

Pasadena addresses the possibility of dam failure in the Safety Element of the General Plan and in the Hazard Mitigation Plan.

Due to the lack of appreciable amounts of water behind Eaton Wash Dam and the implementation of evacuation plans as specified in the Safety Element of the General Plan (City of Pasadena 2002), additional housing proposed in the General Plan Update would not expose people or structures to a significant risk of loss, injury, or death in the case of dam failure and impacts would be less than significant.

Finding: Upon buildout of the General Plan Update, additional housing units would be constructed within the inundation area of the Eaton Wash Dam. However, compliance with existing regulations and City policies would ensure that people and structures would not be exposed to significant risk of loss, injury, or death. Impacts related to dam inundation would be less than significant.

Impact 5.7-4: During the construction phases of projects developed pursuant to the General Plan Update, there is the potential for short-term unquantifiable increases in storm water pollutant concentrations. During operation of such projects, the quality of storm runoff (sediment, nutrients, metals, pesticides, pathogens, and hydrocarbons) may be altered.

Support for this environmental impact conclusion is fully discussed in Section 5.7, *Hydrology and Water Quality*, of the DEIR, beginning on page 5.7-24 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Construction

New development and redevelopment that is proposed as part of the General Plan Update could result in changes to stormwater runoff and water quality during construction activities. Stormwater runoff could contain pollutants such as soil and sediments released during grading and excavation activities, and petroleum-based pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that can result from construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, flues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment. The stormwater runoff flows into storm-drain inlets within the City and eventually discharges into Arroyo Seco and Eaton Wash, with ultimate discharge to the Los Angeles River and the Pacific Ocean. The Arroyo Seco is considered to be an impaired water body for coliform bacteria and trash, and pollutants in stormwater could further degrade water quality.

All projects that would be implemented under the General Plan Update and that involve construction activities that disturb one or more acres of land would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board (SWRCB), including submittal of a Notice of Intent and

preparation of a SWPPP. The SWPPP must include BMPs to reduce water-quality impacts, including various measures to control on-site erosion; reduce sediment flows into stormwater; control wind erosion; reduce tracking of soil and debris into adjacent roadways and offsite areas; and manage wastes, materials, wastewater, liquids, hazardous materials, stockpiles, equipment, and other site conditions to prevent pollutants from entering the storm-drain system. Inspections, reporting, and stormwater sampling and analysis are also required to ensure that visible and nonvisible pollutants are not discharged offsite.

Implementation of the provisions of the NPDES permit and compliance with City grading requirements would minimize construction impacts from future development within the General Plan Update area through the implementation of BMPs that reduce construction-related pollutants. This would ensure that any impacts to downstream waters resulting from construction activities associated with new development or significant redevelopment would be less than significant. In addition to the requirements of the NPDES permit, grading permit requirements include elements that also require the reduction of erosion and sedimentation impacts during construction. Full compliance with applicable local, state, and federal regulations would reduce water-quality impacts associated with construction to a less than significant level.

Operational

Potential pollutants that could be generated by maximum buildout of the General Plan Update area include bacteria/viruses, heavy metals, nutrients, pesticides, organic compounds, sediment, trash and debris, oxygen-demanding substances, and oil and grease. Specific pollutants would depend on the type of land use and site improvements proposed by individual projects.

With issuance of the new 2012 MS4 permit, the regulatory requirements have shifted from requiring a SUSMP for new development and redevelopment projects to requiring compliance with the Los Angeles County's LID ordinance and submittal of a comprehensive LID Plan and analysis to demonstrate compliance with the LID Standards Manual. Under the new 2012 Municipal Separate Storm Sewer Systems (MS4) permit, applicants for future development within the General Plan Update area would be required to prepare an LID Plan for review and approval by the Director of Public Works that includes 1) feasibility of infiltration including a percolation report, 2) source control measures, 3) calculation of the Stormwater Quality Design Volume (SWQDV) which must be retained onsite, 4) discussion of the feasibility of stormwater runoff harvest and use, 5) stormwater quality control measures, and 6) proposed operation and maintenance plan. Although the City of Pasadena's Municipal Code (Chapter 8.70 – *Stormwater Management and Discharge Control*) still refers to preparation of a SUSMP for new development and redevelopment projects, this will likely be modified in the near future for consistency with the Los Angeles County LID Ordinance and revised MS4 permit.

Future development within the City and specific-plan areas would also need to comply with other provisions of Chapter 8.70 of the City's Municipal Code, which prohibit the discharge of certain pollutants into the City's storm drain system, regulates illicit connections to the storm-drain system, requires implementation of permanent BMPs, and specifies requirements for natural watercourse protection.

The RWQCB also requires industrial projects and land uses that generate stormwater or discharges that can directly affect water courses or water bodies to obtain individual Waste Discharge Requirements (WDRs) and/or water quality certifications. Compliance with WDR conditions of approval and/or water quality certifications would prevent the violation of water-quality standards.

Finding: Compliance with existing regulatory programs and requirements, including preparation of project-level SWPPPs and LID plans, would reduce stormwater pollutants that could affect water quality in the Arroyo Seco and/or Eaton Wash, thus reducing impacts related to stormwater pollution and water quality to less than significant levels.

Impact 5.7-5: Portions of the City of Pasadena are susceptible to inundation by mudflows.

Support for this environmental impact conclusion is fully discussed in Section 5.7, *Hydrology and Water Quality*, of the DEIR, beginning on page 5.7-25 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

A mudflow is a landslide composed of saturated rock debris and soil with the consistency of wet cement. The City's hillsides are vulnerable to slope instability, which can result in small slides, slumps, soil slips, rock falls, and debris flows. Debris flows have occurred in the past in some of the canyons near the Pasadena area in the upper reaches of the watersheds. They are most likely to occur in years with heavy rainfall following wildland fires (City of Pasadena 2002).

The very northernmost portions of Pasadena, above Devil's Gate Reservoir and Eaton Wash Reservoir, are mapped as areas of possible debris flows (City of Pasadena 2004). However, none of the areas proposed for future development in the General Plan Update are in areas subject to potential mudflows. In addition, the City of Pasadena requires new construction in hillside areas of the San Gabriel Mountains and San Rafael Hills to conduct hydrology studies to assess the impact of construction on down gradient developed areas. The assessment of possible impacts on LA County storm drains and privately owned debris basins is also required. If the analyses indicate a potential hazard, improvements are required and fees to pay for the improvements may be assessed to the developers, as appropriate. Therefore, implementation of the General Plan Update would have a less than significant impact with respect to mudflows.

Finding: Compliance with existing City regulations pertaining to drainage would reduce mudflow-related impacts to a level that is less than significant.

6. Land Use and Planning

Impact 5.8-1: Implementation of the General Plan Update would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.

Support for this environmental impact conclusion is fully discussed in Section 5.8, *Land Use and Planning*, of the DEIR, beginning on page 5.8-4 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The following is an analysis of the General Plan Update’s consistency with applicable state and regional laws, regulations, plans, and guidelines.

State Planning Law and California Complete Streets Act Consistency

The General Plan Update is consistent with California Government Code Section 65302 as it addresses two of the seven required elements: Land Use and Mobility (“Circulation” in the code). The project revises the General Plan Land Use Diagram. It also eliminates optional elements (cultural and recreational, historic and cultural, public facilities, scenic highways, social development, and economic development). The Land Use and Mobility elements, together with the other General Plan elements, would guide the overall physical development and circulation of the entire City through horizon year 2035.

The General Plan Update includes forecasts of long-term conditions; outlines development goals and policies, exhibits, and diagrams; and presents the objectives, principles, standards, and plan proposals throughout the Land Use and Mobility Elements. The proposed Land Use Diagram (see Figure 3-5 of the DEIR) and the updated goals and policies strive to preserve and ensure land use compatibility throughout Pasadena. Specifically, the goals and policies were developed to direct new growth away from established residential neighborhoods and open space to the Central District, Transit Villages, Neighborhood Villages, and corridors (LU Policy 1.2). This reduces potential conflicts related to traffic and noise, and allows more urbanized areas to enhance services through growth. Additionally, the Land Use Element has policies to support development practices that sustain natural environmental resources and contribute to reduction of greenhouse gas emissions (LU Goal 10).

The mixed use land use categories are intended to include new development with a mix of compatible uses, such as live-work and ground floor retail. Historic resources will be preserved, and new development will be designed to be in harmony and enhance Pasadena’s unique character (LU Goal 8). Strictly commercial development is generally located along some of Pasadena’s arterial corridors to ensure accessibility and provide a compatible transition to adjoining residential neighborhoods.

Industrial uses have the potential to result in land use compatibility impacts to sensitive uses, such as residences or schools, due to potential hazardous materials, health risks, air quality, and noise issues. The General Plan Update would reduce the potential for land use conflicts by redesignating land from industrial to other nonresidential land uses. Overall, buildout of the General Plan would reduce industrial uses in all of the specific plan areas and citywide by approximately 2.3 million square feet. General Plan policies prohibit and control land uses that pose a potential health and environmental hazards to Pasadena's neighborhoods and districts (LU Policy 3.5).

The proposed Land Use and Mobility elements have policies and implementation measures that help the City implement the Complete Streets Act (AB 1358). Specifically, Land Use Element Policies 18.1 through 18.6 and Mobility Element Policies 1.1 through 1.32 and 2.1 through 2.11 include measures to create transit-oriented development, multimodal features, and pedestrian/bicycle facilities; enhance livability; and encourage walking, biking, transit, and other alternatives to motor vehicles.

Each of the specific and applicable requirements in the state planning law (Government Code § 65300) have been examined and considered to determine if there are environmental issues in the community that the General Plan should address, such as fire hazards and flooding. The various environmental issues associated with the General Plan Update (air quality, hazards, flooding, traffic, etc.) are addressed in their respective topical sections in Chapter 5, *Environmental Analysis*, of the DEIR.

