites.</i>	As part of its development review process, the City shall circulate PVCC implementing development plans to local school districts. Therefore, the proposed project will comply with this measure.
<i>Policy III.A:</i>	<i>Accommodate diversity in the local economy.</i>	According to the City of Perris GP, Planning Area 1 is generally made up of “industrial” land use designations and uses. While there are some residential uses in this area, the majority of land uses are nonresidential. There are no schools or parks. This area is near March Global Port, and future land uses could include air-cargo support and air-cargo dependent businesses. Planning Area 3 consists of large tracts of land currently used for agriculture. Proximity to the Interstate 215 corridor suggests conversion of agricultural land, over the long term, to uses that are compatible with surrounding

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
		<p>commercial and industrial uses. Conversion could enhance the economy of the City by attracting new uses that complement the existing Lowe’s and Ross distribution centers and provide jobs for local residents. Nearby residential development may support some level of retail uses in this planning area. This area contains land currently under agricultural cultivation. While the zoning code includes an Agricultural zoning designation, there is no corresponding agricultural land use designation in the City’s General Plan. These agricultural lands could be converted to uses that generate revenue and create jobs within the City.</p> <p>In Planning Area 4, agriculture is the primary land use. As in Planning Area 3, the proximity of this property to Interstate 215 makes it a candidate for uses that are dependent upon freeway access and visibility. Business park development will be accompanied by an expansion of local job opportunities.</p> <p>The PVCC is consistent with the goals for Planning Areas 1, 3 and 4 converting agricultural land to light industrial and commercial uses, complementing surrounding light industrial, general industrial, business park and commercial development, and creating additional jobs for surrounding residential development. This project will be compatible with no significant adverse impacts to the applicable policy set forth in the City of Perris GP. Therefore, the proposed project is consistent with this policy.</p>
<i>Measure III.A.1:</i>	<i>Rezone properties to be consistent with the land use map.</i>	<p>The City of Perris GP land use designations for the project property are currently Business Park (BP), Community Commercial (CC), General Industrial (GI), Light Industrial (LI),</p>

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
		<p>Multi-Family Residential (MFR-14), Neighborhood Commercial (NC), Open Space (OS), Professional Office (PO), Public/Semi-Public Facility (P), Residential [Single Family] (R-6,000), Residential [Single-Family] (R-20,000) and Specific Plan (SP). A portion of this project site is currently zoned A1 (Light Agriculture), which is inconsistent with the corresponding General Plan Land Use designations of Light Industrial and Community Commercial. Additionally, there is no agricultural land use designation in the Perris GP. The proposed project proposes to rezone properties to Specific Plan (SP) to maintain consistency with the City of Perris GP land use designations.</p> <p>Therefore, the proposed project will comply with this measure.</p>
<p><i>Policy IV.A:</i></p>	<p><i>The General Plan and the Zoning Code shall be revised and updated to maintain consistency with each other, and with regional plans.</i></p>	<p>The project proposes a General Plan Amendment to establish the boundaries of the PVCC and a Change of Zone to establish Specific Plan (SP) zoning for the project area. This General Plan Amendment and Change of Zone will be compatible with no significant adverse impacts to the applicable policy and land use designations set forth in the City of Perris GP.</p> <p>The General Plan land use designations for the project property are Business Park (BP), Community Commercial (CC), General Industrial (GI), Light Industrial (LI), Multi-Family Residential (MFR-14), Neighborhood Commercial (NC), Open Space (O), Professional Office (PO), Public/Semi-Public Facility (P), Residential [Single Family] (R-6,000), Residential [Single-Family] (R-20,000) and Specific Plan (SP). A portion of this project site is currently zoned A1 (Light Agriculture), which is inconsistent with the corresponding General Plan Land Use Designations of Light Industrial</p>

**Table 4.8-B
Consistency with City of Perris General Plan Policies and Measures**

		<p>and Community Commercial. Additionally, there is no agricultural land use designation in the General Plan.</p> <p>The largest land use designation within Planning Area 3 is Light Industrial. The General Plan aims to expand the light industrial and commercial land uses due to the close proximity to Interstate 215, a cargo airport, rail lines, and other commercial and industrial land uses. Conversion of agricultural land to light industrial and commercial uses is compatible with surrounding land uses and consistent with the General Plan’s intention of promoting economic growth within an undeveloped area in the City of Perris.</p> <p>The project includes a Change of Zone from A1 (Light Agricultural), BP (Business Park), CC (Commercial Community, GI (General Industrial), LI (Light Industrial), MFR-14 (Multi-Family Residential), NC (Neighborhood Commercial), O (Open Space), P (Public), R-6,000 (Residential), R-20,000 (Residential), to SP (Specific Plan) which would be consistent with the General Plan to make the General Plan and zoning consistent with each other.</p> <p>Therefore, the proposed project is considered to be consistent with the Land Use Plan set forth in the General Plan. Once the Change of Zone is approved, the project will be consistent with the proposed zoning and development standards established for the project. With the approval of the project, the project will have less than significant impacts without any further need for mitigation, regulatory compliance, or design considerations. Also, the project is considered to have less than significant impacts related to</p>
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Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
		land use policies. Therefore, the proposed project is consistent with this policy.
<i>Measure IV.A.1:</i>	<i>Change the Zoning Code and Zoning Map to ensure consistency with the Land Use Plan.</i>	The PVCC includes a Change of Zone to establish Specific Plan (SP) zoning for the project area to ensure consistency with the City of Perris Land Use Plan. Therefore, the proposed project complies with this measure.
<i>Policy V.A:</i>	<i>Restrict development in areas at risk of damage due to disasters.</i>	Development in hazardous areas is being achieved by PVCC’s proposal to place density and development restrictions on future PVCC developments proposed within the Airport Overlay Zone, as discussed in the Hazards and Hazardous Materials section (Section 4.6) of this EIR, that are compliant with City of Perris Municipal Code and the Riverside Airport Land Use Compatibility Plan. Therefore, the proposed project is consistent with this policy.
<i>Measure V.A.1:</i>	<i>Consult hazards maps as part of the review process for all development applications.</i>	The General Plan hazards maps were consulted in the preparation of the Initial Study/Notice of Preparation (Appendix A) in order to determine whether potential impacts may occur from the proposed project. Where hazards maps indicated that impacts may be significant, impacts were further evaluated in the Hazards and Hazardous Materials (Section 4.6) and Hydrology and Water Quality (Section 4.7) sections of this EIR. Therefore, the proposed project complies with this measure.
Noise Element		
<i>Policy I.A:</i>	<i>The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.</i>	The State of California Noise/Land Use Compatibility Criteria was utilized in analyzing potential noise impacts, as discussed in the Noise section (Section 4.9) of this EIR. Therefore, the proposed project is consistent with this policy.

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
<i>Measure I.A.1:</i>	<i>All new development proposals will be evaluated with respect to the State Noise/Land Use Compatibility Criteria. Placement of noise sensitive uses will be discouraged within any area exposed to exterior noise levels that fall into the “Normally Unacceptable” range and prohibited within areas exposed to “Clearly Unacceptable” noise ranges.</i>	The PVCC is modifying some of the Perris GP land use designations within the project area with others that are similar in character and intensity. As discussed in Section 4.9 (Noise) of this EIR, the Perris GP and the proposed project have been evaluated with respect to the State Noise/Land Use Compatibility Criteria and potential impacts will be less than significant. Therefore, the proposed project complies with this measure.
<i>Measure I.A.3:</i>	<i>Acoustical studies shall be prepared for all new development proposals involving noise sensitive land uses, as defined in Section 16.22.020J of the Perris Municipal Code, where such projects are adjacent to roadways and within existing or projected roadway CNEL levels of 60 dBA or greater.</i>	The PVCC is modifying some of the Perris GP land use designations within the project area, but is not proposing new noise sensitive land uses. Pursuant to this general plan measure, as part of the development review project the City of Perris shall require future implementing development applicants to submit acoustical studies whenever it determines that there is a potential to impact noise sensitive receptors. Therefore, the proposed project complies with this measure.
<i>Measure I.A.4:</i>	<i>As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements to be identified on all real estate transfers associated with the affected property that identifies regular exposure to roadway noise.</i>	The PVCC is modifying some of the Perris GP land use designations within the project area, but is not proposing new noise sensitive land uses. Therefore, this measure is not applicable to the proposed project.
<i>Measure I.A.5:</i>	<i>No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior noise levels that exceed 70 dBA CNEL.</i>	The proposed project does not propose any residential housing; therefore this measure does not apply to the project.
<i>Policy II.A:</i>	<i>Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing noise-sensitive receptors.</i>	Future road widening within the project area will be completed in conjunction with individual implementing development projects or by the City of Perris as part of public infrastructure projects. These projects shall comply with all applicable regulations and this general plan policy in order to minimize

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
		impacts on existing noise-sensitive receptors. Therefore, the proposed project is consistent with this policy.
<i>Policy III.A:</i>	<i>Mitigate existing and future noise impacts resulting from train movement.</i>	There are no railroads located within the PVCC project site. The nearest railroad to the project site is the Burlington Northern & Santa Fe (BNSF) Railway line located on the west side of Interstate 215, which is the western boundary of the project site. The PVCC is not proposing new noise sensitive land uses. The City of Perris will implement this policy during the development review process for each implementing development project. Noise impacts related to train movements will be less than significant through the implementation of this policy. Therefore, the proposed project is consistent with this policy.
<i>Measure III.A.2:</i>	<i>Acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of the BNST railroad tracks. Wherever these studies determine that exterior living areas in the proposed development plan would be exposed to noise levels of 60 dBA or greater, the plans shall incorporate setbacks and/or building design/noise insulation measures to reduce exterior noise levels to no more than 65 dBA and ensure that interior noise levels do not exceed 45 dBA CNEL.</i>	The PVCC is modifying some of the Perris GP land use designations within the project area, but is not proposing new noise sensitive land uses. Therefore, this measure is not applicable to the proposed project.
<i>Measure III.A.4:</i>	<i>No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior exposure to train noise levels in excess of 70 dBA CNEL.</i>	The proposed project does not propose any residential housing; therefore this measure does not apply to the project.
<i>Policy IV.A:</i>	<i>Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.</i>	The proposed project does not propose any new noise-sensitive land uses; therefore this policy does not apply to the project.
<i>Measure IV.A.1:</i>	<i>As part of any approvals for new sensitive land uses within the 60 dBA CNEL or higher noise contours associated with March Inland Port,</i>	The proposed project does not propose any new sensitive land uses; therefore this measure does not apply to the project.

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
	<i>and for such new uses within the flight paths associated with the Perris Valley Skydiving Center, the City will require the developer to issue disclosure statements identifying exposure to regular aircraft noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.</i>	
<i>Measure IV.A.2:</i>	<i>All new development proposals in the noise contour areas of 60 dBA and above will be evaluated with respect to the State Noise/Land Use Compatibility Criteria.</i>	The State of California Noise/Land Use Compatibility Criteria was utilized in analyzing potential noise impacts, as discussed in the Noise section (Section 4.9) of this EIR. Therefore, the proposed project complies with this measure.
<i>Policy V.A:</i>	<i>New large scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria.</i>	The State of California Noise/Land Use Compatibility Criteria was utilized in analyzing potential noise impacts, as discussed in the Noise section (Section 4.9) of this EIR. Additionally, the proposed project recognizes this policy by proposing Residential Buffer Standards and Guidelines. Therefore, the proposed project is consistent with this policy.
<i>Measure V.A.1:</i>	<i>An acoustical impact analysis shall be prepared for new industrial and large scale commercial facilities to be constructed within 160 feet of the property line of any existing noise sensitive land use. This analysis shall document the nature of the commercial or industrial facility as well as all interior or exterior facility operations that would generate exterior noise. The analysis shall document the placement of any existing or proposed noise-sensitive land uses situated within the 160-foot distance. The analysis shall determine the potential noise levels that could be received at these sensitive land uses and specify specific measures to be employed by the large scale commercial or industrial facility to ensure that these levels do not exceed 60 dBA CNEL at the property line of the adjoining sensitive land use. No development permits or approval of land use applications shall be issued until the acoustic analysis is received and approved by the City</i>	The PVCC is modifying some of the Perris GP land use designations within the project area, but is not proposing new noise sensitive land uses. Pursuant to this general plan measure, as part of the development review project the City of Perris shall require future implementing development applicants to submit acoustical studies whenever it determines that there is a potential to impact noise sensitive receptors. Therefore, the proposed project complies with this measure.

Table 4.8-B		
Consistency with City of Perris General Plan Policies and Measures		
	<i>Staff.</i>	
Open Space Element		
<i>Policy I.A:</i>	<i>Develop more active recreational parks.</i>	The proposed project does not propose any residential housing; therefore this policy does not apply to the project.
<i>Measure I.A.4:</i>	<i>Continue to attribute parkland demand accompanying new residential development at the rate of 5 acres per 1,000 future residents.</i>	The proposed project does not propose any residential development; therefore this measure does not apply to the project.
<i>Policy II.A:</i>	<i>All development will be accessible by a trail system.</i>	The City of Perris GP has designated a trail system of existing and proposed pedestrian and bike trails. The proposed PVCC complies with the City of Perris Design Guidelines and proposes to expand some of the bike trails. Therefore, the proposed project is consistent with this policy.
<i>Measure III.A.1:</i>	<i>Encourage the creative siting of buildings as a means of preserving rock outcroppings and hillsides.</i>	The City of Perris shall implement this measure through its standard development review process for implementing development projects. Therefore, the proposed project will comply with this measure.
<i>Measure III.A.2:</i>	<i>Discourage subdividing land if such subdivisions create lots that would require significant grading or removal of rock outcroppings to accommodate development.</i>	The City of Perris shall implement this measure through its standard development review process for implementing development projects. Therefore, the proposed project will comply with this measure.
Safety Element		
<i>Measure I.B.1:</i>	<i>Provide leadership in efforts to improve the Perris Valley Storm Channel and San Jacinto River Channel.</i>	Based on existing development conditions, in order to meet the goals of the proposed PVCC, the Perris Valley Master Drainage Plan (PVMDP) requires an alternative drainage solution be implemented as discussed in the Hydrology and Water Quality section (Section 4.7) of this EIR. Therefore, the proposed project complies with this measure.
<i>Measure I.B.5:</i>	<i>Require flood mitigation plans for all proposed</i>	Future development of PVCC that

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
	<i>projects in the 100 year floodplain (FEMA Flood Insurance Rate Map Areas A and AE).</i>	occurs within the floodplain will be in compliance with Title 15, “Floodplain Regulations,” of the City of Perris Municipal Code which regulates, restricts, or prohibits development in flood hazard areas as necessary to minimize increases in erosion, floodwater elevations, and floodwater velocities. Therefore, the proposed project complies with this measure.
<i>Policy I.C:</i>	<i>Reduce the risk of damage from fires.</i>	Future PVCC development applicants shall be required to consider building placement per the City’s development code and the California Building Codes, thus reducing the risk of damages that could be caused by fire. Therefore, the proposed project is consistent with this policy.
<i>Measure I.C.1:</i>	<i>Maintain fuel modification standards to ensure proper clearance of brush around homes and businesses abutting undeveloped areas.</i>	The PVCC project area does not contain and is not located adjacent to areas identified as “wildfire hazard areas” on Exhibit S-16 in the Perris GP’s Safety Element; therefore, this measure does not apply to the project.
<i>Measure I.C.2:</i>	<i>Adopt landscaping standards to include a fire-resistant plant palette, where appropriate.</i>	The proposed <i>PVCC Landscape Standards and Guidelines</i> (Section 6.0) are based on plant materials in compliance with City of Perris Municipal Code Section 19.70. Therefore, the proposed project complies with this measure.
<i>Measure I.C.3:</i>	<i>Enforce current California Building Code standards to exclude the use of materials that pose a fire risk such as untreated wood roofing materials.</i>	All future PVCC implementing developments are required to comply with the regulatory requirements set forth in the current California Building Code (International Building Code). Therefore, the proposed project complies with this measure.
<i>Measure I.C.5:</i>	<i>Maintain appropriate setback requirements in the Zoning Code for new development or redevelopment to prevent spread of fire.</i>	All proposed on-site structures are setback appropriately to the Zoning Code regulations. Additional setbacks are required in the proposed <i>PVCC Standards and Guidelines</i> (Section 4.2.8) for future non-residential developments

Table 4.8-B Consistency with City of Perris General Plan Policies and Measures		
		abutting existing residential property lines. During plan check, the construction method and materials will be designated by building separation as defined in the City of Perris building codes. Therefore, the proposed project complies with this measure.
<i>Policy I.D:</i>	<i>Aircraft-Consult the AICUZ Land Use Compatibility Guidelines and ALUP Airport Influence Area development restrictions when considering development project applications.</i>	Section 12.0 (Airport Overlay Zones) of the PVCC addresses the development restrictions that are applicable to future development within the project area. Therefore, the proposed project is consistent with this policy.
<i>Policy I.E:</i>	<i>Seismic Hazards-All development will be required to include adequate protection from damage due to seismic incidents.</i>	Future PVCC development applicants shall adhere to the mitigation measures identified in the GP Draft EIR as discussed in Section 4.5 (Geology and Soils) of this EIR and mitigation measure MM Geo 1 which will ensure the proposed project implements this measure. Therefore, the proposed project is consistent with this policy.
<i>Measure I.E.1:</i>	<i>Require geological and geotechnical investigations by State-licensed professionals, in areas with potential for earthquake-induced liquefaction, landsliding, other slope instability, or settlement as part of the environmental and development review process.</i>	Future PVCC development applicants shall adhere to the mitigation measures identified in the GP Draft EIR as discussed in Section 4.5 (Geology and Soils) of this EIR and mitigation measure MM Geo 1 which will ensure the proposed project implements this measure. Therefore, the proposed project complies with this measure.
<i>Measure I.E.7:</i>	<i>Geotechnical studies will be required for all projects to determine the potential for damage from expansive soils, and to define appropriate mitigation measures to address the damage potential that is identified.</i>	Future PVCC development applicants shall adhere to the mitigation measures identified in the GP Draft EIR as discussed in Section 4.5 (Geology and Soils) of this EIR and mitigation measure MM Geo 1 which will ensure the proposed project implements this measure. Therefore, the proposed project complies with this measure.
<i>Policy II.A:</i>	<i>The City shall require roadway improvements to expedite quick and safe travel by emergency responders.</i>	Future PVCC development applicants shall comply with PVCC Standards and Guidelines and the City of Perris Municipal Code to identify required

Table 4.8-B	
Consistency with City of Perris General Plan Policies and Measures	
	roadway improvements and to designate fire access drive aisles designed to meet the City's standards of emergency responders. Therefore, the proposed project is consistent with this policy.

Consistency with Regional Plans

SCAG Regional Growth Forecasts

The SCAG 2008 RTP Growth Forecast projects a Year 2035 population of 2,550,867 persons within the Western Riverside County Subregion. The Subregion area comprises the cities of Banning, Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, and Temecula, and parts of unincorporated Riverside County. **Table 4.8-C, SCAG Western Riverside County Subregion Forecasts**, reflects SCAG’s population forecasts for the entire Western Riverside County Subregion.

Table 4.8-C, SCAG Western Riverside County Subregion Forecasts

	2015	2020	2025	2030	2035
Population	1,918,962	2,096,544	2,262,992	2,414,256	2,550,867
Households	609,219	671,933	727,622	780,743	828,547
Employment	691,260	797,626	901,163	1,005,923	1,098,233

These forecasts have been broken down to separate growth within the cities from that in the unincorporated areas. **Table 4.8-D, SCAG City of Perris Forecasts**, depicts SCAG population, household, and employment forecasts for the City of Perris, which includes the proposed project site.

Table 4.8-D, SCAG City of Perris Forecasts

	2015	2020	2025	2030	2035
Population	64,221	71,468	78,671	84,881	90,951
Households	16,789	18,357	20,188	21,988	23,825
Employment	19,300	20,315	22,690	25,370	27,671

Employment/Housing Balance Policies

SCAG’s April 2001 report titled, *The New Economy and Jobs/Housing Balance in Southern California*, states that, “a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternately, a jobs/housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply.” The SCAG region as a whole is, by definition, balanced. The SCAG region as a whole is projected to have 1.33 jobs per housing unit in 2035 under SCAG’s 2008 RTP Growth Forecast.

The proposed project intends to establish a development area for light industrial, general industrial, commercial and business professional office projects, which will bring an additional 56,087 jobs/employees to the area. SCAG's, *The New Economy and Jobs/Housing Balance in Southern California*, further defines jobs/housing balance for this region as an area extending about 14 miles around an employment center with a ratio between jobs and household on the order of 1.0 - 1.29 jobs per household. The proposed project will provide employment opportunities for residents within the same local region, thereby contributing to an overall jobs/housing balance. Therefore, the proposed project is consistent with regional growth forecasts and regional jobs/housing balance projections.

Project/Regional Growth Forecast Comparative Analysis

If implemented, the proposed project has the potential to construct approximately 5.4 million square feet of business professional office development, 3.4 million square feet of commercial development, 8.0 million square feet of general industrial and 36.0 million square feet of light industrial development. These projections are based upon typical development square footages for similar developments within the City. A breakdown of anticipated typical development and the land use is set forth in **Table 4.8-E, Development Intensity and Employee Projections**. Employment generation factors of 1 employee per 500 square feet of commercial/retail building space, 1 employee per 600 square feet of business park floor space, 1 employee per 1,030 square feet of light industrial floor space and 1 employee per 1,500 square feet of heavy industrial floor space were used in the **Table 4.8-E** analysis. Therefore, this project can be projected to generate approximately 56,087 new jobs.

Table 4.8-E, Development Intensity and Employee Projections

Development Type	Acres	Employee/SQ. FT. factor ¹	Floor Area Ratio ²	Building Square Footages	Employment Potentials per Development Ratios
			Typical Allowable	Typical Allowable	Full Buildout of Specific Plan
Business Park/Professional Office	357.1	600	0.35:1	5,444,652	9,074
Commercial	309.2	500	0.25:1	3,367,406	6,735
General Industrial	408.0	1500	0.45:1	7,996,636	5,331
Light Industrial	1836.3	1,030	0.45:1	35,994,761	34,946
Public/Semi-Public Facility ³	248.7	n/a	0.50:1	0.0	0.0
Totals	3,432.0			52,803,454	56,087

¹ Employee generation rates from Riverside County General Plan EIR Appendix E (Buildout Assumptions & Methodology).

² Floor Area Ratio is the gross building area of all floors divided by the lot area, from City of Perris General Plan June 14,

2005.

³ Typical building square footage is zero as no buildings will be located in Public or Open Spaces.

The creation of 56,087 new jobs comprises 290.6 percent of the forecasted employment for the City in 2015 and 202.7 percent in 2035. For the Western Riverside County Subregion, the project will constitute 8.1 percent of the forecasted employment in 2015 and 5.1 percent in 2035.

The jobs/housing ratio for Western Riverside County is projected to be 1.13 in 2015, 1.19 in 2020, 1.24 in 2025, 1.29 in 2030 and 1.33 in 2035. Therefore, Western Riverside County is projected to be a jobs/housing balanced area. The jobs/housing ratio for the City of Perris is projected to be 1.15 in 2015, 1.11 in 2020, 1.12 in 2025, 1.15 in 2030 and 1.16 in 2035. Therefore, the City of Perris is also a jobs/housing balanced area. By implementation of the proposed project, the City will further meet the jobs/housing balance.

Even though the proposed project is located within a jobs/housing balanced area, it still provides the opportunity to create additional jobs that will help further balance the ratio between jobs and households. The project will provide employment and service opportunities for residents within the same local region, thereby contributing to an overall jobs/housing balance, and in effect, lessening the expanding market by limiting the need for residents to leave the areas for these opportunities. Therefore, the proposed project is consistent with regional growth forecasts and regional jobs/housing balance projections.

Consistency with Regional Plans

Regional Plans affecting the project are the SCAG Regional Comprehensive Plan and Guide (RCPG) Policies. The project's consistency with these policies is discussed in **Table 4.8-F, Project Consistency with Regional Comprehensive Plan**.

Projects of regional significance, including General Plans, are subject to review by the SCAG to evaluate conformity with the Regional Comprehensive Plan and Guide (RCPG). The RCPG identifies strategies for local government actions that have regional implications (e.g., adoption and implementation of land use policies in a General Plan). As indicated in the Perris GP Environmental Impact Report (certified on April 26, 2005), the adoption and implementation of the Perris GP would be consistent with regional plans that are based on SCAG population projections.

Additionally, the document contains policies that (1) direct growth where regional infrastructure (e.g., freeways, transit, water, solid waste disposal, sewage treatment) is available and natural resources will not be overburdened; (2) encourage development that discourages long-distance commuting; (3) establish firm growth boundaries; and (4) encourage provision of housing, at all levels. The proposed project would be generally consistent with these policies, in that (1) existing regional infrastructure (e.g., freeways, transit, water, solid waste disposal, sewage treatment) is generally available and would not be overburdened; (2) it encourages development that discourages long-distance commuting; (3) it establishes firm growth boundaries; (4) it could be served by existing regional infrastructure systems, with improvements as recommended in the Transportation and Traffic (Section 4.10) and Utilities and Service System (Section 4.11) sections of this EIR. The proposed project would facilitate increased local employment growth and provide improved opportunities that together would assist the City in achieving a better balance between local jobs and employed residents, thereby reducing the need for long-distance commuting. Specific growth management, regional mobility, and air quality policies of the RCP are discussed below in **Table 4.8-F, Project Consistency with the Regional Comprehensive Plan**. Other policies are inapplicable to the proposed project.

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

Goal/ Principle No.	Policy Text	Statement of Consistency, Non-Consistency or Not Applicable
Regional Transportation Goals		
<i>RTP G1</i>	<i>Maximize mobility and accessibility for all people and goods in the region.</i>	The proposed project is not a transportation improvement project and will not establish a new transportation system nor create significant changes to the existing transportation system. The proposed project will support the <i>Mobility</i> and <i>Accessibility</i> objectives by: improving or maintaining a Level of Service (LOS) D or better during peak traffic hours wherever possible; improving and widening roadways within the project site to comply with the Perris GP Circulation Element, as needed, and locating the project in proximity to nearby Interstate 215. Therefore, the proposed project complies with this goal.
<i>RTP G2</i>	<i>Ensure travel safety and reliability for all people and goods in the region.</i>	Future developments on the project site will result in on and off-site road improvements that will benefit persons, of all social and economic groups, who utilize these roads. Road improvements meet established design requirements for public safety. Therefore, the proposed project complies with this goal.
<i>RTP G3</i>	<i>Preserve and ensure a sustainable regional transportation system.</i>	The proposed project is not a transportation improvement project and will not establish a new transportation system nor create significant changes to the existing transportation system. Nevertheless, future PVCC implementing development projects will be required to fund their fair share of contributions for long-term improvements. Therefore, the proposed project complies with this goal.
<i>RTP G4</i>	<i>Maximize the productivity of our transportation system.</i>	The proposed project is not a transportation improvement project and will not establish a new transportation system nor create significant changes to the existing transportation system. The proposed project will support the this goal by: improving or maintaining a Level of Service (LOS) D or better during the peak traffic hours wherever possible; improving and widening all roadways within the project area to ultimate full-

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

		widths and bordering the site to the ultimate half-section widths, as needed; and locating the project in proximity to nearby Interstate 215. The proposed project is considered to be consistent with this RTP goal.
<i>RTP G5</i>	<i>Protect the environment, improve air quality and promote energy efficiency.</i>	Mitigation measures discussing impacts to the environment, air quality and energy efficiency are discussed in Section 4.2 (Air Quality) of this EIR. Compliance with these mitigation measures will enable the proposed project to protect the environment, reduce the project’s potential air quality impacts and promote energy efficiency. Therefore, the proposed project complies with this goal.
<i>RTP G6</i>	<i>Encourage land use and growth patterns that complement our transportation investments.</i>	The proposed project is located within an area that has been planned for a mix of uses since the adoption of the Perris GP. The location of the proposed project complements transportation investments as Planning Area 1, as described in the Perris GP is generally made up of “industrial” land use designations and uses. While there are some residential uses in this area, the majority of land uses are nonresidential. There are no schools or parks. This area is near March Global Port, and future land uses could include air-cargo support and air-cargo dependent businesses. Perris GP Planning Area 3 consists of large tracts of land currently used for agriculture. Proximity to the Interstate 215 corridor suggests conversion of agricultural land, over the long term, to uses that are compatible with surrounding commercial and industrial uses. In Perris GP Planning Area 4, agriculture is the primary land use. As in Planning Area 3, the proximity of this property to Interstate 215 makes it a candidate for uses that are dependent upon freeway access and visibility. Therefore, the proposed project complies with this goal.
<i>RTP G7</i>	<i>Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination</i>	The proposed project is not a transportation project. Therefore this goal is not applicable to the proposed project.

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

	<i>with other security agencies.</i>	
Growth Visioning		
Principle 1:	<i>Improve mobility for all residents.</i>	
<i>GV P1.1</i>	<i>Encourage transportation investments and land use decisions that are mutually supportive</i>	<p>The proposed project is consistent with the “Business Park,” “Community Commercial,” “General Industrial,” “Light Industrial,” “MFR-14 (Multi-Family Residential),” “Neighborhood Commercial,” “Professional Office,” “Public,” “R-6,000 (Single-Family Residential),” and “R-20,000 (Single-Family Residential)” land use designations as established in the City of Perris GP. The PVCC proposes a redistribution of these land uses but does not propose any additional development that is not anticipated within the General Plan. The proposed project is consistent with the City of Perris GP land use designations.</p> <p>Project-related impacts upon traffic and transportation are discussed in Section 4.10 (Transportation and Traffic) of this EIR. The proposed project has the potential to increase the LOS levels at some intersections. However, the implementing project proponents are contributing to a fair share fund to finance regional road improvements. Project development will result in on- and off-site road improvements that will benefit persons, of all social and economic groups, who utilize these roads. Road improvements meet established design requirements for public safety. Therefore, the proposed project complies with this goal.</p>
<i>GV P1.2</i>	<i>Locate new housing near existing jobs and new jobs near existing housing.</i>	<p>The objective of the PVCC is to promote various land uses for the area, streamline the development process and identify infrastructure needs of the area to encourage the development of new job opportunities for residents of the surrounding existing housing areas. Therefore, the proposed project complies with this goal.</p>
<i>GV P1.3</i>	<i>Encourage transit-oriented development</i>	<p>A pedestrian trail system linking the community to a Metrolink Station and bus stops are planned within the project area. A regional trail along Ramona Expressway will connect</p>

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

		pedestrians to the Ramona Expressway Metrolink Station on the west side of Interstate 215 and a system of trails throughout the project area will provide access to bus stops and transfer points. Additionally, the PVCC Standards and Guidelines encourage bus stops be provided at large commercial centers and large employment centers along existing and future bus routes. Therefore, the proposed project complies with this goal.
<i>GV P1.4</i>	<i>Promote a variety of travel choices.</i>	Throughout the project site, areas have been designated for bikeways, pedestrian trails and bus turnouts which lend support to and provide access to the Metrolink Station located on the Ramona Expressway and well as a connection to the Metrolink Station located in downtown Perris. Regional bus services are offered throughout the project site along Riverside Transit Agency (RTA) Routes 19 and 41; thereby providing a variety of travel choices. Therefore, the proposed project complies with this goal.
Principle 2:	<i>Foster livability in all communities.</i>	
<i>GV P2.1</i>	<i>Promote infill development and redevelopment to revitalize existing communities.</i>	A large portion of the proposed project area is undeveloped land currently used for agriculture. The other portions contain some existing developments including warehouse/distribution facilities, neighborhood commercial, smaller-scale industrial facilities, a rural residential community, and a mobile home subdivision. Because this is not a largely developed area, the promotion of infill development and redevelopment are not applicable to this project. Therefore, this goal is not applicable to this proposed project.
<i>GV P2.2</i>	<i>Promote developments, which provide a mix of uses.</i>	The PVCC proposes a mix of commerce, industrial and business park uses. The proposed PVCC (Sections 7.0, 9.0, and 10.0) encourages the development of mixed uses through proposed “Live-Work Units” whereby residential uses are allowable with commercial and business and professional office type uses. Additionally, the proposed project will promote compatibility of mixed land uses through establishment of the proposed PVCC Standards and Guidelines to

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

		facilitate development in an orderly and consistent manner. Therefore, the proposed project complies with this goal.
GV P2.3	<i>Promote “people scaled,” walkable communities.</i>	The PVCC Standards and Guidelines (Sections 4.0, 7.0, and 9.0) encourage “people scaled” communities by requiring the avoidance of large dominant building masses and monotonous and unbroken building facades as well as requiring the use plazas and elements such as courtyards, linear promenades and usable landscaped areas to promote walkable communities. Therefore, the proposed project complies with this goal.
GV P2.4	<i>Support the preservation of stable, single-family neighborhoods</i>	There is one single-family neighborhood (zoned R-20,000) located within the project site, and another (zoned R-6,000) outside but adjacent to the project site within Planning Area 5. The R-20,000 neighborhood is surrounded by industrial and commercial land uses. The R-6,000 neighborhood is located near the southeast corner of Rider Street and Perris Boulevard, with a vacant lot at the corner proposed for Business Professional Office zoning. The proposed PVCC Residential Buffer Standards and Guidelines (Section 4.2.8 of the PVCC Specific Plan) requires a 50-foot setback for non-residential developments abutting existing residential property lines, reduced hours of operations when necessary due to proximity to residential uses and the projection of all lighting away from residential areas. Additionally, future implementing development projects are required to screen operations from view through landscape or wall screening, to provide sound walls and depending upon proposed implementing development uses, to prepare an Air Quality and/or Health Risk Assessment Study to determine project viability when located adjacent to residences. Therefore, the proposed project complies with this goal.
Principle 3:	<i>Enable prosperity for all people.</i>	
GV P3.1	<i>Provide, in each community, a variety of housing types to meet the housing needs of all income levels.</i>	The PVCC does not propose any new housing for this area. Therefore, this goal is not applicable to this project.

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

GV P3.2	<i>Support educational opportunities that promote balanced growth.</i>	The PVCC does not propose any educational opportunities for this area. Therefore, this goal is not applicable to this project.
GV P3.3	<i>Ensure environmental justice regardless of race, ethnicity or income class.</i>	The PVCC proposes a redistribution of these land uses but does not propose any additional development that is not anticipated within the General Plan. The proposed project is consistent with the City of Perris GP land use designations. No new residential development is proposed in the project area by the proposed project. In order to protect existing residential development from the impacts of the proposed project, the proposed PVCC Residential Buffer Standards and Guidelines (Section 4.2.8 of the PVCC Specific Plan) requires a 50’ setback for non-residential developments abutting existing residential property lines, reduced hours of operations when necessary due to proximity to residential uses and the projection of all lighting away from residential areas. Additionally, future implementing development projects are required to screen operations from view through landscape or wall screening, to provide sound walls and depending upon proposed implementing development uses, to prepare an Air Quality and/or Health Risk Assessment Study to determine project viability when located adjacent to residences. Therefore, the proposed project complies with this goal.
GV P3.4	<i>Support local and state fiscal policies that encourage balanced growth.</i>	The PVCC proposes a redistribution of these land uses but does not propose any additional development that is not anticipated within the General Plan. The proposed project is consistent with the City of Perris GP land use designations. No new residential development is proposed in the project area by the proposed project. The PVCC shall support local and state fiscal policies that encourage balanced growth. Therefore, the proposed project complies with this goal.
GV P3.5	<i>Encourage civic engagement.</i>	The PVCC proposes a redistribution of these land uses but does not propose any additional

**Table 4.8-F
Project Consistency with the Regional Comprehensive Plan**

		development that is not anticipated within the General Plan. The proposed project is consistent with the City of Perris GP land use designations. The public was involved in the Perris GP development and adoption process through the use of workshops and public hearings. The PVCC also encouraged early and active communication amongst the community through stakeholder meetings with property owners affected by land use changes, involvement of stakeholders through the planning and development stage of the PVCC and active follow up with stakeholders. Therefore, the proposed project complies with this goal.
Principle 4:	<i>Promote sustainability for future generations.</i>	
<i>GV P4.1</i>	<i>Preserve rural, agricultural, recreational and environmentally sensitive areas.</i>	Although there are existing agricultural uses within the project area, the City of Perris GP does not contain any agricultural or open space land use designations in the proposed project area. The proposed project is a proposed redistribution of adopted General Plan land use designations within the project area. The proposed project is consistent with the City of Perris GP land use designations. Therefore, this goal is not applicable to this project.
<i>GV P4.2</i>	<i>Focus development in urban centers and existing cities.</i>	The entire project area is located within the city limits of the City of Perris. Therefore, the development proposed by the PVCC is focused within an existing city. Therefore, the proposed project complies with this goal.
<i>GV P4.3</i>	<i>Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.</i>	The proposed PVCC requires future implementing development projects to comply with local, state and federal regulations. This regulations require the efficient use of and the elimination of pollution and waste by use of water saving devices and systems, connection or construction to recycled water facilities if applicable, collection and discharge of stormwater that does not damage streets or adjacent properties and discourages truck-wells that may clog storm drain inlets. Additionally, the proposed project encourages future PVCC

**Table 4.8-F
 Project Consistency with the Regional Comprehensive Plan**

		development applicants to meet LEED certified building standards through an incentive program. Therefore, the proposed project complies with this goal.
<i>GV P4.4</i>	<i>Utilize “green” development techniques.</i>	The project will comply with all federal, state, and local requirements for the reduction of waste and the conservation of water resources and establishes a drought tolerant landscaping plant palette which complies with the City of Perris Development Code, Section 19.70. Additionally, the project encourages increased energy efficiency in building design and offers incentives to future PVCC development applicants for meeting LEED certified design standards. Therefore, the proposed project complies with this goal.

Threshold: *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

The proposed Project area is within the boundaries of the Riverside County Multiple Species Habitat Conservation Plan (MSHCP) for Western Riverside County. However, the proposed Project site is not within or adjacent to a Criteria Cell or Cell Group as identified in the Perris Valley area of the MSHCP. Due to the repetitive nature of this threshold with *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan*, which is analyzed in Section 4.3 Biological Resources of this DEIR, please see said threshold under Biological Resources, beginning on page 4.3-21, for the impact determination associated with this threshold.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts resulting from land use and planning as a result of the proposed project. The proposed project is consistent with the regional and local growth forecasts and the Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Guide (RCPG) Policies and the SCAG Regional Transportation Plan (RTP). Therefore, it is determined that the proposed project’s potential impacts related to land use and planning and consistency with regional plans are below the level of significance. Consequently mitigation measures specifically related to this issue are not required.

Summary of Environmental Effects After Mitigation Measures are Implemented

All potential direct impacts of the project related to land use and planning and consistency with regional plans will be **less than significant**. Mitigation measures are not required to reduce potential impacts from the proposed project to a level that is less than significant.

4.9 Noise

As determined in the Initial Study/NOP prepared for the proposed project (Appendix A), the focus of the following analysis is related to potential impacts associated with the exposure of people to severe noise levels in excess of established standards; the exposure of persons to or generation of excessive groundborne vibration or noise levels; a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; and the exposure of people residing or working in the project area to excessive airport-related noise levels.

In response to the NOP, comment letters were received from the Department of the Air Force (DOAF) and State of California Department of Transportation – Aeronautics Division (CALTRANS). The DOAF indicated protection using noise abatement may be required due to Community Noise Equivalent Level (CNEL) contours in the range of 65dB to 75dB. CALTRANS requested consideration of cumulative noise impacts associated with project sites proximity to roadways and railroads. These comments and concerns are incorporated into this section and into Section 5.0 (Other CEQA Topics) of the EIR.

In addition to other documents, the following references were used in the preparation of this section of the Draft EIR:

- City of Perris, *City of Perris General Plan 2030*, July 12, 2005. (Available at www.cityofperris.org/city-hall/general-plan.html, accessed November 18, 2009.) (Perris GP)
- City of Perris, *Perris Municipal Code, Section 7, Health and Welfare*, 1992. (Available at the City of Perris and at <http://library.municode.com/index.aspx?clientID=16553&stateID=5&statename=California>, accessed June 6, 2011.)
- Hogle-Ireland, Inc., *Draft Environmental Impact Report, City of Perris General Plan 2030*, October 2004. (Available at the City of Perris and at http://www.cityofperris.org/city-hall/general-plan/General_Plan_2030.pdf, accessed June 6, 2011.) (Perris GP EIR)
- March Air Reserve Base United States Air Force, *Air Installation Compatible Use Zone (AICUZ) Study*, 1998. (Available at http://www.marchjpa.com/docs_forms/aicuz1998.pdf, accessed June 3, 2011.)
- March Air Reserve Base United States Air Force, *Citizen's Brochure for the 452 Air Mobility Wing Air Installation Compatible Use Zone Study*, August 2005. (Available at http://www.marchjpa.com/docs_forms/aicuz2005.pdf, accessed April 16, 2010.)
- California Department of Transportation, Division of Aeronautics, *2002 California Airport Land Use Planning Handbook*. (Available at www.dot.ca.gov/hq/planning/aeronaut/documents/ALUPHComplete-7-02rev.pdf, accessed April 16, 2010.)
- Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006. (Available at www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf, accessed June 6, 2011.)
- Riverside County Transportation Commission, *Draft Environmental Impact Report, Perris Valley Line, Riverside County, California, State Clearinghouse No. 2009011046*, April 5, 2010 (Available at http://perrisvalleyline.info/pdf/draft_eir_20100405.pdf; accessed June 6, 2011.) (RCTC)

Setting

The Perris Valley Commerce Center Specific Plan (PVCC) area and its surroundings are in transition from agricultural land uses to a mix of commerce, industrial and business park uses. The project site comprises approximately 3,500 gross acres within the City of Perris. The site is located adjacent to the east side of Interstate 215 and the west side of the Perris Valley Storm Channel (PVSC), south of the March Air Reserve Base (MARB) and Riverside County Flood Control District Channel, and north of Placentia Street.

At this time, a large portion of the proposed PVCC area is undeveloped land currently used for agriculture. Other portions contain some existing developments including warehouse/distribution facilities, neighborhood commercial, smaller-scale industrial facilities, a rural residential community, and a mobile home subdivision. The surrounding area includes the City of Moreno Valley and March Air Reserve Base to the north; the unincorporated community of Mead Valley to the west; and more developed areas of the City of Perris to the south and east.

Acoustical Analysis Background

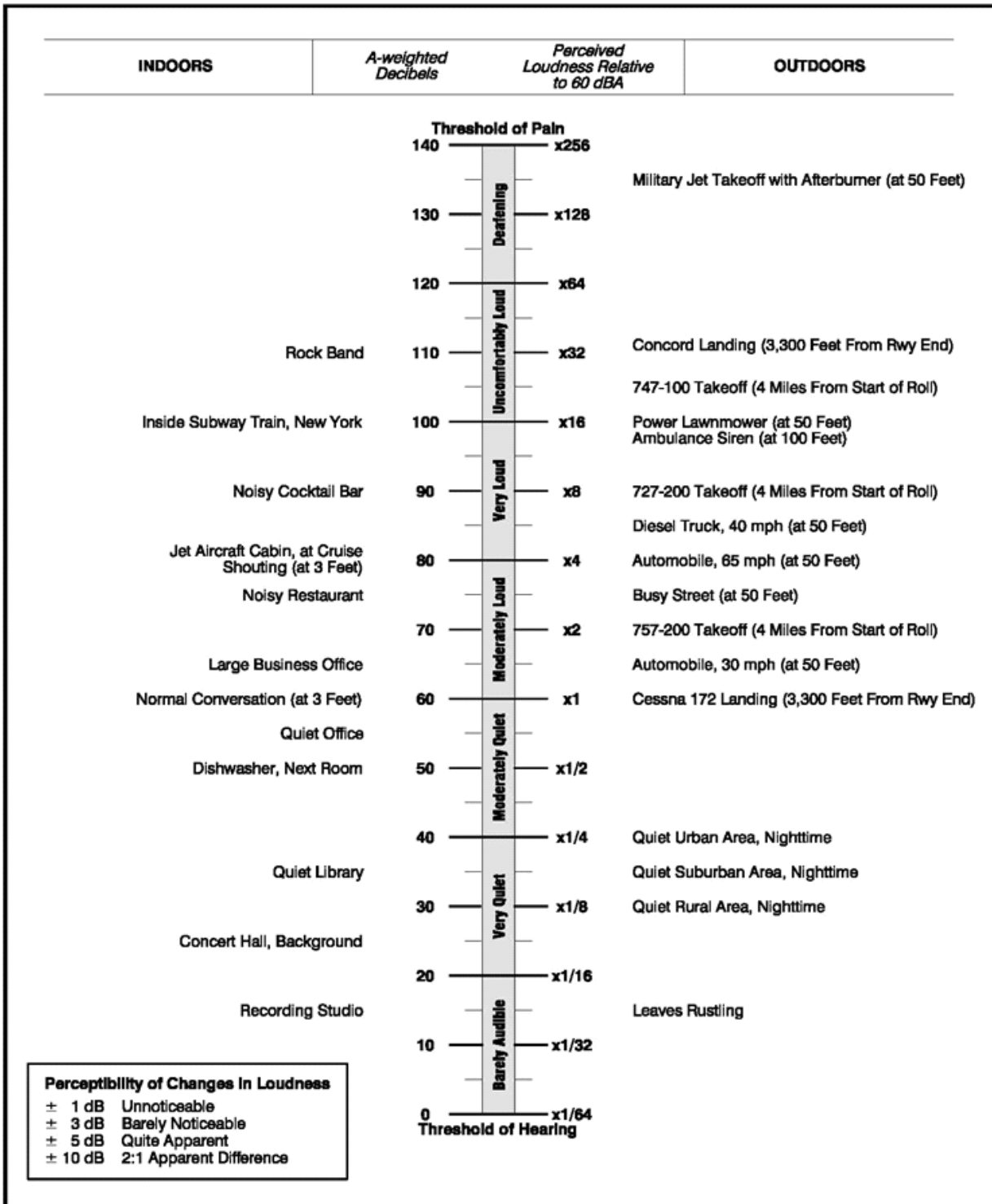
Noise is defined as unwanted or objectionable sound. The effect of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. The unit of measurement used to describe a noise level is the decibel (dB). However, since the human ear is not equally sensitive to all frequencies within the sound spectrum, the “A-weighted” noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dB(A) or dBA. Decibels are measured on a logarithmic scale which quantifies sound intensity in a manner that is similar to the Richter scale used for earthquake magnitudes. In the case of noise, a doubling of the energy from a noise source, such as the doubling of a traffic volume, would increase the noise level by 3 dBA; a halving of the energy would result in a 3 dBA decrease. **Figure 4.9-1, Typical Decibel Level of Common Sounds**, shows the relationship of various noise levels to common noise events.

Average noise levels over a period of minutes or hours are usually expressed as dB L_{eq} or the equivalent noise level for that period of time. For example, $L_{eq(3)}$ would represent a three hour average. When no time-period is specified, a one-hour average is assumed. Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (Ldn). CNEL is a 24-hour weighted average measure of community noise. The computation of CNEL adds 5 dBA to the average hourly noise levels between 7 p.m. and 10 p.m. (evening hours), and 10 dBA to the average hourly noise levels between 10 p.m. and 7 a.m. (nighttime hours). This weighting accounts for the increased human sensitivity to noise in the evening and nighttime hours. Ldn is a very similar 24-hour weighted average which weights only the nighttime hours and not the evening hours. CNEL is normally about 1 dB higher than Ldn for typical traffic and other community noise levels.

Sensitive receptors are areas where humans are participating in activities that may be subject to the stress of significant interference from noise. Land uses associated with sensitive receptors often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, and libraries. Other receptors include office and industrial buildings, which are not considered as sensitive as single-family homes, but are still protected by City of Perris land use compatibility standards.

An interior CNEL of 45 dB(A) is mandated by the State of California Noise Insulation Standards (California Code of Regulations, Title 24, Part 6, Section T25-28) for multiple-family dwellings and hotel and motel rooms. A-weighted noise exposure of 45 dB CNEL is also the guideline interior noise level for single-family residential uses. Since normal noise attenuation within residential structures with closed windows is about 20 dB, an exterior noise exposure of 65 dB CNEL is generally the noise/land use compatibility guideline for new residential dwellings in California. Because commercial or industrial

activities are generally conducted indoors, the exterior noise exposure standard for such less sensitive land uses is less stringent.



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Source: California Airport Land Use Planning Handbook (January 2002), Page 6-5

**Figure 4.9-1
 Typical Decibel Level
 of Common Sounds**

Noise exposure standards have been developed by the State of California and recommended for inclusion into the Noise Element of local general plans. The City of Perris has adopted a modified version of the state guidelines in its Noise Element. **Figure 4.9-2, Land Use Compatibility for Community Noise Exposure**, shows the matrix of exterior noise exposures considered acceptable for various land uses. According to the data provided in **Figure 4.9-2**, noise levels for noise-sensitive uses (residential, schools, etc.) up to 60 dB CNEL are considered to be “Normally Acceptable” and noise levels up to 65 dB CNEL are “Conditionally Acceptable”. For proposed commercial and business park/professional office uses “Normally Acceptable” noise levels extend up to 65 dB CNEL and “Conditionally Acceptable” noise levels extend up to 75 dB CNEL. “Normally Acceptable” noise levels for light industrial and general industrial uses extend up to 70 dB CNEL and “Conditionally Acceptable” noise levels extend up to 80 dB CNEL. In this regard, the phrase “normally acceptable” is defined by the City as “[s]pecific land use is satisfactory based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.” Likewise, the phrase “conditionally acceptable” is defined as “[n]ew construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.”

Groundborne Vibration

In contrast to the airborne noise described above, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed.

Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. The effects of ground-borne vibration include “feelable” movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called ground-borne noise. In extreme cases, the vibration can cause damage to buildings.

There are several different methods used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is typically measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the affect of vibration on the human body. The RMS amplitude is defined as the squared amplitude of the signal. The PPV and RMS velocity are normally described in inches per second in the United States and meters per second in the rest of the world. Although it is not universally accepted, decibel notation (Vdb) is in common use for vibration.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source. Sensitive receptors for vibration include structures (especially older masonry structures); people (especially residents, the elderly, and the sick) and vibration sensitive

equipment. Typical vibration levels are shown in **Figure 4.9-3, Typical Levels of Ground-Borne Vibration.**

Land Use Category	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB						
	55	60	65	70	75	80	85
Residential- Low-Density Single-Family, Duplex, Mobile Homes			Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Residential- Multi-Family			Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Commercial- Motels, Hotels, Transient Lodging			Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Schools, Libraries, Churches, Hospitals, Nursing Homes			Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Amphitheaters, Concert Hall, Auditorium, Meeting Hall	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Sports Arenas, Outdoor Spectator Sports	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Playgrounds, Neighborhood Parks				Diagonal	Diagonal	Diagonal	Diagonal
Golf Courses, Riding Stables, Water Rec., Cemeteries				Diagonal	Diagonal	Diagonal	Diagonal
Office Buildings, Business, Commercial, Professional, and Mixed-Use Developments			Diagonal	Diagonal	Diagonal	Diagonal	Diagonal
Industrial, Manufacturing Utilities, Agriculture				Diagonal	Diagonal	Diagonal	Diagonal





Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

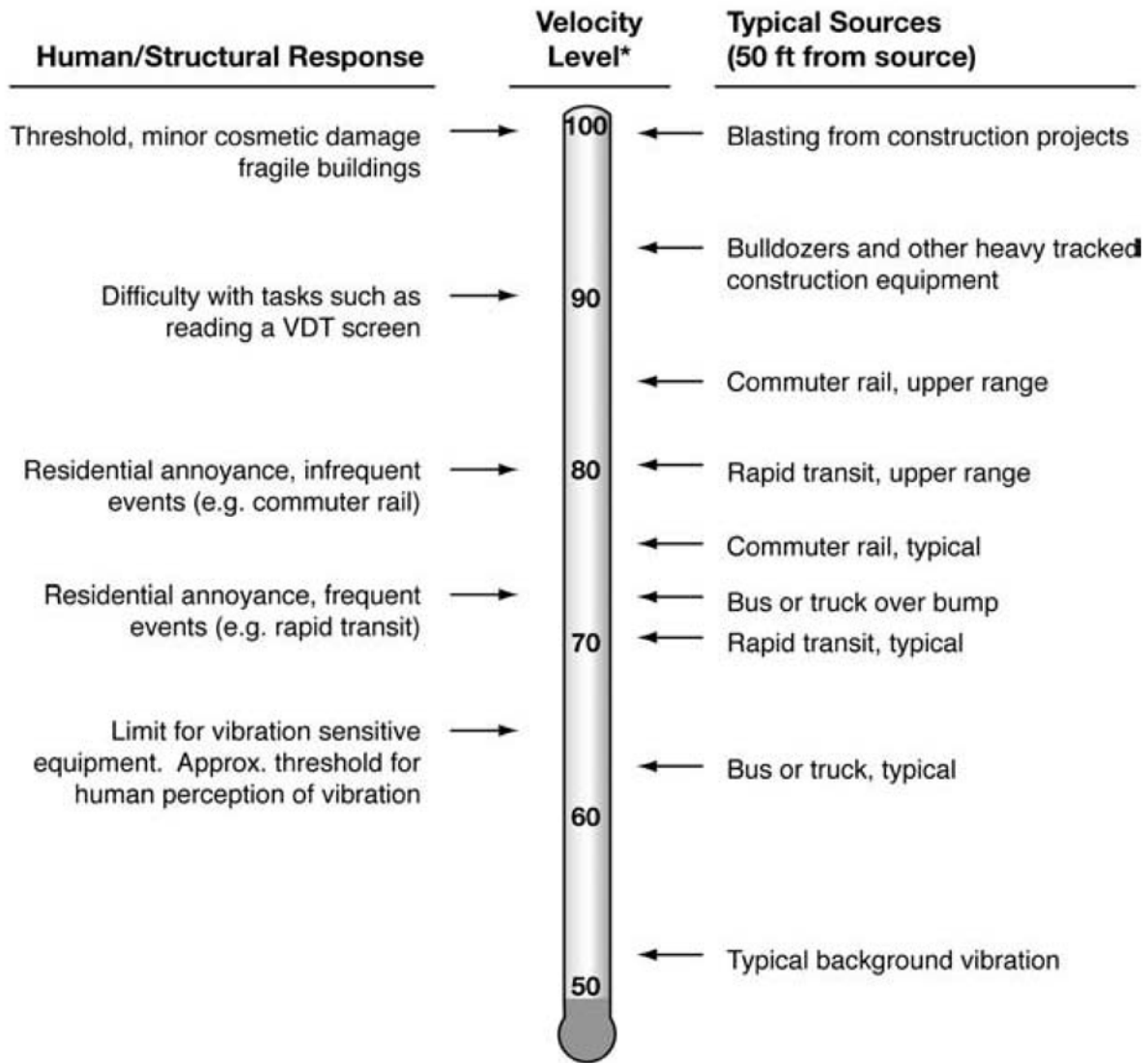
 Normally Acceptable Specific land use is satisfactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements	 Conditionally Acceptable New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.	 Normally Unacceptable New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.	 Clearly Unacceptable New construction or development should generally not be undertaken.
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The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

Source: Exhibit N-1, City of Perris General Plan

Figure 4.9-2
Land Use Compatibility for
Community Noise Exposure

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* RMS Vibration Velocity Level in VdB relative to 10⁻⁶ inches/second

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Source: Transit Noise and Vibration Impact Assessment (May 2006) Page 7-5

**Figure 4.9-3
 Typical Levels of
 Ground-Borne Vibration**

Ground-borne vibration is almost never annoying to people who are outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of a building, the motion does not provoke the same adverse human reaction. In addition, the rumble noise that usually accompanies the building vibration is perceptible only inside buildings.

Existing Noise Levels

A variety of noise sources exist in the City. Mobile noise sources produce a major effect on the ambient noise environment. Mobile sources include automobile traffic, aircraft overflights, and train movements. The primary noise source is automotive traffic along the streets and highway network. A number of stationary sources also generate noise on a regular basis. Much of this noise occurs at industrial sites that are generally located away from sensitive land uses.

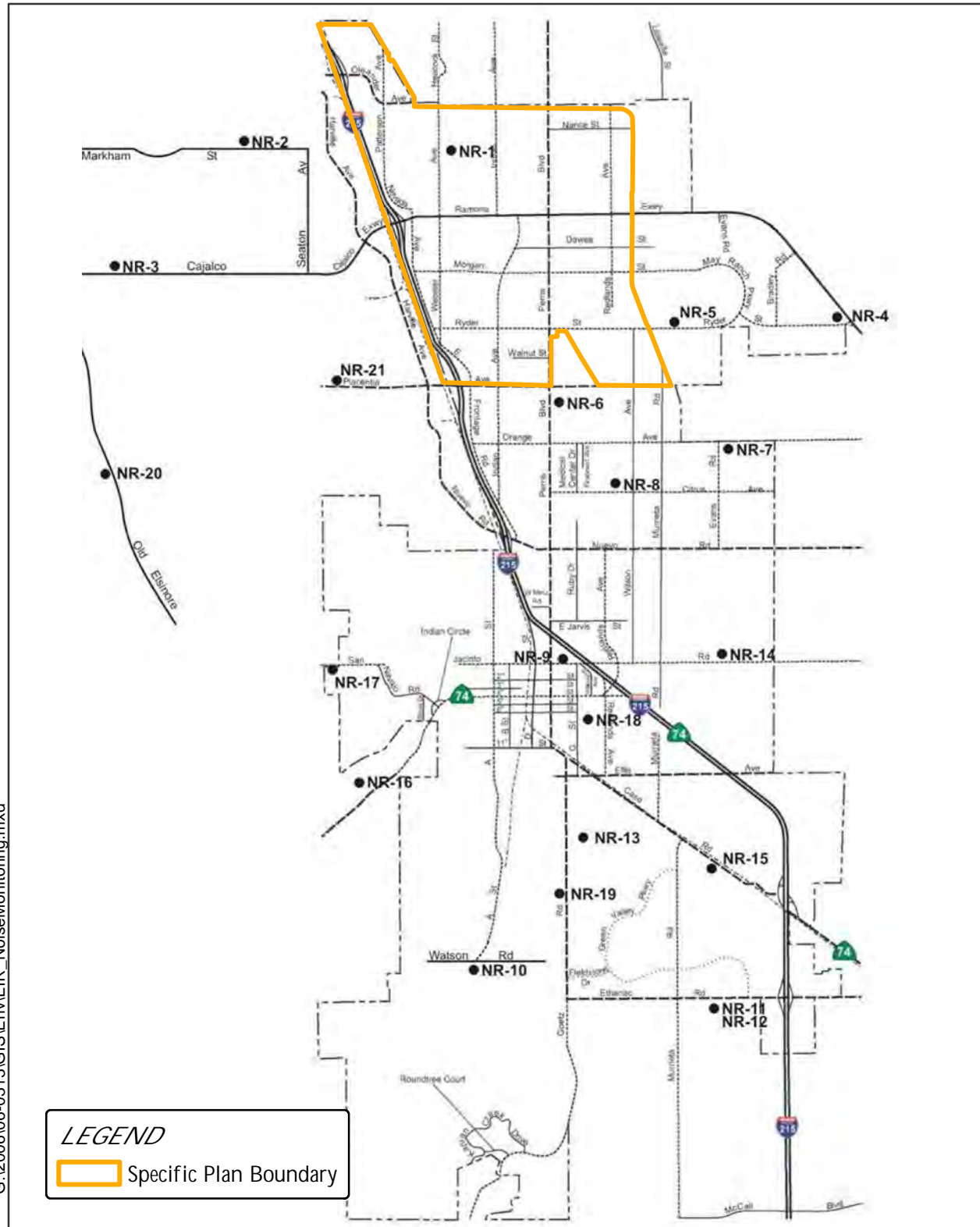
Noise Survey measurements were taken throughout the City for the Perris GP EIR, which is hereby incorporated herein by reference. Noise levels were recorded at 21 separate locations, as shown on **Figure 4.9-4, Noise Measurement Locations**. The locations were selected to include existing or planned sensitive land uses, and to capture the various vehicle mixes on City streets. Measurement results are listed in **Table 4.9-A, Perris GP EIR Citywide Noise Level Measurements**, below.

Table 4.9-A, Perris GP EIR Citywide Noise Level Measurements

Monitoring Location	Leq (dBA)	L02 (dBA)	L08 (dBA)	L25 (dBA)	L50 (dBA)	Lmin (dBA)	Lmax (dBA)
Monday, December 8, 2003							
NR-1	53.5	63.3	56.2	49.9	47.5	41.4	72.7
NR-2	62.0	70.7	66.4	61.1	54.6	46.5	78.4
NR-3	70.3	77.5	74.5	71.2	67.8	49.4	84.4
NR-4	71.9	79.1	76.5	73.7	69.0	47.6	83.0
NR-5	62.0	68.4	65.5	62.6	59.3	48.4	79.5
NR-6	68.4	74.1	72.1	69.9	67.2	52.9	82.8
NR-7	60.9	67.2	65.2	62.6	58.4	40.1	72.5
NR-8	60.3	68.1	63.4	59.7	56.0	46.2	80.6
Tuesday, December 9, 2003							
NR-9	59.5	68.0	63.0	57.5	53.5	48.1	76.3
NR-10	51.1	61.9	56.4	46.1	43.4	39.8	63.8
NR-11	62.3	71.5	67.3	61.6	51.4	33.2	77.4
NR-12	69.5	77.2	76.2	70.2	63.4	45.4	77.7
NR-13	69.1	72.1	70.9	69.8	68.7	64.1	75.2
NR-14	64.3	74.0	70.1	62.1	48.9	31.6	80.1
NR-15	61.7	70.0	66.8	61.9	51.6	36.1	76.5
NR-16	62.3	70.8	67.8	62.3	54.1	40.9	77.9
NR-17	63.5	70.1	67.8	65.1	60.4	45.9	75.0
Wednesday, December 10, 2003							
NR-18	55.0	64.1	60.6	52.6	48.9	44.8	67.6
NR-19	62.5	71.9	67.8	62.2	53.1	35.5	76.3
NR-20	64.1	72.3	70.1	64.4	55.3	39.4	76.9
NR-21	58.8	69.3	59.2	49.3	43.4	40.1	77.4

Source: Perris GP EIR, Table 4.7-2

Note: The Leq represents the equivalent sound level and is the numeric value of a constant level that over the given period of time transmits the same amount of acoustic energy as the actual time-varying sound level. The L02, L08, L25, and L50 are the levels that are exceeded 2, 8, 25, and 50 percent of the time, respectively. Alternatively, these values represent the noise level that would be exceeded for 1, 5, 15, and 30 minutes during a 1-hour period. The Lmin and Lmax represent the minimum and maximum root-mean-square noise levels obtained over a period of 1 second.



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Source: City of Perris General Plan, adopted April 2005, as amended through Feb. 2009.



**Figure 4.9-4
Noise Measurement
Locations**

Existing Traffic Noise Levels

Existing noise levels throughout the vicinity of the proposed project derive mainly from vehicular sources on the surrounding roads. Elevated noise levels are typically confined to a narrow corridor along these roads. Project-related trips will be concentrated near the project site and then become progressively diluted as traffic spreads out throughout the region. In order to determine project-specific noise increases along 79 roadway segments, CNEL levels were calculated utilizing the road segment speed and vehicle mix for the route types identified in Appendix D of the City of Perris General Plan Noise Element at a uniform but arbitrary distance of 100 feet from roadway centerline. The existing noise levels on roadways within the project vicinity are presented in **Table 4.9-B, Noise Levels at 100 Feet from Centerline Under Existing Conditions.**

Table 4.9-B, Noise Levels at 100 Feet from Centerline Under Existing Conditions

Road Segment	Existing	
	ADT ¹	dBA CNEL
Harley Knox Boulevard (Oleander Avenue)		
I-215 to Western Way	7,900	66.6
Western Way to Patterson Avenue	10,300	63.7
Patterson Avenue to Webster Avenue	8,400	62.8
Webster Avenue to Indian Avenue*	8,100	62.7
Indian Avenue to Perris Boulevard	4,500	64.1
Perris Boulevard to Redlands Avenue	<i>DOES NOT EXIST</i>	0.0
Redlands Avenue to Evans Road	<i>DOES NOT EXIST</i>	0.0
Markham Street		
Patterson Avenue to Webster Avenue	1,500	55.3
Webster Avenue to Indian Avenue	1,500	55.3
Indian Avenue to Perris Boulevard	1,200	54.3
Perris Boulevard to Redlands Avenue	<i>DOES NOT EXIST</i>	N/A
Cajalco Expressway		
Day Street to Seaton Avenue*	19,000	71.2
Seaton Avenue to Harvill Avenue*	18,100	71.0
Harvill Avenue to I-215	17,400	70.8
Ramona Expressway		
I-215 to Nevada Avenue	25,000	72.4
Nevada Avenue to Webster Avenue	25,100	73.2
Webster Avenue to Indian Avenue	21,800	72.6
Indian Avenue to Perris Boulevard	22,400	72.7
Perris Boulevard to Redlands Avenue	19,200	72.0
Redlands Avenue to Evans Road*	23,000	72.8
Evans Road to Bradley Road*	16,600	71.4
Morgan Street		
Nevada Avenue to Webster Avenue*	2,300	58.4
Webster Avenue to Indian Avenue	2,300	60.3
Indian Avenue to Perris Boulevard	100	46.7
Perris Boulevard to Redlands Avenue	100	44.8

Road Segment	Existing	
	ADT ¹	dBA CNEL
Rider Street		
Nevada Avenue to Webster Avenue	2,800	59.3
Webster Avenue to Indian Avenue	2,800	59.3
Indian Avenue to Perris Boulevard	4,400	63.1
Perris Boulevard to Redlands Avenue*	6,700	63.1
Redlands Avenue to Wilson Avenue	6,700	63.1
Wilson Avenue to Evans Road*	4,300	61.1
Evans Road to Bradley Road*	4,300	61.1
Placentia Avenue		
Harvill Avenue to I-215	800	56.6
I-215 to E. Frontage Road	800	56.6
E. Frontage Road to Indian Avenue	<i>DOES NOT EXIST</i>	<i>N/A</i>
Indian Avenue to Perris Boulevard	800	55.7
Perris Boulevard to Redlands Avenue*	3,000	59.6
Redlands Avenue to Wilson Avenue*	3,000	59.6
Wilson Avenue to Murrieta Road*	<i>DOES NOT EXIST</i>	<i>N/A</i>
Murrieta Road to Evans Road*	<i>DOES NOT EXIST</i>	<i>N/A</i>
Interstate 215		
Nuevo Road to Placentia Avenue	107,200	81.7
Placentia Avenue to Ramona Expressway	107,200	81.7
Ramona Expressway to Harley Knox Boulevard	121,700	82.3
Harley Knox Boulevard to Van Buren Boulevard	129,000	82.5
Webster Avenue		
Rider Street to Morgan Street	<i>DOES NOT EXIST</i>	<i>N/A</i>
Morgan Street to Ramona Expressway*	2,800	60.2
Ramona Expressway to Markham Street*	1,500	57.5
Markham Street to Harley Knox Boulevard	<i>DOES NOT EXIST</i>	<i>N/A</i>
Indian Avenue		
E. Frontage Road to Orange Avenue	2,600	59.8
Orange Avenue to Placentia Street	2,600	59.8
Placentia Street to Rider Street	2,600	59.8
Rider Street to Morgan Street	3,900	63.5
Morgan Street to Ramona Expressway	3,100	62.5
Ramona Expressway to Markham Street	<i>DOES NOT EXIST</i>	<i>N/A</i>
Markham Street to Harley Knox Boulevard	<i>DOES NOT EXIST</i>	<i>N/A</i>
Harley Knox Boulevard to City Boundary	5,200	65.6
City Boundary to Nandina Avenue	5,200	65.6
Nandina Avenue to San Michele Road	2,800	62.9

Road Segment	Existing	
	ADT ¹	dBA CNEL
Perris Boulevard		
Nuevo Road to Citrus Avenue*	18,900	71.2
Citrus Avenue to Orange Avenue	14,100	69.9
Orange Avenue to Placentia Avenue*	12,100	68.4
Placentia Avenue to Rider Street	12,100	64.4
Rider Street to Morgan Street	15,800	65.6
Morgan Street to Ramona Expressway	11,100	64.0
Ramona Expressway to Markham Street	11,900	70.0
Markham Street to Harley Knox Boulevard	15,600	71.1
Harley Knox Boulevard to City Boundary	15,700	70.4
City Boundary to Nandina Avenue	15,700	70.4
Nandina Avenue to San Michele Road	14,600	70.0
San Michele Road to Krameria Avenue*	12,800	69.5
Redlands Avenue		
Nuevo Road to Citrus Avenue*	7,200	59.9
Citrus Avenue to Orange Avenue*	7,200	64.5
Orange Avenue to Placentia Avenue*	7,200	62.1
Placentia Avenue to Rider Street	7,200	64.5
Rider Street to Morgan Street	<i>DOES NOT EXIST</i>	<i>N/A</i>
Morgan Street to Dawes Street	7,200	64.5
Dawes Street to Ramona Expressway	7,200	64.5
Ramona Expressway to Markham Street	<i>DOES NOT EXIST</i>	<i>N/A</i>
Markham Street to Harley Knox Boulevard	<i>DOES NOT EXIST</i>	<i>N/A</i>

¹ ADT = Average Daily Traffic

* Adjacent to one or more existing sensitive receptors.

Related Regulations

To limit the population’s exposure to physically and/or psychologically damaging noise levels, the federal government, the State, various County governments, and most municipalities in California have established standards and ordinances to control noise.

Federal

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the United States Environmental Protection Agency (EPA). Noise regulations apply to the operation of construction equipment and may apply to industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility’s Health and Safety Plan, as required under OSHA, and will not be addressed further in this analysis.

U.S. Department of Housing and Urban Development

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 65 dBA Ldn as a desirable maximum exterior standard for residential units developed under HUD funding. (This level is also generally accepted within the State of California.) While HUD does not specify acceptable interior noise levels, standard construction of residential dwellings constructed under State of California Code of Regulations Title 24 standards typically provide a minimum of 20 dBA sound attenuation with the windows closed. Based on this premise, the interior Ldn should not exceed 45 dBA.

Environmental Protection Agency

The federal government regulates railroad operations in the United States. Local regulation of train noise is preempted by the federal Noise Control Act (Public Law 90-411, as amended). The EPA is charged with regulating railroad noise under the Noise Control Act. These regulations appear in the Code of Federal Regulations, Title 40, Chapter 1, Part 201. While these regulations remain in force, the EPA Office of Noise Abatement and Control was closed in 1982, leaving enforcement of the EPA regulations to the Federal Railroad Administration (FRA). Representatives of the EPA, however, have indicated that states and localities may, at their option, enforce the federal regulation. Table 4.7-1 of the Perris GP EIR and **Table 4.9-C, Perris GP EIR Summary of EPA/FRA Railroad Noise Standards** summarizes the EPA operating noise standards for older and newer railroad equipment.

The Federal Rail Administration adopted the EPA railroad noise standards as noise regulations (CFR 49, Chapter 11, part 210) for the purpose of enforcement. The standards provide specific noise limits for stationary and moving locomotives, moving railroad cars, and associated railroad operations in terms of A-weighted sound level at a specified measurement location. These regulations are pre-emptive, and states and local governments cannot set more stringent limits for railroad equipment than required by these federal regulations.

The FRA recently issued an Interim Final Rule that requires the sounding of a locomotive horn while a train is approaching and entering a public highway rail crossing, to warn approaching motorists. This rule includes an exception for circumstances in which there is not a significant risk of life or serious personal injury, use of the locomotive horn is impractical, or safety measures fully compensate for the absence of the warning provided by the horn.

Under the new rule, communities can ban train whistles if there is a low risk of collision or if they implement safety measures, such as installing crossing gates that block traffic in both directions, or install cameras that photograph people pulling around gates so that they may be issued traffic violations. The rule also allows the use of an automated horn system installed at the crossing as a substitute for the train horn. The rule also requires that the horns be sounded 15 to 20 seconds before arrival at the crossing, rather than from a quarter-mile away, and establishes a maximum 110 decibels, down from the commonly found 114 decibels.

Table 4.9-C, Perris GP EIR Summary of EPA/FRA Railroad Noise Standards

Noise Sources ¹	Operating Conditions ¹	Measured Distance (Feet)	Standard (dBA)
Non-Switcher Locomotives built on or before 12/31/79	Stationary	100	73
	Idle Stationary	100	93
	Non-Idle Moving	100	95
Switcher Locomotives plus Non-Switcher Locomotives built after 12/31/79	Stationary	100	70
	Idle Stationary	100	87
	Non-Idle Moving	100	90
Rail Cars	Speed < 45 mph	100	88
	Speed > 45 mph	100	93
	Coupling	50	92

Non-Switcher Locomotives - a road engine that is used in long-haul railcar movement; Switcher Locomotives - a smaller engine that is used in shuttling railcars; Railcar - the car(s) pulled by a train engine; Idle Stationary - sitting at idle; Stationary - sitting at idle and measured 100 feet from the center line of the track where the train is idling; Non-Idle Moving - moving along the rails.

State

California Code of Regulations, Part 2, Title 24, Appendix Chapter 35, Section 3501 establishes the State Noise Insulation Standards, which limit the interior noise level exposure within new hotels, motels, dormitories, long-term care facilities, apartment houses and dwellings. This State standard indicates that interior noise levels attributable to exterior noise sources shall not exceed 45 dB (CNEL or Ldn) in any habitable room.

Figure 4.9-2, Land Use Compatibility for Community Noise Exposure presents a land use compatibility chart for community noise prepared by the State of California, Department of Health, as adopted by the City of Perris. It identifies normally acceptable, conditionally acceptable and clearly unacceptable noise levels for siting various new land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and the needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements.

Business and Professions Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353 address buyer notification requirements for lands around airports and are available on-line at <http://www.leginfo.ca.gov/calaw.html>. Any person who intends to offer subdivided lands, common interest developments and residential properties for sale or lease within an airport influence area is required to disclose that fact to the person buying the property.

Regional

Riverside County Airport Land Use Commission

On April 26, 1984, the Riverside County ALUC adopted the Riverside County Airport Land Use Plan (1984 ALUP). This plan established land use restrictions within the Airport-Influenced Areas that were adopted by the ALUC around airports in Riverside County. In 1986, airport-influenced areas were established around March Air Force Base (which was realigned and converted to MARB on April 1, 1996). The airport-influenced area around MARB is divided into three land use planning areas (Area I, Area II and Area III).

The 1984 ALUP establishes two policies related to airport noise. These policies state the following:

- Within Area III, aviation easements will be required for all land uses. The height of the aviation easements will be from runway ground elevation within Area I, the defined approach surfaces, and from 150 feet above runway ground level elevation throughout the remainder of Areas II and III.
- New housing is to be constructed within the noise level specified by the ALUC for each airport shall be sound-proofed as necessary to achieve interior annual noise levels attributable to exterior sources, not to exceed 45 dB (CNEL of Ldn) in any habital [sic] room with windows closed.

The 2005 MARB Air Installation Compatible Use Zone (AICUZ) Study provides noise contours produced by aircraft operations at MARB, based upon the Day-Night Average A-weighted Sound Level (DNL) metric used by the United States Air Force (USAF) and Community Noise Equivalent Level (CNEL) used by the State of California. It also provides the information necessary to maximize beneficial use of the land surrounding MARB while minimizing the potential for degradation of the health and safety of the affected public. The basic objective of the AICUZ program is to achieve compatible uses of public and private lands in the vicinity of military airfields by controlling incompatible development through local actions. The MARB AICUZ provides compatible use guidelines for land use areas around the base which is provided to assist local communities in future planning and zoning activities.

Local

City of Perris Municipal Code

Chapter 16.22 of the Perris Municipal Code regulates new development including “sensitive receptors” located near arterials, railroads and the airport. “Sensitive receptors” refers to types of land uses that are adversely affected by various noise sources. Such land uses are defined in Section 16.22.020 of the Municipal Code to include: residences, schools, libraries, hospitals, churches, offices, hotels, motels, and outdoor recreational areas. Factors used to define sensitive receptors include the potential for interference with speech communication, the need for freedom from noise intrusion, the potential for sleep interference, and subjective judgment.

“Noise impacted projects” are defined as residential projects, or portions thereof, which are exposed to an exterior noise level of 60 dBA CNEL or greater. Such projects must include noise insulation design and construction assemblies that achieve an exterior-to-interior noise reduction sufficient to keep interior noise levels to a maximum of 45 dBA CNEL. This standard applies to any habitable room furnished for normal use with doors and windows closed. Specific construction techniques and materials that will achieve various levels of noise reduction are defined. Specifications for preparation of an acceptable acoustical report are also defined.

Section 7.34.060 of the Perris Municipal Code provides that “It is unlawful for any person between the hours of seven p.m. of any day and seven a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington’s birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed eighty dBA in residential zones in the city.”

City of Perris General Plan

The following are applicable policies from the City of Perris GP Noise Element related to impacts from noise:

City of Perris GP – Noise Element

- | | |
|---------------|---|
| Goal I | Future land uses compatible with projected noise environments. |
| Policy I.A | The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development. |
| Measure I.A.1 | All new development proposals will be evaluated with respect to the State Noise/Land Use Compatibility Criteria. Placement of noise sensitive uses will be discouraged within any area exposed to exterior noise levels that fall into the “Normally Unacceptable” range and prohibited within areas exposed to “Clearly Unacceptable” noise ranges. |
| Measure I.A.2 | Site plans for new residential development near roadway and train noise sources shall incorporate increased building setbacks and/or provide for sufficient noise barriers for usable exterior yard areas so that the noise exposure in those areas does not exceed the levels considered “Normally Acceptable” in The State of California Noise/Land Use Compatibility Criteria. |
| Measure I.A.3 | Acoustical studies shall be prepared for all new development proposals involving noise sensitive land uses, as defined in Section 16.22.020J of the Perris Municipal Code, where such projects are adjacent to roadways and within existing or projected roadway CNEL levels of 60 dBA or greater. |
| Measure I.A.4 | As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to |

	issue disclosure statements to be identified on all real estate transfers associated with the affected property that identifies regular exposure to roadway noise.
Measure I.A.5	No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior noise levels that exceed 70 dBA CNEL.
Goal II	Roadway improvements compatible with existing noise-sensitive land uses.
Policy II.A	Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing sensitive noise receptors.
Measure II.A.1	In the design of future roadway widening projects adjacent to existing sensitive land uses, first priority will be given to widening on the opposite side of the street where no sensitive land uses occur.
Measure II.A.2	Use of quieter roadway surface materials, incorporation of solid noise barriers between the sensitive land use and the roadway will be implemented where feasible, to reduce exterior noise levels within adjacent sensitive land uses to a maximum of 60 dBA CNEL.
Measure II.A.3	Where construction of a solid barrier is economically or practically infeasible e.g. along front yards where driveways would prohibit continuation of the wall, retrofitting of homes with noise attenuation features will be implemented to reduce interior noise to 45 dBA CNEL.
Measure II.A.4	Reduction of posted speed limits will be implemented, wherever it can be accomplished without increasing traffic congestion.
Measure II.A.5	Work proactively with Caltrans to facilitate construction of sound barriers and/or retrofit existing noise impacted structures with noise attenuation features, along those segments of Interstate 215 that abut existing noise impacted land uses.
Goal III	Future land uses compatible with noise from rail traffic.
Policy III.A	Mitigate existing and future noise impacts resulting from train movement.
Measure III.A.1	The City will work proactively with BNSF and Riverside County Transportation Commission to replace aging rail with new continuous welded rail, and to install sound-deadening matting leading to, from, and between the rails where public roads cross tracks in residential areas.
Measure III.A.2	Acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of the BNSF railroad tracks. Wherever these studies determine that exterior living areas in the proposed development plan would be exposed to noise levels of 60 dBA or greater, the plans shall incorporate setbacks and/or building design/noise insulation measures to reduce exterior noise levels to no more than 65 dBA and ensure that interior noise levels do not exceed 45 dBA CNEL.
Measure III.A.3	As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements that identify regular exposure to train noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.
Measure III.A.4	No new residential dwellings shall be placed in areas with mitigated or unmitigated exterior exposure to train noise levels in excess of 70 dBA CNEL.
Goal IV	Future land uses compatible with noise from air traffic.

Policy IV.A	Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.
Measure IV.A.1	As part of any approvals for new sensitive land uses within the 60 dBA CNEL or higher noise contours associated with March Inland Port, and for such new uses within the flight paths associated with the Perris Valley Skydiving Center, the City will require the developer to issue disclosure statements identifying exposure to regular aircraft noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.
Measure IV.A.2	All new development proposals in the noise contour areas of 60 dBA and above will be evaluated with respect to the State Noise/Land Use Compatibility Criteria.
Goal V	Future non-residential land uses compatible with noise sensitive land uses.
Policy V.A	New large scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria.
Measure V.A.1	<p>An acoustical impact analysis may be required in conjunction with a development application for industrial, commercial, or institutional facilities and to determine interior and exterior on-site noise sources including parking lots and loading areas on any property within 160 feet of the property line of any property developed with a noise sensitive land use(s) or designated in the Land Use Element of the General Plan for sensitive land use(s). This analysis shall document the nature of the proposed facility as well as all interior or exterior facility operations that would generate exterior noise.</p> <p>The analysis shall document the placement of any existing or future noise-sensitive land uses situated within the 160- foot distance. The analysis shall determine the potential noise levels that could be received at these sensitive land uses and identify specific measures necessary to ensure that noise levels to be generated in conjunction with operation of proposed commercial, industrial, or institutional facility do not exceed 60 dBA CNEL at the property line of the adjoining sensitive land use.</p> <p>No development permits or approval of land use applications shall be issued until any required acoustic analysis is received and approved by City staff.</p>

Design Considerations

Section 4.2.8, Residential Buffer Development Standards and Guidelines, of the *Perris Valley Commerce Center Guidelines* (PVCC Guidelines) states that there are two existing residential communities located within the project boundary. To recognize and blend with those communities, a Residential Buffer Zone has been established for proposed industrial, commercial and professional/office development abutting existing or proposed residential development. As part of this design standard, the following will be required:

- 50-Foot Setback - A 50-foot setback is required for commercial and industrial developments immediately abutting existing residential property lines. Other allowed uses and facilities within the 50-foot setback include landscape areas, water quality basins and conveyances, vehicle travel aisles, passenger car parking and any feature deemed unobtrusive to the neighboring residential use by the Development Services Department.

- Hours of Operation – Depending on the type of use and activities proposed by the industrial, commercial or professional/office development, the Development Services Department may impose restrictions on hours of operation for construction, as well as business operation.
- Sound Walls – Sound walls may be required to mitigate potential operational noise impacts from proposed industrial, commercial or professional/office development, as well as be constructed in the first phase of development to help shield residents from construction noise.

Section 12.0, Airport Overlay Zone, of the proposed PVCC includes standards for areas to be developed in the vicinity of MARB. Section 12.1.1, Compatibility with March Air Reserve Base, provides development standards applicable to all new development within the project area. Among others, these standards include:

- Avigation Easement – Development projects shall provide an executed avigation easement to the March Joint Powers Authority (MJPA) and the City of Perris. Avigation easement forms and instructions are available on the MJPA website, www.marchjpa.com.
- Avigation Easement Disclosure – The applicant shall provide full disclosure of the avigation easement and Notice of Airport in the Vicinity to all prospective purchasers or tenants.
- Noise Mitigation – All building office areas shall be constructed with appropriate sound mitigation measures as determined by an acoustical engineer or architect to insure appropriate interior sound levels.
- Notice of Airport in the Vicinity – Prior to approval of new development projects, all applicants shall prepare an aerial photograph identifying the location of the MARB in relationship to the project site and a Notice of Airport in the Vicinity. Notice must be provided to all potential purchasers or tenants and shall consist of the following:

NOTICE OF AIRPORT IN VICINITY

This property is located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your lease purchase and determine whether they are acceptable to you.

Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Based on Appendix G to the State *CEQA Guidelines*, impacts related noise may be considered potentially significant if the project would result in:

- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or

- exposure of people to severe noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

There is no official “industry standard” of determining significance for noise impacts. However, typically, a jurisdiction will identify either a 3 dBA or 5 dBA increase as being the threshold because these levels represent varying levels of perceived noise increases. The City of Perris Noise Element in the General Plan states that a change in 5 dBA is “readily discernable to most people in an exterior environment.” Accordingly, an increase in 5 dBA is considered significant for all sensitive receptors along road segments that do not exceed 60 dBA. Additionally, per the City of Perris, for sensitive receptors, if the noise increase would meet or exceed the City’s 60 dBA CNEL standard, then an increase of 3 dBA would also be considered significant.

Environmental Impacts

Threshold: Result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

For the purposes of this section, a substantial permanent increase at a sensitive receptor location is defined as follows:

- an increase of 3 dBA or more from existing noise levels where the 60 dBA noise standard for sensitive receptors is exceeded; and/or
- an increase of 5 dBA or more from existing noise levels at all other sensitive receptor locations.

The proposed project will contribute noise to the existing environment through the addition of traffic on local streets. Because the proposed PVCC represents a long-range plan for future development within the project area, potential traffic-related noise impacts will occur in conjunction with those from other development within the City of Perris and surrounding areas that will occur during the same period of time. Therefore, off-site noise levels were calculated along road segments in the project vicinity for existing conditions (**Table 4.9-B**) and for project buildout (**Table 4.9-E**) which includes traffic generated by the project and projected concurrent area-wide development.

Future noise impacts resulting from vehicular traffic on roadways were modeled CNEL levels were calculated utilizing the road segment speed and vehicle mix for the route types identified in Appendix D of the City of Perris General Plan Noise Element at a uniform but arbitrary distance of 100 feet from roadway centerline. The site is treated as a “hard” site, allowing a 3 dB reduction for each doubling of the distance. The vehicle mixes for the routes types used to calculate the vehicular noise impacts is shown in **Table 4.9-D, City of Perris Standard Vehicle Mix (Percent)**.

Table 4.9-D, City of Perris Standard Vehicle Mix (Percent)

Route Type	Auto	Medium Truck	Heavy Truck
Type 1	95.22	3.24	1.54
Type 2	90.94	4.06	5.00
Type 5	86.80	6.15	7.05

Twenty-one of the 79 roadway segments that were analyzed are adjacent to one or more existing sensitive receptors. An increase of 3 dBA or greater above that of existing levels is considered substantial for those roadway segments adjacent to sensitive receptors that exceed 60 dBA; while an increase of 5 dBA or greater

is considered significant for all other roadways adjacent to sensitive receptors that do not exceed 60 dBA. **Table 4.9-E, Noise Levels at 100 Feet from Centerline Under Buildout Conditions**, shows the calculated CNEL at an arbitrary distance of 50 feet from the centerline of each road at project buildout.

As shown in **Table 4.9-E**, at project buildout, 12 out of the 79 analyzed roadway segments are above the level of significance. The 12 roadways include Ramona Expressway from Redlands Avenue to Evans Road and from Evans Road to Bradley Road; Rider Street from Evans Road to Bradley Road; Placentia Avenue from Perris Boulevard to Redlands Avenue, from Redlands Avenue to Wilson Avenue, from Wilson Avenue to Murrieta Road, and from Murrieta Road to Evans Road; Perris Boulevard from Orange Avenue to Placentia Avenue and from San Michele Road to Krameria Avenue; and Redlands Avenue from Nuevo Road to Citrus Avenue, from Citrus Avenue to Orange Avenue and from Orange Avenue to Placentia Avenue.

It should be noted that the noise increases along the analyzed roadway segments of Placentia Avenue from Wilson Avenue to Murrieta Road and From Murrieta Road to Evans Road (adjacent to sensitive receptors) are solely due to the fact that these roadway segments do not currently exist and therefore there is no existing noise level.

Table 4.9-E, Noise Levels at 100 Feet from Centerline Under Buildout Conditions

Road Segment	Buildout		
	ADT	dBA CNEL	Increase over Existing
Harley Knox Boulevard (Oleander Avenue)			
I-215 to Western Way	16,700	69.8	3.2
Western Way to Patterson Avenue	16,700	69.8	2.1
Patterson Avenue to Webster Avenue	13,800	69.0	2.2
Webster Avenue to Indian Avenue*	8,000	66.6	-0.1
Indian Avenue to Perris Boulevard	7,700	66.5	2.4
Perris Boulevard to Redlands Avenue	5,700	63.5	66.5
Redlands Avenue to Evans Road	5,700	63.5	66.5
Markham Street			
Patterson Avenue to Webster Avenue	2,200	56.9	1.6
Webster Avenue to Indian Avenue	3,100	58.4	3.1
Indian Avenue to Perris Boulevard	3,100	58.4	4.1
Perris Boulevard to Redlands Avenue	1,500	55.3	55.3
Cajalco Expressway			
Day Street to Seaton Avenue*	27,800	72.8	1.6
Seaton Avenue to Harvill Avenue*	30,900	73.3	2.3
Harvill Avenue to I-215	39,700	74.4	3.6
Ramona Expressway			
I-215 to Nevada Avenue	61,400	76.3	3.9
Nevada Avenue to Webster Avenue	48,700	76.1	2.9
Webster Avenue to Indian Avenue	45,600	75.8	3.2
Indian Avenue to Perris Boulevard	41,500	75.4	2.7
Perris Boulevard to Redlands Avenue	44,900	75.7	3.7
Redlands Avenue to Evans Road*	52,300	76.4	3.6
Evans Road to Bradley Road*	43,100	75.5	4.1
Morgan Street			

Road Segment	Buildout		
	ADT	dBA CNEL	Increase over Existing
Nevada Avenue to Webster Avenue*	2,400	58.6	0.2
Webster Avenue to Indian Avenue	2,200	60.1	-0.2
Indian Avenue to Perris Boulevard	4,800	63.5	16.8
Perris Boulevard to Redlands Avenue	7,100	63.3	18.5
Rider Street			
Nevada Avenue to Webster Avenue	4,200	61.0	1.7
Webster Avenue to Indian Avenue	3,900	60.7	1.4
Indian Avenue to Perris Boulevard	4,800	63.5	0.4
Perris Boulevard to Redlands Avenue*	4,200	61.0	-2.1
Redlands Avenue to Wilson Avenue	4,200	61.0	-2.1
Wilson Avenue to Evans Road*	4,000	60.8	-0.3
Evans Road to Bradley Road*	11,400	65.4	4.3
Placentia Avenue			
Harvill Avenue to I-215	19,100	70.4	13.8
I-215 to E. Frontage Road	15,100	69.4	12.8
E. Frontage Road to Indian Avenue	32,300	71.8	71.8
Indian Avenue to Perris Boulevard	31,500	70.0	14.3
Perris Boulevard to Redlands Avenue*	6,600	63.0	3.4
Redlands Avenue to Wilson Avenue*	6,700	63.1	3.5
Wilson Avenue to Murrieta Road*	6,700	64.2	64.2
Murrieta Road to Evans Road*	5,900	63.6	63.6
Interstate 215			
Nuevo Road to Placentia Avenue	165,500	83.6	1.9
Placentia Avenue to Ramona Expressway	169,500	83.7	2.0
Ramona Expressway to Harley Knox Boulevard	185,500	84.1	1.8
Harley Knox Boulevard to Van Buren Boulevard	189,200	84.2	1.7
Webster Avenue			
Rider Street to Morgan Street	1,300	56.8	56.8
Morgan Street to Ramona Expressway*	2,100	58.9	-1.3
Ramona Expressway to Markham Street*	2,100	58.9	1.4
Markham Street to Harley Knox Boulevard	5,600	63.2	63.2
Indian Avenue			
E. Frontage Road to Orange Avenue	6,700	64.0	4.2
Orange Avenue to Placentia Street	5,700	63.3	3.5
Placentia Street to Rider Street	5,600	63.2	3.4
Rider Street to Morgan Street	2,100	60.8	-2.7
Morgan Street to Ramona Expressway	2,100	60.8	-1.7
Ramona Expressway to Markham Street	3,200	62.7	62.7
Markham Street to Harley Knox Boulevard	4,500	64.1	64.1
Harley Knox Boulevard to City Boundary	4,300	64.7	-0.9
City Boundary to Nandina Avenue	13,800	69.8	4.2
Nandina Avenue to San Michele Road	13,800	69.8	6.9
Perris Boulevard			
Nuevo Road to Citrus Avenue*	19,500	71.3	0.1
Citrus Avenue to Orange Avenue	19,400	71.3	1.4
Orange Avenue to Placentia Avenue*	26,600	67.8	3.4

Road Segment	Buildout		
	ADT	dBA CNEL	Increase over Existing
Placentia Avenue to Rider Street	27,200	67.9	3.5
Rider Street to Morgan Street	27,300	67.9	2.4
Morgan Street to Ramona Expressway	26,200	67.8	3.7
Ramona Expressway to Markham Street	27,600	73.6	3.6
Markham Street to Harley Knox Boulevard	29,600	73.9	2.8
Harley Knox Boulevard to City Boundary	36,900	74.1	3.7
City Boundary to Nandina Avenue	38,800	74.3	3.9
Nandina Avenue to San Michele Road	38,500	74.3	4.3
San Michele Road to Krameria Avenue*	38,500	74.3	4.8
Redlands Avenue			
Nuevo Road to Citrus Avenue*	19,300	64.2	4.3
Citrus Avenue to Orange Avenue*	16,400	68.0	3.5
Orange Avenue to Placentia Avenue*	22,800	67.1	5.0
Placentia Avenue to Rider Street	22,900	69.5	5.0
Rider Street to Morgan Street	17,200	68.3	68.3
Morgan Street to Dawes Street	15,300	67.7	3.2
Dawes Street to Ramona Expressway	15,300	67.7	3.2
Ramona Expressway to Markham Street	14,100	67.4	67.4
Markham Street to Harley Knox Boulevard	12,500	66.9	66.9

* Adjacent to one or more existing sensitive receptors.