SCAG 2012–2035 RTP/SCS Consistency

The General Plan Update would be consistent with SCAG's 2012–2035 RTP/SCS goals and policies. As discussed in Section 4.2.2.2 of the DEIR, San Gabriel Valley Council of Governments relies on SCAG's 2012–2035 RTP/SCS for regional planning guidance. The project's consistency with the HQTAs is obtained by achieving consistency with the applicable 2012–2035 RTP/SCS policies. A comparison of the General Plan Update with each applicable goal and policy of the 2012–2035 RTP/SCS is provided in Table 5.8-1 of the DEIR. Based on this analysis, the General Plan Update would not result in significant land use impacts.

Finding: The Project does not conflict with State Planning Law, the California Complete Streets Act, or SCAG's regional plans. Impacts would be less than significant.

7. Noise

Impact 5.9-1 Implementation of the proposed General Plan Update would not result in long-term operation-related noise that would substantially elevate the existing noise environment.

Support for this environmental impact conclusion is fully discussed in Section 5.9, *Noise*, of the DEIR, beginning on page 5.9-17 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The noise modeling and analysis prepared in the DEIR was based on the previously proposed project. Since the Refined Project would result in a reduction of 1,089 residential units and 1.73 million square feet of nonresidential uses, stationary source and traffic noise would be reduced compared to the previously proposed project (Revised FEIR Section 6). However, the significance findings presented below would be the same and less than significant.

Stationary Source Noise

Buildout of the proposed General Plan Update would result in development of additional residential, commercial, and industrial uses in the City. The primary noise sources from residential and commercial land uses are landscaping, maintenance activities, and air conditioning systems. Future commercial uses may also include loading docks. Noise associated with industrial uses is less intermittent than residential noise and can have moderate to high levels on a continual basis. Noise sources associated with industrial uses include frequent heavy trucks for pick-up and deliveries and the operation of equipment used in the manufacturing or machining process. Buildout of the proposed General Plan Update would result in a net reduction of 2,342,457 square feet in industrial development. Under the proposed General Plan Update, up to 2,226,097 square feet of industrial land uses would be permitted. Industrial uses would primarily be permitted in the areas along Raymond Avenue south of California Boulevard in the South Fair Oaks Specific Plan area, the East Pasadena Specific Plan area, and along the Walnut Street corridor between Mentor Avenue and Vista Avenue. The industrial areas are in proximity to existing residences, and new industrial developments would have the potential to increase the ambient noise levels in the vicinity of these industrial areas.

The City of Pasadena requires that noise from new stationary sources in the City comply with the City's Noise Ordinance to reduce nuisances to sensitive land uses. Section 9.36.090 prohibits machinery, equipment, and fan and air conditioning units from generating noise that increases the ambient noise level by 5 dB at the property line of the receiving property. The noise limitations established in the Municipal Code are enforceable through the City's Police Department and Environmental Health Division, per Measure 17. Additionally, the City would have the discretion to condition a new project to meet the noise standards in the Municipal Code. Overall, compliance with the Municipal Code and continued

implementation of City Policies 6a, 6b, 6c, and 7d and Implementation Measure 21 would direct the City to encourage site design to minimize noise spillover. Implementation Measure 23 would limit truck delivery and trash pick-up times to ensure stationary noise impacts from new land uses are minimized. Proposed Land Use Element Policy 27.5, *Impact Mitigation*, directs the City to cooperate with those agencies concerned with monitoring and controlling the emissions of smoke, particulate matter, noise, and odor associated with industrial uses. Proposed Land Use Policy 27.4: Buffering from Adjacent Properties, directs the City to ensure that industrial developments incorporate adequate landscape buffers to minimize any negative impacts to surrounding neighborhoods and development, and control onsite lighting, noise, odors, vibrations, toxic materials, truck access, and other elements that may impact adjoining uses.

With application of the noise regulations in Section 9.36 of the Municipal Code, compliance with existing Noise Element Policies, and the implementation of the proposed Land Use Element Policies, noise impacts related to stationary sources would be less than significant.

Traffic Noise

An increase in land uses could result in additional vehicle trips on the majority of the local roadways in Pasadena. Tables 5.9-8 and 5.9-9 in the DEIR shows the incremental noise increase under buildout of the proposed General Plan Update compared to the existing conditions. As shown in these tables, the majority of roadways and portions of the freeways through the City would experience either a decrease in noise level or a minimal increase in noise of less than 5 dB Community Noise Equivalent Level (CNEL) (from 0.1 to 2.5 dB CNEL for the arterials and 0.2 to 2.7 dB CNEL for the freeways), compared to existing conditions. The segment of Walnut Street east of Sierra Madre Boulevard is projected to increase by 4.1 dB CNEL, however this increase would still be below the 5 dB CNEL threshold. Additionally, the existing land uses along this segment consist primarily of commercial land uses such as a car dealership, auto repair, and auto paint and body businesses. Commercial uses are not considered noise-sensitive land uses. Therefore, impacts are considered less than significant.

Finding: Compliance with the City's existing Noise Ordinance and implementation of proposed General Plan policies would reduce long-term noise impacts to a less than significant level.

Impact 5.9-2 New noise-sensitive land uses developed under the proposed General Plan Update would not be exposed to elevated noise levels from transportation sources.

Support for this environmental impact conclusion is fully discussed in Section 5.9, *Noise*, of the DEIR, beginning on page 5.9-22 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The noise modeling and analysis prepared in the DEIR was based on the previously proposed project. Since the Refined Project would result in a reduction of 1,089 residential units and 1.73 million square feet of nonresidential uses, transportation related noise impacts would be reduced compared to the previously proposed project (Revised FEIR Section 6). However, the significance findings presented below would be the same and less than significant.

An impact could be significant if the proposed General Plan Update designates noise-sensitive land uses in areas that would exceed the noise compatibility criteria of the City. The City applies its Community Noise and Land Use Compatibility standards, summarized in Table 5.9-3 of the DEIR, for the purpose of assessing the compatibility of new development with existing noise sources, such as vehicles. In addition, the building interior of noise-sensitive structures is required to achieve noise levels of 45 dBA CNEL under the California Building Code.

Traffic Noise

Implementation of the proposed General Plan Update could potentially allow the development of land uses that would be not compatible with the future noise environment. Table 5.9-10, *Traffic Noise Levels and Contours under Buildout Conditions (2035)*, of the DEIR shows the noise contours that would be generated along the arterials and freeways within the City with buildout of the proposed General Plan Update. As shown in the table, the 60 dBA CNEL noise contours at buildout would extend from 46 to 483 feet from the centerline of the local roadways and from 2,596 to 3,841 feet from the centerline of the I-210 and SR-134. For example, the 60 dBA CNEL noise contour for the segment of Huntington Drive west of Rosemead Boulevard extends to 483 feet from the centerline of the roadway. Noise-sensitive land uses such as single-family and mixed-use residential developments sited within the 60 dBA CNEL noise contour would be exposed to noise levels above the clearly acceptable and would require a noise study through the development review process to determine and design the project to reduce noise impacts.

Portions of the City will be exposed to noise levels above 60 dBA CNEL from the local arterials and freeways. For the purpose of assessing the compatibility of new development with the anticipated ambient noise, the City utilizes the Community Noise and Land Use Compatibility guidelines, summarized in Table 5.9-3 of the DEIR. To ensure the compatibility of new development in the City, the Noise Element has policies and “Implementation Action Measures” to minimize potential impacts on sensitive land uses from traffic noise. Policy 1a and Policy 2a encourage noise-compatible land uses near freeways and along major roadways, respectively. These two policies would be implemented through Implementation Action Measures 1, 2, and 3. Implementation Action Measure 1 directs the City to consult the land use and noise compatibility guidelines. Implementation Action Measure 2 calls for preparation of an acoustical study to ensure compliance in meeting state noise insulation standards for projects sited in noise environments beyond the

clearly acceptable level. Implementation 3 directs the City to enforce compliance in meeting the 45 dBA CNEL interior noise standard for noise-sensitive uses. Policy 2e requires the City to reduce the effects of traffic-related noise in residential neighborhoods adjacent to South Orange Grove Boulevard, Saint John Avenue, Pasadena Avenue, California Boulevard, and other busy streets that pass through residential neighborhoods. Finally, the proposed Land Use Element Policy 4.11 requires that development demonstrate a contextual relationship with neighboring structures and sites, addressing such elements as building scale, massing, orientation, setbacks, buffering, the arrangement of shared and private open spaces, visibility, privacy, automobile and truck access, impacts of noise and lighting, landscape quality, infrastructure, and aesthetics. Therefore, the City ensures that new sensitive land uses are compatible with the surrounding noise environment.

A significant impact could occur if the proposed General Plan Update would allow for development of noise-sensitive land uses in areas where the ambient noise level clearly exceeds compatible levels. New sensitive land uses would have to demonstrate their compatibility with the ambient noise levels. With implementation of these policies, impacts from transportation noise sources would be less than significant.

Rail Noise

As discussed in Section 5.9.1.4 of the DEIR, the City of Pasadena is served by the Metro Gold Line. Phase 2A of the Metro Gold Line Foothill Extension that would extend service from the Sierra Madre Villa Station to the City of Azusa is currently underway. The portion of the extension within the City limits would continue to travel within the I-210 median, and traffic noise on the I-210 overshadows noise from the Gold Line.

On the north-south portions on the track that run just west of Arroyo Parkway, the General Plan Land Use Element update would allow for mixed-use developments along portions of the line that are currently designated for industrial use. These land uses would be consistent with the majority of the land uses allowed along the tracks in that area. As discussed previously, receptors 50 feet away from a rail car warning device would have the potential to be exposed to noise levels of 75 A-weighted decibel (dBA) day-night level (L_{dn}) at 50 feet. The development of new noise-sensitive land uses in areas exposed to noise levels above 75 dBA L_{dn} or CNEL would be normally unacceptable. In addition, buildout of the proposed General Plan Update may increase ridership of the Metro Gold Line, potentially increasing the service frequency and number of noise events.