Numbers in bold denote a significant increase of 3 dBA or greater when adjacent to sensitive receptors and exceeding 60 dBA or of 5 dBA or greater when adjacent to sensitive receptors, but less than 60 dBA.

Since the maximum off-site traffic noise impact due to project-related traffic exceeds both 60 dBA and the 3.0 dBA significance threshold along 12 roadway segments adjacent to sensitive receptors, the proposed project will result in substantial increases in the ambient noise environment at project buildout and therefore, the **potential project-related noise impacts are considered significant and mitigation measures to reduce project-related traffic noise impacts to the construction of sensitive receptors along these road segments would be required** (see MM Noise 5).

Threshold: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Construction noise represents temporary rather than permanent changes in ambient noise levels. Construction noise levels will vary from hour-to-hour and day-to-day, depending upon the equipment in use and the operations being performed, but will no longer occur once construction of the proposed PVCC project is completed. As a rule of thumb, noise from point sources, such as construction equipment, will decrease by 6 dBA for every doubling of distance away from the receptor. For example, when the construction equipment is 100 feet from the sensitive receptor, the decibel level would be 6 dBA lower than when it is 50 feet from the sensitive receptor and 12 dBA lower than the level it is at 50 feet when it is 200 feet from the sensitive receptor. Therefore, actual construction noise levels at each sensitive receptor may be somewhat less depending upon its distance from construction activity. The level of impact will depend upon several factors: 1) the distance between construction activity and the sensitive receptors, 2) the types of equipment used, and 3) the hours of construction operations, among others.

Two types of short-term noise impacts will occur during construction of individual developments within the PVCC project. First, the transport of workers and construction equipment to implementing project areas will incrementally increase noise levels on access roads leading to the areas. Workers and construction equipment will use existing routes. Although there will be a relatively high single event noise exposure potential from passing trucks (i.e., to 86 L_{max} dBA at 50 feet), short-term intermittent noise from trucks would be minor and less than significant when averaged over a longer period of time¹. In addition, truck traffic on public roads is regulated by federal and state governments and is exempted from local government regulations. Therefore, short-term construction-related noise associated with worker commute and equipment transport to the project site will be **less than significant**.

The second type of short-term noise impact is related to noise generated during excavation, grading and building erection on the project site which would result in potential noise impacts to off-site sensitive receptors and to on-site sensitive receptors if they were to occupy the site while later phases of construction were continuing. Construction is performed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. Thus noise levels will fluctuate depending upon construction phase, equipment type, duration of equipment use, distance between the noise source and receptor, and the presence or absence of noise attenuation structures.

The site preparation phase, which includes excavation and grading of a site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery (e.g., backhoes, bulldozers, draglines, and front loaders) and earthmoving and compacting equipment (e.g., compactors, scrapers, and graders). Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by 3–4 minutes at lower power settings. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators, can reach significant levels ranging from 70 dBA to 105 dBA at 50 feet from noise source (**Figure 4.9-5, Typical Construction Equipment Noise Levels**).

Because the PVCC only sets forth broad parameters for new development and does not identify the timing, size, use or location of individual implementing development projects, it would be speculative to identify the temporary noise impact upon any specific sensitive receptor because the specific construction-related noise impacts of any individual development project cannot be quantified at this time. Nevertheless, it is known that as new development and redevelopment occurs over time, each individual project will generate noise during their construction phases. Noise levels will vary with the type of equipment and size of the active construction zone. Assuming that construction was to occur for 8 hours a day and the CNEL is calculated at 84 dBA at 50 feet, the 65-dBA CNEL contour would fall at a distance of about 446 feet. (Perris GP Noise Element, p.69)

The proposed project will result in potentially significant impacts. However, Section 7.34.060 of the Perris Municipal Code provides that “It is unlawful for any person between the hours of seven p.m. of any day and seven a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed eighty dBA in residential zones in the city.” This municipal code provision limits the days and hours of construction activity in order to avoid disturbances during the hours when persons are most sensitive to noise including recognized sleep hours for residences. Because construction activities are

¹ Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (Ldn). As discussed above, these are 24-hour weighted measurements of community noise. Under these 24-hour measurements individual high noise events are averaged with periods of lower noise levels and quiet periods. Therefore, 24-hour averages result in noise levels that are lower than the individual high noise events.

typically limited to weekdays, during daylight hours, this noise impact is considered a nuisance or annoying, rather than a significant impact. Continued compliance with these mandatory regulatory restrictions will reduce construction noise impacts to a level considered **less than significant**.

Additionally, as provided under Related Regulations, Section 4.2.8, Residential Buffer Development Standards and Guidelines, of the PVCC Guidelines provide that the Development Services Department may impose restrictions on hours of operation for construction, and sound walls may be required to be constructed in the first phase of development to help shield residents from construction noise.

Construction-related noise can be further reduced by assuring that construction staging areas are not located close to sensitive receptors and by equipping construction equipment with properly operating and maintained mufflers; as required by mitigation measures **MM Noise 1** through **MM Noise 4**, below. Therefore, impacts associated with temporary noise associated with construction activities are considered **less than significant, with the incorporation of mitigation measures listed below; and the proposed project will not result in a substantial temporary or periodic increase in ambient noise levels above levels existing without the project.**

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EQUIPMENT		NOISE LEVEL (dBA) AT 50 FEET					
		60	70	80	90	100	110
EARTH MOVING	Compactors (Rollers)			75-80			
	Front Loaders			75-85			
	Backhoes			75-85	85-90		
	Tractors			75-80	80-90	90-95	
	Scrapers, Graders			75-85	85-90		
	Pavers				85-90	90-95	
	Trucks				80-90	90-95	
MATERIAL HANDLING	Concrete Mixers			75-80	80-85		
	Concrete Pumps				80-85		
	Cranes (Moveable)			75-80	80-85		
	Cranes (Derrick)				85-90		
STATIONARY	Pumps		65-70				
	Generators			75-80	80-85		
	Compressors			75-80	80-85		
IMPACT EQUIPMENT	Pneumatic Wrenches				80-85		
	Jack Hammers and Rock Drills				85-90	90-95	
	Pile Drivers					95-100	100-105
OTHER	Vibrators		65-70	70-75			
	Saws			75-80	80-85		

Source: U.S. EPA, "Noise from Construction Equipment and Operations", 1971

**Figure 4.9-5
 Typical Construction
 Equipment Noise Levels**

Threshold: Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

Vibration refers to groundborne noise and perceptible motion. Typical sources of groundborne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernable but without the accompanying effects (e.g., shaking of a building).

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil in the vicinity of the construction site respond to these vibrations, with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels, and slight damage at the highest levels. Ground vibrations from construction activities do not often reach the levels that can damage structures, but they can achieve the audible and feelable ranges in buildings very close to the site.

Ground-borne vibration related to human annoyance is generally related to root mean square (RMS) velocity levels expressed in decibel notation (VdB). However, a major concern with regard to construction vibration is building damage. Consequently, construction vibration is generally assessed in terms of peak particle velocity (PPV). The relationship of PPV to RMS velocity is expressed in terms of the “crest factor,” defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity.

Various types of construction equipment have been measured under a wide variety of construction activities with an average of source levels reported in terms of velocity as shown in **Table 4.9-F, Vibration Source Levels for Construction Equipment**. In this table, a crest factor of 4 (representing a PPV to RMS difference of 12 VdB) has been used to calculate the approximate RMS vibration velocity levels from the PPV values. Although the table gives one level for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. The data provide a reasonable estimate for a wide range of soil conditions.

Table 4.9-F, Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft (inches/second)	RMS at 25 ft (Vdb)*
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.170	93
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

*RMS velocity in decibels (VdB) re 1 micro-inch/second

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.

The Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing

structural damage. Additionally, the FTA has determined that humans can experience vibration levels up to 80 Vdb (RMS) before being adversely affected by vibration.

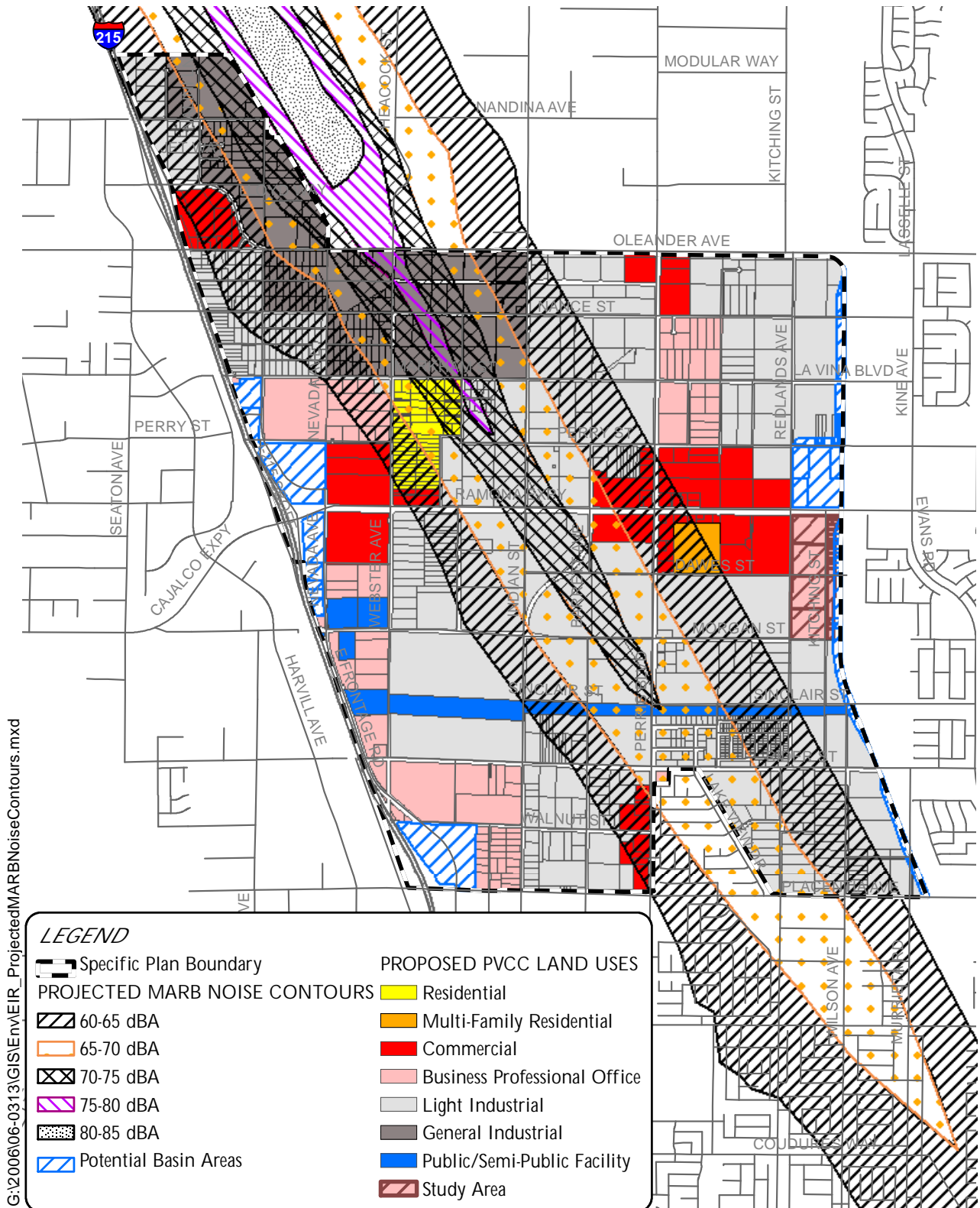
Sensitive receptors that may be affected by construction-related vibration associated with the proposed project include existing residences within the project boundary and Val Verde High School. As shown above in **Table 4.9-F**, use of heavy construction equipment (e.g., a large bulldozer) generates vibration levels of 0.089 PPV or 87 RMS at a distance of 25 feet. Vibration levels at these receptors would not exceed the potential building damage threshold of 0.5 PPV.

Ground-borne vibration attenuates quickly with distance and the RMS level from heavy equipment would be approximately 79 RMS at 60 feet. The majority of construction activity would be more than 60 feet from these residential structures and from Val Verde High School would not be considered annoying. Additionally, Section 7.34.060 of the Municipal Code limits the hours of construction to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction activities are permitted outside of these hours and on Sundays and legal holidays, except for Columbus Day and Washington's Birthday. Because construction activities are typically limited to weekdays, during daylight hours, this noise impact is considered a nuisance or annoying, rather than a significant impact. Continued compliance with these restrictions will reduce construction noise impacts to a level considered less than significant. Therefore, potential impacts upon persons or structures due to construction-related vibration will be considered **less than significant**.

***Threshold:** For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.*

As shown in **Figure 4.9-6, Projected Noise Contours for March ARB**, portions of the project site fall within projected MARB's CNEL noise contour that range from 60 dBA up to 80 dBA, as depicted in the 2005 MARB AICUZ Study. Section A.7 of the Appendices to the AICUZ Study states the following:

- Nearly all studies analyzing aircraft noise and residential compatibility recommend no residential uses in NZs [noise zones] above DNL [Day-Night Average A-Weighted Sound Level] 75 decibels (dB). Usually, no restrictions are recommended below NZ DNL 65 dB. Between DNL 65 and 74 dB there is currently no consensus. ... USAF land use recommendations also state that whenever possible residential land use should be below DNL 65 dB.
- Most industrial/manufacturing uses are compatible in the airfield environs. Exceptions are uses such as research or scientific activities, which require lower noise levels. Noise attenuation measures are recommended for portions of buildings devoted to office use, receiving the public, or where there is a requirement for low background noise levels.”
- The commercial/retail trade and personal and business services are compatible without restriction up to DNL 70 Db; however they are generally incompatible above DNL 80 dB. Between DNL 70 and 80 dB, noise-level-reduction measures should be included in the design and construction of buildings.
- Although recreational use has often been recommended as compatible with high noise levels, recent research has resulted in a more conservative view. Above DNL 75 dB, noise becomes a factor, which limits the ability to enjoy such uses.



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Source: County of Riverside, 2011



0 2,000 4,000
 Feet

Figure 4.9-6
Projected Noise Contours
for March ARB

The proposed PVCC includes a mix of uses consisting of commercial, business park/professional office, light industrial, general industrial, public/semi-public facilities, and single-family and multi-family residential. It should be noted that the single-family residential and multi-family residential land use designations recognize existing residential development and that the PVCC does not propose new single-family or multi-family residential land uses. **Table 4.9-G**, below, shows the ranges of noise levels from projected MARB operations that the individual land use designations within the proposed PVCC will experience as shown on **Figure 4.9-6** and compares the projected airport-related exterior noise to the matrix of exterior noise exposures considered acceptable by the Perris GP for various land uses as shown in **Figure 4.9-2**.

Table 4.9-G, PVCC Land Use/MARB Noise Compatibility

PVCC Land Uses	MARB Noise Contours	Perris GP Noise/Land Use Compatibility
Commercial	Primarily up to 65 dBA	Normally Acceptable
	Some up to 70 bBA	Conditionally Acceptable
Business Park/Professional Office	Primarily up to 65 dBA	Normally Acceptable
	Small amount up to 70 dBA	Conditionally Acceptable
Light Industrial	Primarily up to 75 dBA	Conditionally Acceptable
	Small amount up to 80 dBA	Conditionally Acceptable
General Industrial	Up to 80 dBA	Conditionally Acceptable
Public/Semi-Public Facility	Primarily up to 65 dBA	Normally Acceptable
	Small amount up to 70 dBA	Normally Acceptable
Single-Family Residential	Up to 75 dBA	Normally Unacceptable
Multi-Family Residential	Up to 65 dBA	Conditionally Acceptable

The proposed PVCC requires all developments within its boundaries to comply with the requirement that “All building office areas shall be constructed with appropriate sound mitigation measures as determined by an acoustical engineer or architect to insure appropriate interior sound levels” (Section 12.0 Airport Overlay Zone, Noise Mitigation). With this PVCC requirement, all non-residential land uses meet the noise compatibility requirements set forth in the 2005 AICUZ Study and are considered “normally acceptable” or “conditionally acceptable” by the Perris GP Noise Element. Therefore, as set forth in Section A.7 of the AICUZ Study, these uses are compatible with the exterior noise level guidelines set forth in the Perris GP and in the 1984 ALUP and with the land use compatibility policies of the 2005 MARB AICUZ Study.

In addition to falling within the CNEL noise contours for MARB, the project site is located beneath identified flight tracks for airplanes using the airfield at MARB (**Figure 4.9-7, March Air Reserve Base Flight Tracks**). As such, there is potential for single-event noise exposure levels to affect the proposed project. The exposure levels will vary dependent upon the type of aircraft and flight track flown for each operation at MARB. However, the proposed commercial, business park/professional office, light industrial, general industrial, public/semi-public facilities land uses within the proposed project are not considered to be sensitive receivers and therefore the impacts from these single-event noise levels are considered to be **below the level of significance**.

Inasmuch as the single-family and multi-family residential land use designations in the proposed PVCC are existing residential land uses and the PVCC does not propose new single-family residential or multi-family

residential land uses; the PVCC will not result in the exposure of additional people residing in the project area to excessive airport-related noise levels and impacts are considered to be **below the level of significance**.

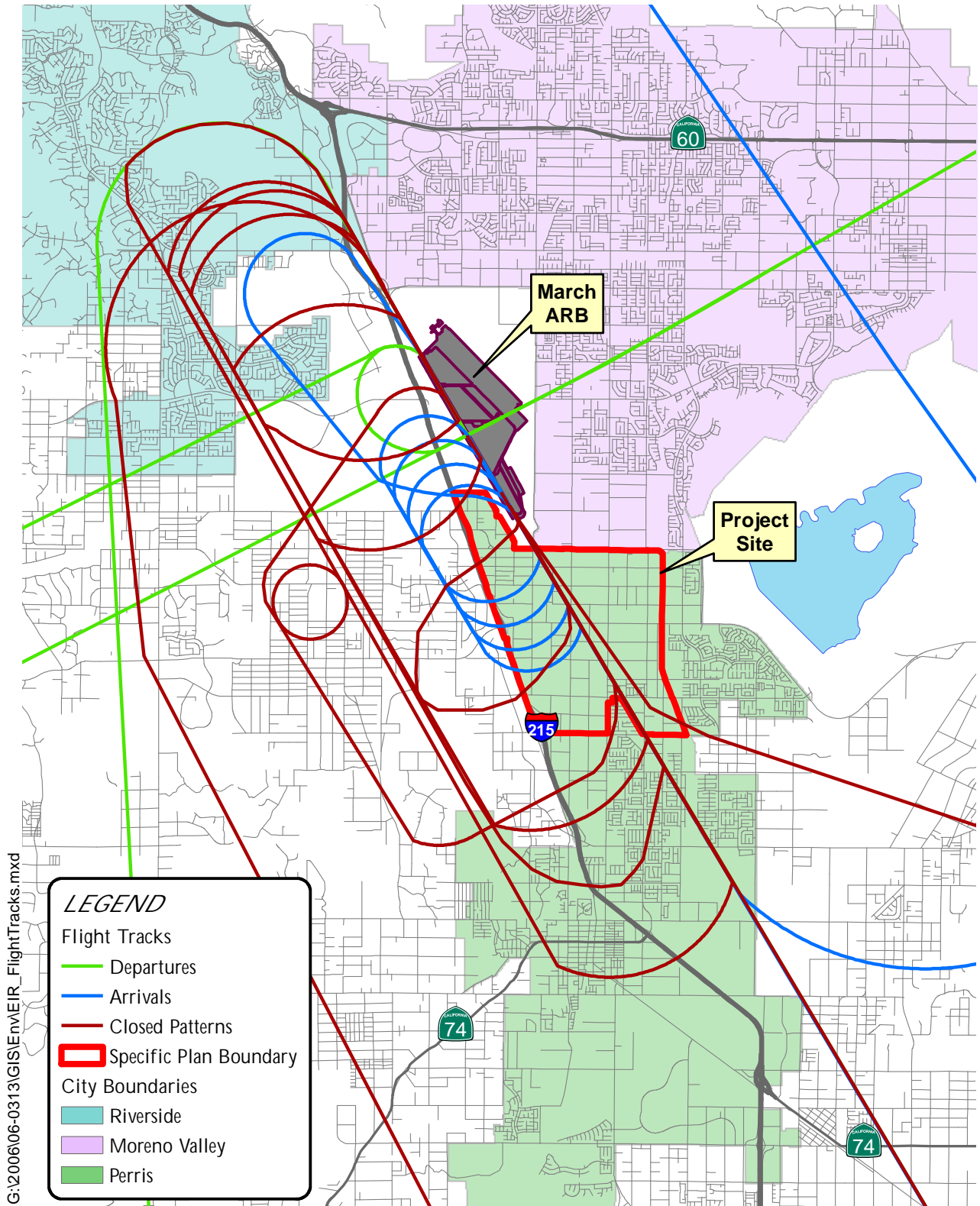
Additionally, design considerations contained within Section 12.0 (Airport Overlay Zone) of the *PVCC Guidelines* provide standards with which new development within the project must comply. These standards include requirements for the execution of avigation easements to MARB, avigation easement disclosures, noise mitigation, and notice of airport in the vicinity disclosure requirements.

Therefore, with regulatory compliance, potential impacts related to the exposure of people residing or working in the project area to excessive noise levels, when located near to an airport, are **less than significant**.

Threshold: Exposure of people to severe noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Noise impacts fall into two broad categories with respect to all types of projects and City of Perris standards: noise impacts from the project and noise impacts to the project. The first category is the noise created by the uses or traffic associated with the project. The second category of noise impacts is noise created offsite that may cause unacceptable levels of noise within buildings or outdoor areas on the project site. The offsite sources of noise that have the potential to generate the noise impact to individual implementing projects within the PVCC project site are traffic-generated noise and March Air Reserve Base.

The noise guidelines adopted by the City of Perris are included in the Perris GP and are shown in **Figure 4.9-2, Land Use Compatibility for Community Noise Exposure**, shows the matrix of exterior noise exposures considered acceptable for various land uses. According to the data provided in **Figure 4.9-2**, noise levels for noise-sensitive uses (residential, schools, etc.) up to 60 dB CNEL are considered to be “Normally Acceptable” and noise levels up to 65 dB CNEL are “Conditionally Acceptable”. For proposed commercial and business park/professional office uses “Normally Acceptable” noise levels extend up to 65 dB CNEL and “Conditionally Acceptable” noise levels extend up to 75 dB CNEL. “Normally Acceptable” noise levels for light industrial and general industrial uses extend up to 70 dB CNEL and “Conditionally Acceptable” noise levels extend up to 80 dB CNEL. In this regard, the phrase “normally acceptable” is defined by the City as “[s]pecific land use is satisfactory based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.” Likewise, the phrase “conditionally acceptable” is defined as “[n]ew construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.”



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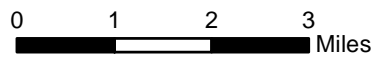


Figure 4.9-7
March Air Reserve
Base Flight Tracks

As discussed above, the proposed project will result in increases in off-site traffic-related noise levels. As shown in **Table 4.9-E**, above, road segments around the project area would have noise levels ranging from 57.7 dBA to 79.3 dBA at project buildout; with the highest noise levels along Interstate 215. Along the 18 road segments where noise levels currently exceed 60 dBA CNEL, noise levels will continue to exceed 60 dBA CNEL at buildout of the proposed project. However, along the 58 road segments that are adjacent to non-sensitive uses, the noise levels will fall within acceptable levels for existing and future land uses pursuant to the City of Perris' noise guidelines shown in **Figure 4.9-2**.

Table 4.9-G, above, shows the ranges of noise levels from projected MARB operations that the individual land use designations within the proposed PVCC will experience as shown on **Figure 4.9-6** and compares the projected airport-related exterior noise to the matrix of exterior noise exposures considered acceptable by the Perris GP for various land uses as shown in **Figure 4.9-2, Land Use Compatibility for Community Noise Exposure**. With the exception of single-family residential uses, all of the allowable uses within the proposed PVCC are considered to be "normally acceptable" or "conditionally acceptable" by the Perris GP Noise Element. It should be noted that the single-family residential and multi-family residential land use designations recognize existing residential development and that the PVCC does not propose new single-family or multi-family residential land uses.

There are no railroads located within the PVCC project site. The nearest railroad to the project site is the Burlington Northern & Santa Fe (BNSF) Railway line located on the west side of Interstate 215, which is the western boundary of the project site. That portion of the BNSF line in proximity to the project site currently has about two freight trains traveling on it daily. These trains typically consist of three diesel locomotives and about 25 freight cars and travel at maximum speeds of 20 mph. In those portions of the rail segment that have grade crossings (where the majority of the corridor's noise sensitive receptors are located), horn noise is a significant contributor to the existing noise environment. However, this portion of the railroad alignment contains very few sensitive noise receptors. (RCTC, p. 4.10-7) Noise levels measured at California & Wade Streets in 2008/2009 were 70 dBA Ldn at a distance of 258 feet distance from BNSF tracks. (RCTC, Table 4.10-5, p. 4.10-13)

Currently the Riverside County Transportation Commission is considering the extension of Metrolink service to the City of Perris, which would utilize this railroad line. According to the RCTC, 2012 opening year Metrolink operating schedules would include four trains from the South Perris Station to the Riverside Downtown Station during the morning peak, and one morning train serving reverse commute trips. In addition, two mid-day, off-peak trains would operate in each direction. During the afternoon peak, four trains would operate to the South Perris Station, and one in-bound train would operate from the South Perris Station. In all, it is anticipated that there would be a total of twelve daily trips. (RCTC, p. 2-45)

With regards to railroad-sourced noise, the Perris GP EIR, which is hereby incorporated herein by reference, determined that implementation of Perris GP policies would minimize train noise effects through methods such as working proactively with BNSF and RCTC to replace aging rail with new continuous welded rail, and install sound-deadening matting where public roads cross tracks in residential areas; acoustical and vibration studies will be prepared for all new development proposals involving noise sensitive land uses within 500 feet of BNSF railroad tracks and include mitigation measures to reduce noise/vibration to acceptable levels; disclosure statements that identify regular exposure to train noise for areas that cannot be properly mitigated; and restricting new residential development in areas where mitigated or unmitigated noise levels exceed 70 dBA CNEL. These policies are contained and detailed above in Perris GP Implementation Measures III.A.1 through III.A.4 and are applicable to any future implementing development projects located within the proposed PVCC; although the PVCC does not propose any new noise sensitive land uses.

Because the proposed PVCC only sets forth broad parameters for new development and does not identify the timing, size, use or location of individual implementing development projects, it would be speculative to identify noise impacts from individual implementing development projects upon adjacent properties because the specific noise-related impacts from any given implementing development project cannot be quantified at this time. However, Perris GP Policy V.A requires new large scale commercial and industrial facilities located within 160 feet of sensitive land uses to mitigate noise impacts to an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria. Compliance with this general plan policy will address issues regarding compatibility between future non-residential and noise sensitive land uses.

Additionally, Section 7.34.060 of the Perris Municipal Code provides that “It is unlawful for any person between the hours of seven p.m. of any day and seven a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed eighty dBA in residential zones in the city.” This municipal code provision limits the days and hours of construction activity in order to avoid disturbances during the hours when persons are most sensitive to noise including recognized sleep hours for residences. Because construction activities are typically limited to weekdays, during daylight hours, this noise impact is considered a nuisance or annoying, rather than a significant impact upon surrounding land uses.

The proposed PVCC includes a mix of uses consisting of commercial, business park/professional office, light industrial, general industrial, public/semi-public facilities, and single-family and multi-family residential; although the single-family residential and multi-family residential land use designations recognize existing residential development and the PVCC does not propose new noise-sensitive land uses. As described above, the proposed PVCC will comply with applicable Perris GP policies and City of Perris noise ordinance requirements. The future implementing development projects within the PVCC are considered to be normally acceptable” or “conditionally acceptable”. Therefore, impacts from the project will not expose people to noise levels that exceed City noise standards; impacts are considered **less than significant**.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures, which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts related to noise to below the level of significance.

To further reduce impacts associated with construction noise, the following mitigation measures shall be implemented:

MM Noise 1: During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers consistent with manufacturer’s standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

MM Noise 2: During construction, stationary construction equipment, stockpiling and vehicle staging areas will be placed a minimum of 446 feet away from the closest sensitive receptor.

MM Noise 3: No combustion-powered equipment, such as pumps or generators, shall be allowed to operate within 446 feet of any occupied residence unless the equipment is surrounded by a noise protection barrier.

MM Noise 4: Construction contractors of implementing development projects shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

MM Noise 5: New sensitive land uses, including residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, and libraries, to be located within the PVCC shall be protected from excessive noise, including existing and projected noise. Attenuation shall be provided to ensure that noise levels do not exceed an exterior standard of 60 dBA (65 dBA is conditionally acceptable) in outdoor living areas and an interior standard of 45 dBA in all habitable rooms. Specifically, special consideration shall be given to land uses abutting Ramona Expressway from Redlands Avenue to Evans Road and from Evans Road to Bradley Road; Rider Street from Evans Road to Bradley Road; Placentia Avenue from Perris Boulevard to Redlands Avenue, from Redlands Avenue to Wilson Avenue, from Wilson Avenue to Murrieta Road, and from Murrieta Road to Evans Road;. Perris Boulevard from Orange Avenue to Placentia Avenue and from San Michele Road to Krameria Avenue; and Redlands Avenue from Nuevo Road to Citrus Avenue, from Citrus Avenue to Orange Avenue and from Orange Avenue to Placentia Avenue.

Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed would create noise that could affect sensitive receptors. Impacts will come from construction noise and from increased traffic. Potential significant effects related to project construction noise will be mitigated to a level below significance with implementation of the above mitigation measures. However, the proposed project will result in noise level increases due to project-related traffic that exceeds the 3.0 dBA significance threshold along 12 roadway segments adjacent to sensitive receptors. However, with incorporation of the above mitigation measures, **noise impacts can be reduced to less than significant levels.**

4.10 Transportation and Traffic

Potential impacts related to increased hazards due to a design feature or incompatible uses and whether the proposed project will result in inadequate emergency access or parking capacity were found to be less than significant in the Initial Study/Notice of Preparation prepared for the proposed project (Appendix A). The focus of the following discussion is related to potential impacts associated with an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system; an exceedance, either individually or cumulatively, of a level of service (LOS) standard established by the county congestion management agency for designated roads or highways; and conflicts with adopted policies, plans, or programs supporting alternative transportation.

In response to the NOP, comment letters were received from the City of Moreno Valley Public Works Department, City of Riverside Planning Department, March Joint Powers Authority (MJPA), Riverside Transit Authority (RTA), and the State of California Department of Transportation (Caltrans). Caltrans, the City of Moreno Valley Public Works Department, the City of Riverside Planning Department and MJPA have requested a traffic study as part of the EIR analysis. The RTA requests that the EIR adequately address effects on transit service and the effects the project will have on RTA service. Comments and concerns regarding transit services have been incorporated into this section of the EIR. This EIR is programmatic and not project specific, and many of the specific requests by these comment letters do not pertain to this level of analysis. Further analysis will be required through Mitigation Measures which will address concerns by these letters, which have been incorporated into this section of the EIR. Additionally, as discussed below, traffic analysis was prepared as part of the existing City of Perris General Plan land uses. The change in land uses, as proposed as part of this project, generate fewer daily trip-ends than in the existing Perris General Plan land uses within the project boundary, therefore a traffic analysis was not warranted.

In addition to other reference documents, the following references were used in the preparation of this section of the DEIR:

- City of Perris, *City of Perris General Plan 2030*, July 12, 2005. (Available at www.cityofperris.org/city-hall/general-plan.html, accessed November 18, 2009.) (Perris GP)
- Hogle-Ireland, Inc., *Draft Environmental Impact Report, City of Perris General Plan 2030*, October 2004. (Available at http://www.cityofperris.org/city-hall/general-plan/General_Plan_2030.pdf, accessed November 17, 2009.) (Perris GP EIR)
- Riverside Transit Agency, *Design Guidelines For Bus Transit*, August 2004. (Available at http://www.riversidetransit.com/downloads/planningGuidelines/RTA_Design_Guidelines_v7.pdf, accessed June 6, 2011.)
- Albert A. Webb Associates, Letter regarding *Traffic Impact Study Exemption Request for Perris Valley Commerce Center Specific Plan, City of Perris, CA* to Habib Motlagh, Tri-Lake Consultants, City of Perris, February 1, 2010. (Available at the City of Perris.)
- Albert A. Webb Associates, *North Perris Road and Bridge Benefit District Analysis Report*, June 2008. (Available at http://www.cityofperris.org/business/news/northperris-bridgedist-report-v3_0308.pdf, accessed May 21, 2010.)

Setting

The Perris Valley Commerce Center Specific Plan (PVCC) area and its surroundings are in transition from agricultural land uses to a mix of commercial, industrial and business park uses. The area has access to a multi-directional freeway system via Interstate 215 that traverses north and south along the western

boundary of the project area, as shown on **Figure 4.10-1, Vicinity Map**. The project site comprises approximately 3,500 gross acres within the City of Perris. The site is located adjacent to the east side of Interstate 215, adjacent to the west side of the Perris Valley Storm Channel (PVSC), south of the March Air Reserve Base (MARB) and Riverside County Flood Control District Channel, and north of Placentia Street, as shown in **Figure 4.10-2, Project Boundary**.

Existing Conditions

Land Uses

Existing land uses surrounding the project site include the following:

North: Vacant land, MARB and industrial uses within Moreno Valley jurisdiction

South: Industrial, residential and vacant land

East: Perris Valley Storm Channel, residential and vacant land

West: Vacant property, industrial uses, Interstate 215 and an existing rail line within Riverside County jurisdiction

Currently, a large portion of the project site is undeveloped land that is being used for sod farming. The remaining portions contain existing development including warehousing/distribution facilities, neighborhood and community commercial, small-scale industrial facilities, a rural residential neighborhood and a mobile home park.

Roadway System

There are two primary transportation arteries located within the project site: Interstate 215 and Ramona Expressway. Interstate 215, traversing north to south, is the only state highway located within the project area and parallels its western boundary. Interstate 215 currently has four lanes in each direction and is owned and maintained by the Caltrans. Ramona Expressway traverses east to west through the project site and is currently a four-lane expressway owned and maintained by the City of Perris.

The existing major roadways located within the project’s boundaries, their number of lanes and general plan classifications are listed in **Table 4.10-A, Existing Primary Roadways Within Project Boundary**.

Table 4.10-A, Existing Primary Roadways Within Project Boundary

Roadway	Classification	Number of Lanes	Primary Direction
Harley Knox Boulevard (Oleander Avenue)	Primary Arterial	2-4	East-West
Markham Street	Secondary Arterial	2	East-West
Ramona Expressway	Expressway	4	East-West
Morgan Street	Secondary Arterial	2-4	East-West
Rider Street	Secondary Arterial	2	East-West
Placentia Avenue	Primary Arterial	2-4	East-West
Interstate 215	Freeway	6	North-South
Webster Avenue	Secondary Arterial	2	North-South
Indian Avenue	Secondary Arterial	2-4	North-South
Perris Boulevard	Primary Arterial	2-4	North-South
Redlands Avenue	Secondary Arterial	2-4	North-South

Source: City of Perris General Plan Circulation Element and aerial photography



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Imagery: Eagle Aerial, 2010.

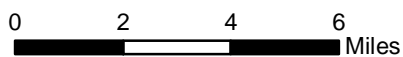
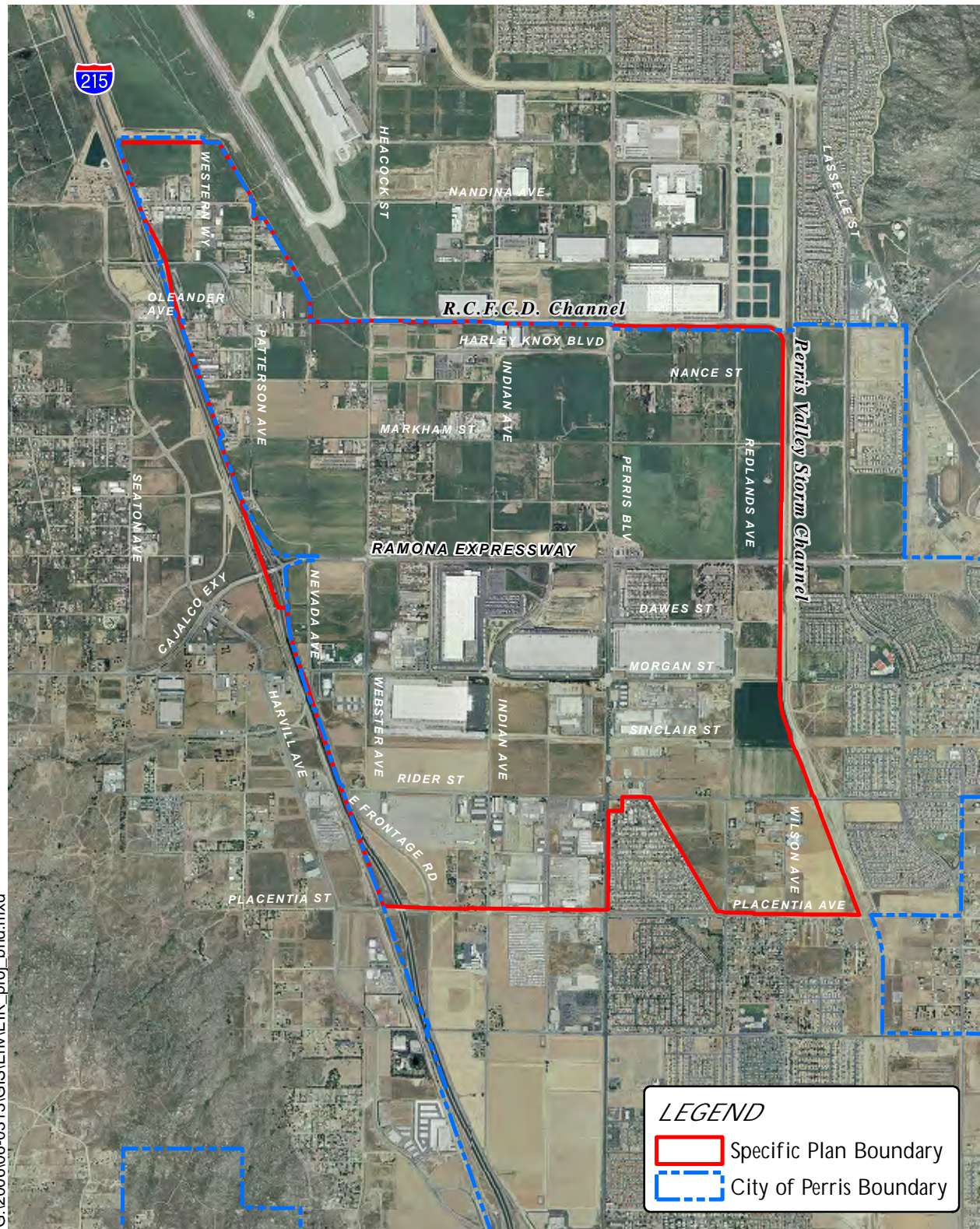


Figure 4.10-1
Vicinity Map



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Imagery: Eagle Aerial, 2010.



0 2,000 4,000 6,000
Feet

Figure 4.10-2
Project Boundary

Level of Service Analysis:

The following traffic impact analysis uses the level of service (LOS) system of categorization to evaluate the project area roadway segments. Traffic engineers use this LOS system of categorization to describe how well a roadway is functioning. The LOS measures several factors including operating speeds, freedom to maneuver, traffic interruptions, and average vehicle delay at intersections. The LOS approach uses a ranking system, similar to education, with Level “A” being best and Level “F” being worst. **Table 4.13-B, Level of Service (LOS) Standards**, describes LOS levels in terms the average driver can understand.

Table 4.10-B, Level of Service (LOS) Standards

Level of Service (LOS)	Definition
A	Represents free flow: Individual vehicles are virtually unaffected by the presence of others in the traffic stream.
B	Is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
C	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with other vehicles in the traffic stream.
D	Is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
E	Represents operating conditions at or near the level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.
F	Is used to define forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic approaches a point that exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable.

Source: Perris GP Circulation Element, Table CE-1 (from the “Highway Capacity Manual,” Highway Research Board Special Report 209, National Research Council, Washington D.C., 2000.)

Average Daily Traffic

Existing average daily traffic (ADT) levels within the PVCC were determined by utilizing traffic counts at the affected roadway segments, obtained from 2002 to 2008, and applying a two percent per year growth factor through year 2010. The resulting existing ADT volumes and associated LOS are provided in **Table 4.10-C, Existing Average Daily Traffic and Levels of Service Within Study Area**.

Table 4.10-C, Existing Average Daily Traffic and Levels of Service Within Study Area

Roadway	Number of Lanes	ADT	LOS
Harley Knox Boulevard (Oleander Avenue)			
I-215 to Western Way	4	7,900	A
Western Way to Patterson Avenue	4	10,300	A
Patterson Avenue to Webster Avenue	2	8,400	A
Webster Avenue to Indian Avenue	2	8,100	A
Indian Avenue to Perris Boulevard	2	4,500	A
Perris Boulevard to Redlands Avenue	N/A	N/A	N/A
Redlands Avenue to Evans Road	N/A	N/A	N/A

Roadway	Number of Lanes	ADT	LOS
Markham Street			
Patterson Avenue to Webster Avenue	2	1,500	A
Webster Avenue to Indian Avenue	2	1,500	A
Indian Avenue to Perris Boulevard	2	1,200	A
Perris Boulevard to Redlands Avenue	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Cajalco Expressway			
Day Street to Seaton Avenue	2	19,000	E
Seaton Avenue to Harvill Avenue	2	18,100	E
Harvill Avenue to I-215	4	17,400	≤C
Ramona Expressway			
I-215 to Nevada Avenue	4	25,000	B
Nevada Avenue to Webster Avenue	4	25,100	B
Webster Avenue to Indian Avenue	4	21,800	A
Indian Avenue to Perris Boulevard	4	22,400	A
Perris Boulevard to Redlands Avenue	4	19,200	A
Redlands Avenue to Evans Road	4	23,000	A
Evans Road to Bradley Road	4	16,600	A
Morgan Street			
Nevada Avenue to Webster Avenue	2	2,300	A
Webster Avenue to Indian Avenue	4	2,300	A
Indian Avenue to Perris Boulevard	2	100	A
Perris Boulevard to Redlands Avenue	2	100	A
Rider Street			
Nevada Avenue to Webster Avenue	2	2,800	A
Webster Avenue to Indian Avenue	2	2,800	A
Indian Avenue to Perris Boulevard	2	4,400	A
Perris Boulevard to Redlands Avenue	2	6,700	A
Redlands Avenue to Wilson Avenue	2	6,700	A
Wilson Avenue to Evans Road	2	4,300	A
Evans Road to Bradley Road	4	4,300	A
Placentia Avenue			
Harvill Avenue to I-215	4	800	≤C
I-215 to E. Frontage Road	4	800	A
E. Frontage Road to Indian Avenue	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Indian Avenue to Perris Boulevard	2	800	A
Perris Boulevard to Redlands Avenue	4	3,000	A
Redlands Avenue to Wilson Avenue	2	3,000	A
Wilson Avenue to Murrieta Road	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Murrieta Road to Evans Road	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
I-215			
Nuevo Road to Placentia Avenue	6	107,200	E
Placentia Avenue to Ramona Expressway	6	107,200	E
Ramona Expressway to Harley Knox Blvd	6	121,700	F
Harley Knox Boulevard to Van Buren Blvd	6	129,000	F
Webster Avenue			
Rider Street to Morgan Street	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Morgan Street to Ramona Expressway	2	2,800	A

Roadway	Number of Lanes	ADT	LOS
Ramona Expressway to Markham Street	2	1,500	A
Markham Street to Harley Knox Boulevard	N/A	N/A	N/A
Indian Avenue			
E. Frontage Road to Orange Avenue	2	2,600	A
Orange Avenue to Placentia Street	2	2,600	A
Placentia Street to Rider Street	2	2,600	A
Rider Street to Morgan Street	2	3,900	A
Morgan Street to Ramona Expressway	4	3,100	A
Ramona Expressway to Markham Street	N/A	N/A	N/A
Markham Street to Harley Knox Boulevard	N/A	N/A	N/A
Harley Knox Boulevard to City Boundary	2	5,200	A
City Boundary to Nandina Avenue	2	5,200	≤C
Nandina Avenue to San Michele Road	2	2,800	≤C
Perris Boulevard			
Nuevo Road to Citrus Avenue	6	18,900	A
Citrus Avenue to Orange Avenue	4	14,100	A
Orange Avenue to Placentia Avenue	4	12,100	A
Placentia Avenue to Rider Street	4	12,100	A
Rider Street to Morgan Street	4	15,800	A
Morgan Street to Ramona Expressway	4	11,100	A
Ramona Expressway to Markham Street	2	11,900	B
Markham Street to Harley Knox Boulevard	2	15,600	D
Harley Knox Boulevard to City Boundary	2	15,700	D
City Boundary to Nandina Avenue	2	15,700	D
Nandina Avenue to San Michele Road	2	14,600	≤C
San Michele Road to Krameria Avenue	2	12,800	≤C
Redlands Avenue			
Nuevo Road to Citrus Avenue	2	7,200	A
Citrus Avenue to Orange Avenue	4	7,200	A
Orange Avenue to Placentia Avenue	4	7,200	A
Placentia Avenue to Rider Street	2	7,200	A
Rider Street to Morgan Street	N/A	N/A	N/A
Morgan Street to Dawes Street	2	7,200	A
Dawes Street to Ramona Expressway	2	7,200	A
Ramona Expressway to Markham Street	N/A	N/A	N/A
Markham Street to Harley Knox Boulevard	N/A	N/A	N/A

Alternative Transportation

The City of Perris encourages the use of mass transit whenever possible. Bus transit is available and the City is currently planning for the extension of Metrolink facilities into the area.