Objective 3 of the General Plan Noise Element directs the City to minimize noise from the Metro Line on residential and other sensitive land uses. Policy 3b directs the City to work with Metro to install noise attenuation features if the Gold Line adversely affects existing adjacent residential or other noise-sensitive uses. Implementation Action Measure 2 requires an acoustical study to demonstrate that noise insulation is provided to meet state standards (45 dBA L_{dn} in habitable rooms). Implementation Action Measure 3 directs the City to

enforce compliance in meeting the 45 dBA CNEL interior noise standard for noise-sensitive uses. Finally, Implementation Action Measure 26 directs the City to warn new residents and other sensitive noise receptors about the potential for noise in the Central District and other mixed-use areas. With implementation of General Plan Noise Element, Land Use Element, and applicable state and local regulations, noise impacts related to the project would be less than significant.

Finding: Adherence to adopted and proposed General Plan policies would ensure that development projects demonstrate their compatibility with City noise standards and that rail noise is minimized in relation to sensitive receptors. Therefore, this impact would be less than significant and no mitigation is necessary.

8. Population and Housing

Impact 5.10-1: The proposed General Plan Update would directly and indirectly result in population growth in Pasadena.

Support for this environmental impact conclusion is fully discussed in Section 5.10, *Population and Housing*, of the DEIR, beginning on page 5.10-13 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The population, housing, and employment projections for buildout of the Refined Project would exceed, but not substantially exceed, SCAG's growth forecasts for the City of Pasadena. Implementation of the General Plan Update would directly induce population growth in the area. However, the General Plan Update accommodates future growth in the City by providing for infrastructure and public services to accommodate this projected growth (see Chapter 5.7, *Hydrology and Water Quality*, Chapter 5.11, *Public Services*, Chapter 5.13, *Transportation and Traffic*, and Chapter 5.14, *Utilities and Service Systems*, of the DEIR). Furthermore, population growth would be offset by employment growth accommodated by the General Plan Update, which would provide employment opportunities for new residents and create a slightly more balanced jobs-housing ratio for the SGV region. Therefore, implementation of the Project would result in a less than significant impact relating to population growth.

Finding: Although the Refined Project would induce population growth in Pasadena, it would not substantially exceed growth projected by SCAG. With implementation of proposed General Plan policies, the project would contribute to a more balanced ratio of jobs and housing in the region. This impact would be less than significant and no mitigation is necessary.

9. Public Services

Impact 5.11-1: General Plan Update buildout would introduce new structures, residents, and workers into the Pasadena Fire Department's service boundaries, thereby increasing the demand on fire protection facilities and personnel.

Support for this environmental impact conclusion is fully discussed in Section 5.11, *Public Services*, of the DEIR, beginning on page 5.11-6 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

General Plan Update buildout would add 11,223 residential units, approximately 25,242 residents, about 9.26 million square feet of nonresidential and uses, and about 34,793 employees to the City (Revised FEIR Section 6). This growth in PFD's service area would result in an increase in demand for fire protection and emergency services. Although services provided are currently adequate, additional PFD resources, including firefighter staffing, would be required to provide fire protection for new residents, workers, and structures.

Public safety in Pasadena, including fire protection and emergency services provided by the PFD, is funded from the City's general fund. There is no direct fiscal mechanism that ensures that funding for fire and emergency services will grow exactly proportional to an increased need for services resulting from population growth in the City. However, revenue sources that contribute to the general fund, including property and sales taxes, would be expected to grow in rough proportion to any increase in residential dwelling units and/or nonresidential space in Pasadena.

Furthermore, policies and implementation measures in the General Plan Update encourage periodic review of public safety services and require that services reflect the growing needs of residents. In particular, implementation of Policy 16.2 in the proposed land use element would ensure that the City regularly assesses the impacts of growth on PFD services and that equipment, personnel, and services are provided as needed to serve that growth.

Upon implementation of the General Plan Update, PFD would maintain appropriate firefighter staffing to ensure compliance with NFPA standards for response time and coverage, as discussed above. In addition, future projects would be reviewed by the City and PFD on an individual basis and would be required to comply with requirements in effect at the time building permits are issued. Policies and implementation measures in adopted and proposed General Plan elements are designed to ensure collaboration between PFD and other involved agencies to achieve the City's development goals in phases, working within the budget and infrastructure constraints of the City. By following this process, sufficient revenue would be available for necessary service improvements to provide for adequate fire facilities, equipment, and personnel upon buildout of the General Plan Update. A new Standards of Coverage document in preparation for the PFD will identify what new and/or expanded fire stations may be needed to serve the City at General Plan buildout (Costa

2013). The impacts of construction and operation of any new or expanded fire stations required would be part of the impacts of the whole project that are analyzed throughout Chapter 5 of the DEIR. Therefore, impacts to fire services resulting from buildout of the General Plan Update would be less than significant.

As the City's population increases, additional fire stations or expansions may be required. Various localized environmental impacts related to new construction or redevelopment of fire stations could occur. In addition to the stations currently identified for replacement (Stations 33 [not funded], 36, 37, and 38 [all funded]) and improvements (Station 31 [not funded]), additional stations or improvements may be required. Any new or expanded fire stations that may be required to serve the City at General Plan buildout will be identified in the forthcoming Standards of Coverage document. Development and operation of new stations in permitted land use designations have been considered in the General Plan Update buildout and analyzed throughout the DEIR since it analyzes anticipated effects of citywide growth related to air quality, noise, traffic, utilities, and other environmental impact areas. In addition, if construction impacts of a development project necessitate the closure of roadways that serve a particular project, the applicant would be required to coordinate road closures and emergency access with PFD to ensure an adequate level of fire protection services at the adopted service levels.

Finding: Implementation of proposed General Plan policies and implementation programs would ensure that fire protection services in the City are expanded as needed. This impact would be less than significant.

Impact 5.11-2: The Project would introduce new structures, residents, and workers into the Pasadena Police Department's service boundaries, thereby increasing the demand for police protection services.

Support for this environmental impact conclusion is fully discussed in Section 5.11, *Public Services*, of the DEIR, beginning on page 5.11-10 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

General Plan Update buildout would add an estimated 11,223 residential units, approximately 25,242 residents, about 9.26 million square feet of nonresidential and uses, and about 34,793 employees to the City (Revised FEIR Section 6) to the City, increasing demands for Pasadena Police Department (PPD) services. The increase in population and businesses in the City would add to the number of service calls received and to the number of patrols and staff necessary to service the project area. Future growth in accordance with the General Plan Update is expected to create the typical range of calls for police service. To serve future growth, new and/or additional police resources would be needed to prevent a reduction in service ratios. The project would likely increase the number of police responses in the City, which would increase the need for equipment and personnel. Therefore, the City of Pasadena's costs to maintain facilities and equipment as well as train and equip personnel

would also increase. In addition, the redistribution and increase of the population and traffic density into areas proposed for growth, such as the Central District, could necessitate the reassignment of certain resources pertaining to police services. The costs of additional personnel and materials are anticipated to be offset through the increased revenues and fees generated by future development. In addition, future projects would be reviewed by the City of Pasadena on an individual basis and would need to comply with any requirements in effect when the review is conducted, such as at the time of building permit issuance (i.e., impact fees, etc.).

To maintain the existing ratio of sworn officers and civilian employees per capita—1.63 and 0.72 per 1,000 residents, respectively—buildout of the General Plan would require hiring a minimum of 41 new officers and 18 new employees. However, impacts to police services are anticipated to be adequately funded by an increase in tax revenues over an extended period of time, relative to the increase in development intensity. Although there is no direct fiscal mechanism ensuring that funding for police services from the general fund will grow exactly proportional to the increased need for services, development over time would increase contributions to the general fund through tax revenues and are expected to grow in rough proportion to any increase in residential dwelling units and/or nonresidential space in Pasadena.

Additional police personnel and resources would be provided through the annual budget and capital improvement plan (CIP) review process. Annually, PPD needs would be assessed and budget allocations revised accordingly to ensure that adequate levels of service are maintained throughout the City. Furthermore, proposed General Plan Policy 16.2 of the proposed land use element requires the City to perform ongoing review of growth and development in terms of its impact on adequate provision of public services. Additional resources and personnel funded by an increase in tax revenue would maintain the level of service needed to support the increase in growth.

No new police facilities are planned or proposed at this time. As discussed above, to maintain the existing ratio of sworn officers and civilian employees per capita, buildout of the General Plan would require hiring a minimum of 41 new officers and 18 new employees. Given this level of staff increase, the field-nature of certain officers, the rotating daily shifts of police personnel, and the Department's existing facilities, no new or expanded police stations or other physical facilities are expected to be necessary. Nevertheless, it is assumed that if new facilities are determined to be necessary at some point in the future, such facilities would occur where allowed under the designated land use. The environmental impacts of the construction and operation of new facilities, as an allowed land use, have been evaluated throughout the DEIR. Specifically, the DEIR analyzes anticipated effects of citywide growth related to air quality, noise, traffic, utilities, and other environmental impact areas. No significant impacts due to the construction of new or expanded police facilities are expected

to occur apart from impacts identified elsewhere in Chapter 5 of the DEIR. Impacts on police services related to implementation of the Project would be less than significant.

Finding: Buildout of the General Plan Update would increase need for PPD services. However, impacts to police services are anticipated to be adequately funded by an increase in tax revenues over an extended period of time, relative to the increase in development intensity. Therefore, impacts related to police services would be less than significant.

Impact 5.11-3: The Project would generate new students who would impact the school enrollment capacities of area schools.

Support for this environmental impact conclusion is fully discussed in Section 5.11, *Public Services*, of the DEIR, beginning on page 5.11-15 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The addition of new housing units within the attendance boundaries of a school district has the potential to generate student growth in that district. This growth may put a strain on existing and/or planned school resources. Though the Project does not involve the approval of any specific development, population growth and student generation was estimated based on General Plan buildout to determine whether the project would impact Pasadena schools.

The DEIR analyzed buildout of the previously proposed project and determined that it would add a net increase of 12,312 residential units in Pasadena resulting in an increase of 4,923 additional students (using a generation rate of 0.4 students per household) within Pasadena Unified School District (PUSD), distributed as follows:

- Elementary: 2,272
- Middle: 1,136
- High: 1,515

It determined that the majority of growth throughout the City will be concentrated in three specific plan areas, assuming approximately 8,667 would occur within the Central District, South Fair Oaks, and East Pasadena specific plan areas. PUSD schools currently serving each of these specific plan areas are shown in Table 5.11-4 of the DEIR.

The DEIR determined that PUSD has capacity to accommodate the student population estimated for Pasadena at buildout of the General Plan Update. As shown in Table 5.11-3 of the DEIR, there is excess classroom capacity for all grade levels in PUSD: 3,432 students in elementary schools, 2,972 students in middle schools, and 2,194 students in high schools. Therefore, though buildout of the previously proposed project may increase the student population in Pasadena, the construction or expansion of local school facilities is not anticipated to be required to serve the new students.

Since the Refined Project would result in a reduction of 1,089 residential units, there would be proportionate reduction in student generation at buildout in the City (Revised FEIR Section 6). Therefore, impacts associated with the Refined Project would be slightly less than the previously proposed project and less than significant.

PUSD offers a School of Choice program, *Open Enrollment*, under which students may attend schools other than their neighborhood schools based on availability of seats in the desired schools. Thus, PUSD has an existing voluntary mechanism which could shift students from overcrowded schools to schools with available capacity.

If student growth generated by General Plan buildout exceeds the estimates identified above, modernization of an underutilized site could be needed. PUSD reserves its rights under law to negotiate schools impact fees with developers beyond the \$2.24 per square foot for residential units if the size, scope, and location of proposed residential developments warrant additional resources for building new or modernized school facilities (Pappalardo 2013). However, because estimated housing growth and student generation under the General Plan Update are based on realistic development capacity of proposed land uses designations in the City, a student population that exceeds these estimates is unlikely. Impacts of the Project related to student generation and the potential need for additional school facilities would be less than significant.

Finding: PUSD has capacity to accommodate the student population estimated for Pasadena at buildout of the General Plan Update. Therefore, this impact would be less than significant.

Impact 5.11-4: General Plan Update buildout is estimated to generate a net increase of 27,473 residents, increasing the service needs for the Pasadena Public Library.

Support for this environmental impact conclusion is fully discussed in Section 5.11, *Public Services*, of the DEIR, beginning on page 5.11-19 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

PPL determined that it has adequate facilities and collections to support a population of up to 175,000 (Sanders 2013). The DEIR determined that the Pasadena Public Library had adequate capacity and resources to service an increase in population of 27,473. Since the Refined Project would result in an increase of 25,242 residents to the City, there would be adequate capacity and impacts would be less than significant.

Proposed Land Use Policy 1.9 requires new development to provide public service and facilities through equitable fees and exactions. In addition, the City has enacted the Library Special Tax that levies a tax on residential and nonresidential land uses to maintain and improve the City's library system (Pasadena Municipal Code Section 4.109). The imposition of fees to improve the existing facilities and the fact that existing facilities would meet the

needs of residents at General Plan buildout ensures that impacts would be less than significant.

Finding: The PPL has sufficient library resources to serve the additional population that would be generated by implementation of the Project. Therefore, impacts to library services would be less than significant and no mitigation is necessary.

10. Recreation

Impact 5.12-1: The proposed General Plan Update would generate additional residents that would increase the use of existing parks and recreational facilities such that physical deterioration of the facility could occur or be accelerated.

Support for this environmental impact conclusion is fully discussed in Section 5.12, *Recreation*, of the DEIR, beginning on page 5.12-16 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The DEIR analyzed the previously proposed project and determined that buildout would impact the City's existing parks, recreation facilities and open space due to greater use and intensification of facilities based on up to approximately 12,312 additional housing units and 27,473 new residents. In addition, the DEIR analyzed the development of approximately 10.99 million additional square feet of nonresidential uses, increasing employment by an estimated 40,323 workers, resulting in an indirect increase the number of people using the existing recreational facilities. Implementation of the General Plan Update would result in increased use of existing parks and increased wear and tear of the City's parks.

The City's Municipal Code does not identify a specific ratio for acres of parkland per person. The City's park impact fee nexus study, prepared in 2013 (Pasadena 2013), is based on the assumption that the City provides 2.73 acres developed parkland and 1.89 acres open space for every 1,000 residents. The study assumed there would be an increase of 11,950 households by 2035, which is slightly less than the estimated increase from the General Plan Update. The nexus study assumed less population growth, 24,654 people, compared to the General Plan build out projection of 27,473 persons. The nexus study determined that the residential impact fee amounts could be increased by 41.6 percent to meet the demand of the projected growth, taking into account land value, construction costs, and new development's share of capital improvements. It also provided a distribution to balance funding capital improvement projects with acquiring new parkland. In 2014, the City increased the fee by five percent, which will be adjusted once the nexus study for all development-related fees are determined. In order to ensure that there is no increase in impacts or deterioration to the existing parks and recreational facilities, new development is required to provide fees consistent with the nexus study, which is updated every five years. Fees may be used for capital improvements and interest on fees may be used for maintenance.

The Refined Project would result in an increase of 11,223 residential units and 25,242 residents, approximately eight percent less than the previously proposed project. This would result in slightly less impacts and is consistent with the assumptions used in the City's park impact fee nexus study, which assumed an increase of 11,950 households by 2035.

The City does not currently have parks within walking distance for all residents. As shown in Figure 5.12-2 of the DEIR, most residents are within 0.5 mile of an existing park. However, four substantial "gap" areas remain, where public parks are not within close walking distance from residential neighborhoods. Gap #3 north of Washington Boulevard between Hill Avenue and Allen Avenue are near some schools that have recreational amenities, although there are not any joint-use agreements for these facilities in place. However, most of these areas lack park space within close walking distance.

Compliance with the adopted Green Space, Recreation, and Parks Element would ensure that progress is made in the expansion of the City's network of recreational amenities and that adequate parkland would be provided for the anticipated growth. In particular, the proposed General Plan Update must be consistent with Green Space, Recreation and Parks (GSRP) Element Policies 6.1, 6.2, 6.3, 8.1, and 8.3. As shown in Figure 5.12-2 of the DEIR, the City makes a continual effort to reduce the "gap" areas. The City's primary tool for expanding and acquiring parkland is through its residential impact fee (see Pasadena Municipal Code § 4.17.050). The impact fee program funds the development of park or recreational facilities, as well as certain improvements for acquisition, construction and installation; interest on funds may be used for maintenance and improvement of existing recreational facilities. Compliance with the residential impact fee program will ensure that there would not be substantial deterioration of existing facilities.

The City of Pasadena provides a wide range of recreational resources to its residents. Furthermore, it implements a comprehensive set of General Plan policies and master plans that address the adequate provision of parks, open space, and recreational amenities. These policies and plans give special attention to the geographic distribution of recreational resources and specific needs of the City's neighborhoods. In addition, proposed General Plan Policies LU-2.8, LU-2.13, LU-2.7, and LU-21.10 advocate for the provision of parks and recreational amenities that are located and sized to meet the needs of each neighborhood.

Finding: Upon implementation of adopted General Plan policies and those included in the General Plan Update, park space and recreational amenities in Pasadena would be increased to accommodate the needs of new residents and implementation would be consistent with the goals and policies of the Green Space, Recreation, and Parks Element. Therefore, impacts related to existing parks and recreational facilities would be less than significant.

Impact 5.12-2: Buildout of the General Plan Update would result in environmental impacts related to provision of new and/or expanded recreational facilities.

Support for this environmental impact conclusion is fully discussed in Section 5.12, *Recreation*, of the DEIR, beginning on page 5.12-18 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The City's General Plan Update would guide growth and development within the City and set new development caps. The project does not specify a particular development project. The proposed Land Use Diagram designates land for parks and open space, which includes parks and recreational facilities. Although a majority of this land is already developed for parks and open space, new recreational facilities or the expansion of existing facilities could be developed in these areas. Furthermore, consistent with the City's residential impact fee ordinance, new residential development in accordance with buildout of the General Plan Update would result in the construction of new or expanded recreational amenities. Based on the City's existing availability of parkland, the increase in population by 27,473 residents could result in a need for up to 63 acres of parkland or payment of an in-lieu fee for improvements or acquisition of parkland.

Development and operation of new recreational facilities may have adverse physical effects on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic. Environmental impacts associated with construction of new and/or expansion of parks and recreational facilities in accordance with the proposed Land Use Diagram are addressed throughout the EIR (see appropriate environmental topical areas in Chapter 5, *Environmental Impacts*, of the DEIR). Proposed park improvements identified under Table 5.12-2 of the DEIR are included in this analysis. It is speculative to determine the location of new park facilities that would result from future site specific development projects in accordance with the General Plan, since specific development projects are not proposed at this time. However, future park and recreation improvements or acquisition in the City would be consistent with the proposed Land Use Diagram and would require additional environmental review under CEQA.

General Plan Update goals, policies, and actions, along with existing federal, state, and local regulations, would also mitigate potential adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and trails pursuant to buildout of the proposed Land Use Diagram. For example, proposed Policy 2.14, *Natural Areas*, guides the maintenance and acquisition of natural areas to protect watersheds and natural resources. Policy 2.13, *Parks*, encourages the maintenance of existing and new parks and recreational facilities within walking distance of residents. In addition to supporting healthy lifestyles, this ensures recreational opportunities are available close to residents, reducing the need for expansion of farther facilities. Additionally, Pasadena is establishing itself as a leader on environmental stewardship efforts (Policy 10.1, *Environmental Quality and Conservation*) and has a number of polices aimed at protecting, expanding, and restoring open spaces and natural

features (Policies 10.9, *Natural Open Space*, and 10.10, *Expanded Natural Areas*) and preserving the Eaton Canyon Corridor and Arroyo Seco (Policy 10.11, *Eaton Canyon Corridor and the Arroyo Seco*). The City also encourages the development and preservation of urban open spaces (Policy 10.12, *Urban Open Spaces*), which reduces environmental impacts to the natural environment by enhancing the built environment with landscaped parklets, paseos, courtyards, and community gardens. Pasadena's Policy 10.13, *Urban Forest*, encourages planting additional trees in the built environment or within existing parks, which reduces the impact of short-term development and contributes to the reduction of the heat-island effect. Consequently, adoption of the General Plan Update would not result in significant adverse impacts related to provision of new or expanded recreational facilities. Impacts would be less than significant.