Bus Service

Regional bus service in western Riverside County is provided by the Riverside Transit Agency (RTA). Currently, RTA operates two bus routes that travel through the project area: Routes 19 and 41, as shown on **Figure 4.10-3, Mass Transit Routes**.

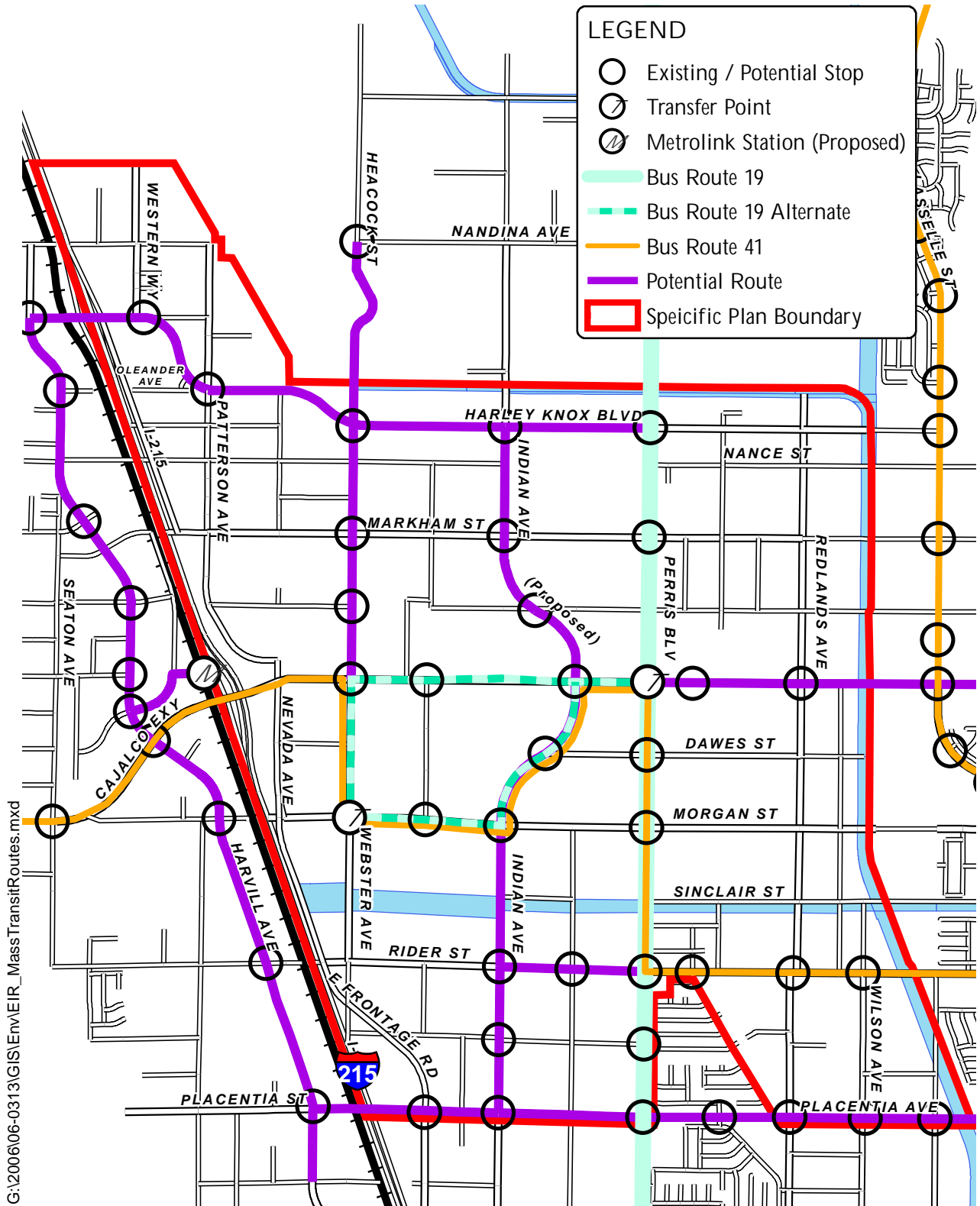
- **Route 19** travels through the project area along Perris Boulevard connecting the Moreno Valley Mall to the City of Perris Civic Center and Downtown. This route includes alternate routing that traverses west on the Ramona Expressway and makes a loop, following Indian Avenue, Morgan Street, Webster Avenue and then back to the Ramona Expressway. This loop provides service to several large employers and a high school.
- **Route 41** traverses through the project area along portions of Ramona Expressway, Webster Avenue, Morgan Street, Indian Avenue, Perris Boulevard and Rider Street as connects the Mead Valley Community Center to the Riverside County Regional Medical Center in Moreno Valley by traveling through the City of Perris.

In addition to these scheduled RTA routes, there are several roadways with the potential to be utilized for future routes or the expansion of existing routes. Consideration of future or modified routes will be at the discretion of RTA based upon a range of factors such as development intensity, employee density, potential for ridership, and fiscal impacts. In anticipation of future service throughout the project site, RTA has requested development consideration for standards including, but not necessarily limited to, bus turnout criteria and transit amenities, such as seating and shelters, as defined in RTA's *Design Guidelines for Bus Transit*.

Metrolink

The Perris Valley Rail Line is planned by the Riverside County Transportation Commission as part of the regional Metrolink system. This rail line will serve commuters in the southeastern area of Riverside County providing an alternative means of transit to the greater Los Angeles area. This 23-mile rail line will parallel the west side of Interstate 215 and is expected to begin operation in 2011 with a projected daily ridership of 5,700 by 2025. Because the City of Perris has seen such a tremendous growth in recent years, three Metrolink stations have been planned along the Perris Valley Rail Line that will eventually serve the City of Perris. The Ramona Expressway Station will serve North Perris; the Perris Station/Historic Perris Depot will serve the Downtown area; and the South Perris Station will be located on the northwest corner of the Case Road/Interstate 215 Interchange to serve South Perris and points beyond.

The Ramona Expressway Station will be located in very close proximity to the PVCC area, west of Interstate 215 and north of Cajalco Road. It will serve commuters from the Hemet and San Jacinto areas from the east and the Mead Valley community from the west and Perris, allowing travel to the Los Angeles area as an alternative to the highway system. This line will also provide alternative means of travel for the PVCC employees living in the local region.



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Source: City of Perris General Plan, 2008

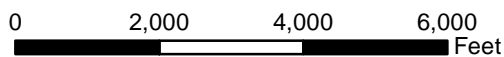


Figure 4.10-3
Mass Transit Routes

Related Regulations

The City of Perris “Street Fee” was enacted by City Resolution No. 2224, and authorizes the City to impose street improvement fees for the purposes of defraying all or a portion of the cost of public facilities related to a development project. The fees owed by the project will be based on the current fee rate at the time of construction.

Levels of Service

The Perris GP establishes Circulation Policies for proposed projects. The City of Perris has established a city-wide target of a minimum LOS D along all City maintained roads (including intersections) and LOS D along Interstate 215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS E, at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at Interstate 215 freeway ramps. These policy standards address Road Rights-of-Way and Dedication, Roadway Design, Alignment, Access, Intersections, On-site Road Improvements, Off-Site Road Improvements, Arterial Highways, Collector Streets, Commercial and Industrial Development, Circulation Hazards, Flooding, Dust and Blows, and, Congestion Relief/Level of Service, Parking; Pedestrian Facilities, and Bikeways.

City of Perris General Plan

The following excerpted goals and policies from the Perris GP Circulation Element, Land Use Element and Safety Element pertain to transportation and circulation and are applicable to the proposed project. The proposed project's consistency with the General Plan policies is discussed in Section 4.8 (Land Use and Planning).

City of Perris GP - Circulation Element

Policy I.A	Design and develop the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the designated Transportation System, Exhibit 4.2 Future Roadway Network.
Measure I.A.6	Require a parking facility design that minimizes visual and physical impacts while maintaining pedestrian and motorist safety and supporting adjacent activities.
Policy I.B	Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-and-ride facilities, and pedestrian facilities.
Measure I.B.1	Require on-site improvements that accommodate public transit vehicles (i.e., bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e., community centers, tourist, and employment centers).
Policy I.C:	Cooperate with local, regional, State and federal agencies to establish an efficient multi-modal circulation system.
Policy I.D	Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation.
Policy II.A	Maintain the following target Levels of Service: <ul style="list-style-type: none">• LOS D along all City-maintained roads (including intersections) and LOS D along Interstate 215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS E, at intersections of any

	Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at Interstate-215 freeway ramps.
	<ul style="list-style-type: none">• LOS E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.
Measure II.A.I	Utilize existing infrastructure (lanes, median islands, turn lanes, available right-of-way) and rights-of-way to the maximum extent practicable.
Policy II.B	Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.
Measure II.B.I	Develop a Standard Specification for the City of Perris that includes the following: <ul style="list-style-type: none">• Cross sections and classifications identified in Exhibit CE-11;• Facilities that accommodate bus operations, including bus turn outs, and other design features;• Design guidelines that define the minimum design and technical criteria for the analysis and design of roadway facilities. Such design guidelines shall identify intersection improvements consistent with the lane geometrics referenced in Table CE-7.• Limit access points and intersections of streets and highways based upon the road's General Plan classification and function to reduce motorist conflict and enhance continual traffic flow. Access points must be located at a sufficient distance from the major intersections and from the access points on the adjoining parcels to allow for safe, efficient operation.• Roadway pavement cross-section to accommodate large trucks where extensive truck travel involving regional movement of bulk goods is anticipated
Measure II.B.2	Allow roundabouts or other innovative design solutions when a thorough traffic impact assessment has been conducted demonstrating that such an intersection design alternative would manage traffic flow and improve safety.
Measure II.B.3	Restrict on-street parking to reduce traffic congestion and improve safety in appropriate locations such as expressways and arterials, and require all new development to provide adequate off-street parking based on expected parking needs.
Policy III.A	Implement a transportation system that accommodates and is integrated with new and existing development and is consistent with financing capabilities.
Measure III.A.I	Distribute the costs of transportation system improvements for new development equitably among beneficiaries through the City's Traffic Impact Fee Program.
Measure III.A.2	Use redevelopment agreements, revenue sharing agreements, tax allocation agreements, and the CEQA process as tools to ensure that new development pays a fair share of the costs to provide local and regional improvements and to mitigate cumulative traffic impacts.
Measure III.A.4	Require developers to be primarily responsible for the improvements of the streets and highways of the commercial, industrial, and residential areas that are being developed. These may include road construction or widening, installation of

- turning lanes and traffic signals, and the improvement of any drainage facility or other auxiliary facility necessary for the safe and efficient movement of traffic or the protection of road facilities.
- Policy IV.A: Provide non-motorized alternatives for commuter travel as well as recreational opportunities that maximize safety and minimize potential conflicts with pedestrians and motor vehicles.
- Policy V.A Provide for safe movement of goods along the street and highway system.
- Measure V.A.3 Monitor commercial truck movements and operations in the City and establish new truck routes away from noise-sensitive areas, where feasible.
- Measure V.A.4 Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and truck through-traffic to designated routes; and distribute maps of approved truck routes to City traffic officers.
- Measure V.A.7: Require streets abutting properties in Light Industrial and General Industrial zones to conform to standard specifications for industrial collector streets to accommodate the movement of heavy trucks.
- Measure V.A.8 Provide adequate off-street loading areas for all commercial and manufacturing land uses.
- Policy VII.A Implement the Transportation System in a manner consistent with Federal, State, and local environmental quality standards and regulations.
- Measure VII.A.2 Require noise mitigation measures (e.g., wall treatments, landscape berms, and/or building and window enhancements) along freeways, expressways, and four-lane highways in order to protect adjacent noise-sensitive land uses from traffic-generated noise impacts consistent with the requirements of Title 24 of the California Codes and Regulations.
- Measure VIII.D.1 Implement the City's Transportation Control Measure (TCM) Ordinance to comply with Federal, State, regional, and local requirements.
- Measure VIII.D.3 Construct traffic signals at intersections where signal warrants have been met.
- Measure VIII.D.4 Optimize traffic operation by maintaining the spacing and operation of the traffic signals, as a coordinated system.

City of Perris GP – Land Use Element

- Policy II.A Require new development to pay its full, fair-share of the infrastructure costs.

City of Perris GP – Safety Element

- Policy II.A The City shall require roadway improvements to expedite quick and safe travel by emergency responders.

Fair Share Fee Programs

To ensure that area-wide traffic conditions do not worsen as development occurs throughout the County of Riverside, the County has established "fair share" mitigation fees which apply to projects within the City. The proposed project is subject to two major sources of off-site roadway improvement fees: the Transportation Uniform Mitigation Fee (TUMF) and the City of Perris Development Impact Fee (DIF). The proposed project will be required to pay into DIF and TUMF which will off-set the project's contribution to area-wide traffic impacts.

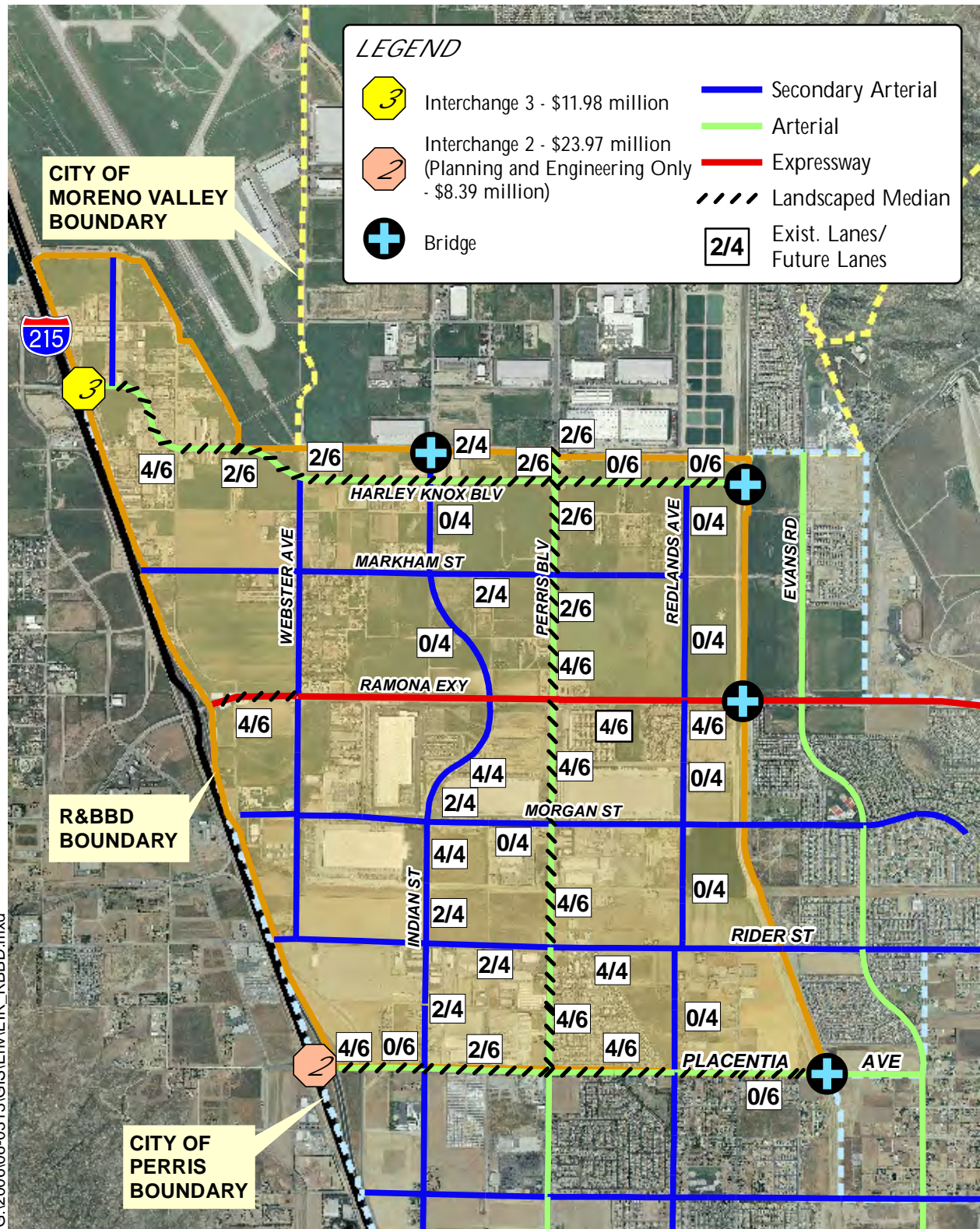
The Western Riverside Council of Governments (WRCOG) is responsible for establishing and updating the TUMF rates. WRCOG receives all fees generated from the TUMF as collected by the local jurisdictions. WRCOG invests, accounts for, and expends the fee in accordance with the TUMF ordinance, the administrative plan and applicable state laws. The TUMF is structured so that 48.7% of funds generated in each zone go back to that zone to be programmed for projects. Another 48.7% is allocated to regional inter-zone projects programmed by the Riverside County Transportation Commission (RCTC), and 2.6% is allocated for regional transit projects programmed by the Riverside Transit Agency. Thereafter, local jurisdictions implement the projects approved for each applicable area within each jurisdiction.

The City of Perris performed a comprehensive review of their DIF program and adopted an update in February 2006. Fee amounts have been determined that will finance transportation infrastructure at levels identified through the year 2030. A summary of these and their respective future rates are provided in the Traffic Study, along with a list of potentially eligible TUMF and DIF improvements in the proposed project vicinity. Fees owed to DIF by the project proponent will be based on the fees that are current when building permits are issued. Fees owed to TUMF by the project proponent will be based on the current fees when the certificate of occupancy is issued.

The North Perris Road and Bridge Benefit District (NPRBBD) encompasses approximately 3,500 acres (five square-miles) of land in north Perris, as shown in **Figure 4.10-4, North Perris Road and Bridge Benefit District**. The NPRBBD boundary is the same as that of the proposed PVCC.

The purpose of the NPRBBD is to streamline the financing of specific regional road and bridge improvements determined to provide benefit to the developing properties within the boundaries of the NPRBBD. The road and bridge improvement fee for the NPRBBD is a one-time fee paid to the City prior to recordation of a final tract or parcel map, or prior to the issuance of a building permit. The payment of the NPRBBD fee is not intended to relieve the subdivider, developer or an applicant for a building permit from the requirements imposed under other provisions or ordinances of the City of Perris to dedicate and improve roads as a condition of approval of a tentative map or building permit.

The selected facilities are needed to provide acceptable levels of service in conjunction with the planned development of the area. Eligible facilities are those which will provide a regional benefit and are shown on the Circulation Element of the Perris GP. The NPRBBD includes Expressway, Arterial, and Secondary Arterial classifications of roadway.



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Imagery: Eagle Aerial, 2010.

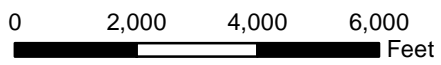


Figure 4.10-4
North Perris Road and
Bridge Benefit District

Guidelines Pertaining to Fire Department Access

The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. The *Guideline for Fire Department Access & Water Requirements for Commercial & Residential Development*, published by the City of Perris Development Services Department, Office of the Fire Marshal. This general guideline addresses the creation and maintenance of fire department access roadways, and access walkways to and around buildings. It also sets standards for fire hydrant quantity and placement as required by the 2007 California Fire and Building Codes and as amended by local ordinance. The guideline includes requirements for:

- Plan submittal
- Fire access roadway design
- Fire lane identification
- Premises identification
- Fire lane obstructions
- Access for residential development
- Alternative engineered fire access systems
- Access requirements in special fire areas (Fire Hazard Severity Zones)
- Hydrant quantity, spacing, placement, and identification
- Water availability and fire flow
- Access to structures
- Access during construction

These guidelines apply to new, remodeled, reconstructed, or relocated residential or commercial structures and developments to which emergency response may be necessary. The information contained in this document is intended to assist the applicant in attaining compliance and to ensure that privately owned roadways necessary, for emergency response purposes, will be available for use at all times.

Design Considerations

The proposed PVCC implements the Perris GP Circulation Element by incorporating General Plan roadways into its Infrastructure Plan (Section 3.0) which includes a Circulation Plan that addresses several aspects of circulation throughout the PVCC Specific Plan including vehicle, truck and transit circulation, and non-vehicular circulation. The proposed PVCC's *Standards and Guidelines and Design Guidelines* incorporate the general alignments and right-of-way sections necessary to safely meet the transportation needs of its residents, businesses, and visitors; and pedestrian paths, sidewalks and bike trails in order to accommodate non-motorized forms of transportation.

No other site design measures are incorporated which will lessen impacts related to traffic and transportation.

Within its boundaries, the PVCC proposes minor changes to the Perris GP Circulation Element, including an extension of Bus Route 19 within the PVCC boundaries that heads west off of Perris Boulevard on Ramona Expressway, south on Webster Avenue, east on Morgan Street and loops back north to Ramona Expressway on Indian Avenue, before returning on its original course heading north on Perris Boulevard.

Truck routes have been altered slightly in that Webster Avenue is no longer a designated truck route. However, Western Way heading north from Harley Knox Boulevard to the north PVCC boundary and Redlands Avenue from Rider Street to Harley Knox Boulevard have been designated truck routes in the PVCC.

Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Based on Appendix G to the State *CEQA Guidelines*, impacts related to utilities and service systems may be considered potentially significant if the project would:

- cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways; or
- conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Due to the repetitive nature of the information and analysis presented herein, the first two thresholds above will be combined and analyzed simultaneously.

Environmental Impacts

Due to the repetitive nature of the information and analysis presented herein, the first two thresholds being addressed in this section have been combined, as presented below, and are analyzed simultaneously.

Threshold: Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) or exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for the designated roads or highways.

For the purposes of this threshold, an increase will be considered “substantial” if the proposed project contributes, either individually or cumulatively, to an exceedance of Level of Service D along any City-maintained road, I-215 or State Route 74; except that LOS E is acceptable at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at I-215 freeway ramps.

In order to determine traffic volumes generated from the proposed PVCC, weighted average trip generation rates were utilized. Trip generation represents the amount of traffic traveling to and from the proposed project. The trip generation rates used to estimate project-generated traffic are from a publication titled “*Trip Generation Manual, 8th Edition*” by the Institute of Transportation Engineers (ITE). The proposed PVCC land uses are expected to generate approximately 499,271 daily trip-ends during a typical weekday (see **Table 4.10-D**).

Table 4.10-D, Projected PVCC Land Use Trip Generation

General Plan Land Use	Acres	FAR / Density	ITE Trip Generation Land Use	Qty	Unit	Daily	
						Rate ¹	Trip-Ends
Business Park / Professional Office (BP & PO)	357	0.35	Business Park (770)	5443	TSF	12.76	69,453
Commercial (CC & NC)	309	0.25	Shopping Center (820)	3365	TSF	42.94	144,493
General Industrial (GI)	408	0.45	Warehousing (150)	7998	TSF	3.56	28,473
Light Industrial (LI)	1836	0.45	General Light Industrial (110)	35989	TSF	6.97	250,843
Public (P)	588			588	Acres	0	0
Residential (R)	63	7	Single Family Detached (210)	441	DU	9.57	4,220
Multi-Family Residential (MFR)	22	14	Residential Condominium / Townhouse (230)	308	DU	5.81	1,789
TOTAL	3,583						499,271

FAR = Floor Area Ratio, TSF = Thousand Square Feet, DU = Dwelling Unit

¹Average trip generation rates from *Trip Generation Manual, 8th Ed.*, by Institute of Transportation Engineers, 2008.

The proposed PVCC is modifying some of the Perris GP land use designations within the project area with other designations that are similar in character and intensity. Like the Perris GP, the PVCC sets forth parameters for new development; but does not identify the timing, size or use of individual implementing development projects. For this reason, the specific impacts at any given intersection or roadway segment at any point in the future cannot be quantified at this time.

Because the proposed PVCC represents a long-range plan for future development within the project area, potential project-related traffic impacts will occur in conjunction with those from other development within the City of Perris and surrounding areas that will occur during the same period of time. **Table 4.10-E** shows the average daily traffic and level of service of area roadways that is projected to occur at PVCC buildout; with concurrent buildout of the surrounding area pursuant to the Perris GP.

Table 4.10-E, Buildout Average Daily Traffic and Levels of Service Within Study Area

Roadway	Number of Lanes	Buildout ADT	LOS
Harley Knox Boulevard (Oleander Avenue)			
I-215 to Western Way	6	16,700	A
Western Way to Patterson Avenue	6	16,700	A
Patterson Avenue to Webster Avenue	6	13,800	A
Webster Avenue to Indian Avenue	6	8,000	A
Indian Avenue to Perris Boulevard	6	7,700	A
Perris Boulevard to Redlands Avenue	6	5,700	A
Redlands Avenue to Evans Road	6	5,700	A
Markham Street			
Patterson Avenue to Webster Avenue	4	2,200	A
Webster Avenue to Indian Avenue	4	3,100	A
Indian Avenue to Perris Boulevard	4	3,100	A
Perris Boulevard to Redlands Avenue	4	1,500	A

Roadway	Number of Lanes	Buildout ADT	LOS
Cajalco Expressway			
Day Street to Seaton Avenue	8	27,800	≤C
Seaton Avenue to Harvill Avenue	8	30,900	≤C
Harvill Avenue to I-215	8	39,700	≤C
Ramona Expressway			
I-215 to Nevada Avenue	8	61,400	C
Nevada Avenue to Webster Avenue	8	48,700	A
Webster Avenue to Indian Avenue	8	45,600	A
Indian Avenue to Perris Boulevard	8	41,500	A
Perris Boulevard to Redlands Avenue	8	44,900	A
Redlands Avenue to Evans Road	8	52,300	B
Evans Road to Bradley Road	8	43,100	A
Morgan Street			
Nevada Avenue to Webster Avenue	4	2,400	A
Webster Avenue to Indian Avenue	4	2,200	A
Indian Avenue to Perris Boulevard	4	4,800	A
Perris Boulevard to Redlands Avenue	4	7,100	A
Rider Street			
Nevada Avenue to Webster Avenue	4	4,200	A
Webster Avenue to Indian Avenue	4	3,900	A
Indian Avenue to Perris Boulevard	4	4,800	A
Perris Boulevard to Redlands Avenue	4	4,200	A
Redlands Avenue to Wilson Avenue	4	4,200	A
Wilson Avenue to Evans Road	4	4,000	A
Evans Road to Bradley Road	4	11,400	A
Placentia Avenue			
Harvill Avenue to I-215	4	19,100	≤C
I-215 to E. Frontage Road	6	15,100	A
E. Frontage Road to Indian Avenue	6	32,300	A
Indian Avenue to Perris Boulevard	6	31,500	A
Perris Boulevard to Redlands Avenue	6	6,600	A
Redlands Avenue to Wilson Avenue	6	6,700	A
Wilson Avenue to Murrieta Road	6	6,700	A
Murrieta Road to Evans Road	6	5,900	A
I-215			
Nuevo Road to Placentia Avenue	8	165,500	F
Placentia Avenue to Ramona Expressway	8	169,500	F
Ramona Expressway to Harley Knox Boulevard	8	185,500	F
Harley Knox Boulevard to Van Buren Boulevard	8	189,200	F
Webster Avenue			
Rider Street to Morgan Street	4	1,300	A
Morgan Street to Ramona Expressway	4	2,100	A
Ramona Expressway to Markham Street	4	2,100	A
Markham Street to Harley Knox Boulevard	4	5,600	A

Roadway	Number of Lanes	Buildout ADT	LOS
Indian Avenue			
E. Frontage Road to Orange Avenue	4	6,700	A
Orange Avenue to Placentia Street	4	5,700	A
Placentia Street to Rider Street	4	5,600	A
Rider Street to Morgan Street	4	2,100	A
Morgan Street to Ramona Expressway	4	2,100	A
Ramona Expressway to Markham Street	4	3,200	A
Markham Street to Harley Knox Boulevard	4	4,500	A
Harley Knox Boulevard to City Boundary	4	4,300	A
City Boundary to Nandina Avenue	4	13,800	≤C
Nandina Avenue to San Michele Road	4	13,800	≤C
Perris Boulevard			
Nuevo Road to Citrus Avenue	6	19,500	A
Citrus Avenue to Orange Avenue	6	19,400	A
Orange Avenue to Placentia Avenue	6	26,600	A
Placentia Avenue to Rider Street	6	27,200	A
Rider Street to Morgan Street	6	27,300	A
Morgan Street to Ramona Expressway	6	26,200	A
Ramona Expressway to Markham Street	6	27,600	A
Markham Street to Harley Knox Boulevard	6	29,600	A
Harley Knox Boulevard to City Boundary	6	36,900	B
City Boundary to Nandina Avenue	6	38,800	≤C
Nandina Avenue to San Michele Road	6	38,500	≤C
San Michele Road to Krameria Avenue	6	38,500	≤C
Redlands Avenue			
Nuevo Road to Citrus Avenue	4	19,300	A
Citrus Avenue to Orange Avenue	4	16,400	A
Orange Avenue to Placentia Avenue	4	22,800	B
Placentia Avenue to Rider Street	4	22,900	B
Rider Street to Morgan Street	4	17,200	A
Morgan Street to Dawes Street	4	15,300	A
Dawes Street to Ramona Expressway	4	15,300	A
Ramona Expressway to Markham Street	4	14,100	A
Markham Street to Harley Knox Boulevard	4	12,500	A

Based on the assessment of current and year 2030 levels of service included in Perris GP Circulation Element, roadway improvements were incorporated into the Circulation Element roadway network to accommodate growth and development anticipated in the Perris General Plan. The Perris GP EIR, which is hereby incorporated herein by reference, determined that these roadway improvements will result in LOS D or better on roadway segments and at intersections owned and maintained by the City as the roadway improvement projects will be implemented by 2030; and that as a result of planned improvements indicated in Perris GP Circulation Element, the impact at General Plan buildout on levels of service on roadway segments and at intersections owned and maintained by the City is less than significant.

Additionally, the Perris GP EIR found that I-215 is expected to be upgraded to eight lanes with Measure A funding before expiration of this 30-year tax measure. The City has requested that Caltrans conduct a

Project Study Report (PSR) at the I-215/Ramona Interchange which would include adjoining segments of the expressway and deficient intersections at the off-ramps. The Perris GP EIR determined that even with the contemplated improvements, all segments of I-215 through the City of Perris will operate at LOS F by the year 2030 and that this level of service represents a significant impact.

Because the PVCC only sets forth broad parameters for new development and does not identify the timing, size or use of individual implementing development projects, the specific impacts at any given intersection or roadway segment any point in the future cannot be quantified at this time. For this reason, although the Perris GP Circulation Element identifies area-wide roadway improvements that will lead to acceptable levels of service on study area roadways, it would be speculative to determine the timing of the roadway improvements that will necessary to serve planned development within the proposed PVCC project area. Therefore, in order to apply Perris GP Circulation Element Implementation Measure III.A.4 and Perris GP Land Use Element Policy II. As cited above in a fair and equitable manner to the specific traffic impacts of individual development projects, mitigation measures **MM Trans 1** through **MM Trans 8** are required to address potential project-specific traffic impacts and design considerations to determine the needed roadway improvements to be constructed in conjunction with each implementing project. Further, additional mitigation is required

As shown in **Table 4.10-E**, the LOS on area roadways following PVCC buildout will be at LOS D or better on study area roadways, with the exception of I-215 which is projected to be a LOS F. These projected levels of service are the same as those identified within the Perris GP EIR. Therefore, the findings contained within the Perris GP EIR are also applicable to the proposed project and it can be concluded that the proposed project's potential impacts related to levels of service on roadways are considered to be **less than significant**, although potential impacts related to Interstate 215 will be **significant and unavoidable**.

Threshold: Conflict with adopted policies, plans, or programs supporting alternative transportation.

The City of Perris General Plan identifies alternate modes of transportation as being bus, rail or pedestrian. Specifically, Policy I.B.1 states: "require on-site improvements that accommodate public transit vehicles (i.e., bus pullouts, transit stops, cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e., community centers, tourist and employment centers)."

The Riverside Transit Authority (RTA) operates two bus routes which can be accessed from multiple bus stops and transfer points within the PVCC project area:

- Route 19 -This bus route travels through the project area along Perris Boulevard connecting the Moreno Valley Mall to the City of Perris Civic Center. This route includes alternate routing that traverses west on the Ramona Expressway and makes a loop, following Indian Avenue, Morgan Street, Webster Avenue and then back to the Ramona Expressway; this loop provides service to several large employers and a high school.
- Route 41 - This route traverses through the project area along portions of Ramona Expressway, Webster Avenue, Morgan Street, Indian Avenue, Perris Boulevard, and Rider Street as connects the Mead Valley Community Center to the Riverside County Regional Medical Center in Moreno Valley by traveling through the City of Perris.

The proposed PVCC has incorporated pedestrian paths and sidewalks into roadway design, and bike trails into its *Standards and Guidelines and Design Guidelines* to accommodate non-motorized forms of transportation. Identified trails within the PVCC include a trail within the Metropolitan Water District of Southern California's right-of-way that runs east/west through the project area between Morgan Street and Rider Street and a regional trail along Ramona Expressway. Class II Bike Lanes are also identified within

the PVCC along Morgan Street, Rider Street, Perris Boulevard south of Ramona Expressway and Nevada Avenue/E. Frontage Road south of Ramona Expressway. Additionally, the PVCC *Standards and Guidelines* encourage bus stops be provided at large commercial centers and large employment centers along existing and future bus routes. Employees of the proposed project and shoppers at commercial areas will be able to utilize the existing and any future RTA routes as a means of alternate modes of transportation to and from work.

The project will include roadway improvements which include sidewalks and bike racks, and is located near to existing bus routes. The project will not conflict with the City's adopted policies, plans or programs supporting alternative modes of transportation, and therefore potential impacts are considered **less than significant**.

Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). The proposed project will not result in any significant adverse transportation or traffic-related impacts; therefore, mitigation is not required. However, while impacts to transportation or traffic-related impacts were considered to be below the level of significance, the following measures will further reduce project impacts.

MM Trans 1: Future implementing development projects shall construct on-site roadway improvements pursuant to the general alignments and right-of-way sections set forth in the PVCC Circulation Plan, except where said improvements have previously been constructed.

MM Trans 2: Sight distance at the project entrance roadway of each implementing development project shall be reviewed with respect to standard City of Perris sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

MM Trans 3: Each implementing development project shall participate in the phased construction of off-site traffic signals through payment of that project's fair share of traffic signal mitigation fees and the cost of other off-site improvements through payment of fair share mitigation fees which include TUMF (Transportation Uniform Mitigation Fee), DIF (Development Impact Fee) and the NPRBBD (North Perris Road and Bridge Benefit District). The fees shall be collected and utilized as needed by the City of Perris to construct the improvements necessary to maintain the required level of service and build or improve roads to their build-out level.

MM Trans 4: Prior to the approval of individual implementing development projects, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing in the project area that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the project area, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalk and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the project.

MM Trans 5: Bike racks shall be installed in all parking lots in compliance with City of Perris standards.

MM Trans 6: Each implementing development project that is located adjacent to the MWD Trail shall coordinate with the City of Perris Parks and Recreation Department to determine the development plan for the trail.

MM Trans 7: Implementing project-level traffic impact studies shall be required for all subsequent implementing development proposals within the boundaries of the PVCC as approved by the City of Perris Engineering Department. These subsequent traffic studies shall identify specific project impacts and needed roadway improvements to be constructed in conjunction with each implementing development project. All intersection spacing for individual tracts or maps shall conform to the minimum City intersection spacing standards. All turn pocket lengths shall conform at least to the minimum City turn pocket length standards. If any of the proposed improvements are found to be infeasible, the implementing development project applicant will be required to provide alternative feasible improvements to achieve levels of service satisfactory to the City.

MM Trans 8: Proposed mitigation measures resulting from project-level traffic impact studies shall be coordinated with the NPRBBD to ensure that they are in conformance with the ultimate improvements planned by the NPRBBD. The applicant shall be eligible to receive proportional credits against the NPRBBD for construction of project level mitigation that is included in the NPRBBD.

Summary of Environmental Effects After Mitigation Measures Are Implemented

Following project buildout, roadways will operate at LOS D or better on study area roadways, with the exception of I-215 which is projected to operate at LOS F. Therefore, it can be concluded that the proposed project's potential impacts related to levels of service on roadways are considered to be **less than significant**; although potential impacts related to I-215 will be **significant and unavoidable**.

4.11 Utilities and Service Systems

Potential impacts related to exceeding wastewater treatment requirements and compliance with federal, state and local statutes and regulations related to solid waste, were found to be less than significant in the Initial Study/NOP prepared for this project (Appendix A). The focus of the following discussion is to address whether the project will require or result in the construction of new or expanded water or wastewater treatment facilities; require or result in the construction of new or expanded storm water drainage facilities; have sufficient water supplies available to serve the project; result in a determination by the wastewater treatment provider that it has adequate capacity to serve the project in addition to existing commitments; and be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal.

In response to the NOP, comment letters were received from the Riverside County Fire Department (RCFD). The RCFD requested that all water mains, hydrants and fire flows be in accordance with Riverside County Ordinance 460 and/or 787, that all building be constructed with fire retardant roofing materials per Section 1505 of the California Building Code, and that all implementing development projects provide alternate or secondary access. RCFD requested mitigation measures as defined by Riverside County be considered and the EIR discuss developer's participation in the City's Development Impact Fee program. These comments and concerns are incorporated into this section of the EIR. The RCFD also identified potential cumulative impacts which would affect RCFD's ability to provide an acceptable level of service. A discussion of cumulative impacts is incorporated into Section 5.0 (Other CEQA Topics) of this EIR.

In addition to other reference documents, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Perris Valley Commerce Center Specific Plan*, October 2009. (Available at the City of Perris Planning Division.)
- City of Perris, *City of Perris General Plan 2030*, July 12, 2005. (Available at the City of Perris and at www.cityofperris.org/city-hall/general-plan.html, accessed November 18, 2009.)
- Eastern Municipal Water District, *2010 Urban Water Management Plan*, June 2011 (Available at Eastern Municipal Water District and at http://www.emwd.org/news/reports/UWMP_2011/UWMP-Final.pdf, accessed July 12, 2011.) (UWMP)
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Setting

The PVCC consists of approximately 3,500 gross acres located in the north Perris area of western Riverside County (**Figure 3.0-1, Regional Map**). The site is bordered generally by I-215 to the west, MARB and Harley Knox Boulevard to the north, the PVSC to the east, and Placentia Avenue to the south. At this time, a large portion of the proposed PVCC project area is undeveloped land currently used for agriculture. Other portions contain existing development including warehouse/distribution facilities, neighborhood and community commercial, small-scale industrial facilities, a rural residential neighborhood, and a mobile home park. The surrounding area includes the City of Moreno Valley and MARB to the north, the unincorporated community of Mead Valley to the west, and more developed areas of Perris to the south and east.

Water

The PVCC will be served by Eastern Municipal Water District (EMWD). EMWD was formed in 1950 and annexed into the Metropolitan Water District of Southern California (MWD) in 1951 (Project WSA, p. 3).¹ EMWD was formed to augment dwindling local water supplies with imported water being made available through MWD (Project WSA, p. 3). EMWD is the potable, wastewater service, and recycled water provider to a 555-square-mile area from Moreno Valley southward along the I-215 corridor to Temecula and wastewater to Hemet and San Jacinto with an estimated population of over 660,000 persons (Project WSA, p. 4). Presently, EMWD is one of MWD's 26 member agencies and relies on imported water for most of its potable supply (Project WSA, pp. 3-4).

In June 2011, EMWD adopted its 2010 Urban Water Management Plan (UWMP), which details the reliability of the EMWD's current and future water supply. The UWMP is hereby incorporated herein by reference. Based on the UWMP, the water supply available to EMWD in 2010 totaled 154,700 acre-feet per year (AFY) (UWMP, Table 3.1). EMWD has four existing sources of water supply: imported water purchased from MWD (65 percent), which is described in detail in MWD's 2010 Regional Urban Water Management Plan (RUWMP) and is hereby incorporated herein by reference; local groundwater production (11 percent); local desalted groundwater sources (3 percent), and recycled water (21 percent)

¹ While the project site is located within the City of Perris, the site is outside the service area of the City of Perris Water Department, which is a sub-agency of EMWD. Water service will be provided directly from EMWD.

from EMWD’s four regional water reclamation facilities (Project WSA, p. 5). For the past six years EMWD’s reliance on imported water has remained proportionally consistent or decreased, even as EMWD added over 20,000 new water connections (UWMP, p. 27). This consistency has been achieved through the construction of desalination facilities, a commitment to increase recycled water use and through a decrease in demand from water efficiency (UWMP, p. 27). These efforts have increased the reliability of supplies and decreased the dependence on imported water sources. **Table 4.11-A** identifies EMWD’s past and current water supplies by their source.

Table 4.11-A, Past and Present EMWD Water Supply (AFY)

Type	Source	2005	2006	2007	2008	2009	2010
Imported	MWD	104,400	110,400	109,900	94,400	84,200	75,000
Imported - Locally Treated	MWD	4,600	8,400	17,300	16,600	17,000	16,600
Groundwater	West San Jacinto Management Area	18,100	19,600	19,500	20,000	18,100	15,800
Desalination	West San Jacinto Management Area	900	4,800	4,800	3,000	4,800	5,800
Recycled	EMWD Regional Water Reclamation Facilities	32,600	28,800	38,600	35,100	39,200	41,500
Total		161,600	172,000	190,100	169,100	163,300	154,700

Notes: AFY = acre-feet/year
Source: UWMP, Table 3.1, p. 28.

Imported Water

EMWD relies on MWD for the majority of its water supply. However, as shown on the above table, deliveries have decreased in recent years, which is due to a decrease in demand resulting from several factors including conservation and economic downturn (UWMP, p. 14). Although MWD only delivers water from two sources, the Colorado River Aqueduct and the State Water Project, it takes a comprehensive and proactive approach to planning for the future.² Through coordination with member agencies, MWD has developed regional targets for imported water, local resources and conservation to accommodate for growth, and face the challenges to future supply reliability. Through the past decade, MWD has undertaken several planning initiatives including the Integrated Water Resources Plan (IWRP), the Water Surplus and Drought Management Plan (WSDMP), and the Strategic Plan. These programs and plans provide a framework and guidelines for the future Southern California supply planning. (UWMP, p. 32)

² MWD was established more than eighty years ago to obtain an allotment of Colorado River water and today the Colorado River Aqueduct continues to be a core supply for Southern California. The State Water Project is owned by the State of California and operated by the State Department of Water Resources. More than two thirds of California’s residents depend on the State Water Project for a portion of their drinking water.

MWD's resource mix depends on a blend of improving the reliability and availability of imported water supplies into the region, increasing local storage and developing local resources. The latest IWRP update, implemented in October 2010, demonstrated that MWD and its member agencies have moved the region toward the goal of long-term water reliability and major achievements have been made in conservation, water recycling and groundwater recovery, storage and groundwater management programs within the Southern California region, storage programs related to the State Water Project and the Colorado River, and other water supply management programs outside of the region. Further, EMWD works closely with MWD staff and its leadership to coordinate planning efforts and quantify local supply resources. (UWMP, p. 32)

The IWRP analyzes current data to determine demand and supply alternatives to determine reliability through 2035 (IWRP, pp. 1-5, 1-7). Challenges addressed in the IWRP include: limitations on State Water Project and Colorado River Aqueduct supplies due to environmental issues and drought, regulatory restrictions, economics and climate (IWRP, pp. 1-11 - 1-12). The IWRP proposes a strategy that balances the potential risks to water supplies with the need to avoid unnecessary investment in resources (UWMP, p. 37). Specifically, the IWRP addresses how MWD will continue to provide water supplies to its member agencies in the face of several water supply challenges, including the need to respond to potential reductions in water supply based on recent judicial decisions aimed to protect the Bay-Delta (IWRP, pp. 1-11 - 1-12).