The Refined Project would result in an increase of 11,223 residential units and 25,242 residents, approximately eight percent less than the previously proposed project. This would require less park space at buildout, resulting in less than significant impacts.

Finding: Environmental review of park projects, where applicable, and implementation of proposed and adopted General Plan policies would ensure that new and/or expanded recreational facilities would not result in significant environmental impacts. This impact would be less than significant and no mitigation is necessary.

11. Transportation and Traffic

Impact 5.13-3: Project circulation improvements would be designed to adequately address potentially hazardous conditions (sharp curves, etc.), potential conflicting uses, and emergency access.

Support for this environmental impact conclusion is fully discussed in Section 5.13, *Transportation and Traffic*, of the DEIR, beginning on page 5.13-25 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Buildout of the proposed General Plan Update would result in some changes to the City's circulation network. The General Plan Update would result in improvements to the regional and local roadway, bicycle, pedestrian, and transit network.

An evaluation of the roadway alignments, intersection geometrics, and traffic control features will be required as improvements occur and have been designed. Roadway improvements would have to be made in accordance with the City's Mobility Plan, roadway functional design guidelines, and design guidelines included in the California Manual of Uniform Traffic Control Devices (MUTCD) and the Caltrans Roadway Design Manual. All future roadway system improvements associated with development and redevelopment activities under the General Plan Update would be designed in accordance with the established roadway design standards, some of which have also been incorporated into the proposed Mobility Element. These improvements will be subject to review and future

consideration by the City of Pasadena, Department of Transportation. Implementation of the General Plan Update would not result in hazardous conditions, create conflicting uses, or cause a detriment to emergency vehicles access. In addition, future land use development projects would be analyzed in detail at the project level for site access during the approval process.

Buildout of the proposed General Plan Update would result in some changes to the City's circulation network, but would not increase hazards or impact emergency access due to design features. Impacts would be less than significant, and no mitigation would be required. Policy 1.7 directs the City to design streets to achieve safe interaction for all modes of travel, particularly for pedestrian and bicycle users. Policy 1.8 directs the City to improve safety for all modes by developing and coordinating between the Police Department and Pasadena Department of Transportation the implementation of traffic management, education, and enforcement initiatives. Policy 1.10 directs the City to continuously evaluate the operation of the City's transportation system to manage the speed of travel at or below the speed limit, manage queues at intersections and develop improvements to increase safety of all transportation services.

Finding: With application of standard design guidelines and implementation of proposed General Plan Update policies, implementation of the project would not result in hazardous conditions or conflict with emergency access. Impacts would be less than significant.

12. Utilities and Service Systems

Impact 5.14-1: Wastewater generated by buildout of the General Plan Update would be adequately treated by the wastewater service provider for the project.

Support for this environmental impact conclusion is fully discussed in Section 5.14, *Utilities and Service Systems*, of the DEIR, beginning on page 5.14-7 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The amount of wastewater that would be generated by buildout of the proposed General Plan Update was calculated in the DEIR using two methods: 1) as a percentage of total projected water demand and 2) using wastewater generation factors provided by Sanitation Districts of Los Angeles County (LACSD).

The DEIR estimated wastewater generation as 100 percent of indoor water use, or approximately 70 percent of total water demand. The DEIR determined that buildout of the of the previously proposed project would result in a total population of 163,411. Pasadena's 2010 Urban Water Management Plan (UWMP) estimates the 2035 water demand to be 194 gallons per capita per day (gpcd) without conservation and 156 gpcd with planned non-potable water use for landscaping and 20x2020 Water Conservation Plan requirements (see Section 5.14.2 of the DEIR). The proposed General Plan Update buildout would demand 27.5 mgd (30,772 afy) of water; resulting in about 19.3 mgd (21,540 afy) of wastewater.

Comparing buildout with the most conservative estimates for existing wastewater generation shows an increase of 1,430 afy or 1.3 mgd in wastewater in the City. The relatively slight increase in wastewater can be accounted for due to the planned water conservation and non-potable project uses that are expected over the next 20 years. The 20x2020 Water Conservation Plan—and Senate Bill X7-7 that authorizes it—are discussed in Section 5.14.2.1 of the DEIR. The reduction in water usages has a direct correlation to the amount of wastewater generated.

In order to provide a conservative analysis of the potential impacts related to wastewater generation, wastewater at General Plan Update buildout was also calculated using LACSD's generation factors. Table 5.14-3 of the DEIR shows that buildout could result in about 23.1 mgd (25,927 afy), an increase of 5.1 mgd (5,817 afy). There is sufficient wastewater treatment capacity to accommodate the increase in wastewater demand citywide, and no major improvements are required.

No new major sewer upgrades are anticipated or recommended for the General Plan Update land use changes. All new development in the City will be subject to sewer capacity considerations as part of the City approval process. Improvements and upgrades to sewer lines are prioritized based on need. Development fees are collected from each project and used to fund the highest priority improvements. Expansion of existing sewer facilities could be required. Impacts related to construction activities are provided throughout Section 5 of the DEIR. Additionally, a site-specific Storm Water Pollution Prevention Plan would be required for construction, thereby limiting construction impacts to less than significant.

An increase of 5.2 mgd would remain under the maximum residual capacity of the City's water reclamation plants of 60 mgd. The proposed land use changes associated with the General Plan Update and the increase in wastewater flows would not exceed the treatment requirements of the Los Angeles RWQCB. Therefore, impacts related to wastewater are less than significant.

The Refined Project would result in an increase of 11,223 residential units and 25,242 residents, approximately eight percent less than the previously proposed project. This would result in a proportionate reduction in wastewater generated at buildout of the General Plan Update and slightly less than the previously proposed project (Revised FEIR Section 6).

Finding: Although buildout of the General Plan Update would increase overall wastewater generation in Pasadena, adherence with existing conservation strategies and the City's existing discretionary review process would ensure that no significant impacts related to wastewater treatment would occur. The Project would not exceed the treatment requirements of the Los Angeles RWQCB. Impacts would be less than significant and no mitigation is necessary.

Impact 5.14-2: Water supply and delivery systems are adequate to meet project requirements.

Support for this environmental impact conclusion is fully discussed in Section 5.14, *Utilities and Service Systems*, of the DEIR, beginning on page 5.14-23 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Water Demands and Supplies

The DEIR determined that buildout of the previously proposed project, with full occupancy of planned residential units, would result in a population increase of 27,473 persons to a total of 163,411. As a result of the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7 (SBX7-7)), PWP established a water conservation target of 20 percent reduction in water use by 2020 compared to baseline. In addition, the city would reduce water demand through its planned recycled and non-potable water use and conservation requirements. Consequently, the rate for determining water demand would decrease and buildout would only slightly increase water demand citywide.

Table 5.14-9 shows a comparison of proposed water use to existing conditions. Using the 2010 UWMP baseline potable water use factor of 210 gpcd, the existing population would demand 28.5 mgd (31,998 afy) of water. However, actual water demand in the City was obtained from PWP based on actual sales. Actual water demand from PWP of 25.6 mgd (28,636 afy) represents the existing baseline. Using actual sales also provides the worst case condition for analysis since it is lower than UWMP estimates and comparison to General Plan Update buildout would show a greater increase.

Water demand at buildout is about 25.5 mgd (28,574 afy), or less than a 1 percent increase over the current existing demand of 25.6 mgd (28,636 afy) within the City's service boundaries. The anticipated 2035 water demand represents approximately 79 percent of PWP's projected water supply and is well below the available water supplies for its service area of 36,510 afy in the year 2035. As shown in Table 5.14-4 of the DEIR, the 2010 UWMP projected water demand for the City of Pasadena was 30,668 afy. Buildout of the General Plan Update would result in the need for 30,772 afy based on mandatory conservation per the 20x2020 California Water Plan (20 percent reduction from baseline), representing a 104 afy increase over water projections. However, with planned recycled use and conservation measures identified above, buildout would result in a water demand of 28,574 afy, which is 2,094 afy below planned water demand (2010 UWMP).

UWMPs are important source documents for cities and counties as they update their general plans. Similarly, general plans are source documents for water suppliers updating the UWMPs. The accuracy and usefulness of these planning documents are interdependent. If a project was included as part of the projected water demand of the current UWMP, the water demand for the proposed development does not need to be separately analyzed as long as water demand for the project has remained substantially the same. The City's UWMP was

prepared in 2010, and its service population was based on 2008 SCAG forecasts. As growth is evaluated and accounted for in its General Plan, SCAG forecasts are updated and these numbers will be reflected in the City's 2015 UWMP that is currently being prepared.

The City has entitlements and/or written contracts to receive imported water from Metropolitan Water District (MWD) via the regional distribution system. Although pipeline capacity rights do not guarantee the availability of water per se, they do guarantee the ability to convey water when it is available from the MWD distribution system. According to the City's UWMP, the total water supplies projected to be available from MWD exceed demands; however, only the projected supplies necessary to meet projected demands are included in the City's UWMP. The UWMP demonstrates that the City would be able to meet all projected water demands.

Impacts related to water supply would be less than significant because the projected water demand at buildout is within the demands forecast in the 2010 UWMP, which demonstrates that supply meets the demand of the City. Furthermore, buildout would not result in any new or expanded water supplies or facilities beyond those planned and assumed in the 2010 UWMP. Impacts would be less than significant.

The Refined Project would result in an increase of 11,223 residential units and 25,242 residents, approximately eight percent less than the previously proposed project. This would result in a proportionate reduction in water usage at buildout of the General Plan Update and slightly less than the previously proposed project (Revised FEIR Section 6).

Regulations are in place to ensure sufficient water supply for the City of Pasadena. First, the Urban Water Management Planning Act requires that water districts plan for water supply and assess reliability of each source of water over a 20-year period by updating their UWMPs in five-year increments. General Plans are source documents as water suppliers update the UWMPs. The next round of UWMP updates in 2015 will include the General Plan Update's population projections and land use plan.