Potable imported water from MWD to EMWD is delivered directly from MWD's two large filtration plants. The Henry J. Mills Filtration Plant, owned and operated by MWD, treats water from northern California and provides it through two connection points located in the northeast portion of EMWD. The Robert F. Skinner Filtration Plant, also owned and operated by MWD, treats a blend of Colorado River water and water from northern California for potable use and provides water to EMWD through a connection point in the southwest portion of EMWD. (UWMP, p. 25)

Microfiltration plants owned and operated by EMWD, filter MWD's water from the Colorado River and/or State Water Project through membranes to remove particulate contaminants to potable water standards. These plants are located in the cities of Hemet and Perris. Recharge water from MWD is used for groundwater replenishment in the eastern part of EMWD. This untreated water from MWD is percolated into the ground, adding water to the aquifer. EMWD and others can extract this water at a later date for beneficial uses. Untreated water from MWD used for agricultural purposes is delivered in the northeast portion of EMWD for use by EMWD retail and wholesale accounts, and in the south for Rancho California Water District's agricultural accounts. (UWMP, p. 28)

Groundwater

Groundwater is EMWD's only source of locally produced potable water (Project WSA, p. 9). EMWD produces potable groundwater from two management plan areas within the San Jacinto Watershed, the West San Jacinto Groundwater Basin Management Plan area and the Hemet/San Jacinto Water Management Plan area (UWMP, p. 44). EMWD is a key player in two cooperative efforts to protect groundwater quality and reliability. The West San Jacinto Groundwater Basin Management Plan area is subject to an existing groundwater management plan, and the Hemet/San Jacinto Water Management Plan area is complete and will be approved by the adopting agency boards in 2011 (UWMP, p. 44). Specifically, in the Hemet/San Jacinto Water Management Plan area, EMWD's groundwater production is currently constrained by the 1954 Fruitvale Judgment and Decree (Project WSA, p. 10). Since 2001, EMWD, along with other agencies, has been working on a groundwater management plan for the Hemet/San Jacinto Water Management Plan area seeking to resolve several controversial issues including the San Jacinto Tunnel seepage water, Fruitvale Judgment and Decree, export of groundwater from the basins, and how to maximize the use of recycled water (Project WSA, p. 10). EMWD's rights under the Hemet/San Jacinto Water Management Plan will be a base groundwater production right of 10,869 AFY (Project WSA, p. 11).

Native potable groundwater production is limited or will be limited according to management plan provisions to prevent continued overdraft. EMWD is anticipating limitations on native groundwater production and has developed alternatives to assure reliability including an Integrated Recharge and Recovery Program (IRRP), filtration plants to treat and deliver imported water to areas dependent on groundwater and recycled water use for irrigation of landscape and agriculture (UWMP, p. 45). These groundwater supplies are managed under a variety of management mechanisms described in the UWMP (UWMP, pp. 44-52).

Long-term groundwater management includes plans for artificial recharge using MWD replenishment water via permanent facilities through the IRRP. An agreement with the Soboba Band of Luiseño Indians requires that, on average, an annual delivery of 7,500 AF from MWD been conveyed toward groundwater recharge in the Hemet/San Jacinto area, fulfilling the Soboba tribe's water rights and addressing chronic groundwater overdrafts for the next 30 years. (Project WSA, pp. 10-11)

Through pilot programs and using temporary facilities, EMWD has recharged groundwater in the Hemet/San Jacinto area with imported surplus water from WMD since 1990. Under the Interim Water Supply Plan, the imported water from the State Water Project was conveyed into the aquifer at two sites, and achieved 20,819 AF of imported water from 2004 to 2007. However, due to dry conditions and environmental restrictions, the plan was ended in 2007 and recharge permits have since expired. To replace the temporary recharge facilities, long-term facilities are being designed and built as part of the IRRP, an integral piece of the water management plan and the Soboba settlement. EMWD is also contributing to the replenishment of the basin by providing recycled water in lieu of groundwater production. The Recycled In-Lieu Program can deliver up to 8,540 AFY to local agricultural water producers. (Project WSA, p. 11)

Desalination

In an effort to reduce dependency on imported water from MWD, EMWD has developed several programs designed to take advantage of these local resources. High-quality groundwater is a source of water for local customers in the Hemet/San Jacinto area, and in the West San Jacinto Basin, groundwater is blended with imported water for use in the western portion of EMWD (Project WSA, p. 8). EMWD has also constructed two desalination facilities to recover poor quality groundwater with high total dissolved solids (TDS) levels in the West San Jacinto groundwater basin areas, and the water from these desalters enters EMWD's potable distribution system (Project WSA, p. 9). A third desalter is now in the final stages of design. In addition to being a source of potable water, the main role of the desalter is to play a part in managing the groundwater management zones by addressing the migration of brackish groundwater into areas of good quality groundwater (UWMP, p. 53). Accordingly, EMWD implemented a Groundwater Salinity Management Program (UWMP, p. 52). These desalter facilities recover high TDS groundwater from the Menifee and Perris South Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone, for potable use (UWMP, pp. 52-53).

Desalter wells deliver water to an integrated raw water system that delivers water to the desalination plants where it is treated prior to entering the distribution system. Groundwater extraction for use in the desalter program has not caused a decline in water levels to date. In fact, groundwater extracted from desalter wells is limited by existing facilities and not groundwater supplies. The desalination process helps manage increasing water levels due to high TDS groundwater and decreased production. In addition, high iron and manganese concentrations will irreversibly impact the desalter membranes, and have resulted in several brackish groundwater extraction wells remaining off-line. In 2004, an effort was initiated to evaluate alternative technologies for removal of iron and manganese prior to desalination. A removal process was selected and final design was completed in 2009. Completion of construction is scheduled for September 2011 that will increase extraction capacity. (UWMP, p. 53)

Recycled Water

Recycled water is extensively used in EMWD’s service area to meet non-potable demands, and the supply of recycled water will continue to increase with EMWD’s population size (UWMP, p. 53). To offset municipal demand, recycled water is used to irrigate landscapes and for industrial purposes (Project WSA, p. 13). The majority of EMWD’s agricultural customers also use recycled water. EMWD operates and maintains four regional water reclamation facilities. These facilities treat water collected in EMWD’s wastewater system for use as recycled non-potable water. In 2010, EMWD treated 46,500 AF and sold 28,300 AF, or 61 percent (UWMP, Table 3.11). EMWD has sold up to 32,500 AF annually of recycled water to retail and wholesale customers throughout its service area, the majority of which is used for agricultural irrigation (UWMP, p. 56). The four regional water reclamation facilities that EMWD currently operates are all either in the process of expansion or have an expansion planned in the near future (UWMP, p. 53). In addition to treatment facilities, EMWD has several recycled water storage ponds throughout its service area, which allows EMWD to sell more than the recycled water produced by its treatment plants during the peak demand months of June through September (UWMP, p. 56). Recycled water production and sales reduce the demand for imported water and provide a sustainable supply to EMWD (UWMP, p. 31).

Water Infrastructure

In 2010, EMWD’s potable water system consisted of 2,421 miles of transmission and distribution pipeline, 77 water storage tanks, and a maximum storage capacity of 193 million gallons with 133,810 active domestic accounts and 146 active agriculture and irrigations accounts (CAFR, p. 79). Moreover, EMWD operates 84 pumping plants, 18 active domestic wells with a production capacity of 32,843 AFY, 7 active desalter wells, 2 desalter treatment plants with a combined capacity of 8 million gallons per day, and 2 filtration treatment plants with a combined capacity of 32 million gallons per day (CAFR, p. 79). According to the *Perris Valley Commerce Center Specific Plan*, EMWD provides service to the PVCC project site through its system of existing pipelines, ranging in size from 8 to 42 inches in diameter, within the 1,627-foot and 1,705-foot pressure zones. A list of waterlines within the project area as of October 2008 is provided in **Table 4.11-B**. Although EMWD has no conceptual plans for expansion of these waterlines, they will assess demand as growth occurs and upgrades are designed as part of implementing development projects in order to meet future demands of the PVCC project area.

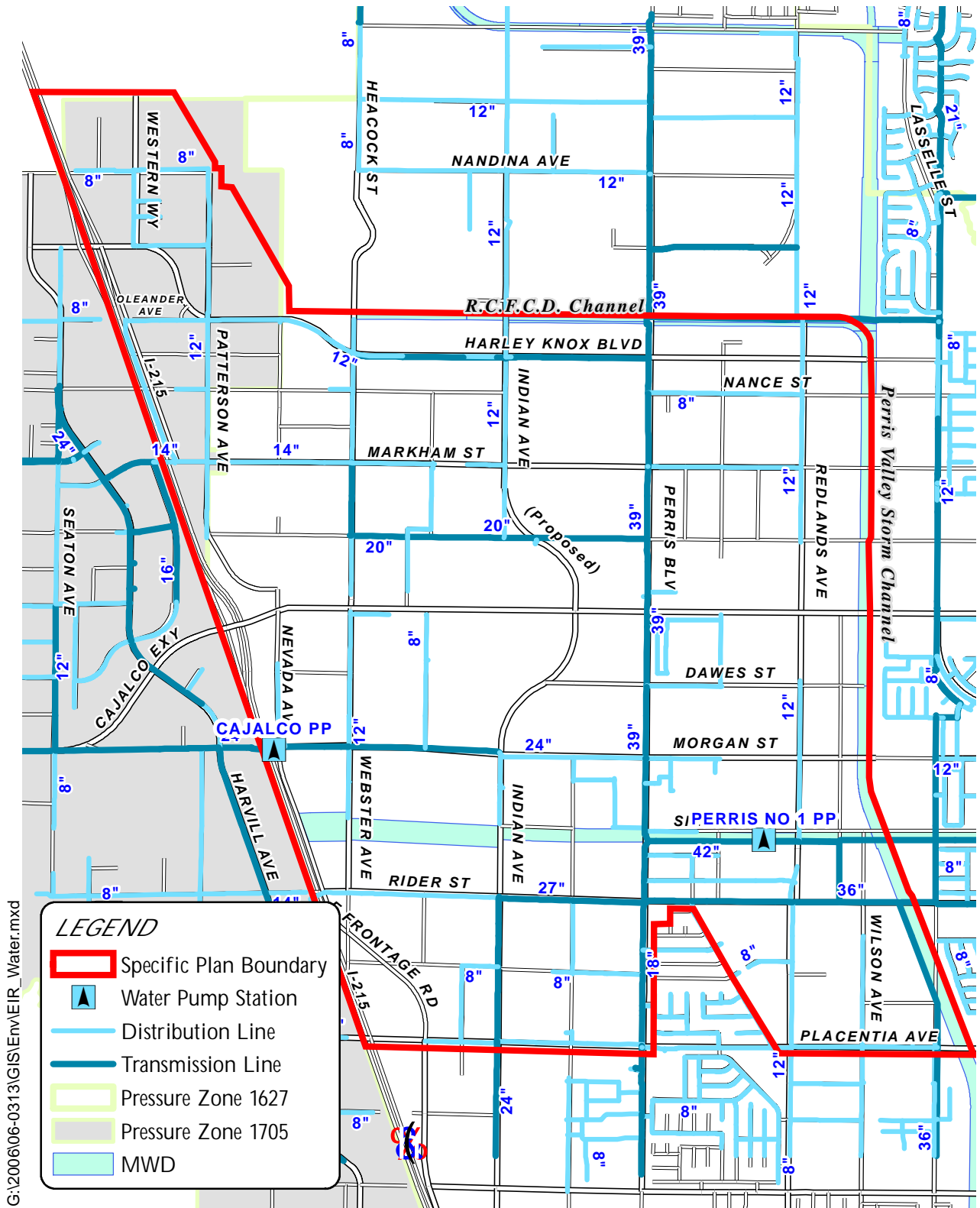
The California Aqueduct/MWD owns and operates a transmission line of at least 15 inches in diameter that traverses east to west through the PVCC project area. Existing waterlines serving the project area are shown on **Figure 4.11-1, Existing EMWD Water** and listed in **Table 4.11-B, Existing EMWD Waterlines**.

Table 4.11-B, Existing EMWD Waterlines

Waterline Location	From (north or west)	To (south or east)
42-Inch Diameter Pipe		
MWD easement	Perris Blvd.	400 ft. west of the PVSC
39-Inch Diameter Pipe		
Perris Blvd.	Moreno Valley	MWD easement
MWD easement	400 ft. west of PVSC	PVSC
Easement 400 ft. west of Flood Control Channel	MWD easement	Rider St.
24-Inch Diameter Pipe		
Harley Knox Blvd.	Webster Ave.	Perris Blvd.

Waterline Location	From (north or west)	To (south or east)
Morgan Street	I-215	Perris Blvd.
Webster Ave.	Ramona Exp.	South of Morgan St.
Indian Ave.	Rider St.	Placentia Ave.
20-Inch Diameter Pipe		
Perry St.	Webster Ave.	Perris Blvd.
18-Inch Diameter Pipe		
Perris Blvd.	MWD easement	Placentia Avenue
14-Inch Diameter Pipe		
Rider St.	I-215	Flood Control Channel
12-Inch Diameter Pipe		
Patterson Ave.	Nandina Ave.	Markham St.
Webster Ave.	Moreno Valley	Ramona Expressway.
Indian Ave.	Moreno Valley	Perry St.
Barrett Ave.	Morgan St.	MWD easement
Redlands Ave.	Moreno Valley	Markham St.
Redlands Ave.	Rider St.	Placentia Avenue
Dawes St.	East of Perris Blvd. (loop)	
8-Inch Diameter Pipe		
Nandina Ave.	I-215	Patterson Ave.
Nance St.	Perris Blvd.	Redlands Ave.
Markham St.	I-215/Frontage Road	Brennan Ave.
Markham St.	Perris Blvd.	Redlands Ave.

Source: Perris Valley Commerce Center Specific Plan



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Source: PVCC Specific Plan

Figure 4.11-1
Existing EMWD Water



0 2,000 4,000 6,000
 Feet

Wastewater

EMWD owns and maintains the sanitary sewer system within the PVCC project area. Overall, EMWD’s sanitary sewer system includes over 1,534 miles of gravity sewer lines, 53 sewage lift stations, and five regional water reclamation facilities (RWRf), with a combined total capacity of 61 million gallons per day (MGD) and the potential to expand to 224 MGD as summarized in **Table 4.11-C, EMWD Wastewater Treatment Facilities**.

Table 4.11-C, EMWD Wastewater Treatment Facilities

Treatment Plant	Level of Treatment	Capacity (MGD)	Typical Daily Flow (MGD)	Ultimate Expansion (MGD)
San Jacinto Valley RWRf	Secondary	11	7.8	27
Moreno Valley RWRf	Tertiary	13	11.2	16
Perris Valley RWRf	Tertiary	15	13*	100
Sun City RWRf	Tertiary	3	2.4	15-27
Temecula Valley RWRf	Tertiary	8	6.0	54
TOTAL	-	50	40.4	237- 249

*Perris Valley RWRf receives a total of approximately 13 MGD which consists of approximately 4.5 MDP diverted from the Sun City service area, approximately 0.5 MGD from the Hemet/San Jacinto service area, approximately 0.2 MGD from the Perris water filtration plant and approximately 0.15 MGD from the Hemet water filtration plant.¹

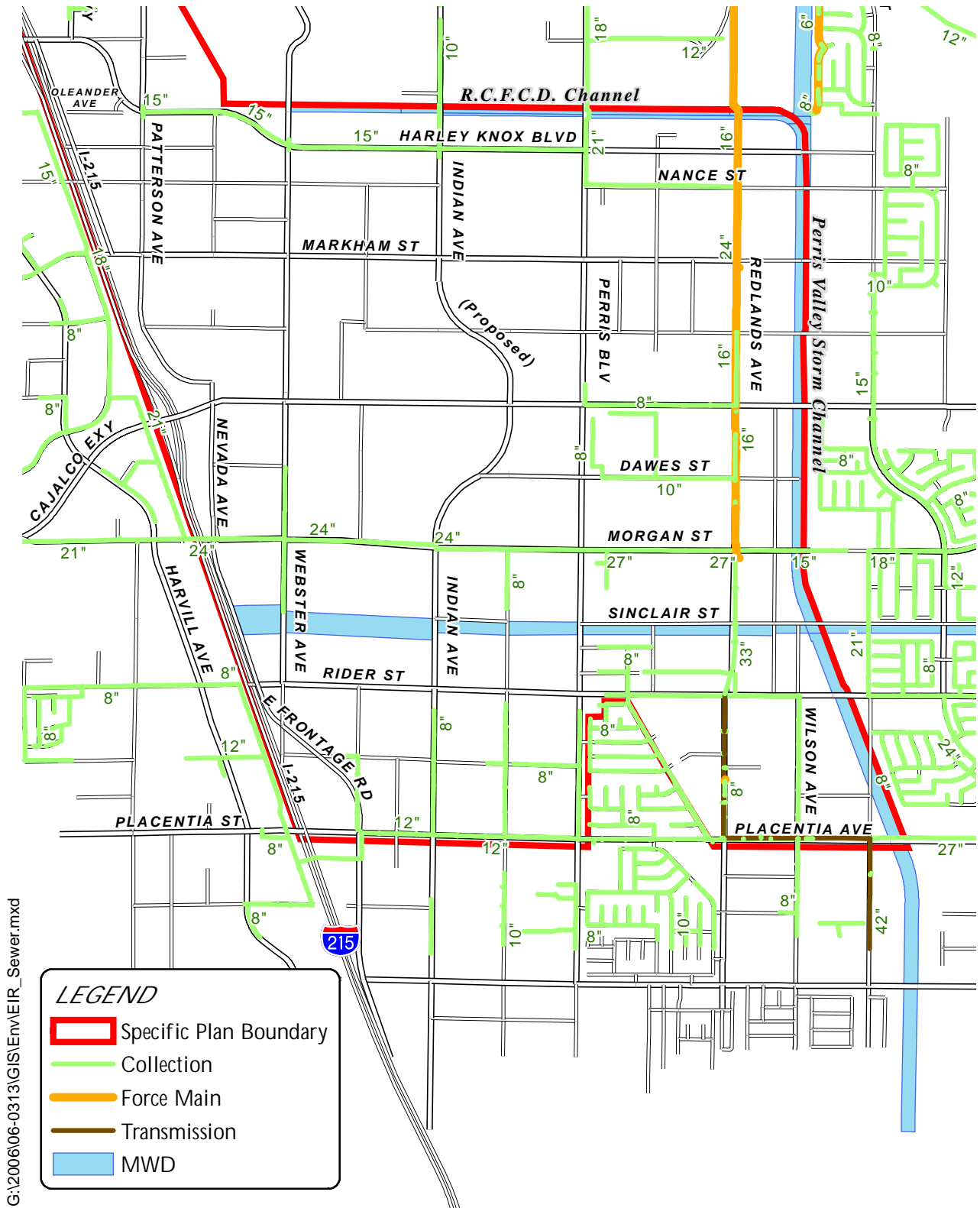
Wastewater generated by the implementing development projects within the PVCC will be treated at the 300-acre Perris Valley Regional Water Reclamation Facility (PVRWRf), south of Case Road, and west of I-215. The PVRWRf receives sewage from a 120-square-mile area from customers in Perris, Sun City, Romoland, Homeland, and a portion of Moreno Valley.

As shown in **Table 4.11-C**, the PVRWRf has a current overall capacity of 15 MGD and typically receives approximately 13 MGD of wastewater from the City of Perris and diverted wastewater from the Sun City and Hemet/San Jacinto service areas and EMWD’s Perris and Hemet water filtration plans, which is approximately 87 percent of the PVRWRf’s total capacity. For operating purposes, EMWD diverts wastewater to the PVRWRf although there is sufficient capacity in EMWD’s other wastewater treatment facilities to accommodate these diverted wastewater flows. The PVRWRf’s capacity is currently being expanded to handle 22 MGD and should be in full service by 2011.³ Ultimate expansion capacity of the Perris treatment facility is 100 MGD.

The sewer system’s primary trunk line within the PVCC project area is located in Redlands Avenue, with the secondary trunk lines located in Harley Knox Boulevard and Morgan Street (**Figure 4.11-2, Existing EMWD Sewer**). EMWD trunk line sewers convey wastewater southerly to the 300-acre PVRWRf that is located south of Case Road and west of I-215. Wastewater is processed at the PVRWRf into recycled water and biosolids that may be used for soil enrichment. Recycled water sourced from the PVRWRf is utilized by CALPINE⁴ energy company, the San Jacinto Wildlife Area, and municipal and agricultural irrigators for use in the irrigation of golf courses, school athletic fields and municipal parks, among other uses.

³ Communication with Elizabeth Lovsted, EMWD, 5/10/2010

⁴ A power company currently based out of Houston, Texas.



Source: PVCC Specific Plan.

Figure 4.11-2
Existing EMWD Sewer

Some older developed areas utilize individual on-site wastewater disposal systems in the form of either a septic tank with leaching field, or a seepage pit system.

Storm water Drainage

The project site is within the RCFC&WCD PVMDP, as previously shown on **Figure 4.7-2**. The PVMDP proposes a series of concrete lined trapezoidal channels to convey runoff from the area. At the time the PVMDP was adopted, the drainage concept contained therein was feasible because most of the area was agricultural land and relatively inexpensive. Due to development in the area and the increased land values, open channels are no longer the best option and it has become more economically feasible to place the backbone drainage facilities underground in the existing roadways. Additionally, several other issues make the immediate implementation of the existing PVMDP problematic. The PVMDP is dependent upon the ultimate build-out of the PVSC located along the easterly boundary of the PVCC. Currently, two large diameter MWD Colorado River Aqueduct lines cross the PVSC. These lines prohibit the construction of the PVSC to its ultimate depth. Relocation of these MWD facilities is estimated to cost between \$25-35 million. Therefore, an updated master drainage plan was prepared for the PVCC in order to meet the development goals of this specific plan. Although it is not necessary for RCFC&WCD to formally amend the PVMDP to include the PVCC master drainage facilities, the City anticipates making this request to RCFC&WCD to amend both the PVMDP and the Perris Valley Area Drainage Plan to allow the collection of fees from new development within the PVMDP and the application of such fees towards the cost of the master drainage facilities.

Recycled Water

EMWD'S recycled water system currently receives 45-50 MGD of treated wastewater from its regional treatment plants. EMWD currently has more than 200 active recycled water accounts and sells more than 26,000 acre-feet per year of recycled water. The majority of the recycled water sold is used for agricultural irrigation. In recent years, sales to municipal customers have rapidly increased as residential and urban development replaces irrigated farmland.

The PVCC project site is located within EMWD's Recycled Water Service area, served by the Moreno Valley RWRf; recycled water sourced from this facility is utilized for agricultural purposes within the project area. Currently, new development in the area must connect to the potable water system to provide for irrigation needs, until enough recycled capacity is available. Additionally, the lack of transmission lines prohibits the ability to adequately phase out the usage of potable water for irrigation purposes throughout the specific plan area.

Solid Waste

In the PVCC area, solid waste collection service is provided by CR&R Disposal. Waste is transported to the Perris Materials Recovery Facility⁵ where recyclable materials are separated from solid wastes. Extracted recyclable materials are sold in bulk and transported for processing and transformation for other uses. Solid wastes are transported to either the El Sobrante Landfill in Corona or the Badlands Landfill in Moreno Valley. Both landfills are Class III municipal solid waste landfills. As Class III landfills, they accept primarily non-hazardous residential and commercial/industrial municipal solid waste.

The PVCC site is located approximately nine miles southwest of the Badlands Landfill that is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue. The landfill is a regional municipal solid waste landfill that is owned and operated by Riverside County and has a total capacity of approximately 6,278 acres. The existing landfill encompasses approximately 1,168.3 acres, of which 150 acres are permitted for refuse disposal and another 96 acres are designated for existing and planned

⁵ Located at 1706 Goetz Road, Perris.

ancillary facilities and activities. The landfill is currently permitted to receive 4,000 tons per day (tpd) and had an estimated total capacity of approximately 15.237 million tons, as of June 30, 2008. As of January 1, 2009 (beginning of day), the landfill had a total remaining disposal capacity of approximately 7.556 million tons. The Badlands Landfill is projected to reach capacity, at the earliest time, in 2014. During the last six months of 2008, the Badlands Landfill accepted a daily average volume of 1,407 tons and a period total of approximately 216,684 tons. Further landfill expansion potential exists at the Badlands Landfill site.

The PVCC project site is located approximately 13 miles east of the El Sobrante Landfill that is located in the City of Corona at 10910 Dawson Canyon Road. The landfill is a regional municipal solid waste landfill. The landfill encompasses 1,322 acres, of which 645 acres are permitted for land fill operation. The El Sobrante Landfill is currently permitted to receive refuse in the amount of 70,000 tons per week, of which 28,000 tons are reserved for refuse generated within Riverside County (4,000 tons per day). The landfill has a total capacity of approximately 109 million tons or 184.93 million cubic yards, of which approximately 52.3 million tons are reserved for in-County waste. As of January 1, 2009 (beginning of day), the landfill had a remaining in-County disposal capacity of approximately 39.969 million tons. During the last six months of 2008, the El Sobrante Landfill accepted a total of approximately 1.031 million tons of waste, of which approximately 0.429 million tons were generated within Riverside County; the daily average for in-County waste was 2,786 tons. The landfill is expected to reach capacity in approximately the year 2045.

Related Regulations

Water Supply

State Regulations

Water Conservation in Landscaping Act

To ensure adequate supplies are available for future uses and to promote the conservation and efficient use of water, local agencies were required to adopt a water-efficient landscape ordinance. The City of Perris adopted the policies and requirements contained in the model ordinance drafted by the State of California on December 8, 2009. EMWD encourages businesses to minimize unnecessary landscaping and requires a separate water meter and a formal “water budget” for any commercial landscaping over 3,000 square feet, as regulated by Ordinance No. 72.24.

Sections 13550-13556 of the State Water Code

These sections of the State Water Code state that local, regional, or state agencies shall not use water from any source of quality for non-potable uses if suitable recycled water is available as provided in Section 13550 of the Water Code.

Urban Water Management Planning Act

Since 1984, the Urban Water Management Planning Act, has required “urban water suppliers” to develop written “urban water management plans.” While generally aimed at encouraging water suppliers to implement water conservation measures, it also created long-term planning obligations. In preparing urban water management plans, urban water suppliers must describe the following:

- Existing and planned water supply and demand;
- Water conservation measures and a schedule for implementing and evaluating such measures;
- and water shortage contingency measures.

The Urban Water Management Planning Act requires urban water suppliers to use a 20-year planning horizon and to update the data in the urban water plans every 5 years. In preparing their 20-year management plans, water suppliers must directly address the subject of future population growth. The suppliers must also identify sources of supply to meet demand. The plan must “identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier.”

California Water Supply Laws

California Water Code sections 10910-10915 (commonly referred to as “SB 610,” according to the enacting legislation) require the preparation of a Water Supply Assessment (WSA) for certain projects, generally including those that will have a water demand equivalent to a project with 500 dwelling units or more. Under SB 610, at the time the lead agency determines a project is subject to CEQA, the agency must identify the public water system that will provide water service to the project and request preparation of a WSA for the project from the water provider. As indicated above, the project is within EMWD’s service territory and, therefore, will be served by EMWD. In preparing a WSA, if the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate information from that plan into the WSA. Generally, a WSA must include an analysis of whether the total projected water supplies available to the water provider during normal, single-dry years and multiple-dry years over the next 20-year period is sufficient to meet the projected water demand associated with the project, in addition to other existing and planned future uses. Additional analysis is required if the water supplies identified to serve the project include groundwater. Upon the water provider’s adoption of the WSA, the WSA must be forwarded to the lead agency and incorporated in the CEQA document being prepared for the project.

Similar to the requirements of SB 610, California Government Code Section 66473.7 (commonly referred to as “SB 221,” according to the enacting legislation) generally requires the legislative body of a city, county or local agency to include as a condition in any tentative tract map or development agreement that includes a subdivision (defined as a residential development containing 500 or more dwelling units) a requirement that a sufficient water supply is or will be available to serve the subdivision. The availability of a sufficient water supply must be based on Written Verification from the public water system that will provide water service to the proposed project. As with the standard provided by SB 610, a “sufficient water supply” under SB 221 is the total water supplies available to the water provider during normal, single-dry years and multiple-dry years within a 20-year projection that will meet the projected demand of the proposed subdivision, in addition to other existing and planned future uses, including agricultural and industrial uses. The water provider’s verification must be based on substantial evidence such as water supply contracts, capital outlay programs and regulatory permits and approvals regarding the water provider’s rights to and capability of delivering the project supply.

Water Conservation Act

The Water Conservation Act of 2009, or Senate Bill 7x-7, which was enacted in November 2009, set a requirement for water agencies to reduce their per capita water use by 2020. The overall goal is to reach a statewide reduction of per capita urban water use of 20 percent by December 31, 2020, with an intermediate 10 percent reduction by December 31, 2015. Demand reduction can be achieved through both conservation and the use of recycled water as a potable demand offset.

An urban water provider’s 2010 UWMP must include a target for per capita water use in 2020 and an interim target for 2015. The 2020 target may be updated in the 2015 UWMP. These targets must be developed using one of four methods. Effective 2016, urban water retailers who do not meet their water conservation targets will be ineligible for state water grants or loans unless one of two exceptions is met. The first exception states that an urban supplier may be eligible if they have submitted a compliance schedule, financing plan, and budget to California Department of Water Resources (DWR) for approval, showing how they will meet their target per capita water use by 2020. The second exception states that an

urban water supplier may be eligible for funding if their entire water service area qualifies as a disadvantaged community. DWR, through a public process, developed and published *Methodologies for Calculating Baseline and Compliance Urban Water Per Capita Use* in October 2010 for consistent application of the Act throughout the state.

City of Perris and Local Regulations

City of Perris General Plan

The following are policies within the City's General Plan that pertain to water and are applicable to the proposed project.

City of Perris GP - Conservation Element

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| Goal V | Provide an adequate water supply to support existing and future land uses, anticipated in the Land Use Element. |
| Policy V.A | Coordinate land-planning efforts with local water purveyors. |
| Measure V.A.1 | Work with Eastern Municipal Water District to ensure that development does not outpace projections consistent with EMWD's Urban Water Management Plan. |
| Measure V.A.2 | Require use of new technologies and water conserving plant materials for landscaping. |
| Measure V.A.3 | Participate with the Eastern Municipal Water District to develop and implement water conservation programs and to encourage use of water conserving technologies. |
| Goal VI | Achieve regional water quality objectives and protect the beneficial uses of the region's surface and groundwater. |
| Policy VI.A | Comply with requirements of the National Pollutant Discharge Elimination System (NPDES). |
| Measure VI.A.3 | Prior to issuance of any grading permit involving a disturbance of one or more acres of land requires proof of a RWQCB San Jacinto Watershed Construction Activities Permit and a Storm Water Pollution Prevention Plan. |
| Measure VI.A.4 | Review water quality impacts during the proposed project review and approval phases to ensure that appropriate BMPs are incorporated into the proposed project design and long-term operations. |
| Measure VI.A.5 | In accordance with the Riverside County NPDES, enact a Water Quality Management Plan to review and regulate new development approvals |

City of Perris GP - Conservation Element: Sustainable Community Section

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|---------------|---|
| Goal I | Create a vision for energy and resource conservation and the use of green building design for the City which provides for the protection of the environment while improving the quality of life and promoting sustainability. |
| Policy I.A | Adopt and maintain development regulations, which encourage water and resource conservation. |
| Measure I.A.5 | Use permeable paving materials within developments to deter water runoff and promote natural filtering of precipitation and irrigation waters. |

Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainable practices.
Policy VIII.A	Adopt and maintain development regulations that encourage water and resource conservation.
Measure VIII.A.1	Use indigenous and/or drought-resistant planting materials and efficient irrigation systems in residential projects as a means of reducing water demand, including smart irrigation systems.
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25 percent or less of the landscaped areas.
Measure VIII.A.3	Use water conserving appliances and fixtures (low-flush toilets, and low-flow shower heads and faucets) within all new residential developments.
Measure VIII.A.4	Use gray water, and water conserving appliances and fixtures within all new commercial and industrial developments.
Measure VIII.A.5	Use permeable paving materials within developments to deter water runoff and promote natural filtering of precipitation and irrigation waters.
Measure VIII.A.8	Explore the use of private water well systems for all potable and/or landscaping water use for larger commercial and industrial projects.

Riverside County Water Efficient Landscape Requirements Ordinance

The County of Riverside Board of Supervisors approved an update to Ordinance No. 859 on October 20, 2009. The intent of this ordinance is to establish provision for water management practices and water waste prevention; establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes without a decline in landscape quality or quantity; to retain flexibility and encourage creativity through appropriate design; and to assure the attainment of water efficient landscape goals by requiring that landscapes not exceed a maximum water demand of 70 percent of its reference evapotranspiration or any lower percentage as may be required by state legislation, whichever is stricter. Further, to eliminate water waste from overspray and/or runoff; to achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program; and lastly, to implement the requirements of the California Water Conservation in Landscaping Act 2006 and the California Code of Regulations Title 23, Division 2, Chapter 2.7.

Eastern Municipal Water District

EMWD will be the water service provider for the project. EMWD is a public agency and retail water service provider, organized and operating as a municipal water district pursuant to the Municipal Water District Law, Water Code section 71000 *et seq.* As such, EMWD is vested with broad statutory powers to provide water service and regulate water supply-related issues within its service territory. Pursuant to that authority, EMWD adopted Ordinance 72.22 on January 3, 2007. This ordinance discourages water waste by all customers; establishes penalties for commercial, industrial, institutional customers in non-compliance with runoff and/or irrigation requirements; and implements a tiered penalty structure for dedicated landscape meters for non-compliance with their water budget. The Procedural Guide for Landscape Irrigation Water was created and is required as a part of conditions that need to be followed prior to the issuance of landscape irrigation meters. The Procedural Guide applies to all new landscaping for public agency projects and private development projects.

EMWD also implements an aggressive water use efficiency program which is estimated to have resulted thus far in overall water savings of 12,000 acre-feet. Components of EMWD's water use efficiency program include:

- Ultra-Low-Flush Toilets (ULFT): More than 15,700 ULFTs have been installed in residential homes.
- Residential High-Efficiency Clothes Washers (HECW): More than 1,000 HECW units have been installed. They use 40 percent less water and require 55 percent less energy.
- Commercial-Industrial-Institutional hardware incentive program: Spray valves, water brooms, waterless urinals, conductivity controllers (moisture sensors) and X-ray processors.
- Water-saving Showerhead Program: Customers are using more than 25,500 low-flow showerheads and water-use efficiency kits handed out at headquarters and community outreaches.
- Water Broom Giveaway Program: Every school in EMWD's service area was given a free water broom.
- California Friendly Model Home Program: This offers financial incentives for builders to install water efficient landscaping, fixtures and appliances in new model homes, demonstrating significant water savings.
- Commercial-Industrial-Institutional Incentives and Rebates: Customers with more than 3,000 square feet of landscaping and state mandated water budgets are offered incentives and rebates for the latest irrigation technologies.
- Grant Funding Opportunities: Develop and finance innovative conservation programs using the latest technology available.
- California Friendly Workshops: Offered to more than 3,200 participants. Topics include California-friendly plants, composting and green waste recycling, landscape watering and fertilizing, and basic irrigation.
- Protector del Agua (PDA): Six four-hour landscape water management classes are provided to landscape maintenance staff. PDA begins with basic irrigation principles of soil-plant-water relationships and concludes with irrigation scheduling.
- School Classroom Presentations, Facilities Tours and Educational Resources: Made available to 116,000 students in 10 school districts within EMWD's 555-square mile service area.

Storm Water

Federal Regulations

Clean Water Act

The Federal CWA requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. The water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The SARWQCB placed Lake Elsinore and Canyon Lake on the 303(d) list of impaired waters in 1994. Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto watershed. Therefore, the implementing development projects within the PVCC will discharge storm water into receiving waters with known water quality impairments.

In 1972, the CWA was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a NPDES permit. The CWA focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste discharges, and required

implementation of control measures to minimize pollutant discharges. The CWA was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial storm water discharges. In November 1990, the EPA published final regulations that establish requirements for specific categories of industries, including construction projects that encompass greater than or equal to five (5) acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to one (1) acre. The regulations require that storm water and non-storm water runoff associated with construction activity, which discharge either directly to surface waters or indirectly through municipal separate storm sewer systems (MS4s), must be regulated by an NPDES permit.

Pursuant to Section 404 of the CWA, the ACOE regulates discharges of dredged and/or fill material into waters of the United States. "Waters of the United States" are defined in ACOE regulations at 33 C.F.R. Part 328.3(a). Navigable waters of the United States are those waters of the United States that are navigable in the traditional sense. Waters of the United States is a broader term than navigable waters of the United States and includes adjacent wetlands and tributaries to navigable waters of the United States and other waters where the degradation or destruction of which could affect interstate or foreign commerce.

National Flood Insurance Program

The federal government has been actively involved in flood control since 1927 following major floods on the Mississippi River. Beginning with the Flood Control Act of 1936, Congress assigned the ACOE the responsibility for flood control engineering works and later for floodplain information services. Flood control was provided through the construction of dams and reservoirs. Despite these programs and rapidly rising federal expenditures for flood control, flood losses continued to rise. In 1968, Congress passed the National Flood Insurance Act (the 1968 Act), which created the National Flood Insurance Program (NFIP). The Flood Disaster Protection Act of 1973, which amended the 1968 Act, required the purchase of flood insurance by property owners who were located in special flood hazard areas and were being assisted by federal programs, or by federally supervised, regulated, or insured agencies or institutions.

National Flood Insurance Program Reform Act of 1994

In 1994, the National Flood Insurance Program Reform Act went through its first major revision, since its inception. Included in this revision were provisions that if a lender were to escrow an account and if the structure were in the floodplain, then the lender must escrow for flood insurance. The revised legislation also included increased flood insurance limits and the elimination of the 1962 buy-out program. However, the legislation did initiate the Hazard Mitigation Fund as part of the flood insurance policy. Also included in this legislation, was the increase from a 5-day to a 30-day waiting period for a new policy to become effective. It also prohibits the waiver of flood insurance purchase requirements as a condition of receiving federal disaster assistance. If the flood insurance policy was not maintained and in the event of another disaster, there would be no disaster assistance available for that structure.

Executive Order 11988, Floodplain Management

Executive Order 11988 requires the ACOE to provide leadership and to take action to:

- Reduce the hazards and risks associated with floods;
- Minimize the impacts of floods on human health, safety, and welfare; and
- Restore and preserve the natural and beneficial values of the current floodplain.

To comply with Executive Order 11988, the policy of the ACOE is to develop projects that, to the extent possible, avoid or minimize adverse effects associated with use of the floodplain and that avoid development (or the inducement of development) in an existing floodplain; unless, there is no practicable alternative.

State Regulations

The California Water Code is the principal state law regulating water quality in California. The Health and Safety Code, Fish and Game Code, Harbors and Navigation Code, and the Food and Agriculture Code all contain provisions concerning water quality. The Health and Safety Code provides for protection of ground and surface waters from hazardous waste and other toxic substances. The Harbors and Navigation Code provides regulations designed to prevent the unauthorized discharge of waste from vessels into surface waters. The Fish and Game Code has provisions to prevent unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life. The Food and Agriculture Code provides for the protection of groundwater that may be used for drinking water supplies.

The California Code of Regulations also contains administrative procedures for the state and RWQCBs in Title 23; and for water quality for domestic uses, wastewater reclamation, and hazardous waste management in Title 22. The California Department of Fish and Game (CDFG), through provisions of the California Fish and Game Code (Sections 1601 through 1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. The presence of a channel bed and banks, and at least an intermittent flow of water, define streams and rivers. The CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake, as defined by the CDFG.

This portion of the California Water Code, Division 7 (Porter-Cologne Act), establishes a program to protect water quality and beneficial uses of the state water resources and includes groundwater and surface water. It establishes waste discharge requirements, water quality control planning and monitoring, enforcement of discharge permits, and ground and surface water quality objectives. It also prevents waste and unreasonable use of water, and adjudicates water rights. It also directs each RWQCB in the State of California to develop a Water Quality Control Plan (Basin Plan) for all areas within its region. The Basin Plan is the basis for each RWQCB's regulatory programs. The proposed project site is located within the purview of the Santa Ana Regional Water Quality Control Board (SARWQCB), Region 8, and must comply with applicable elements of the region's Santa Ana River Basin Plan (the 1995 Basin Plan) as well as the Porter-Cologne Water Quality Control Act, and the Federal Clean Water Act.

The SARWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the CWA to include the beneficial uses of specific water bodies, the levels of water quality that must be met and maintained to protect those uses (water quality objectives), and the state's anti-degradation policy. Water quality standards for all ground and surface waters overseen by the SARWQCB are documented in the 1995 Basin Plan. Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Nine beneficial uses have been designated for surface water bodies and groundwater in the vicinity of the proposed project site (Table 4.7-A, Beneficial Uses for Water Bodies in Proximity to the Project Area).

The State Water Resources Control Board administers the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size. This is known as the General Permit for Storm Water Discharges Associated with Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002. The main compliance requirement of the NPDES permits is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to identify potential on-site pollutants and identify and implement appropriate storm water pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges. Storm water best management practices (BMPs) to be implemented during construction and grading, as well as post-construction BMPs, will be outlined in the SWPPPs and Water

Quality Management Plans (WQMPs) prepared for the specific development projects within the PVCC. Possible examples of BMPs include: detention basins for capture and containment of sediments; use of silt fencing, sandbags, or straw bales to control runoff; and identification of emergency procedures in the case of hazardous materials spills. Individual project proponents will be required to obtain a construction NPDES permit, prior to site disturbance.

On September 17, 2004, the Water Quality Management Plan for Urban Runoff from New Development and Significant Redevelopment was adopted by the SARWQCB and became effective January 1, 2005. This included the preparation of site specific WQMPs that identified BMPs to ensure that the water quality of receiving waters would not be degraded following development.

On September 2, 2009, the California State Water Resources Control Board voted to adopt major revisions to the statewide General Permit for Discharges of Storm water Associated with Construction Activities (Construction General Permit). The new permit will take effect July 1, 2010 and applies to projects that disturb one or more acres, or projects that disturb less than one acre but are part of a larger common plan of development that disturbs more than one acre in total (e.g., large linear utility projects). The revised permit requires that projects implement a SWPPP that contains specific BMPs and establishes numeric effluent limitations to meet water quality and technology-based standards. It also provides greater clarity so that the public can determine whether permittees are in compliance.

Therefore, new projects submitted to the City of Perris (a co-permittee listed in the Riverside County WQMP) are required to submit a project-specific WQMP prior to the first discretionary project approval or permit. Project applicants may submit a preliminary project-specific WQMP for discretionary project approval (land use permit); however, a final version would be submitted for review and approval prior to the issuance of any grading or building permits.

Cobey-Alquist Flood Plain Management Act (California Water Code Section)

This act states that a large portion of land resources of the State of California are subject to recurrent flooding. The public interest necessitates sound development of land use, as land is a limited, valuable, and irreplaceable resource. The floodplains of the State are a land resource that requires development in a manner that is in conjunction with economically justified structural measures for flood control, and that would result in the prevention of loss of life and economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is a policy of the State to encourage local government to plan land use regulations to accomplish floodplain management, and to provide State assistance and guidance.

Regional Regulations

Riverside County Flood Control and Water Conservation District (RCFC&WCD) has adopted the PVMDP, which identifies flood control facilities for an area that includes the proposed project area. In addition to the PVMDP, RCFC&WCD has adopted the Perris Valley Area Drainage Plan (PVADP), which is a financing mechanism used to ensure that new development pays its fair share for needed drainage facilities through the imposition of area drainage plan (ADP) fees. According to the RCFC&WCD, the primary responsibility for the design and construction of all ADP facilities lies with the RCFC&WCD so that the maximum control and accountability for costs accruing to the ADP funds can be maintained. The following criteria will be applied by the Chief RCFC&WCD Engineer to assist in the evaluation of the engineering and administration responsibility for construction contracts related to the proposed project stormdrain connections. Design responsibility for major facilities, including channels, retention basins, and storm drains with diameters of more than 60-inches will be designed by the District (or through private engineering contracts administered by the District), unless otherwise authorized in writing by the

Chief Engineer. Local facilities and lateral storm drains with diameters of 60-inches or less will normally be designed by the developer's engineer using District standards, providing that the Chief Engineer has authorized the developer (in writing) to proceed in this manner.

The project is located within the PVADP. Accordingly, implementing development proponents will be subject to applicable ADP fees. The PVADP fees are currently set at \$8,875 per acre. ADP fees are paid at the time of tentative map recordation, unless deferred by the developer to the grading permit or building permit stage. The actual ADP fee paid by developments may be less than \$8,875 per acre, due to credits for drainage infrastructure previously constructed or drainage facilities constructed, as part of development proposals. Although the ADP fee is established for subdivisions, Riverside County's "Rules and Regulations for Administration of Area Drainage Plans" provides for the payment of ADP fees for other discretionary land uses when a determination has been made that the approved land use will increase runoff which may require earlier construction of downstream ADP facilities.

Local Regulations

City of Perris Municipal Code

Chapter 14.22 *Stormwater/Urban Runoff Management and Discharge Control*, 14.22.020 Purpose and Intent. The purpose of this chapter is to ensure the environmental protection and public health, safety, and general welfare of City residents by:

- A. Prohibiting non-storm water discharges into the storm water conveyance system;
- B. Eliminating discharges into the storm water conveyance system from spills, dumping, or disposal of materials, other than storm water or permitted or exempted discharges;
- C. Reducing pollutants in storm water discharges, including those pollutants taken up by storm water as it flows over urban areas (urban runoff), to the maximum extent practicable; and
- D. Reducing pollutants in storm water discharges to achieve applicable water quality objectives for receiving waters within the City and Santa Ana River Watershed.

The intent of this chapter is to protect and enhance the water quality of the City of Perris water courses, water bodies, groundwater, wetlands, and regional receiving waters in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C. Section 1342), and California Regional Water Quality Control Board NPDES Permit No. CAS 618033, Order No. R8-2002-0011, and any amendment, revision or re-issuance thereof (Ord. 1194 § 3(part), 2006).

Chapter 15.09 *Flood Management*, 15.09.090 Standards of Construction. In all areas of special flood hazards, the following standards are required:

- A. Anchoring.
 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 2. All manufactured homes shall meet the anchoring standards of Section 15.09.120.
- B. Construction Materials and Methods.
 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
4. Within Zones AH or AO, adequate drainage paths around structures or slopes shall be constructed to guide floodwaters around and away from the proposed structures.