Second, under SB 610, a WSA would be required for any project if it is a residential development of 500 units or more; a shopping center or business establishment project employing more than 1,000 persons or having more than 500,000 square feet of floor space; a commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; or an industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area. Individual development projects implemented under the proposed Land Use Diagram would be required to prepare a water supply assessment (WSA) if they meet these requirements.

Finally, under Senate Bill 221 (SB 221), approval by a city or county of certain residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe mechanism to ensure that collaboration on finding the needed water

supplies to serve a new large subdivision occurs before construction begins. Therefore, impacts to water supply and delivery systems would be less than significant.

Long-Term Reliability

The Southern California region faces a challenge satisfying its water requirements and securing its firm water supplies. Increased environmental regulations and competition for water from outside the region have resulted in reduced supplies of imported water. Continued population and economic growth correspond to increased water demands within the region, putting an even larger burden on local supplies. A number of significant factors affecting delivery reliability are discussed in the environmental setting section.

MWD's 2010 Regional UWMP reports on its water reliability and identifies projected supplies to meet the long-term demand within its service area. It presents MWD's supply capacities from 2015 through 2035 under the three hydrologic conditions specified in the Act: single dry-year, multiple dry-years, and average year. MWD evaluated supply reliability by projecting supply and demand conditions for the single- and multiyear drought cases based on conditions affecting the state water project (SWP) (MWD's largest and most variable supply). The Regional UWMP shows that the region can provide reliable water supplies not only under normal conditions but also under both the single driest year and the multiple dry year hydrologies.

Recent water supply challenges throughout the American Southwest and the State of California have resulted in the development of a number of policy actions that water agencies would implement in the event of a water shortage. In southern California, the development of such policies has occurred at both the wholesale and retail level. The environmental setting section and Pasadena UWMP Section 5 both describe new and existing policies that MWD and PWP have in place to respond to water supply shortages and up to a 50 percent reduction in water supply.

Supply Shortages

As detailed in the Revised FEIR starting at Page 3-151, California Governor Edmund Brown Jr. declared a drought state of emergency on January 17, 2014, asking Californians to reduce water use by 20 percent. The US Department of Agriculture designated 27 California counties, including Los Angeles County, as primary natural disaster areas on January 15, 2014, due to the drought (USDA 2014). The California Department of Water Resources (DWR) reports that State Water Project allocations have been substantially reduced in recent years. There was a 35 percent allocation in 2013 and a 5 percent allocation in 2014, resulting from dry conditions. As of March 2015, the allocation was increased to 20 percent.

In response to the drought, the State Water Resources Control Board adopted Resolution No. 2014-0038 (July 15, 2014) and emergency regulations to ensure that water suppliers, their customers, and state residents increase water conservation and prohibits wasting water

in urban settings. Water suppliers are required to activate their Water Shortage Contingency Plan, educate customers and employees, increase local supplies, and report progress.

On April 1, 2015, Governor Brown signed an executive order directing the State Water Resources Control Board to impose a 25 percent reduction on local water agencies (compared to 2013 water usage). In addition to mandates for cuts in water usage, the executive order includes other conservations requirements and requires water purveyors and large agricultural producers to prepare detailed reports about water use to state regulators.

On April 28, 2015, the State Water Resources Control Board outlined its plan for new mandates on water usage. They consist of conservation targets based on per-capita residential water use. They sort the state's water districts into nine tiers, each with their own mandated reductions in water usage based on current consumption rates. The lowest is a 4 percent cut, but most agencies are required to cut usage between 8 and 36 percent. Pasadena Water and Power (PWP) was assigned a 28 percent reduction target.

MWD

In preparation for the possibility of being unable to the meet “firm demands” (noninterruptible supplies) of its member agencies, in February 2008, MWD's Board of Directors adopted the water supply allocation plan (WSAP), which was subsequently updated in June 2009. MWD's plan includes the specific formula for calculating member agency supply allocations and the key implementation elements needed for administering an allocation. The WSAP is the foundation for the urban water shortage contingency analysis required under Water Code Section 10632 and is part of MWD's 2010 Regional UWMP. MWD's WSAP was developed in consideration of the principles and guidelines described in MWD's 1999 water surplus and drought management plan.

City of Pasadena

Pasadena Municipal Code Chapter 13.10 establishes a staged water conservation program that will encourage reduced water consumption in the City. The program will reduce water demand through conservation, enabling effective water supply planning, assuring reasonable and beneficial use of water, preventing waste of water, and maximizing the efficient use of water within the City.

As detailed in the Revised FEIR starting at Page 3-151, Pasadena is in an extreme drought period. In periods of extreme drought, the City relies on its Water Supply Shortage Plans (PMC 13.10) to ensure there is adequate water supply to meet the needs of the growing community. The Water Supply Shortage Plan has four levels of increasingly restrictive measures to address water shortages. Under a Level 4 Water Supply Shortage no new potable water service is permitted.

Despite ongoing drought conditions and threats to the state's water supplies, the City of Pasadena is not expected to experience a catastrophic shortage of water. As evaluated in

Section 5.14 of the DEIR, water demand at buildout of the General Plan Update would represent less than a 1 percent increase over the existing demand. Although buildout of the General Plan Update would increase the City's population by 27,473 and its number of employees by 40,323, this growth would take place in a City that is largely built out geographically. Adding higher density housing and additional commercial space has not resulted in increased water demand in Pasadena. Despite significant development and population growth over the last fifty years, PWP's total water use is about the same as it was in 1960. New homes and businesses would largely be introduced in heavily urbanized areas of Pasadena where new uses would generally lessen the amount of land dedicated to turf or is otherwise irrigated. In addition, the City of Pasadena ensures that new development will consume water extremely efficiently by mandating the installation of water efficient fixtures as described in the California Green Building Code. Furthermore, implementation of existing and planned conservation measures would ensure that per-capita usage of water would decrease over the period covered by the General Plan Update.

Enforcement of existing regulations, conservation programs, and contingency plans are expected to ensure that water demands in Pasadena are met during the planning period of the General Plan Update. Section 5.14 of the DEIR includes a detailed rationale for this conclusion. Furthermore, large development projects in Pasadena allowed under the General Plan Update—such as those with 500 or more dwelling units and those employing more than 1,000 persons—would be required to prepare a water supply assessment (WSA) consistent with Senate Bill 610. These project-level WSAs would evaluate the availability of water to serve the proposed land uses.

City Efforts to Address Water Supply

In response to ongoing drought conditions, the City has taken measures to ensure that residents, businesses, and public facilities use water efficiently. Pasadena's Municipal Services Committee (MSC) has indicated its intent to expand local conservation efforts, with the goal of exceeding the water usage mandates imposed on PWP by the state. Level 2 water supply shortage conservation measures were adopted on June 1, 2015, consistent with Pasadena Municipal Code Chapter 13.10. Level 1 measures were in effect as of July 28, 2014 and included the following restrictions:

- Outdoor watering three days per week, on Tuesday, Thursday and Saturday, during the spring and summer months, April 1 through October 31. Property owners can water one day per week November 1 through March 31.
- No watering outdoors between 9 a.m. and 6 p.m., except with a handheld container or hose with a shutoff nozzle.
- No watering during periods of rain.
- All water leaks must be fixed within 72 hours.

- No excessive water flow or runoff onto pavement, gutters or ditches from watering or irrigating landscapes or vegetation of any kind.
- No washing down paved surfaces unless for safety or sanitation, in which case a bucket, a hose with a shutoff nozzle, a cleaning machine that recycles water or a low-volume/high-pressure water broom must be used.
- No washing vehicles except by using a handheld bucket or similar container or hose equipped with a water shutoff nozzle.

Level 2 measures restrict water to two days per week, on Tuesday and Saturday from April 1 through October 21, all water leaks must be fixed within 48 hours, and a prohibition on the filling of ornamental lakes and ponds.

Conservation measures are also found in the Pasadena General Plan's adopted Open Space & Conservation Element and the proposed Land Use Element.

Catastrophic Supply Interruption

Given the great distances that imported supplies travel to reach Los Angeles County, the region is vulnerable to interruptions along hundreds of miles of aqueducts, pipelines, and other facilities. Additionally, this water is distributed to customers through an intricate network of pipes and water mains that are susceptible to damage from earthquakes and other disasters.

Metropolitan Water District

MWD has comprehensive plans for stages of actions it would undertake to address a catastrophic interruption in water supplies through its WSAP and water surplus and drought management plan. MWD also developed an emergency storage requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the southern California region, including seismic events along the San Andreas Fault. Under the requirement, the City must maintain seven days of water supply in storage. In addition, MWD is working with the state to implement a comprehensive improvement plan to address disasters outside of the Southern California region, such as a maximum probable seismic event in the Delta that would cause levee failure and disruption of SWP deliveries. For greater detail on MWD's planned responses to catastrophic interruption, please refer to MWD's Regional UWMP.

City of Pasadena

PWP is also prepared for a catastrophic event that would result in complete loss of supply from its normal sources. In the event of an interruption of water supplies, the City will respond in accordance with PWP's emergency response plan and contingency plan. Additionally, PWP is prepared to deal with secondary effects of emergency events, such as a loss of power, decline in water quality, or a communication system shutdown. PWP's

emergency planning procedures are designed to maintain safe water supplies to meet basic customer needs and reduce the impacts of any catastrophic supply interruptions to the greatest extent possible. PWP's UWMP, Tables 5-7 and 5-8, detail the City's planned response during specific catastrophic supply interruptions.

Finding: Implementation of existing regulations and long-range water supply plans, including those implemented by MWD and the City, would ensure that sufficient water supply is available to serve land uses in Pasadena under the General Plan Update. This impact would be less than significant and no mitigation is necessary.

Impact 5.14-3: Existing and/or proposed facilities would be able to accommodate project-generated solid waste.