C. Elevation and Flood-proofing.

1. Residential construction, new or substantial improvement, shall have the lowest floor, including the basement:
 - a. In an AO-Zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade, if no depth number is specified;
 - b. In an A-Zone, elevated to or above the base flood elevation, as determined by this community; and
 - c. In all other Zones, elevated to or above the base flood elevation. Upon the completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or surveyor, or verified by the community building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.
2. Nonresidential construction shall either be elevated to conform with Section 15.09.090 or together with attendant utility and sanitary facilities:
 - a. Be flood-proofed below the elevation recommended under Section 15.09.090 so that the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - c. Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the floodplain administrator.
3. All new construction and substantial improvements that include fully enclosed areas below the lowest floor (excluding basements) that are usable solely for the parking of vehicles, building access, or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater.

Designs for meeting this requirement must exceed the following minimum criteria:

- a. Be certified by a registered professional engineer or architect;
 - b. Be certified to comply with a local flood-proofing standard approved by the Federal Insurance Administration, Federal Emergency Management Agency; or
 - c. Have a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwater.
4. Manufactured homes shall also meet the standards in 15.09.120 (Ord. 981 § 2(part), 1994).

Sewer

Federal

Water Pollution Control Act

The purpose of the Federal Water Pollution Control Act is to restore and preserve the integrity of the nation's waters. In addition to the Federal Water Pollution Control Act, other federal environmental laws have a bearing on the location, type, planning, and funding of wastewater treatment facilities.

State

Regional Water Quality Control Board

Operation of the PVRWRF is subject to regulations set forth by the California Department of Health Services (DHS) and State Water Resources Control Board (SWRCB). NPDES permits are required for operators of municipal separate storm sewer systems (MS4s), construction, projects, and industrial facilities who discharge to surface waters within the City.

Solid Waste

State Regulations

The California Integrated Waste Management Act of 1989 (AB 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. The act was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25 percent of the solid waste landfilled by 1995 and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation.

Other state statutes pertaining to solid waste include compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires adequate areas for collecting and loading recyclable materials within the project site.

County Regulations

The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with state requirements as set forth in AB 939. The CIWMP is comprised of the Countywide Summary Plan; the Countywide Siting Element; and the Source Reduction and Recycling Elements, Household Hazardous Waste Elements, and Non-disposal Facility Elements for Riverside County and each of the cities in Riverside County. The Riverside County Waste Management Department administers recycling programs available to county residents that are normally advertised through mass media, such as newspapers, radio, television, and billboards.

On September 23, 1998, the Countywide Integrated Waste Management Board (CIWMB) approved the Riverside CIWMP. This document (comprised of the Countywide Summary Plan, the Countywide Siting Element, and the County's and each of its cities' Source Reduction and Recycling Elements, Household Hazardous Waste Elements and Nondisposal Facility Elements) was prepared in compliance with the Integrated Waste Management Act of 1989 (AB 939, *et seq.*) for the purpose of defining programs and policies to reduce waste disposal by 25 percent in 1995 and 50 percent by the year 2000.

City of Perris Regulations

City of Perris GP - Conservation Element

Goal III	Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainability.
Policy III.B	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.
Measure III.B.1	Initiate and maintain incentive programs to encourage and reward developments that employ energy and resource conservation and green building practices similar to the City's current recycling program.
Measure III.B.2	Reuse, refurbish and remodel existing buildings whenever possible to conserve land and resources.
Measure III.B.3	Require the installation of recycling bins and provide space for storage and collection of recyclables within development sites.
Measure III.B.6	Include text within all demolition permits that encourages recycling of demolition and construction waste within new and refurbished commercial and industrial development sites.

Design Considerations

Each individual project site within the PVCC will be graded and buildings designed to the recommendations of the project-specific Geotechnical Engineering Investigation. Each development is required to implement Site Design BMP's accomplishing each of four different techniques: 1) Minimize urban runoff; 2) Minimize impervious footprint; 3) Conserve Natural Areas and 4) Minimize directly connected impervious areas. These Site Design BMPs will reduce potentially significant impacts to surface and groundwater resources.

The drainage systems that will be developed in conjunction with the PVCC will consist of two basic components: storm drains and detention basins. The drainage system will capture surface runoff from properties in the area and convey it into proposed storm drains and detention basins before continuing to the PVSC. The PVCC master drainage facilities shown in **Figure 4.7-3** are modifications from the facilities identified in the existing PVMDP and are described below:

- **Line D (From the Perris Valley Storm Channel to the upstream end of the facility, approximately 2,000 feet west of Indian Avenue on Nance Street)**
Line D will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box, and an underground reinforced concrete pipe. While the proposed slope of the underground portions of this facility are less than the RCFC&WCD design standards, an agreement has been reached with RCFC&WCD to ensure this will be a District maintained facility. . . .
- **Line E (From the Perris Valley Storm Channel to the proposed Line E Detention Basin)**
Line E will consist of a concrete lined trapezoidal channel, an underground reinforced concrete box, and an underground reinforced concrete pipe. While the proposed slope of a segment of this facility is less than the RCFC&WCD design standards, an agreement has been reached with RCFC&WCD to ensure this will be a District maintained facility.
- **Line E Detention Basin**
This basin or basins will be located in the vicinity of the intersection of the Ramona Expressway and I-215. Line E Detention Basin(s) is a key component to the proposed Line E system. The

basin(s) will reduce peak flows and allow the majority of the downstream facility to be constructed in the street right-of-way. Line E Detention Basin(s) conceptually requires a surface area of approximately 9.5 acres with an approximate depth of 20 feet. The Line E Detention Basin(s) will be designed to handle a 100-year storm event. It is anticipated that the Line E Detention Basin(s) may serve as a dual use facility, recreational park, and a flood control basin.

- **Line F (From the Line E Detention Basin to the Line F Detention Basin)**

Line F will consist of an underground reinforced concrete pipe from the Line E Detention Basin to the Line F Detention Basin. The slope proposed for Line F meets the minimum RCFC&WCD design criteria, and as such would be a District-maintained facility.

- **Line F Detention Basin**

This basin will be located in the vicinity of the intersection of Markham Street and the I-215. Line F Detention Basin will reduce peak flows and allow a majority of the downstream facilities to be constructed within the street right-of-way. Line F Detention Basin conceptually requires a surface area of approximately 8 acres with an approximate depth of 20 feet. The Line F Detention Basin will be designed to handle a 100-year storm event. It is anticipated that the Line F Detention Basin may serve as a dual use facility, recreational park, and flood control basin.

- **Line H from the Perris Valley Storm Channel to the proposed Line H Detention Basin**

Line H is proposed to be an underground reinforced concrete box in Placentia Avenue, from the PVSC to the Line H Detention Basin. The slope proposed for Line H meets the minimum RCFC&WCD design criteria, and as such would be a District maintained facility

- **Line H Detention Basin**

This basin will be located in an area approximately 1,000 feet west of Indian Avenue and south of Walnut Street. The Line H Detention Basin will have a surface area of approximately 15.5 acres and be approximately 20 feet deep. The basin will reduce peak flows and allow the downstream Line H facility to be constructed in the street right-of-way. The Line H Basin will be designed with a holding capacity to accommodate the 100-year storm event. It is anticipated that the Line H Detention Basin will serve as a dual-use facility. It will be used as a recreational park and a flood control basin.

In addition to the facilities discussed above, other adopted PVMDP facilities in the PVCC area will also need to be constructed to accommodate the drainage needs of the area. **Figure 4.7-3** shows the adopted and modified drainage facilities that will need to be constructed. These facilities will be required to accommodate developed 100-year storm flows in the project area. It is anticipated that the above-described drainage systems will be constructed in conjunction with future development projects within the PVCC area. Once developed, runoff from the project area will be increased. This increased runoff is consistent with expected runoff used to size facilities identified in the existing PVMDP. Runoff from the PVCC will be discharged into the PVSC and ultimately into the San Jacinto River.

Thresholds of Significance

The City of Perris has not established local CEQA significance and instead defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Based on Appendix G to the State *CEQA Guidelines*, impacts related to utilities and service systems may be considered potentially significant if the project would:

- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- result in a determination by the wastewater treatment provider, which serves the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Environmental Impacts

Threshold: Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The PVCC project area is served by existing water pipelines that range in size from 8-inch diameter pipes to 42-inch diameter pipes. These existing waterlines are shown previously on **Figure 4.11-1, Existing EMWD Water** and listed in **Table 4.11-B, Existing EMWD Waterlines**. The sewer system's primary trunk line within the PVCC project area is located in Redlands Avenue, with the secondary trunk lines located in Harley Knox Boulevard and Morgan Street (**Figure 4.11-2, Existing EMWD Sewer**). EMWD trunk line sewers convey wastewater southerly to the 300-acre Perris Valley Regional Water Reclamation Facility (PVRWRF) that is located south of Case Road and west of I-215.

The proposed project site is not currently served by an EMWD recycled water pipeline. The extension of the recycled water line would occur as part of EMWD programs to increase use of recycled water which is funded in part by development fees. The environmental impacts of extending this line will only impact disturbed existing roadway areas and will not result in significant environmental impact. The proposed on-site recycled water pipelines will be designed in accordance with EMWD's standard plans and specifications and applicable federal, state and local statutes, ordinances, and regulations. Specifically, the proposed project will comply with *EMWD Recycled Water Guidelines* and EMWD Ordinance No. 68.2.

There are existing EMWD sewer facilities in roadways adjacent to the proposed project site. There is an existing sewer pipeline within San Jacinto Avenue which ranges in size from an 8-inch to 24-inch diameter pipeline. In addition, there is an existing 8-inch diameter pipeline that bisects the proposed project site that will be abandoned as part of the proposed project. In order to connect the proposed project to EMWD's sewer system, 8-inch diameter sewer connection lines will be constructed in on-site roadways. These 8-inch diameter sewer lines will connect to the existing 8-inch diameter sewer line located within San Jacinto Avenue.

Development within the PVCC project area will require extension of new waterlines into areas not currently served and upgrading of some existing waterlines to meet future demand. Primary improvements will likely require increasing the capacity of several waterlines, and installing new waterlines. The majority of improvements include 12-inch diameter waterlines located primarily within existing and future street rights-of-way that will connect to existing feeder lines. The timing of these improvements will depend on the rate of future land development within the PVCC. Upgrades and new waterline installation may be required in conjunction with construction of new development, as reviewed and approved by EMWD.

It is anticipated that portions of the Redlands Avenue sewer trunk line will require upgrades to meet future carrying capacity. In addition, improvements to existing secondary lines, or construction of new gravity lines, may be required. It is anticipated that initial development of the area within the PVCC will benefit from currently available sewer capacity. Actual sewer improvements will be coordinated and approved by EMWD, as development occurs.

As required for all development projects in the City of Perris, the proposed PVCC and its implementing projects would be conditioned to construct all associated water and sewer facilities needed to provide these services throughout the development area. Adherence to standard EMWD and City conditions relative to the design and installation of new water and sewer infrastructure and/or connections to existing water infrastructure would ensure that no significant impact would result from the construction or operation of implementing development

As shown previously in **Table 4.11-A**, the overall water supply available to EMWD in 2010 totaled 154,700 AFY, and as shown below in **Table 4.11-E**, in 2035 the water supply and demand is anticipated to total between 302,200 AFY to 315,300 AFY depending on hydrologic conditions. According to the Water Supply Assessment prepared by EMWD for the proposed project (known herein as Project WSA and available as Appendix G in this DEIR), the proposed project's estimated water demand is 2,671.5 AFY at full buildout (Project WSA, p. 2). This level of demand represents approximately 1.73 percent (2,671.5 AFY/154,700 AFY) of the total EMWD water supply in 2010 and between 0.9 percent (2,671.5 AFY/302,200 AFY) and 0.8 percent (2,671.5 AFY/315,300 AFY) of EMWD's anticipated water supply and demand in 2035 depending on hydrologic conditions. As discussed below, and documented in the Project WSA, UWMP, and RUWMP, EMWD has adequate capacity to serve the proposed project's water demand and will not require facilities to be expanded.

The PVCC is anticipated to generate approximately 5,316,295 gallons of wastewater per day (**Table 4.11-I, PVCC Projected Generation of Wastewater**). Wastewater from the proposed project will be treated at EMWD's Perris Valley Regional Water Reclamation Facility (PVRWRF) located in the City of Perris which has a current capacity for 15 million gallons per day (MGD). Currently, the PVRWRF typically receives approximately 13 MGD of wastewater with a remaining capacity for 2 MGD. However, the PVRWRF's capacity is currently being expanded to handle 22 MGD by 2011.

Once the expansion of the PVRWRF is completed in 2011, and the PVRWRF's total capacity is increased to 22 MGD, the demand from the proposed project on the excess capacity will represent 58.9 percent (5.3 MGD/9 MGD).

Inasmuch as EMWD has sufficient capacity to provide water and wastewater services to the proposed PVCC project and the its implementing development projects would be subject to conditions imposed by the City and EMWD associated to the installation of additional pipelines within the project area in order to serve individual implementing projects within the PVCC; **the proposed project will not require the construction of new water treatment facilities or the expansion of existing facilities the construction of which would cause significant environmental effects; and the proposed project will result in less than significant environmental effects related to new or expanded water treatment facilities.**

Threshold: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The existing drainage system in the City of Perris is owned and operated by both the City and Riverside County. Storm runoff within the City is generally intercepted by a network of City facilities. The local facilities then convey the flow to the major County facility, the PVSC which, in turn, conveys the flow into the San Jacinto River. According to the Perris Valley Master Drainage Plan, the drainage system

throughout the City is adequate only for existing development. Construction of buildings, roadways, and parking lots consistent with the General Plan would increase impervious surfaces, which could, in turn, increase storm water runoff in the City. This increased runoff could exceed the capacity of existing infrastructure.

Comprehensive, areawide flood control infrastructure improvements are required to accommodate continued development throughout the Perris Valley. The PVSC will ultimately have to be deepened and widened to accommodate runoff from both existing and future development. These improvements are feasible only in conjunction with future improvements to the San Jacinto River channel, which receives the outflow from the PVSC.

Consistent with the Perris GP Implementation Measures, new development will be accompanied by construction of both on-site storm detention basins and related structures in the near-term, and construction of storm water master plan facilities in the City that will accompany longer term improvements to the PVSC and the San Jacinto River Channel. The extent of interim facilities construction is not known and will depend upon the hydraulic measures employed and elapsed time until improvements to the PVSC and the San Jacinto River Channel are completed.

In addition to the modified facilities discussed above, other adopted Perris Valley MDP facilities in the PVCC area will also need to be constructed to accommodate the drainage needs of the area. **Figure 4.7-3** in the Hydrology and Water Quality Section (Section 4.6) of this DEIR shows the adopted and modified drainage facilities that will need to be constructed. These facilities will be required to accommodate developed 100-year storm flows in the project area. It is anticipated that the above-described drainage systems will be constructed in conjunction with future development projects within the PVCC area. Once developed, runoff from the project area will be increased. This increased runoff is consistent with that planned for by the existing Perris Valley MDP. Runoff will be discharged into the PVSC and ultimately into the San Jacinto River. Design criteria for interim storm water facilities require that new development does not disrupt existing drainage patterns. These include requirements that runoff from adjoining contributory drainage areas are included in calculations of potential storm water runoff volumes and accommodated in design of the interim facilities and that storm water discharge to storm drain facilities does not increase from predevelopment volumes. In addition, the interim detention facilities are designed to prevent “first flush” storm water discharges and nuisance drainage discharges such as irrigation overspray that contain contaminants from entering storm drain facilities that eventually discharge to the San Jacinto River. The project will abide by the Interim Development Criteria as adopted by the City of Perris, City Council with Ordinance No. 3403, and pay all applicable drainage fees to the Flood Control District prior to the issue of grading permits.

The March Air Force Base Reuse Drainage Master Plan identifies storm water conveyance through the project area into the Perris Valley MDP Lateral B. The PVCC has not proposed any changes to this part of the MDP and, as such, will not affect, or be inconsistent with the MDP. According to the Perris Valley Area Plan, the PVSC is an earthen flood control channel and conveys flows released from upstream areas and flows from storm drains discharging into the channel. The PVSC is an ADP facility and was designed to accommodate flows from the Perris Valley ADP watershed in a 100-year storm event after development of the watershed, including the project site. On-site storm drain facilities will be constructed and connected to the PVSC. Storm water runoff from the proposed project will not exceed the capacity of existing or planned storm water drainage systems. Potential impacts related to existing or planned storm water drainage systems are therefore less than significant.

As described above under “Design Considerations”, the drainage systems that will be developed in conjunction with the PVCC will consist of two basic components: storm drains and detention basins. The drainage system will capture surface runoff from properties in the area and convey it into proposed storm

drains and detention basins before continuing to the PVSC. The facilities as shown in **Figure 4.7-3** are modifications to the existing Perris Valley MDP. Inasmuch as these facilities are part of the proposed Project, the potential impacts associated with development of these storm drain facilities are the same as those discussed throughout this DEIR. Therefore, the construction of the storm water drainage facilities associated with the PVCC will not cause significant environmental effects beyond those discussed throughout this DEIR.

***Threshold:** Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.*

Anticipated Water Demand of Project

New development associated with the PVCC will result in an increase in demand for water supply within EMWD’s service area. The Project WSA was prepared pursuant to SB 610 and SB 221 to assess the impact of the project’s water demand on existing and projected water supplies (Project WSA, pp. 2-3). According to the Project WSA, based on the proposed PVCC land use designations, at buildout, the PVCC is anticipated to have a projected water demand of 2,671.5 AFY (7.3 AF per day), or 2.4 million gallons per day (Project WSA, p. 2). **Table 4.11-D, Perris Valley Commerce Center Projected Water Usage** shows EMWD’s estimation of the project’s water usage at full buildout.

Table 4.11-D, Perris Valley Commerce Center Projected Water Usage

Land Use Type	Size (Acres)	Generation Rate (Demand/AFY)	AFY
Commercial and Industrial	2,925	0.75	2,193.8
Multi-Family Residential	85	3.1	263.5
Public Facilities	160	0.9	144
Open Space/Basins-Recreational	78	0.9	70.2
Total	3,170	0.75	2,671.5

Source: Project WSA, Table 10, p. 19.

Determination of Supply Reliability for Project

Domestic water for the proposed project area is provided by EMWD. In June 2011, EMWD adopted its 2010 UWMP, which details the reliability of the EMWD’s current and future water supply. In addition to local water supplies, much of the water EMWD will use to serve the proposed project is imported through MWD, which has analyzed and continues to analyze its ability to provide water from the State Water Project and the Colorado River Aqueduct to its members including in its RUWMP and its 2010 update to the IWRP. The agencies water planning documents detail their ability to provide water in times of shortage and address concerns regarding water supply reliability based on recent judicial decisions effecting the State Water Project as well as potential impacts on water supply due to climate change, as discussed below. Even in light of these challenges, the MWD’s RUWMP determines that the programs and protections it has in place will allow it to provide projected water supplies its members though 2035, even under a repeat of historic drought scenarios (Project WSA, p. 21). The City has independently reviewed and analyzed these documents and the other factors that affect the availability and reliability of water supply, as presented below.

Water Supply

As discussed previously, EMWD has four sources of water supply: (1) imported water purchased from the MWD, (2) local portable groundwater, (3) local desalted groundwater sources, and (4) recycled water from the EMWD’s four regional water reclamation facilities, and of these sources EMWD relies most on imported water for its supply (Project WSA, p. 5). EMWD has full-service, non-interrupted delivery contacts for all the water it receives from MWD, except for its agricultural water supplies and the water

used for recharge in the San Jacinto Basin. Utilizing existing sources of water, EMWD has projected the available water supply in various hydrologic scenarios to 2035. **Table 4.11-E** shows the projected water supply from existing sources.

Table 4.11-E, Existing Water Supply Resources (2015-2035)

	2015	2020	2025	2030	2035
Average Year Hydrology^a					
MWD	149,300	170,700	190,700	210,000	226,200
EMWD Recycled Water System	43,900	50,000	53,900	54,900	55,300
Groundwater	13,200	13,200	13,200	13,200	13,200
Existing Desalter	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	213,900	241,400	265,300	285,600	302,200
Total Projected Demands	213,900	241,400	265,300	285,600	302,200
Dry Year Hydrology^b					
MWD	155,300	177,600	198,300	218,300	235,100
EMWD Recycled Water System	45,500	51,800	55,800	56,900	57,300
Groundwater	13,200	13,200	13,200	13,200	13,200
Existing Desalter	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	221,500	250,100	274,800	295,900	313,100
Total Projected Demands	221,500	250,100	274,800	295,900	313,100
Multiple Dry Year Hydrology^c					
MWD	156,600	179,000	199,800	219,900	236,900
EMWD Recycled Water System	45,800	52,200	56,200	57,300	57,700
Groundwater	13,200	13,200	13,200	13,200	13,200
Existing Desalter	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	223,100	251,900	276,700	297,900	315,300
Total Projected Demands	223,100	251,900	276,700	297,900	315,300
^a Based on a repeat of 2004-2009 conditions. ^b Based on a repeat of 1977 conditions. ^c Based on a repeat of 1990-1992 conditions. Source: Project WSA, Tables 11-13, pp. 19-20; UWMP, Tables 3.2-3.4, pp. 30-31.					

As shown in **Table 4.11-E**, EMWD projects it will have an adequate water supply based on its existing sources to meet the projected demand to 2035 under multiple hydrologic conditions.

While the existing water supply sources will provide for the anticipated water demands of the proposed project and cumulative growth in the service area, EMWD seeks to supplement their existing supply through various projects. EMWD has identified several projects that would supplement imported supplies including the retrofit of potable water landscape customers, indirect potable recharge, and additional water use efficiency (Project WSA, p. 7). These projects will offset the demand of existing water and further free up resources for new development (Project WSA, p. 7). **Table 4.11-F** provides a summary of additional potential local supplies.

Table 4.11-F, Potential Water Supply (2015-2035)^a

Source	2015	2020	2025	2030	2035
Recycled Water	6,100	13,500	16,400	22,200	28,200
Desalination	4,500	4,500	4,500	4,500	4,500
Planned additional conservation	0	0	1,300	4,300	6,400
Water transfers/exchanges	0	0	0	0	0

Source	2015	2020	2025	2030	2035
Total	10,600	18,000	22,200	31,000	39,100

^a Numbers in AFY
 Source: Project WSA, Table 4, p. 7.

These projects are in the planning stage of development, thus, costs and implementation timelines are subject to change. New development will be required to help fund new water supply sources. The extent of additional funding will be determined by EMWD and may take the form of a new component of connection fees or a separate charge. Details about funding will be developed with the plan of service. (Project WSA, p. 7)

Imported Water

As shown in **Table 4.11-E**, EMWD receives the majority of its water supply as imported water from MWD. The statutory relationship between MWD and its member agencies establishes the scope of EMWD’s entitlements from MWD. Typically there are no set limits on supply quantities to member agencies (Project WSA, p. 7). In the RUWMP, MWD does not provide supply projections for each member agency. Instead, MWD uses a regional approach to developing projections. MWD calculates the demand for the entire region, and using information about existing and proposed local projects, determines the amount of imported water that will be needed in the future (Project WSA, p. 8). In the RUWMP, MWD concluded that with the storage and transfer programs developed, MWD will have a reliable source of water to serve its member agencies’ needs through 2035 during normal, historic single-dry, and historic multiple-dry years (UWMP, p. 31).

Further, during unprecedented shortage events, MWD’s Water Supply Allocation Plan is implemented, requiring a reduction in demand by member agencies (RUWMP, pp. 2-21 – 2-23). However, the allocation plan takes into account member agency population growth and investments in local resources. Member agencies are allocated a portion of their anticipated demand with the assurance that a member agency will not see a retail shortage greater than the regional shortage (Project WSA, pp. 7-8). Water supply is not limited under the allocation plan, but water use above a member agency’s allocation is charged at a much higher rate (Project WSA, p. 8).

MWD procures its water supply from the State Water Project and Colorado River Aqueduct through contracts with the applicable overseeing agencies. MWD has a water supply contract with DWR for 1,911,500 AF, although that amount is subject to availability (2010 Annual Report, p. 33). For fiscal year 2009/2010 MWD took delivery of 953,352 AF, including exchange deliveries with Desert Water Agency and Coachella Valley Water District, which is approximately half of the contractual supply (2010 Annual Report, p. 33). MWD has a contract with the United States Bureau of Reclamation for a basic apportionment of 550,000 AF of Colorado River water and an additional 842,000 AF of water when available (2010 Annual Report, p. 27). MWD may receive unused apportionment from Arizona, Nevada, or the higher priority agricultural users in California or surplus water as available (2010 Annual Report, p. 27). Moreover, indication that MWD’s planning efforts work was demonstrated in fiscal year 2009/2010. MWD adjusted system operations to reserve approximately 130,000 AF in State Water Project carryover to bolster supplies under a potentially low State Water Project allocation in 2010 (2010 Annual Report, p. 11). This strategy provided additional supplies for early 2010 under a 5 percent initial SWP allocation, which was the lowest initial allocation in SWP history (2010 Annual Report, p. 11). MWD extracted 143,000 AF of supplies from groundwater banking and exchange programs in the Central Valley in 2009, bringing the three-year yield to more than 480,000 AF of dry-year supply; and extracted 72,000 AF of supplies from groundwater conjunctive use agreements between MWD and participating member public agencies (2010 Annual Report, p. 11) Also, MWD delivered 1.105 million AF of water supplies on the Colorado River Aqueduct in 2009, the first time since 2002 that MWD diverted more than 1.0 million AF (2010 Annual Report, p. 11).

Furthermore, the current 2010 update of the IWRP ensures that MWD and member agencies would meet all full-service, non-interrupted water deliveries without interruption through 2035 (IWRP, pp. 4-1 - 4-9). IWRP also serves as a model for meeting California's new goal to lower residential per-capita water use by 20 percent by 2020 (IWRP, p. iii). It sets targets for conversation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers (IWRP, pp. 3-1 - 3-32). Using a diverse mix of resources, MWD and its agencies have reduced dependency on any single water supply resource so as to ensure the reliability of their supplies. To evaluate the reliability of the supply, MWD developed a computer model named IRPSIM. The IRPSIM is based on 83 years of historical hydrology (from 1922 to 2004) to allow it to estimate water surplus and shortage over a 25-year period (IWRP, p. 2-32). The IRPSIM model allows the analysis of information as to hydrologic and climatic effects on supplies, demands, and storage capability and use (IWRP, p. 2-32). The information calculated by the simulation model provides time series and probabilistic outcomes of resource use and regional surplus and shortage conditions in frequency and magnitude (IWRP, p. 2-32). The results of the modeling indicate that MWD can maintain reliable deliveries to EMWD during drought conditions over the next 25 years (IWRP, p. 3-17).

MWD also adopted a Water Surplus and Drought Management (WSDM) Plan to ensure it can achieve the IWRP's goal of 100 percent water delivery reliability. The WSDM Plan maximizes wet-year water supply to provide water in dry-years through storage and transfers and also raises public awareness about water supply issues (RUWMP, pp. 2-20 - 2-23). The WSDM Plan also addresses dry year conditions that result in shortage, severe shortage, or extreme shortage, and still provide 100 percent of its water deliveries to its full-service, non-interrupted customers (RUWMP, p. 2-20).

Constraints on Imported Water Supplies

While MWD and EMWD are confident in the reliability of their water supplies until at least 2035, there are several potential constraints on the availability of imported waters supply that effect water supply throughout the entire state. These issues are considered in many of the agencies plans and the agencies believe they can supply water regardless of these constraints.

Bay-Delta Ecosystem

The Bay-Delta is the hub of California's water supply and is critically important to the entire state. About 30 percent of Southern California's water supply moves across the Bay-Delta. The Bay-Delta's declining ecosystem, caused by a number of factors that include agricultural runoff and operation of water pumps that can alter flows, has led to historic restrictions in water supply deliveries. Operational constraints likely will continue until a long-term solution to the problems in the Bay-Delta is identified and implemented. (RUWMP, p. 1-18)

The listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (ESAs) have adversely impacted operations and limited the flexibility of the State Water Project. In response to court decisions related to the Biological Opinions for fish species listed under the ESAs, DWR altered the operations of the State Water Project. This decision resulted in export restrictions and reduced State Water Project deliveries. In June 2007, MWD's Board approved a Delta Action Plan that provides a framework for staff to pursue actions with other agencies and stakeholders to build a sustainable Delta and reduce conflicts between water supply conveyance and the environment. The Delta Action Plan aims to prioritize immediate short-term actions to stabilize the Delta while an ultimate solution is selected, and mid-term steps to maintain the Bay-Delta while the long-term solution is implemented. (RUWMP, p. ES-4)

In the near-term, the physical and operational actions in the Bay-Delta being developed include measures that protect fish species and reduce supply impacts with the goal of reducing conflicts between water supply conveyance and environmental needs. The potential for increased supply due to these near-term fixes is included in the RUWMP as a 10 percent increase in water supplies obtained from the State Water

Project allocation for the year. In evaluating the supply capabilities for the RUWMP, additional supplies from this interim fix are assumed to materialize by 2013. Also included as a possible near-term fix for the Bay-Delta is the proposed Two-Gate System demonstration program, which would provide movable barriers on the Old and Middle Rivers to modify flows and prevent fish from being drawn toward the Bay-Delta pumping plants. The Two-Gate System is anticipated to protect fish and increase State Water Project supplies. (RUWMP, p. ES-4)

Operational constraints likely will continue until a long-term solution to the problems in the Bay-Delta is identified and implemented. State and federal resource agencies and various environmental and water user entities are currently engaged in the development of the Bay Delta Conservation Plan (BDCP), which is aimed at addressing the basic elements that include the Delta ecosystem restoration, water supply conveyance, and flood control protection and storage development. In dealing with these basic issues, the ideal solutions sought are the ones that address both the physical changes required as well as the financing and governance. In evaluating the supply capabilities for the RUWMP, MWD assumed a new Delta conveyance is fully operational by 2022 that would return supply reliability similar to 2005 conditions, prior to supply restrictions imposed due to the Biological Opinions. (RUWMP, pp. ES-4 - ES-5)

This assumption is consistent with MWD's long-term Delta Action Plan that recognizes the need for a global, comprehensive approach to the fundamental issues and conflicts to result in a sustainable Bay-Delta, sufficient to avoid biological opinion restrictions on planned State Water Project deliveries to MWD and the other State Water Project contractors. Further, recently passed state legislation included pathways for establishing governance structures and financing approaches to implement and manage the identified elements. (RUWMP, p. ES-5)

Moreover, MWD has contractual rights to 65,000 AF of flexible storage at Lake Perris and 153,940 AF of flexible storage at Castaic Lake (RUWMP, p. 3-15). This storage provides MWD with additional options for managing State Water Project deliveries to maximize yield from the project (RUWMP, p. 3-15). Along with other programs dealing with State Water Project reliability issues such as the Yuba Dry Year Water Purchase Program, Monterey Agreement, Desert Water Agency/Coachella Valley Water District Table A Transfer and Advance Delivery Programs, MWD remains confident it can meet all its full-service delivery contracts (RUWMP, pp. 3-12 - 3-22). However, the Monterey Agreement is currently involved in a new round of lawsuits brought against its revised EIR, which was published in May 2010 (RUWMP, p. 3-15)

Colorado River Litigation

The allocation of Colorado River supplies available to MWD is also the subject of litigation. The 2003 Quantification Settlement Agreement (QSA) among Imperial Irrigation District (IID), Coachella Valley Water District (CVWD), and MWD is a critical component of the California Plan, which characterized how California would develop a combination of programs to allow the state to limit its annual use of Colorado River water to 4.4 million AFY plus any available surplus water. The 4.4 million AFY plus any available surplus water limit was first set by the Limitation Act of 1929 and later confirmed by the United States Supreme Court. The QSA establishes the baseline water use for each of the agencies and facilitates the transfer of water from agricultural agencies to urban uses, and specifies that IID, CVWD, and MWD would forbear use of water to permit the Secretary of the Interior to satisfy the uses of the non-encompassed present perfected rights. (RUWMP, pp. 3-2, 3-4)

On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that thirteen agreements associated with the IID/San Diego County Water Authority (SDCWA) water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed challenging the execution, approval, and subsequent implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento County Superior Court. After a number of pleading challenges, appeal of rulings dismissing one Imperial County case and dismissing portions of another, and

pretrial rulings, the first phase of trial began on November 9, 2009, and concluded on December 2, 2009. One of the key issues was the constitutionality of the QSA Joint Powers Authority Agreement, pursuant to which IID, CVWD, and SDCWA agreed to commit \$133 million toward certain mitigation costs associated with implementation of the transfer of 300,000 AF of water conserved by IID pursuant to the QSA, and the state agreed to be responsible for any mitigation costs exceeding this amount. A final judgment was issued on February 11, 2010, holding that the state's commitment was unconditional in nature and, as such, violated the state's debt limitation under the California Constitution, and that eleven other agreements, including the QSA, also are invalid because they are inextricably interrelated with the QSA Joint Powers Authority Agreement and the funding mechanism it established to cover such mitigation costs. The court also ruled that all other claims raised by the parties, including CEQA claims related to the QSA Programmatic EIR and the IID Transfer Project EIR, are moot. (RUWMP, p. 3-4)

MWD, CVWD, and SDCWA have filed appeals of the court's decision, which will stay the ruling pending outcome of the appeal. If the ruling stands, it could delay the implementation of programs authorized under the QSA or result in increased costs or other adverse impacts. The impact, if any, that the ruling might have on MWD's water supplies cannot be adequately determined at this time. (RUWMP, p. 3-4)

Climate Change

Climate change adds its own new uncertainties to the challenges of planning. MWD's water supply planning has been fortunate in having almost 100 years of hydrological data regarding weather and water supply. This history of rainfall data has provided a sound foundation for forecasting both the frequency and the severity of future drought conditions, as well as the frequency and abundance of above normal rainfall. Weather patterns can be expected to shift dramatically and unpredictably in a climate driven by increased concentrations of carbon dioxide in the atmosphere, as experienced in Australia. These changes in weather significantly affect water supply planning, irrespective of the debate associated with the sources and cause of increasing concentrations of greenhouse gasses. As a major steward of the region's water supply resources, MWD is committed to performing its due diligence with respect to climate change. (RUWMP, p. 2-25)

While uncertainties remain regarding the exact timing, magnitude, and regional impacts of these temperature and precipitation changes, researchers have identified several areas of concern for California water planners. These include reduction in Sierra Nevada snowpack; increased intensity and frequency of extreme weather events; and rising sea levels resulting in increased risk of damage from storms, high-tide events, and the erosion of levees; and potential pumping cutbacks on the State Water Project and Central Valley Project. Other important issues of concern due to global climate change include effects on local supplies such as groundwater; changes in urban and agricultural demand levels and patterns; impacts to human health from waterborne pathogens and water quality degradation; declines in ecosystem health and function; and alterations to power generation and pumping regimes. (RUWMP, p. 2-26)

MWD continues to incorporate current climate change science into its planning efforts. MWD has made great efforts to implement greenhouse gas mitigation programs and policies for its facilities and operations. To date, these programs and policies have focused on exploring water supply/energy relationships and opportunities to increase efficiencies; joining the California Climate Action Registry; acquiring "green" fleet vehicles, and supporting an employee rideshare program; developing solar power at the Robert A. Skinner water treatment plant; and identifying and pursuing development of "green" renewable water and energy programs that support the efficient and sustainable use of water. MWD also continues to be a leader in efforts to increase regional water use efficiency. MWD has worked to increase the availability of incentives for local conservation and recycling projects, as well as supporting conservation Best Management Practices for industry and commercial businesses. (RUWMP, pp. 2-27 - 2-28)

State Water Project Delivery Reliability Report 2009

The 2009 State Water Project Delivery Reliability Report (DWR 2009) is a bi-annual report on the current and future for State Water Project water supply conditions, if no significant improvements are made to convey water past the Bay-Delta or to store the more-variable run-off that is expected with climate change. DWR 2009 shows a continuing erosion of the ability of the State Water Project to deliver water. For current conditions, the dominant factor for these reductions is the restrictive operational requirements contained in the federal biological opinions. For future conditions, it is these requirements and the forecasted effects of climate change. Deliveries estimated for the DWR 2009 are reduced by the operational restrictions of the biological opinions issued by the U.S. Fish and Wildlife Service in December 2008 and the National Marine Fisheries Service in June 2009 governing the State Water Project and Central Valley Project operations. To illustrate the effect, the median value estimated for the primary component of State Water Project Table A annual deliveries for current conditions in the 2005 Report is 3,170,000 AF. In the 2007 Report it is 2,980,000 AF, and in the DWR 2009, it is 2,680,000 AF. This is an overall reduction of almost 500,000 AF. (DWR 2009, p. 5)

The studies used in this series of reports to estimate future deliveries now also include the potential effects of climate change. The studies for the 2005 Report did not include any of these potential effects. For the 2007 Report, the changes in run-off patterns and amounts were incorporated into the analyses. For DWR 2009 studies, the changes in run-off patterns and amounts are included along with a potential rise in sea level. Sea level rise has the potential to require more water to be released to repel salinity from entering the Bay-Delta in order to meet the water quality objectives established for the Bay-Delta. The effect of the operational restrictions in addition to the incorporation of potential climate changes impacts amounts to an estimated reduction of 970,000 AF when the median value for annual State Water Project deliveries for future conditions in the 2005 Report (3,570,000 AF) is compared to the updated value in DWR 2009 (2,600,000 AF) (DWR 2009, p. 5)

The DWR 2009 compares the updated values to those contained in the 2007 Report and provides greater detail on the analytical method used to calculate the estimates. The results of the studies are designed to assist water planners and managers in updating their water management and infrastructure development plans. These results emphasize the need for local agencies to develop a resilient and robust water supply, and a distribution and management system to maximize the efficient use of our variable supply. They also illustrate the urgent need to improve the method of conveying water past the Bay-Delta in a more sustainable manner that meets the dual goals of increasing water supply reliability and improving the conditions for endangered and threatened fish species. (DWR 2009, p. 5)

Groundwater

Protecting and developing local resources to reduce dependency on imported water is an important objective in EMWD's Strategic Plan. Groundwater information is included in this assessment to assist the lead agency in determining the adequacy of EMWD's total supply. Groundwater, however, is not being proposed to serve this project. New developments, including this project, will be supplied with imported water, which is either treated imported water directly from the MWD; untreated imported water from MWD subsequently treated by EMWD; or untreated imported water treated by EMWD and recharged into the basin for later withdrawal. (Project WSA, p. 9)

Table 4.11-F lists the amount of potable groundwater that EMWD is projecting will be supplied. Groundwater extraction in the Hemet/San Jacinto area, currently covered by the Fruitvale Agreement, will decrease as the Hemet/San Jacinto Water Management Plan is implemented. The Perris/Moreno Valley wells in the West San Jacinto Groundwater Basin Management Plan area are projected to continue to produce 6,000 AFY. The desalters are part of managing the West San Jacinto Groundwater Basin Management Plan area and will reduce salinity in the groundwater management zones with the added benefit of providing a source of potable water. (Project WSA, p. 13)

Protecting the available groundwater supply is an important part of EMWD's planning efforts. EMWD is actively working with other agencies and groups to ensure that groundwater will be a reliable resource far into the future. Part of managing groundwater responsibly requires that replacement of groundwater extracted beyond the safe yield. Groundwater extraction in Hemet/San Jacinto area will be replaced with imported water as the Hemet/San Jacinto Water Management Plan is implemented, and groundwater extraction in the West San Jacinto Groundwater Basin Management Plan area will remain static. Although the desalters will provide an additional supply of water, the amount of water produced is not sufficient to accommodate the proposed growth within EMWD. The majority of the increased water demand caused by this project will be met by increasing the use of imported water from MWD. (Project WSA, p. 13)

Recycled Water

EMWD is dedicated to expanding and maximizing the use of recycled water produced at four regional water reclamation facilities, which collect and treat wastewater from throughout the EMWD service area. EMWD policy recognizes recycled water as the preferred source of supply for all non-potable water demands, including irrigation of recreation areas, greenbelts, open space common areas, commercial landscaping, and supply for aesthetics impoundment or other water features (Project WSA, p. 21). Based on the UWMP, the amount of reclaimed water generated within the EMWD service area in 2010 totaled 46,500 AF and a total of 28,300 AF was sold (UWMP, Table 3.11). Recycled water usage potential within the EMWD service area is anticipated to increase to 86,000 AFY by 2035 (UWMP, Table 3.14).

The supply of recycled water will continue to grow with EMWD's population growth. The four regional water reclamation facilities that EMWD is currently operating are all either in the process of expansion or have an expansion planned in the near future (Project WSA, p. 13). Due to an increase in treatment plant flow from population growth and after filling all recycled water storage ponds, EMWD has remaining surplus recycled water. Currently the use of recycled water is limited by the amount available to serve during peak demands and with livestream discharge occurring in off-peak periods. EMWD has developed plans to eliminate discharge and use all of the recycled water available within the service area and to offset demand of existing potable customers including retrofit of potable water landscape customers and indirect potable recharge (Project WSA, p. 13). However, approximately 208 acre feet of recycled water was delivered to the Elsinore Valley Municipal Water District under an existing sales agreement and approximately 16,261 AF of recycled water was discharged into Temescal Creek at Wasson Canyon. Recycled water supplies are not subject to climatic variability and EMWD predicts that these sources will remain stable and reliable components of EMWD's water supplies under any future conditions.

EMWD also treats raw water imported from MWD at a microfiltration plant located in Perris and is constructing another microfiltration plant in Hemet. This allows EMWD to utilize additional MWD supplies that could not otherwise be utilized. Additionally, the San Jacinto Valley Regional Water Reclamation Facility (RWRF) is being expanded to provide tertiary treatment so that the water can be used for far more than secondary treated water and the Perris RWRF is being expanded to have a capacity of 30 million gallons per day.

According to EMWD policy, the proposed project will be conditions to construct a recycled water system physically separated from the potable water system (Project WSA, p. 21). The proposed project includes installation of facilities to utilize recycled water for all non-potable water demands that will be built to EMWD's recycled water standards. However, the water supply assessment assumes that recycled water will not be delivered to the project site. If and when recycled water is delivered, the project's water demand will be less than the projected water demand.

Demand Projections

As mentioned, the Project WSA anticipated the proposed project will demand 2,671.5 AFY at full buildout.

Table 4.11-G identifies the EMWD’s past, current, and projected water deliveries by customer type.

Table 4.11-G, Potable Retail Water Deliveries by Customer Type (2005–2035)

Year/Type	Units	SFR	MFR	Co	In	Inst/Gov	LS	AG	Total
2005	No. of Accounts	114,100	1,000	1,500	100	40	1,500	200	118,440
Actual	Volume (AF)	62,300	5,500	3,900	400	2,900	7,500	2,400	84,900
2010	No. of Accounts	129,400	4,300	2,100	100	500	2,200	100	138,700
Actual	Volume (AF)	54,000	6,100	4,200	400	2,300	8,900	1,800	77,700
2015	No. of Accounts	140,600	5,700	2,300	1,200	100	3,300	100	153,300
Projected	Volume (AF)	74,500	8,300	5,600	3,900	3,600	18,500	2,800	113,800
2020	No. of Accounts	150,200	6,100	2,400	1,300	100	3,500	85	163,685
Projected	Volume (AF)	79,600	8,800	5,900	600	3,800	19,600	2,400	120,700
2025	No. of Accounts	169,600	6,900	2,700	1,400	100	4,000	85	184,785
Projected	Volume (AF)	89,900	10,000	6,700	700	4,300	22,200	2,400	136,100
2030	No. of Accounts	187,700	7,700	3,000	1,500	100	4,400	85	204,485
Projected	Volume (AF)	99,400	11,000	7,400	800	4,800	24,500	2,400	150,300
2035	No. of Accounts	202,800	8,200	3,300	1,700	100	4,700	85	220,885
Projected	Volume (AF)	107,400	11,900	8,000	800	5,200	26,500	2,400	162,200

Notes: Totals are rounded to nearest hundreds.
SFR = Single-Family Residential; MFR = Multi-Family Residential; Co = Commercial; In = Industrial; Inst/Gov = Institutional / Government; LS = Landscape; AG = Agriculture
Source: Project WSA, Table 6, p. 17; UWMP, Table 2.10, p. 22.

As shown in **Table 4.11-G**, the potable demand estimates for the proposed project is within the limit of retail growth projected.

In addition to potable water deliveries, EMWD also sells water to its sub-agencies and has other water uses that include recycled water, distribution system water losses, and treatment water losses. These all contribute to the overall water demand. **Table 4.11-H** shows EMWD’s total water demand.

Table 4.11-H, Total Water Demand (2005–2035)

	Actual		Projected				
	2005	2010	2015	2020	2025	2030	2035
Total retail potable water sales	84,900	77,700	113,800	120,700	136,100	150,400	162,200

	Actual		Projected				
	2005	2010	2015	2020	2025	2030	2035
Total water sales to sub-agencies	29,400	27,100	47,600	61,600	65,000	69,000	72,400
Total other water uses / losses	47,300	49,900	52,500	59,100	64,200	66,300	67,600
Total Water Demand	161,600	154,700	213,900	241,400	265,300	285,600	302,200

Source: Project WSA, Table 9, p. 18; UWMP, Table 2.1, p. 15.

As shown in **Table 4.11-H**, the projected total water demand for EMWD in 2035 will be 288,110 AFY. The proposed project’s water demand will consist of 0.9 percent of this service area projection.

Development of Additional Water Supplies

EMWD has developed an Integrated Resource Plan (IRP) to serve as a framework for planning and prioritizing supply options. Several supply portfolios were developed and evaluated using performance measures that meet EMWD’s objectives for future water supplies. EMWD’s objectives are to develop a sustainable water supply, accomplish financial stability, provide a reliable water supply, maximize water use efficiency, maximize use of local resources, and implement projects that improve the environment and salinity conditions in the service area (UWMP, p. 61). The IRP results demonstrated the benefit of expanding the use of recycled water and examined multiple options for expanding the recycled water program allowing for flexibility in implementation as EMWD’s demands increase. Using EMWD’s entire recycled water supply to offset demand for potable will decrease the dependence of EMWD on imported water supplies and provide additional supply reliability (UWMP, p. 61). In addition, EMWD has an existing desalination program that recovers high total dissolved solids groundwater for potable use from two desalination plants, and a third desalination plant has been designed and is projected to be operational in 2015 (UWMP, p. 62).

The IRP results also demonstrated that reducing demand through conservation is a cost effective method of improving reliability and extending the capacity of supply programs. In addition to meeting the requirement of SB 7x-7, EMWD is proposing a 30 percent reduction in outdoor demand and a 10 percent reduction in indoor demand by 2035 (UWMP, p. 62). This reduction target may be achieved through adjustment in the budget-based tiered rate, additional legislation, code changes, and active conservation programs (UWMP, p. 62). Further, EMWD currently relies on MWD for any transfers or exchanges, and as a member agency, EMWD benefits from MWD’s efforts to improve supply reliability through transfers and exchanges detailed in the RUWMP (RUWMP, pp. 3-2 - 3-27, 3-56 - 3-60). In addition to relying on MWD, water transfers have been identified as a method of improving reliability especially during periods of water shortage, and EMWD is investigating opportunities for independent transfers and exchanges (UWMP, pp. 62). **Table 4.11-F**, shown previously, summarizes potential water supply sources to meet future demands.

EMWD also maintains and periodically updates a comprehensive Water Facilities Master Plan (WFMP), which defines water supply, transmission mains, and storage facilities required for the accommodation of projected growth within EMWD (Project WSA, p. 16). On a yearly basis, a 5-year Capital Improvement Plan (CIP) is prepared, which is based on a further refinement of the WFMP. The CIP outlines specific projects and their funding source, and each project is also submitted individually to the EMWD Board of Directors for authorization and approval. This process allows EMWD to accurately match facilities’ needs with development trends (Project WSA, p. 16). Moreover, a CIP includes projects for treating raw water and desalting groundwater. EMWD has taken steps to increase the reliability and output of groundwater basins through integrated recharge and recovery. EMWD is also planning, or already in the process of, expanding each of its regional water reclamation facilities to treat the increased wastewater generated by the growing population thereby supplying additional recycled water. Financing information for the desalter plant construction, regional water reclamation facilities expansion, and well replacement can also be found in the CIP.

EMWD's plans to utilize more recycled water in the future have been facilitated by a \$4.9 million grant awarded by the State Water Resources Control Board for projects in the Santa Ana watershed in August 2008. Grant monies are from the Proposition 50 water bond and are intended to help the agencies fund programs to decrease their reliance on imported water. EMWD will apply the grant money toward the San Jacinto Valley Regional Water Reclamation Facility Tertiary upgrade project which will provide additional treatment to Title 22 tertiary levels and pumping capacity to deliver treated water to more recycled water customers. At this level, recycled water can be used for almost any purpose in California except direct consumption. The expansion of recycled water supplies will play an important role in EMWD achieving its goal of developing a drought-proof and sustainable water supply for customers and reducing dependence on imported water supplies. Permits and approvals for each project will be sought in each appropriate jurisdiction.

In addition to these water supply projects, EMWD is required to update the UWMP every five years to ensure that adequate water supplies exist for future growth. The EMWD has committed to yearly evaluations of supply and demand and to work to obtain new water supplies from groundwater, brine concentration and recycled water programs. In the interim, EMWD will continue to work closely with MWD in the implementation of water management plans as a means of ensuring the reliability of the EMWD's imported water supplies.

Water Shortage Contingency Plan and Water Shortage Emergency Operations Plan

EMWD has prepared a Water Shortage Contingency Plan (WSCP) to address any water shortages within its service area. The WSCP applies regulations and restrictions on the delivery and consumption of potable outdoor water use during water shortages, and is based on public safety, health and welfare, sustaining economic vitality, and quality of life. The reduction requirements and restrictions are applied to each of the four separate groups of customer types: single- and multi-family residential and landscape customers; commercial, industrial, and institutional; agricultural; and wholesale. Over 90 percent of EMWD's customers are within the residential and landscape group. These customers are subject to a budget-based tiered rate. Commercial, industrial, institutional, agricultural, and wholesale groups must also reduce demand during periods of shortage and face event-driven penalties and fines if found in violation. The WSCP can be implemented for either an extended term water shortage that may last months or years, or a limited shortage that may only last a few days or weeks. (UWMP, p. 63)

The WSCP sets seven stages of action that EMWD can implement in times of water shortage including use prohibitions and penalties it can impose to reduce water demand (UWMP, p. 64). These stages can be triggered when there is a water deficiency caused by limitations on supply or limitations on EMWD's delivery system. Because MWD and EMWD rely heavily on imported supplies, they have developed response plans in case of catastrophic occurrences such as earthquakes, flooding or other physical impairment of the water supply conveyance system. MWD's Emergency Storage Requirements that would be utilized in case of major impairment to the water supply system and can meet 75 percent of MWD's normal year water demands (RUWMP, p. 2-24). MWD has prepared for emergencies through storage, facility design, and redundant power sources. Half of the capacity of Diamond Valley Lake is reserved for emergency supply (RUWMP, p. 2-24). Water storage in the region can provide southern California with water supply at a 25 percent reduced rate for up to six months (RUWMP, p. 2-24). EMWD has also developed a Water Shortage Emergency Operations Plan (WSEOP) to address catastrophes. The WSEOP describes the coordination required between operational staff, management, community involvement staff, and other EMWD employees (UWMP, p. 68). These plans are discussed in further detail in Section 5 of the UWMP.

Conservation Measures

EMWD will reduce potable water demand to meet the goals of Water Conservation Act of 2009, or SB 7x-7. EMWD will accomplish this in two ways: using recycled water to offset potable water demand and

reducing demand for water through conservation. Three methods have been identified for conserving water: 1) a budget-based tiered rate; 2) requirements for water efficiency in new construction; and 3) an active conservation program. Water use reduction will be focused on outdoor demand reduction by all customer types, and recycled water will be used to offset potable demand through the expansion of the existing recycled water system. EMWD calculates the water efficiency savings to achieve 22,200 AFY in 2015; 28,600 AFY in 2020; 37,000 AFY in 2025; 42,300 AFY in 2030; and 45,200 AFY in 2035. (Project WSA, p. 14; UWMP, p. 20).

Tiered Rate savings are an estimate of water saved by customers after the implementation of a budget-based tiered rate. In April 2009, EMWD implemented a tiered rate billing structure for its residential and landscape customers. Customers are provided an allocation for reasonable water use and are required to pay a higher rate for water use over their allocated limit. Water savings by existing customers has been estimated. Actual water demand since the implementation of the tiered rate has been lower than the estimated amounts, likely as a result of several factors and not the tiered rate implementation alone. (Project WSA, p. 14; UWMP, p. 20)

Water Use Efficiency Requirements in New Development includes installing lower water use landscape and interior fixtures. Water use efficiency is mandated statewide through existing ordinances, plumbing codes and legislation. To enforce water use efficiency in new development EMWD has lowered the water budget allocations for new development. Any residential or dedicated landscape account installed after January 1, 2011, will have an outdoor budget allocation based on only 70 percent of its evapotranspiration, compared to up to 100 percent of its evapotranspiration for older accounts. (Project WSA, p. 14; UWMP, p. 20)

Active Conservation savings are the result of water use efficient program implemented by EMWD. EMWD encourages the replacement of inefficient devices and includes monetary rebate, distribution, and direct installation programs. Water savings are estimated by each device and takes into account the device's lifetime. (Project WSA, p. 14; UWMP, p. 20)

EMWD has already experienced the economic impact of the implementation of tiered rates. In 2009, EMWD implemented the budget-based tiered rate with the goals that it would encourage water use efficiency and provide revenue stability. The rate structure was developed to ensure that revenue would remain neutral as customers decrease their water use. Since the implementation of the tiered rate, EMWD has seen reduction in water use, which puts EMWD on target to meet the SB x7-7 compliance target, but customer behavior to date continues to ensure that the average revenue per billing rate is more that what might have been collected using a flat commodity rate. In the future, EMWD will continue to monitor customer response to the budget-based tiered rate and make any adjustments required to ensure revenue stability. (UWMP, pp. 20-21)

The long-term economic impact of conservation and the use of recycled water to comply with SB x7-7 were evaluated as part of EMWD's IRP. The IRP included financial stability as one objective when evaluating potential supply scenarios. Scenarios that included conservation and recycled water use in quantities that meet or exceed the reduction requirement for SB x7-7 performed better than those without. The costs associated with reducing EMWD's demand for potable water are offset by the avoided cost of importing additional water. Overall, through these three methods of reducing water use, and recycled water use, EMWD anticipates the reduction of potable water demand to meet the requirements of SB 7x-7. (Project WSA, pp. 13-14; UWMP, p. 21)

Water Availability for the Proposed Project

From a facilities perspective, the proposed project will be conditioned to construct off-site and on-site water facilities needed to distribute water throughout the project area. A plan of service for the proposed project should be created, and after approval by EMWD, be consulted for specific improvements. With

respect to water supply, the project will be served using imported water from MWD supplemented with new local supply projects during multi-dry years, if needed. However, if the city succeeds in obtaining a permit from the State Water Resources Control Board to develop the available local resources, EMWD may be unable to supplement MWD supplies in times of shortage. Allocation from MWD may result in water supplies being made available at a significantly higher cost depending on circumstances. (Project WSA, p. 21)

Further, with respect to recycled water, the proposed project is near existing and proposed recycled water lines, and recycled water may be available for the project. Landscape areas in the project area will be designed to use recycled water to the greatest extent possible. In fact, per EMWD policy, the project will be conditioned to construct a recycled water system physically separated from the potable water system. The system will need to be constructed to recycled water standards. The project may also be conditioned to construct off-site recycled water facilities. EMWD will make a final determination on requirements for recycled water use and facilities during the design phase of the proposed project. (Project WSA, p. 21)

Conclusion of the Project WSA

EMWD relies on MWD to meet the needs of its growing population. MWD stated in its RUWMP that, with the addition of all water supplies, existing and planned, MWD would have the ability to meet all of its member agencies' projected supplemental demand through 2035 even under a repeat of historic multi year drought scenarios. Based on present information and the assurance that MWD is engaged in planning processes that will identify solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supply to meet the potable water demand for the proposed project as part of its existing and future demands. (Project WSA, p. 22)

In the event the lead agency determines adequate water supply exists for the proposed project, the project applicant is required to meet with EMWD staff to develop a plan of service. The plan of service will detail water, wastewater and recycled water requirements to serve the project. An agreement developed prior to construction will determine additional funding required to reduce existing customer demand on imported supplies through the expansion of local resources. The reduction of existing customer demand on imported water supplies will free up allocated imported water to be used to serve this project under multiple dry year conditions. The amount of funding will be determined by EMWD and may take the form of a new component of connection fees or a separate charge. The estimated cost of desalinated water is between \$1,400 and \$1,700 per AF. These costs are expected to increase over time. If there is a change in the circumstances detailed in the Project WSA, EMWD will address the changes in the plan of service for the proposed project. Modifications at the plan of service stage could reduce the amount of water available to serve this project. (Project WSA, p. 22)

The Project WSA is not a commitment to serve the proposed project, but a review of EMWD supplies based on present information available. The Project WSA is conditioned on MWD's ability to continue to supply imported water to meet EMWD's requirements including the requirements for the proposed project. The proposed project is subject to any special or additional requirements imposed by MWD or EMWD on such deliveries, including increased pricing or a different pricing structure. The lead agency for the project is responsible to evaluate the adequacy of the Project WSA and make the ultimate decision of the sufficiency of the water supply. The project applicant is responsible for keeping EMWD informed about progress in the planning and development of the proposed project so that a review can be completed. If the lead agency determines adequate water supply exists for this project, to the greatest extent possible recycled water shall be used on the proposed project. Details about the extent of recycled water use shall be included in the plan of service for the project. (Project WSA, p. 22)

The Project WSA will be reviewed every three years until the project begins construction, and the project applicant shall notify EMWD when construction has begun. The review will insure that the information included in the Project WSA remains accurate and no significant changes to either the project or EMWD's water supply have occurred. If neither the project applicant nor the lead agency contacts EMWD within three years of approval of the Project WSA, it will be assumed that the proposed project no longer requires the estimated water demand calculated, and the demand for the proposed project will not be considered in assessments for other future projects, and the Project WSA will become invalid. (Project WSA, pp. 21-22)

Therefore, it can be concluded that such **there are sufficient water supplies available to serve the project from EMWD's existing entitlements and resources as set forth in its 2010 UWMP and MWD's 2010 RUWMP, therefore, impacts to water supply are considered less than significant.**

Threshold: Result in a determination by the wastewater treatment provider, which serves the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Development associated with the proposed PVCC will result in an increase in the amount of wastewater generated within EMWD's service area. Based upon the proposed PVCC land use designations, the PVCC is anticipated to generate approximately 5,316,295 gallons of wastewater per day (Table 4.11-I, PVCC Projected Generation of Wastewater).

Table 4.11-I, PVCC Projected Generation of Wastewater

PVCC Land Use Designation	Acreage	Sewage Generation Factor ¹ (GPD/Acre)	Projected Wastewater (GPD)
Business Park/Professional Office (BPO)	357.12	1,700	607,104
Commercial (C)	309.22	1,700	525,674
General Industrial (GI)	407.95	1,700	693,515
Light Industrial (LI)	1,836.28	1,700	3,121,676
Other (ROW, Basins, etc) ²	339.47	0	0
Public/Semi-Public Facility (P) ²	248.71	1,000	248,710
Residential (Multi-Family) (MFR-14)	22.33	2,400	53,592
Residential (R)	62.88	1,050	66,024
Total	3,583.96		5,316,295
Notes:			
¹ Sewage generation factors are average daily flows per EMWD, <i>Sanitary Sewer Design System Planning & Design</i> , February 9, 1993, Revised 09/1/2006			
² Approximately 159.64 acres of property in the Public/Semi-Public Facility designation are basins and will not require water. This acreage is included in the Other designation for purposes of projecting sewage daily flows.			

Wastewater from the proposed project will be treated at EMWD's Perris Valley Regional Water Reclamation Facility (PVRWRF) located in the City of Perris which has a current capacity for 15 million gallons per day (MGD). The PVRWRF typically receives approximately 13 MGD of wastewater with a remaining capacity for 2 MGD. Additionally, the PVRWRF's capacity is currently being expanded to handle 22 MGD by the end of 2011.

Once the expansion of the PVRWRF is completed in 2011, and the PVRWRF's total capacity is increased to 22 MGD, the demand from the proposed project on the excess capacity will represent 58.9 percent (5.3 MGD/9 MGD). This amount of wastewater is within the total planned capacity of the PVRWRF; therefore, this proposed project is not expected to require the construction or expansion of wastewater treatment facilities beyond those already under construction and planned.

Although the total amount of wastewater generated by the proposed project will be well within the capacity of the PVRWRF, by the time development of the proposed project is completed there is the potential that, prior to completion of the expansion of the facility's capacity projected for 2011, the PVRWRF may be reaching its capacity. However, a portion of the current wastewater consists of diversions from elsewhere within EMWD's service area. Therefore, because EMWD's wastewater diversions are operational decisions, those volumes can be reduced. There is sufficient capacity in EMWD's other wastewater treatment facilities to accommodate any additional wastewater flows sent to them whenever diversions from other parts of the EMWD service area to the PVRWRF are reduced. Overall, EMWD has sufficient capacity to treat all wastewater generated by the proposed project. Therefore, no significant impact upon EMWD's ability to treat wastewater will occur. Since the proposed project will generate a limited volume of wastewater per the existing and future capacity of the PVRWRF, the wastewater generated by the proposed project will not contribute significantly enough to require the construction of new or expanded wastewater treatment facilities. Impacts are considered **less than significant**.

Threshold: Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Construction-Related Solid Waste

Statewide, construction and demolition (C&D) debris constituted approximately 22 percent of solid waste disposed in California in 2004. In Riverside County, C&D waste alone constitutes approximately 8.8 percent of the countywide waste stream by weight. **Table 4.11-J, Estimated Construction-Related Solid Waste Generation and Contribution** shows the amounts of construction-related waste anticipated to be generated by the proposed PVCC project during construction.

As previously stated, the Badlands Sanitary Landfill is currently permitted to receive 4,000 (1,460,000 tons per year) tons per day as of June 30, 2008. The El Sobrante Landfill is currently permitted to receive 70,000 tons of refuse per week, of which 28,000 tons are reserved for refuse generated within Riverside County (4,000 tons per day). The landfill has a total capacity of approximately 109 million tons or 184.93 million cubic yards, of which approximately 52.3 million tons are reserved for in-County waste. As of January 1, 2009, the landfill had a remaining in-County disposal capacity of approximately 39.969 million tons.

The construction of the proposed facility is anticipated to generate approximately 104,671.09 tons of construction-related solid waste during the estimated twenty-year construction period of the proposed project.

Given the limited contribution of construction-related solid waste anticipated to be generated by the proposed project over an estimated twenty-year construction period⁶ (approximately 0.10 percent of the combined annual landfill capacity), development of the proposed project site will not substantially contribute to the exceedance of the permitted capacity of the designated landfills.

⁶ Construction period estimated to reflect Perris GP 2030 time frame.

Table 4.11-J, Estimated Construction-Related Solid Waste Generation and Contribution

Land Use Designation	Generation Factor ¹ (lbs per sq. ft.)	Proposed Project Total (tons)
Business Park/Professional Office (BPO) 5,444,652 s.f.	3.89 lbs per sq. ft.	10,589.85
Commercial (C) 3,367,406 s.f.	3.89 lbs per sq. ft.	6,549.60
General Industrial (GI) 7,996,636 s.f.	3.89 lbs per sq. ft.	15,553.46
Light Industrial (LI) 35,994,761 s.f.	3.89 lbs per sq. ft.	70,009.81
Other (ROW, Basins, etc)	N/A	N/A
Public/Semi-Public Facility (P)	N/A	N/A
Residential (Multi-Family) (MFR-14)² 308 d.u.	4.38 lbs per sq. ft.	809.42
Residential (R)² 441 d.u.	4.38 lbs per sq. ft.	1,158.95
PROJECTED TOTAL FROM ALL SOURCES		
(tons)	Disposal Facility - Disposal Capacity³ (tons per year)	Proposed Project Percent of Yearly Intake⁴
104,671.09	Badlands Landfill - 1,460,000	0.36
	El Sobrante Landfill - 3,650,000	0.14
	TOTAL LANDFILL CAPACITY - 5,110,000	0.10

¹ Generation rate from “Characterization of Building-Related Construction and Demolition Debris in the United States” prepared for U.S. Environmental Protection Agency by Franklin Associates, June 1998; as referenced by CIWMB. This rate includes all materials discarded, whether or not they are later recycled or disposed of in a landfill.

² Assumes average dwelling size of 1,200 square feet.

³ Daily disposal capacity multiplied by 365 days per year.

⁴ (Proposed Project Total averaged over an estimated 20-year construction period / Disposal Facility Capacity) x 100

Operational Solid Waste

Following construction of the proposed project, the majority of the waste generated, approximately 29 percent of waste produced by the proposed project, is expected to be organic material (this organic material is primarily composed of food waste and landscape trimmings). **Table 4.11-K, Anticipated Solid Waste Generation and Contribution**, shows the amounts of waste anticipated to be generated by the proposed project following construction. Recycling of both paper and C&D waste generated both during and after construction can greatly reduce the amount of waste directed into landfills.

The Riverside County Waste Management Department and the Riverside County Department of Health Services implement programs, such as AB 939, that address source reduction with the aim of reducing the amount of solid waste going into landfills. The proposed project is located within the City of Perris, which participates in these programs. As seen in **Table 4.11-K**, solid waste generated by the proposed project will contribute a negligible percentage of the solid waste taken to any of the landfills that will serve the proposed project in relation to the maximum yearly intake.

Pursuant to Riverside County Waste Management Department requirements, the applicant is required to submit a Recyclables Collection and Loading Area plot plan to the Riverside County Waste Management Department for each implementing development. The plans are required to conform to the Waste Management Department’s *Design Guidelines for Recyclables Collection and Loading Areas*. Prior to final building inspection, the applicant is required to construct the recyclables collection and loading area in compliance with the Recyclables Collection and Loading Area plot plan, as approved and stamped by the Riverside County Waste Management Department, and verified by the Riverside County Building and Safety Department through site inspection.

Given the limited contribution of solid waste anticipated to be generated by the proposed project (approximately 10.65 percent of the annual landfill capacity), development of the project site will not substantially contribute to the exceedance of the permitted capacity of the designated landfills. Also, considering the proposed project’s participation in the source reduction programs offered by the City, the solid waste stream generated by the proposed project may be reduced over time. Potential impacts to existing landfills will be **less than significant**.

Table 4.11-K, Anticipated Solid Waste Generation and Contribution

Land Use Designation	Disposal Factor ¹	Proposed Project Total (tons/year)
Business Park/Professional Office (BPO) 5,444,652 s.f.	0.0108 tons/sq. ft./year	58,802.24
Commercial (C) 3,367,406 s.f.	0.0024 tons/ sq. ft./year	8,081.77
General Industrial (GI) 7,996,636 s.f.	0.0108 tons/sq. ft./year	86,363.67
Light Industrial (LI) 35,994,761 s.f.	0.0108 tons/sq. ft./year	388,743.42
Other (ROW, Basins, etc)	N/A	N/A
Public/Semi-Public Facility (P)	N/A	N/A
Residential (Multi-Family) (MFR-14)² 308 d.u.	0.41 annual tons per residence	126,28
Residential (R)² 441 d.u.	0.41 annual tons per residence	1,931.58

Land Use Designation	Disposal Factor ¹	Proposed Project Total (tons/year)
PROJECTED TOTAL FROM ALL SOURCES (tons)	Disposal Facility - Disposal Capacity² (tons per year)	Proposed Project Percent of Yearly Intake³
544,048.96	Badlands Landfill - 1,460,000	37.26
	El Sobrante Landfill - 3,650,000	14.91
	TOTAL LANDFILL CAPACITY - 5,110,000	10.65

¹Waste disposal rates from California Department of Resources Recycling and Recovery (www.calrecycle.ca.gov).

²Daily permitted throughput (tons/day) x 365.

³(Proposed Project Total / Disposal Facility Capacity) x 100

Proposed Mitigation Measures

No significant impacts related to utilities and service systems are anticipated from the implementation of the project. Therefore, no mitigation measures are required.

Summary of Environmental Effects After Mitigation Measures Are Implemented

There are no anticipated adverse environmental impacts related to utilities and service systems resulting from implementation of the project; therefore, no mitigation measures are required and potential impacts remain less than significant.

5.0 Other CEQA Topics

The State *CEQA Guidelines* set forth several general content requirements for EIRs. Those applicable to this project include cumulative impacts (Section 15130), unavoidable adverse impacts (Section 15126(b)), growth inducing impacts (Section 15126(d)), and significant irreversible impacts (Section 15126.2(c)). This section addresses each of those general requirements.

Cumulative Impact Analysis

Introduction

CEQA requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone (State *CEQA Guidelines* Section 15130(b)).

As stated in the State *CEQA Guidelines*, an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable (Section 15130(a)). “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 as defined in Section 15130” (Section 15065(c)). Section 15355 of the State *CEQA Guidelines* states that “cumulative impacts” occur from “...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through fee-payment programs. The EIR must examine “reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project” (State *CEQA Guidelines* Sections 15130(a)(3) and 15130(b)(5)).

State *CEQA Guidelines* Section 15130(b)(1) requires that a discussion of cumulative impacts be based on either 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 general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

This EIR primarily utilizes the “summary of projections” approach in the cumulative analysis. Section 15130(d) of the State *CEQA Guidelines* states that, “Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.” Additionally, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact. (Section 15130(e) of the State *CEQA Guidelines*)

Cumulative Analysis Setting

The cumulative impact analysis for the proposed project is based on information contained in the City of Perris General Plan 2030 (Perris GP) and City of Perris General Plan 2030 Draft Environmental Impact Report (Perris GP EIR) (SCH No. 2004031135) certified by the City Council in October 2004. These documents are utilized because the geographic area addressed in the two documents encompasses not only the proposed project site, but all portions of City surrounding the proposed project site that could be potentially impacted by the proposed project's contribution to cumulative impacts. Both of these documents are hereby incorporated by reference. The two documents are available for review at the locations cited for these documents in Section 7.0 (References) of this DEIR.

Because of the nature of individual environmental factors, the cumulative area for every issue addressed in this DEIR will not be identical. The individual cumulative areas for the issues addressed in this DEIR are provided in the respective impact sections.

Assessment of Cumulative Impacts

Agricultural Resources

This cumulative impact analysis considers development of the PVCC, in conjunction with other development in the City and neighboring jurisdictions. Conversion of agricultural lands to non-agricultural uses is a function of population growth, combined with the availability of developable land and the increasing costs of water. With increased urbanization in the City, other impacts affect agricultural productivity. Increased population results in increased urban water use that reduces supplies that would otherwise be available for agricultural use. Increased demand for water increases water costs which, in turn, result in marginal agriculture becoming impractical.

Approximately 52 percent of the land within the City of Perris is currently or has formerly been utilized for agricultural purposes. Many agricultural fields have been out of production for a number of years and are dominated by disturbed vegetation. Various forms of disturbance related to agricultural uses include frequent disking, pesticide application, and irrigation. Farmland within the City is most often used for sod farms, alfalfa, hay, and other dry land farming. High yield or cash crops are not a principal characteristic of Perris agricultural production or economy.

The City of Perris is undergoing transition into an urban area and conversion of agricultural lands has been identified as goals of both the current (2005) and past (1991) General Plans. Agricultural land use designations were not established in either plan.

Although build-out of the PVCC will result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance ("farmland") to non-agricultural uses, that conversion was previously addressed in the EIR that was prepared for the City of Perris' 1991 General Plan and in the Perris GP EIR. Inasmuch as a Statement of Overriding Considerations was adopted for the loss of designated farmland related to the 1991 General Plan; the Perris GP EIR found that the continuation of non-agricultural land use designations on farmland within the City would result in no impacts. Similar to the Perris GP, the proposed PVCC continues to designate farmland within the PVCC project area with non-agricultural land use designations. Therefore, the findings contained within the Perris GP EIR are also applicable to the proposed PVCC and it can be concluded that implementation of the PVCC, which includes its future implementing development and infrastructure projects will also have **no cumulative impact related to the conversion of farmland to non-agricultural uses.**

Approximately 187.1 acres on 25 parcels¹ within the City remains zoned for agricultural uses (i.e., A1 - Light Agriculture). According to the Perris GP EIR, the remaining land zoned for agricultural use is subject to a Williamson Act contract, for which a Notice of Non-renewal has been filed, thereby stopping the automatic annual renewals and placing the contract in a status in which it runs out over the remaining life of the contract until the contract expires. When a Notice of Non-renewal has matured (i.e., the remaining years have run out and the property is no longer subject to the contract) or a cancellation occurs, removal of the subject land from the affected agricultural preserve requires a separate action to amend the official agricultural preserve maps by diminishing or disestablishing the agricultural preserve.

Although build-out of the PVCC will result in the elimination of agricultural zoning and agricultural preserves within the PVCC boundaries, those impacts were previously addressed in the EIR that was prepared for the City of Perris' 1991 General Plan and in the Perris GP EIR. The Perris GP EIR found that the continuation of non-agricultural land use designations on agricultural land within the City of Perris would result in no impacts related to conflicts with agricultural zoning and Williamson Act contracts. Similar to the Perris GP, the proposed PVCC continues to designate agricultural property within the PVCC boundaries with non-agricultural land use designations and non-agricultural zoning. Therefore, the findings contained within the Perris GP EIR are also applicable to the proposed project and it can be concluded that implementation of the PVCC, which includes its future implementing development and infrastructure projects will also have **no cumulatively considerable impact related to potential conflicts with existing zoning for agricultural use or a Williamson Act Contract**

Air Quality

The cumulative area for air quality impacts is the South Coast Air Basin (Basin). The PVCC project site is located within a non-attainment region of the Basin, and specifically within Source Receptor Area (SRA) 24. This area is the geographical context for the cumulative impact analysis of this proposed project. The meteorological patterns of Southern California lend to the "blowing-in" effect of air pollution from the more populated and industrial counties to the west of the PVCC project site area.

The portion of the Basin within which the proposed PVCC is located is designated as a non-attainment area for NO₂ under state standards, and ozone, PM-10, and PM-2.5 under both state and federal standards.

In evaluating the cumulative effects of the PVCC, Section 21100(e) of CEQA states that "previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis." In addressing cumulative effects for air quality, the AQMP utilizes approved general plans and therefore, is the most appropriate document to use to evaluate cumulative impacts of the subject project. This is because the AQMP evaluated air quality emissions for the entire Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the project area, into compliance with all federal and state air quality standards. According to Section 4.2 of this DEIR, the implementation of the PVCC, which includes its implementing development and infrastructure projects, will not obstruct the implementation of the AQMP. Since the emissions generated by the overall PVCC area and some individual development projects within the PVCC will exceed the SCAQMD's recommended thresholds of significance, the cumulative impact will also be **significant**. These findings are consistent with those in the Perris GP EIR.

Regarding global climate change and greenhouse gas (GHG) emissions as discussed previously in Section 4.2, it is not anticipated that a single specific plan project, even one this size, would have a measurable effect on global climate conditions. Therefore, the City of Perris is determining that the contribution of

¹ Riverside County parcel data, 2009

PVCC-related CO₂ emissions to the state-wide CO₂ emissions would **not be considered cumulatively considerable**.

Biological Resources

The geographical context for the analysis of cumulative biological impacts includes western Riverside County and accounts for all anticipated cumulative growth within this geographic area.

Goal III of the Conservation Element in the City of Perris GP is to ensure the “implementation of the Multi-Species Habitat Conservation Plan (MSHCP).” The Riverside County Multiple Species Habitat Conservation Plan Environmental Impact Report Section 5.1.1, *Cumulative Impact Analysis, Biological Resources*, evaluated the cumulative effects of the MSHCP and alternatives on biological resources. In particular, the analysis focuses on the cumulative effects of the MSHCP with the regional growth forecasts.

Through compliance with the MSHCP, the PVCC and its implementing development projects will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species listed in the MSHCP as implementation of the MSHCP benefits Covered Species by preserving their habitat in order to address their life cycle needs. Thus, through compliance with the MSHCP and based on the features of the MSHCP itself, direct, indirect, and cumulative impacts to Covered Species are mitigated below a level of significance.

Implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations. However, within the PVCC project area, there are no threatened or endangered species known or likely to be on site, which are not on the 146-species list covered by the MSHCP. Therefore, impacts to Non-Covered species are **cumulatively less than significant**.

The PVCC and its implementing development and infrastructure projects will **not cause adverse cumulative effects** related to the reduction of sensitive vegetation communities; as the PVCC is located within the MSHCP Plan Area and the MSHCP itself is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County. Similarly, the PVCC and its implementing development and infrastructure projects will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for the identified Planning Species. Part of the purpose and goals of the MSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information.

The PVCC and its implementing development and infrastructure projects will **not cause adverse cumulative impacts** by conflicting with the provisions of any adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan or other approved local, regional, or state habitat conservation plan either within or outside of the Plan area. The MSHCP has been written specifically to complement existing HCPs, such as the Stephens’ kangaroo rat long-term HCP. Through compliance with the MSHCP and existing HCPs, local, regional, and state plans, **cumulative impacts are considered less than significant**.

Cumulative effects associated with the MSHCP take authorization would involve direct loss of habitat and species associated with ground disturbance in take authorized areas as development occurs in accordance with projected growth. Cumulative indirect effects would occur to species and habitats within the MSHCP Conservation Area and would be associated with development of proposed land uses and activities in take authorized areas in proximity to the MSHCP Conservation Area. Indirect effects primarily result from adverse “edge effects” and may be short-term indirect effects related to construction or long-term indirect

effects associated with development or land use practices in proximity to conserved habitat areas. Cumulative indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and run-off. Edge effects at the boundary between natural lands and human-occupied lands ("urban edge effects") arise due to human-related intrusions such as lighting, noise, invasive species, exotic predators (e.g., dogs and cats), hunting, trapping, off-road activities, dumping, and other forms of recreation and disturbance. Human-induced edge effects are generally unfavorable to native species and are considered cumulative as edge increases throughout the landscape.

The PVCC and its implementing development and infrastructure projects will comply with the requirements of the MSHCP. Cumulative significant indirect impacts associated with edge effects and increased development outside the conservation areas established by the MSHCP, are addressed in the provisions of Section 6.1.4 of the MSHCP. Edge effects will result as development occurs in proximity to habitat; however, the MSHCP contains provisions that will reduce the adverse impacts associated with edge effects. The MSHCP provides take authorization for Covered Species. The MSHCP would not directly cause edge effects, but it would dictate where such effects could occur through the reserve assembly process. Thus, cumulative indirect impacts associated with edge effects are considered **less than significant**.

Cultural Resources

The cumulative area for cultural resources is the City of Perris. Cultural Resources were addressed in Section 6.5 (pp. VI-7 through VI-9) of the Perris GP EIR, which are hereby incorporated by reference.

Nine prehistoric sites are located within the Perris's city limits while eleven occur within a one-quarter-mile-wide radius of the municipal limits. Most of these sites consist of milling slick sites (rocks used to crush grain), but there are several sites exhibiting extensive pictographs (rock art), and a few small stone flake scatters. Ten historic archaeological sites occur within the City; however none are located within the proposed PVCC project site. These historic archaeological sites consist of the remnants (such as foundations) of historic buildings and/or ranch complexes. Ninety-one historic sites occur in the city limits and seven are located within the PVCC project site. Much of the geographic area of the City of Perris has a medium to high potential to contain significant fossil resources.

A paleontological records search was conducted for the area within the Perris city limits and levels of sensitivity developed, based on the rock units and the kinds of fossils recovered from these and similar rock units in the general vicinity. Although few paleontological excavations have taken place in the Perris Valley, numerous fossils were recovered from various rock units during excavations at the Diamond Valley Lake southeast of the City that allowed the likelihood for recovery of fossils in the Perris Valley to be more reliably defined. The likelihood for fossil recovery is indicated in each of five geographic areas of the City and represented on the Paleontological Sensitivity Map in the Conservation Element of Perris GP (Exhibit CN-7).

No known sites likely to contain human remains were identified in the City of Perris GP. In the event that human remains are discovered during development of any PVCC implementing development or infrastructure project site, the proponents of such implementing development or infrastructure project will be required to comply with the State Health and Safety Code 7050.5.

The Perris GP EIR determined that the Conservation Element of the Perris GP includes Implementation Measures that will prevent changes to significant archaeological resources in the City of Perris and will assure the identification and preservation of significant fossils.

While the proposed PVCC does not propose any specific changes to any identified resources, future implementing development projects will occur in areas that may contain significant cultural resources. Additionally, infrastructure or other public works improvements could result in damage to or demolition of other cultural resources. Although the City has programs and policies to protect and minimize adverse impacts to historical structures and features, the potential remains for significant impacts to these resources to occur as a result of development. Although potential impacts upon archaeological resources will be less than significant, implementation of mitigation measures **MM Cultural 1 through MM Cultural 8** will further reduce the less than significant level of potential impacts.

Inasmuch as the Perris GP EIR concluded that buildout under the Perris GP land use designations will not have a significant effect upon cultural resources, it can be concluded that there are no projects that would, in combination with the proposed PVCC, result in any significant cumulative impacts on historical, archaeological, or paleontological resources, or in impacts to human remains. Therefore, the proposed PVCC and its implementing development and infrastructure projects will have **no significant cumulative impacts** associated with cultural resources.

Geology/Soils

Geologic hazards are localized by nature, as they are related to the soils and geologic character of a particular site. Cumulative impacts could occur related to an earthquake, if the magnitude of the quake and location of the fault(s) traversed the region. Impacts due to seismic activity would be cumulative if state and local building and development codes and regulations (existing regulatory requirements) were not being implemented throughout the region. Pursuant to City and State Building Code requirements, all new development will be required to incorporate appropriate design and construction measures to guard against ground shaking hazards. Further, the PVCC, which includes its implementing development and infrastructure projects and all other non-PVCC projects and structures in the City will be constructed in compliance with existing seismic safety regulations of the California Uniform Building Code and International Building Code, which requires the use of site-specific engineering and construction standards identified for each class of seismic hazard.

The City of Perris is subject to a number of potential geologic hazards that have the potential to impact future build-out of the Perris GP. These hazards, including seismic-related ground failure, on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse were addressed in the Perris GP EIR and Section 4.5, herein. It was determined that these impacts will be reduced to below the level of significance through implementation of PVCC-specific mitigation measures, Perris GP Implementation Measures, and existing regulatory requirements.

Since all local jurisdictions in the region are subject to local, state and federal laws, cumulative impacts related to geologic and soils safety are **less than significant**.

Hazards/Hazardous Materials

The cumulative area for hazards and hazardous materials would be the City of Perris, as the majority of the impacts associated with the transport and use of hazardous materials would occur within City limits. Similarly, City-specific hazardous waste programs and hazardous waste requirements would only apply to projects located within City limits. This cumulative impact analysis considers development of the PVCC in conjunction with other development in the City and neighboring jurisdictions. Risks associated with hazardous materials are largely site specific and localized, and are thus limited to a specific project site. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers to hazardous substances. As such, the potential for cumulative impacts to occur is limited.

The Perris GP EIR (Section 4.4, Hazards, and Section 6.7, Issues Found Not To Be Significant - Hazards and Hazardous Materials) made the determination of “impacts found not to be significant” for six of the eight threshold topics related to hazards and hazardous materials. Potential impacts for the remaining two threshold topics were found to be less than significant.

As with the Perris GP EIR, which is hereby incorporated herein by reference, specific future uses (i.e. the implementing development projects) within the PVCC have not yet been established and those future implementing development projects will be subject to project-specific CEQA review and regulation and monitoring by the Department of Environmental Health of the Riverside County Community Health Agency. Potential cumulative impacts related to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment are considered to be **less than cumulatively considerable and thus not significant**.

Val Verde High School is located at 972 Morgan Street, between Nevada Road and Webster Avenue. Since proposed PVCC does not include any specific development projects, the quantity of hazardous materials that would be used by proposed implementing commercial and industrial developments within the PVCC boundaries is unknown. However, as shown on **Figure 4.8-4**, the PVCC proposes light industrial land uses to the east of the high school. The light industrial land use designation allows specific uses that could potentially emit hazardous emissions or handle hazardous or acutely hazardous materials and wastes. Since specific uses have not been determined for the project, mitigation measure **MM Haz 1** has been included to require project-level CEQA review for any implementing development project that proposes industrial uses within one-quarter mile of Val Verde High School, in order to assure that any potential for the use of hazardous materials within the vicinity of Val Verde High School is identified and adequately addressed.

No other changes proposed by the PVCC are expected to promote or otherwise result in future land uses that could produce potentially significant impacts regarding hazardous emissions or the handling of hazardous or acutely hazardous materials or wastes within one-quarter mile of a school. In the event such an implementing development project is proposed within the PVCC’s boundaries, such implementing development project would be subject to project-based CEQA review. Appropriate environmental documentation pursuant to CEQA will identify the extent of any potential hazard and all appropriate mitigation measures that may be incorporated into said implementing development project will reduce the risk to a less than significant level.

Although each development site has potentially unique hazardous materials considerations, it is expected that future growth will generally comply with the range of federal, state, and local statutes and regulations applicable to hazardous materials, and will be subject to existing and future programs of enforcement by the appropriate regulatory agencies. For these reasons, cumulative impacts resulting from hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of a school would be **less than significant**.

Risks associated with airport hazard-related impacts to or from MARB are largely site specific and localized, and are thus limited to the PVCC project site. As such, the potential for cumulative impacts to occur is limited.

Although each development site has potentially unique airport hazard-related impacts to or from the MARB, it is expected that future growth will generally comply with the range of federal, state, and local statutes and regulations applicable to development near airports, and will be subject to existing and future programs of enforcement by the appropriate regulatory agencies. In addition, mitigation measures **MM Haz 2** through **MM Haz 5** will be implemented to reduce airport-related impacts. For these reasons, cumulative impacts resulting from airport-related safety hazards would be less than significant.

Consequently, the proposed PVCC's impact associated with airport hazard-related impacts to or from the MARB would be **less than cumulatively considerable and thus not significant**.

Hydrology/Water Quality

The geographic context for the Hydrology and Water Quality cumulative impact analysis is the Perris Valley/San Jacinto watershed hydrologic unit and the Eastern Municipal Water District (EMWD) service area.

Groundwater supply and aquifer overdraft are currently being assessed and management plans implemented to minimize impacts with increased development on groundwater supplies. According to the Perris GP EIR, development consistent with the Perris GP will increase the amount of impermeable surfaces thereby causing some diminishment of recharge to the Perris groundwater sub-basins. However, the Perris GP EIR states that this recharge reduction will likely not be significant and goes on to say that recharge of these sub-basins from current and planned EMWD storage/percolation ponds, and formulation and implementation of an inter-agency management plan for Perris-area groundwater basins will promote maintenance of existing groundwater levels. Additionally, California's Groundwater Bulletin 118 states that the natural recharge for the San Jacinto groundwater basin is primarily from percolation of water in the San Jacinto River and its tributaries with less recharge from rainfall on the valley floor. In fact, the primary recharge area for the basin is in the upper reaches of the San Jacinto River. Recharge also occurs from the percolation of water in Lake Perris while reclaimed water percolates from storage ponds in Hemet and San Jacinto. Increased future demands are expected to be met with additional supplies from Metropolitan Water District (MWD) (imported water) and groundwater management activities are expected to maintain groundwater levels and safe yields. These groundwater management activities will ensure that groundwater supplies are not depleted or degraded and cumulative impacts would be **less than significant**.

Storm water flow conveyance and flood potential will increase as development results in greater amounts of impervious surfaces and channelization for conveyance of peak flows. However, the Riverside County Flood Control and Water Conservation District (RCFC&WCD) and the County's Master Drainage Plan (MDP) guide and govern local and regional hydrology and hydraulic modifications. The planned drainage capacities have been determined assuming a full build-out scenario. All development within the County of Riverside and the San Jacinto Watershed, including the City of Perris, must comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit, RCFC&WCD stormwater management plan, MDP, and other pertinent local drainage and conveyance ordinances. Existing regulations effectively minimize potential impacts to flow conveyance and flooding and have incorporated necessary elements in the MDP. Accordingly, the project-related contribution to impacts associated with stormwater flow conveyance and flood potential would not be cumulatively considerable, and thus **less than significant**.

Similarly, impacts to existing drainage patterns in the project area resulting in erosion or siltation would also increase from development of the proposed site and throughout the City but are also minimized through compliance with existing regulations. Therefore, **no cumulative impacts** are anticipated with the development of the proposed project.

As stated in Section 4.7 of this DEIR, on-site storm drain facilities will be constructed and connected to the Perris Valley Storm Channel (PVSC). Stormwater run-off from the proposed project will not exceed the capacity of existing or planned stormwater drainage systems. Development of PVCC and the City will be regulated through compliance with the County's WQMP requirements and the NPDES permit requirements the proposed project is not anticipated to provide substantial additional sources of polluted run-off. As such, **no cumulative impacts** are anticipated.

Future development within the City and the PVCC could place structures within the 100-year flood hazard area that could impede or redirect flood flows. Development of PVCC and the Perris Valley that occurs within the floodplain is restricted and permitted by the City of Perris to ensure that flood flow is not redirected or impeded to the detriment of properties within the City of Perris or properties upstream or downstream. Further, the Perris GP EIR found that less than significant impacts relative to the risk to property and life resulting from construction within the 100-year floodplain within the City. As such, **no cumulative impacts** are anticipated.

According to the Perris GP EIR, the City of Perris is subject to inundation from dam failure at any of three reservoirs: Lake Perris Dam adjoining the northeasterly boundary of the City of Perris; Pigeon Pass Reservoir in Moreno Valley; and Little Lake Reservoir in Hemet. Because of proximity to the City of Perris, inundation from breach of the Lake Perris dam is assumed to be the worst-case scenario in terms of volume and minimal elapsed time from breach to maximum flow within the City. The dam inundation study for Lake Perris Reservoir indicates that sudden failure of the dam as a result of a seismic event is so unlikely that the inundation simulation is based on a dam breach that follows an initial, small leak near the base of the dam. Based on this study, virtually all of Perris, east of Perris Boulevard, where the majority of existing development is located, would be flooded.

Adoption and implementation of Perris GP will result in a significant increase in the number of people residing and working in the City of Perris. Much of this future development will occur in the area east of Perris Blvd. that is subject to inundation after breach of the Lake Perris dam. Although failure of the Lake Perris dam is an extremely unlikely event, the scenario outlined in the inundation study indicates that flooding would occur hours after the beginning of the dam breach. Accordingly, emergency evacuations could preclude injury and loss of life, but not property damage. The Perris GP Safety Element includes Implementation Measures that would provide for swift evacuation of people within the Lake Perris Dam inundation area.

The Lake Perris Reservoir, and the dam that impounds it, is located east of the proposed project site. The dam is owned by the California Department of Water Resources (DWR). The DWR Division of Dam Safety regulates the safety and integrity of the dam. By virtue of its location and purpose, the dam is integral to the Lake Perris State Recreation Area which is operated by California State Parks. As the southernmost State Water Project Facility and the southern terminus of the East Branch of the California aqueduct, Metropolitan Water District (MWD) of Southern California is the principal user of water from Lake Perris. The dam is subject to periodic inspection by state authorities and MWD.

The Lake Perris Reservoir is currently being prepared for upgrades to withstand the strongest earthquake likely to occur in the area. As noted above, simulations of dam or levee failure in the City of Perris show virtually all of the City east of Perris Boulevard will be flooded. As a result of its inspections, "DWR has identified potential seismic safety risk in a section of the foundation of the Perris Dam. There is no imminent threat to life or property." The environmental review process for the dam upgrade is currently underway with the DEIR released in January 2010. The "completion of the dam remediation design is expected in late 2010. Construction is estimated to begin in 2011. Dam completion is expected by 2013. All projects concerning the Perris Dam are anticipated to be complete by 2014." (<http://perrisdam.water.ca.gov>) The possibility of failure due to seismic or other factors is considered by MWD to be extremely remote. The project-related contribution to impacts associated with dam inundation would not be cumulatively considerable, and thus **less than significant**.