Support for this environmental impact conclusion is fully discussed in Section 5.14, *Utilities and Service Systems*, of the DEIR, beginning on page 5.14-32 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The estimated increase in solid waste generation that would result from buildout of the previously proposed project is shown in Table 5.14-12 of the DEIR. Buildout was forecast to generate 696,430 pounds of solid waste per day, or a net increase of about 114,519 pounds per day (57.26 tons per day). As shown in Table 5.14-11 of the DEIR, the solid waste facilities accepting the vast majority of solid waste from Pasadena have a combined remaining capacity of about 158.3 million tons and closure dates as late as 2045. There is sufficient landfill capacity in the region for solid waste that would be generated by buildout in accordance with the proposed General Plan Update. Impacts are less than significant.

The Refined Project would result in an increase of 11,223 residential units and 9.26 million square feet of nonresidential uses, approximately eight percent less than the previously proposed project. This would result in a proportionate reduction in solid waste generation at buildout of the General Plan Update and slightly less than the previously proposed project (Revised FEIR Section 6).

In addition, future nonresidential and multifamily residential projects developed pursuant to the General Plan Update would include storage areas for recyclable materials in compliance with AB 341. Construction projects building nonresidential land uses would recycle and/or salvage at least 50 percent of the nonhazardous construction and demolition waste in conformance with Section 5.408 of the 2013 California Green Building Standards Code. In addition, proposed General Plan Policies 10.2 and 10.4 encourage the reduction of solid waste through sustainable building practices.

Finding: Existing solid waste facilities in the region have sufficient capacity to serve Pasadena at buildout of the General Plan Update. This impact would be less than significant and no mitigation is necessary.

Impact 5.14-4: Proposed facilities would be able to accommodate proposed General Plan Update generated utility demands.

Support for this environmental impact conclusion is fully discussed in Section 5.14, *Utilities and Service Systems*, of the DEIR, beginning on page 5.14-38 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Electricity

Growth in the City of Pasadena would result in additional demand for electricity service. Existing energy demand is approximately 1,313 gigawatt-hours (GWh) per year. The DEIR determined that future growth in accordance with buildout would generate electricity demand of about 1,438 GWh per year, as shown in Table 5.14-14 of the DEIR. Note that forecast consumption is about 14 percent greater than actual consumption in 2012. PWP estimates that electricity consumption within PWP's service area will be about 3,738 GWh by 2035. Buildout would exceed future estimates; however, this amount does not account for triennial energy efficiency goals that are adopted by PWP. Buildout would occur over a 21 year period and acquisition of about 6 GWh per year of electricity by PWP would not result in a substantial adverse impact.

The Refined Project would result in an increase of 11,223 residential units and 9.26 million square feet of nonresidential uses, approximately eight percent less than the previously proposed project. This would result in a proportionate reduction on electricity demand at buildout of the General Plan Update and slightly less than the previously proposed project (Revised FEIR Section 6).

New facilities to support the demand for electric service in the City of Pasadena would be constructed by PWP in accordance with the demand for new service. Because developments that would be considered for approval under the proposed General Plan have not yet been designed or proposed, the specific electricity facilities that would need to be installed to serve those developments are unknown, as are the environmental impacts of such installations. Such impacts would be evaluated on a project-by-project basis. It is not likely that major new facilities would be necessary to serve the City with adequate electricity service at project buildout. Consistent with the City's adopted Integrated Resource Plan, the PWP is already replacing inefficient local generating units at its Glenarm Power Plant. Furthermore, because the City is geographically built out, the construction of new electrical substations is not expected to be necessary. Therefore, growth in demand for electricity service generated by implementation of the General Plan Update would not result in a significant impact.

Natural Gas

Future development in accordance with the General Plan Update would result in an increased demand for natural gas service. Estimated existing natural gas demand in the City

is about 38.2 million therms per year. Forecast natural gas demand in the City at GPU buildout is about 48 million therms per year, as shown in Table 5.14-15 of the DEIR.

The Refined Project would result in an increase of 11,223 residential units and 9.26 million square feet of nonresidential uses, approximately eight percent less than the previously proposed project. This would result in a proportionate natural gas usage at buildout of the General Plan Update and slightly less than the previously proposed project (Revised FEIR Section 6).

Gas service will be added to the existing system by the Southern California Gas Company (SCGC), as necessary to meet the requirements of individual development projects within the City. The utility companies have indicated that they will be able to supply the area with natural gas without impacting existing service. SCGC has sufficient planned natural gas supplies for the estimated net increase of 9.6 million therms per year due to General Plan Update buildout. Buildout of the General Plan Update would not require SCGC to obtain new or expanded natural gas supplies. Impacts would be less than significant.

Communication: Telephone, Mobile Phone, Cable, and Internet Service

Buildout of the City in accordance with the General Plan Update would result in additional demand for communication facilities. Traditionally these facilities are installed or upgraded by private service providers as new development is built, and installation is supported by service fees. Services within the City are provided by AT&T, Charter Communications, and satellite television services.

In addition, cell antennas are increasingly needed to ensure adequate coverage in the service boundaries of the City. The City provides entitlements for installation of these private services, and service providers base the need for such facilities on market demand. Though traditional phone lines only require installation of wire facilities along city streets, mobile facilities require more detailed strategic planning, as reception quality for the cell phone antennas is dependent on multiple factors, including topography and the height of the communication facility. Installation of these communication structures are studied by the Federal Aviation Administration, and installations are registered with the Federal Communications Commission. Under the Federal Communications Act of 1996, no laws or actions by any local government or planning or zoning board may prohibit, or have the effect of prohibiting, the placement, construction, or modification of communication towers, antennas, or other wireless facilities in any particular geographic area (No. 47 USC Section 332 [c]). To ensure compatibility of these towers with adjacent land uses, Pasadena Municipal Code 12.22, Telecommunication Facilities provides regulations for the siting of telecommunication facilities, including cell phone towers.

Cable service is provided to the City by local cable franchises, including Time Warner Cable, Comcast Cable, Cox Cable, and Charter Cable. Installation of cable services is provided by these private companies and supported by service fees.

For Internet service, transmission can be obtained through the phone lines for dial-up coverage or by broadband providers. Most Internet service providers are regulated by the California Public Utilities Commission. Broadband providers supply Internet services through cable lines or through Ethernet, a bundling of local area networks that are transmitted by fiber optics (DSL). Like cell phones, the Internet can also be provided through wireless connections. Infrastructure to support these services is therefore run over the associated local telephone and cable service provider lines.

Growth in the City of Pasadena would necessitate the construction or expansion of these types of communication facilities; however, installation of communication infrastructure is implemented by private companies who base service needs on customer demand. The City of Pasadena has purview over design review and is required to approve new private infrastructure facilities prior to their placement, as regulated by the California Public Utilities Commission.

Finding: Although population growth in Pasadena would generate additional demands for utilities, existing utility providers would be able to expand their services as necessary. This impact would be less than significant and no mitigation is necessary.

C. Findings on Impacts Mitigated to Less Than Significant

The City finds that the following environmental impacts can and will be mitigated to below a level of significance based upon the implementation of the mitigation measures in the EIR. These findings are based on the discussion of impacts in the detailed issue area analyses in the EIR. An explanation of the rationale for each finding is presented below.

1. Air Quality

Impact 5.2-5: Buildout of the proposed General Plan Update could site sensitive land uses in proximity to air pollution sources and expose sensitive receptors to substantial pollutant concentrations.

Support for this environmental impact conclusion is fully discussed in Section 5.2, *Air Quality*, of the DEIR, beginning on page 5.2-24 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Because placement of sensitive land uses falls outside CARB jurisdiction, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to address the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing

facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

CARB's recommendations for the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. Respiratory and cardiovascular problems including asthma, lung cancer, and premature death have been associated with living near major roadways and freeways (Balmes et al, 2009). Children who live near major roadways and freeways have been found to have higher asthma rates and reduced lung function (CARB 2013c). There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic: diesel particulate matter (DPM) from trucks, benzene and 1,3 butadiene from passenger vehicles. Exposure to DPM accounts for more than 80 percent of the total carcinogenic risk in the South Coast Air Basin (SoCAB) (SCAQMD 2008a). It has been found that outdoor concentrations are highest near the roadway and decrease with increasing distance downwind of the source (Zhu et al, 2002). CARB recommends avoiding siting new sensitive land uses within 500 feet of urban roads with more than 100,000 vehicles per day or rural roads with more than 50,000 vehicles per day (CARB 2005). Table 5.2-10, *CARB Recommendations for Siting New Sensitive Land Uses*, of the DEIR shows a summary of the other CARB recommendations for siting new sensitive land uses within the vicinity of air-pollutant sources. Recommendations in the table are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Stationary sources of toxic air contaminants (TACs) within the City of Pasadena include the stationary sources permitted by SCAQMD. Various permitted uses are dispersed throughout the City with a high concentration along the corridor between I-210 and Colorado Boulevard and along Fair Oaks Avenue and Arroyo Parkway (SCAQMD 2014). The other sources of TAC within the City are I-210 and SR-134, which have annual average daily traffic volumes exceeding 100,000. There are no local roadways with more than 100,000 average daily vehicle trips in the City (Fehr & Peers 2014). Figure 5.2-1, *Sources Within the City of Pasadena*, of the DEIR shows the permitted sources within and 1,000 feet from the City and sphere of influence boundaries. In addition, the figure also shows the 500-foot buffer zone from the freeways.

If new sensitive receptors were sited within 500 feet of I-210 or SR-134 or within CARB's siting recommendations of other stationary sources, they may be exposed to significant concentrations of air pollutants. As shown in Figure 3-5, *Proposed General Plan Land Use Diagram*, of the DEIR residential land uses would be permitted along I-210 and SR-134. Additionally, residential land uses would also be near or adjacent to areas designated for commercial and industrial uses and to existing permitted sources. Thus, new residential and

other sensitive developments could be sited within the buffer distances to TAC sources as shown in Table 5.2-10 of the DEIR. Therefore, air quality impacts from placement of sensitive uses near major pollutant sources are considered significant.