Land Use/Planning

This cumulative impact analysis considers development of the proposed project in relationship to the City's General Plan land use policies and zoning ordinances, along with other developmental policies, and neighboring jurisdictions. As shown in Section 4.8 of this DEIR, the proposed project is consistent with

all of the applicable Perris GP Policies and regional plans. Therefore, the cumulative impacts are considered **not significant**.

Noise

The geographic context for the analysis of cumulative noise impacts is the City of Perris. This cumulative impact analysis considers development of the PVCC in conjunction with ambient growth within the vicinity of the PVCC project site. Noise by definition is a localized phenomenon, and drastically reduces in magnitude as distance from the sources increases. Consequently, only projects and growth due to occur in the immediate proposed project area would be likely to contribute to cumulative noise impacts.

Future construction in the area is not expected to result in a cumulatively significant impact in terms of exceeding the noise standards established in the Perris GP EIR or Noise Ordinance. The City Municipal Code exempts noise generated from construction from noise regulations as long as these activities are limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. Construction is prohibited on Sundays and on all holidays with the exception of Columbus Day and Washington's Birthday. The project construction noise impacts on-site and for the off-site roadway improvements are localized in nature and decrease substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to a sensitive noise receptor location in question. Because the probability of future implementing development and infrastructure project construction sites being located in close enough proximity to one another within the City to raise ambient noise levels by a significant level is considered to be remote and unlikely, the cumulative impact related to construction noise is less than significant. Therefore, the impact of construction of the PVCC's implementing development and infrastructure projects would **not be cumulatively considerable or significant**.

The Perris GP EIR concluded that implementation of the Perris GP would represent a less than significant impact regarding exposure of people to severe noise levels in excess of established standards or a substantial permanent increase in ambient noise levels. The Perris GP EIR discussed this topic under three categories: roadway-sourced impacts, railroad-sourced impacts and Perris Speedway-sourced impacts.

The proposed project will contribute noise to the existing environment through the addition of traffic on local streets. Because the proposed PVCC represents a long-range plan for future development within the project area, potential traffic-related noise impacts will occur in conjunction with those from other development within the City of Perris in accordance with the Perris GP and in surrounding areas.

As shown in **Table 4.9-E**, road segments around the project area would have noise levels ranging from 57.7 dBA to 79.3 dBA at project buildout; with the highest noise levels along Interstate 215. Projected noise levels along the 66 currently existing analyzed roadway segments will be reduced between 0.1 dBA and 2.7 dBA along nine roadway segments and will increase from 0.2 dBA to 18.5 dBA along 57 roadway segments. Since the maximum off-site traffic noise impact due to project-related traffic exceeds the 3.0 dBA significance threshold along 12 roadway segments adjacent to sensitive receptors and exceeds the 5.0 dBA significance threshold along 18 other roadway segments, the proposed project will result in substantial increases in the ambient noise environment at project buildout and therefore, the **potential cumulative project-related noise impacts are considered significant and the contribution of the project to the cumulative impact would be considerable**.

Transportation/Traffic

The geographic context for the analysis of cumulative traffic impacts is the City of Perris. This cumulative impact analysis considers development of the proposed project in conjunction with ambient growth within the vicinity of the proposed project.

The Perris GP EIR concluded that “The projected increase in traffic volume on Interstate 215 by the year 2030 as a cumulative effect of project traffic and of traffic generated by projects contributory to vehicle trips on Interstate-215 is substantial in relation to the existing traffic load and capacity of Interstate 215 through the project area. The resultant Level of Service ‘F’ through the project area represents a significant impact.”

Because the PVCC only sets forth broad parameters for new development and does not identify the timing, size or use of individual implementing development projects, the specific impacts at any given intersection or roadway segment any point in the future cannot be quantified at this time. As shown in **Table 4.10-E**, the LOS on area roadways following PVCC buildout will be at LOS D or better on study area roadways, with the exception of Interstate 215 which is projected to be a LOS F. These projected levels of service are the same as those identified within the Perris GP EIR. Therefore, the project’s potential impacts related to levels of service on roadways are considered to be **less than significant**; although potential cumulative impacts related to Interstate 215 will remain **significant and unavoidable** as described in the Perris GP EIR. Through the Perris GP EIR analysis process, the City has determined that the cumulative traffic-related impacts are unavoidable and immitigable. The City Council adopted a Statement of Overriding Considerations to support approval of the Perris GP despite unavoidable residual impacts.

As stated above regarding Section 15130(e) of the State *CEQA Guidelines*, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact. Since the Perris GP adopted overriding considerations for the cumulatively significant unavoidable traffic-related impacts, and the projected levels of service on affected roadways are the same as those identified within the Perris GP EIR, no further analysis is necessary. **No additional cumulative impacts** are anticipated.

Additionally, the project will be required to pay Transportation Uniform Mitigation Fees (TUMF) and City of Perris Road and Bridge Benefit District (RBBD) fees to help pay for off-site improvements designed to mitigate local and regional traffic impacts to which the project contributes.

Utilities and Service Systems

The geographic context for the analysis of cumulative water supply is EMWD’s service area. The cities of Hemet, Moreno Valley, Murrieta, Perris, San Jacinto, and Temecula, and portions of western Riverside County represent the service area for EMWD with respect to water supplies. The context for impacts related to wastewater is the service area of the Perris Valley Regional Water Reclamation Facility, which includes the cities of Perris, Sun City, Romoland, and a portion of Moreno Valley. The cumulative area for solid waste-related issues is Western Riverside County.

Overall, EMWD will have to increase their facilities to serve the growing City of Perris. The cumulative growth from this project, along with others, has been addressed by the City in their Perris GP EIR, as well as by EMWD in their Urban Water Management Plan (UWMP) process. The Perris GP EIR determined that the physical environmental impacts associated with construction of new water and sewer facilities were less than significant. At such time that EMWD constructs its own expanded facilities; EMWD will be its own Lead Agency under CEQA and make their own CEQA determinations at the time they construct their planned facilities. As described in Section 4.11 of this DEIR, there is adequate existing capacity to provide water and sewer service to the proposed PVCC project. Therefore, project-related contribution to impacts related to the construction of new water or wastewater treatment facilities or the expansion of existing water and wastewater facilities would not be cumulatively considerable and is **less than significant**.

California Assembly Bill 939 (AB 939) mandates the reduction of solid waste disposal in landfills. With the implementation of AB 939 provisions, the amount of solid waste disposed of in landfills by County build out is projected to be 4,148,156 tons per year. With planned expansion activities of County landfills and projected growth rates contained with a Landfill System Capacity Projection Study prepared for the County, the Riverside County Integrated Project Final EIR concluded sufficient landfill capacity would exist to accommodate future disposal needs through County build out in 2040². Therefore, build out of the County General Plan would not create demands for solid waste services that exceed the capabilities of the County's waste management system. Consequently, cumulative impacts associated with solid waste within the County, including the City of Perris, would be considered **less than significant**.

Unavoidable Adverse Impacts

This topic is intended to address any impacts that cannot be mitigated to below a level of significance (State *CEQA Guidelines* Section 15126.2). Significant impacts which cannot be avoided or eliminated if the project is implemented have been discussed in detail throughout Section 4.0 of this document and above. With the exception of air quality impacts and cumulative traffic impacts related to Interstate 215, potential impacts related to all other topics analyzed in this DEIR were found to be less than significant or less than significant with mitigation measures incorporated. Details concerning conditions that contribute to the unavoidable significant impacts to air quality and cumulative traffic impacts are provided below.

The project has significant air quality impacts that cannot be avoided or mitigated to less than significant levels. However, the project will create construction jobs in the short-term and industrial, commercial and office jobs in the long-term. The project will add to the City's economic growth by generating tax revenue and implementing the Perris GP. As stated above in the cumulative impact analysis for air quality, the Basin as a whole is in non-attainment for certain pollutants and every additional car on the road contributes to adverse air quality impacts. Therefore, this project does not contribute a unique impact that does not currently exist within the Southern California region. Therefore, although the project will have unavoidable impacts to air quality, it is the City's desire to grow and allow for interstate commerce based business in their City which outweighs these impacts.

Impacts to air quality are considered significant if a project will violate an air quality standard, contribute substantially to an existing air quality violation or result in a cumulatively considerable increase in a criteria pollutant under non-attainment. The proposed project will generate emissions in both the short-term and long-term which are above the SCAQMD regional thresholds even with mitigation measures incorporated, thereby indicating project emissions will violate an air quality standard and contribute substantially to an existing air quality violation. Although mitigation measures have been included which would reduce some short-term and long-term effects of the project, implementation of those mitigation measures does not reduce the impacts to levels below the significance thresholds utilized in this analysis.

Road segments around the project area would have noise levels ranging from 57.7 dBA to 79.3 dBA at project buildout; with the highest noise levels along Interstate 215. Projected noise levels along the 66 currently existing analyzed roadway segments will be reduced between 0.1 dBA and 2.7 dBA along nine roadway segments and will increase from 0.2 dBA to 18.5 dBA along 57 roadway segments. Since the maximum off-site traffic noise impact due to project-related traffic exceeds the 3.0 dBA significance threshold along 12 roadway segments adjacent to sensitive receptors and exceeds the 5.0 dBA significance threshold along 18 other roadway segments, the proposed project will result in substantial increases in the ambient noise environment at project buildout and therefore, the **potential direct and cumulative project-related noise impacts are considered significant**.

² Per the Riverside County Integrated Project FEIR discussion of Solid Waste impacts, Riverside County General Plan build out is assumed in 2040 based on the Southern California Association of Government's (SCAG) projected growth rate for the County.

Regarding traffic impacts, since the Perris GP adopted overriding considerations for the cumulatively significant unavoidable traffic-related impacts, and the project represents a redistribution of Perris GP land uses within the project area, cumulative impacts related to Interstate 215 will remain **significant and unavoidable** as described in the Perris GP EIR and no additional impacts are anticipated.

Growth Inducing Impacts

According to State *CEQA Guidelines* (Section 15126.2 [d]), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria below:

- A project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- A project would encourage and facilitate other activities that could significantly affect the environment.

The Perris GP EIR determined that its implementation would not result in an impediment to growth. It was determined that a lack of potable water supply would be the only impediment to growth in Southern California; however, EMWD provides water to the City and has the rights to adequate supplies to accommodate growth consistent with the Perris GP. Since the project is a specific plan that is modifying some of the Perris GP land use designations within the project area with other designations that are similar in character and intensity, the project will not remove obstacles to population growth.

The Perris GP EIR also considered urbanization of land in a remote location as a growth inducing impact and found that development consistent with the Perris GP reflects the logical, geographic expansion within Western Riverside County. As the project development is substantially similar to the Perris GP and within the same footprint, the project will also not result in urbanization in a remote location.

The Perris GP EIR also considered precedent-setting actions such as zone changes or General Plan Amendments as potentially growth inducing and it was determined that the Perris GP was substantially similar to the existing land uses contained in the previous Perris GP from 1991 and that implementation of the Perris GP would not establish a precedent for developing land previously not subject to development. Although the project includes a General Plan Amendment and a zone change to modify the existing land use and zoning designation with the project area, the proposed land use designations are substantially similar in character and intensity as those contained in the Perris GP. Therefore, the project will not establish a precedent-setting action.

The Perris GP EIR found that new development consistent with the Perris GP will require extension and upgrading of major infrastructure such as sewer and water facilities (including storm drains), roadways, and dry utilities such as electric lines and that the indirect extension of infrastructure represents a significant impact. The proposed project will simply implement the City's Circulation Element of the Perris GP by planning for the improvement of the roadways within the project area. Therefore, the proposed project itself is not expanding infrastructure to areas not already planned to be served; the project is implementing the Perris GP which plans for the conversion of the project site to urban development. Similarly, sewer and water facilities and dry utilities were anticipated to require extension within the City; however, the proposed project itself is not extending the service to areas not already planned to be served. The drainage systems that will be developed in conjunction with the PVCC will consist of two basic components: storm drains and detention basins. The proposed drainage system includes modifications to the existing Perris Valley MDP, but will not result in impacts beyond those

analyzed in the Perris GP EIR. Therefore, the proposed project will not indirectly necessitate extension of major infrastructure.

The PVCC can be projected to generate 56,087 jobs/employees to the area. The creation of 56,087 jobs represents a 2.9 percent increase in the forecasted employment for this area of the City in 2030 as evaluated in the Perris GP EIR.

Short-Term Uses Versus Long-Term Productivity

If the proposed project is approved and constructed, a variety of short-term and long-term impacts will occur on both local and regional levels. During construction, portions of surrounding lands may be temporarily impacted by dust and noise over the project build-out. Short-term erosion may occur during grading and construction activities. These disruptions, however, are temporary and can be mitigated to a large degree.

The long-term effect of the proposed project and the subsequent development will be to convert the site into a mix of industrial, commercial, and office uses. In relation to this process, the characteristics of the physical, biological, cultural, aesthetic, and human environment will be impacted, as with any form of urbanization. The consequences of this urbanization include: incremental degradation of the regional air quality, incremental demands for public services and utilities, and increased natural resource consumption. However, these impacts will not be substantially different from those identified and planned for in the Perris GP.

Ultimate development of the project would create long-term environmental consequences that are connected with any form of urbanization. However, the proposed project has been designed to benefit the community and population by providing increased opportunities for employment in closer proximity to residential development and will ultimately provide for a form of long-term productivity which appears compatible with human needs in the area.

Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Action Should it be Implemented

Pursuant to State *CEQA Guidelines* Section 15126.2(c), an EIR must include a description of significant irreversible environmental changes that would be caused by the proposed action. Section 15126.2(c) reads as follows:

“Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Irreversible Commitment of Resources

Implementation of the proposed project would irreversibly commit approximately 3,584 acres of the project site to development of business park/professional office, commercial, general industrial, light industrial, public/semi-public, residential and other uses. In addition to a commitment of land to specific land uses, the proposed project would result in a long-term, irreversible change in the visual character of the project site. The current vacant land character of the most of the PVCC project site would be transformed into developed property. These changes to the visual environment are consistent in keeping with existing development within the PVCC project boundaries. Construction and operation of the proposed project would contribute to the incremental depletion of renewable and non-renewable resources.

Construction of the proposed project will require the use of renewable resources such as lumber and other forest products, which could be expected to be replenished over the lifetime of the project. For example, lumber supplies are increased as seedlings mature into trees. As such, the development of the project would not result in the irreversible commitment of renewable resources. Nevertheless, there would be an incremental increase in the demand for these resources during construction of the project.

Construction of the project will also result in the use of non-renewable resources including building materials (e.g., asphalt, petrochemical construction materials, steel, copper and other metals, and sand and gravel) and fossil fuels, including the use of fossil fuels for construction equipment, the transport of construction materials to the project site and the transportation of construction workers to and from the project site (e.g., natural gas, gasoline, diesel fuel and other petroleum-based products). These materials and the resources used in their production are available in a finite supply and are generally not retrievable, although some of the materials are recyclable. Construction materials like concrete and asphalt, for example, can be crushed and recycled as road base. None of these materials are considered to be in short supply and unavailable for use in project construction.

During project operation, the project would result in an irretrievable commitment of nonrenewable resources, such as energy resources and fossil fuels. Energy resources including petroleum and natural gas will be consumed during construction and operational phases of new development. Short-term, or construction-related, energy uses will include electricity for lights and construction equipment, and fossil fuels for construction equipment, and the transport of construction materials and workers to and from the project site. Long-term energy resources include fuel consumed for the heating and cooling of buildings, transportation of people and goods, as well as for lighting and other energy-related needs.

Electricity consumption during construction and operation phases will increase the consumption of oil, coal, and natural gas used at power plants located outside the City of Perris. Accordingly, this represents a long-term commitment to the continued consumption of these resources.

New development will, in turn, result in increased demand for municipal services (e.g., fire and police, trash disposal, street repair and maintenance), and for general government services (e.g., courts and social services). These represent a long-term commitment of money and human resources.

Irreversible Environmental Changes

An unavoidable significant adverse impact is the degradation of regional air quality caused by the cumulative effect of numerous projects in the City of Perris, including the proposed project. The proposed project in combination with statewide, national, and international emissions could cumulatively contribute to a change in Earth's climate, i.e., global warming. Therefore, the project will have a potentially significant cumulative impact on global climate change.

Night lighting in the project vicinity would incrementally increase as a result of the proposed development. Implementation of the proposed project would result in less than significant adverse environmental effects to Agriculture, Hydrology and Water Quality, Land Use and Planning, Noise, Utilities and Service Systems and therefore do not require mitigation measures. The following issue areas have potential environmental effects that can be mitigated to below the level of significance: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, project-related Transportation and Traffic.

Potential impacts upon Air Quality including cumulative impacts upon climate change (global warming) and cumulative Transportation and Traffic impacts were found to be significant and cannot be mitigated to below the level of significance. A Statement of Overriding Consideration will be required for these issue areas.

Potential Environmental Damage from Accidents

The project proposes a mix of business park/professional office, commercial, general industrial, light industrial, public/semi-public, residential and other uses. Potential impacts related to the creation of a significant hazard to the public or environment through the routine transportation, use, or disposal of hazardous materials, and the creation of a significant hazard to the public or environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment were found to be less than significant without mitigation required, and impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or planned school, and safety hazards for people residing or working in the project area, if within an airport land use plan or within two miles of a private or private-use airport will be reduced to less than significant levels through the implementation of mitigation measures and compliance with regulatory requirements. The project site is located within a seismically active region and would be exposed to ground shaking during a seismic event. In order to address the potential for moderate to severe ground-shaking that may occur during the lifetime of the proposed structures, the project will follow engineering and design parameters in accordance with the most recent edition of the UBC and/or the Structural Engineers Association of California parameters, as required in standard City conditions of approval.

6.0 Alternatives to the Proposed Project

Introduction

An EIR must identify ways to mitigate or avoid the significant effects that a proposed project may have on the environment. In compliance with State *CEQA Guidelines* Section 15126.6(a), this Draft EIR must describe “a range of reasonable alternatives to the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.” The EIR does not need to consider every conceivable alternative; rather, it must consider a reasonable range of potentially feasible alternatives to the proposed project or to the location of the proposed project, which would avoid or substantially lessen significant effects of the proposed project, even if “these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” [State *CEQA Guidelines* Section 15126.6(b)]. The discussion of project alternatives must “include sufficient information about each (to) allow meaningful evaluation, analysis, and comparison with the proposed project.” An EIR must evaluate a No Project alternative in order to allow decision-makers to compare the effect of approving the proposed project to the effect of not approving the proposed project.

The City, acting as the CEQA Lead Agency, is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives addressed in an EIR is governed by a “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR needs to examine in detail only those that the Lead Agency determines could feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any of the significant effects of the proposed project. Per State *CEQA Guidelines* Section 15364, “feasible” has been defined as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.”

As stated in Section 3.0 of this DEIR, the project objectives include:

- Allow the residents of the community to live and work under the same roof.
- Promote future Professional Office conversions.
- Ensure a balance of land uses that maintain and enhance the City’s fiscal viability, economic diversity and environmental integrity.
- Encourage the development of joint-use and dual-use facilities.
- Set forth allowed land uses in a coordinated, comprehensive manner that interfaces with planned open space trails and public realms, as well as proximity to transportation facilities.

Summary of Proposed Project Significant Impacts

Pursuant to State *CEQA Guidelines* Section 15126.6(a), each alternative must accomplish most of the basic project objectives and in some way avoid or substantially lessen one or more of the significant effects created by the proposed project. The direct significant environmental effects that result from the proposed project before mitigation include impacts to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and transportation and traffic. After mitigation measures are implemented, the direct significant effects of the project are impacts to air quality and noise. Cumulatively, the project contributes to significant impacts to air quality, noise, and traffic impacts related to Interstate 215.

Rationale for Alternative Selection

Alternatives Considered but Rejected by the Lead Agency

Section 15126.6(c) of the State *CEQA Guidelines* specifies that an EIR should identify alternatives that were considered by the lead agency, but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR because the alternative(s) fails to meet the basic project objectives, is infeasible, and does not avoid significant environmental impacts.

Higher Intensity Alternatives

The project, as proposed, is anticipated to result in unavoidable adverse project-related and cumulative impacts related to air quality, noise, and cumulative impacts related to traffic on Interstate 215. Cumulative traffic impacts result from the significant and unavoidable impacts to Interstate 215 as identified by the Perris GP EIR. Anticipated impacts to air quality by the proposed project will be a result of the vehicle travel within the project area. Alternatives with higher intensities of commercial, industrial or business park uses on the same acreage would clearly result in more traffic, and therefore poorer air quality than the proposed project, and were not considered further.

Different Land Use Mix

Similarly, any alternatives which considered a different land use mix than the proposed project, such as those removing or increasing existing residential, were rejected because they would not meet most of the project objectives and would not lessen or avoid the project's impacts related to air quality, noise and cumulative traffic-related impacts to Interstate 215. This is because the surrounding area is also predominantly designated for industrial uses and has associated truck traffic. Therefore, removing or increasing existing residential uses may increase potential impacts to the residential areas related to truck traffic, the potential transport and use of hazardous materials, and airport hazard-related impacts to or from the March Air Reserve Base (MARB). Therefore, such alternatives were not considered in this DEIR.

All Residential Alternative

Land uses under the all residential alternative, would consist of a mix of single-family residential (SFR) and multiple-family residential (MFR) units along with the necessary drainage facilities needed to serve the project area. This alternative was rejected because it would not meet any of the project objectives. Additionally, this alternative would result in land uses inconsistent with MARB; residential units exposed to unacceptably high noise from MARB; and increased airport hazard-related impacts to or from MARB. Therefore, all residential alternatives were not considered in this DEIR.

No Residential Alternative

Under the no residential alternative, the residential land uses designated in the PVCC Specific Plan would be replaced with commercial or industrial uses. This alternative was rejected because it would not meet the project objective of allowing project residents to live and work under the same roof. A no residential alternative would create land use conflicts as there are existing residential uses in the PVCC Specific Plan area and adjacent properties were previously developed with residential uses. Additionally, a no residential alternative would not lessen or avoid the project's impacts related to air quality, noise, and cumulative traffic-related impacts to Interstate 215, because this alternative would replace residentially-designated property with commercial, industrial, or business park uses, which would clearly result in more traffic, and therefore, poorer air quality than the proposed project. Therefore, the no-residential alternative was not considered in this DEIR.

Alternative Location

Given the nature of the proposed development, an alternative location will not alleviate these impacts. Shifting the impacts to another location does not reduce or eliminate them. The location of the project is appropriate because the uses proposed are substantially similar to the site's general plan designation and are further removed from the more sensitive land uses. The project area is also in close proximity to a freeway. Therefore, an alternative location is not considered a feasible alternative to the proposed project.

It is required under CEQA that alternative site(s) be evaluated if any feasible sites exist where significant impacts can be lessened. The environmental impacts of development on any other site in the City are expected to be similar to those of the proposed project. Namely, any other physical site location would still result in air quality and noise impacts and cumulative traffic-related impacts to Interstate 215 and depending on the site's current use; some sites would be closer to larger residential projects and sensitive land uses and could offer more potential hazard-related impacts than the proposed PVCC project. Additionally, other sites, depending on their biological or cultural resources may have similar or worse impacts than the project as well. Given the nature of the proposed project, an alternative location will not alleviate the impacts because a relocation of the proposed project would also enable the project site to be developed pursuant to the Perris GP land use designations, which include similar uses. In addition, development of an alternative site nearby simply moves the potential impacts. Therefore, an alternative location that would meet most of the basic project objectives would not meet the CEQA definition of an alternative.

Description and Evaluation of Alternatives

This section provides an analysis of the environmental impacts anticipated for each project alternative in comparison to the proposed project. The comparison assumes that mitigation measures equivalent to those for the proposed project would be implemented for each alternative, unless otherwise indicated. Each alternative is also evaluated on its ability to meet the project objectives.

Per State *CEQA Guidelines* Section 15126.6(3), the "no project" alternative could take two forms: 1) No change from the existing uses (includes agricultural); or 2) Development into already approved land uses. The Perris GP Land Use Map designates the project site for a mix of uses, but does not include agricultural uses. Since both "no project" alternatives are significantly different, both forms of the No Project alternative will be addressed in this section.

The alternatives considered in this DEIR are: 1) a No Project Alternative that retains the existing uses of the site, but includes no new development, 2) a No Project Alternative that considers development pursuant to Perris GP land use designations, and 3) a Reduced Commercial Alternative. Alternative 1 – No Project – Existing Land Use Alternative

The No Project – Existing Land Use Alternative includes continued use of the project site existing agricultural, commercial, industrial, and residential uses as well as vacant land. Under this alternative, it is assumed that these activities would continue and that no new development would occur. Approximately 187 acres¹ within the City remain zoned for agricultural uses and approximately half of this acreage is within the project area. This alternative evaluates the environmental impacts resulting from a continuance of the project site with the current operations.

Alternative 2 – No Project – Existing Perris GP Land Use Designation Alternative

The No Project – Existing Perris GP Land Use Designation Alternative would result in development of the project site in accordance with its current general plan designated land uses across the project site consisting of Business Park (BP), Community Commercial (CC), General Industrial (GI), Light Industrial

¹ Riverside County parcel data, 2009

(LI), Multi-Family Residential (MFR-14), Neighborhood Commercial (NC), Open Space (OS), Professional Office (PO), Public/Semi-Public Facility (P), Residential (R-6,000), Residential (R-20,000) and Specific Plan (SP). Typical Floor Area Ratios (FARs) for the non-residential land use designations are between 0.25:1 and 0.45:1. **Table 6.0-A, Comparison of Proposed Project to No Project - Existing Perris GP Land Use Designation Alternative** shows a comparison of the proposed project to the No Project - Existing Perris GP Land Use Designation Alternative.

Table 6.0-A, Comparison of Proposed Project to No Project - Existing Perris GP Land Use Designation Alternative

Development Type	Proposed Project	Existing Perris GP Land Use Designation Alternative
Business Park/Professional Office (BPO) Professional Office (PO) Business Park (BP)	5,444,652 sq. ft. (on 357.12 acres)	4,832,982 sq. ft. (on 317.0 acres)
Commercial (C) Community Commercial (CC) Neighborhood Commercial (NC)	3,367,406 sq. ft. (on 309.22 acres)	5,034,665 sq. ft. (on 462.32 acres)
General Industrial (GI)	7,996,636 sq. ft. (on 407.95 acres)	8,289,686 sq. ft. (on 422.9 acres)
Light Industrial (LI)	35,994,761 sq. ft. (on 1,836.28 acres)	31,756,808 sq. ft. (on 1,620.08 acres)
Multi-Family Residential Residential (Multi-Family) (MFR-14)	308 dwelling units (on 22.33 acres)	-
Public (P) Public/Semi-Public/Utilities Park, Recreational and Natural Open Space (OS)	249 acres	120 acres
Residential (R) Residential (Single-Family) (R-6,000 and R-20,000)	441 dwelling units (on 62.88 acres)	854 dwelling units (on 122.0 acres)
Specific Plan (SP)	-	1,330 dwelling units (on 190.33 acres)
Other (ROW, basin, etc.)	340 acres	330 acres
Traffic (total trips)	499,271 daily	549,453 daily
Estimated Employment*	56,087 jobs	54,483 jobs
Total Estimated Building Square-Footage	52,803,454	49,914,141

* Assumes generation factors of 1 employee per 600 square feet of business park floor space, 1 employee per 500 square feet of commercial building space, 1 employee per 1,500 square feet of general industrial floor space, and 1 employee per 1,030 square feet of light industrial floor space (from Appendix E of the Riverside County General Plan EIR).

Alternative 3 - Reduced Commercial Alternative

For purposes of this analysis, the Reduced Commercial Alternative will reduce the square footage of the proposed commercial uses by 66 percent. This is because the commercial land uses have the highest traffic trip generation rate in comparison to the other land uses even though the acreage of commercial land uses is less than that of the other land uses. Approximately 111 acres would be converted to Business Park/Professional Office uses and 92 acres would be converted to Light Industrial uses. Business

Park/Professional Office was generally proposed for the parcels adjacent to existing sensitive uses such as residential uses or schools. Light Industrial uses were generally proposed for parcels adjacent to other Light Industrial or General Industrial uses. Although the overall square footage of the project could be reduced, not all aspects of development would be reduced equally as a result. **Table 6.0-B** shows a comparison of the proposed project components to Alternative 3.

Table 6.0-B, Comparison of Proposed Project to Reduced Commercial Alternative

Development Type	Proposed Project	Reduced Commercial Alternative
Business Park/Professional Office (BPO) Professional Office (PO) Business Park (BP)	5,444,652 sq. ft. (on 357.12 acres)	7,135,281 sq. ft. (on 468.01 acres)
Commercial (C) Community Commercial (CC) Neighborhood Commercial (NC)	3,367,406 sq. ft. (on 309.22 acres)	1,155,429 sq. ft. (on 106.1 acres)
General Industrial (GI)	7,996,636 sq. ft. (on 407.95 acres)	7,996,636 sq. ft. (on 407.95 acres)
Light Industrial (LI)	35,994,761 sq. ft. (on 1,836.28 acres)	37,802,849 sq. ft. (on 1,928.52 acres)
Multi-Family Residential Residential (Multi-Family) (MFR-14)	308 dwelling units (on 22.33 acres)	308 dwelling units (on 22.33 acres)
Public (P) Public/Semi-Public/Utilities Park, Recreational and Natural Open Space (OS)	249 acres	249 acres
Residential (R) Residential (Single-Family) (R-6,000 and R-20,000)	441 dwelling units (on 62.88 acres)	441 dwelling units (on 62.88 acres)
Specific Plan (SP)	–	–
Other (ROW, basin, etc.)	340 acres	340 acres
Traffic (total trips)	499,271 daily	438,495 daily
Estimated Employment*	56,087 jobs	56,236 jobs
Total Estimated Building Square-Footage	52,803,454	54,090,194

* Assumes generation factors of 1 employee per 600 square feet of business park floor space, 1 employee per 500 square feet of commercial building space, 1 employee per 1,500 square feet of general industrial floor space, and 1 employee per 1,030 square feet of light industrial floor space (from Appendix E of the Riverside County General Plan EIR).

Comparison of Alternatives

The matrix approach to comparing the above-described alternatives is used for ease of directly comparing the proposed project's significant effects with those of the alternatives, per State *CEQA Guidelines* Section 15126.6(d). **Table 6.0-C, Impact Comparison of Alternatives Matrix**, identifies the areas of potential environmental effects per CEQA and ranks each alternative as better, the same or worse than the proposed project with respect to each topic.

**Table 6.0-C
Impact Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project PVCC	Alternative 1 No Project - Existing Land Use	Alternative 2 No Project - Existing Perris GP Land Use Designation	Alternative 3 Reduced Commercial
Agricultural Resources	No significant impact - based on applicable findings contained in the Perris GP EIR.	Same - Some continued agricultural uses. No significant impact.	Same - No significant impact based on applicable findings contained in the Perris GP EIR.	Same - No significant impact based on applicable findings contained in the Perris GP EIR.
Air Quality	Significant - Will exceed SCAQMD short-term and long-term thresholds for criteria pollutants. Cumulatively significant - contributes to exceedance of air quality standards which the Basin is non-attainment. GHG emissions were found to not be cumulatively considerable due to the scale of the project on a state-wide scale and consistency with applicable General Plan polices.	Better - No development results in no increase in ambient air quality conditions. There would be no change in the emission of greenhouse gases related to use of the project site.	Worse - The existing Perris GP land uses will result in nine percent more daily vehicle trips which in turn increase criteria pollutant and GHG emissions. The resulting emissions would remain above established thresholds, and cumulative impacts related to criteria pollutant emissions released in an area that already experiences problems regarding air quality. Cumulatively significant - This alternative still contributes to the exceedance of criteria pollutant air quality standards. GHG emissions are also not cumulatively considerable.	Better - Although reduced commercial building square footage reduces the amount of daily trips 12 percent from vehicles related to the proposed project which in turn reduce criteria pollutant and GHG emissions, this alternative would still result in emissions exceeding established thresholds, and cumulative impacts related to criteria pollutant emissions released in an area that already experiences problems regarding air quality. Cumulatively significant - Although it has fewer emissions, this alternative contributes to exceedance of air quality standards.

**Table 6.0-C
 Impact Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project PVCC	Alternative 1 No Project - Existing Land Use	Alternative 2 No Project - Existing Perris GP Land Use Designation	Alternative 3 Reduced Commercial
				GHG emissions are also not cumulatively considerable.
Biological Resources	Less than significant project impacts to potential habitat. Project does not conflict with the MSHCP.	Better - No further development within the project area. No significant impacts are expected.	Same - This alternative would result in the same less than significant impacts to potential habitat. Development under this alternative would also be consistent with the MSHCP.	Same - This alternative would result in the same less than significant impacts to potential habitat. Development under this alternative would also be consistent with the MSHCP.
Cultural Resources	Less than significant impacts to cultural resources without mitigation measures incorporated. However, mitigation measures ensure no significant impacts occur.	Better - Although the site is not expected to harbor significant cultural resources, under this alternative there would not be the prospect of uncovering unknown resources, as no further development would be proposed.	Same - This alternative would have the same less than significant impacts, with and without implementation of mitigation measures.	Same - This alternative would have the same less than significant impacts, with and without implementation of mitigation measures.
Geology and Soils	Less than significant impacts related to seismic shaking and ground failure and soil instability with implementation of mitigation measures.	Same - No significant impact.	Same - This alternative would have the same less than significant impacts as the proposed project, with implementation of mitigation measures.	Same - This alternative would have the same less than significant impacts as the proposed project, with implementation of mitigation measures.

**Table 6.0-C
Impact Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project PVCC	Alternative 1 No Project - Existing Land Use	Alternative 2 No Project - Existing Perris GP Land Use Designation	Alternative 3 Reduced Commercial
Hazards and Hazardous Materials	<p>Less than significant impacts related to the routine use or transport of hazardous materials, accidental release of hazardous materials with no mitigation.</p> <p>No significant impact related to hazardous materials within one quarter mile of a school or airport-related hazards, with mitigation.</p>	<p>Same - No further development within the project area.</p> <p>No significant impacts due to site characteristics or due to land uses near schools and airports.</p>	<p>Same - No significant impacts due to site characteristics.</p> <p>No significant impact related to hazardous materials within one quarter mile of a school or airport-related hazards, with mitigation.</p>	<p>Same - No significant impacts due to site characteristics.</p> <p>No significant impact related to hazardous materials within one quarter mile of a school or airport-related hazards, with mitigation.</p>
Hydrology and Water Quality	<p>Less than significant project impacts with implementation of WQMP and NPDES permit requirements. Project also includes storm drains and detention basins as part of the project which reduces impacts to water quality and flooding.</p>	<p>Better for Water Quality - The project site has many vacant parcels and land used for agricultural uses. The undeveloped, unpaved nature of these areas provides for infiltration of pollutants and so this alternative would have better water quality impacts than the proposed project.</p> <p>Worse for Hydrology - Due to the area's relatively flat terrain and the lack of regional drainage infrastructure, flooding occurs in both major and minor storm events. With no development, regional drainage infrastructure will</p>	<p>Same - This alternative would have the same less than significant impacts as the proposed project, with implementation of WQMP and NPDES permit requirements. This alternative would still include storm drains and detention basins to address the water quality and flood control needs.</p>	<p>Same - This alternative would have the same less than significant impacts as the proposed project, with implementation of WQMP and NPDES permit requirements. This alternative would still include storm drains and detention basins to address the water quality and flood control needs.</p>

**Table 6.0-C
Impact Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project PVCC	Alternative 1 No Project - Existing Land Use	Alternative 2 No Project - Existing Perris GP Land Use Designation	Alternative 3 Reduced Commercial
		not be constructed.		
Land Use and Planning	Consistent with all applicable Perris GP policies and regional plans. No significant impact.	Worse - Without further development as anticipated by the City of Perris including conversion of all agricultural uses, goals and policies for the Perris GP would not be met.	Same - This alternative would have the same less than significant impacts as the proposed project.	Same - This alternative would have the same less than significant impacts as the proposed project.
Noise	Less than significant construction-related noise impacts with mitigation measures incorporated. Significant project-level and cumulative traffic-related noise due to traffic that exceeds the 3.0 dBA significance threshold along 12 roadway segments adjacent to sensitive receptors and exceeds the 5.0 dBA significance threshold along 18 other roadway segments.	Better - Without further development, there is no short term less than significant construction-related noise impacts and there will be no project-related increase in traffic noise and other operational noise.	Worse - This alternative would have the same less than significant construction-related impacts as the proposed project. However, inasmuch as this alternative would have approximately nine percent more daily trips compared to the proposed project, significant project-level and cumulative traffic-related noise would be slightly higher than that of the proposed project.	Better - This alternative would have the same less than significant impacts construction-related impacts as the proposed project. This alternative would result in a 12 percent reduction of project-generated traffic. Therefore, potential increases in noise-levels along roadway segments would be less than those from the proposed project; although project-level and cumulative traffic-related noise increases would still exceed established thresholds and would be significant.
Transportation and Traffic	Less than significant project impacts without implementation of mitigation measures. However, mitigation measures further	Better - No further increase in traffic originating from the project area. Same - Significant cumulative impacts from Interstate 215	Worse - This alternative would create nine percent more daily trips compared to the project, which translates to more	Better - Reduction in the commercial square footage would result in a 12 percent reduction of project-generated traffic. Same - Significant

**Table 6.0-C
Impact Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project PVCC	Alternative 1 No Project - Existing Land Use	Alternative 2 No Project - Existing Perris GP Land Use Designation	Alternative 3 Reduced Commercial
	<p>reduce project impacts.</p> <p>Cumulative - potential cumulative impacts related to Interstate 215 will be significant and unavoidable in accordance with the applicable findings contained in the Perris GP EIR.</p>	<p>will still occur.</p>	<p>traffic impacts to local roadways as analyzed in the Perris GP EIR.</p> <p>Same - Significant cumulative impacts from Interstate 215 will still occur.</p>	<p>cumulative impacts from Interstate 215 will still occur.</p>
<p>Utilities and Service Systems</p>	<p>Less than significant project impacts to water, wastewater, and stormwater facilities without implementation of mitigation measures.</p> <p>Less than significant project impacts on solid waste generation without implementation of mitigation measures.</p>	<p>Better- No further development results in a smaller increase in water, wastewater, and solid waste generation and reduces impacts to those facilities.</p> <p>Worse- The lack of regional drainage infrastructure will increase flooding in both major and minor storm events and will not result in increases in impacts to stormwater drainage facilities.</p>	<p>Same - Will generate a similar amount of water, wastewater, stormwater, and solid waste and impacts on those facilities would not be significant.</p>	<p>Same - Will generate a similar amount of water, wastewater, stormwater, and solid waste and impacts on those facilities would not be significant.</p>
<p>Environmentally Superior to Proposed Project?</p>	<p>N/A</p>	<p>Yes</p>	<p>No</p>	<p>Yes</p>
<p>Meets Most of the Project Objectives?</p>	<p>Yes</p>	<p>No</p>	<p>Yes</p>	<p>Yes</p>

Environmentally Superior Alternative

The State *CEQA Guidelines*, Section 15126.6(e)(2), requires the identification of the environmentally superior alternative. Of the alternatives evaluated above, the No Project (Existing Land Use) alternative is the environmentally superior alternative with respect to reducing impacts created by the proposed project. The State *CEQA Guidelines* also require the identification of another environmentally superior alternative if the No Project alternative is selected as the environmentally superior alternative.

Of the remaining alternatives, the Reduced Commercial Alternative (Alternative 3) is the most environmentally superior alternative to the proposed project. This alternative would reduce the commercial land uses by 66 percent and increase business park and light industrial uses. When compared to the proposed project, implementation of this alternative would result in a 12 percent reduction of project-generated traffic. The reduced traffic would result in slightly reduced air quality and noise impacts. However, air quality and noise impacts will not be sufficiently reduced to eliminate significant impact findings. Impacts related to agricultural, biological, cultural, geology, hazards, hydrology, land use, noise, and utilities would essentially stay the same as the proposed project.

While the City of Perris has examined a reasonable range of alternatives to the proposed project, one of which both meets some of the project objectives and is environmentally superior to the proposed project. The outcomes offered by Alternative 3 are limited when compared to the proposed project, to the extent that:

- the proposed alternative will not optimize the economic potential of the undeveloped parcels within the Perris Valley Commerce Center.
- the alternative will not create as diverse an array of new employment opportunities to utilize the skilled labor pool within the City of Perris as compared to the proposed project.
- the proposed alternative will not improve the economic development potential of the City of Perris by reducing the potential sales tax revenue generated by development within the project site.

This alternative would not result in maximum utilization of the land use as compared to the proposed project. Therefore, although Alternative 3 is an environmentally superior alternative, it is not feasible for the economic, social, technological, and other factors identified above and thus is not being further considered for development in lieu of the proposed project.

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8.0 Acronyms

Acronyms, units of measurement and chemical symbols used throughout the Draft EIR are identified in this section.

Acronyms

AAQS	Ambient air quality standards
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
ADP	Area Drainage Plan
AICUZ	Air Installation Compatibility Zone
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
APZ	Accident Potential Zone
AQMP	Air Quality Management Plan
BMP	Best Management Practices
BUOW	Western burrowing owl
CAA	Clean Air Act
CAL/EPA	California Environmental Protection Agency
CAPSSA	Critical Area Plant Species Survey Area
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response Compensation, and Liability Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CETAP	Community and Environmental Transportation Acceptability Process
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CIWMB	California Integrated Waste Management Board
CIWMP	Countywide Integrated Waste Management Plan
CRHR	California Register of Historic Resources
CUP	Conditional Use Permit

Acronyms

CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DHS	Department of Health Services
DOAF	Department of the Air Force
DOC	California Department of Conservation
DOT	Department of Transportation
DTSC	Department of Toxic Substance Control
EDR	Environmental Data Resources, Inc.
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAR	Floor Area Ratio or Federal Aviation Regulation
GHG	Greenhouse gas
HANS	Property Owner Initiated Habitat Acquisition and Negotiation Strategy
HCP	Habitat Conservation Plan
HUD	Housing and Urban Development
HSWA	Hazardous and Solid Waste Amendments
I-215	Interstate 215
JPR	Joint Project Review
LST	Localized significance thresholds
LMD	Landscape Maintenance District
MARB	March Air Reserve Base
MBTA	Migratory Bird Treaty Act
MDP	Master Drainage Plan
MMTCO ₂ e	Million metric tonnes of carbon dioxide equivalent
mph	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan

Acronyms

MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NEPSSA	Narrow Endemic Plants Species Survey Area
NFIP	National Flood Insurance Program
NPDES	National Pollutant Discharge Elimination System
NPRBBD	North Perris Road and Bridge Benefit District
NRHP	National Register of Historic Places
OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
ODCsc	Ozone depleting compounds
OES	Office of Emergency Services
OHWM	Ordinary high water mark
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Perris GP	City of Perris General Plan
Perris GP DEIR	City of Perris General Plan Draft Environmental Impact Report
Perris GP EIR	City of Perris General Plan Environmental Impact Report
PRO	Prohibited Use
PVCC	Perris Valley Commerce Center Specific Plan
PVCC DEIR	Perris Valley Commerce Center Specific Plan Draft Environmental Impact Report
PVCC Guidelines	Perris Valley Commerce Center Specific Plan Design Standards and Guidelines
PVMDP	Perris Valley Master Drainage Plan
PVRWRF	Perris Valley Regional Water Reclamation Facility
PVSC	Perris Valley Storm Channel
RCB	Reinforced concrete box
RCHCA	Riverside County Habitat Conservation Agency
RCIP	Riverside County Integrated Plan
RCFC&WCD	Riverside County Flood Control and Water Conservation District
RCP	Reinforced concrete pipe
RCP	Regional Comprehensive Plan
RCPG	Regional Comprehensive Plan and Guide

Acronyms

RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RST	Regional significance threshold
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
ROW	Right-of-way or rights-of-way
RPWs	Relatively Permanent Waters
RWQCB	Regional Water Quality Control Board
RPZ	Runway Protection Zone
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SBKR	San Bernardino kangaroo rat
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJRC	San Jacinto River Channel
SKR	Stephen's kangaroo rat
SQG	Small Quantity Generators
SRA	Source receptor area
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
tpd	Tons per day
TNWs	Traditionally Navigable Waters
USDOT	United States Department of Transportation
UST	Underground storage tank
UWMP	Urban Water Management Plan
VMT	Vehicle miles traveled
WPCP	Water Pollution Control Plan
WQMP	Water Quality Management Plan

Acronyms

WWTP Waste water treatment plant

Units of Measurement and Chemical Symbols

>	Greater than
$\mu\text{g}/\text{m}^3$	Micrograms per cubic meter
CFC	Chloroflourocarbons
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CY	Cubic yards
HC	Hydrocarbons
HCFC	Hydro-chloroflourocarbons
HFC	Hydroflourocarbons
LST	Localized Significance Threshold
mgp	Million gallons per day
Mt	Metric tonne
NF_3	Nitrogen triflouride
NH_4NO_3	Ammonium nitrate
NO	Nitric oxide
NO_2	Nitrogen dioxide
NO_x	Oxides of nitrogen
N_2O	Nitrous oxide
O_3	Ozone
Pb	Lead
PFC	Perflourocarbons
PM-10	Particulate matter 2.5 to 10 microns in diameter
PM-2.5 ₅	Particulate matter 2.5 microns or less in diameter
ppm	Parts per million
ROG	Reactive organic gases
SF_6	Sulfur hexaflouride
SO_2	Sulfur dioxide
SO_x	Oxides of sulfur

Units of Measurement and Chemical Symbols

SRA	Source Receptor Area
TCA	1,1,1-trichloroethane or methyl chloroform
VOC	Volatile organic compounds