Mitigation Measures:

2-4 Prior to future discretionary approval, the City of Pasadena Planning Division shall evaluate new development proposals for sensitive land uses (e.g., residences, schools, and day care centers) within the City for potential incompatibilities with regard to the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective (April 2005). In addition, applicants for siting or expanding sensitive land uses that are within the recommended buffer distances listed in Table 1-1 of the CARB Handbook shall submit a health risk assessment (HRA) to the City of Pasadena. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children. If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceeds the respective thresholds, as established by the SCAQMD at the time a project is considered, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and noncancer risks to an acceptable level (i.e., below the aforementioned thresholds as established by the SCAQMD), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:

- Air intakes oriented away from high-volume roadways and/or truck loading zones.
- Heating, ventilation, and air conditioning systems of the buildings provided with appropriately sized maximum efficiency rating value (MERV) filters.
- Heating, ventilation, and air conditioning systems for units that are installed with MERV filters shall maintain positive pressure within the building's filtered ventilation system to reduce infiltration of unfiltered outdoor air.

Mitigation measures identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site development plan as a component of the proposed project. The air intake

design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City and shall be verified by the City's Planning Division. The intent of this mitigation measure is to reflect current CARB and SCAQMD Guidance/Standards as well as CEQA legislation and case law, and the City implementation of the measure shall adhere to current standards/law at the time such analyses are undertaken.

Finding: Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the EIR. These changes are identified in the form of the mitigation measure above. The City of Pasadena hereby finds that implementation of the mitigation measure is feasible, and the measure is therefore adopted.

Impact 5.2-6: Industrial land uses associated with buildout of the proposed General Plan Update would have the potential to create objectionable odors that could affect a substantial number of people.

Support for this environmental impact conclusion is fully discussed in Section 5.2, *Air Quality*, of the DEIR, beginning on page 5.2-26 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

Growth within the City of Pasadena could generate new sources of odors and place sensitive receptors near existing sources of odors. Nuisance odors from land uses in the SoCAB are regulated under SCAQMD Rule 402, Nuisance.

Industrial land uses have the potential to generate objectionable odors. Areas where industrial uses could be developed would be generally limited to the South Fair Oaks and East Pasadena planning areas and the Walnut Avenue corridor between Mentor and Vista Avenues. These areas are surrounded by existing designated residential uses (see Figure 4-3 of the DEIR). While industrial land uses associated with the proposed General Plan would be required to comply with SCAQMD Rule 402, additional measures may be necessary to prevent an odor nuisance. Therefore, industrial land uses associated with the General Plan Update may generate potentially significant odor impacts to a substantial number of people.

Residential and commercial land uses could result in generation of odors such as exhaust from landscaping equipment. However, unlike industrial land uses, these are not considered potential generators of odor that could affect a substantial number of people. Therefore, impacts from potential odors generated from residential and commercial land uses associated with the General Plan Update are considered less than significant

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. By the time such

emissions reached any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Furthermore, short-term construction-related odors are expected to cease upon the drying or hardening of the odor-producing materials. Therefore, impacts associated with construction-generated odors are considered less than significant.

Mitigation Measures:

2-5 Prior to future discretionary approval, if it is determined that a project has the potential to emit nuisance odors beyond the property line, an odor management plan shall be prepared by the project applicant, subject to review and approval by the Planning & Community Development Director or their designee. Facilities that have the potential to generate nuisance odors include but are not limited to:

- Wastewater treatment plants
- Composting, green waste, or recycling facilities
- Fiberglass manufacturing facilities
- Painting/coating operations
- Large-capacity coffee roasters
- Food-processing facilities

The odor management plan shall show compliance with the South Coast Air Quality Management District's Rule 402 for nuisance odors. The Odor Management Plan shall identify the best available control technologies for toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include but are not limited to scrubbers (i.e., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

Finding: Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the EIR. These changes are identified in the form of the mitigation measure above. The City of Pasadena hereby finds that implementation of the mitigation measure is feasible, and the measure is therefore adopted.

2. Biological Resources

Impact 5.3-1: Buildout of the General Plan Update could impact sensitive species and sensitive natural communities.

Support for this environmental impact conclusion is fully discussed in Section 5.3, *Biological Resources*, of the DEIR, beginning on page 5.3-22 and Section 6, *Refined Project Environmental Analysis*, of the Revised FEIR.

The General Plan Update would not result in land use changes that convert open space to other development uses. However, buildout would allow for development in several areas with vacant residential parcels in the City. These include parcels zoned low-density residential in the San Rafael Hills and tract of land at the northwest of the intersection of Crestford Drive and Florecita Drive, shown on Figure 5.3-2 *Sensitive Areas Designated for Development*. These areas have patches of sage scrub, sagebrush, and chaparral habitats, as well as oak and walnut woodlands, partly on steep slopes. Sensitive plant communities in the region also consist of coastal scrub and riparian oak woodlands. The CNDDDB (CDFW 2014) does not include records of sensitive species from these areas, which could be due to the absence of focused surveys in the area. Sensitive species that may now occur in these parcels could be impacted directly or indirectly by buildout of the General Plan Update. Impacts would be potentially significant.

In the San Rafael Hills, the General Plan Update maintains the existing land use designation (predominantly Low-Density Residential and Institutional for the Art Center College of Design campus). Most of the natural habitat in the San Rafael Hills in Pasadena would remain low-density residential or institutional in the General Plan Update, but an area of approximately 20 acres (near Bushwick Drive and Wierfield Drive, north of Allendale Golf Course and south of Art Center College of Design) that is currently designated low density residential would be designated Open Space – Parks in the General Plan Update, thus increasing the amount of open space land and protecting an increased amount of native habitat from residential development. This would be a beneficial impact on biological resources.

Sensitive natural habitats within the General Plan Update area occur to different degrees in four areas: the Arroyo Seco, Eaton Canyon Corridor, Hastings Canyon, and the San Rafael Hills. The land use designation for Arroyo Seco, Eaton Canyon, and Hastings Canyon is Open Space- Parks in the existing General Plan and in the General Plan Update; no changes are proposed in the boundaries of the Parks land use designation in these areas. Therefore, consistent with the General Plan Update, no development would be allowed to occur and implementation would not impact sensitive biological resources in these areas.

Land use changes in the General Plan Update would be concentrated in eight specific plan areas. There are no natural habitats or sensitive species in these specific plan areas. Development in accordance with the General Plan Update in these areas would not result in

impacts to sensitive biological resources. Approximately 2.2 acres of land in the southeast corner of the City south of Del Mar Avenue is currently designated Institutional but would be converted to Parks. That area currently consists of a medical land use and vacant land, and lacks natural habitats and sensitive biological resources.

General Plan Update Policies 10.9, 10.10, 10.11 further support the goals of protecting open spaces, watersheds, and critical habitats, including Eaton Canyon Corridor and Arroyo Seco. Policies in the adopted Open Space and Conservation Element would continue to preserve, acquire, restore, and create natural open spaces, hillsides and watersheds—including the Eaton Canyon Corridor and the Arroyo Seco.

Mitigation Measures:

3-1 The City of Pasadena shall require applicants of future development projects that disturb undeveloped land in the San Rafael Hills and tract of land at the northwest intersection of Crestford Drive and Florecita Drive, shown on Figure 5.3-2, to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall be a reconnaissance level field survey of the project site for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, special status species or their habitat, sensitive habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the project site and adjacent lands potentially affected by the project, the biologist shall submit a written report substantiating such to the City of Pasadena before issuance of a grading permit by the City, and the project may proceed without any further biological investigation. If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, implementation of Mitigation Measure 3-2 shall be required.

3-2 A qualified biologist shall evaluate impacts to sensitive or protected biological resources from development. The impact assessment may require focused surveys that determine absence or presence and distribution of biological resources on the site. These surveys may include, but are not limited to: 1) focused special status animal surveys if suitable habitat is present; 2) appropriately timed focused special status plant surveys that will maximize detection and accurate identification of target plant species; and 3) a delineation of jurisdictional boundaries around potential wetlands, riparian habitat, and waters of the United States or State. The results of these surveys will assist in assessing actual project impacts, and with the development of project-specific mitigation measures. Alternatively, the project applicant may forgo focused plant and animal surveys and assume presence of special status species in all suitable habitats on the project site. The qualified

biologist shall substantiate the impact evaluation or the assumed presence of special-status species in all suitable habitats onsite in a written report submitted to the City of Pasadena before issuance of a grading permit by the City.

- 3-3 The City of Pasadena shall require applicants of development project to avoid potential impacts to sensitive or protected biological resources to the greatest extent feasible. Depending on the resources potentially present on the project site, avoidance may include: 1) establishing appropriate no-disturbance buffers around onsite or adjacent resources, and/or 2) initiating construction at a time when special status or protected animal species will not be vulnerable to project-related mortality (e.g., outside the avian nesting season or bat maternal or wintering roosting season). Consultation with relevant regulatory agencies may be required in order to establish suitable buffer areas. If the project avoids all sensitive or protected biological resources, no further action is required. If avoidance of all significant impacts to sensitive or protected biological resources is not feasible, the project shall implement Mitigation Measure 3-4.
- 3-4 The City of Pasadena shall require applicants to design development projects to minimize potential impacts to sensitive or protected biological resources to the greatest extent feasible, in consultation with a qualified biologist and/or appropriate regulatory agency staff. Minimization measures may include 1) exclusion and/or silt fencing, 2) relocation of impacted resources, 3) construction monitoring by a qualified biologist, and 4) an informative training program conducted by a qualified biologist for construction personnel on sensitive biological resources that may be impacted by project construction. If minimization of all significant impacts to sensitive or protected biological resources is infeasible, the project shall implement Mitigation Measure 3-5.
- 3-5 A qualified biologist will develop appropriate mitigations that will reduce project impacts to sensitive or protected biological resources to a less than significant level, if feasible. The type and amount of mitigation will depend on the resources impacted, the extent of the impacts, and the quality of habitats to be impacted. Mitigations may include, but are not limited to: 1) compensation for lost habitat or waters in the form of preservation or creation of in-kind habitat or waters, either onsite or offsite, protected by conservation easement; 2) purchase of appropriate credits from an approved mitigation bank servicing the Pasadena area; and 3) payment of in-lieu fees.

Finding: Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the EIR.